



PREPARED FOR:
**GRAND LEDGE PUBLIC SCHOOLS
220 LAMSON STREET
GRAND LEDGE, MI**

STORM WATER MANAGEMENT PLAN

FOR THE DESIGNATED FACILITY:
GRAND LEDGE PS MS4-EATON

PERMIT NUMBER:
MIS040002

TEC PROJECT 57590-01

PREPARED BY:
**TESTING ENGINEERS & CONSULTANTS, INC.
1343 Rochester Rd, Troy, MI 48083-6015 (Delivery)
PO Box 249, Troy, MI 48099-0249 (Mailing)**

**(248) 588-6200
www.testingengineers.com
tec@tectest.com**

MARCH 31, 2017

TABLE OF CONTENTS

1.0 INTRODUCTION1

1.1 BACKGROUND1

1.2 REGULATORY CONTEXT2

1.3 LEGAL AUTHORITY3

1.4 ENFORCEMENT RESPONSE PROCEDURE3

1.5 COORDINATION WITH LOCAL GOVERNMENT3

1.6 RECEIVING WATERS IDENTIFICATION4

1.7 GOALS AND OBJECTIVES4

2.0 SITE DESCRIPTION4

3.0 ILLICIT DISCHARGE ELIMINATION PROGRAM5

3.1 INTRODUCTION5

3.2 DEFINITIONS5

3.3 PERMIT REQUIREMENTS5

3.4 ILLICIT CONNECTION IDENTIFICATION5

 3.4.1 NOTICE OF INTENT5

 3.4.2 STORM WATER SYSTEM MAPPING5

 3.4.3 OUTFALL CONDITION - VISUAL SCREENING6

 3.4.4 RECEIVING WATERS CONDITION - VISUAL SCREENING6

 3.4.5 TRAINING6

 3.4.6 DRY WEATHER SCREENING6

 3.4.7 ADDITIONAL ASSESSMENT/CONFIRMATION OF ILLICIT DISCHARGES7

 3.4.8 PRIORITIZATION OF POTENTIAL ILLICIT CONNECTIONS7

3.5 ILLICIT CONNECTION/DISCHARGE ELIMINATION/MINIMIZATION8

 3.5.1 IMPLEMENTATION PLAN8

 3.5.2 EVALUATION AND ASSESSMENT8

 3.5.3 MEASURABLE GOALS9

 3.5.4 FIELDWORK MANUAL/CHECKLISTS9

4.0 PUBLIC EDUCATION PROGRAM9

4.1 INTRODUCTION9

4.2 PERMIT REQUIREMENTS9

4.3 DEFINITION OF PUBLIC10

4.4 AWARENESS PROGRAM10

4.5 IMPLEMENTATION10

4.6 EVALUATION/MEASURABLE GOALS11

5.0 POLLUTION PREVENTION/GOOD HOUSEKEEPING PROGRAM11

5.1 INTRODUCTION11

5.2 PERMIT REQUIREMENTS11

5.3 OPERATION AND MAINTENANCE12

 5.3.1 LAWN CHEMICAL MANAGEMENT12

 5.3.2 PEST MANAGEMENT12

 5.3.3 CATCH BASIN MANAGEMENT13

 5.3.4 ROAD/PARKING LOT MAINTENANCE13

 5.3.5 SALT AND SAND/DE-ICING13

 5.3.6 FLEET MAINTENANCE14

 5.3.7 TRASH DUMPSTER MANAGEMENT14

 5.3.8 SWIMMING POOL MAINTENANCE14

5.3.9	SEPTIC SYSTEM MANAGEMENT	15
5.3.10	FLOOR MAINTENANCE	15
5.3.11	SPORTS FIELD LINE PAINTING EQUIPMENT CLEANING	15
5.4	ADDITIONAL BMPs	15
5.5	STAFF AND CONTRACTOR TRAINING PROGRAMS	15
5.6	RELEASE REPORTING	15
5.7	IMPLEMENTATION	15
5.8	EVALUATION/MEASURABLE GOALS	16
6.0	PUBLIC INVOLVEMENT/PARTICIPATION	16
6.1	INTRODUCTION	16
6.2	PERMIT REQUIREMENTS	16
6.3	LOCAL GOVERNMENT/WATERSHED GROUP IDENTIFICATION	17
6.4	NOTIFICATION TO PUBLIC	17
6.5	COOPERATIVE ARRANGEMENT WITH WATERSHED GROUP	17
6.6	ADVISORY COMMITTEE	17
6.7	IMPLEMENTATION/MEASURABLE GOALS	17
7.0	CONSTRUCTION STORM WATER RUNOFF CONTROL	17
7.1	INTRODUCTION	17
7.2	PERMIT REQUIREMENTS	18
7.3	EXISTING PROGRAM	18
7.4	ADDITIONAL BMPs	19
7.5	IMPLEMENTATION/MEASURABLE GOALS	19
8.0	POST CONSTRUCTION STORM WATER RUNOFF CONTROL	19
8.1	INTRODUCTION	19
8.2	PERMIT REQUIREMENTS	19
8.3	EXISTING SYSTEMS	20
8.3.1	STRUCTURAL CONTROLS	20
8.3.2	NON-STRUCTURAL CONTROLS	20
8.4	COORDINATION WITH LOCAL OR REGIONAL SWMPs	20
8.5	POST CONSTRUCTION FLOW CONTROLS	20
8.5.1	STRUCTURAL BMPs	20
8.5.2	NON-STRUCTURAL BMPs	21
8.6	IMPLEMENTATION/MEASURABLE GOALS	21
	REPORT SIGNATURES	22

ATTACHMENT LIST

- APPENDIX A Storm Water Infrastructure
- District Map
 - Facilities Site Maps
 - Inventory of Structural Stormwater Controls
- APPENDIX B Sample Staff Training Materials
- APPENDIX C Sample Public Education Materials
- APPENDIX D Inspection & Recordkeeping Forms
- Stormwater: General Inspection Checklist
 - Annual Dry Weather Screening Form
 - Storm Water Incident/Violation Log
 - Annual PEP/Public Involvement Checklist
 - BMP Implementation Tracking Form
 - Lawn/Landscape Maintenance Questionnaires
 - Salting/De-Icing Questionnaire
 - Annual Refresher Training Attendance Log
 - Contractor SWMP Compliance Certifications

1.0 INTRODUCTION

1.1 BACKGROUND

Storm water runoff from lands modified by human activities can harm surface waters and, in turn, can change natural hydrologic patterns, accelerate natural stream flows, destroy aquatic habitat, and elevate pollutant concentrations and loadings. Urbanization alters the natural infiltration capability of the land and increases the area of impervious surfaces within a watershed. Runoff, especially from urbanized areas, may contain high levels of contaminants, such as sediment, suspended solids, and chemicals from human activities.

In addition to pollutants being picked up by runoff, discharges from storm systems often include wastes and wastewater from non-storm water sources, referred to as illicit discharges. Municipal storm sewer systems are not designed to accept, process, or discharge such wastes. Sources include sanitary wastewater drains connected to the storm drain system; effluent from septic systems; car wash, laundry, and other industrial wastewaters; improper disposal of auto and household products (e.g., used motor oil and pesticides); and, spills from roadways.

In 1972, Congress amended the Clean Water Act (CWA) to prohibit the discharge of any pollutant to waters of the United States from a point source, unless the discharge is authorized by a permit. The permit process is governed by the National Pollutant Discharge Elimination System (NPDES).

In 1987, Congress again amended the CWA to require implementation, in two phases, of a comprehensive national program for addressing storm water discharges. The first phase, referred to as Phase I, required NPDES permits for medium and large municipal storm water systems, certain categories of industrial activity impacting storm water, and construction 'disturbing more than five acres resulting in storm water discharge from the site.

In 1999, the United States Environmental Protection Agency (U.S. EPA) promulgated the regulation entitled "National Pollutant Discharge Elimination System - Regulations for Revision of the Water Pollution Control Program Addressing Storm Water Discharges" (Federal Register, Volume 64, Number 235, pages 68722-68852). This is known as the Storm Water Phase II Final Rule. The rule regulates storm water discharges from two categories:

- First, the rule covers storm water discharges to certain small Municipal Separate Storm Water Systems (MS4s). Public entities which operate MS4s may be regulated under this rule.
- Second, the rule covers discharges from construction activity generally disturbing between 1 and 5 acres. A certified construction storm water operator (CSWO) who inspects the site can include an owner, developer, contractor, or subcontractor, but the permittee must be the land owner or recorded easement holder.

In Michigan, the Michigan Department of Environmental Quality (DEQ) has been granted jurisdiction for implementing the CWA and managing the Phase II rules. Michigan has developed two general permits; one providing watershed coverage, and the second providing jurisdictional coverage.

1.2 REGULATORY CONTEXT

The Storm Water Phase II Final Rule requires the owner/operator of a small MS4 to obtain NPDES permit coverage because a MS4 is defined as a point source discharge (PSD) of storm water into discrete conveyances, including roads with drainage systems and municipal streets, ultimately discharging into a receiving body of water. The rules are outlined in 40 CFR 122.

According to 40 CFR 122.26(b)(8), "municipal separate storm sewer means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

- Owned or operated by a State, city, town, borough, county, parish, district, or other public body... that discharges into waters of the United States;
- Designed or used for collecting or conveying storm water;
- Which is not a combined sewer; and,
- Which is not part of a Publicly-Owned Treatment Works (POTW)."

Specifically, MS4s within an urbanized area, as defined by the 2002 United States Census, must obtain coverage under the General Permit, either individually, or within a cooperative watershed group. The individual permit is referred to as a Jurisdictional General Permit.

The Phase II rules outline six minimum measures for a government unit that owns or operates a MS4 to implement in order to obtain coverage under the Jurisdictional General Permit for storm water discharge. The six minimum measures are designed to improve the quality of storm water discharged from such MS4s.

The permit requires development and implementation of a Storm Water Management Program that outlines how the MS4 will address the six minimum measures using a series of Best Management Practices (BMPs), and defining measurable goals to monitor the improvement in storm water discharge. The program must be documented in a Storm Water Management Plan (SWMP).

Grand Ledge Public Schools (GLPS) has elected to obtain coverage under the Jurisdictional General Permit. This SWMP covers the entire district and each of its facilities. Specifically, this SWMP covers the following district facilities:

GLPS Facility	Address
Central Administration (Sawdon)	220 Lamson St, Grand Ledge
Grand Ledge High School	820 Spring St, Grand Ledge
Beagle Middle School	600 South St, Grand Ledge
Hayes Middle School	12620 Nixon Rd, Grand Ledge
Delta Center Elementary	305 S Canal Rd, Lansing
Holbrook Elementary	615 Jones St, Grand Ledge
Neff Elementary	950 Jenne St, Grand Ledge
Wacousta Elementary*	9135 Herbison Rd, Eagle
Willow Ridge Elementary	12840 Nixon Rd, Grand Ledge
Operations Facility	12730 Nixon Rd, Grand Ledge

* =Not in Urbanized Area, but voluntarily included in program

GLPS submitted a Storm Water Discharge Permit Application Notice of Intent (NOI), on March 10, 2003. The NOI included site plans/diagrams showing known discharge points, or outfalls, from each referenced GLPS complex. The DEQ has granted Grand Ledge Public Schools authorization to discharge from the Municipal Separate Storm Sewer System (MS4) designated as Grand Ledge PS MS4-Eaton to surface waters of the state of Michigan under the conditions set forth in Permit Number MI0059743 through October 1, 2017.

1.3 LEGAL AUTHORITY

GLPS has total control over the access and use of its own facilities, which will be sufficient to control storm water discharges within the MS4 as required by the Permit. For instance, GLPS controls its own MS4 connections, implements construction controls on its on-site construction projects and roadways, conducts inspections, implements post-construction controls on its MS4, and implements pollution prevention/good housekeeping practices. GLPS will not discharge non-stormwater discharges into its MS4.

GLPS does not have authority to enact ordinances or authority over public infrastructure traversing its property. However, should GLPS identify improper discharges to its MS4 from an external source, GLPS will follow the Enforcement Response Procedure in Section 1.4 to ensure compliance with the Permit.

1.4 ENFORCEMENT RESPONSE PROCEDURE

This SWMP has been adopted as an official policy of GLPS, and is the primary regulatory mechanism to ensure compliance with the Permit and all applicable storm water regulations. Ms. Erika Conley will be responsible for recordkeeping. GLPS will track instances of non-compliance with this SWMP using the forms in Appendix D, which tracks the name of the person responsible, the date of discovery, the nature of the violation, the enforcement response used, a schedule for returning to compliance, and the date resolved. The schedule for returning to compliance may vary with the complexity of the violation, but will fall within the response schedules set out in other sections of this document.

GLPS has total control over the access and use of its own facilities, and will ensure elimination of improper discharges. Should GLPS identify improper discharges to its MS4 from a known external source, GLPS will inform the discharger within 24 hours about its findings and the need to eliminate or correct the discharge. If the discharger fails to correct the problem, local authorities will be contacted for assistance within five business days.

If GLPS suspects that the discharge is endangering health or the environment, GLPS will notify the DEQ within 24 hours. Notice may be provided after regular working hours via the Pollution Emergency Alerting System (PEAS) at (800) 292-4706.

1.5 COORDINATION WITH LOCAL GOVERNMENT

The district coordinates implementation of this SWMP with the respective local body of government within which the facilities are located, to the extent feasible. This coordination entails identification of the watershed within which each complex is located, and notification of the implementation of this

SWMP. See Section 6.0 for a listing of the government entities and watershed groups with which GLPS is coordinating. GLPS has obtained and reviewed the watershed management plans developed by local stakeholders for the district's receiving streams.

1.6 RECEIVING WATERS IDENTIFICATION

The receiving waters from each complex known as of the submittal of the NOI are as follows:

GLPS Facility	Receiving Waters
Central Administration (Sawdon)	City of Grand Ledge Storm Sewer
Grand Ledge High School	City of Grand Ledge Storm Sewer; Sandstone Creek
Beagle Middle School	Sandstone Creek
Hayes Middle School	Wetland Area
Delta Center Elementary	Delta Township Storm Sewer
Holbrook Elementary	City of Grand Ledge Storm Sewer
Neff Elementary	Sandstone Creek via High School
Wacousta Elementary*	No conveyances; not included in NOI
Willow Ridge Elementary	Miller Creek via Operations Facility
Operations Facility	Miller Creek

* = Not in Urbanized Area, but voluntarily included in program

1.7 GOALS AND OBJECTIVES

The objective of development of a Storm Water Management Program by small MS4 owners/operators is to reduce pollutants in storm water to the maximum extent practicable (MEP) to protect water quality. Implementation of a program that incorporates elements of the six minimum measures will help GLPS achieve this goal.

MEP is a standard that establishes the level of pollutant reductions MS4 operators can achieve through implementation of a storm water management program. The strategies may be different for each MS4 and each facility because of unique local hydrologic, geologic, and water quality concerns in each location. Therefore, MEP has been considered in development of the general program, however, specific requirements may vary for implementation on a case-by-case basis for each GLPS facility, as appropriate.

2.0 SITE DESCRIPTION

The GLPS district (the "Site") covers an area of 125 square miles. Included within the school district are the City of Grand Ledge and the villages of Delta Mills, Mulliken, Wacousta, and Eagle, as well as a large portion of Delta Township. The school district, which is mainly in Eaton County, includes portions of Clinton and Ionia Counties. See Attachment A for the District Map and Attachment B for individual facility site maps.

3.0 ILLICIT DISCHARGE ELIMINATION PROGRAM

3.1 INTRODUCTION

An Illicit Discharge Elimination Program (IDEP) is a program designed to identify, prioritize, and minimize or eliminate illicit connections to the storm water system, and to prohibit future illicit connections.

3.2 DEFINITIONS

The following are key IDEP terms:

- Illicit discharge: Any discharge (or seepage) to the separate storm water drainage system that is not composed entirely of storm water, uncontaminated groundwater, or one of a few other specifically defined exceptions.
- Illicit connection: A physical connection to the separate storm water drainage system that primarily conveys illicit discharges into the system and/or is not authorized or permitted by the local authority.
- Point source discharge (PSD): An outfall from a drainage system to waters of the state, or a point where a storm water drainage system discharges into a system operated by another public body.
- Significant illicit discharge: A discharge that shows evidence of impairing water quality in the receiving stream.

3.3 PERMIT REQUIREMENTS

There are five permit requirements for developing an IDEP. They include:

- A listing or map of known storm water point sources to be included in the Notice of Intent (NOI) for coverage under the General Permit.
- A schedule for providing an updated map of the location of each known storm water point source discharge. The drawing must include a description of the conveyances leading to these point source discharges and the respective receiving waters or drainage systems,
- A program to find, prioritize, and eliminate illicit connections, and minimize illicit discharges to the MS4 or waters of the state,
- A description of a program to minimize infiltration of seepage from sanitary sewers and septic systems into the MS4, and
- Legal authority to prohibit discharges into the drainage system.

3.4 ILLICIT CONNECTION IDENTIFICATION

3.4.1 Notice of Intent

GLPS submitted a Storm Water Discharge Permit Application, or Notice of Intent (NOI) on March 10, 2003. The NOI included site plans/diagrams showing known discharge points, or outfalls, from each referenced GLPS complex.

3.4.2 Storm Water System Mapping

GLPS contracted with Testing Engineers & Consultants, Inc. (TEC) to assist in the development and implementation of the IDEP. TEC has visited each facility to review existing drawings, interview maintenance staff, and conduct a walkover of the storm water system.

Outfall Identification

TEC field verified the outfalls identified in the NOI during the site visit. If additional outfalls are discovered during on-going site visits, they will be identified and included in the SWMP. Outfall identification includes connections to other MS4s. Additionally, each outfall is field-located using a positioning system (GPS) unit for inclusion on system maps prepared for each facility.

Where outfalls consist of connections to other MS4s, the down-gradient storm sewer operators will be contacted to verify the connections. Identification of riparian lands that may be located on or traverse district property will also be made where appropriate.

Conveyances Description

Using existing drawings, interviews with GLPS maintenance staff, and field verification techniques, the storm water conveyance system at each facility has been compiled onto the site diagrams. Riparian lands will also be noted, if present.

3.4.3 Outfall Condition - Visual Screening

A visual screening is conducted to note and record outfall conditions, if accessible (e.g., those discharges which do not discharge to a down-gradient MS4).

3.4.4 Receiving Waters Condition - Visual Screening

A visual screening is conducted to note and record receiving water conditions, if the outfall discharges directly to a water body.

3.4.5 Training

TEC conducts awareness training regarding operations and potential illicit connections/discharges on an annual basis for GLPS district maintenance staff. GLPS will require that each member of the district maintenance staff attend this training at least once during the three-year permit cycle, and that new employees attend within their first year of hire. An outline of training topics, developed by TEC, is presented in Appendix B. Additional training on recognition of potential illicit connections, discharges, and outfall indicator parameters is available to maintenance staff as part of the PEP, on an as-needed basis. Grounds-keeping staff is interviewed periodically to determine if they have identified potential stormwater concerns.

3.4.6 Dry Weather Screening

A dry weather visual screening of each identified outfall is conducted to assist in the identification of potential illicit connections. The visual screening is documented using a field form, provided in Appendix D. The screening is conducted at all PSDs, including enclosed discharge points (i.e., connections to down-gradient MS4s) and outfalls to waters of the state. Screening is conducted at least 72 hours after a significant precipitation event.

Dry weather screening is conducted annually to assess progress in elimination or minimization of illicit connections/discharges. The annual screening also includes visual observations of the condition of each outfall and receiving waters at each location.

3.4.7 Additional Assessment/Confirmation of Illicit Discharges

Based on the field observations from site visits, document review, interviews, outfall visual observations, and dry weather screening, gaps in conveyance mapping and potential illicit discharges/connections may be identified, which will require additional assessment/confirmation.

Additional assessment may involve tracer dye or smoke testing of storm water conveyances, or sampling of discharges and laboratory analysis of indicator parameters. All available visual methods, including flow monitoring (e.g., introduction of high water volume in specific conveyances in conjunction with visual observation of changes in flow), are used prior to testing or sampling. If warranted, sampling will be conducted within 24 hours of identifying flow.

For potential illicit discharges that may result from a cross-connection with a sanitary wastewater source, confirmatory biological sampling and laboratory analysis for *E. coli* will be conducted.

For potential illicit discharges that may result from a cross-connection with a process water, or non-rain water source not specifically exempted by the Permit, chemical sampling and analysis will be conducted. Appropriate indicator parameters are selected on a case-by-case basis, depending on the nature of the suspected source, in order to confirm the illicit connection. If a probable source has not been identified, the analysis will be for herbicides, pesticides, volatile organic compounds (VOCs), and polynuclear aromatic hydrocarbons (PNAs) to assist in determining the source of the illicit discharge. These parameters will screen for a variety of chemicals used in the maintenance of GLPS facilities.

Confirmation sampling as described above may also be conducted to investigate illicit discharges resulting from illegal dumping or spills, if the nature and/or source of the contaminants is not apparent.

If sources of storm water flow not attributable to rain water or permitted non-storm sources cannot be identified, tracer dye testing may be required. Tracer dye testing can only be conducted by permission of the DEQ. If tracer dye testing is warranted, a letter is submitted to DEQ outlining the dye product to be used, the estimated concentration in receiving waters, and a date range within which testing is conducted. Tracer dye testing will not commence until DEQ authorization is received.

In the event a potential illicit discharge cannot be confirmed by a combination of the means described above, consideration is given to using a televised video assessment.

The timeline for investigation and corrective action procedures is highly dependent upon the nature and location of the illicit discharge. However, GLPS will begin its source investigation within five business days of discovery.

3.4.8 Prioritization of Potential Illicit Connections

Once illicit connections, if any, are identified, a schedule is developed to eliminate or minimize the connections. The illicit connections identified is prioritized for elimination or minimization based on the level of impact to the surface water quality and the level of effort/fiscal feasibility to implement. Fiscal feasibility is determined by available funds and timing for budgeting implementation in the

appropriate school year. Priority is given to illicit connections/discharges that have the greatest potential to harm down-gradient aquatic habitats.

3.5 ILLICIT CONNECTION/DISCHARGE ELIMINATION/MINIMIZATION

3.5.1 Implementation Plan

Illicit connections/discharges that require major capital expenditures to eliminate or minimize the connection/discharge are prioritized based on available funds and budgeted for implementation in subsequent school years. Since continuing discharges are non-permitted and subject to fines up to \$25,000 per day per violation, they are prioritized for rapid elimination. If the removal of a connection or discharge is delayed because of weather, capital needs, or other critical factors, GLPS will evaluate ways to collect and dispose of the source material so that the discharge is eliminated quickly. An implementation plan is developed to track the progress of elimination/minimization of confirmed illicit connections/discharges. The plan will allow for progress reporting as well as monitoring of measurable goals (see below).

In the event an illicit cross-connection to a sanitary line is identified, GLPS is prepared to comply with the Sanitary Sewer Overflow (SSO) notification and annual reporting requirements for discharge of sewage from illicit sanitary cross-connections. Such an illicit connection is given highest priority for elimination.

Should an illicit discharge occur due to illegal dumping or spills, GLPS will attempt to correct the problem and/or identify the responsible party within 24 hours of discovery or the receipt of a complaint. Notifications will be made as described in Section 1.4. If the source is not readily apparent, source investigation activities will commence within five business days. These may include sampling and analysis, as discussed in Section 3.4.7, or surveillance methods as appropriate based on the location and nature of the discharge. If the source is under the control of GLPS, the incident will be logged using the form provided in Appendix D and corrective actions will include implementation of BMPs to reduce the risk of similar releases in the future. If the source is a third party, GLPS will follow the Enforcement Response Procedure described in Section 1.4.

3.5.2 Evaluation and Assessment

The following outlines the implementation of the IDEP based on major tasks.

System Mapping of Outfalls and Conveyances

System mapping has been completed. Conveyances description has been completed. Verification of connections to down-gradient MS4 operators has been completed. System mapping for each facility has been completed.

Initial Screening of Outfalls/Receiving Waters

Initial visual screening of each outfall and receiving waters has been completed.

Interviews/Questionnaires/Training

Interviews with facility maintenance staff, distribution of the questionnaires, and initial awareness training have been completed.

Dry Weather Screening

Annual dry weather screening is conducted in the fall of each year of the permit duration. The goal of the annual dry weather screening is to evaluate the progress in elimination or minimization of illicit connections/discharges (see below).

Additional Assessment/Confirmation/Prioritization

Additional assessment of potential illicit discharges/connections has been completed. The facilities are grouped based on the gravity of the potential illicit discharge/connection determined during the initial visual assessment and dry weather screening tasks. Video confirmation, if needed, would be scheduled for the following school year on a case-by-case basis.

3.5.3 Measurable Goals

The following measurable goals are used to assess the progress of IDEP implementation:

- Number of illicit discharges/connections eliminated versus number found
- Ability to meet the IDEP proposed schedule
- Procedure to monitor new construction to prevent cross connections

3.5.4 Fieldwork Manual/Checklists

GLPS has developed a field checklist for conducting visual assessments. The checklist includes guidelines for conducting the observations.

4.0 PUBLIC EDUCATION PROGRAM

4.1 INTRODUCTION

The purpose of the Public Education Program (PEP) is to promote, publicize, and facilitate education for the purpose of encouraging the public, as defined by GLPS, to reduce the discharge of pollutants in storm water to the maximum extent practicable (MEP).

4.2 PERMIT REQUIREMENTS

The PEP permit requirements include educating the public in the following categories, as appropriate to each facility, the staff mix, and the audience:

- Hazards associated with illicit discharges and improper waste disposal, including prevention of grease and litter discharges to the storm water system by food service staff;
- Potentially impacted water body at each location and stewardship of the watershed;
- Good housekeeping practices including lawn care, pesticide and herbicide application, vehicle and equipment cleaning (power washing), de-icing;
- Availability and location of facilities for the collection and disposal of household hazardous wastes;
- Other maintenance activities as may apply to each facility, such as proper septic system care, management of riparian lands, and the role of vegetation in watershed maintenance.

4.3 DEFINITION OF PUBLIC

For purposes of this SWMP, GLPS has defined public as the Board of Education (Board), school district employees, district students, parents/guardians of district students, outside contractors providing services to GLPS, and visitors to GLPS properties. The PEP will prioritize stormwater topics that are relevant to the public use of GLPS facilities.

4.4 AWARENESS PROGRAM

A training program, using in part the DEQ-sponsored “Be Stormwater Savvy” promotional and training materials has been developed. GLPS management personnel are responsible to disseminate appropriate information to employees whose job functions are directly related to activities that have the potential to affect storm water, including maintenance, grounds, and janitorial staff.

An awareness program has been developed and is provided to contractors to notify them of their responsibilities to adhere to the Storm Water Management Program requirements. Contractors are monitored by GLPS’ Construction Manager (CM).

In addition, promotional materials have been developed to disseminate to the district students and their parents/guardians on a periodic basis, generally annually. This is accomplished through existing notification venues. GLPS publishes a biannual newsletter entitled “Comet Tails.” In addition, the district maintains a web site at <http://www.glcomets.net/> that is used to post pertinent information for the students and their parents/guardians.

Notification will include information on the availability and location of facilities in the area for the collection and disposal of household hazardous wastes and the local governmental unit reporting procedures for discovery of illicit discharges.

GLPS will provide resources to incorporate storm water awareness into the district's curriculum and share with administration representatives responsible for district curriculum so they can make informed decisions on including such information. The content of the various training/awareness materials is geared specifically to each audience, but covers the major categories outlined in Section 3.2. Samples of public education materials are presented in Appendix C.

4.5 IMPLEMENTATION

Awareness training of maintenance/janitorial and administrative staff (including the Board) is conducted at least annually. Contractor awareness information is developed and disseminated to new contractors. The GLPS’ CM is contractually obligated to provide this information to all contractors on an on-going basis.

Notifications to students, parents/guardians and visitors to GLPS facilities are made periodically in the Grand Ledge Public Schools Insider newsletter and on the GLPS web site located at <http://www.glcomets.net/>. Periodic information is included in the newsletter or mailed.

4.6 EVALUATION/MEASURABLE GOALS

The following measurable goals are used to assess the progress of PEP implementation:

- Track attendance at training for maintenance/janitorial/grounds staff
- Disseminate awareness materials to the public annually via newsletter, web site, and/or flyers
- Educate the public via school board meetings, which appear on public access television
- Website hit counter for GLPS' SWMP website
- Monitor email responses received via the GLPS' SWMP website

These activities, along with the public participation goals discussed in Section 6.0, will be tracked using the form provided in Appendix D. Program-specific feedback will be shared with the individuals and groups that conduct PEP activities in order to facilitate continual improvement of those programs. Metrics described above will be evaluated and discussed within the annual progress report. If the PEP is found to be ineffective based on the metrics (for instance, if surveys indicate decreasing awareness or knowledge of watershed issues), revisions will be made to address the specific deficiencies indicated by the evaluation.

5.0 POLLUTION PREVENTION/GOOD HOUSEKEEPING PROGRAM

5.1 INTRODUCTION

GLPS facility operations cover a wide variety of activities and land uses that are potential sources of storm water pollutants. These include roadway and parking lot maintenance, transportation and equipment garages, open ditches and storm sewers, turf and landscaping activities, and waste handling and disposal activities. The purpose of a comprehensive pollution prevention and good housekeeping program is to document and evaluate current practices, identify opportunities for improvement, and help effect reduction of pollutants entering the storm water system from improper disposal of wastes, spills, and operations and maintenance activities.

5.2 PERMIT REQUIREMENTS

The permit requires development, implementation, and compliance with a program of operation and maintenance BMPs with the ultimate goal of preventing or reducing pollutant runoff from operations to the maximum extent practicable. This includes ensuring staff:

- Properly handle wastes, recyclables, chemicals, and equipment used on the job;
- Maintain a clean work area;
- Regularly maintain storm water controls; and,
- Identify and report various storm water pollution sources, including illicit discharges, malfunctioning post-construction controls, and poor soil erosion and sedimentation controls at construction sites.

This requirement must be accomplished by providing staff with:

- Guidance or operation manuals;
- Employee training and testing; and
- Equipment and other resources necessary to prevent and reduce storm water pollution.

The permit requires the development and implementation of BMPs covering structural and administrative storm water controls, roadway construction and maintenance activities, fleet maintenance activities, and, turf management (pesticides and fertilizers).

GLPS has assessed its facilities, as identified in Section 1.2, for the potential to discharge pollutants to surface waters. Facilities are prioritized based on typical site activities (i.e., vehicle maintenance) and the quantity of hazardous materials and petroleum products stored on site. In general, administrative and school buildings are considered to have a low potential to discharge pollutants. Facility and fleet maintenance activities have a moderate potential to discharge pollutants. Therefore, the Operations Building and Bus Garage are presently designated as prioritized facilities. Prioritization of facilities will be re-assessed at the beginning of each permit cycle and upon construction or renovation (change of use) of GLPS buildings.

5.3 OPERATION AND MAINTENANCE

An on-going assessment is made to document current Operation and Maintenance (O&M) activities, procedures, or policies, as appropriate. Once the assessment is complete, the activities, procedures, or policies are reviewed to determine whether modifications are required in practices to help improve the quality of storm water discharge and to guide the implementation of training outlined in the PEP.

The following are examples of existing O&M activities in place at GLPS and potential BMP modifications to those practices:

5.3.1 Lawn Chemical Management

Lawn care is managed and conducted by GLPS. Generally, turf management chemicals are only applied to athletic fields. A questionnaire is used to obtain current information on fertilizer, pesticide, and herbicide application from maintenance staff at each location. The questionnaires are compiled and an assessment made as to whether modifications to turf management practices can be made to improve the quality of storm water discharge. GLPS will follow manufacturer recommendations for application of lawn chemicals, including ensuring the materials are not applied when rain is forecast. A copy of the questionnaire is included in Appendix D.

GLPS has retained an outside contractor (at time of report preparation: PureGreen) to develop a Turf Management Plan for playing fields. Baseline soil testing is conducted to assess the current soil loading of fertilizer constituents in areas where fertilizer is applied. The testing results are used to adjust future fertilizer application. In addition, if required, aspects of turf management are added to the annual grounds and maintenance staff training program.

5.3.2 Pest Management

GLPS has an Integrated Pest Management Plan (IPMP), as required by the Michigan Department of Public Health. Pesticide management, generally consisting of RoundUp application along fences and buildings) is contracted to an outside contractor, who is certified by the State of Michigan in the 3A (Turfgrass) and 3B (Ornamental and Shade Plants) categories. The IPMP is reviewed with respect to

potential impacts on storm water quality. The IPMP states the contractor will not apply materials when rain is forecast or when wind speeds that would cause significant drift are expected.

5.3.3 Catch Basin Management

Currently, silt build-up in catch basins is cleaned out three times per year in April, September, and December. GLPS uses outside contractors, or the City of Grand Ledge, equipped with vacuum (“vac”) trucks. Materials extracted from catch basins will be properly disposed off-site. GLPS will request and retain disposal manifests or load ticket from the contractors.

The catch basin at the Operations Center is equipped with an oil/water separator and the water is discharged to the sanitary sewer system. The oil/water separator is emptied three times per year by a licensed waste hauler and the material is transported off-site for proper disposal.

Contractors will be required to follow best management practices for dewatering and disposal of materials extracted from catch basins, as described in the DEQ compliance assistance document, *Catch Basin Cleaning Activities Guidance Document*. Forms to certify the contractor’s familiarity and intent to comply with the document are located in Appendix D.

GLPS procedures are assessed and a determination made as to whether a preventive maintenance program should be implemented. In addition, an evaluation into retrofitting catch basins with inserts is made (see Post-Construction Storm Water Runoff Control for further discussion and schedule for implementation).

GLPS incorporates routine (at least annual) inspections of the catch basins at each facility as part of a preventive maintenance program. The process follows the guidelines in the US EPA “Stormwater O&M Fact Sheet: Catch Basin Cleaning.” Generally, catch basins will require cleaning once 50% of capacity is reached.

5.3.4 Road/Parking Lot Maintenance

GLPS uses outside contractors for maintenance on its roads and parking lots. Major reconstruction is also contracted out. Street sweeping will be conducted annually in the spring, generally in April or May. Activities associated with maintenance as well as street cleaning activities on GLPS managed roads and parking lots are assessed to determine whether the existing frequency of street cleaning is adequate or whether an increased frequency is required.

Contractors will be required to follow best management practices for dewatering and disposal of street sweeper waste material, as described in the DEQ compliance assistance document, *Catch Basin Cleaning Activities Guidance Document*. Forms to certify the contractor’s familiarity and intent to comply with the document are located in Appendix D.

5.3.5 Salt and Sand/De-Icing

GLPS does not store salt or sand on-site, except for some palletized bags stored indoors for hand application to sidewalks. Salt for road and parking lot de-icing is obtained from the City of Grand Ledge on a per load basis. GLPS does not store salt outdoors. Salt is applied by GLPS grounds staff

using a hand-spreader or a truck-mounted calibrated spreader. Forms to log salt use by GLPS grounds staff are located in Appendix D.

5.3.6 Fleet Maintenance

GLPS operates a fleet of buses and service vehicles. Buses will be periodically inspected for leaks in conjunction with scheduled quarterly preventative maintenance. Parking areas will also be monitored for significant oil staining and/or sheen on a quarterly basis.

An assessment of maintenance activities has been made to determine practices and whether improvements can be made to reduce potential impact on storm water discharge. Areas evaluated included hazardous materials storage, used oil management, and spill prevention. In addition, the district operates a vehicle wash unit which discharges via an oil-water separator to the sanitary sewer system. This operation was included in the assessment and an evaluation made of potential impact to the storm system. All fleet maintenance chemicals are handled and stored indoors, where there is no contact with rainwater. While there remains some potential for discharge during vehicle refueling operations, a refueling procedure is in development. Therefore, fleet maintenance areas are not considered "high potential" to discharge pollutants to surface waters of the state.

At the Operations Center, blow-down wastewater from a compressor has been re-routed from a down spout drain to the on-site sanitary system to prevent contact with stormwater. The blow down wastewater now passes through an oil-water separator that discharges to an on-site holding tank; the tank is periodically pumped out. GLPS is in the process of installing an air dryer system to the air compressor to reduce the initial amount of moisture going into the air tank.

5.3.7 Trash Dumpster Management

An evaluation of solid waste management practices, specifically dumpster handling, including containment or proximity to catch basins, is made. However, none of the dumpsters in use at GLPS are equipped with hydraulic compactors. Based on the assessment, modifications may be made to dumpster location/management. The evaluation will also assess the potential for impact to the storm water system from other sources of trash.

In addition, the district's cafeteria drains are equipped with grease traps, which are cleaned out periodically by an outside contractor and the grease removed off-site for disposal. GLPS does use two grease collection containers, at the high school and at Hayes Middle School, which are periodically emptied by a contractor. Grease is therefore managed in a manner that does not impact storm water discharge.

Training has been provided to staff to specifically address the need to keep dumpster lids closed, and keep areas around dumpsters clean. Annual stormwater management refresher training is provided.

5.3.8 Swimming Pool Maintenance

GLPS operates a swimming pool at the high school that discharges to the City of Grand Ledge sanitary sewer system. Filter backwash is also discharged to the sanitary system.

5.3.9 Septic System Management

GLPS operates a septic system at Wacousta Elementary School. Although this location is not located within the Urbanized Area, an evaluation has been made of the management of the system to assess potential for impact to the storm water system. The system is evaluated annually for proper operation. The ground is viewed approximately weekly during routine ground-keeping. The septic tanks are pumped annually and have never been observed to be close to using up the available capacity. The system is inspected and serviced annually.

5.3.10 Floor Maintenance

Floor scrubber/stripper and carpet cleaning wash water is collected and discharged to the sanitary sewer via janitorial slop sinks.

5.3.11 Sports Field Line Painting Equipment Cleaning

The district maintains sports fields and sports field line painting equipment cleaning is conducted. The paint is mixed and the equipment is cleaned at the Operations Center. The water used in cleaning is discharged to the sanitary sewer.

5.4 ADDITIONAL BMPs

In addition to implementing improvements to the existing management practices outlined above, consideration is given to the following BMPs for implementation at GLPS:

- Overall district hazardous materials management and spill prevention, including material storage coverings
- Flow diversion installation
- Use of native plants to replace turf grass in selected areas
- Labeling of storm sewer structures installed after March 10, 2004
- Assessing impacts to water quality of new flood management projects (see Post-Construction Run-Off Section)

5.5 STAFF AND CONTRACTOR TRAINING PROGRAMS

In order to effectively implement improvements to existing operations or implement additional BMPs, specific BMP information is incorporated into the PEP staff training and awareness information dissemination. An outline of training topics for the maintenance/janitorial/grounds staff is included in Appendix B.

5.6 RELEASE REPORTING

If a release of any polluting material from the MS4 to the surface waters or groundwaters of the state occurs, the DEQ will be notified as soon as practicable but no later than one business day of discovery, unless the release is known to be less than the applicable threshold reporting quantity. During business hours, staff will contact the DEQ's Lansing District Office directly at (517) 335-6010. After hours, the DEQ 24-Hour Pollution Emergency Alerting System (PEAS) at (800) 292-4706 will be used.

5.7 IMPLEMENTATION

GLPS programs are fully implemented. GLPS will continue to annually evaluate their BMPs to assess areas of possible improvement.

5.8 EVALUATION/MEASURABLE GOALS

The following measurable goals are used to assess the progress of Pollution Prevention/Good Housekeeping Program implementation:

- Track fertilizer applications (frequency, volume, and area) and note changes in fertilizer usage, if soil testing warrants
- Track salt/de-icing material applications (frequency and quantity)
- Track frequency and results of fleet inspections (quarterly)
- Track frequency of catch basin cleaning activities (three times annually)
- Track frequency of street sweeping activities (annually)
- Track contractor oversight, as discussed below

Facilities maintenance activities described above and conducted by GLPS staff will be logged using the forms in Appendix D.

In addition, tracking of the following BMPs has been discussed previously:

- Track completion of dry weather screening program of GLPS PSDs (see IDEP for discussion; tracking form is located in Appendix D)
- Track attendance at employee training sessions (see PEP for discussion; tracking form is located in Appendix D)

Contractors will be required to comply with the pollution prevention and good housekeeping program, particularly the BMPs described in Section 5.3. In addition, the BMPs will be integrated into the preparation of specifications and bid documents. Forms to certify the contractor's familiarity and intent to comply with the BMPs are located in Appendix D.

6.0 PUBLIC INVOLVEMENT/PARTICIPATION

6.1 INTRODUCTION

GLPS has posted its SWMP and a map of the district on its stormwater website. Comments on the SWMP or reports of possible stormwater issues/violations may be emailed to the district using an email address available on that website.

6.2 PERMIT REQUIREMENTS

The permit encourages public input in the storm water management program. GLPS has posted the SWMP on its webpage and welcomes comments or questions from the public.

Cooperation with local stream or watershed protection organizations is encouraged. This involvement can include:

- Informing the organizations of activities under the storm water management program
- Seeking ways to meet general permit requirements by interacting with the local organizations involved in water resource protection

6.3 LOCAL GOVERNMENT/WATERSHED GROUP IDENTIFICATION

GLPS discharges storm water into several local government systems and watersheds. Local governments and regional watershed protection organizations, such as the Middle Grand River Organization of Watersheds (MGROW), have been identified. GLPS has been and intends to continue to correspond with these governmental units and regional watershed protection organizations.

6.4 NOTIFICATION TO PUBLIC

As outlined in the PEP, notification to students, parents/guardians and visitors to GLPS facilities of the requirement for the district to develop a storm water management program is made via its website and information on the implementation is made periodically thereafter in the Grand Ledge Public Schools Insider newsletter and, as necessary, on the GLPS website located at <http://www.glcomets.net/>. Stormwater informational posters have been displayed in public locations within school facilities.

6.5 COOPERATIVE ARRANGEMENT WITH WATERSHED GROUP

GLPS cooperates with watershed groups for facilitating the watershed group's PEP (e.g., GLPS will consider providing the watershed group's literature to the population served by GLPS).

6.6 ADVISORY COMMITTEE

To achieve the requirement for public participation, GLPS has set up an internal committee made up of Facility and Grounds staff with Board of Education review. The purpose of the committee is to provide input into the implementation of the District's Storm Water Management Program.

6.7 IMPLEMENTATION/MEASURABLE GOALS

The following measurable goals are used to assess the progress of BMP implementation:

- Identification is completed
- Notification has been made via the website
- Attend at least one regional watershed protection organization or similar group meeting per year
- Monitor activities of regional watershed permit group via other means (web site/newspaper)
- Discuss storm water issues and receive staff training at periodic meetings of the Michigan School Business Officials association
- Conduct three internal advisory committee meetings per school year

These activities, along with the public education goals discussed in Section 4.0, will be tracked using the forms in Appendix D.

7.0 CONSTRUCTION STORM WATER RUNOFF CONTROL

7.1 INTRODUCTION

Polluted storm water from construction sites often flows to MS4s and ultimately is discharged into the receiving waters or drainage systems operated by others. Pollutants commonly discharged from construction sites can include:

- Sediment;
- Solid and sanitary wastes;
- Phosphorous (fertilizer);

- Nitrogen (fertilizer);
- Pesticides;
- Oil and grease;
- Concrete truck washout;
- Construction chemicals; and
- Construction debris.

Of these, sediment is the main pollutant of concern. Sediment runoff rates from construction sites are generally 10 to 20 times greater than from agricultural lands, and 1,000 times greater than from forest lands. During a short time, therefore, construction sites can contribute more sediment to waters of the state than are deposited naturally over several decades.

7.2 PERMIT REQUIREMENTS

The Phase II Final Rule and the permit require control of storm water discharges from construction activity that results in land disturbance of greater than or equal to one acre, or disturb less than one acre but is part of a larger common plan of development or sale that would disturb one acre or more. In addition, Michigan's Soil Erosion and Sedimentation Control statute (Part 91 of Act 451 of 1994) prohibits offsite sedimentation for sites less than one acre if located within 500 feet of a wetland, lake or stream.

Construction projects meeting these requirements, therefore, are subject to soil erosion and sedimentation control (SESC) requirements outlined in the State of Michigan's Part 91 rules, including design and implementation of runoff control measures. The construction site developer or GLPS is responsible for obtaining a Part 91 SESC Permit before commencing construction activity one acre or greater in total earth disturbance, and must control waste, such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality. Each construction site must be regularly inspected by a certified storm water operator (CSWO) during construction as required under the State of Michigan's Permit by Rule (Rule 323.2190) to make sure control measures are enforced.

In the event of violations, including the discharge of soil, sediment, or other pollutants to the MS4 during construction activity, the CM shall notify the Eaton County Drain Commissioner's office within two business days, and the DEQ within five business days. If the problem cannot be corrected within these time frames, the CM shall submit a timeline for returning to compliance. In addition, the CM will implement measures to reduce the likelihood of recurrence.

7.3 EXISTING PROGRAM

The district contracts out all construction projects involving earthwork. GLPS' CM is contractually-obligated to maintain compliance with applicable legal requirements and the GLPS SWMP. Currently, SESC permitting and Certified Storm Water Operator (CSWO) monitoring is the responsibility of the architectural/engineering firm responsible for civil engineering design, the general contractor/construction manager managing the construction project, or the earthwork subcontractor. The general contractor will note the location of structural stormwater controls in the as-built plans for new facilities, which will be provided to GLPS upon completion of the project. An inventory of

existing structural stormwater controls is provided in Attachment C, which will be revised to include new facilities within thirty days of their completion.

7.4 ADDITIONAL BMPs

GLPS contractually requires architects/engineers and/or construction managers to be responsible for compliance with Michigan's Part 91 SESC requirements and Permit-by-Rule for construction storm water runoff control for construction disturbing more than one acre. The district will also contractually require architects/ engineers and/or construction managers be responsible for compliance with other environmental regulations and BMPs for construction (e.g., construction debris, concrete truck washout, and hazardous materials management), if not already included in the contract.

As part of the State of Michigan site plan review process, if required, the district's submittal to the State of Michigan will ensure erosion controls have been addressed and a soil erosion and sedimentation control plan has been prepared.

7.5 IMPLEMENTATION/MEASURABLE GOALS

The following measurable goals are used to assess the progress of BMP implementation:

- GLPS' CM tracks and enforces compliance of contractors to permit-by-rule requirements for construction sites over one acre and other BMPs outlined above when construction projects involving earthwork are conducted while the current permit is in effect.

8.0 POST CONSTRUCTION STORM WATER RUNOFF CONTROL

8.1 INTRODUCTION

Post-construction storm water management in areas undergoing new development or reconstruction is necessary because runoff from these areas has been shown to significantly affect receiving waters. There are generally two types of impacts from post-construction runoff. The first is caused by an increase in the type and quantity of pollutants. As runoff flows over areas altered by development, harmful sediment and substances, such as oil and grease, pesticides, heavy metals, and nutrients (e.g., nitrogen and phosphorous), can become suspended and carried to receiving waters.

The second type occurs by increasing the volume of water delivered to receiving waters during storms. Increased impervious surfaces interrupt the natural cycle of gradual percolation of water through vegetation and soil. Instead, large volumes of water are collected from surfaces such as roofs, and asphalt or concrete roads/parking lots, and are routed to the drainage system, and quickly flow to the nearest receiving water. This may result in stream bank scouring and downstream flooding, impacting aquatic life and property.

8.2 PERMIT REQUIREMENTS

The permit requires development and implementation of a comprehensive storm water program for new development and redevelopment projects that outlines development, implementation, and enforcement of controls across the entire urbanized area at each facility to protect the designated uses in all receiving waters from the effects of urbanization.

The common effects of urbanization to be considered by the program include:

- Stream "flashiness" (higher peak flow and lower base flow);
- Stream bank erosion;
- Increased stream temperature and pollutant load;
- Reduced stream bank vegetation; and,
- Degraded fish and aquatic habitat.

The district is not subject to local site plan review, and does not have control over review of site plans for off-site development. However, it does have the authority to develop its own site plans for development or redevelopment at the referenced affected complexes subject to this SWMP.

8.3 EXISTING SYSTEMS

8.3.1 Structural Controls

GLPS maintains documentation of existing structural controls in place at GLPS facilities and verify the controls are maintained to ensure effectiveness.

8.3.2 Non-Structural Controls

As part of the Pollution Prevention/Good Housekeeping evaluation, existing non-structural controls are evaluated and documented.

8.4 COORDINATION WITH LOCAL OR REGIONAL SWMPs

Where local or regional watershed master SWMPs can be identified, GLPS will offer to provide links on its website to these plans and/or organizations. GLPS will take into consideration the identified local or regional storm water master SWMP when evaluating new BMPs for post-construction flow controls during new development or renovation planning.

8.5 POST CONSTRUCTION FLOW CONTROLS

As part of the site planning process for construction or re-development projects disturbing greater than or equal to one acre, GLPS will evaluate the feasibility of implementation of BMPs designed to manage storm water run-off from the affected complexes subject to this SWMP. Appropriate BMPs will be selected and implemented in order to meet a performance standard in which the post-construction runoff rate and volume of discharges shall not exceed the pre-development rate and volume for all storms up to the two-year, 24-hour storm at the site. In addition, although the district is not subject to local site plan review, GLPS will coordinate the implementation of BMPs with any local or regional entities into whose storm water system the project's storm water is discharged. Some of the BMPs GLPS will consider include, but are not limited to, the following:

8.5.1 Structural BMPs

- Dry extended detention ponds
- Infiltration basins/trenches
- Porous pavement (when shown to be effective in cold climates)
- Sand filters/filter strips
- Vegetative practices, such as bioswales and rain gardens
- Catch basin inserts

8.5.2 Non-Structural BMPs

- Buffer zones
- Open space design
- Urban forestry
- Green parking
- Alternative pavers

In addition, long term erosion control is facilitated by properly maintaining existing landscaping to prevent soil erosion.

8.6 IMPLEMENTATION/MEASURABLE GOALS

The following measurable goals are used to assess the progress of BMP implementation:

- Review/documentation of existing systems has been completed
- Use of a form to track maintenance of implemented BMPs and to identify/schedule BMPs that may need to be renovated or re-engineered
- Tracking BMPs implemented should new construction or renovation be planned while the current permit is in effect

The post-construction runoff rate and volume of discharges shall not exceed the pre-development rate and volume for all storms up to the two-year, 24-hour storm at the site. New structural stormwater controls for water quantity, if constructed during redevelopment activities, must be designed and implemented in accordance with this rate standard.

BMPs will be designed on a site-specific basis to reduce post-development total suspended solids (TSS) loadings by 80 percent or achieve a discharge TSS concentration not to exceed 80 milligrams per liter. GLPS will ensure that the minimum treatment volume standard for each new construction or redevelopment project where the area of disturbance exceeds one acre shall be one inch of runoff from the entire development site. Following construction, TSS concentrations will be measured to ensure the effectiveness of the BMPs.

Structural and vegetative BMPs will be maintained in perpetuity in order to ensure the above performance standards continue to be met.

Testing Engineers & Consultants, Inc.

GRAND LEDGE PS MS4-EATON
STORM WATER MANAGEMENT PLAN
GRAND LEDGE PUBLIC SCHOOLS, GRAND LEDGE, MI

TEC REPORT 57590
MARCH 31, 2017
PAGE 22 OF 22

REPORT SIGNATURES

The author of this SWMP is Mr. Donald C. Kaylor, Professional Geologist (Indiana, Tennessee) and Certified Stormwater Operator (Michigan). Mr. Kaylor is a Department Manager employed by Testing Engineers & Consultants, Inc. (TEC). TEC may be contacted at:

Testing Engineers & Consultants, Inc.

Mailing Address:

PO Box 249

Troy, MI 48099-0249

Tel: 248.588.6200

Fax: 248.588.6232

Street & Courier Address

1343 Rochester Rd

Troy, MI 48083-6015

dkaylor@tectest.com

www.testingengineers.com

Prepared by:



Donald C. Kaylor, PG (IN, TN), CP (MI), EP
Manager, Environmental Assessment

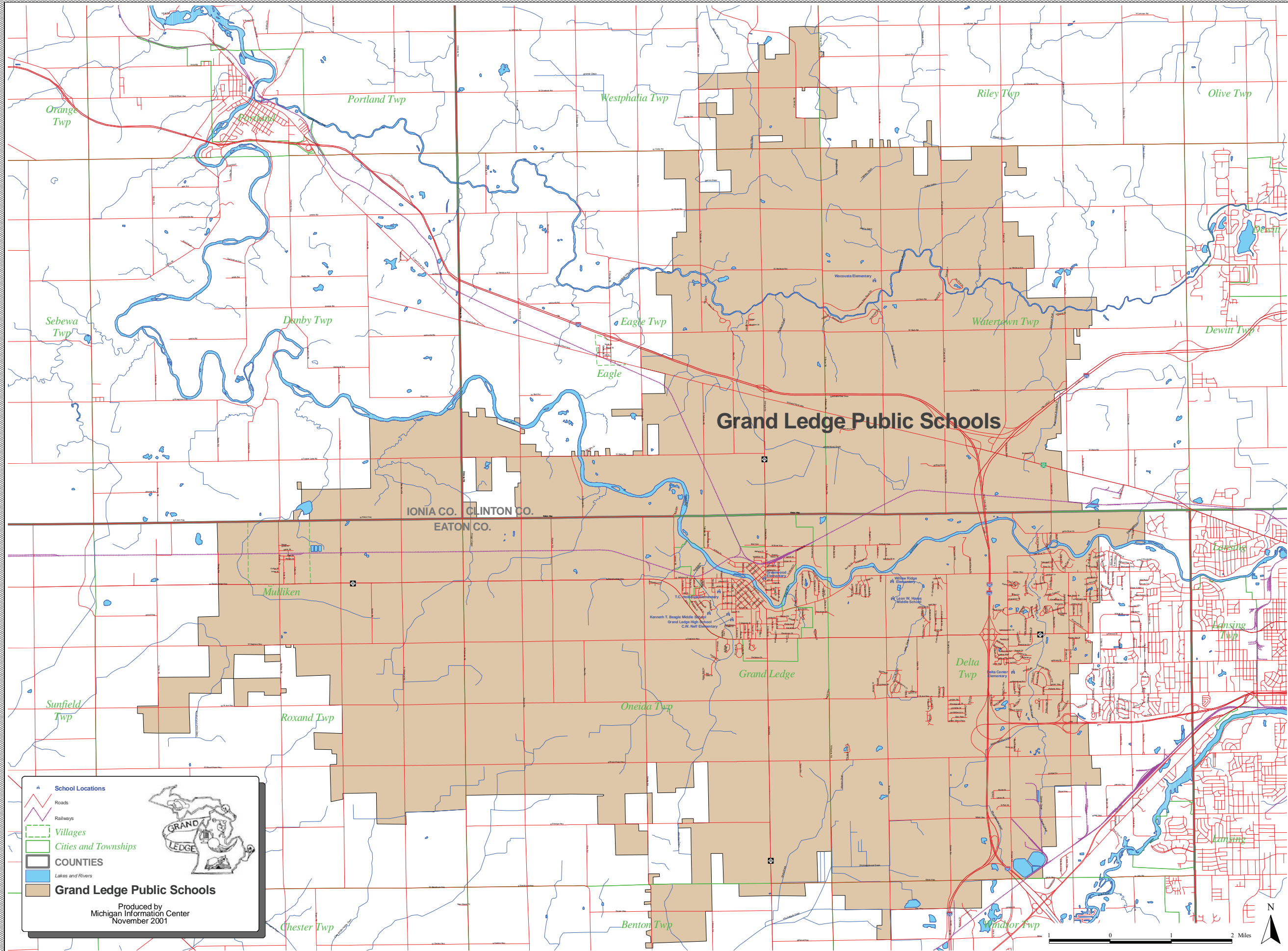
Testing Engineers & Consultants, Inc.

**GRAND LEDGE PS MS4-EATON
STORM WATER MANAGEMENT PLAN
GRAND LEDGE PUBLIC SCHOOLS, GRAND LEDGE, MI**


**TEC REPORT 57590
MARCH 31, 2017
ATTACHMENTS**

ATTACHMENT A
STORM WATER INFRASTRUCTURE

Grand Ledge Public Schools



Produced by
Michigan Information Center
November 2001



Source: Michigan Geographic Framework

**INVENTORY OF
STRUCTURAL STORM WATER CONTROLS**

March 2017

Grand Ledge Public Schools

Location	Controls
Beagle Elementary & Operations Building 600 West South Street Grand Ledge, MI 48837	11 Catch Basins
Delta Center Elementary 305 South Canal Road Lansing, MI 48917	21 Catch Basins
Hayes Middle School 12620 Nixon Road Grand Ledge, MI 48837	8 Catch Basins
High School & Neff Elementary 820 Spring Street/950 Jenne Street Grand Ledge, MI 48837	59 Catch Basins
Holbrook Elementary 615 Jones Street Grand Ledge, MI	9 Catch Basins
Sawdon 220 Lamson Street Grand Ledge, MI 48837	15 Catch Basins
Wacousta Elementary 9135 Herbison Road Eagle, MI 48822	4 Catch Basins
Willow Ridge Elementary 12840 Nixon Road Grand Ledge, MI 48837	8 Catch Basins

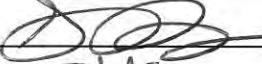
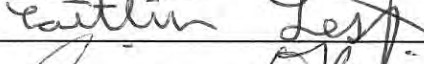
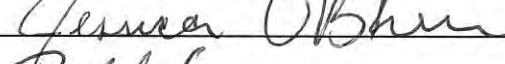
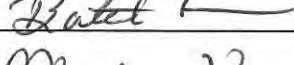
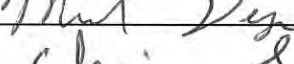


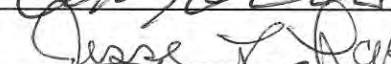


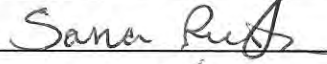
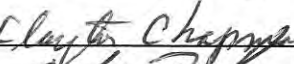




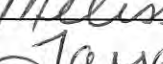
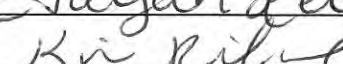
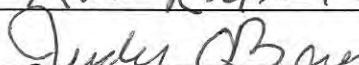

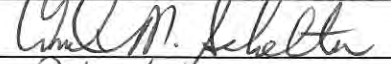
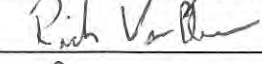
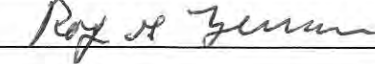


ATTACHMENT B

SAMPLE STAFF TRAINING MATERIALS

GRAND LEDGE PUBLIC SCHOOLS

July 26, 2016





SIGN-IN SHEET



PRINT NAME	SIGNATURE	BUILDING
1. Sara Baum		Hayes
2. Caitlin Lesatz		Hayes
3. Jessica O'Brien		Hayes
4. Beth Lewerman		D.C.
5. Mindy Dwyer		D.C.
6. Chris Schultz		D.C.
7. Ron Hicks		HecC
8. Andy Olmstead		WR
9. Jesse Lasorda		WR
10. Eddw. Barricklow		W.R.
11. Chris Peabody		Beagle
12. SARRA Ruiz		Wac.
13. Clayton Chapman		Wac -
14. Scott Reynolds		Wac.
15. Jonathon Wright		Beagle
16. Betty Ranschburch		Neff
17. Joey Schmittman		Beagle
18. Melissa Eye		Neff
19. Tayah Lee		Sawdon
20. Kim Richardson		H.S.
21. Judy O'Brien		H.S.
22. Dan STARR		H.S.
23. Andy SCHELTER		H.S.
24. Rich VanBlencze		OPS
25. ROY ZERMAN		ALL

GRAND LEDGE PUBLIC SCHOOLS

July 26, 2016

SIGN-IN SHEET

PRINT NAME	SIGNATURE	BUILDING
1. Amanda Ferris		Sawdon Hillbrook
2. EDWARD F. REICHSTETTER	Edward F. Reichstetter	HIGH School
3. Marty Beamish	Marty Beamish	High School
4. Tony Sweet	Tony Sweet	High School
5. DAVE JOLLEY	Dave Jolley	H-H School
6. Martin Schuchling	Martin Schuchling	OPPS
7. JOHN P. PERE	John P. Pere	OPPS
8. Sharron Moline	Sharron Moline	High School
9. JAREN BLOCH	Jaren Bloch	High School
10. LANCE MAHES		OPPS
11. Pat Mulley	Pat Mulley	OPPS
12. Lawrence Murray	Lawrence Murray	OPPS
13. LYNN DAVIS		OPPS
14. Ron Bohndt		OPPS
15. Wayne Pratt	Wayne Pratt	
16.		
17.		
18.		
19.		
20.		
21.		
22.		
23.		
24.		
25.		





NPDES Phase II Storm Water Requirements for School Facilities

Presented by:
Donald Kaylor, PG, CSO
Testing Engineers & Consultants, Inc.

August YEAR

1

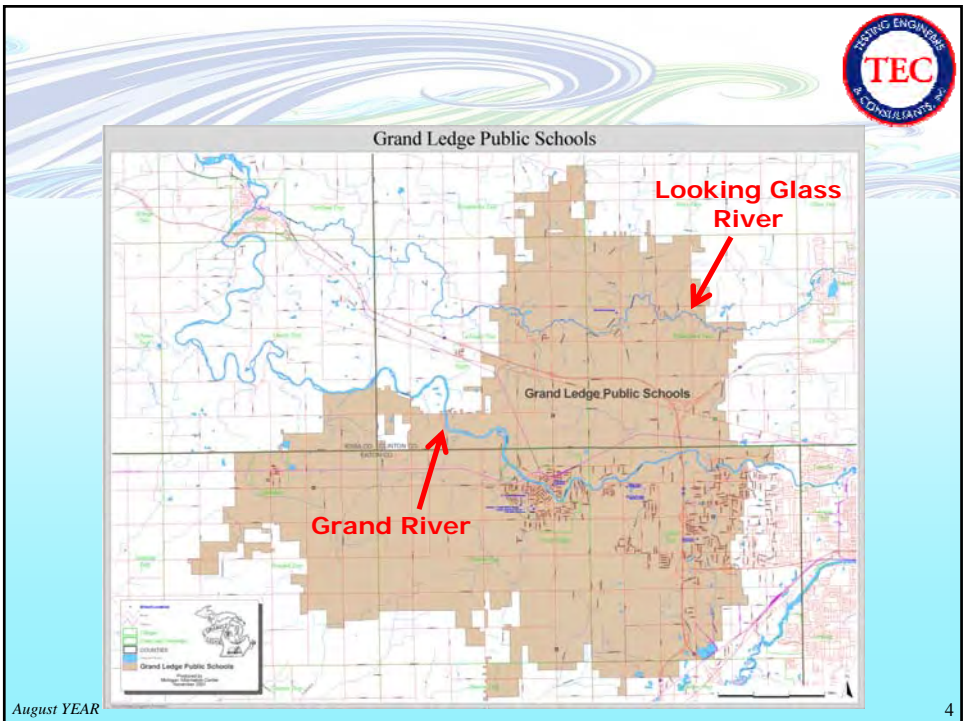
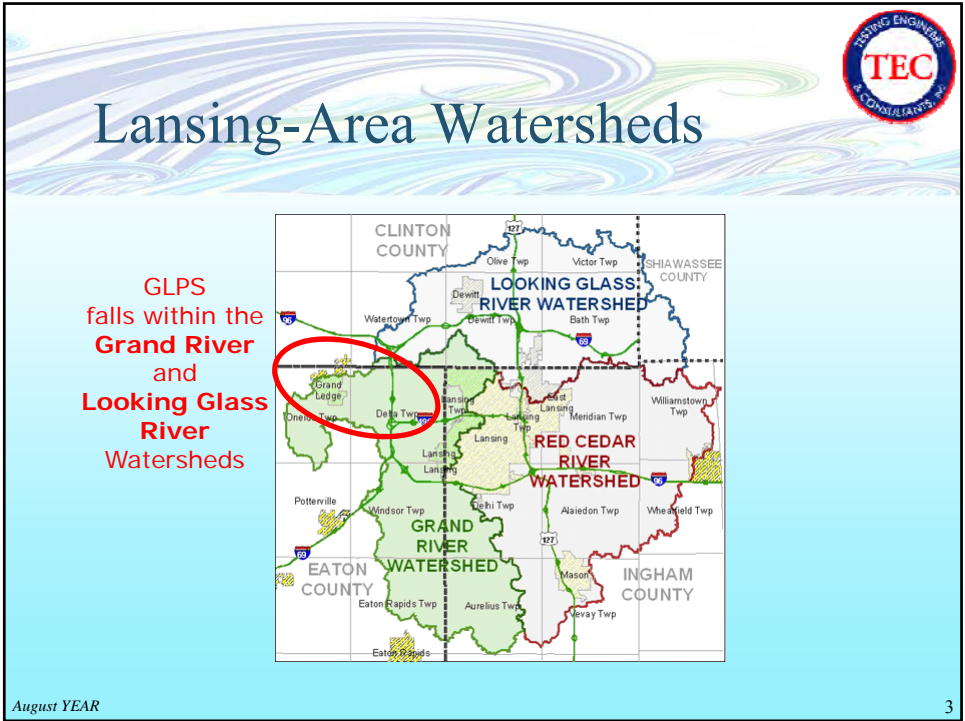


What is Storm Water?

- Rain & Snow become “Storm Water” when they hit the ground
- Storm Water flows directly to streams, then rivers and lakes
- Storm Water is untreated
- Storm Water may carry sediment (dirt) and chemicals from parking lots, roadways, and construction sites

August YEAR

2



Why Care about Storm Water?



Pollutants fall on impervious surface



Oil in parking lot



Polluted storm water enters storm drain



Typical roadside catch basin

Storm water enters waterway



Storm drain outfall

Impaired waterway



Sedimentation and flooding during rain event

August YEAR 5

Why Care about Storm Water?



- Affects the Health of our Lakes and Streams:
 - Ecology
 - Public Health
 - Aesthetics
- It's the Law!
 - GLPS's Municipal Separate Storm Sewer System ("MS4") is permitted and regulated by the Michigan Department of Environmental Quality (DEQ)

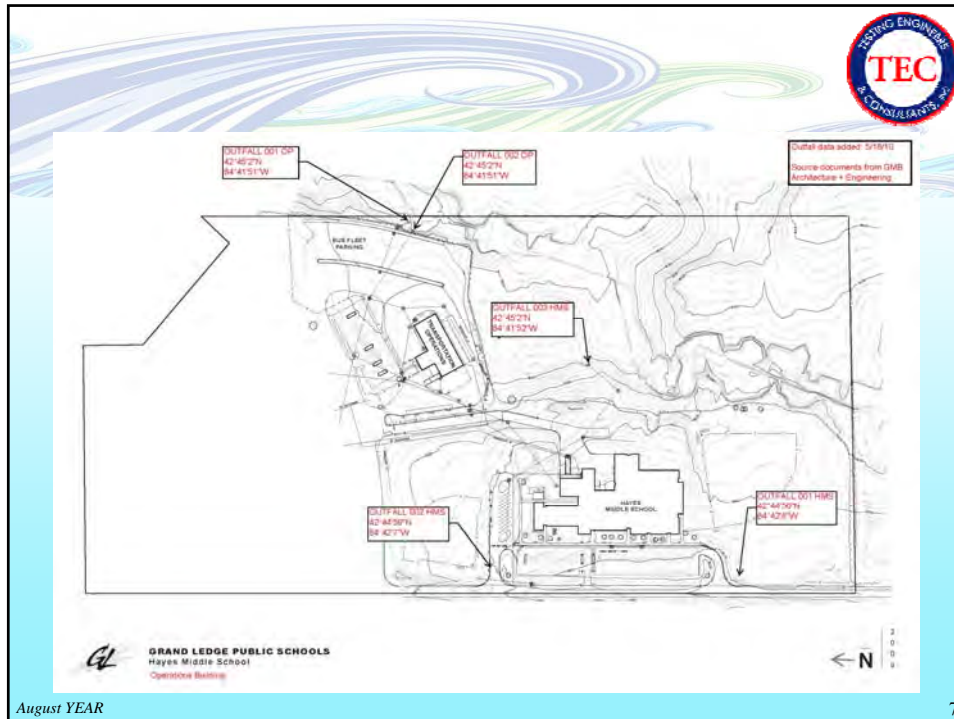
➔

Drinking Water

Fishing


Outdoor Recreation
(Paddling/Float Trips)

August YEAR 6



What Do NPDES Phase II Regulations Require?


- Goal: Reduce the discharge of pollutants to the maximum extent practicable to protect water quality
- GLPS's Storm Water Management Plan (SWMP) includes:
 - Public Education and Outreach
 - Public Participation/Involvement
 - Illicit Discharge Detection and Elimination
 - Construction Site Runoff Control
 - Post-Construction Runoff Control
 - Pollution Prevention/Good Housekeeping




Public Education and Outreach

- Goals of the Public Education Plan (PEP):
 - Increase public awareness and understanding of storm water pollution
 - Encourage actions to reduce pollution in storm water runoff
 - Promote reporting of improper disposal of materials into storm drains
 - Train GLPS staff and contractors

August YEAR 9



Public Education and Outreach



PEP Resources:

- GLPS Website
- GLPS Insider (Newsletter)
- DEQ “Be Stormwater Savvy” Campaign
- Local “Pollution Isn’t Pretty” Campaign

2007 Bond
Contact Us


August YEAR 10



Public Participation


- Public Posting of SWMP on GLPS Website
- Public Notice of SWMP Revisions
 - Upcoming Revision: Fall 2016
 - Feedback is welcome!
- Coordination with Local Watershed Groups
- Creation of Internal Advisory Committee
 - Will meet 3 times/year to discuss implementation
 - Participants: TEC, Operations Director, select GLPS staff (administration and operations)

August YEAR 11



What is Illicit Discharge?

- Improper connections to the storm water system
- Unauthorized releases into storm drains (e.g., floor mop wash water, used oil)



August YEAR 12

Illicit Discharge Elimination Program (IDEP)



TEC conducts annual screening for illicit discharges at GLPS during dry weather

However, if you see something, say something!



August YEAR

13

Construction Site Runoff Control



- Responsibility of Construction Manager
- CM will prevent discharges (including sediment) to storm sewers

August YEAR

14

Post-Construction Runoff Control



- Responsibility of Architect and Site Engineer
- Future projects will be designed to minimize the impact of storm water on local waterways



August YEAR

15

Post Construction Runoff Control



Outfalls are labeled



August YEAR

16

Pollution Prevention/Good Housekeeping



- Potential Sources of Storm Water Pollution:
 - Roadway and Parking Lot Maintenance
 - Salt/de-icing materials
 - Street sweeping/catch basin cleaning
 - Transportation and Equipment Garages
 - Oils, fuels, solvents
 - Landscaping and Turf Maintenance
 - Pesticides, herbicides, and fertilizers
 - Waste Handling and Disposal
 - Keep dumpsters covered, with lids closed

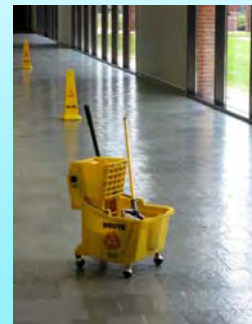
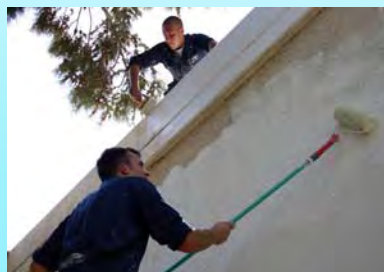
August YEAR

17

Example: Wash Water



- Never rinse containers used for paint, cement, or cleaning materials outdoors – including mop wash
- These materials should not be allowed to enter storm drains



August YEAR

18




Example: Fleet Maintenance

- Do not perform vehicle maintenance activities outdoors
- Do not leave containers open, or store chemicals outside
- Clean up spills/leaks promptly; do not allow oils, fuels, or solvents to enter storm drains
- Report spills/leaks to the Operations Director





August YEAR 19

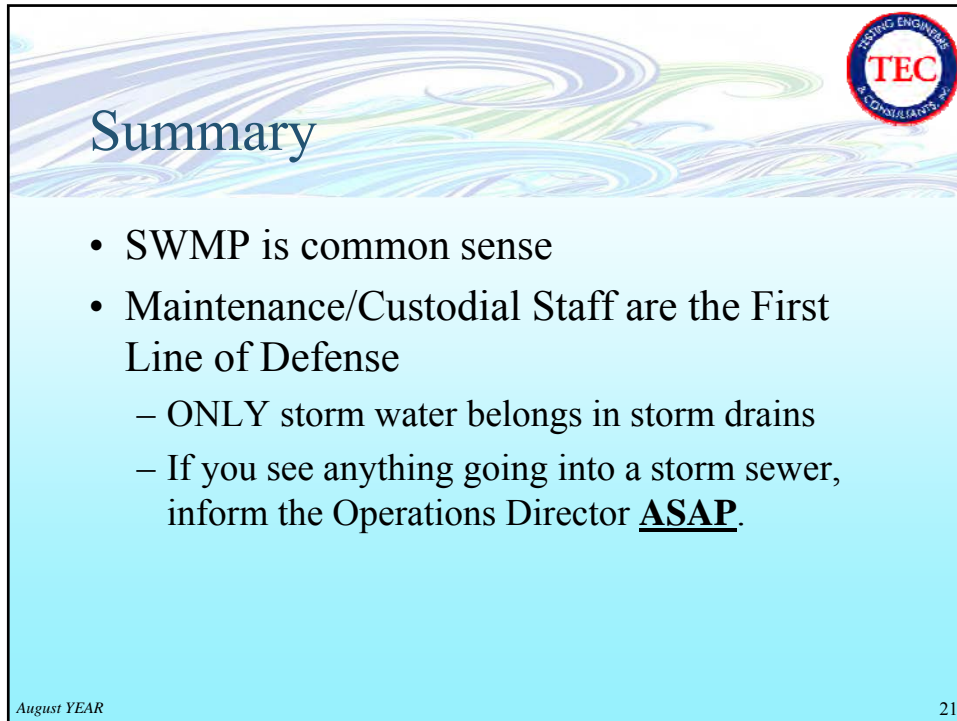


Example: Catch Basins

- Keep catch basins clear of debris
- Report clogged catch basins to Operations Director



August YEAR 20



Summary

- SWMP is common sense
- Maintenance/Custodial Staff are the First Line of Defense
 - ONLY storm water belongs in storm drains
 - If you see anything going into a storm sewer, inform the Operations Director **ASAP**.

August YEAR 21



Q & A

- Any questions or comments?

August YEAR 22

ATTACHMENT C

SAMPLE PUBLIC EDUCATION MATERIALS



Storm Water Management

How Does Storm Water Affect Our Environment?

One of the most significant, yet unrecognized groups of water contaminants is storm water pollutants. When it rains or snows, storm water flows over streets, lawns, fields and buildings to lower areas such as lakes, streams and wetlands. This runoff can collect debris, oil, grease, pesticides, fertilizers and other harmful chemicals that eventually make their way into our rivers, creeks or lakes. Unlike sanitary sewers that divert water to a treatment plant directly from your home, storm drains lead directly to surrounding lakes and rivers without any type of treatment. All the debris and pollutants that were picked up by storm water runoff end up in your lakes and streams!

Under the National Pollutant Discharge Elimination System (NPDES) Phase II Program, Grand Ledge Public Schools is obligated to reduce storm water pollution to the maximum extent practicable to protect water quality and comply with the Clean Water Act. [Grand Ledge Public Schools' Storm Water Management Plan \(SWMP\) \(/downloads/district/glps_swmp_july_18_2014_via_tec.pdf\)](http://downloads/district/glps_swmp_july_18_2014_via_tec.pdf) consists of six program elements:

- Public Education and Outreach -- Informing citizens of the impacts polluted stormwater runoff discharges can have on water quality.
- Public Participation/Involvement -- Providing opportunities for citizens to participate in program development and implementation.
- Illicit Discharge Detection and Elimination -- Eliminating illegal discharges to the storm sewer system, including improper disposal of waste.
- Construction Site Runoff Control -- Implementing an erosion and sediment control program during construction activities.
- Post-Construction Runoff Control -- Protecting sensitive areas (e.g., wetlands and streams) from storm water flows resulting from development.
- Pollution Prevention/Good Housekeeping -- Adopt pollution prevention and good housekeeping measures during facility operations.

Learn More & Get Involved!

Here are just a few ways YOU can help prevent storm water pollution:

- Never dump anything down a storm sewer or drain.
- Take used oil to your local quick lube or auto shop.
- Dispose of pet waste in a trash can.
- Wash your car on your lawn so excess water, chemicals and dirt are filtered through grass and vegetation.

More Information and Resources:

[✚ Michigan Department of Environmental Quality \(MDEQ\) Storm Water Management \(http://www.michigan.gov/deq/0,4561,7-135-3313_71618_3682_3716---,00.html\)](http://www.michigan.gov/deq/0,4561,7-135-3313_71618_3682_3716---,00.html)

[✚ Michigan Department of Environmental Quality \(MDEQ\) Information & Education Publications \(http://www.michigan.gov/deq/0,4561,7-135-3313_71618_3682_3714-106374--,00.html\)](http://www.michigan.gov/deq/0,4561,7-135-3313_71618_3682_3714-106374--,00.html)

[✚ Michigan Water Stewardship Program \(http://www.miwaterstewardship.org\)](http://www.miwaterstewardship.org)

[✚ "Pollution Isn't Pretty" Campaign \(http://www.pollutionisntpretty.org\)](http://www.pollutionisntpretty.org)

Here is a list of local (Lansing-area) watershed and environmental organizations! These groups sponsor river and stream clean-up days, remove trash and invasive species, promote awareness of water quality and pollution prevention, and encourage recreational use of our local waterways.

[✚ Middle Grand River Organization of Watersheds \(MGROW\) \(http://mgrow.org\)](http://mgrow.org)

[✚ Ingham Conservation District \(https://www.inghamconservation.com\)](https://www.inghamconservation.com)

[✚ Quiet Water Society \(http://www.quietwatersociety.org\)](http://www.quietwatersociety.org)

[✚ Mid Michigan Environmental Action Council \(Mid-MEAC\) \(http://www.midmeac.org\)](http://www.midmeac.org)

[✚ Friends of the Lansing Regional Trails \(FLRT\) \(http://lansingtrails.org\)](http://lansingtrails.org)

[✚ Greater Lansing Regional Committee for Stormwater Management \(http://mywatersheds.org\)](http://mywatersheds.org)

Connect, Contact, Correspond!



Dr. Michael Johnson
Assistant Superintendent


Erika Conley
Administrative Assistant
(517) 925-5406


Documents

 [GLPS Storm Water Management Plan \(/downloads/district/glps_swmp_july_18_2014_via_tec.pdf\)](/downloads/district/glps_swmp_july_18_2014_via_tec.pdf)

 [GLPS Storm Water Management Permit \(/downloads/district/swm_permit_grand_ledge_ps_-_sept_11_2015.pdf\)](/downloads/district/swm_permit_grand_ledge_ps_-_sept_11_2015.pdf)

Annual Reports

 2016-2017

 2015-2016

Administration Building
220 Lamson Street
Grand Ledge, MI 48837
517-925-5400
Copyright © 2017 Powered by [Foxbright](#)

Connect, Contact, Correspond!

2017 Board of Education



KIM MULVENNA
PRESIDENT



LINDA WACYK
VICE PRESIDENT



JONATHAN SHIFLETT
SECRETARY



SARA CLARK PIERSON
TRUSTEE



BEVERLY WINSTANLEY
TRUSTEE



DENISE DUFORT
TRUSTEE



PATRICK MCKENNON
TRUSTEE

Meeting Schedule

Meeting Date	Time	Site	Purpose
March 27	6:00 p.m.	Sawdon Board Room	Regular Meeting
April 10	6:00 p.m.	Admin. Conf. Room	Work Session
April 24	6:00 p.m.	Sawdon Board Room	Regular Meeting
May 2	6:00 p.m.	Crowne Plaza	County-Wide Board Meeting
May 22	6:00 p.m.	Sawdon Board Room	Regular Meeting
June 12	6:00 p.m.	Admin. Conf. Room	Work Session
June 26	6:00 p.m.	Sawdon Board Room	Regular Meeting
July 10*	6:00 p.m.	Sawdon Board Room	Regular Meeting
August 14	6:00 p.m.	Admin. Conf. Room	Work Session
August 28	6:00 p.m.	Sawdon Board Room	Regular Meeting
September 11	6:00 p.m.	Admin. Conf. Room	Work Session
September 25	6:00 p.m.	Sawdon Board Room	Regular Meeting
October 9	6:00 p.m.	Admin. Conf. Room	Work Session
October 23	6:00 p.m.	Sawdon Board Room	Regular Meeting
November 13	6:00 p.m.	Admin. Conf. Room	Work Session
November 27	6:00 p.m.	Sawdon Board Room	Regular Meeting
December 11*	6:00 p.m.	Sawdon Board Room	Regular Meeting
January 8, 2018	6:00 p.m.	Sawdon Board Room	Organizational Meeting

*Only one meeting in July due to summer recess and December due to holidays.

Parent Advisories

Integrated Pest Management Program

Grand Ledge Public Schools has adopted an Integrated Pest Management Program. Inherent with this are the District's efforts to reduce pesticide use as much as possible. While it may be necessary, occasionally, to apply a pesticide, this program does not rely on routine pesticide applications to resolve problems. Instead, we use various techniques such as habitat alteration, sanitation, mechanical means or exclusion to prevent pests from becoming a problem.

If it is necessary for the district to utilize a pesticide, you will receive advance notice of the application, other than bait or gel formation, as your child's school. As required by law, we will post the notice of application at your child's school entrance and in a common area located by the main office of the school. However, if you would like to be notified by first-class U.S. mail, postmarked at least three-days before the application, please contact our Operations Department at 517-925-5430. Give your name, mailing address and what school your child attends. **PLEASE NOTE:** In an emergency (i.e., stinging insects), pesticides may be applied without prior notice, but you will be provided notice immediately following such application.

You may review our IPM program or pesticide application records for your child's school by calling the Operations Department at 517-925-5430 or by eMailing our Assistant Superintendent for Operations at johnsonm@glcomets.net.

When school is not in regular session, parents will not receive advance notice by mail.



Not all water pollution comes from big factories – it's also caused by little household chores.

Hosing off your driveway or sidewalk sends dirt, motor oil, fertilizer, and animal waste into our rivers and lakes – the very water

we drink. So please, sweep instead of hosing. Limit your fertilizer use and avoid applying it before a rainy day. Take care when changing your motor oil. And tidy up after your pets.

Wondering what to do with unused household and landscaping chemicals? Drop them off for free at the Ingham County Health Department.

Remember: anything that enters storm drains or ditches is headed straight for your local lake or river. No filters, no treatment. Your waterways are closer than you think!

To learn more about how Grand Ledge Public Schools is helping to protect our local streams, visit our Storm Water Management page under the Operations Department on the district website: www.glcomets.net.

Clean Water



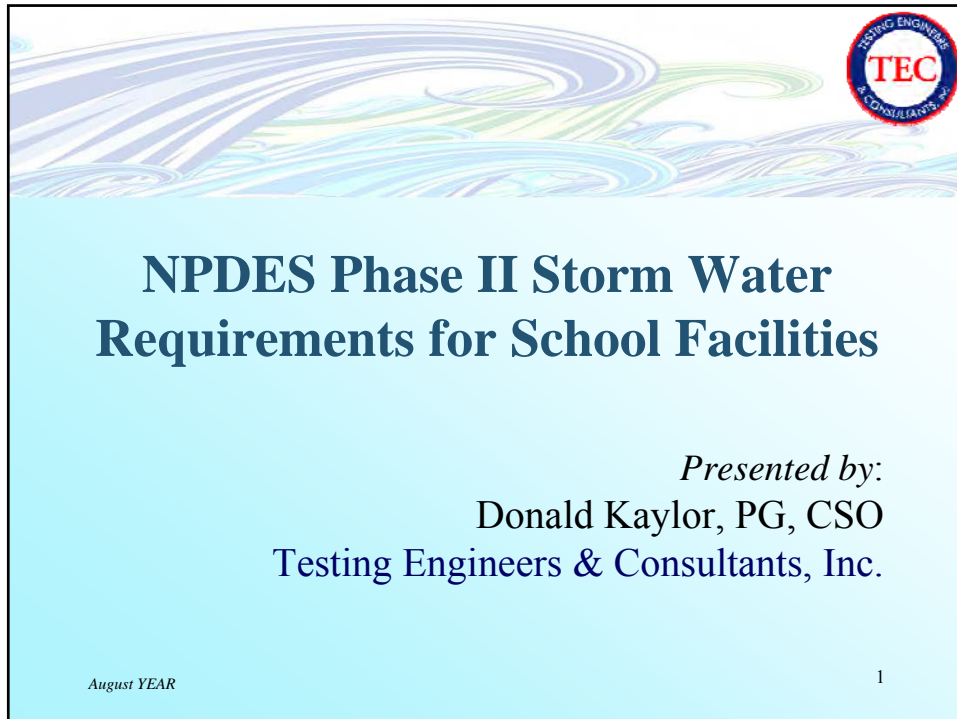
Everybody's
Business



10 Things You Can Do to Prevent Stormwater Runoff Pollution

- Use fertilizers sparingly and sweep up driveways, sidewalks, and roads
- Never dump anything down storm drains
- Vegetate bare spots in your yard
- Compost your yard waste
- Avoid pesticides; learn about Integrated Pest Management (IPM)
- Direct downspouts away from paved surfaces
- Take your car to the car wash instead of washing it in the driveway
- Check car for leaks, and recycle motor oil
- Pick up after your pet
- Have your septic tank pumped and system inspected regularly

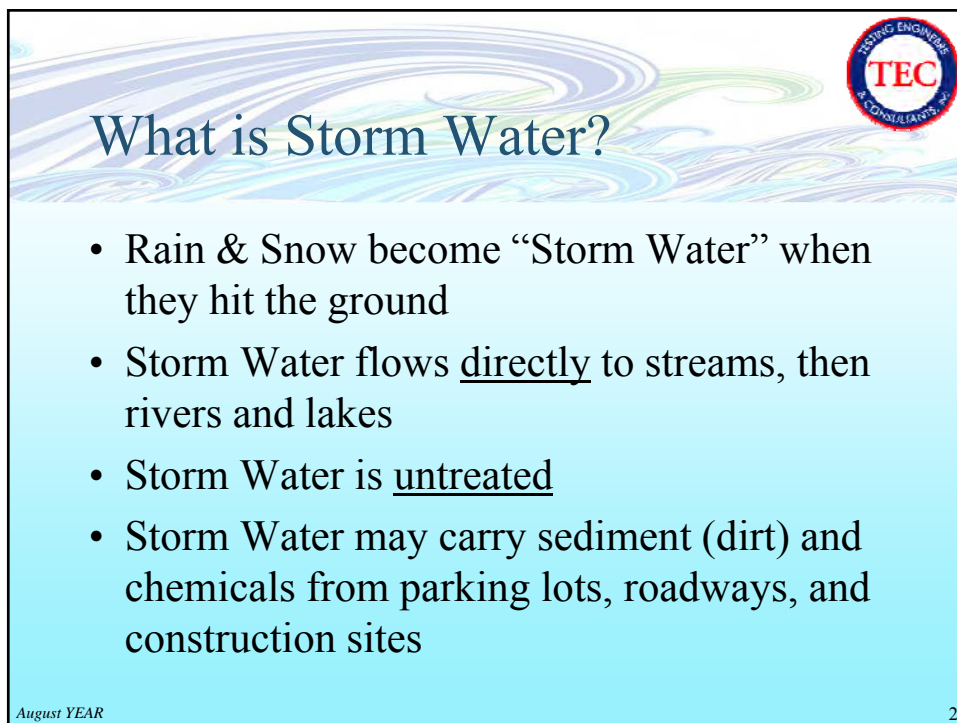




NPDES Phase II Storm Water Requirements for School Facilities

Presented by:
Donald Kaylor, PG, CSO
Testing Engineers & Consultants, Inc.

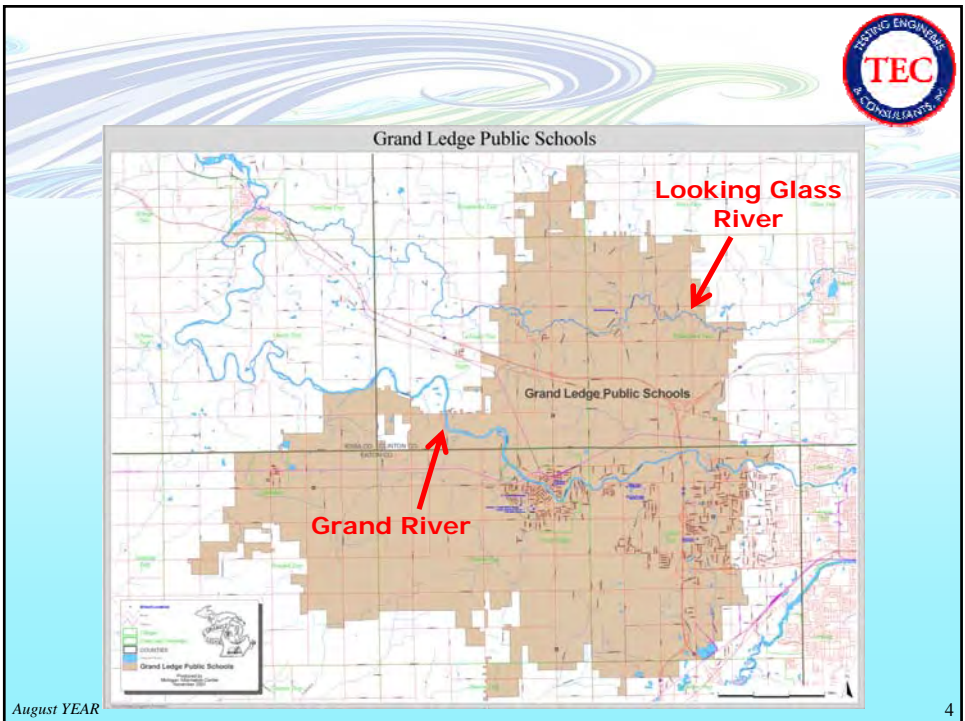
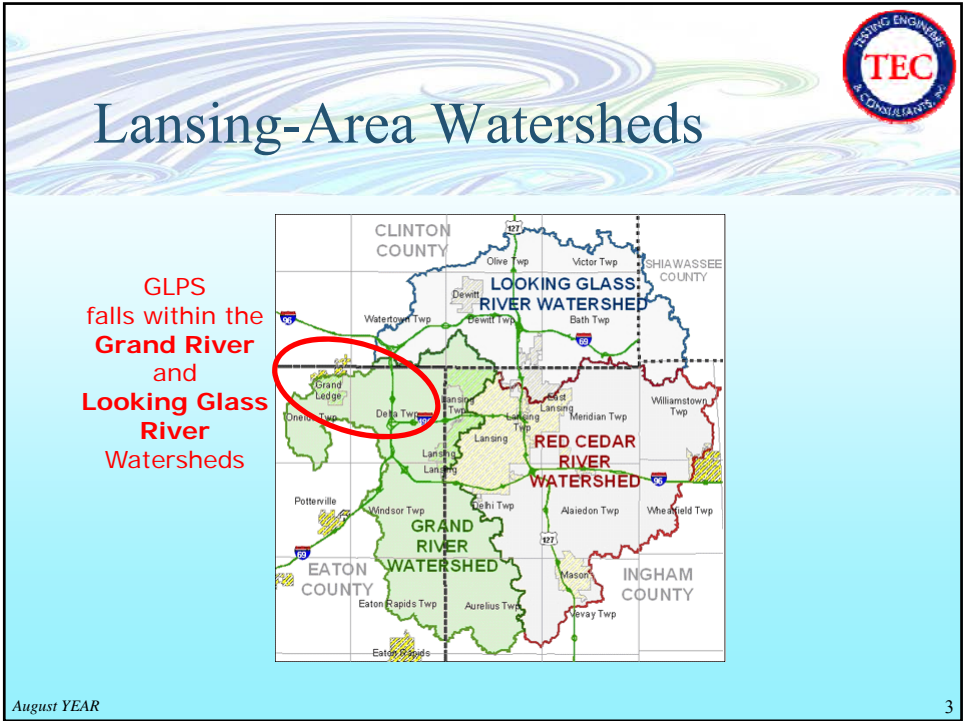
August YEAR 1



What is Storm Water?

- Rain & Snow become “Storm Water” when they hit the ground
- Storm Water flows directly to streams, then rivers and lakes
- Storm Water is untreated
- Storm Water may carry sediment (dirt) and chemicals from parking lots, roadways, and construction sites

August YEAR 2



Why Care about Storm Water?



Pollutants fall on impervious surface



Oil in parking lot

Polluted storm water enters storm drain



Typical roadside catch basin

Storm water enters waterway



Storm drain outfall

Impaired waterway



Sedimentation and flooding during rain event

August YEAR 5

Why Care about Storm Water?

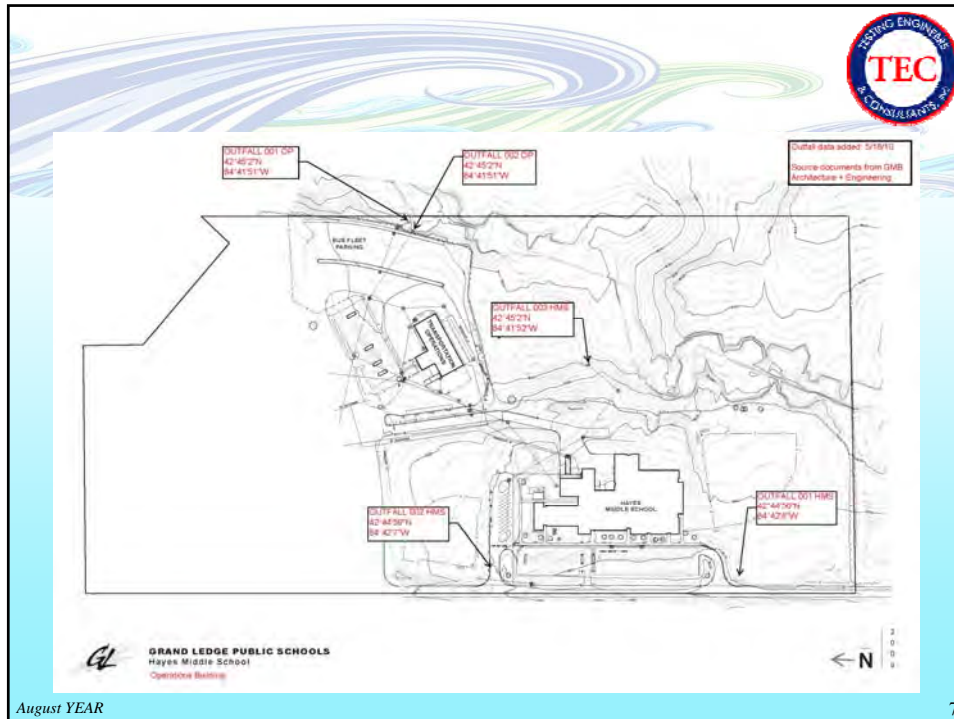


- Affects the Health of our Lakes and Streams:
 - Ecology
 - Public Health
 - Aesthetics
- It's the Law!
 - GLPS's Municipal Separate Storm Sewer System ("MS4") is permitted and regulated by the Michigan Department of Environmental Quality (DEQ)

➔


- Drinking Water
- Fishing
- Outdoor Recreation (Paddling/Float Trips)

August YEAR 6



What Do NPDES Phase II Regulations Require?


- Goal: Reduce the discharge of pollutants to the maximum extent practicable to protect water quality
- GLPS's Storm Water Management Plan (SWMP) includes:
 - Public Education and Outreach
 - Public Participation/Involvement
 - Illicit Discharge Detection and Elimination
 - Construction Site Runoff Control
 - Post-Construction Runoff Control
 - Pollution Prevention/Good Housekeeping




Public Education and Outreach

- Goals of the Public Education Plan (PEP):
 - Increase public awareness and understanding of storm water pollution
 - Encourage actions to reduce pollution in storm water runoff
 - Promote reporting of improper disposal of materials into storm drains
 - Train GLPS staff and contractors

August YEAR 9



Public Education and Outreach



PEP Resources:

- GLPS Website
- GLPS Insider (Newsletter)
- DEQ “Be Stormwater Savvy” Campaign
- Local “Pollution Isn’t Pretty” Campaign

2007 Bond
Contact Us


August YEAR 10



Public Participation


- Public Posting of SWMP on GLPS Website
- Public Notice of SWMP Revisions
 - Upcoming Revision: Fall 2016
 - Feedback is welcome!
- Coordination with Local Watershed Groups
- Creation of Internal Advisory Committee
 - Will meet 3 times/year to discuss implementation
 - Participants: TEC, Operations Director, select GLPS staff (administration and operations)

August YEAR 11



What is Illicit Discharge?

- Improper connections to the storm water system
- Unauthorized releases into storm drains (e.g., floor mop wash water, used oil)



August YEAR 12

Illicit Discharge Elimination Program (IDEP)



TEC conducts annual screening for illicit discharges at GLPS during dry weather

However, if you see something, say something!



August YEAR

13

Construction Site Runoff Control



- Responsibility of Construction Manager
- CM will prevent discharges (including sediment) to storm sewers

August YEAR

14

Post-Construction Runoff Control



- Responsibility of Architect and Site Engineer
- Future projects will be designed to minimize the impact of storm water on local waterways



August YEAR

15

Post Construction Runoff Control



Outfalls are labeled



August YEAR

16

Pollution Prevention/Good Housekeeping



- Potential Sources of Storm Water Pollution:
 - Roadway and Parking Lot Maintenance
 - Salt/de-icing materials
 - Street sweeping/catch basin cleaning
 - Transportation and Equipment Garages
 - Oils, fuels, solvents
 - Landscaping and Turf Maintenance
 - Pesticides, herbicides, and fertilizers
 - Waste Handling and Disposal
 - Keep dumpsters covered, with lids closed

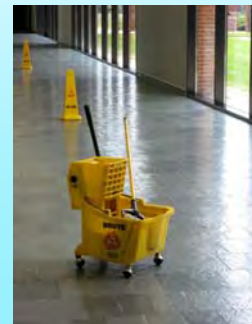
August YEAR

17

Example: Wash Water



- Never rinse containers used for paint, cement, or cleaning materials outdoors – including mop wash
- These materials should not be allowed to enter storm drains



August YEAR

18




Example: Fleet Maintenance

- Do not perform vehicle maintenance activities outdoors
- Do not leave containers open, or store chemicals outside
- Clean up spills/leaks promptly; do not allow oils, fuels, or solvents to enter storm drains
- Report spills/leaks to the Operations Director





August YEAR 19

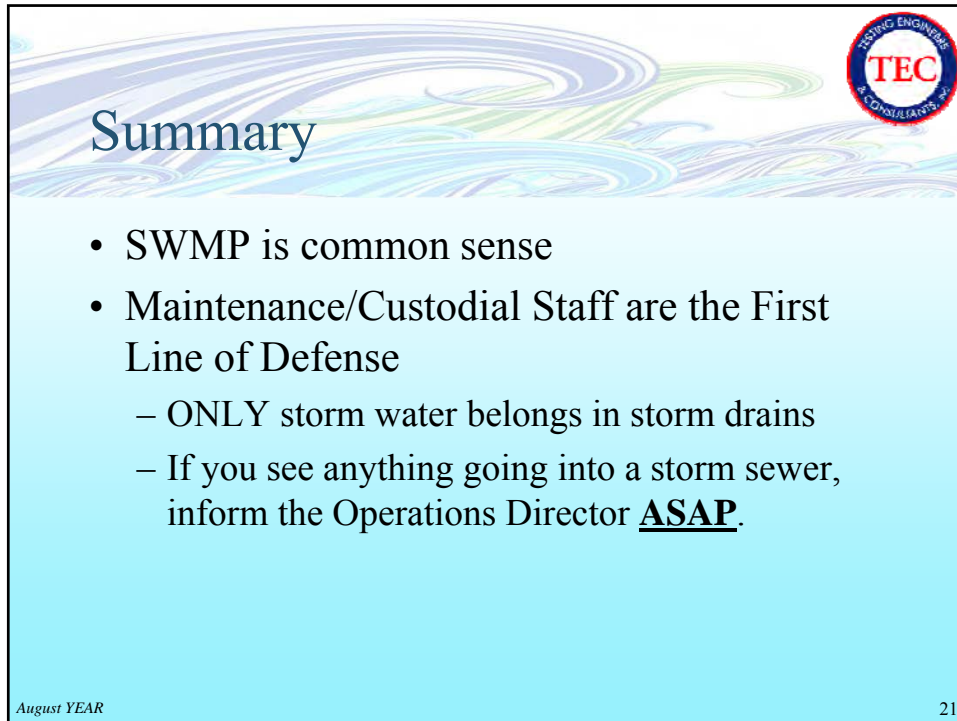


Example: Catch Basins

- Keep catch basins clear of debris
- Report clogged catch basins to Operations Director



August YEAR 20



Summary

- SWMP is common sense
- Maintenance/Custodial Staff are the First Line of Defense
 - ONLY storm water belongs in storm drains
 - If you see anything going into a storm sewer, inform the Operations Director **ASAP**.

August YEAR 21



Q & A

- Any questions or comments?

August YEAR 22

ATTACHMENT D
INSPECTION AND RECORDKEEPING FORMS

**CONTRACTOR SWMP COMPLIANCE CERTIFICATION
GRAND LEDGE PUBLIC SCHOOLS**

Company: _____

Street Address: _____

City/State/Zip: _____

I certify by my signature below that I or I (on behalf of my company and its contractors and agents), as the case may be,

- (a) Understand, accept, and will adhere to the provisions of the Storm Water Management Plan (SWMP) for Grand Ledge Public Schools as it pertains to the portion of the project I am or my company is responsible for, and as required under the district's MS4 permit.
- (b) Have reviewed and will follow guidance within the DEQ compliance assistance document, *Catch Basin Cleaning Activities Guidance Document*, if street sweeping and/or catch basin cleaning activities are to be performed.

Name of Authorized Agent: _____

Title/Position: _____

Authorized Signature: _____

**STORMWATER DRY WEATHER SCREENING
GRAND LEDGE PUBLIC SCHOOLS**

Facility: _____

Date: _____

Outfall Description: _____

OUTFALL OBSERVATIONS				
Characteristics	Yes	No	NA	Comments
Water present				
Water flowing				
Bacterial sheens				
Oil sheens				
Suds / Foam				
Floating materials				
Algae				
Slime				
Debris				
Odor				
Structure staining				
Structural integrity				
Stressed vegetation				
Stained vegetation				
Water Clarity: Clear Cloudy				
Water Color: Clear Yellowish Greenish Brownish				

Possible Illicit Discharge Sources (circle one or more, as appropriate)	
Water line flushing or potable water sources	Swimming pools
Irrigation runoff	Diverted stream flow
Lawn watering runoff	Groundwater springs
Air conditioning condensate	Groundwater from infiltration
Car washing	Pumped groundwater from dewatering
Street washing	Undocumented connections
Interior wash water	Other:

**ANNUAL PEP/PUBLIC INVOLVEMENT CHECKLIST
GRAND LEDGE PUBLIC SCHOOLS**

Conduct Annual Website Survey

Date: _____

- Number of website “hits”: _____
- Attach a copy of the findings

Conduct Annual Staff Training

Date: _____

- Attach a copy of the staff sign-in sheet

Attend Regional Watershed Permit Group Meeting

Date: _____

Hold Internal Advisory Committee Meeting (#1)

Date: _____

- Attach a copy of the meeting minutes

Hold Internal Advisory Committee Meeting (#2)

Date: _____

- Attach a copy of the meeting minutes

Hold Internal Advisory Committee Meeting (#3)

Date: _____

- Attach a copy of the meeting minutes

Ongoing activities:

Monitor & Respond to Website E-mails

Date: _____

- Identify responsible staff member: _____

Monitor Activities of Regional Watershed Group(s)

Date: _____

- Identify responsible staff member: _____

Distribute Awareness Materials in School Newsletter

Date: _____

- Identify responsible staff member: _____

Discuss Storm Water Issues at MSBO Meetings

Date: _____

- Identify GLPS representative(s): _____

Describe any additional Public Education/Involvement events or activities below:

Other: _____

Date: _____

Other: _____

Date: _____

Stormwater: General Inspection Checklist

Department:

Program: Stormwater

Owner: GLPS

Authority: Permit # MIS040002

This inspection checklist can be used by area managers to

- Conduct general inspections
- Determine if additional best management practices (BMPs) may be required

Note For a complete list of all BMP categories, see GLPS SWMP

Division:	Bldg#/ Area:	Date:
Location:	Time:	
Inspector:	Title:	

GOOD HOUSEKEEPING

(Circle one)

- | | | | | |
|-----|---|-----|----|-----|
| 1. | Are outside areas kept neat, clean, and orderly? | yes | no | n/a |
| 2. | Are storm drain inlets labeled "No Dumping, Flows to Bay?" | yes | no | n/a |
| 3. | Are garbage cans, waste bins, and dumpsters covered? | yes | no | n/a |
| 4.a | Has the stormwater conveyance system been recently altered? | yes | no | n/a |
| b | If yes, does the alteration maintain SWPPP compliance? | yes | no | n/a |
| 5. | Are stormwater drainage paths clear? Grates clean? | yes | no | n/a |
| 6.a | Are vehicles or equipment cleaned at this facility? | yes | no | n/a |
| b | If yes, is wash water being collected and disposed of properly? | yes | no | n/a |

HAZMAT STORAGE

- | | | | | |
|-----|---|-----|----|-----|
| 8.a | Are vehicles fueled at this location? | yes | no | n/a |
| b | If yes, are fuel tanks locked and/or properly operated? | yes | no | n/a |
| c | If yes, are measures taken to protect storm drains from spills? | yes | no | n/a |

Briefly describe: _____

- | | | | | |
|------|--|-----|----|-----|
| 9. | Do aboveground tanks (liquid) have secondary containment? | yes | no | n/a |
| 10. | Are containment structures or surface slabs liquid tight? | yes | no | n/a |
| 11a | Does this site store hazardous materials such as solvents, pesticides, or acids? | yes | no | n/a |
| b | If yes, are containers weathertight or covered? | yes | no | n/a |
| c | If yes, are ignitable or reactive wastes stored at least 50 feet from the property line? | yes | no | n/a |
| 12.a | Has the facility had a hazardous waste spill since the last inspection? | yes | no | n/a |
| b | If yes, was the problem resulting in the spill corrected? | yes | no | n/a |

Stormwater: General Inspection Checklist

OTHER BEST MANAGEMENT PRACTICES

- | | | | | |
|-------------|---|------------|-----------|------------|
| 13.a | Does this site store hazardous or other materials that could impact the storm drain such as detergent, paint, or powders? | yes | no | n/a |
| b | If yes, are they stored in a manner prohibiting exposure to rain or runoff? | yes | no | n/a |
| 14. | Are waste materials kept on site in closed leaktight containers? | yes | no | n/a |
| 15. | Are all leaking vehicles or equipment equipped with drip pans? | yes | no | n/a |
| 16. | Are erodible soils uncovered or exposed to rainwater? | yes | no | n/a |
| 17.a | Is the ground surface stained by oil or significant materials? | yes | no | n/a |
| b | If yes, has the source been found and contained? | yes | no | n/a |
| 18. | Are truck unloading areas covered? | yes | no | n/a |
| 19. | Does the facility have wastes, products, salvaged materials, and recyclables stored properly? | yes | no | n/a |
| 20.a | Does the facility have a clarifier/oil/water separator? | yes | no | n/a |
| b | If yes, is it clean and functioning properly? | yes | no | n/a |
| 21.a | Has this facility received a complaint regarding stormwater discharge? | yes | no | n/a |
| b | If yes, has the problem been addressed? | yes | no | n/a |
| 22. | Have personnel received training on Stormwater Pollution Prevention? | yes | no | n/a |
| 23. | Are spill response materials on available? (Check all that apply) | yes | no | n/a |

Sand _____ Rice Hulls _____ Sorbent Booms/Pillows/Blankets _____
 Kitty Litter _____ Neutralizer _____ Drip Pans _____
 Other (Please List) _____

- 24.** Identify existing management practices employed to reduce pollutants in stormwater discharges: (Check all that apply and describe conditions)

Good Housekeeping _____ Containment _____ Berms _____
 Leachate Collection _____ Sand Filter _____
 Recycling _____ Retention Facilities _____
 Silt Fence _____ Sorbent Booms _____
 Spill Mitigation _____ Oil/Water Separator _____
 Dead-end Sumps _____
 Other _____

- 25.** Action Items:

a.

b.

c.

**STORM WATER INCIDENT/VIOLATION LOG
GRAND LEDGE PUBLIC SCHOOLS**

Facility Name: _____ Date of Discovery: _____

Location of Incident/Violation: _____

Reported by: _____

Nature of Incident/Violation:

Plan for Corrective Action:

Anticipated Date of Return to Compliance: _____ **Date Resolved:** _____

Name of Individual Responsible for Corrective Action: _____

Signature of Individual Responsible for Corrective Action: _____

**BMP IMPLEMENTATION TRACKING FORM
GRAND LEDGE PUBLIC SCHOOLS**

The following checklist will be used to track performance of pollution prevention/housekeeping activities:

- | | |
|--|----------------|
| <input type="checkbox"/> Conduct Quarterly Fleet Inspection (#1) | Date(s): _____ |
| <input type="checkbox"/> Conduct Quarterly Fleet Inspection (#2) | Date(s): _____ |
| <input type="checkbox"/> Conduct Quarterly Fleet Inspection (#3) | Date(s): _____ |
| <input type="checkbox"/> Conduct Quarterly Fleet Inspection (#4) | Date(s): _____ |
| • Attach a copy of the findings | |
|
 | |
| <input type="checkbox"/> Perform Catch Basin Cleaning (#1) | Date(s): _____ |
| <input type="checkbox"/> Perform Catch Basin Cleaning (#2) | Date(s): _____ |
| <input type="checkbox"/> Perform Catch Basin Cleaning (#3) | Date(s): _____ |
|
 | |
| <input type="checkbox"/> Perform Annual Street Sweeping | Date(s): _____ |
|
 | |
| <input type="checkbox"/> Perform Annual Dry Weather Screening | Date(s): _____ |
| • Complete the form in Appendix G, Section 2 | |
|
 | |
| <input type="checkbox"/> Record Application of Salt/De-Icing Products | Ongoing |
|
 | |
| <input type="checkbox"/> Record Application of Pesticides/Fertilizer | Ongoing |