Kent County Administration and Drain Commissioner

NPDES Municipal Separate Storm Sewer System (MS4) Illicit Discharge Elimination Plan

Prepared for: The Lower Grand River Watershed

August 1, 2013 Project Nos. G120878



LOWER GRAND MS4 COMMUNITIES IN KENT COUNTY

ILLICIT DISCHARGE ELIMINATION PLAN

PREPARED FOR: THE LOWER GRAND RIVER WATERSHED

AUGUST 1, 2013

PROJECT NO. G120878

TABLE OF CONTENTS



1.0		INTRODUCTION	1
2.0		IDEP GOALS	2
3.0		LEGAL AUTHORITY - IDEP ORDINANCES	3
4.0		OUTFALL AND DISCHARGE POINTLISTS	5
5.0		TRAINING	6
6.0	6.1 6.2 6.3	IDENTIFICATION AND ELIMINATION OF EXISTING ILLICIT DISCHARGES	7 9
7.0		MINIMIZING SEEPAGE FROM SEPTIC SYSTEMS AND SANITARY SEWERS	12
8.0		SPILL RESPONSE PROCEDURES	13
9.0		DOCUMENTATION AND REPORTING	16

LIST OF FIGURES

Figure 1	Dry-weather Outfall Evaluation - Locating Problem Areas
Figure 2	Dry-weather Outfall Evaluation - Finding the Source
Figure 3	Dry-weather Screening Data Sheet

LIST OF TABLES

Table 1 Field Testing Results Evaluation
Table 2 Stormwater Program Managers

LIST OF APPENDICES

Appendix 1	Discussion of Indicator Parameters
Appendix 2	Prioritized List of Outfalls and Discharge Points
Appendix 3	Community Reporting Forms
Appendix 4	Interjurisdictional Agreement

LIST OF ABBREVIATIONS/ACRONYMS

BMP	Best Management Practice
GVMC	Grand Valley Metropolitan Council
IDEP	Illicit Discharge Elimination Plan
KCDC	Kent County Drain Commissioner
KCRC	Kent County Road Commission
LGRW	Lower Grand River Watershed
MDEQ	Michigan Department of Environmental Quality
MS4	Municipal Separate Storm Sewer Systems
OSDS	Onsite Sewage Disposal Systems
PEAS	Pollution Emergency Alert System
PEP	Public Education Plan
SSOs	Sanitary Sewer Overflows
SWPPI	Stormwater Pollution Prevention Initiative

1.0 INTRODUCTION

This Illicit Discharge Elimination Plan (IDEP) has been prepared in accordance with the requirements of the General Permit Application for Storm Water Discharges from Municipal Separate Storm Sewer Systems (MS4) subject to watershed plan requirements. 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 IDEP includes the following section headings:

- IDEP goals
- Legal authority
- Outfall and discharge point lists
- Identification and elimination of existing illicit discharges
 - Locating problem areas
 - Finding the source of illicit discharges
 - Removing/correcting illicit connections
- · Minimizing seepage from septic systems and sanitary sewers
- Spill response procedures
- Preventive measures
- Documentation and reporting

2.0 IDEP GOALS

- Find, prioritize, and eliminate illicit discharges and illicit connections identified during dry-weather screening activities.
- Minimize infiltration of seepage from sanitary sewers and onsite sewage disposal systems (OSDS) into the MS4.
- Establish the legal authority for the community to eliminate illicit discharges found entering the MS4.
- Maintain a map of the MS4, point sources, and stormwater outfalls.
- Establish a system to document and report information regarding the IDEP including complaints, outfall screening, and illicit connections found and removed.
- Determine a method to evaluate the effectiveness of the illicit discharge elimination activities based on the watershed goals.

3.0 LEGAL AUTHORITY - IDEP ORDINANCES

Local ordinances, the Michigan Plumbing Code of 2000, the Michigan Drain Code of 1956, Michigan Act 451, and the Federal Clean Water Act provide the basic legal tools to implement the IDEP. Local ordinances effectively prohibit illicit connections and discharges; allow surveillance, monitoring, and inspections when needed; and provide enforcement authority and penalties.

An ordinance (or other regulatory mechanism where an ordinance is not feasible or appropriate) to effectively prohibit illicit discharges into the MS4 has been adopted by the following participating communities in the Lower Grand River Watershed (LGRW).

Participating Communities with an IDEP Ordinance

Community	Illicit Discharge and Connection Ordinance Adoption Date
Allendale Charter Township	May 10, 2004
Cascade Charter Township	June 23, 2004
East Grand Rapids, City of	September 19, 2005
Ferrysburg, City of	September 7, 2004
Georgetown Charter Township	August 12, 2002
Grand Haven, City of	February 5, 2007
Grand Rapids Charter Township	January 6, 2004
Grand Rapids, City of	July 2001
Grandville, City of	September 26, 2005
Hudsonville, City of	December 14, 2004
Kentwood, City of	October 24, 2004
Kent County Administration and Drain Commissioner	Regulatory mechanism in place
Kent County Road Commission	Regulatory mechanism in place
Plainfield Charter Township	November 6, 2000
Rockford, City of	August 8, 2005
Sparta, Village of	September 13, 2004
Spring Lake, Village of	January 16, 2006
Walker, City of	March 28, 2003
Wyoming, City of	October 3, 2005

Each ordinance or other regulatory mechanism:

- Regulates the contribution of pollutants to the MS4, owned by the permittee.
- Prohibits illicit discharges, including the direct dumping or disposal of materials, into the MS4, owned by the permittee.
- Establishes the authority to investigate, inspect, and monitor suspected illicit discharges into the MS4, owned by the permittee.
- Requires elimination of illicit discharges and connections into the MS4, owned by the permittee.



The Kent County Road Commission (KCRC) and the Kent County Drain Commissioner (KCDC) do not have ordinance authority; however, both agencies have regulatory mechanisms to address illicit discharges.

The KCDC has broad authority to control water pollution in county drains provided by the state Drain Code of 1956. The following are pertinent excerpts.

The Michigan Drain Code states:

Sec. 423. (1) A person shall not continue to discharge or permit to be discharged into any county drain or intercounty drain of the state any sewage or waste matter capable of producing in the drain detrimental deposits, objectionable odor nuisance, injury to drainage conduits or structures, or capable of producing such pollution of the waters of the state receiving the flow from the drains as to injure livestock, destroy fish life, or be injurious to public health.

(10) Failure to comply with any of the provisions of this section subjects the offender to the penalties described in section 602.

Sec. 602. If any person shall willfully or maliciously remove any section or grade stake set along the line of any drain, or obstruct or injure any drain, he shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine not exceeding \$100.00 and the costs of prosecution, or in default of the payment thereof, by imprisonment in the county jail not exceeding 90 days.

The KCRC has limited authority under state law to control water pollution in statutory road right-of-ways. When evidence of an illicit discharge to a KCRC ditch or drain is found, and voluntary correction is not forthcoming, the KCRC will contact the appropriate agency, depending on the nature of the illicit discharge, and work with the KCDC, Kent County Health Department, local unit of government, local policing authority and/or the Michigan Department of Environmental Quality (MDEQ) to require elimination. The MDEQ has broad authority to control pollution, either directly or indirectly, to waters of the state provided by Act 451 of 1994.

A summary of indicators typically used to detect certain illicit discharges is included in Appendix 1.



4.0 OUTFALL AND DISCHARGE POINT MAPS AND LISTS

Lists of outfalls and discharge points are kept updated, identifying the location of all outfalls and discharge points the permittee owns and the names of all surface waters of the state that receive stormwater runoff from an MS4. The lists include a discrete identification number, the name of the receiving water, identification as an outfall or discharge point, the latitude and longitude, and the prioritization given to that point for screening purposes. Newly discovered outfalls and discharge points will be identified in the Progress Report. A copy of the current list of outfalls and discharge points is included in Appendix 2.



5.0 TRAINING

Municipal employees, who, as part of their normal job responsibilities, may come into contact with or otherwise observe an illicit discharge or illicit connection, will receive training on recognition and reporting of illicit discharges and connections. This will be accomplished through the IDEP training as identified in Appendix 2D of the Stormwater Pollution Prevention Initiative (SWPPI). Examples of training mechanisms identified in the SWPPI include the review of a Water Pollution Report Form with employees for recording and reporting suspected illicit discharges and an article to be distributed to employees (Appendix 3).

Field personnel will be provided additional training prior to conducting Dry-Weather Screening. Training will include health and safety, documentation and reporting procedures, and visual and olfactory outfall screening procedures. This will be accomplished by hands-on training by a professional engineer or other qualified individual for the field personnel by spring 2013. Alternatively, train-the-trainer sessions will be conducted for each community followed by community training of field personnel, if desired. Additional training will be provided for activities associated with sampling, identifying, and eliminating the source of unauthorized discharges and illicit connections. This will be accomplished, where needed, by hands-on training for the field personnel or by training-the-trainer for each community as appropriate.

6.0 IDENTIFICATION AND ELIMINATION OF EXISTING ILLICIT DISCHARGES

The field work to identify and eliminate illicit discharges and illicit connections will be completed in three steps. The initial step involves *Locating Problem Areas* and will focus on dry-weather screening stormwater outfalls for evidence of illicit discharges. The process is illustrated in Figure 1. The second step will be *Finding the Source* of any illicit discharges and will involve tracing illicit discharges through the stormwater drainage system to the source of the discharge or the illicit connection. This process is illustrated in Figure 2. The final step consists of *Removing/Correcting Illicit Connections*, which will require facilities to disconnect illicit connections and may require enforcement pursuant to existing ordinances and follow-up inspections. Information and test results are recorded on a data sheet, included as Figure 3.

6.1 LOCATING PROBLEM AREAS

Locating the presence of unauthorized discharges will be conducted during the permit cycle using the following techniques:

- Priority areas for detecting non-stormwater discharges will be identified. All permitted outfalls and discharge points will be placed into one of the following priority groups.
 - High Priority Outfalls to waters of the State within the Urbanized Areas that have a history of past illicit discharges, outfalls reported by the public as suspicious, outfalls in areas with a history of illegal dumping, and outfalls serving areas suspected of having illicit discharges.
 - Medium-High Priority Outfalls to waters of the State within the Urbanized Areas that are not in the High Priority group.
 - Medium Priority MS4 to MS4 discharge points within the Urbanized Areas that have a history
 of past illicit discharges and that serve areas suspected of having illicit discharges due to the land
 use activities.
 - Medium-Low Priority Outfalls to waters of the State that are within the watershed boundary, but outside of the Urbanized Areas.
 - Low Priority MS4 to MS4 discharge points, within the watershed boundary, that are not in the Medium priority group.

All High Priority and Medium-High Priority outfalls in Appendix 2 will receive dry-weather screening during the permit cycle. Medium, Medium-Low, and Low Priority outfalls and discharge points will be investigated upon reports of suspected illicit discharges.



- Preferably, dry-weather screening will not commence until at least 48 hours after any rainfall event, but may commence if less than 0.1 inch of rain occurred during the previous 48 hours. Optionally, the field crew will attempt to identify known legitimate dry-weather discharges prior to conducting the field work. Dry-weather screening of all outfalls and MS4-MS4 discharge points will be completed in accordance with the following, and as illustrated as a flowchart in Figure 1:
 - Locate outfall/discharge point, complete data sheet with site information.
 - If new outfall/discharge point, assign identification number and mark location on map
 - o If flow apparent, test discharge with field kit for temperature, pH, ammonia, and surfactants, collect additional sample if necessary, and record flow information and test results on data sheet. Readily observable sources of flow to the storm sewer will be noted. For example, landscape irrigation may be misdirected onto impermeable surfaces or irrigation runoff may be entering the drainage system.
 - Assign follow-up prioritization
 - □ Immediate report to appropriate agency when discharge found, agency to follow up within one week.
 - High notify stormwater manager, follow up within 30 days.
 - □ Low notify stormwater manager conduct visual observations within 3 months.
 - In follow-up visits, test flow again with field test kits. If test results still indicate follow up necessary, collect additional samples for lab analysis, if necessary, and follow steps in "Finding the Source" section below.
 - o If no flow apparent, evaluate the areas for indicators of pollution, i.e. the presence of algae, unusual vegetative growth, staining, bacterial sheens, or debris.
 - If indicators show a sign that pollution may exist, assign follow-up prioritization.
 - Immediate report to appropriate agency when discharge found, agency to follow up within one week to check for dry-weather flow.
 - High notify stormwater manager; follow up within 30 days to check for dry-weather flow.
 - Low notify stormwater manager, conduct visual observations within 3 months for dry-weather flow.
 - In follow-up visits, if flow present, test with field test kits. If test results indicate follow up necessary, collect additional samples for lab analysis, if necessary, and follow steps in "Finding the Source" section below. If no flow is present on immediate or high priority sites, proceed to steps in "Finding the Source" section below.
 - If no dry-weather flow is present and no indication that pollution may exist, close outfall file.
 - If the outfall is submerged or otherwise unsafe to approach, the next available and safe location upstream from the outfall will be screened.



- The results of the Dry-Weather Screening will be ranked according to the guide in Table 1 and then
 used to locate problem areas and prioritize the locations for finding the source:
 - Immediate If, in the opinion of the field crew, immediate action to address the dry-weather flow is indicated, the field crew will inform the stormwater program manager, or the appropriate agency if health or safety is a concern, record the incident, and ensure that the agency investigates the site within one week. Table 2 is a list of the current stormwater program managers and their contact information.
 - High If flow is present and test results indicate follow up is necessary, but it does not appear to be of immediate concern, the stormwater manager will be notified and follow-up will be pursued within 30 days. If flow is again present, field crews will use field test kits to confirm results, and begin conducting dry-weather screening at accessible points upstream of the discharge until a potential source is found.
 - Low If flow is present but test results indicate the discharge is most likely exempt, (groundwater for example), the site will be observed within 3 months to determine if conditions have changed and repeat testing is warranted.
 - o None No follow-up is needed.
- A field form will document the results of outfall screening and testing. A copy of the form is included
 as Figure 3. A separate form will be utilized for each visit.
- Any new or additional stormwater outfalls or discharge points will be reported in the next Progress Report.
- An illicit discharge reporting process (telephone, email, or other method) has been implemented. A system to log reports, assign them for follow-up, and document results of investigations is included in the process. Experience has shown that the most reliable reports come from municipal personnel; however, this reporting process has been coordinated with the Public Education Plan (PEP) in order to encourage the public to observe and notify county or local governmental units when illegal dumping or illicit discharges are suspected. The Community Reporting Forms are included in Appendix 3.
- Each community's schedule for completing the dry-weather screening will be consistent with the screening priority identification of their outfalls and discharge points as identified in Appendix 2.

6.2 FINDING THE SOURCE

The field investigation necessary to find the source of illicit discharges will be completed based on the results of the efforts in *Locating Problem Areas*. The process is illustrated in a flowchart in Figure 2.



Sites identified during the initial investigation that pose a significant and immediate health or environmental problem (immediate priority) will be brought to the attention of the community's stormwater program manager (Table 2), at the time the discharge is detected, and the appropriate agency or department; such as the Kent or Ottawa County Health Department, an adjacent community, or the MDEQ. That appropriate agency may provide useful information or assistance for the follow-up investigation within one week. Additional sample collection and laboratory analysis for parameters such as, fluoride, copper, phosphorus, ammonia, nitrite, nitrate, and *E. coli* will be considered, depending on the land use and suspected source of the illicit discharge.

The process for tracing illicit discharges that do not pose a significant and immediate health or environmental problem (high priority) to their source will be based on factors such as whether the area is known to have high bacteria problems or vulnerability to bacterial contamination, significant industrial or commercial development, dense housing without sanitary sewer connections, public notification or complaints, and the sensitivity of the receiving stream.

The exact procedure for tracking the illicit discharge will depend on the particular facts of each incident. Generally, if the discharge can be tracked by direct visual observation, the responsible party will be contacted and required to eliminate the discharge. If the source is not obvious, then manhole to manhole observations will be made to identify the source until the responsible party is identified and contacted.

If the source is still not identified through upstream investigations, more sophisticated means will be utilized such as:

- Televising the storm sewers or dye testing premises in the vicinity of a suspected illicit connection.
- Investigation of permissible point sources located upstream of outfalls with documented dry-weather flow.
- Investigation of complaints, reports, or notification of suspected illicit discharges.
- Distribution of letters to residents and businesses alerting them to the problem that is under investigation and soliciting their assistance in finding the source of an illicit discharge.
- A building-by-building evaluation where a potential illicit connection has been isolated to a small area.

If a low priority outfall was found to have similar test results in 3 months, the stormwater program manager will follow the steps outlined above to find the source and determine if the source of flow is exempt or requires the responsible party to be notified and the discharge eliminated.

If the source of an illicit discharge is traced to an MS4 owned by another permittee, the upstream stormwater program manager will be notified within one week of detection unless the severity of the discharge warrants immediate action. The stormwater program managers of all participating communities of the LGRW that own discharge points that enter another MS4 have agreed to coordinate tracking and eliminating illicit discharges in these situations. The agreement is included as Appendix 4. Notification will



consist of a phone call or email to the upstream MS4 stormwater program manager. The notification will include identifying the date and location where the suspected illicit discharge was detected and any other information about the discharge that will assist with the identification of its source. The notification will be recorded and supplemented by transmittal of the IDEP Dry-Weather Screening Data Sheet. The upstream MS4 stormwater program manager will then process the following steps outlined above.

The continuous communication between the community's stormwater program manager, the field crew, and other agencies during the investigation will ensure appropriate and timely actions are taken to find the source of an illicit discharge.

6.3 REMOVING/CORRECTING ILLICIT DISCHARGES AND CONNECTIONS

Those responsible for illicit connections will be notified to correct the problem. The property owner will be required to implement appropriate best management practices (BMPs) to eliminate the potential for illicit discharges, according to the community's ordinance or regulatory mechanism. A follow-up inspection will be conducted to ensure the correction is satisfactorily completed. Persons responsible for illicit discharges, including spill or dumping incidents, will be investigated and required to pursue reasonable clean-up. Where appropriate, they will be required to demonstrate taking measures to ensure that similar incidents will not occur. All illicit discharges should be eliminated as soon as practical taking into consideration the pollution potential of the discharge, the cost of elimination, and the measures needed to eliminate the discharge. Appropriate fines, penalties, and litigation will be considered.



7.0 MINIMIZING SEEPAGE FROM SEPTIC SYSTEMS AND SANITARY SEWERS

Each community will coordinate its IDEP with the local health department to assist in mitigating problems with failing OSDS. An OSDS found during the implementation of the IDEP to be infiltrating into a MS4 will be referred to the local health department.

A formal complaint is recorded when the local health department is informed that a septic system is in a state of failure. The field sanitarian responsible for that area visits the site to verify the condition of the septic system. The homeowner is ordered to pump the septic tanks, apply for a septic permit, and correct the situation in a timely manner if a public health hazard is determined to exist. Failure to comply with an order from the local health department can result in monetary penalties and/or condemnation of the dwelling as unfit for human habitation. The property owner will be encouraged to connect to the sanitary sewer where feasible. If sanitary sewers are not available, short- and long-term solutions for sewage disposal will be determined.

Each community will continue to conduct a preventative maintenance program on its wastewater collection and stormwater systems according to their SWPPIs. The maintenance may involve routine cleaning and/or television inspections that provide good assessments of pipe conditions and locates sites needing repairs. Each community will correct any sanitary system deficiencies identified in order to minimize exfiltration and seepage of sewage into the groundwater or stormwater drainage system. The potential for seepage from sanitary sewers into the stormwater drainage system will be investigated in the process of *Finding the Source* of illicit discharges. Sanitary sewer overflows (SSOs) or cross connections to a storm sewer will be corrected as soon as possible or in accordance with a state compliance action.

NOTE: Some communities rely on others for sewerage services and have little direct control over their operation and maintenance.

8.0 SPILL RESPONSE PROCEDURES

Reports by the public or municipal personnel of spills or suspicious discharges will be pursued by trained individuals. Persons responsible for illicit discharges, including spill or dumping incidents, will be investigated and compelled to pursue reasonable clean-up. Where appropriate, they will be required to demonstrate taking measures to ensure similar incidents will not occur. Appropriate fines, penalties, and litigation will be considered.

If a spill or suspicious discharge is found or reported, the stormwater program manager will be notified and initial information will be gathered. Records will be maintained regarding the incident from the first report to resolution. The Community Reporting Form is included in Appendix 3. Based on the initial information the stormwater coordinator will assess the severity of the situation. All reports will be considered an emergency until it is determined to be a non-emergency. Therefore, the Emergency Procedure will be implemented until the stormwater program manager determines that the incident is a non-emergency, at which point the Non-Emergency Procedure will be implemented.

The MDEQ supports the appropriate participation of its employees in emergency response activities for the purpose of protecting public health and the environment. In general, the MDEQ employees do not serve as "first responder" personnel. Rather, the MDEQ staff serve as technical consultants to, and coordinate their activity with, an on-scene incident commander, usually the local fire chief and/or a responsible party. Staff may serve as technical consultants either at the site of the emergency or by telephone or other means of communication.

Emergency Procedure

- 1) Is public safety at immediate risk? If yes, notify law enforcement and report to National Response Center.
- 2) Notify and solicit aid from other nearby or affected agencies, e.g. County Drain Commissioner and Road Commission. Engage Environmental Response Contractor, if needed.
- 3) If caused by Municipal Operations, report to the MDEQ District Office or Pollution Emergency Alert System (PEAS) if afterhours. If it is a Part 5 Rules material (oil causing visible sheen or >50 pounds of salt or listed pollutants over certain amounts) also report to 9-1-1.
- 4) If consistent with personnel safety, attempt to track the spill to its source. Gather more detailed and accurate information. Engage the responsible party. Attempt to persuade responsible party to take primary responsibility for preventing further damage and to initiate clean-up.
- 5) Attempt to stop the discharge through cooperation with responsible party or by utilizing internal resources or environmental response contractor.
- 6) Attempt to block the flow of pollutants to prevent further damage and to facilitate capture of spilled material
- 7) Consider environmental monitoring to measure damage.



- 8) Clean up spilled material. Dispose as hazardous waste or liquid industrial waste.
- Prepare written report to the MDEQ District Office within 10 days. Send a copy to the local health department.
- 10) Consider requiring the responsible party to implement procedures or to install facilities to ensure the incident does not occur again.
- 11) Consider civil and/or criminal actions.

Important Phone Numbers

MDEQ Grand Rapids District Office - (616) 356-0500

MDEQ PEAS - 1-800-292-4706 (calls from out-of-state - 1-517-373-7660)

National Response Center - 1-800-424-8802 or www.nrc.uscg.mil/nrchp.html

Kent County Drain Commissioner - (616) 336-3688

Ottawa County Drain Commissioner - (616) 994-4530

Potential Environmental Response Contractors

(Inclusion here does not imply any approval or any endorsement or qualifications; contacts are provided for convenience in an emergency only. Communities are encouraged to select a contractor before an emergency situation occurs.)

Young's Environmental Cleanup, Inc.	Plummer's Environmental Services, Inc.
Grand Rapids Area Office	10075 Sedroc Industrial Drive
4990 West River Drive, NE	Byron Center, MI 49315
Comstock Park, MI 49321	Toll Free: 1-800-878-3996
Phone: (616) 785-3374	Office: 1-616-877-3930
Fax: (616) 785-3401	Fax: 1-616-877-3937
24 hr: 1-800-4Youngs (496-8647)	www.plummersenvironmental.com/index.aspx
http://www.youngsenvironmental.com/	
K&D Industrial Services, Inc. Corporate Offices	Valley City Environmental Service
Romulus, MI 48174	1040 Market Avenue, SW
(734) 722-8922	Grand Rapids, MI
Fax: (734) 729-8220	(616) 235-1500
Grand Rapids Branch	Fax (616) 235-9507
2629 Prairie Road	24 hr Emergency Spill Response Numbers
Wyoming, MI 49519	Please call 800.678.7035 / 616.235.1500
(616) 784-8900	http://www.valleycityes.com/
Fax: (616) 534-5782	
http://kdigroup.com/	



Non-Emergency Procedure

- 1) Determine a level of urgency based on the nature of the spill and likely impact on health, safety, and environment.
- 2) If consistent with personnel safety, attempt to track the spill to its source. Gather more detailed and accurate information. Engage the responsible party. Attempt to persuade responsible party to take primary responsibility for preventing further damage and to initiate clean-up.
- 3) Report to the MDEQ District Office, or PEAS if after business hours.
- 4) Determine if internal resources are sufficient or if an Environmental Response Contractor is needed.
- 5) Attempt to stop the discharge through cooperation with responsible party or by utilizing internal resources or environmental response contractor.
- 6) Attempt to block the flow of pollutants to prevent further damage and to facilitate capture.
- 7) Clean up spilled material. Dispose as hazardous waste or liquid industrial waste.
- 8) Prepare written report to the MDEQ District Office within 10 days.
- Consider requiring the responsible party to implement procedures or to install facilities to ensure the incident does not occur again.

9.0 DOCUMENTATION AND REPORTING

Progress Reports will be submitted to the MDEQ on the implementation status of the IDEP. The report will cover all of the decisions, actions, and results performed as part of the IDEP during the previous reporting period. The Progress Report will include:

- Documentation of actions taken to eliminate illicit discharges.
- For significant illicit discharges, a list of pollutants of concern, the estimated volume and load discharged, and the locations of the discharge into both the separate storm sewer system and the receiving water.
- The status of the program to minimize seepage from sanitary sewers and OSDS into the separate storm sewer system.
- Updated outfall mapping.
- A schedule for elimination of illicit connections that have been identified, but have yet to be eliminated.
- An evaluation of the effectiveness of the IDEP program. The evaluation will include:
 - An evaluation of the effectiveness of the detection methods used based on the number of illicit discharges detected.
 - o An estimated quantification of the number of discharges prevented or eliminated.
 - An estimated quantification of the volume of illicit flow eliminated.
 - o An assessment of the effectiveness of the program overall.

The goal of the program is to have a drainage system with no illicit discharges.

Figures

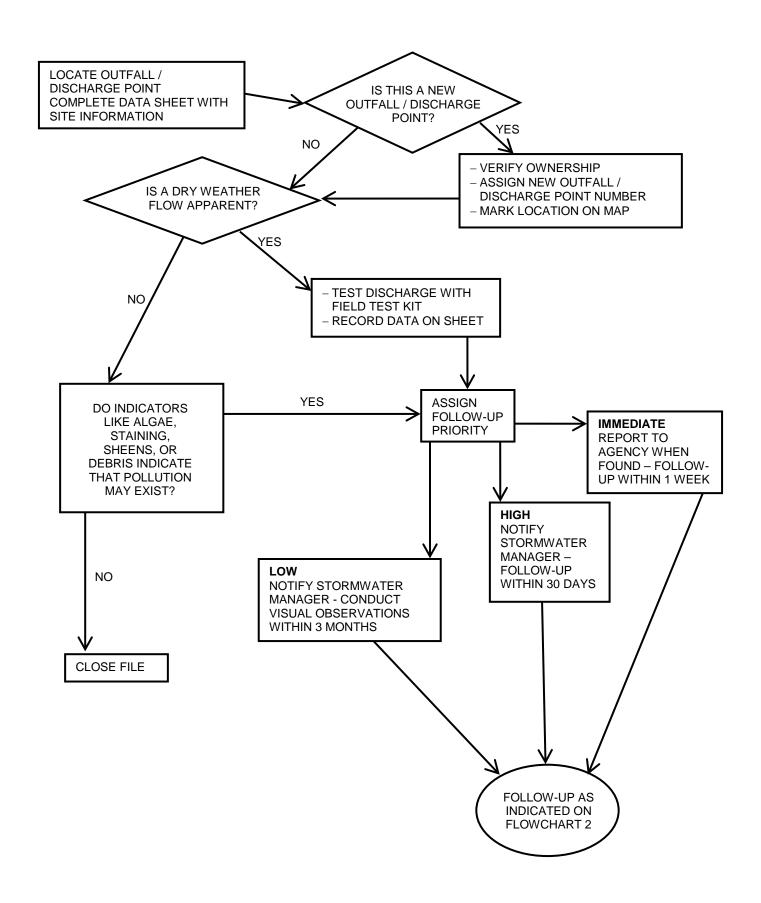


FIGURE 1: LOCATING PROBLEM AREAS

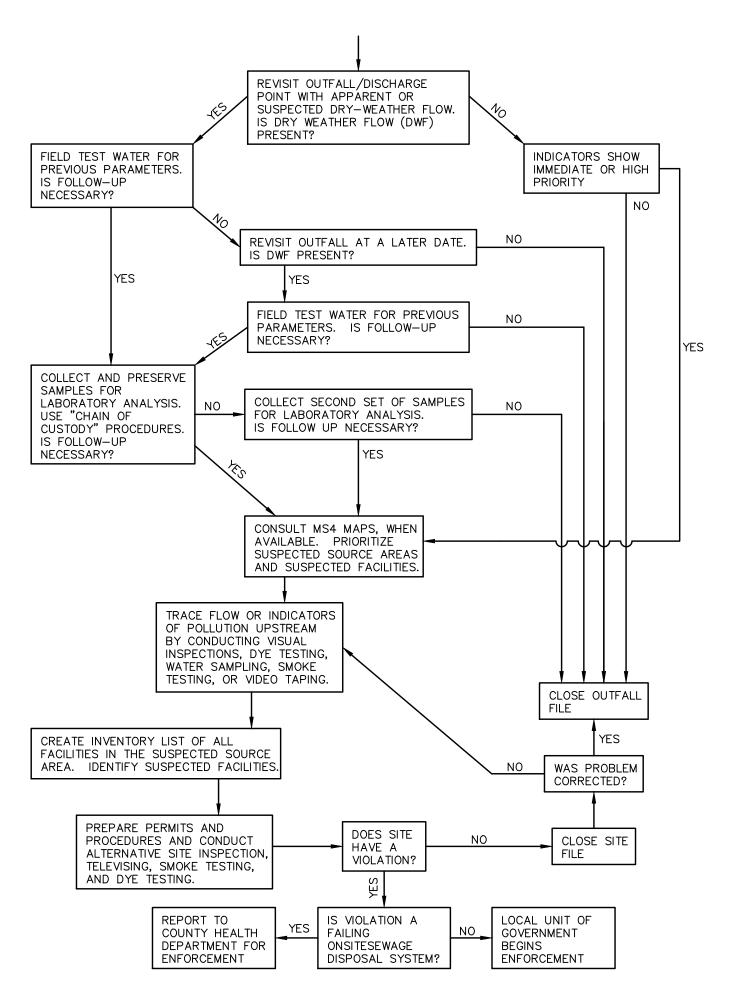


FIGURE 2: FINDING THE SOURCE

IDEP DRY WEATHER SCREENING DATA SHEET



GENERAL			Outfall ID	
Date Tim	e Air Temp	°F Receiv	ing Water	
Crew Name		of Last Rain	<u></u>	Clear/Sunny
Photograph #				Partly Cloudy
		°W (decimal o		
GPS Coordinates	IN	°W (decimal o	legrees)	Overcast
TYPE OF OUTFALL				
Material & Size	Conditio		Flow Observation	
(in) Concrete (in) PV		_		f flow in outfall
(in) RCP (in) Me (in) CMP		_		ater in pipe, no flow ficient to quantify
(in) CPP (ft) Dito		_	Dry, no wate	
(in) Other-describe below	iiipa	_	Dry, no wate	or present
() Garder december policin	If evi	dence of Illicit Conne	ection, describe be	elow
			,	
FLOW OBSERVATIONS (skip i			Casalina	O:1 O4b a ***
Odor None Mus Color Clear Ligh	ty Sewage t Brown Dark Brown	Rotten Egg _ Green	Gasoline Grey	_ Oil Other** Black Other**
Turbidity Clear Slig		Highly	Grey Opaque	Black Other**
Floatables None Tras	· —	Foam	Oil Sheen	Other**
<u> </u>				
OUTFALL AREA OBSERVATION				
Deposits/Stains None	Mineral	Sediment	_ ′	Grease Other**
Vegetation None	Normal	Excessive	_ Algae	Other**
Debris None	Tissue	Other**	li Ot	her, include comments
OTHER OBSERVATIONS NEAF	ROUTFALL			
Pollution Source Debris/	Trash Co	onstruction Runoff	Road	d Crossing
	<u></u>	reambank Erosion		Erosion
		le Outlet	Othe	
		and (coarse)		k/Silt (fine)
Hardpa	n (solid clay) Aı	rtificial	Othe	r** her, include comments
			11 01	ner, include comments
FIELD TEST KIT ANALYSES	OTHER ANAL	YSES		
Parameter Value Units	<u>Parameter</u>	<u>Value</u> <u>Units</u>	<u>Parameter</u>	<u>Value</u> <u>Units</u>
pH SU	 .			
Surfactants H, M, L,	or None			
Ammonia mg/L Temperature °F	 ,		 -	
Temperature °F				
Follow Up None	High Priority	Other - explain	Additional in	formation on
Low Priority	Immediate	•	attached she	
Comments				
□ Check if more comments are	on the back			

Tables

Table 1 - Field Testing Results Evaluation Guidelines

Parameter	Test Range	None Low		High	Immediate
Temperature °F	32-100	44 - 75	40 - 43 or 76 - 85	32 - 39 or 86 - 99	<32 or >100
pH	0-14	6 - 9.5	5 - 6 or 9.5 - 10.5	4 - 5 or 10.5 - 11	<4 or >11
Surfactants	detect presence	none	low or medium	high	
Ammonia ppm	0-6	0 - 1	1 - 3	3 - 6	>6

Table 2 – Storm Water Program Managers

Permittee	Storm Water Program Manager	Telephone Email	
Allendale Charter Township	Mr. Jerry Alkema, Township Supervisor	(616) 895-6295 ext. 12 jerryalkema@allendale-twp.org	
Cascade Charter Township	Mr. Steve Peterson Township Planner	(616) 949-1500 speterson@cascadetwp.com	
East Grand Rapids, City of	Mr. Ken Feldt, Public Works Director	(616) 940-4817 kfeldt@eastgr.org	
Ferrysburg, City of	Mr. Craig Bessinger, City Manager	(616) 842-5803 cbessinger@ferrysburg.org	
Forest Hills Public Schools	Mr. Ron Boezwinkle, Director of Operations	(616) 493.8780 rboezwin@fhps.net	
Georgetown Charter Township	Mr. Mike Hatkowski, Operations Coordinator	(616) 662-2800 mhatkowski@georgetown-mi.gov	
Grand Haven, City of	Mr. William Hunter, Director of Public Works	(616) 855-5809 bhunter@grandhaven.org	
Grand Rapids Charter Township	Mr. RJ Versluys Deputy Chief	(616) 361-7391 bversluys@grandrapidstwp.org	
Grand Rapids, City of	Ms. Carrie Rivette Project Engineer	(616) 456-3057 crivette@grcity.us	
Grandville, City of	Mr. Ron Carr, Director of Public Works	(616) 538-1990 carrr@cityofgrandville.com	
Hudsonville, City of	Mr. Dutch Besteman, Public Works Superintendent	(616) 669-0200 ext. 1424 dbestema@hudsonville.org	
Kent County Drain Commissioner and Admin.	Mr. Douglas Sporte, Deputy Drain Commissioner	(616) 336-3688 Doug.Sporte@Kentcountymi.gov	
Kent County Road Commission	Mr. Wayne Harrall, Director of Engineering	(616) 242-6914 wharrall@kentcountyroads.net	
Kentwood, City of	Mr. Ronald Woods, Director of Public Works	(616) 554-0824 woodsr@ci.kentwood.mi.us	
Plainfield Charter Township	Mr. Rick Solle, Director of Public Services	(616) 363-9660 soller@plainfieldchartertwp.org	
Rockford, City of	Mr. Jamie Davies, Public Services Director	616-893-0938 jdavies@rockford.mi.us	
Sparta, Village of	Mr. Miles Ring, DPW Superintendent	(616) 262-7901 dpwdept@spartami.org	
Spring Lake, Village of	Ms. Chris Burns Village Manager	(616) 842-1393 ext. 1002 christine@springlakevillage.org	
Walker, City of	Ms. Bonnie Broadwater, Engineering Programs Coordinator	(616) 791-6327 bbroadwa@ci.walker.mi.us	
Wyoming, City of	Mr. Aaron Vis, Environmental Services Inspector	(616) 261-3593 avis@wyomingmi.gov	

Appendix 1

Appendix 1

Excerpts from

Illicit Discharge Detection and Elimination - A Guidance Manual for Program

Development and Technical Assessments

By Edward Brown and Deb Caraco, Center for Watershed Protection, Ellicott City, Maryland 21043

and Robert Pitt, University of Alabama, Tuscaloosa, Alabama 35487 October 2004

Ammonia

Ammonia is a good indicator of sewage, since its concentration is much higher there than in groundwater or tap water. High ammonia concentrations may also indicate liquid wastes from some industrial sites. Ammonia is relatively simple and safe to analyze. Some challenges include the tendency for ammonia to volatilize (i.e., turn into a gas and become non-conservative) and its potential generation from non-human sources, such as pets or wildlife.

Boron

Boron is an element present in the compound borax, which is often found in detergent and soap formulations. Consequently, boron is a good potential indicator for both laundry wash water and sewage. Preliminary research from Alabama supports this contention, particularly when it is combined with other detergent indicators, such as surfactants (Pitt, IDDE Project Support Material). Boron may not be a useful indicator everywhere in the country since it may be found at elevated levels in groundwater in some regions and is a common ingredient in water softeners products. Program managers should collect data on boron concentrations in local tap water and groundwater sources to confirm whether it will be an effective indicator of illicit discharges.

Chlorine

Chlorine is used throughout the country to disinfect tap water, except where private wells provide the water supply. Chlorine concentrations in tap water tend to be significantly higher than most other discharge types. Unfortunately, chlorine is extremely volatile, and even moderate levels of organic materials can cause chlorine levels to drop below detection levels. Because chlorine is non-conservative, it is not a reliable indicator, although if very high chlorine levels are measured, it is a strong indication of a water line break, swimming pool discharge, or industrial discharge from a chlorine bleaching process.

Color

Color is a numeric computation of the color observed in a water quality sample, as measured in cobalt-platinum units (APHA, 1998). Both industrial liquid wastes and sewage tend to have elevated color values. Unfortunately, some "clean" flow types can also have high color values. Field testing by Pitt (IDDE Project Support Material) found high color values associated for all contaminated flows, but also many uncontaminated flows, which yielded numerous false

positives. Overall, color may be a good first screen for problem outfalls, but needs to be supplemented by other indicator parameters.

Conductivity

Conductivity, or specific conductance, is a measure of how easily electricity can flow through a water sample. Conductivity is often strongly correlated with the total amount of dissolved material in water, known as Total Dissolved Solids. The utility of conductivity as an indicator depends on whether concentrations are elevated in "natural" or clean waters. In particular, conductivity is a poor indicator of illicit discharge in estuarine waters or in northern regions where deicing salts are used (both have high conductivity readings). Field testing in Alabama suggests that conductivity has limited value to detect sewage or wash water (Pitt, IDDE Project Support Material). Conductivity has some value in detecting industrial discharges that can exhibit extremely high conductivity readings. Conductivity is extremely easy to measure with field probes, so it has the potential to be a useful supplemental indicator in subwatersheds that are dominated by industrial land uses.

Detergents

Most illicit discharges have elevated concentration of detergents. Sewage and washwater discharges contain detergents used to clean clothes or dishes, whereas liquid wastes contain detergents from industrial or commercial cleansers. The nearly universal presence of detergents in illicit discharges, combined with their absence in natural waters or tap water, makes them an excellent indicator. Research has revealed three indicator parameters that measure the level of detergent or its components-- surfactants, fluorescence, and surface tension (Pitt, IDDE Project Support Material). Surfactants have been the most widely applied and transferable of the three indicators. Fluorescence and surface tension show promise, but only limited field testing has been performed on these more experimental parameters. Methods and laboratory protocols for each of the three detergent indicator parameters are reviewed in Appendix F2.

E. coli, Enterococci and Total Coliform

Each of these bacteria is found at very high concentrations in sewage compared to other flow types, and is a good indicator of sewage or septage discharges, unless pet or wildlife sources exist in the subwatershed. Overall, bacteria are good supplemental indicators and can be used to find "problem" streams or outfalls that exceed public health standards. Relatively simple analytical methods are now available to test for bacteria indicators, although they still suffer from two monitoring constraints. The first is the relatively long analysis time (18-24 hours) to get results, and the second is that the waste produced by the tests may be classified as a biohazard and require special disposal techniques.

Fluorescence

Laundry detergents are highly fluorescent because optical brighteners are added to the formula to produce "brighter whites." Optical brighteners are the reason that white clothes appear to have a bluish color when placed under a fluorescent light. Fluorescence is a very sensitive indicator of the presence of detergents in discharges, using a fluorometer to measure fluorescence at specific wavelengths of light. Since no chemicals are needed for testing, fluorometers have minimal safety and waste disposal concerns. Some technical concerns do limit the utility of fluorescence as an indicator of illicit discharges. The concerns include the presence of fluorescence in non-illicit flow types such as irrigation water, the considerable variation of fluorescence between different detergent brands, and the lack of a readily standard or benchmark concentration for

Z:\2012\120878\WORK\REPT\IDEP\2013 0319 DRAFT\APP1 EXCERPTSFROMIDDEMANUAL.DOCX

optical brighteners. For example, Pitt (IDDE Project Support Material) measured fluorescence in mg/L of Tidetm brand detergent, and found the degree of fluorescence varied regionally, temporally, and between specific detergent formulations. Given these current limitations, fluorescence is best combined with other detergent indicators such as surfactants. Appendix F3 should be consulted for more detailed information on analytical methods and experimental field testing using fluorescence as an indicator parameter.

Fluoride

Fluoride is added to drinking water supplies in most communities to improve dental health, and normally found at a concentration of two parts per million in tapwater. Consequently, fluoride is an excellent conservative indicator of tap water discharges or leaks from water supply pipes that end up in the storm drain. Fluoride is obviously not a good indicator in communities that do not fluoridate drinking water, or where individual wells provide drinking water. One key constraint is that the reagent used in the recommended analytical method for fluoride is considered a hazardous waste, and must be disposed of properly.

Hardness

Hardness measures the positive ions dissolved in water and primarily include magnesium and calcium in natural waters, but are sometimes influenced by other metals. Field testing by Pitt (IDDE Project Support Material) suggests that hardness has limited value as an indicator parameter, except when values are extremely high or low (which may signal the presence of some liquid wastes). Hardness may be applicable in communities where hardness levels are elevated in groundwater due to karst or limestone terrain. In these regions, hardness can help distinguish natural groundwater flows present in outfalls from tap water and other flow types.

Hq

Most discharge flow types are neutral, having a pH value around 7, although groundwater concentrations can be somewhat variable. pH is a reasonably good indicator for liquid wastes from industries, which can have very high or low pH (ranging from 3 to 12). The pH of residential wash water tends to be rather basic (pH of 8 or 9). The pH of a discharge is very simple to monitor in the field with low cost test strips or probes. Although pH data is often not conclusive by itself, it can identify problem outfalls that merit follow-up investigations using more effective indicators.

Potassium

Potassium is found at relatively high concentrations in sewage, and extremely high concentrations in many industrial process waters. Consequently, potassium can act as a good first screen for industrial wastes, and can also be used in combination with ammonia to distinguish wash waters from sanitary wastes. (See Chapter 12). Simple field probes can detect potassium at relatively high concentrations (5 mg/L), whereas more complex colorimetric tests are needed to detect potassium concentrations lower than 5 mg/L.

Surface Tension

Surfactants remove dirt particles by reducing the surface tension of the bubbles formed in laundry water when it is agitated. Reduced surface tension makes dirt particles less likely to settle on a solid surface (e.g., clothes or dishes) and become suspended instead on the water's surface. The visible manifestation of reduced surface tension is the formation of foam or bubbles on the water surface. Pitt (IDDE Project Support Material) tested a very simple procedure to

measure surface tension that quantifies the formation of foam and bubbles in sample bottles. Initial laboratory tests suggest that surface tension is a good indicator of surfactants, but only when they are present at relatively high concentrations. Section F3 provides a more detailed description of the surface tension measurement procedure.

Surfactants

Surfactants are the active ingredient in most commercial detergents, and are typically measured as Methyl Blue Active Substances (or MBAS). They are a synthetic replacement for soap, which builds up deposits on clothing over time. Since surfactants are not found in nature, but are always present in detergents, they are excellent indicators of sewage and wash waters. The presence of surfactants in cleansers, emulsifiers and lubricants also makes them an excellent indicator of industrial or commercial liquid wastes. In fact, research by Pitt (IDDE Project Support Material) found that detergents were an excellent indicator of "contaminated" discharges in Alabama (i.e., discharges that were not tap water or groundwater). Several analytical methods are available to monitor surfactants. Unfortunately, the reagents used involve toluene, chloroform, or benzene, each of which is considered hazardous waste with a potential human health risk. The most common analysis method uses chloroform as a reagent, and is recommended because it is relatively safer when compared to other reagents.

Turbidity

Turbidity is a quantitative measure of cloudiness in water, and is normally measured with a simple field probe. While turbidity itself cannot always distinguish between contaminated flow types, it is a potentially useful screening indicator to determine if the discharge is contaminated (i.e., not composed of tap water or groundwater).

Table 39: Indicator Parameters Used to Detect Illicit Discharges								
	1	Discharge Typ	oes It Ca					
Parameter	Sewage	Washwater	Tap Water	Industrial or Commercial Liquid Wastes	Laboratory/Analytical Challenges			
Ammonia	•	•	0	•	Can change into other nitrogen forms as the flow travels to the outfall			
Boron	•	•	0	N/A				
Chlorine	0	0	0	•	High chlorine demand in natural waters limits utility to flows with very high chlorine concentrations			
Color	•	•	0	•				
Conductivity	•	•	0	•	Ineffective in saline waters			
Detergents – Surfactants	•	•	0	•	Reagent is a hazardous waste			
E. coli Enterococci Total Coliform	•	0		0	24-hour wait for results Need to modify standard monitoring protocols to measure high bacteria concentrations			
Fluoride*	0	0	•	•	Reagent is a hazardous waste Exception for communities that do not fluoridate their tap water			
Hardness	•	•	•	•				
рН	0	•	0	•				
Potassium	•	0	0	•	May need to use two separate analytical techniques, depending on the concentration			
Turbidity	•	•	0	•				

[•] Can almost always (>80% of samples) distinguish this discharge from clean flow types (e.g., tap water or natural water). For tap water, can distinguish from natural water.

N/A: Data are not available to assess the utility of this parameter for this purpose.

Data sources: Pitt (this study)

Can sometimes (>50% of samples) distinguish this discharge from clean flow types depending on regional characteristics, or can be helpful in combination with another parameter

Poor indicator. Cannot reliably detect illicit discharges, or cannot detect tap water

^{*}Fluoride is a poor indicator when used as a single parameter, but when combined with additional parameters (such as detergents, ammonia and potassium), it can almost always distinguish between sewage and washwater.

Appendix 2

KCDC Outfalls and Discharge Points 2018

Outfall ID#	Point of Discharge	Latitude	Longitude	Priority	Outfall or Discharge Point	Ultimate Outfall
ADA 07.02 DC	Waters of the State	43.007000	-85.533	MEDIUM-HIGH	OUTFALL	TRIB TO EGYPT CREEK
ADA 13.01 DC	Waters of the State	42.991624	-85.449425	MEDIUM-LOW	OUTFALL	TRIB TO HONEY CREEK
ADA 29.01 DC	Waters of the State	42.959000	-85.514	MEDIUM-HIGH	OUTFALL	TRIB TO GRAND RIVER
ADA 29.02 DC	Waters of the State	42.957000	-85.514	MEDIUM-HIGH	OUTFALL	TRIB TO GRAND RIVER
ADA 29.03 DC	Waters of the State	42.959000	-85.517	MEDIUM-HIGH	OUTFALL	TRIB TO GRAND RIVER
ADA 29.04 DC	Waters of the State	42.957000	-85.517	MEDIUM-HIGH	OUTFALL	TRIB TO GRAND RIVER
ADA 29.05 DC	Waters of the State	42.957000	-85.518	MEDIUM-HIGH	OUTFALL	TRIB TO GRAND RIVER
ADA 29.06 DC	Waters of the State	42.951000	-85.512	MEDIUM-HIGH	OUTFALL	TRIB TO GRAND RIVER
ADA 30.01 DC	Waters of the State	42.960000	-85.531	MEDIUM-HIGH	OUTFALL	TRIB TO GRAND RIVER
ADA 31.01 DC	Waters of the State	42.943000	-85.547	MEDIUM-HIGH	OUTFALL	TRIB TO LITTLE PLASTER CREEK
ADA 31.02 DC	Waters of the State	42.942000	-85.539	MEDIUM-LOW	OUTFALL	TRIB TO LITTLE PLASTER CREEK
ADA 31.03 DC	Waters of the State	42.945000	-85.539	MEDIUM-HIGH	OUTFALL	MARTIN & BEAK NO.2
ADA 31.04 DC	Waters of the State	42.951000	-85.54	MEDIUM-HIGH	OUTFALL	TRIB TO GRAND RIVER
ADA 34.01 DC	Waters of the State	42.952000	-85.486	MEDIUM-LOW	OUTFALL	THORNAPPLE RIVER
ALG 17.01 DC	Waters of the State	43.162571	-85.162571	MEDIUM-LOW	OUTFALL	TRIB TO LITTLE CEDAR CREEK
ALG 19.01 DC	Waters of the State	43.157412	-85.656501	MEDIUM-LOW	OUTFALL	TRIB TO LOW LAKE
ALG 24.01 DC	Waters of the State	43.156894	-85.57082	MEDIUM-LOW	OUTFALL	TRIB TO ROGUE RIVER
ALP 25.01 DC	Waters of the State	43.049000	-85.676	MEDIUM-HIGH	OUTFALL	TRIB TO STRAWBERRY CREEK
ALP 27.01 DC	Waters of the State	43.052000	-85.719	MEDIUM-LOW	OUTFALL	TRIB TO INDIAN MILL CREEK
ALP 31.01 DC	Waters of the State	43.045115	-85.774168	MEDIUM-LOW	OUTFALL	SAND CREEK - EAST FORK
ALP 35.01 DC	Waters of the State	43.031000	-85.693	HIGH	OUTFALL	WETLANDS/POND
ALP 35.02 DC	Waters of the State	43.030000	-85.692	MEDIUM-HIGH	OUTFALL	WETLANDS/POND
ALP 36.01 DC	Waters of the State	43.037000	-85.681	MEDIUM-HIGH	OUTFALL	YORK CREEK/ALPINE WALKER DRAIN
ALP 36.02 DC	Waters of the State	43.039000	-85.682	MEDIUM-HIGH	OUTFALL	YORK CREEK/ALPINE WALKER DRAIN
BWN 06.01 DC	Waters of the State	42.844885	-85.421668	MEDIUM-LOW	OUTFALL	BROOKSHIRE ESTATES WET POND
BWN 06.02 DC	Waters of the State	42.843457	-85.423585	MEDIUM-LOW	OUTFALL	WETLANDS/POND
BWN 11.01 DC	Waters of the State	42.841443	-85.347308	MEDIUM-LOW	OUTFALL	PRATT LAKE
BWN 14.01 DC	Waters of the State	42.823800	-85.344	MEDIUM-LOW	OUTFALL	PRATT LAKE
BWN 16.01 DC	Waters of the State	42.818201	-85.3795	MEDIUM-LOW	OUTFALL	TRIB TO CLARK AND BUNKER DRAIN
BWN 22.01 DC	Waters of the State	42.811920	-85.36365	MEDIUM-LOW	OUTFALL	TRIB TO TYLER CREEK
BWN 27.01 DC	Waters of the State	42.783961	-85.366323	MEDIUM-LOW	OUTFALL	TRIB TO COLDWATER RIVER
BWN 29.01 DC	Waters of the State	42.784643	-85.408038	MEDIUM-LOW	OUTFALL	COLDWATER RIVER
BWN 35.01 DC	Waters of the State	42.774246	-85.342001	MEDIUM-LOW	OUTFALL	TRIB TO COLDWATER RIVER
BYN 01.01 DC	Waters of the State	42.844000	-85.674	MEDIUM-HIGH	OUTFALL	BUCK CREEK
BYN 01.02 DC	Waters of the State	42.841000	-85.673	MEDIUM-HIGH	OUTFALL	BUCK CREEK

Outfall ID#	Point of Discharge	Latitude	Longitude	Priority	Outfall or Discharge Point	Ultimate Outfall
BYN 03.01 DC	Waters of the State	42.845000	-85.714	MEDIUM-HIGH	OUTFALL	WET POND
BYN 03.02 DC	Waters of the State	42.844000	-85.721	MEDIUM-HIGH	OUTFALL	VANSINGEL FARMS
BYN 03.03 DC	Waters of the State	42.843000	-85.721	MEDIUM-HIGH	OUTFALL	VANSINGEL FARMS
BYN 03.04 DC	Waters of the State	42.843000	-85.72	MEDIUM-HIGH	OUTFALL	VANSINGEL FARMS
BYN 03.05 DC	Waters of the State	42.843000	-85.718	MEDIUM-HIGH	OUTFALL	VANSINGEL FARMS
BYN 03.06 DC	Waters of the State	42.843000	-85.717	MEDIUM-HIGH	OUTFALL	VANSINGEL FARMS
BYN 03.07 DC	Waters of the State	42.844000	-85.716	MEDIUM-HIGH	OUTFALL	VANSINGEL FARMS
BYN 03.08 DC	Waters of the State	42.844000	-85.717	MEDIUM-HIGH	OUTFALL	VANSINGEL FARMS
BYN 03.09 DC	Waters of the State	42.845000	-85.719	MEDIUM-HIGH	OUTFALL	VANSINGEL FARMS
BYN 03.10 DC	Waters of the State	42.846000	-85.721	MEDIUM-HIGH	OUTFALL	VANSINGEL FARMS
BYN 03.11 DC	Waters of the State	42.841000	-85.712	MEDIUM-HIGH	OUTFALL	EAST LAKE BYRON
BYN 03.12 DC	Waters of the State	42.842000	-85.71	MEDIUM-HIGH	OUTFALL	EAST LAKE BYRON
BYN 03.13 DC	Waters of the State	42.842000	-85.709	MEDIUM-HIGH	OUTFALL	EAST LAKE BYRON
BYN 04.01 DC	Waters of the State	42.845000	-85.731	MEDIUM-HIGH	OUTFALL	RUSH CREEK/KNIGHT DRAIN
BYN 04.02 DC	Waters of the State	42.841000	-85.723	MEDIUM-HIGH	OUTFALL	KNIGHT DRAIN BRANCH 1
BYN 06.01 DC	Waters of the State	42.852000	-85.778	MEDIUM-HIGH	OUTFALL	RUSH CREEK EAST BRANCH
BYN 06.02 DC	Waters of the State	42.848759	-85.768891	MEDIUM-LOW	OUTFALL	TRIB TO BROWN DRAIN
BYN 06.08 DC	Waters of the State	42.851240	-85.77195	MEDIUM-HIGH	OUTFALL	TRIB TO RUSH CREEK (EAST BRANCH)
BYN 09.01 DC	Waters of the State	42.839000	-85.738	MEDIUM-HIGH	OUTFALL	KNIGHT DRAIN
BYN 09.03 DC	Waters of the State	42.836000	-85.729	MEDIUM-HIGH	OUTFALL	RUSH CREEK/KNIGHT DRAIN
BYN 09.04 DC	Waters of the State	0.000000	-85.724	MEDIUM-HIGH	OUTFALL	DETENTION BASIN/WETLAND
BYN 09.07 DC	Waters of the State	42.827000	-85.738	MEDIUM-LOW	OUTFALL	TRIB TO RUSH CREEK/KNIGHT DRAIN
BYN 10.01 DC	Waters of the State	42.841000	-85.721	MEDIUM-HIGH	OUTFALL	WEST LAKE BYRON
BYN 10.02 DC	Waters of the State	42.839000	-85.721	MEDIUM-HIGH	OUTFALL	WEST LAKE BYRON
BYN 10.03 DC	Waters of the State	42.839000	-85.719	MEDIUM-HIGH	OUTFALL	WEST LAKE BYRON
BYN 10.04 DC	Waters of the State	42.839000	-85.717	MEDIUM-HIGH	OUTFALL	WEST LAKE BYRON
BYN 10.05 DC	Waters of the State	42.839000	-85.714	MEDIUM-HIGH		WEST LAKE BYRON
BYN 10.06 DC	Waters of the State	42.841000	-85.713	MEDIUM-HIGH		WEST LAKE BYRON
BYN 10.07 DC	Waters of the State	42.840000	-85.721	MEDIUM-HIGH	OUTFALL	WEST LAKE BYRON
BYN 10.08 DC	Waters of the State	42.840000	-85.712	MEDIUM-HIGH		EAST LAKE BYRON
BYN 10.09 DC	Waters of the State	42.838000	-85.712	MEDIUM-HIGH		EAST LAKE BYRON
BYN 10.10 DC	Waters of the State	42.837000	-85.712	MEDIUM-HIGH		WATER'S EDGE POND
BYN 10.11 DC	Waters of the State	42.836000	-85.712	MEDIUM-HIGH		WATER'S EDGE POND
BYN 10.12 DC	Waters of the State	42.836000	-85.711	MEDIUM-HIGH		WATER'S EDGE POND
BYN 10.13 DC	Waters of the State	42.837000	-85.711	MEDIUM-HIGH		WATER'S EDGE POND
BYN 10.14 DC	Waters of the State	42.837000	-85.704	MEDIUM-HIGH		EAST LAKE BYRON
BYN 10.15 DC	Waters of the State	42.833000	-85.717	MEDIUM-HIGH		WHISTLE RIDGE NO. 3 DETENTION/CHANNEL
BYN 10.17 DC	Waters of the State	42.830000	-85.713	MEDIUM-HIGH		TRIB TO KNIGHT DRAIN
BYN 10.19 DC	Waters of the State	42.830000	-85.722	MEDIUM-HIGH		WARNER COUNTY DRAIN
BYN 10.20 DC	Waters of the State	42.831868	-85.710097	MEDIUM-HIGH		TRIB TO KNIGHT DRAIN
BYN 10.21 DC	Waters of the State	42.832000	-85.71	MEDIUM-HIGH	OUTFALL	WET BASIN/WETLAND

Outfall ID#	Point of Discharge	Latitude	Longitude	Priority	Outfall or Discharge Point	Ultimate Outfall
BYN 11.01 DC	Waters of the State	42.841000	-85.692	MEDIUM-HIGH	OUTFALL	CUTLERVILLE ORCHARD
BYN 11.02 DC	Waters of the State	42.835000	-85.7	MEDIUM-HIGH	OUTFALL	PROVIDENCE LAKE
BYN 11.03 DC	Waters of the State	42.835000	-85.698	MEDIUM-HIGH	OUTFALL	PROVIDENCE LAKE
BYN 11.04 DC	Waters of the State	42.835000	-85.697	MEDIUM-HIGH	OUTFALL	PROVIDENCE LAKE
BYN 11.05 DC	Waters of the State	42.835000	-85.703	MEDIUM-HIGH	OUTFALL	PROVIDENCE LAKE
BYN 11.06 DC	Waters of the State	42.835000	-85.703	MEDIUM-HIGH	OUTFALL	PROVIDENCE LAKE
BYN 11.07 DC	Waters of the State	42.836000	-85.702	MEDIUM-HIGH	OUTFALL	PROVIDENCE LAKE
BYN 11.08 DC	Waters of the State	42.836000	-85.702	MEDIUM-HIGH	OUTFALL	GOOSE CREEK
BYN 11.09 DC	Waters of the State	42.834000	-85.689	MEDIUM-HIGH	OUTFALL	GOOSE CREEK
BYN 11.10 DC	Waters of the State	42.834000	-85.691	MEDIUM-HIGH	OUTFALL	DAN KOSTER M.I.C
BYN 11.11 DC	Waters of the State	42.832000	-85.689	MEDIUM-HIGH	OUTFALL	DAN KOSTER M.I.C
BYN 11.12 DC	Waters of the State	42.833000	-85.688	MEDIUM-HIGH	OUTFALL	GOOSE CREEK
BYN 11.13 DC	Waters of the State	42.832000	-85.686	MEDIUM-HIGH	OUTFALL	GOOSE CREEK
BYN 11.14 DC	Waters of the State	42.831000	-85.684	MEDIUM-HIGH	OUTFALL	GOOSE CREEK
BYN 11.15 DC	Waters of the State	42.836600	-85.6996	MEDIUM-HIGH	OUTFALL	GOOSE CREEK
BYN 11.16 DC	Waters of the State	42.836900	-85.7015	MEDIUM-HIGH	OUTFALL	PROVIDENCE COVE POND
BYN 11.17 DC	Waters of the State	42.836900	-85.6998	MEDIUM-HIGH	OUTFALL	PROVIDENCE COVE POND
BYN 11.18 DC	Waters of the State	42.834800	-85.698	MEDIUM-HIGH	OUTFALL	PROVIDENCE LAKE
BYN 11.19 DC	Waters of the State	42.834300	-85.6999	MEDIUM-HIGH	OUTFALL	PROVIDENCE LAKE
BYN 12.01 DC	Waters of the State	42.837000	-85.667	MEDIUM-HIGH	OUTFALL	MATT STREET DRAIN
BYN 12.02 DC	Waters of the State	42.836412	-85.667092	MEDIUM-HIGH	OUTFALL	BUCK CREEK EXT DRAIN
BYN 12.03 DC	Waters of the State	42.833000	-85.671	MEDIUM-HIGH	OUTFALL	TRIB TO BUCK CREEK
BYN 13.01 DC	Waters of the State	42.816000	-85.669	MEDIUM-HIGH	OUTFALL	PFEIFFER DRAIN
BYN 14.01 DC	Waters of the State	42.825000	-85.697	MEDIUM-LOW	OUTFALL	TRIB TO BUCK CREEK
BYN 14.05 DC	Waters of the State	42.816000	-85.693	MEDIUM-HIGH	OUTFALL	BUCK CREEK
BYN 14.08 DC	Waters of the State	42.820607	-85.697633	MEDIUM-HIGH	OUTFALL	TRIB TO BUCK CREEK
BYN 14.09 DC	Waters of the State	42.820209	-85.697658	MEDIUM-HIGH	OUTFALL	TRIB TO BUCK CREEK
BYN 15.03 DC	Waters of the State	42.813000	-85.712	MEDIUM-HIGH	OUTFALL	TRIB TO BUCK CREEK
BYN 15.04 DC	Waters of the State	42.813000	-85.712	MEDIUM-HIGH	OUTFALL	TRIB TO BUCK CREEK
BYN 15.05 DC	Waters of the State	42.816000	-85.723	MEDIUM-HIGH	OUTFALL	WARNER DRAIN
BYN 15.06 DC	Waters of the State	42.821000	-85.719	MEDIUM-HIGH	OUTFALL	WARNER DRAIN
BYN 16.01 DC	Waters of the State	42.826000	-85.735	MEDIUM-HIGH	OUTFALL	KNIGHT DRAIN
BYN 16.02 DC	Waters of the State	42.823000	-85.738	MEDIUM-LOW	OUTFALL	KNIGHT DRAIN
BYN 16.03 DC	Waters of the State	42.823000	-85.739	MEDIUM-LOW	OUTFALL	KNIGHT DRAIN
BYN 16.04 DC	Waters of the State	42.821000	-85.741	MEDIUM-LOW	OUTFALL	KNIGHT DRAIN
BYN 16.05 DC	Waters of the State	42.820000	-85.742		OUTFALL	KNIGHT DRAIN
BYN 16.06 DC	Waters of the State	42.818954	-85.728767	MEDIUM-HIGH	OUTFALL	WARNER DRAIN
BYN 17.01 DC	Waters of the State	42.819000	-85.743		OUTFALL	KNIGHT DRAIN
BYN 17.02 DC	Waters of the State	42.816910	-85.74376	MEDIUM LOW	OUTFALL	KNIGHT DRAIN
BYN 17.03 DC	Waters of the State	42.815810	-85.74451	MEDIUM LOW	OUTFALL	KNIGHT DRAIN
BYN 21.02 DC	Waters of the State	42.804000	-85.724	MEDIUM-HIGH	OUTFALL	TRIB TO JAKES DRAIN

Outfall ID#	Point of Discharge	Latitude	Longitude	Priority	Outfall or Discharge Point	Ultimate Outfall
BYN 21.03 DC	Waters of the State	42.802000	-85.728	MEDIUM-HIGH	OUTFALL	JAKES DRAIN
BYN 21.04 DC	Waters of the State	42.803000	-85.73	MEDIUM-HIGH	OUTFALL	POND/WETLAND
BYN 21.05 DC	Waters of the State	42.804000	-85.73	MEDIUM-HIGH	OUTFALL	POND/WETLAND
BYN 21.06 DC	Waters of the State	42.803000	-85.73	MEDIUM-HIGH	OUTFALL	JAKES DRAIN
BYN 22.01 DC	Waters of the State	42.809000	-85.715	MEDIUM-HIGH	OUTFALL	LANTING DRAIN
BYN 22.02 DC	Waters of the State	42.804000	-85.706	MEDIUM-HIGH	OUTFALL	PLANTERS ROW
BYN 22.03 DC	Waters of the State	42.804000	-85.704	MEDIUM-HIGH	OUTFALL	PLANTERS ROW
BYN 22.04 DC	Waters of the State	42.803000	-85.704	MEDIUM-HIGH	OUTFALL	LANTING
BYN 22.05 DC	Waters of the State	42.803000	-85.705	MEDIUM-HIGH	OUTFALL	LANTING
BYN 22.07 DC	Waters of the State	42.802000	-85.709	MEDIUM-HIGH	OUTFALL	PLANTERS ROW
BYN 22.08 DC	Waters of the State	42.802000	-85.71	MEDIUM-HIGH	OUTFALL	PLANTERS ROW
BYN 22.09 DC	Waters of the State	42.802000	-85.71	MEDIUM-HIGH	OUTFALL	PLANTERS ROW
BYN 22.10 DC	Waters of the State	42.802000	-85.71	MEDIUM-HIGH	OUTFALL	PLANTERS ROW
BYN 22.11 DC	Waters of the State	42.802000	-85.709	MEDIUM-HIGH	OUTFALL	PLANTERS ROW
BYN 22.12 DC	Waters of the State	42.802000	-85.709	MEDIUM-HIGH	OUTFALL	PLANTERS ROW
BYN 22.13 DC	Waters of the State	42.711790	-85.7997	MEDIUM-HIGH	OUTFALL	TRIB TO BUCK CREEK
BYN 23.01 DC	Waters of the State	42.806000	-85.692	MEDIUM-LOW	OUTFALL	CARLISLE SHORES DRAIN
BYN 23.02 DC	Waters of the State	42.806000	-85.692	MEDIUM-LOW	OUTFALL	CARLISLE SHORES DRAIN
BYN 23.03 DC	Waters of the State	42.807000	-85.69	MEDIUM-LOW	OUTFALL	CARLISLE SHORES DRAIN
BYN 23.04 DC	Waters of the State	42.807000	-85.691	MEDIUM-LOW	OUTFALL	CARLISLE SHORES DRAIN
BYN 23.05 DC	Waters of the State	42.808000	-85.688	MEDIUM-LOW	OUTFALL	CARLISLE DRAIN
BYN 23.07 DC	Waters of the State	42.810087	-85.688686	MEDIUM-LOW	OUTFALL	TRIB TO CARLISLE DRAIN
BYN 24.02 DC	Waters of the State	42.810652	-85.674059	MEDIUM-LOW	OUTFALL	TRIB TO CARLISLE DRAIN
BYN 24.03 DC	Waters of the State	42.801543	-85.67337	MEDIUM-LOW	OUTFALL	TRIB TO CARLISLE DRAIN
BYN 30.01 DC	Waters of the State	42.796558	-85.780228	MEDIUM-LOW	OUTFALL	TRIB TO BLACK CREEK
BYN 32.01 DC	Waters of the State	42.768312	-85.758008	MEDIUM-LOW	OUTFALL	TRIB TO UNNAMED CREEK
BYN 35.01 DC	Waters of the State	42.780521	-85.691586	MEDIUM-LOW	OUTFALL	BUCK CREEK
CAL 03.01 DC	Waters of the State	42.844000	-85.475	MEDIUM-HIGH	OUTFALL	TRIB TO THORNAPPLE
CAL 11.01 DC	Waters of the State	42.838176	-85.451085	MEDIUM-HIGH	OUTFALL	CAMPAU LAKE
CAL 12.01 DC	Waters of the State	42.839000	-85.438	MEDIUM-HIGH	OUTFALL	TRIB TO THORNAPPLE
CAL 12.02 DC	Waters of the State	42.839000	-85.438	MEDIUM-HIGH	OUTFALL	TRIB TO THORNAPPLE
CAL 19.01 DC	Waters of the State	42.802582		MEDIUM-LOW		TRIB TO THORNAPPLE
CAL 20.01 DC	Waters of the State	42.808952	-85.513189	MEDIUM-HIGH		TRIB TO EMMONS LAKE
CAL 20.02 DC	Waters of the State	42.802840	-85.511795		OUTFALL	EMMONS LAKE
CAL 20.03 DC	Waters of the State	42.800311	-85.51196		OUTFALL	EMMONS LAKE
CAL 20.04 DC	Waters of the State	42.799589	-85.511692		OUTFALL	EMMONS LAKE
CAL 20.05 DC	Waters of the State	42.798402	-85.511594		OUTFALL	EMMONS LAKE
CAL 20.06 DC	Waters of the State	42.797548	-85.511811		OUTFALL	EMMONS LAKE
CAL 21.01 DC	Waters of the State	42.807121	-85.490352		OUTFALL	TRIB TO THORNAPPLE
CAL 22.01 DC	Waters of the State	42.807490	-85.46825		OUTFALL	TRIB TO THORNAPPLE
CAL 22.02 DC	Waters of the State	42.807906	-85.472249	MEDIUM-LOW	OUTFALL	TRIB TO THORNAPPLE

Outfall ID#	Point of Discharge	Latitude	Longitude	Priority	Outfall or Discharge Point	Ultimate Outfall
CAL 22.03 DC	Waters of the State	42.808939	-85.477667	MEDIUM-LOW	OUTFALL	TRIB TO THORNAPPLE
CAL 24.01 DC		42.812405	-85.428575	HIGH	OUTFALL	CAMPBELL LAKE
CAL 29.01 DC	Waters of the State	42.794626	-85.518941	MEDIUM-LOW	OUTFALL	TRIB TO EMMONS LAKE
CAL 29.02 DC	Waters of the State	42.791538	-85.514898	MEDIUM-LOW	OUTFALL	EMMONS LAKE
CAN 08.01 DC	Waters of the State	43.092000	-85.53	MEDIUM-LOW	OUTFALL	BARKLEY CREEK
CAN 09.01 DC	Waters of the State	43.904000	-85.506	MEDIUM-HIGH	OUTFALL	LAKE BELLA VISTA
CAN 09.02 DC	Waters of the State	43.093000	-85.505	MEDIUM-HIGH	OUTFALL	LAKE BELLA VISTA
CAN 09.04 DC	Waters of the State	43.097000	-85.493	MEDIUM-LOW	OUTFALL	TRIB TO ROGUE RIVER
CAN 11.01 DC	Waters of the State	43.908000	-85.455	MEDIUM-HIGH	OUTFALL	TRIB TO BOSTWICK LAKE
CAN 27.01 DC	Waters of the State	43.053408	-85.472834	MEDIUM-LOW	OUTFALL	TRIB TO BEAR CREEK
CAS 06.01 DC	Waters of the State	42.931000	-85.545	MEDIUM-HIGH	OUTFALL	MARTIN & BEAK DRAIN
CAS 06.02 DC	Waters of the State	42.938000	-85.547	MEDIUM-HIGH	OUTFALL	TRIB TO GILLETT DRAIN
CAS 06.03 DC	Waters of the State	42.940000	-85.55	MEDIUM-HIGH	OUTFALL	TRIB TO GILLETT DRAIN
CAS 06.04 DC	Waters of the State	42.941000	-85.546	MEDIUM-HIGH	OUTFALL	TRIB TO GILLETT DRAIN
CAS 06.05 DC	Waters of the State	42.927000	-85.539	MEDIUM-HIGH	OUTFALL	TRIB TO SPAULDING DRAIN
CAS 07.01 DC	Waters of the State	42.927000	-85.539	MEDIUM-HIGH		SPAULDING DRAIN
CAS 07.02 DC	Waters of the State	42.915000	-85.538	MEDIUM-HIGH	OUTFALL	PATTERSON DRAIN
CAS 07.03 DC	Waters of the State	42.916000	-85.536	MEDIUM-HIGH	OUTFALL	PATTERSON DRAIN
CAS 07.04 DC	Waters of the State	42.915000	-85.536	MEDIUM-HIGH		PATTERSON DRAIN
CAS 08.02 DC	Waters of the State	42.921000	-85.515	MEDIUM-HIGH	OUTFALL	TRIB TO THORNAPPLE
CAS 08.03 DC	Waters of the State	42.921000	-85.513	MEDIUM-HIGH	OUTFALL	TRIB TO THORNAPPLE
CAS 08.04 DC	Waters of the State	42.916000	-85.516	MEDIUM-HIGH		TRIB TO THORNAPPLE
CAS 08.05 DC	Waters of the State	42.919000	-85.511	MEDIUM-HIGH	OUTFALL	TRIB TO THORNAPPLE
CAS 09.01 DC	Waters of the State	42.920000	-85.509	MEDIUM-HIGH	OUTFALL	TRIB TO THORNAPPLE
CAS 09.02 DC	Waters of the State	42.921000	-85.507	MEDIUM-HIGH	OUTFALL	TRIB TO THORNAPPLE
CAS 09.03 DC	Waters of the State	42.917000	-85.502	MEDIUM-HIGH	OUTFALL	TRIB TO THORNAPPLE
CAS 10.01 DC	Waters of the State	42.923000	-85.476	MEDIUM-HIGH	OUTFALL	TRIB TO THORNAPPLE
CAS 10.03 DC	Waters of the State	42.918000	-85.479	MEDIUM-HIGH	OUTFALL	TRIB TO THORNAPPLE
CAS 15.01 DC	Waters of the State	42.902000	-85.479	MEDIUM-HIGH	OUTFALL	APPLE HILLS DRAIN
CAS 15.02 DC	Waters of the State	42.902000	-85.48	MEDIUM-HIGH	OUTFALL	APPLE HILLS DRAIN
CAS 15.03 DC	Waters of the State	42.903000	-85.471	MEDIUM-HIGH		WET BASIN/WETLAND
CAS 15.04 DC	Waters of the State	42.903000	-85.471	MEDIUM-HIGH		APPLE HILLS EAST DRAIN
CAS 18.01 DC	Waters of the State	42.907000	-85.53	MEDIUM-HIGH		TRIB TO PLASTER CREEK
CAS 18.02 DC	Waters of the State	42.912000	-85.545	MEDIUM-HIGH		TRIB TO PLASTER CREEK
CAS 21.01 DC	Waters of the State	42.895000	-85.494	MEDIUM-HIGH		TRIB TO THORNAPPLE
CAS 31.03 DC	Waters of the State	42.862000	-85.545	MEDIUM-LOW		TRIB TO PLASTER CREEK
CDS 25.01 DC	Waters of the State	43.223071	-85.556207		OUTFALL	CEDAR CREEK
CDS 25.02 DC	Waters of the State	43.224135	-85.555759	MEDIUM-LOW	OUTFALL	CEDAR CREEK
CRT 21.01 DC	Waters of the State	43.153130	-85.50826	MEDIUM-LOW	OUTFALL	FOXTAIL DRAIN
CRT 28.01 DC	Waters of the State	43.135000	-85.493	MEDIUM-HIGH		MYERS LAKE/RUM CREEK
CRT 31.01 DC	Waters of the State	43.126000	-85.546	MEDIUM-HIGH	OUTFALL	RUM CREEK

Outfall ID#	Point of Discharge	Latitude	Longitude	Priority	Outfall or Discharge Point	Ultimate Outfall
CRT 33.01 DC	Waters of the State	43.132000	-85.493	MEDIUM-HIGH	OUTFALL	RUM CREEK
CRT 34.01 DC	Waters of the State	43.127000	-85.483	MEDIUM-HIGH	OUTFALL	LITTLE BROWER LAKE
GDV 21.01 DC	Waters of the State	42.892703	-85.734134	MEDIUM-HIGH	OUTFALL	BEHAN &FOLEY DRAIN - TRIB TO BUCK CREEK
GDV 21.02 DC	Waters of the State	42.885651	-85.739028	MEDIUM-HIGH	OUTFALL	TRIB TO BEHAN & FOLEY DRAIN
GDV 21.03 DC	Waters of the State	42.886305	-85.738594	MEDIUM-HIGH	OUTFALL	TRIB TO BEHAN & FOLEY DRAIN
GDV 29.01 DC	Waters of the State	42.883205	-85.74666	MEDIUM-HIGH	OUTFALL	HUIZENGA DRAIN
GDV 30.01 DC	Waters of the State	42.882128	-85.764503	MEDIUM-HIGH	OUTFALL	HUIZENGA DRAIN
GNS 03.01 DC	Waters of the State	42.842000	-85.602	MEDIUM-HIGH	OUTFALL	AVALON POINTE POND
GNS 03.02 DC	Waters of the State	42.842000	-85.601	MEDIUM-HIGH	OUTFALL	AVALON POINTE POND
GNS 03.03 DC	Waters of the State	42.844000	-85.6	MEDIUM-HIGH	OUTFALL	AVALON POINTE POND
GNS 03.04 DC	Waters of the State	42.845000	-85.601	MEDIUM-HIGH	OUTFALL	AVALON POINTE POND
GNS 03.05 DC	Waters of the State	42.845000	-85.6	MEDIUM-HIGH	OUTFALL	TRIB TO PLASTER CREEK
GNS 03.06 DC	Waters of the State	42.843000	-85.598	MEDIUM-HIGH	OUTFALL	WETLANDS ADJACENT TO PLASTER CREEK
GNS 03.07 DC	Waters of the State	42.845000	-85.591	MEDIUM-HIGH	OUTFALL	PLASTER CREEK
GNS 04.02 DC	Waters of the State	42.847000	-85.611	MEDIUM-HIGH	OUTFALL	VANTAGE POINT WEST POND
GNS 04.03 DC	Waters of the State	42.847000	-85.612	MEDIUM-HIGH	OUTFALL	VANTAGE POINT WEST POND
GNS 04.05 DC	Waters of the State	42.848000	-85.624	MEDIUM-HIGH	OUTFALL	TRIB TO BUCK CREEK
GNS 04.06 DC	Waters of the State	42.848000	-85.608	MEDIUM-HIGH	OUTFALL	TRIB TO CUTLERVILLE DRAIN
GNS 04.07 DC	Waters of the State	42.849000	-85.607	MEDIUM-HIGH	OUTFALL	TRIB TO CUTLERVILLE DRAIN
GNS 05.01 DC	Waters of the State	42.844000	-85.631	MEDIUM-HIGH	OUTFALL	CUTLERVILLE DRAIN
GNS 05.02 DC	Waters of the State	42.844000	-85.629	MEDIUM-HIGH	OUTFALL	CUTLERVILLE DRAIN
GNS 05.03 DC	Waters of the State	42.845000	-85.632	MEDIUM-HIGH	OUTFALL	CUTLERVILLE DRAIN
GNS 05.04 DC	Waters of the State	42.845000	-85.633	MEDIUM-HIGH	OUTFALL	CUTLERVILLE DRAIN
GNS 06.01 DC	Waters of the State	42.847000	-85.655	MEDIUM-HIGH	OUTFALL	SUMMER SHORES LAKE
GNS 06.02 DC	Waters of the State	42.847000	-85.655	MEDIUM-HIGH	OUTFALL	SUMMER SHORES LAKE
GNS 06.03 DC	Waters of the State	42.847000	-85.657	MEDIUM-HIGH	OUTFALL	SUMMER SHORES LAKE
GNS 06.04 DC	Waters of the State	42.846000	-85.658	MEDIUM-HIGH	OUTFALL	SUMMER SHORES LAKE
GNS 06.05 DC	Waters of the State	42.845000	-85.657	MEDIUM-HIGH	OUTFALL	SUMMER SHORES LAKE
GNS 06.06 DC	Waters of the State	42.844000	-85.657	MEDIUM-HIGH	OUTFALL	SUMMER SHORES LAKE
GNS 06.07 DC	Waters of the State	42.845000	-85.659	MEDIUM-HIGH	OUTFALL	SUMMER SHORES LAKE
GNS 06.08 DC	Waters of the State	42.852000	-85.649	MEDIUM-HIGH	OUTFALL	VAN OOSTEN DRAIN
GNS 06.09 DC	Waters of the State	42.850000	-85.65	MEDIUM-HIGH	OUTFALL	VAN OOSTEN DRAIN
GNS 07.01 DC	Waters of the State	42.831000	-85.653	MEDIUM-HIGH	OUTFALL	BUCK CREEK EXTENSION
GNS 07.02 DC	Waters of the State	42.828000	-85.646	MEDIUM-HIGH	OUTFALL	TRIB TO BUCK CREEK
GNS 08.01 DC	Waters of the State	42.827000	-85.641	MEDIUM-HIGH		CRYSTAL CREEK DRAIN
GNS 08.02 DC	Waters of the State	42.830000	-85.638	MEDIUM-HIGH	I .	TRIB TO BUCK CREEK
GNS 08.03 DC	Waters of the State	42.830000	-85.637	MEDIUM-HIGH	OUTFALL	TRIB TO BUCK CREEK
GNS 09.02 DC	Waters of the State	42.828000	-85.618	MEDIUM-HIGH	OUTFALL	WET POND
GNS 09.03 DC	Waters of the State	42.827000	-85.619	MEDIUM-HIGH	OUTFALL	WET POND
GNS 09.04 DC	Waters of the State	42.840000	-85.617	MEDIUM-HIGH		WET POND - HEATHERS DRAIN
GNS 09.06 DC	Waters of the State	42.841000	-85.615	MEDIUM-HIGH	OUTFALL	TRIB TO CUTLERVILLE DRAIN

Outfall ID#	Point of Discharge	Latitude	Longitude	Priority	Outfall or Discharge Point	Ultimate Outfall
GNS 09.08 DC	Waters of the State	42.832000	-85.608	MEDIUM-HIGH	OUTFALL	TRIB TO PLASTER CREEK
GNS 09.09 DC	Waters of the State	42.833000	-85.606	MEDIUM-HIGH	OUTFALL	TRIB TO PLASTER CREEK
GNS 09.10 DC	Waters of the State	42.832000	-85.608	MEDIUM-HIGH	OUTFALL	TRIB TO PLASTER CREEK
GNS 10.01 DC	Waters of the State	42.838000	-85.599	MEDIUM-LOW	OUTFALL	PLASTER CREEK
GNS 10.02 DC	Waters of the State	42.836000	-85.589	MEDIUM-LOW	OUTFALL	PLASTER CREEK
GNS 10.03 DC	Waters of the State	42.837000	-85.589	MEDIUM-LOW	OUTFALL	PLASTER CREEK
GNS 11.03 DC	Waters of the State	42.834000	-85.571	MEDIUM-LOW	OUTFALL	TRIB TO DUTTON DRAIN
GNS 11.06 DC	Waters of the State	42.831967	-85.580781	MEDIUM-LOW	OUTFALL	TRIB TO PLASTER CREEK
GNS 16.01 DC	Waters of the State	42.817000	-85.615	MEDIUM-LOW	OUTFALL	BREWER DRAIN
GNS 17.01 DC	Waters of the State	42.822000	-85.628	MEDIUM-HIGH	OUTFALL	TRIB TO BUCK CREEK
GNS 17.02 DC	Waters of the State	42.822000	-85.628	MEDIUM-HIGH	OUTFALL	TRIB TO BUCK CREEK
GNS 17.03 DC	Waters of the State	42.822000	-85.627	MEDIUM-HIGH	OUTFALL	TRIB TO BUCK CREEK
GNS 17.04 DC	Waters of the State	42.822000	-85.626	MEDIUM-HIGH	OUTFALL	TRIB TO BUCK CREEK
GNS 17.05 DC	Waters of the State	42.823000	-85.633	MEDIUM-HIGH	OUTFALL	TRIB TO BUCK CREEK
GNS 17.06 DC	Waters of the State	42.824000	-85.633	MEDIUM-HIGH	OUTFALL	TRIB TO BUCK CREEK
GNS 17.07 DC	Waters of the State	42.824000	-85.632	MEDIUM-HIGH	OUTFALL	TRIB TO BUCK CREEK
GNS 17.08 DC	Waters of the State	42.818000	-85.643	MEDIUM-HIGH	OUTFALL	TRIB TO BUCK CREEK
GNS 18.01 DC	Waters of the State	42.824000	-85.653	MEDIUM-HIGH	OUTFALL	TRIB TO SHARPS CREEK
GNS 18.02 DC	Waters of the State	42.822000	-85.659	MEDIUM-HIGH	OUTFALL	SHARP'S CREEK
GNS 18.03 DC	Waters of the State	42.817000	-85.66	MEDIUM-HIGH	OUTFALL	TRIB TO SHARP'S CREEK
GNS 18.04 DC	Waters of the State	42.818000	-85.661	MEDIUM-HIGH	OUTFALL	TRIB TO SHARP'S CREEK
GNS 18.05 DC	Waters of the State	42.819000	-85.661	MEDIUM-HIGH	OUTFALL	TRIB TO SHARP'S CREEK
GNS 18.09 DC	Waters of the State	42.818000	-85.648	MEDIUM-HIGH	OUTFALL	TRIB TO SHARPS CREEK
GNS 18.11 DC	Waters of the State	42.817000	-85.653	MEDIUM-HIGH	OUTFALL	TRIB TO SHARPS CREEK
GNS 26.01 DC	Waters of the State	42.795499	-85.581703	MEDIUM-LOW	OUTFALL	TRIB TO HANNA LAKE
GNS 31.01 DC	Waters of the State	42.768000	-85.659	MEDIUM-LOW	OUTFALL	TRIB TO BUCK CREEK
GNS 31.02 DC	Waters of the State	42.778760	-85.65577	MEDIUM-LOW	OUTFALL	WET POND
GRC 04.02 DC	Waters of the State	43.023000	-85.629	MEDIUM-HIGH	OUTFALL	LAMBERTON LAKE
GRC 04.04 DC	Waters of the State	42.940000	-85.62	MEDIUM-HIGH	OUTFALL	SILVER CREEK KEISER POND
GRC 04.05 DC	Waters of the State	42.939000	-85.62	MEDIUM-HIGH	OUTFALL	SILVER CREEK KEISER POND
GRC 05.02 DC	Waters of the State	42.937000	-85.636	MEDIUM-HIGH	OUTFALL	SILVER CREEK CALVIN POND
GRC 06.01 DC	Waters of the State	43.020000	-85.655	MEDIUM-HIGH		LAMBERTON CREEK
GRC 08.01 DC	Waters of the State	43.007000	-85.634	MEDIUM-HIGH	OUTFALL	LAMBERTON CREEK
GRC 08.02 DC	Waters of the State	43.001000	-85.635	MEDIUM-HIGH	OUTFALL	TRIB TO LAMBERTON CREEK
GRC 09.01 DC	Waters of the State	43.009000	-85.628	MEDIUM-HIGH		LAMBERTON CREEK
GRC 09.03 DC	Waters of the State	43.006000	-85.731	MEDIUM-HIGH		INDIAN MILL CREEK
GRC 13.01 DC	Waters of the State	42.998000	-85.672	MEDIUM-HIGH	OUTFALL	GRAND RIVER
GRC 15.01 DC	Waters of the State	42.990000	-85.601	MEDIUM-HIGH		TRIB TO LAMBERTON CREEK
GRC 15.02 DC	Waters of the State	42.988000	-85.601	MEDIUM-HIGH	OUTFALL	TRIB TO LAMBERTON CREEK
GRC 15.03 DC	Waters of the State	42.993000	-85.601	MEDIUM-HIGH		TRIB TO LAMBERTON CREEK
GRC 15.04 DC	Waters of the State	42.993000	-85.601	MEDIUM-HIGH	OUTFALL	TRIB TO LAMBERTON CREEK

Outfall ID#	Point of Discharge	Latitude	Longitude	Priority	Outfall or Discharge Point	Ultimate Outfall
GRC 15.05 DC	Waters of the State	43.000000	-85.718	MEDIUM-HIGH	OUTFALL	INDIAN MILL CREEK
GRC 15.06 DC	Waters of the State	42.994000	-85.727	MEDIUM-HIGH	OUTFALL	TRIB TO INDIAN MILL CREEK
GRC 16.01 DC	Waters of the State	42.989000	-85.746	MEDIUM-HIGH	OUTFALL	TRIB TO WORDEN & INDIAN MILL CREEK
GRC 16.02 DC	Waters of the State	42.909825	-85.621079	MEDIUM-HIGH	OUTFALL	BURTON-BRETON DRAIN
GRC 16.03 DC	Waters of the State	42.902220	-85.615089	MEDIUM-HIGH	OUTFALL	PLASTER CREEK
GRC 16.04 DC	Waters of the State	42.993619	-85.744246	MEDIUM-HIGH	OUTFALL	BRANDYWINE CREEK
GRC 17.03 DC	Waters of the State	42.909338	-85.646727	MEDIUM-HIGH	OUTFALL	PLASTER CREEK
GRC 19.01 DC	Waters of the State	42.981000	-85.65	MEDIUM-HIGH	OUTFALL	TRIB TO COLDBROOK CREEK
GRC 19.02 DC	Waters of the State	42.974000	-85.654	MEDIUM-HIGH	OUTFALL	TRIB TO COLDBROOK CREEK
GRC 20.01 DC	Waters of the State	42.972000	-85.636	MEDIUM-HIGH	OUTFALL	TRIB TO COLDBROOK CREEK
GRC 20.05 DC	Waters of the State	42.979000	-85.748	MEDIUM-HIGH	OUTFALL	TRIB TO WORDEN
GRC 20.06 DC	Waters of the State	42.979000	-85.751	MEDIUM-HIGH	OUTFALL	TRIB TO WORDEN
GRC 21.02 DC	Waters of the State	42.974000	-85.618	MEDIUM-HIGH	OUTFALL	COLDBROOK CREEK
GRC 21.03 DC	Waters of the State	42.982000	-85.74	MEDIUM-HIGH	OUTFALL	TRIB TO GRAHAM & WORDEN DRAIN
GRC 21.06 DC	Waters of the State	42.978000	-85.744	MEDIUM-HIGH	OUTFALL	TRIB TO WORDEN
GRC 22.01 DC	Waters of the State	42.979000	-85.606	MEDIUM-HIGH	OUTFALL	TRIB TO COLDBROOK CREEK
GRC 24.01 DC	Waters of the State	42.982000	-85.672	HIGH	OUTFALL	GRAND RIVER
GRC 25.05 DC	Waters of the State	42.965516	-85.674531	MEDIUM-HIGH	OUTFALL	GRAND RIVER
GRC 25.06 DC	Waters of the State	42.968261	-85.674345	MEDIUM-HIGH	OUTFALL	GRAND RIVER
GRC 28.01 DC	Waters of the State	42.963000	-85.618	MEDIUM-HIGH	OUTFALL	WATERS DRAIN
GRC 28.02 DC	Waters of the State	42.962000	-85.61	HIGH	OUTFALL	WATERS DRAIN
GRC 28.03 DC	Waters of the State	42.963000	-85.621	MEDIUM-HIGH	OUTFALL	WATERS DRAIN
GRT 04.01 DC	Waters of the State	43.027000	-85.628	MEDIUM-HIGH	OUTFALL	TRIB TO LAMBERTON LAKE
GRT 04.03 DC	Waters of the State	43.027000	-85.618	MEDIUM-HIGH	OUTFALL	POND
GRT 10.03 DC	Waters of the State	43.007000	-85.596	MEDIUM-HIGH	OUTFALL	WET POND - TRIB TO LAMBERTON CREEK
GRT 10.04 DC	Waters of the State	43.007000	-85.597	MEDIUM-HIGH	OUTFALL	WET POND - TRIB TO LAMBERTON CREEK
GRT 10.05 DC	Waters of the State	43.006000	-85.597	MEDIUM-HIGH	OUTFALL	TRIB TO LAMBERTON CREEK
GRT 24.01 DC	Waters of the State	42.970000	-85.568	MEDIUM-LOW	OUTFALL	TRIB TO SADDLEBAG
GRT 24.02 DC	Waters of the State	42.970000	-85.568		OUTFALL	TRIB TO SADDLEBAG
GRT 25.01 DC	Waters of the State	42.961000	-85.558	MEDIUM-HIGH		WET BASIN
GRT 25.02 DC	Waters of the State	42.965000	-85.563	MEDIUM-HIGH		TRIB TO SADDLEBAG
GRT 25.03 DC	Waters of the State	42.965000	-85.558	MEDIUM-HIGH		TRIB TO SADDLEBAG
GRT 25.04 DC	Waters of the State	42.964000	-85.556	MEDIUM-HIGH		TRIB TO SADDLEBAG
GRT 26.01 DC	Waters of the State	42.966000	-85.576	MEDIUM-HIGH		TRIB TO SADDLEBAG
GRT 36.01 DC	Waters of the State	42.952000	-85.564	MEDIUM-HIGH		SADDLEBAG DRAIN
KWD 14.01 DC	Waters of the State	42.911811	-85.583826	MEDIUM-HIGH		WHISKEY CREEK
KWD 14.02 DC	Waters of the State	42.912089	-85.581193	MEDIUM-HIGH		WHISKEY CREEK
KWD 22.01 DC	Waters of the State	42.896294	-85.605184	MEDIUM-HIGH	OUTFALL	TRIB TO PLASTER CREEK
KWD 23.01 DC	Waters of the State	42.898100	-85.58167		OUTFALL	TRIB TO PLASTER CREEK
KWD 26.01 DC	Waters of the State	42.874278	-85.572311		OUTFALL	TRIB TO PLASTER CREEK
KWD 26.02 DC	Waters of the State	42.877309	-85.573484	MEDIUM-LOW	OUTFALL	TRIB TO PLASTER CREEK

Outfall ID#	Point of Discharge		Longitude	Priority	Outfall or Discharge Point	Ultimate Outfall
KWD 29.01 DC	Waters of the State	42.882609	-85.629426	MEDIUM-HIGH	OUTFALL	PARIS DRAIN - TRIB TO BUCK
KWD 31.01 DC	Waters of the State	42.865793	-85.65699	MEDIUM-HIGH	OUTFALL	TRIB TO HEYBOER
KWD 32.01 DC	Waters of the State	42.868042	-85.629064	MEDIUM-HIGH	OUTFALL	TRIB TO HEYBOER
KWD 34.01 DC	Waters of the State	42.854808	-85.59014	MEDIUM-HIGH	OUTFALL	TRIB TO PLASTER CREEK
KWD 35.01 DC	Waters of the State	42.854718	-85.568077	MEDIUM-HIGH	OUTFALL	TRIB TO PLASTER CREEK
LOW 04.01 DC	Waters of the State	42.928982	-85.376074	MEDIUM-LOW	OUTFALL	TRIB TO GRAND RIVER
LOW 04.03 DC	Waters of the State	42.934373	-85.376082	MEDIUM-LOW	OUTFALL	TRIB TO GRAND RIVER
LOW 04.04 DC	Waters of the State	42.936873	-85.389175	MEDIUM-LOW	OUTFALL	TRIB TO GRAND RIVER
LOW 04.05 DC	Waters of the State	42.935324	-85.387491	MEDIUM-LOW	OUTFALL	TRIB TO GRAND RIVER
LOW 04.06 DC	Waters of the State	42.935010	-85.387347	MEDIUM-LOW	OUTFALL	TRIB TO GRAND RIVER
LOW 20.01 DC	Waters of the State	42.890148	-85.4069	MEDIUM-LOW	OUTFALL	TRIB TO GRAND RIVER
PLN 03.01 DC	Waters of the State	43.116682	-85.596366	MEDIUM-LOW	OUTFALL	TRIB TO ROGUE RIVER
PLN 11.01 DC	Waters of the State	43.098552	-85.584818	MEDIUM-HIGH	OUTFALL	ROGUE RIVER
PLN 11.03 DC	Waters of the State	43.089303	-85.574808	MEDIUM-HIGH	OUTFALL	WET BASIN - TRIB TO ROGUE RIVER
PLN 12.01 DC	Waters of the State	43.098347	-85.550953	MEDIUM-LOW	OUTFALL	TRIB TO BARKLEY CREEK
PLN 16.01 DC	Waters of the State	43.075614	-85.616348	MEDIUM-HIGH	OUTFALL	WHITE PINE DRAIN
PLN 16.02 DC	Waters of the State	43.073225	-85.618029	MEDIUM-HIGH	OUTFALL	WHITE PINE DRAIN
PLN 16.03 DC	Waters of the State	43.072710	-85.618614	MEDIUM-HIGH	OUTFALL	WHITE PINE DRAIN
PLN 17.02 DC	Waters of the State	43.074832	-85.630271	MEDIUM-HIGH	OUTFALL	WET BASIN
PLN 17.03 DC	Waters of the State	43.074139	-85.630984	MEDIUM-HIGH	OUTFALL	SCOTT CREEK TRIB TO GRAND RIVER
PLN 17.04 DC	Waters of the State	43.074141	-85.631092	MEDIUM-HIGH	OUTFALL	SCOTT CREEK TRIB TO GRAND RIVER
PLN 17.05 DC	Waters of the State	43.072077	-85.630053	MEDIUM-HIGH	OUTFALL	SCOTT CREEK TRIB TO GRAND RIVER
PLN 18.01 DC	Waters of the State	43.073507	-85.651165	MEDIUM-LOW	OUTFALL	WETLANDS
PLN 18.02 DC	Waters of the State	43.077181	-85.650846	MEDIUM-LOW	OUTFALL	TRIB TO GRAND RIVER
PLN 19.01 DC	Waters of the State	43.067678	-85.66977	MEDIUM-HIGH	OUTFALL	TRIB TO MILL CR
PLN 20.02 DC	Waters of the State	43.061798	-85.641959	MEDIUM-HIGH	OUTFALL	TRIB TO GRAND RIVER
PLN 21.02 DC	Waters of the State	43.067666	-85.614024	MEDIUM-HIGH	OUTFALL	JUPITER POND (SOUTH BASIN)
PLN 21.03 DC	Waters of the State	43.067170	-85.612794	MEDIUM-HIGH	OUTFALL	TRIB TO GRAND RIVER
PLN 21.04 DC	Waters of the State	43.070387	-85.620286	MEDIUM-HIGH	OUTFALL	TRIB TO GRAND RIVER
PLN 21.05 DC	Waters of the State	43.071210	-85.625882	MEDIUM-HIGH		TRIB TO GRAND RIVER
PLN 22.02 DC	Waters of the State	43.067947	-85.599611	MEDIUM-HIGH	OUTFALL	TRIB TO ROGUE RIVER
PLN 23.01 DC	Waters of the State	43.062873	-85.581561	MEDIUM-HIGH	OUTFALL	GRAND RIVER
PLN 24.01 DC	Waters of the State	43.065314	-85.56504	MEDIUM-LOW	OUTFALL	TRIB TO GRAND RIVER
PLN 24.02 DC	Waters of the State	43.060736	-85.563522	MEDIUM-LOW	OUTFALL	TRIB TO GRAND RIVER
PLN 24.03 DC	Waters of the State	43.064800	-85.5637		OUTFALL	BOULDER CREEK EAST
PLN 24.04 DC	Waters of the State	43.063500	-85.5637	MEDIUM-LOW	OUTFALL	TRIB TO GRAND RIVER
PLN 25.01 DC	Waters of the State	43.054100	-85.565167		OUTFALL	GRAND RIVER
PLN 27.01 DC	Waters of the State	43.057017	-85.590091	MEDIUM-HIGH		GRAND RIVER
PLN 27.03 DC	Waters of the State	43.055586	-85.597757	MEDIUM-HIGH		GRAND RIVER
PLN 28.01 DC	Waters of the State	43.043596	-85.611129	MEDIUM-HIGH	OUTFALL	WET BASIN
PLN 28.02 DC	Waters of the State	43.053000	-85.629	MEDIUM-HIGH	OUTFALL	TRIB TO GRAND RIVER

Outfall ID#	Point of Discharge		Longitude	Priority	Outfall or Discharge Point	Ultimate Outfall
PLN 30.01 DC	Waters of the State	43.051893	-85.650118	MEDIUM-HIGH	OUTFALL	TRIB TO GRAND RIVER
PLN 30.02 DC	Waters of the State	43.053332	-85.660826	MEDIUM-HIGH	OUTFALL	TRIB TO GRAND RIVER
PLN 31.01 DC	Waters of the State	43.030000	-85.659	MEDIUM-HIGH	OUTFALL	GRAND RIVER
PLN 32.01 DC	Waters of the State	43.034436	-85.640991	MEDIUM-HIGH	OUTFALL	TRIB TO GRAND RIVER
PLN 33.01 DC	Waters of the State	43.036336	-85.628107	MEDIUM-HIGH	OUTFALL	WET BASIN
PLN 33.02 DC	Waters of the State	43.036721	-85.627703	MEDIUM-HIGH	OUTFALL	WET BASIN
PLN 33.03 DC	Waters of the State	43.036368	-85.627922	MEDIUM-HIGH	OUTFALL	WET BASIN
PLN 33.04 DC	Waters of the State	43.038048	-85.628344	MEDIUM-HIGH	OUTFALL	WET BASIN
PLN 33.05 DC	Waters of the State	43.038014	-85.628597	MEDIUM-HIGH	OUTFALL	WET BASIN
PLN 34.01 DC	Waters of the State	43.034490	-85.598815	MEDIUM-HIGH	OUTFALL	WET BASIN
PLN 34.02 DC	Waters of the State	43.038801	-85.597818	MEDIUM-HIGH	OUTFALL	WET BASIN
SOL 35.01 DC	Waters of the State	43.211368	-85.578495	MEDIUM-LOW	OUTFALL	TRIB TO CEDAR CREEK
SPR 27.01 DC	Waters of the State	43.144508	-85.728754	MEDIUM-LOW	OUTFALL	TRIB TO ROGUE RIVER
SPR 35.01 DC	Waters of the State	43.117120	-85.699017	MEDIUM-LOW	OUTFALL	TRIB TO ROGUE RIVER
TYR 19.01 DC	Waters of the State	43.237757	-85.78708	MEDIUM-LOW	OUTFALL	TRIB TO ROGUE RIVER
TYR 30.01 DC	Waters of the State	43.226887	-85.776638	MEDIUM-LOW	OUTFALL	GREINER DRAIN
TYR 32.01 DC	Waters of the State	43.214719	-85.766011	MEDIUM-LOW	OUTFALL	TRIB TO CROCKERY CREEK
TYR 32.02 DC	Waters of the State	43.214710	-85.766018	MEDIUM-LOW	OUTFALL	TRIB TO CROCKERY CREEK
TYR 33.01 DC	Waters of the State	43.215200	-85.7469	MEDIUM-LOW	OUTFALL	BALL CREEK
VER 26.01 DC	Waters of the State	42.961442	-85.339753	MEDIUM-LOW	OUTFALL	FLAT RIVER
VER 31.01 DC	Waters of the State	42.945465	-85.414044	MEDIUM-LOW	OUTFALL	TRIB TO GRAND RIVER
VER 35.01 DC	Waters of the State	42.956828	-85.34	MEDIUM-LOW	OUTFALL	TRIB TO FLAT RIVER
VSP 22.01 DC	Waters of the State	43.155639	-85.715862	MEDIUM-HIGH	OUTFALL	ROGERS DRAIN
WLK 01.01 DC	Waters of the State	43.026024	-85.4985	MEDIUM-HIGH	OUTFALL	YORK CREEK/ALPINE WALKER DRAIN
WLK 01.02 DC	Waters of the State	43.026798	-85.691429	MEDIUM-HIGH	OUTFALL	YORK CREEK/ALPINE WALKER DRAIN
WLK 04.01 DC	Waters of the State	43.020969	-85.738487	MEDIUM-HIGH	OUTFALL	TRIB TO INDIAN MILL CREEK
WLK 05.01 DC	Waters of the State	43.015997	-85.759353	MEDIUM-HIGH	OUTFALL	TRIB TO SAND CREEK
WLK 06.01 DC	Waters of the State	43.020626	-85.777591		OUTFALL	TRIB TO SAND CREEK
WLK 06.02 DC	Waters of the State	43.020055	-85.777143	MEDIUM-LOW	OUTFALL	TRIB TO SAND CREEK
WLK 06.03 DC	Waters of the State	43.019909	-85.785346	MEDIUM-LOW	OUTFALL	TRIB TO SAND CREEK
WLK 06.04 DC	Waters of the State	43.019165	-85.786326		OUTFALL	TRIB TO SAND CREEK
WLK 07.01 DC	Waters of the State	43.005244	-85.775872	MEDIUM-HIGH	OUTFALL	WET BASIN - TRIB TO FRIAR AND KIMBALL DRAI
WLK 08.01 DC	Waters of the State	43.012069	-85.760039	MEDIUM-HIGH	OUTFALL	FRUIT RIDGE IND PARK POND
WLK 08.02 DC	Waters of the State	43.011642	-85.760045	MEDIUM-HIGH	OUTFALL	WETLANDS- TRIB TO SAND CREEK
WLK 08.03 DC	Waters of the State	43.010055	-85.761122	MEDIUM-HIGH	OUTFALL	WETLANDS-TRIB TO SAND CREEK
WLK 08.04 DC	Waters of the State	43.006358	-85.764927		OUTFALL	NOLAN DRAIN
WLK 08.05 DC	Waters of the State	43.001423	-85.765076	MEDIUM-HIGH		NOLAN DRAIN
WLK 10.01 DC	Waters of the State	43.003508	-85.724028		OUTFALL	INDIAN MILL CREEK
WLK 10.02 DC	Waters of the State	43.003508	-85.724525	MEDIUM-HIGH	OUTFALL	TRIB TO INDIAN MILL CREEK
WLK 12.01 DC	Waters of the State	43.008469	-85.680037	MEDIUM-HIGH	OUTFALL	TRIB TO NOLAN DRAIN
WLK 12.02 DC	Waters of the State	43.006586	-85.676678	MEDIUM-HIGH	OUTFALL	TRIB TO NOLAN DRAIN

Outfall ID#	Point of Discharge	Latitude	Longitude	Priority	Outfall or Discharge Point	Ultimate Outfall
WLK 12.03 DC	Waters of the State	43.004178	-85.688089	MEDIUM-HIGH	OUTFALL	TRIB TO GRAND RIVER
WLK 12.04 DC	Waters of the State	43.001110	-85.676623	MEDIUM-HIGH	OUTFALL	TRIB TO GRAND RIVER
WLK 12.05 DC	Waters of the State	43.008700	-85.677463	MEDIUM-HIGH	OUTFALL	TRIB TO GRAND RIVER
WLK 17.01 DC	Waters of the State	42.996189	-85.756087	MEDIUM-HIGH	OUTFALL	MULLINS DRAIN
WLK 17.02 DC	Waters of the State	42.995915	-85.756056	MEDIUM-HIGH	OUTFALL	MULLINS DRAIN
WLK 17.07 DC	Waters of the State	42.988760	-85.747888	MEDIUM-HIGH	OUTFALL	TRIB TO BRANDYWINE
WLK 19.01 DC	Waters of the State	42.983845	-85.781686	MEDIUM-HIGH	OUTFALL	TALLMAN CREEK DRAIN
WLK 19.02 DC	Waters of the State	42.975979	-85.771346	MEDIUM-HIGH	OUTFALL	TALLMAN CREEK DRAIN
WLK 20.02 DC	Waters of the State	42.985405	-85.759545	MEDIUM-HIGH	OUTFALL	WORDEN DRAIN
WLK 20.03 DC	Waters of the State	42.980432	-85.759074	MEDIUM-HIGH	OUTFALL	WET DETENTION BASIN
WLK 20.04 DC	Waters of the State	42.981648	-85.756303	MEDIUM-HIGH	OUTFALL	WORDEN DRAIN
WLK 20.06 DC	Waters of the State	42.981654	-85.754969	MEDIUM-HIGH	OUTFALL	TRIB TO WORDEN DRAIN
WLK 20.07 DC	Waters of the State	42.980339	-85.75101	MEDIUM-HIGH	OUTFALL	GRAHAM & WORDEN DRAIN
WLK 29.01 DC	Waters of the State	42.968171	-85.756937	MEDIUM-HIGH	OUTFALL	SEXTON DRAIN
WLK 29.02 DC	Waters of the State	42.959908	-85.757702	MEDIUM-HIGH	OUTFALL	TRIB TO TALLMAN CREEK
WLK 29.03 DC	Waters of the State	42.959468	-85.759396	MEDIUM-HIGH	OUTFALL	TRIB TO TALLMAN CREEK
WLK 30.01 DC	Waters of the State	42.970943	-85.768884	MEDIUM-HIGH	OUTFALL	TRIB TO GRAND RIVER
WLK 30.02 DC	Waters of the State	42.968033	-85.767648	MEDIUM-HIGH	OUTFALL	TALLMAN CREEK
WYM 02.01 DC	Waters of the State	42.935691	-85.687364	MEDIUM-HIGH	OUTFALL	PLASTER CREEK
WYM 09.01 DC	Waters of the State	42.921093	-85.742189	MEDIUM-HIGH	OUTFALL	ROYS CREEK
WYM 15.01 DC	Waters of the State	42.907768	-85.71338	MEDIUM-HIGH	OUTFALL	ROYS CREEK
WYM 15.02 DC	Waters of the State	42.911705	-85.707351	MEDIUM-HIGH	OUTFALL	ROYS CREEK
WYM 19.01 DC	Waters of the State	42.894355	-85.648783	MEDIUM-HIGH	OUTFALL	TRIB TO HEYBOER MAIN DRAIN
WYM 19.02 DC	Waters of the State	42.891203	-85.649928	MEDIUM-HIGH	OUTFALL	HEYBOER MAIN DRAIN
WYM 19.03 DC	Waters of the State	42.885708	-85.649355	MEDIUM-HIGH	OUTFALL	HEYBOER MAIN DRAIN
WYM 19.04 DC	Waters of the State	42.884183	-85.653598	MEDIUM-HIGH	OUTFALL	HEYBOER MAIN DRAIN
BYN 14.02 PRK	Waters of the State	42.816	-85.691	MEDIUM HIGH	OUTFALL	BUCK CREEK
BYN 14.03 PRK	Waters of the State	42.817	-85.691	MEDIUM HIGH	OUTFALL	BUCK CREEK
BYN 14.04 PRK	Waters of the State	42.815	-85.693	MEDIUM HIGH	OUTFALL	BUCK CREEK
BYN 36.01 DPW	Waters of the State	42.771561	-85.680443	MEDIUM HIGH	OUTFALL	BUCK CREEK
BYN 36.02 DPW	Waters of the State	42.77804	-85.677679	MEDIUM HIGH	OUTFALL	TRIB TO BUCK CREEK
BYN 36.03 DPW	Waters of the State	42.768401	-85.675605	MEDIUM HIGH		BUCK CREEK
CRT 27.01 PRK	Waters of the State	43.13897	-85.488		OUTFALL	MYERS LAKE
GRC 20.01 KC	Waters of the State	42.976	-85.637	MEDIUM HIGH		WETLANDS - TRIB TO CORDUROY CREEK
GRC 20.02 KC	Waters of the State	42.976	-85.637	MEDIUM HIGH		WETLANDS - TRIB TO CORDUROY CREEK
GRC 20.03 KC	Waters of the State	42.975	-85.636	MEDIUM HIGH		WETLANDS - TRIB TO CORDUROY CREEK
GRC 20.04 KC	Waters of the State	42.975	-85.635		OUTFALL	CORDUROY POND - WETLANDS
GRC 20.05 KC	Waters of the State	42.974	-85.633	MEDIUM HIGH		CORDUROY POND - WETLANDS
GRC 20.06 KC	Waters of the State	42.974	-85.633	MEDIUM HIGH	OUTFALL	CORDUROY POND - WETLANDS
GRC 20.07 KC	Waters of the State	42.974	-85.633	MEDIUM HIGH		CORDUROY POND - WETLANDS
GRC 35.01 DPW	Waters of the State	42.95	-85.694	MEDIUM HIGH	OUTFALL	GRAND RIVER

Outfall ID#	Point of Discharge	Latitude	Longitude	Priority	Outfall or Discharge Point	Ultimate Outfall
KWD 27.01 DPW	Waters of the State	42.876	-85.589	MEDIUM HIGH	OUTFALL	PLASTER CREEK
KWD 27.02 DPW	Waters of the State	42.875	-85.59	MEDIUM HIGH	OUTFALL	PLASTER CREEK
KWD 27.03 DPW	Waters of the State	42.873	-85.59	MEDIUM HIGH	OUTFALL	PLASTER CREEK
PLN 03.01 DPW	Waters of the State	43.116129	-85.595073	MEDIUM HIGH	OUTFALL	TRIB TO ROGUE RIVER
PLN 03.02 DPW	Waters of the State	43.116	-85.593	MEDIUM HIGH	OUTFALL	TRIB TO ROGUE RIVER
PLN 03.03 DPW	Waters of the State	43.11	-85.597	MEDIUM HIGH	OUTFALL	TRIB TO ROGUE RIVER
PLN 03.04 DPW	Waters of the State	43.111809	-85.598849	MEDIUM HIGH	OUTFALL	TRIB TO ROGUE RIVER
PLN 31.02 PRK	Waters of the State	43.03552	-85.6687	MEDIUM HIGH	OUTFALL	MILL CREEK
PLN 31.03 PRK	Waters of the State	43.03415	-85.66724	MEDIUM HIGH	OUTFALL	MILL CREEK
PLN 31.04 PRK	Waters of the State	43.03374	-85.66682	MEDIUM HIGH	OUTFALL	MILL CREEK
WLK 05.02 PRK	Waters of the State	42.934	-85.749	MEDIUM LOW	OUTFALL	TRIB TO GRAND RIVER
WLK 05.03 PRK	Waters of the State	42.935	-85.748	MEDIUM LOW	OUTFALL	TRIB TO GRAND RIVER
WLK 05.04 PRK	Waters of the State	42.937	-85.747	MEDIUM LOW	OUTFALL	TRIB TO GRAND RIVER
WLK 07.02 PRK	Waters of the State	42.919685	-85.76561	MEDIUM HIGH	OUTFALL	GRAND RIVER
WLK 07.03 PRK	Waters of the State	42.915727	-85.76732	MEDIUM HIGH	OUTFALL	GRAND RIVER
WLK 07.04 PRK	Waters of the State	42.915673	-85.76737	MEDIUM HIGH	OUTFALL	GRAND RIVER
WLK 07.05 PRK	Waters of the State	42.923158	-85.76479	MEDIUM HIGH	OUTFALL	GRAND RIVER
ADA 28.01 DC	MS4 TO MS4	42.96	-85.506	MEDIUM	DISCHARGE POINT	Tributary to Grand River
ALP 23.01 DC	MS4 TO MS4	43.069	-85.691	MEDIUM	DISCHARGE POINT	TRIB TO STRAWBERRY CREEK
ALP 23.02 DC	MS4 TO MS4	43.069	-85.692	LOW	DISCHARGE POINT	TRIB TO STRAWBERRY CREEK
ALP 24.01 DC	MS4 TO MS4	43.069	-85.69	MEDIUM	DISCHARGE POINT	TRIB TO STRAWBERRY CREEK
BYN 02.01 DC	MS4 TO MS4	42.841	-85.693	MEDIUM	DISCHARGE POINT	TRIB TO GOOSE CREEK
BYN 02.02 DC	MS4 TO MS4	42.845	-85.691	MEDIUM	DISCHARGE POINT	TRIB TO GOOSE CREEK
BYN 02.03 DC	MS4 TO MS4	42.845	-85.691	MEDIUM	DISCHARGE POINT	TRIB TO GOOSE CREEK
BYN 02.04 DC	MS4 TO MS4	42.845845	-85.690993	MEDIUM	DISCHARGE POINT	TRIB TO GOOSE CREEK
BYN 02.05 DC	MS4 TO MS4	42.84656	-85.692194	MEDIUM	DISCHARGE POINT	TRIB TO GOOSE CREEK
BYN 02.06 DC	MS4 TO MS4	42.845863	-85.689889	MEDIUM	DISCHARGE POINT	TRIB TO GOOSE CREEK
BYN 02.07 DC	MS4 TO MS4	42.845874	-85.689373	MEDIUM	DISCHARGE POINT	TRIB TO GOOSE CREEK
BYN 02.08 DC	MS4 TO MS4	42.845403	-85.689351	MEDIUM	DISCHARGE POINT	TRIB TO GOOSE CREEK
BYN 02.09 DC	MS4 TO MS4	42.844759	-85.697279	MEDIUM	DISCHARGE POINT	TRIB TO GOOSE CREEK
BYN 03.14 DC	MS4 TO MS4	42.842	-85.721	MEDIUM	DISCHARGE POINT	TRIB TO KNIGHT DRAIN
BYN 03.15 DC	MS4 TO MS4	42.846241	-85.722129	MEDIUM	DISCHARGE POINT	VANSINGEL FARMS WET BASIN
BYN 03.16 DC	MS4 TO MS4	42.845253	-85.722134	MEDIUM	DISCHARGE POINT	VANSINGEL FARMS WET BASIN
BYN 03.17 DC	MS4 TO MS4	42.844517	-85.722049	MEDIUM	DISCHARGE POINT	VANSINGEL FARMS WET BASIN
BYN 03.18 DC	MS4 TO MS4	42.843242	-85.721999	MEDIUM	DISCHARGE POINT	VANSINGEL FARMS WET BASIN
BYN 03.19 DC	MS4 TO MS4	42.845011	-85.716848	MEDIUM	DISCHARGE POINT	VANSINGEL FARMS WET BASIN
BYN 03.20 DC	MS4 TO MS4	42.845449	-85.717784	MEDIUM	DISCHARGE POINT	VANSINGEL FARMS WET BASIN
BYN 03.21 DC	MS4 TO MS4	42.846092	-85.719638	MEDIUM	DISCHARGE POINT	VANSINGEL FARMS WET BASIN
BYN 03.22 DC	MS4 TO MS4	42.846245	-85.720634	MEDIUM	DISCHARGE POINT	VANSINGEL FARMS WET BASIN
BYN 06.03 DC	MS4 TO MS4	42.85408	-85.781092	LOW	DISCHARGE POINT	RUSH CREEK (EAST BRANCH)
BYN 06.04 DC	MS4 TO MS4	42.851332	-85.770629	LOW	DISCHARGE POINT	TRIB TO RUSH CREEK (EAST BRANCH)

Outfall ID#	Point of Discharge	Latitude	Longitude	Priority	Outfall or Discharge Point	Ultimate Outfall
BYN 06.05 DC	MS4 TO MS4	42.851919	-85.77286	LOW	DISCHARGE POINT	TRIB TO RUSH CREEK (EAST BRANCH)
BYN 06.06 DC	MS4 TO MS4	42.852931	-85.770353	LOW	DISCHARGE POINT	TRIB TO RUSH CREEK (EAST BRANCH)
BYN 06.07 DC	MS4 TO MS4	42.853281	-85.771586	LOW	DISCHARGE POINT	TRIB TO RUSH CREEK (EAST BRANCH)
BYN 06.08 DC	MS4 TO MS4	42.850414	-85.777972	LOW	DISCHARGE POINT	RUSH CREEK (EAST BRANCH)
BYN 09.05 DC	MS4 TO MS4	42.837	-85.723	MEDIUM	DISCHARGE POINT	RUSH CREEK (EAST BRANCH)
BYN 09.06 DC	MS4 TO MS4	42.838	-85.723	MEDIUM	DISCHARGE POINT	RUSH CREEK (EAST BRANCH)
BYN 09.08 DC	MS4 TO MS4	42.837365	-85.727352	MEDIUM	DISCHARGE POINT	RUSH CREEK (EAST BRANCH)
BYN 09.09 DC	MS4 TO MS4	42.836632	-85.72756	MEDIUM	DISCHARGE POINT	RUSH CREEK (EAST BRANCH)
BYN 09.10 DC	MS4 TO MS4	42.833318	-85.739323	MEDIUM	DISCHARGE POINT	TRIB TO KNIGHT DRAIN
BYN 09.11 DC	MS4 TO MS4	42.833307	-85.740171	MEDIUM	DISCHARGE POINT	TRIB TO KNIGHT DRAIN
BYN 09.12 DC	MS4 TO MS4	42.83309	-85.740366	MEDIUM	DISCHARGE POINT	TRIB TO KNIGHT DRAIN
BYN 09.13 DC	MS4 TO MS4	42.83234	-85.740238	MEDIUM	DISCHARGE POINT	TRIB TO KNIGHT DRAIN
BYN 09.14 DC	MS4 TO MS4	42.832141	-85.740147	MEDIUM	DISCHARGE POINT	TRIB TO KNIGHT DRAIN
BYN 09.15 DC	MS4 TO MS4	42.832451	-85.738678	MEDIUM	DISCHARGE POINT	TRIB TO KNIGHT DRAIN
BYN 09.16 DC	MS4 TO MS4	42.83167	-85.740156	MEDIUM	DISCHARGE POINT	TRIB TO KNIGHT DRAIN
BYN 09.17 DC	MS4 TO MS4	42.830815	-85.739363	MEDIUM	DISCHARGE POINT	TRIB TO KNIGHT DRAIN
BYN 09.18 DC	MS4 TO MS4	42.829989	-85.740158	MEDIUM	DISCHARGE POINT	TRIB TO KNIGHT DRAIN
BYN 09.19 DC	MS4 TO MS4	42.828871	-85.73857	MEDIUM	DISCHARGE POINT	TRIB TO KNIGHT DRAIN
BYN 09.20 DC	MS4 TO MS4	42.828809	-85.738524	MEDIUM	DISCHARGE POINT	TRIB TO KNIGHT DRAIN
BYN 09.21 DC	MS4 TO MS5	42.827716	-85.741053	MEDIUM	DISCHARGE POINT	TRIB TO KNIGHT DRAIN
BYN 10.16 DC	MS4 TO MS4	42.836	-85.723	MEDIUM	DISCHARGE POINT	RUSH CREEK (EAST BRANCH)
BYN 10.18 DC	MS4 TO MS4	42.831	-85.722	MEDIUM	DISCHARGE POINT	WARNER COUNTY DRAIN
BYN 10.22 DC	MS4 TO MS4	42.833	-85.703	MEDIUM	DISCHARGE POINT	GOOSE CREEK
BYN 10.23 DC	MS4 TO MS4	42.839941	-85.721596	MEDIUM	DISCHARGE POINT	WEST LAKE BYRON
BYN 10.24 DC	MS4 TO MS4	42.838972	-85.721983	MEDIUM	DISCHARGE POINT	WEST LAKE BYRON
BYN 10.25 DC	MS4 TO MS4	42.838266	-85.719516	MEDIUM	DISCHARGE POINT	WEST LAKE BYRON
BYN 10.26 DC	MS4 TO MS4	42.838189	-85.714305	MEDIUM	DISCHARGE POINT	WEST LAKE BYRON
BYN 10.27 DC	MS4 TO MS4	42.836235	-85.720717	MEDIUM	DISCHARGE POINT	RUSH CREEK (EAST BRANCH)
BYN 10.28 DC	MS4 TO MS4	42.835149	-85.710819	MEDIUM	DISCHARGE POINT	WATERS EDGE WET BASIN
BYN 10.29 DC	MS4 TO MS4	42.835109	-85.711914	MEDIUM	DISCHARGE POINT	WATERS EDGE WET BASIN
BYN 10.30 DC	MS4 TO MS4	42.835096		MEDIUM	DISCHARGE POINT	WATERS EDGE WET BASIN
BYN 10.31 DC	MS4 TO MS4	42.835656		MEDIUM	DISCHARGE POINT	WATERS EDGE WET BASIN
BYN 10.32 DC	MS4 TO MS4	42.836398		MEDIUM	DISCHARGE POINT	WATERS EDGE WET BASIN
BYN 10.33 DC	MS4 TO MS4	42.836895		MEDIUM	DISCHARGE POINT	WATERS EDGE WET BASIN
BYN 10.34 DC	MS4 TO MS4	42.837374	-85.712287	MEDIUM	DISCHARGE POINT	WATERS EDGE WET BASIN
BYN 10.35 DC	MS4 TO MS4	42.835856	-85.7108	MEDIUM	DISCHARGE POINT	WATERS EDGE WET BASIN
BYN 10.36 DC	MS4 TO MS4	42.836782	-85.71058	MEDIUM	DISCHARGE POINT	WATERS EDGE WET BASIN
BYN 10.37 DC	MS4 TO MS4	42.836226	-85.70946	MEDIUM	DISCHARGE POINT	WATERS EDGE WET BASIN
BYN 10.38 DC	MS4 TO MS4	42.836743		MEDIUM	DISCHARGE POINT	WATERS EDGE WET BASIN
BYN 10.39 DC	MS4 TO MS4	42.836702	-85.708863	MEDIUM	DISCHARGE POINT	WATERS EDGE WET BASIN
BYN 10.40 DC	MS4 TO MS4	42.837179	-85.70886	MEDIUM	DISCHARGE POINT	WATERS EDGE WET BASIN

Outfall ID#	Point of Discharge	Latitude	Longitude	Priority	Outfall or Discharge Point	Ultimate Outfall
BYN 10.41 DC	MS4 TO MS4	42.837196	-85.709523	MEDIUM	DISCHARGE POINT	WATERS EDGE WET BASIN
BYN 10.42 DC	MS4 TO MS4	42.83717	-85.710225	MEDIUM	DISCHARGE POINT	WATERS EDGE WET BASIN
BYN 10.43 DC	MS4 TO MS4	42.835763	-85.708787	MEDIUM	DISCHARGE POINT	WATERS EDGE WET BASIN
BYN 10.44 DC	MS4 TO MS4	42.835118	-85.708889	MEDIUM	DISCHARGE POINT	WATERS EDGE WET BASIN
BYN 10.45 DC	MS4 TO MS4	42.836264	-85.708828	MEDIUM	DISCHARGE POINT	WATERS EDGE WET BASIN
BYN 10.46 DC	MS4 TO MS4	42.827089	-85.720583	MEDIUM	DISCHARGE POINT	WARNER DRAIN
BYN 10.47 DC	MS4 TO MS4	42.828353	-85.720687	MEDIUM	DISCHARGE POINT	WARNER DRAIN
BYN 10.48 DC	MS4 TO MS4	42.830017	-85.721415	MEDIUM	DISCHARGE POINT	WARNER DRAIN
BYN 10.49 DC	MS4 TO MS4	42.832552	-85.720909	MEDIUM	DISCHARGE POINT	WARNER DRAIN
BYN 10.50 DC	MS4 TO MS4	42.832545	-85.719753	MEDIUM	DISCHARGE POINT	WARNER DRAIN
BYN 10.51 DC	MS4 TO MS4	42.832446	-85.718074	MEDIUM	DISCHARGE POINT	WARNER DRAIN
BYN 10.52 DC	MS4 TO MS4	42.830207	-85.719846	MEDIUM	DISCHARGE POINT	WARNER DRAIN
BYN 10.53 DC	MS4 TO MS4	42.830998	-85.716902	MEDIUM	DISCHARGE POINT	TRIB TO KNIGHT DRAIN
BYN 10.54 DC	MS4 TO MS4	42.829154	-85.717149	MEDIUM	DISCHARGE POINT	TRIB TO KNIGHT DRAIN
BYN 10.55 DC	MS4 TO MS4	42.827406	-85.716453	MEDIUM	DISCHARGE POINT	TRIB TO KNIGHT DRAIN
BYN 10.56 DC	MS4 TO MS4	42.82978	-85.714523	MEDIUM	DISCHARGE POINT	TRIB TO KNIGHT DRAIN
BYN 10.57 DC	MS4 TO MS4	42.831876	-85.709397	MEDIUM	DISCHARGE POINT	TRIB TO KNIGHT DRAIN
BYN 10.58 DC	MS4 TO MS4	42.83255	-85.708994	MEDIUM	DISCHARGE POINT	TRIB TO KNIGHT DRAIN
BYN 10.59 DC	MS4 TO MS4	42.832551	-85.707181	MEDIUM	DISCHARGE POINT	TRIB TO KNIGHT DRAIN
BYN 10.60 DC	MS4 TO MS4	42.831096	-85.703318	MEDIUM	DISCHARGE POINT	TRIB TO GOOSE CREEK
BYN 14.06 DC	MS4 TO MS4	42.820957	-85.702897	MEDIUM	DISCHARGE POINT	TRIB TO BUCK CREEK
BYN 14.07 DC	MS4 TO MS4	42.82155	-85.698405	MEDIUM	DISCHARGE POINT	TRIB TO BUCK CREEK
BYN 15.01 DC	MS4 TO MS4	42.824	-85.707	MEDIUM	DISCHARGE POINT	WINCHESTER COUNTY DRAIN
BYN 15.02 DC	MS4 TO MS4	42.815	-85.703	LOW	DISCHARGE POINT	TRIB TO WILLARD COUNTY DRAIN
BYN 21.01 DC	MS4 TO MS4	42.812	-85.738	LOW	DISCHARGE POINT	KNIGHT COUNTY DRAIN
BYN 22.06 DC	MS4 TO MS4	42.803	-85.709	MEDIUM	DISCHARGE POINT	LANTING COUNTY DRAIN
BYN 23.06 DC	MS4 TO MS4	42.811812	-85.686015	LOW	DISCHARGE POINT	TRIB TO CARLISLE DRAIN
BYN 24.01 DC	MS4 TO MS4	42.808058	-85.675129	LOW	DISCHARGE POINT	TRIB TO CARLISLE DRAIN
CAN 09.03 DC	MS4 TO MS4	43.097	-85.505	MEDIUM	DISCHARGE POINT	GRASS LAKE
CAS 08.01 DC	MS4 TO MS4	42.92	-85.527	MEDIUM	DISCHARGE POINT	PRIVATE POND
CAS 10.02 DC	MS4 TO MS4	42.924	-85.472	MEDIUM	DISCHARGE POINT	TRIB TO GRAND RIVER
CAS 15.05 DC	MS4 TO MS4	42.908	-85.479	MEDIUM	DISCHARGE POINT	TRIB TO THORNAPPLE RIVER
CAS 15.06 DC	MS4 TO MS4	42.91	-85.475	MEDIUM	DISCHARGE POINT	APPLE HILLS COUNTY DRAIN
CAS 15.07 DC	MS4 TO MS4	42.908	-85.475	MEDIUM	DISCHARGE POINT	APPLE HILLS COUNTY DRAIN
CAS 17.01 DC	MS4 TO MS4	42.907	-85.527	MEDIUM	DISCHARGE POINT	PATTERSON COUNTY DRAIN
CAS 31.01 DC	MS4 TO MS4	42.867	-85.546	LOW	DISCHARGE POINT	TRIB TO FISK DRAIN
CAS 31.02 DC	MS4 TO MS4	42.867	-85.546	LOW	DISCHARGE POINT	TRIB TO FISK DRAIN
EGR 03.01 DC	MS4 TO MS4	42.940009	-85.597301	MEDIUM	DISCHARGE POINT	REEDS LAKE
GDV 29.02 DC	MS4 TO MS4	42.884161	-85.757684	MEDIUM	DISCHARGE POINT	HUIZENGA DRAIN
GNS 04.01 DC	MS4 TO MS4	42.848	-85.612	MEDIUM	DISCHARGE POINT	TRIB TO CUTLERVILLE DRAIN
GNS 04.04 DC	MS4 TO MS4	42.841	-85.617	MEDIUM	DISCHARGE POINT	TRIB TO CUTLERVILLE DRAIN

Outfall ID#	Point of Discharge	Latitude	Longitude	Priority	Outfall or Discharge Point	Ultimate Outfall
GNS 05.05 DC	MS4 TO MS4	42.841	-85.644	MEDIUM	DISCHARGE POINT	CUTLERVILLE DRAIN
GNS 07.03 DC	MS4 TO MS4	42.839	-85.65	MEDIUM	DISCHARGE POINT	CUTLERVILLE DRAIN
GNS 07.04 DC	MS4 TO MS4	42.838	-85.649	MEDIUM	DISCHARGE POINT	CUTLERVILLE DRAIN
GNS 09.01 DC	MS4 TO MS4	42.83	-85.624	MEDIUM	DISCHARGE POINT	BUCK CREEK
GNS 09.05 DC	MS4 TO MS4	42.84	-85.619	MEDIUM	DISCHARGE POINT	CUTLERVILLE DRAIN
GNS 09.07 DC	MS4 TO MS4	42.834	-85.61	MEDIUM	DISCHARGE POINT	PLASTER CREEK
GNS 11.01 DC	MS4 TO MS4	42.834	-85.575	LOW	DISCHARGE POINT	TRIB TO PLASTER CREEK
GNS 11.02 DC	MS4 TO MS4	42.833	-85.575	LOW	DISCHARGE POINT	TRIB TO PLASTER CREEK
GNS 11.04 DC	MS4 TO MS4	42.83145	-85.584214	LOW	DISCHARGE POINT	TRIB TO PLASTER CREEK
GNS 11.05 DC	MS4 TO MS4	42.830969	85.581292	LOW	DISCHARGE POINT	TRIB TO PLASTER CREEK
GNS 18.08 DC	MS4 TO MS4	42.813	-85.644	MEDIUM	DISCHARGE POINT	SHARPS CREEK
GNS 18.10 DC	MS4 TO MS4	42.819	-85.645	MEDIUM	DISCHARGE POINT	TRIB TO SHARPS CREEK
GRC 05.01 DC	MS4 TO MS4	43.027	-85.635	MEDIUM	DISCHARGE POINT	TRIB TO SOFT WATER LAKE
GRC 09.02 DC	MS4 TO MS4	43.006	-85.625	MEDIUM	DISCHARGE POINT	TRIB TO LAMBERTON CREEK
GRC 09.04 DC	MS4 TO MS4	43.004	-85.74	MEDIUM	DISCHARGE POINT	TRIB TO BRANDYWINE CREEK
GRC 09.05 DC	MS4 TO MS4	42.925658	-85.621871	MEDIUM	DISCHARGE POINT	TRIB TO BURTON BRETON DRAIN
GRC 09.06 DC	MS4 TO MS4	42.921375	-85.627799	MEDIUM	DISCHARGE POINT	TRIB TO LARAWAY BROOKLYN DRAIN
GRC 10.07 DC	MS4 TO MS4	42.919367	-85.598508	MEDIUM	DISCHARGE POINT	TRIB TO BURTON BRETON DRAIN
GRC 17.01 DC	MS4 TO MS4	42.986	-85.63	MEDIUM	DISCHARGE POINT	WETLANDS/POND
GRC 17.02 DC	MS4 TO MS4	42.992	-85.646	LOW	DISCHARGE POINT	PALMER SEPARATION COUNTY DRAIN
GRC 20.04 DC	MS4 TO MS4	42.98	-85.646	HIGH	DISCHARGE POINT	COLDBROOK CARRIER CREEK COUNTY DRAIN
GRC 21.01 DC	MS4 TO MS4	42.974	-85.625	MEDIUM	DISCHARGE POINT	TRIB TO COLDBROOK CORDUROY POND
GRC 21.04 DC	MS4 TO MS4	42.979	-85.737	MEDIUM	DISCHARGE POINT	WETLAND
GRC 21.05 DC	MS4 TO MS4	42.979	-85.737	MEDIUM	DISCHARGE POINT	WETLAND
GRC 22.02 DC	MS4 TO MS4	42.975	-85.717	MEDIUM	DISCHARGE POINT	GRAND RIVER
GRC 23.01 DC	MS4 TO MS4	42.973	-85.707	MEDIUM	DISCHARGE POINT	GRAND RIVER
GRC 27.03 DC	MS4 TO MS4	42.967	-85.722	MEDIUM	DISCHARGE POINT	TRIB TO GRAND RIVER
GRT 04.04 DC	MS4 TO MS4	43.014	-85.614	MEDIUM	DISCHARGE POINT	TRIB TO LAMBERTON CREEK
GRT 04.05 DC	MS4 TO MS4	43.013	-85.622	MEDIUM	DISCHARGE POINT	TRIB TO LAMBERTON CREEK
GRT 10.01 DC	MS4 TO MS4	43.012	-85.605	MEDIUM	DISCHARGE POINT	TRIB TO LAMBERTON CREEK
GRT 10.02 DC	MS4 TO MS4	43.009	-85.606	MEDIUM	DISCHARGE POINT	TRIB TO LAMBERTON CREEK
GRT 10.06 DC	MS4 TO MS4	43.01	-85.591	MEDIUM	DISCHARGE POINT	WETLANDS/PONDS
GRT 26.02 DC	MS4 TO MS4	42.965	-85.59	MEDIUM	DISCHARGE POINT	CHURCH LAKE
GRT 27.01 DC	MS4 TO MS4	42.962	-85.6	MEDIUM	DISCHARGE POINT	TRIB TO WATERS COUNTY DRAIN
GRT 27.02 DC	MS4 TO MS4	42.962	-85.596	MEDIUM	DISCHARGE POINT	TRIB TO WATERS COUNTY DRAIN
GRT 36.02 DC	MS4 TO MS4	42.946	-85.555	MEDIUM	DISCHARGE POINT	MARTIN AND BEAK DRAIN
GRT 36.03 DC	MS4 TO MS4	42.947	-85.551	MEDIUM	DISCHARGE POINT	MARTIN AND BEAK DRAIN
KWD 22.02 DC	MS4 TO MS4	42.890745	-85.587227	MEDIUM	DISCHARGE POINT	PLASTER CREEK
KWD 35.02 DC	MS4 TO MS4	42.868814	-85.567455	MEDIUM	DISCHARGE POINT	PLASTER CREEK
LOW 04.02 DC	MS4 TO MS4	42.932313	-85.381262	MEDIUM	DISCHARGE POINT	TRIB TO GRAND RIVER
LOW 04.07 DC	MS4 TO MS4	42.943733	-85.378591	LOW	DISCHARGE POINT	TRIB TO GRAND RIVER

Outfall ID#	Point of Discharge	Latitude	Longitude	Priority	Outfall or Discharge Point	Ultimate Outfall
PLN 11.02 DC	MS4 TO MS4	43.08962	-85.580047	MEDIUM	DISCHARGE POINT	TRIB TO ROGUE RIVER
PLN 13.01 DC	MS4 TO MS4	43.085659	-85.565265	MEDIUM	DISCHARGE POINT	TRIB TO GRAND RIVER
PLN 17.01 DC	MS4 TO MS4	43.076366	-85.634551	MEDIUM	DISCHARGE POINT	SCOTT CREEK
PLN 20.01 DC	MS4 TO MS4	43.057736	-85.643194	MEDIUM	DISCHARGE POINT	GRAND RIVER
PLN 21.01 DC	MS4 TO MS4	43.065605	-85.616398	MEDIUM	DISCHARGE POINT	GRAND RIVER
PLN 22.01 DC	MS4 TO MS4	43.064496	-85.606199	MEDIUM	DISCHARGE POINT	GRAND RIVER
PLN 24.05 DC	MS4 TO MS4	43.0647	-85.5685	LOW	DISCHARGE POINT	GRAND RIVER
PLN 27.02 DC	MS4 TO MS4	43.051461	-85.597346	MEDIUM	DISCHARGE POINT	COIT AND PLAINFIELD DRAIN
PLN 29.01 DC	MS4 TO MS4	43.056297	-85.645931	MEDIUM	DISCHARGE POINT	GRAND RIVER
PLN 33.06 DC	MS4 TO MS4	43.040354	-85.628177	MEDIUM	DISCHARGE POINT	WETLAND
PLN 35.01 DC	MS4 TO MS4	43.042402	-85.581466	LOW	DISCHARGE POINT	GRAND RIVER DRIVE DRAIN
VSP 22.02 DC	MS4 TO MS4	43.154047	-85.715152	MEDIUM	DISCHARGE POINT	ROGERS COUNTY DRAIN
WLK 02.01 DC	MS4 TO MS4	43.014719	-85.69867	MEDIUM	DISCHARGE POINT	ALPINE ESTATES DRAIN
WLK 06.05 DC	MS4 TO MS4	43.026256	-85.787935	LOW	DISCHARGE POINT	SAND CREE (EAST FORK)
WLK 07.02 DC	MS4 TO MS4	43.005756	-85.777475	LOW	DISCHARGE POINT	FRIAR AND KIMBALL OTTAWA COUNTY DRAIN
WLK 07.03 DC	MS4 TO MS4	43.0076	-85.768631	MEDIUM	DISCHARGE POINT	TRIB TO SAND CREEK (EAST FORK)
WLK 07.04 DC	MS4 TO MS4	43.00679	-85.7865	LOW	DISCHARGE POINT	FRIAR AND KIMBALL OTTAWA COUNTY DRAIN
WLK 09.01 DC	MS4 TO MS4	43.005	-85.743	MEDIUM	DISCHARGE POINT	BRANDYWINE CREEK
WLK 11.01 DC	MS4 TO MS4	43.00949	-85.697943	MEDIUM	DISCHARGE POINT	TRIB TO INDIAN MILL CREEK
WLK 11.02 DC	MS4 TO MS4	43.005347	-85.690833	MEDIUM	DISCHARGE POINT	COGSWELL DRAIN
WLK 17.03 DC	MS4 TO MS4	43.00115	-85.755866	MEDIUM	DISCHARGE POINT	TRIB TO BRANDYWINE CREEK
WLK 17.04 DC	MS4 TO MS4	43.001081		MEDIUM	DISCHARGE POINT	TRIB TO BRANDYWINE CREEK
WLK 17.05 DC	MS4 TO MS4	43.00102		MEDIUM	DISCHARGE POINT	TRIB TO BRANDYWINE CREEK
WLK 17.06 DC	MS4 TO MS4	43.00067		MEDIUM	DISCHARGE POINT	TRIB TO BRANDYWINE CREEK
WLK 18.01 DC	MS4 TO MS4	43.993419		MEDIUM	DISCHARGE POINT	MULLINS DRAIN
WLK 18.02 DC	MS4 TO MS4	43.992189	-85.768171	MEDIUM	DISCHARGE POINT	MULLINS DRAIN
WLK 20.01 DC	MS4 TO MS4	42.986682		MEDIUM	DISCHARGE POINT	WORDEN DRAIN
WLK 20.05 DC	MS4 TO MS4	42.986121	-85.755572	MEDIUM	DISCHARGE POINT	WORDEN DRAIN
WLK 20.08 DC	MS4 TO MS4	42.972209		MEDIUM	DISCHARGE POINT	SEXTON DRAIN
WLK 20.09 DC	MS4 TO MS4	42.982434	-85.76393	MEDIUM	DISCHARGE POINT	WORDEN DRAIN
WLK 29.04 DC	MS4 TO MS4	42.959977		MEDIUM	DISCHARGE POINT	TRIB TO GRAND RIVER
GRT 14.01 KC	MS4 TO MS4	42.998734		MEDIUM	DISCHARGE POINT	TRIB TO GRAND RIVER
GRC 20.08 KC	MS4 TO MS4	42.977	-85.63	MEDIUM	DISCHARGE POINT	CORDUROY POND - WETLANDS
GRC 26.01 DPW	MS4 TO MS4	42.957	-85.693	MEDIUM	DISCHARGE POINT	TRIB TO GRAND RIVER
GRC 31.01 KC	MS4 TO MS4	42.95	-85.666	MEDIUM	DISCHARGE POINT	GRAND RIVER
GRC 31.02 KC	MS4 TO MS4	42.949	-85.664	MEDIUM	DISCHARGE POINT	GRAND RIVER
GRC 31.03 KC	MS4 TO MS4	42.949	-85.666	MEDIUM	DISCHARGE POINT	GRAND RIVER
PLN 21.05 DC	MS4 TO MS4	43.07121	-85.6259	MEDIUM-HIGH		TRIB TO GRAND RIVER
LOW 04.07 DC	MS4 TO MS4	42.94373	-85.3786	LOW	OUTFALL	TRIB TO GRAND RIVER
WLK 20.09 DC	MS4 TO MS4	42.98243	-85.7639	MEDIUM	OUTFALL	WORDEN DRAIN
GNS 03.07 DC	MS4 TO MS4	42.845	-85.591	MEDIUM-HIGH	OUTFALL	PLASTER CREEK

Outfall ID#	Point of Discharge	Latitude	Longitude	Priority	Outfall or Discharge Point	Ultimate Outfall
BYN 10.60 DC	MS4 TO MS4	42.83059	-85.702	MEDIUM	OUTFALL	TRIB TO GOOSE CREEK
BYN 17.02 DC	MS4 TO MS4	42.81691	-85.7438	MEDIUM-LOW	OUTFALL	KNIGHT COUNTY DRAIN
BYN 17.03 DC	MS4 TO MS4	42.81581	-85.7445	MEDIUM-LOW	OUTFALL	KNIGHT COUNTY DRAIN

Appendix 3

FOR KENT COUNTY EMPLOYEES

Activities to Report.

Description of Pollution.

As you perform your routine duties, if you observe anyone (landscapers, contractors, waste haulers, residents, etc.) dumping anything into a storm drain, report it. Storm drains lead directly to nearby stream and lakes, usually without any type of treatment. Kent County is regulated by the state and federal governments, and we can be fined for failure to prevent and reduce the amount of pollutants entering the storm drain system. Motor vehicle fluids, paint and chemicals, yard waste, restaurant wastes, etc. should be disposed of properly. Only rainwater should enter a storm drain.

Date(s) pollution was observed: Location of observed pollution (address, street): Name of person(s) or company involved (if known): Please describe the pollution (include photographs if possible): Date this report was submitted: Your Contact Information (optional).

How to Return Form.

To report dumping, please fill out this report completely. Return it in one of four ways to our Storm Water Coordinator:

1. Email: drain-info@kentcountymi.gov

Name, Title: _____
Phone: _____
Email:

- Fax: 616-336-3575
 Phone: 616-336-3688
- 4. Mail: Kent County Drain Commissioner, 1500 Scribner Ave. NW, Grand Rapids, MI 49504

Notice to the MDEQ will be given to:

Amanda St. Amour Water Bureau, MDEQ Grand Rapids District Office (616) 356-0215

StamourA@michigan.gov

Or, if the notice is provided after regular working hours, the Michigan Department of Environmental Quality's 24-Hour Pollution Emergency Alerting System (PEAS) will be used: 1-800-292-4706.

FOR KENT COUNTY EMPLOYEES

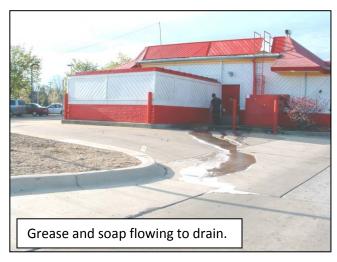
EXAMPLES OF POLLUTION ENTERING THE STORM SEWER SYSTEM













FOR KENT COUNTY CITIZENS

Activities to Report.

Description of Pollution.

As you perform your routine activities, if you observe anyone (landscapers, contractors, waste haulers, residents, etc.) dumping anything into a storm drain, report it. Storm drains lead directly to nearby stream and lakes, usually without any type of treatment. Kent County is regulated by the state and federal governments, and we can be fined for failure to prevent and reduce the amount of pollutants entering the storm drain system. Motor vehicle fluids, paint and chemicals, yard waste, restaurant wastes, etc. should be disposed of properly. Only rainwater should enter a storm drain.

Date(s) pollution was observed: Location of observed pollution (address, street): Name of person(s) or company involved (if known): Please describe the pollution (include photographs if possible): Date this report was submitted: Your Contact Information (optional). Name, Title: Phone:

How to Return Form.

To report dumping, please fill out this report completely. Return it in one of four ways to our Storm Water Coordinator:

1. Email: drain-info@kentcountymi.gov

Email:

- Fax: 616-336-3575
 Phone: 616-336-3688
- 4. Mail: Kent County Drain Commissioner, 1500 Scribner Ave. NW, Grand Rapids, MI 49504

Notice to the MDEQ will be given to:

Amanda St. Amour Water Bureau, MDEQ Grand Rapids District Office (616) 356-0215

StamourA@michigan.gov

Or, if the notice is provided after regular working hours, the Michigan Department of Environmental Quality's 24-Hour Pollution Emergency Alerting System (PEAS) will be used: 1-800-292-4706.

FOR KENT COUNTY CITIZENS

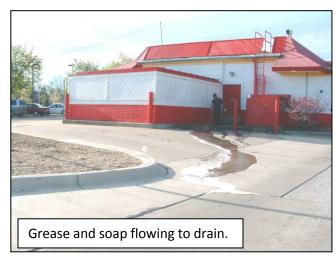
EXAMPLES OF POLLUTION ENTERING THE STORM SEWER SYSTEM













Appendix 4

IDEP Inter-jurisdictional Cooperation

State and federal law requires regulated Municipal Separate Storm Sewer Systems (MS4s) to have effective programs to find and eliminate illicit discharges to their systems (Illicit Discharge Elimination Plan). In some cases one community's MS4 discharges into another community's MS4.

We, as Storm Water Program Managers for our communities, recognize this requirement. We agree to work cooperatively with other MS4 communities where an illicit discharge is suspected to originate across our jurisdictional boundaries.

By signing this agreement, our community commits to investigating dry-weather discharges that appear at outfalls. We accept responsibility for notifying upstream owners if an illicit discharge is found to enter our MS4, and commit to abating discharges that are found to be leaving our MS4. These activities will be conducted pursuant to the procedures and timelines identified in the IDEP.

NAME_William R. Byl

Storm Water Program Manager for Kent County