

West Bloomfield School District



Stormwater Management Program Plan

Municipal Separate Storm Sewer System National Pollutant Discharge Elimination System Permit

COC # MIS040014

Prepared By:



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Appendices

Appendix “A”	Outfall/Discharge Point Receiving Water Table & Site Stormwater Structure Maps
Appendix “B”	WEBSD School Board Policy Resolution, Post Construction Stormwater Runoff Program Policy and Procedures & Municipal Separate Storm Sewer System Noncompliance Enforcement Tracking Sheet
Appendix “C”	SEMCOG Posters
Appendix “D”	Inspection Field Worksheets & Stormwater Sampling and Analysis Protocol for School District MS4 Clients (SOP-101)
Appendix “E”	Illicit Discharge Illegal Spill Reporting Form



Stormwater Management Program Plan

1.0 Introduction

This Stormwater Management Plan (SWMP) has been developed, to reduce the discharge of pollutants from the MS4 to the Maximum Extent Practicable and protect water quality in accordance with the appropriate water quality requirements of Michigan Act 451, Public Acts of 1994, Part 31, and the Federal Water Pollution Control Act, as amended, (33 U.S.C. 1251 et seq.) West Bloomfield School District (WEBSD) will implement and enforce this SWMP to the Maximum Extent Practicable. In order to retain the authorization to discharge, WEBSD is required to submit this plan with the “NPDES Application for Discharge of Stormwater to Surface Waters from a Municipal Separate Storm Sewer System (MS4).”

This Stormwater Management Plan commits to action from 2017 through 2021. This SWMP includes measurable goals for Best Management Practices (BMP), focusing on the six minimum measures. Measurable goals describe the actions WEBSD will take to implement each BMP and allow WEBSD to evaluate progress toward meeting key objectives outlined in the following sections.

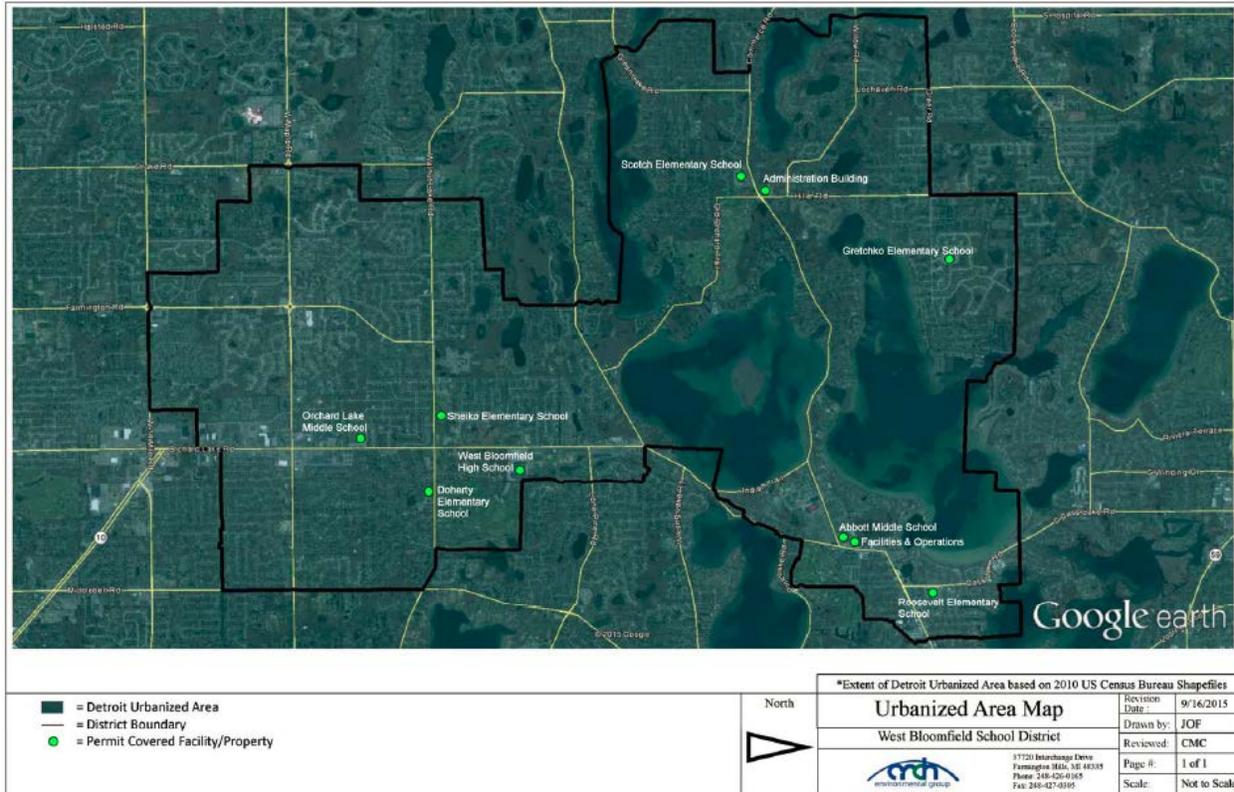
WEBSD owns and operates ten public facilities within the boundaries of the “Detroit Urbanized Area.” All of WEBSD properties are within the urbanized area based off of the 2010 Census data, and the facilities include:

1. Abbot Middle School
2. Administration Building
3. Doherty Elementary School
4. Gretchko Elementary School
5. Orchard Lake Middle School
6. Roosevelt Elementary School
7. Scotch Elementary School
8. Sheiko Elementary School
9. Transportation and Maintenance
10. West Bloomfield High School

1.1 Regulated Area

A map identifying the urbanized area within the WEBSD urbanized area as defined by the 2010 Census is provided below in Map 1.

Map 1 – District Jurisdictional Boundary Map – Urbanized Area¹



1.2 Outfalls & Discharge Points/ Receiving Waters

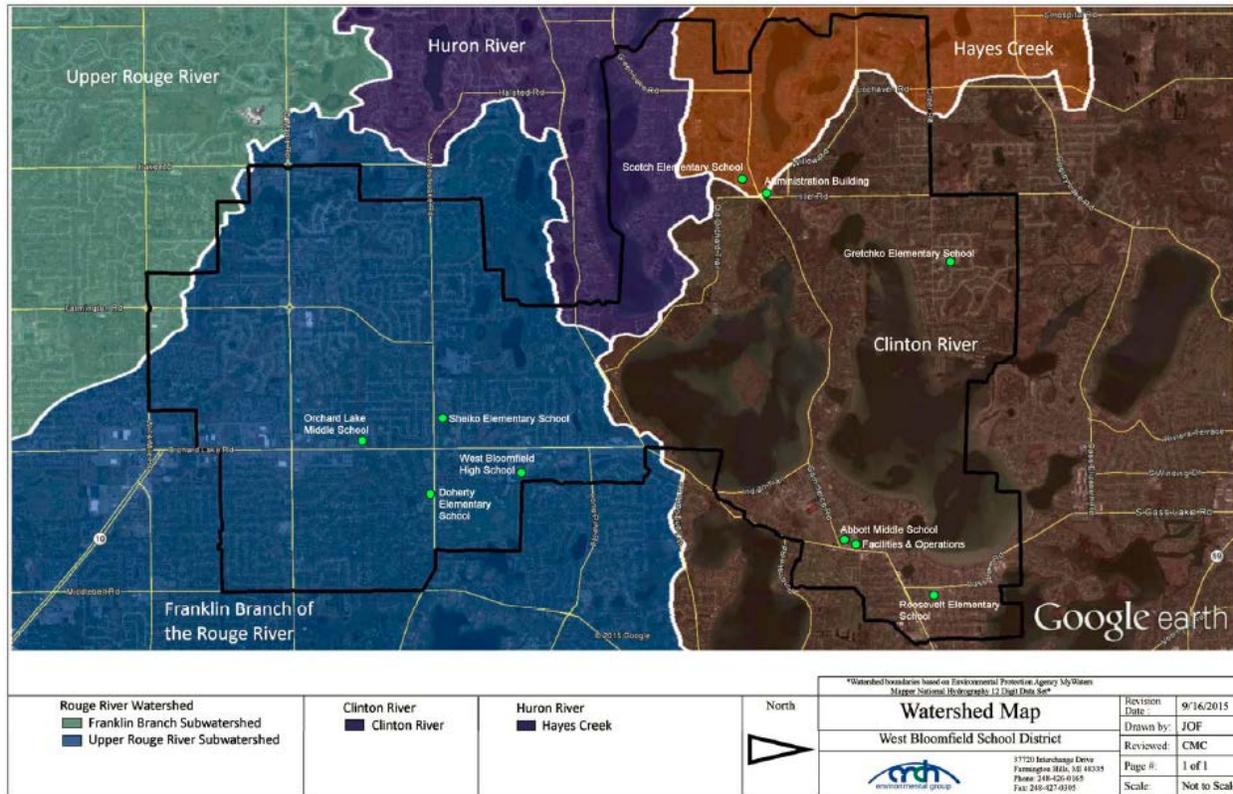
The general permit authorizes the discharge of stormwater from municipal separate stormwater drainage systems to waters of the state from all existing outfalls or points of discharge.

WEBSD has identified outfalls that discharge directly into surface waters of the state and discharge points that discharge into other MS4 drainage systems. WEBSD’s drainage system discharges directly or indirectly into the Clinton River Watershed and the Rouge River Watershed as detailed in Map 2 below.

WEBSD has completed site specific storm sewer system maps which identify outfall and discharge point locations, discharge point source identification numbers, and receiving waters. A receiving water table and site specific storm sewer system maps are provided in Appendix “A.” Any changes to the WEBSD storm sewer system will be reflected on the storm sewer system maps and reported to the MDEQ during progress reporting. The district watershed boundary map is provided in below in the map listed as “Map 2.”

¹ Urbanized area boundary based on U.S. Census Bureau 2010 Urban Area Reference Maps.

Map 2 – District Watershed Map²



1.3 Enforcement Response Procedures

WEBSD is committed to practicing sound stormwater management practices; including observance and adherence to all local, state, and federal stormwater statutes, rules, and regulations. Enforcement of the policies, procedures, and best management practices (BMPs) outlined in this SWMP is the responsibility of the district Superintendent or their designee. WEBSD had developed and passed a School Board Resolution requiring the district comply with the requirements of the Michigan National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Permit. Any questions regarding this policy and procedure should be directed to the Stormwater Manager. This procedure will be reviewed on an annual basis by the Stormwater Manager for any updates. In addition to the enforcement mechanisms noted in ordinance, additional tracking of instances of noncompliance occurs and includes the following information:

- Name
- Date
- Location of Violation (address, cross streets, etc.,)
- Business/Agency/Organization (as appropriate)
- Description of Violation
- Description of Enforcement Response

² Watershed boundaries based on Environmental Protection Agency MiWaters Mapper National Hydrography Dataset Mapper 12-Digit Watersheds.

- Date Violation was Resolved

A copy of the approved resolution and an example of the Municipal Separate Storm Sewer System Noncompliance Enforcement Tracking Sheet can be found in Appendix “B.”

2.0 Stormwater Management Program Plan (SWMP) Minimum Control Measures

This SWMP has been developed to describe the Best Management Practices (BMPs) WEBSD will implement to meet the six minimum control measures and water quality requirements. The six minimum control measures include:

- **Public Participation/Involvement Program (PPP)**
- **Public Education Program (PEP)**
- **Illicit Discharge Elimination Program (IDEP)**
- **Construction Stormwater Runoff Control Program**
- **Post Construction Stormwater Runoff Program**
- **Pollution Prevention/Good Housekeeping Program**

Each BMP includes a measurable goal, implementation schedule, and measure of assessment.

2.1 Public Involvement/Participation Program (PPP)

Engaging and empowering the public in the effort to reduce the impacts of stormwater runoff is a key element of the public involvement/participation program.

2.1.1 Public Involvement/Participation Program Objectives

1. Process for making the Stormwater Management Plan available for public inspection and comment.
2. Process for inviting public involvement and participation in the implementation of SWMP best management practices and periodic review of the SWMP.

2.1.2 Public Involvement& Participation Procedure

1. The SWMP will be posted on the WEBSD webpage for review and comment by the public when the application is submitted to the MDEQ. The stormwater webpages will include the contact information to forward comments.
2. The public will be notified through announcements or newsletters that a copy of the SWMP is available on the WEBSD stormwater webpage.
3. A public survey has been developed and placed on the WEBSD stormwater webpage in an effort to provide input into stormwater implementation.
4. A link to a stormwater blog “CleanWATER Chronicles” has been added to the WEBSD stormwater webpage. The stormwater blog explains water quality issues and promotes opportunities for public involvement.
5. Cooperation with local watershed protection groups.

2.1.3 Public Involvement& Participation Assessment



West Bloomfield School District
Stormwater Management Program Plan (SWMP)



1. WEBSD will review the public involvement & participation BMPs as part of annual SWMP review to determine level of district involvement and identify areas of improvement.



2.1.4 Public Involvement & Participation Program (PPP) BMP Table

BMP	Implementation of BMP	Timeframe	Measurable Goal	Measure of Assessment	Responsible Party
BMP #2.1.4.1 Public Notice of SWMP	Make SWMP available for public review through stormwater webpage.	Annually 2017-2021	Public notice published in annual district wide newsletter announcing the availability of the SWMP for review, including contact information for comments.	Verify SWMP available on stormwater webpage, and track changes webpage posting of SWMP.	WEBSD
	Notification in annual district newsletter to publicize updated SWMP and locations for review.			Keep copies of official SWMP posting notifications.	
	Contact information will be available on the stormwater webpages to forward comments regarding the SWMP.			Compile and track comments from the public.	
BMP #2.1.4.2 Stormwater Blog	Post link to stormwater blog on district website.	Ongoing 2017-2021	A link to a stormwater blog established and maintained on the district stormwater webpage to assist in distributing information and updating the public on the watershed and activities.	Copies of monthly stormwater blog postings for reporting period.	WEBSD
BMP #2.1.4.3 Stormwater Education Program Survey	Post survey on district website.	Ongoing 2017-2021	Survey posted on the stormwater webpages and link maintained throughout the permit term to assess community knowledge and provide input into stormwater implementation.	Results of completed surveys.	WEBSD
BMP #2.1.4.4 Participation Activities	Engage in environmental education activities.	Ongoing 2017-2021	Increase in public participation in environmental activities and outreach events. Participation activities include water quality issues, stormwater management initiatives, home toxics, recycling, compost and disposal.	Reports of participation.	WEBSD



BMP	Implementation of BMP	Timeframe	Measurable Goal	Measure of Assessment	Responsible Party
BMP #2.1.4.5 Public Involvement & Participation Program Assessment	Evaluate the effectiveness of the public involvement program.	Annually 2017-2021	Complete as part of annual SWMP review to determine level of district involvement and identify areas of improvement. Program activities may be adjusted based on the results of the assessment.	Copies of annual SWMP review noting any areas of needed improvement.	WEBSD

2.2 Public Education Program (PEP)

WEBSD's "Public Education Program (PEP)" is designed to promote, publicize, and facilitate education for the purpose of encouraging the public to reduce the discharge of pollutants into the WEBSD separate storm sewer system.

The term "Public" as referred in to in this program is defined to include all persons who could potentially affect the quality of stormwater discharges from WEBSD properties including but not limited to WEBSD faculty, staff, contractors, and students of WEBSD, as well as area residents, visitors, public employees, local businesses, industries, construction contractors and property developers. This PEP will include a variety of mechanisms and venues to provide watershed awareness and pollution prevention education throughout the WEBSD jurisdiction.

2.2.1 Public Education Program Objectives

1. Responsibility and stewardship in their watershed.
2. Inform and educate the public about the connection of the MS4 to area waterbodies and the potential impacts discharges could have on surface waters of the state.
3. Educate the public on illicit discharges and promote public reporting of illicit discharges and improper disposal of materials into the MS4.
4. Promote preferred cleaning materials and procedures for car, pavement, and power washing.
5. Inform and educate the public on the proper application and disposal of pesticides, herbicides, and fertilizers.
6. Promote proper disposal practices for grass clippings, leaf litter, and animal wastes that may enter the MS4.
7. Identify and promote the availability, location, and requirements of facilities for collection or disposal of household hazardous wastes, travel trailer sanitary wastes, chemicals, yard wastes, and motor vehicle fluids.
8. Inform and educate the public on proper septic system care and maintenance, and how to recognize system failure.
9. Promote methods for managing riparian lands to protect water quality.
10. Identify and educate commercial, industrial, and institutional facilities about good housekeeping.
11. Provide training for staff.

2.2.2 Public Education Program Procedure

WEBSD is targeting all community wide issues as high priority. No prioritization will be needed, as educational activities to ensure that all community wide issues are reached to the public. It is anticipated that during the course of this permit a combination of educational approaches will be used to convey the individual components of the PEP. Educational mechanisms will include tracking of watershed specific education topics in various science curriculums, cooperation with the distribution or posting of community newsletters and other watershed partner literature, and event notices. WEBSD has developed and implemented a comprehensive "Stormwater Management" webpage on the districts website. Additionally, program posters, are strategically placed throughout school facilities. Copies of SEMCOG posters are provided in Appendix "C."

2.2.3 Public Education Program BMP Table

BMP Topic	Description of BMP	Timeframe	Measurable Goal & Key Messages	Measure of Assessment	Target Audience	Responsible Party
BMP #2.2.3.1 Promote public responsibility and stewardship in watershed.	Watershed website. Watershed specific website hosted by district; featuring watershed map, description of watershed, and links to watershed groups.	Ongoing 2017-2021	Supply watershed information and promote watershed membership information. Educate the public on local water body health.	Update webpages as necessary. Confirm posting & track webpage reviews. Provide watershed membership information.	Students, faculty and community	WEBSD
	Place SEMCOG "7 Simple Steps to Clean Water" information on stormwater webpages.		SEMCOG "7 Simple Steps to Clean Water" information and links.	Update webpages as necessary. Confirm posting & track webpage reviews.		
	Review K-12 Science Curriculum to highlight items applicable to this program plan.	Curriculum annually 2017-2021	Review and update curriculum table, detailing number of students/grades level participating within each identified curriculum topic.	Updated curriculum table.	Faculty & students	
			Communicate with faculty regarding the resources available to reach the student audience.	Documentation of communication with faculty.		
	Publicize environmental related events through email, newsletters or social media.	Ongoing 2017-2021	Promote public awareness on environmental issues and increase district environmental participation.	Date, time location and name of event attended.	Students, faculty and community	
				Maintain copies of email notices (watershed announcement) of educational materials provided to district staff.		

BMP Topic	Description of BMP	Timeframe	Measurable Goal & Key Messages	Measure of Assessment	Target Audience	Responsible Party
BMP #2.2.3.2 Educate the public about the connection of the MS4 to the area waterbodies and the potential impacts discharges could have on surface waters of the state.	Posting of the training video "When it Rains, it Drains...The Stormwater Question" on the district webpage.	Ongoing 2017-2021	Educate the public on local water bodies, water quality issues, and impacts of discharges on surface waters through visual media.	Update webpages as necessary. Confirm posting & track webpage reviews.	Students, faculty and community	WEBSD
	Include information and links to USEPA and MDEQ Stormwater information on district stormwater webpage.		Provide resources to water quality issues, and impacts of discharges on surface waters.	Update webpages as necessary. Confirm posting of links & track webpage reviews.		
	SEMCOG posters placed strategically throughout the district.		Maintain three (3) various SEMCOG posters at each facility. Strategic locations include Main Office, Lounge, and Receiving Area (if available).	Annual review of postings. Number of posters placed throughout district.		
	General Stormwater Awareness Training (Level I Training further described in Sec. 3.0 of this SWMP)	Once per permit cycle or during the 1 st year of employment 2017-2021	Provide training to teachers, administrative and support staff not conducting level II, illicit discharge/pollution prevention training.	Copy of sign-in sheets and Agenda (if available).	Faculty	
		Ongoing 2017-2021	Post stormwater training video on stormwater webpage.	Update webpages as necessary. Confirm posting & track webpage reviews.	Students, faculty and community	
BMP #2.2.3.3 Educate the Public on Illicit Discharges and promote public reporting of illicit discharges and improper disposal of materials into the MS4.	Publicize 24-hour environmental hot-line phone numbers and instructions for reporting spills, illicit discharges, or connections.	Ongoing 2017-2021	Track # of calls received on hotline per year. All calls to be addressed-outcome of calls. Goal of an overall decrease in number of illicit discharges in improper disposal of materials into MS4s.	Number of calls to the Stormwater Manager.	Students, faculty and community	WEBSD
			Place 24-hour environmental hot-line posters throughout the district.	Promotion/ publicizing efforts; number of posters placed throughout district.		



BMP Topic	Description of BMP	Timeframe	Measurable Goal & Key Messages	Measure of Assessment	Target Audience	Responsible Party
	Pollutants & Illicit Discharges webpage; featuring information regarding sources of pollution, how pollutants cause damage, illicit discharges. How to Report/Hotline Numbers poster; describing illicit discharges and how to report illicit discharges.		Maintain illicit discharge webpage.	Update webpages as necessary. Confirm posting & track webpage reviews.		
			Place "How to spot illicit discharge/ How to Report-Hotline Numbers" posters placed in Receiving Rooms at each WEBSD facility. Goal is to have one poster at each facility.	Annual review of postings. Number of posters placed throughout district.		
	SEMCOG posters placed strategically throughout the district.		Goal to maintain three (3) various SEMCOG posters at each facility. Strategic locations include Main Office, Lounge, and Receiving Area (if available).	Annual review of postings. Number of posters placed throughout district.		
	The district implements an active storm drain labeling/ marking program.	Completed update as needed 2017-2021	Visually making a connection of storm drains to local waterways and the impacts of dumping pollutants into these drains, increase number of staff, students and visitors who can identify the connection. Mark all drains on pervious surfaces.	Annual inventory of stenciled basins.		
BMP #2.2.3.4 Promote preferred cleaning materials and procedures for car, pavement, and power washing.	SEMCOG posters placed strategically throughout the district.	Ongoing 2017-2021	Goal to maintain three (3) various SEMCOG posters at each facility. Strategic locations include Main Office, Lounge, and Receiving Area (if available).	Annual review of postings. Number of posters placed throughout district.	Students, faculty and community	WEBSD
	Discontinue practice of allowing school or other private groups from holding car wash fund raising project on school property.	Annually 2017-2021	Send notice to all school principals and athletic department informing them of the new policy.	Copy of annual notice.	Faculty & students	
BMP #2.2.3.5 Inform and educate the public on proper application and disposal	Maintain a district "Good Housekeeping" informational page on stormwater management webpages.	Ongoing 2017-2021	Address the environmental (including water quality) and resulting from improper handling and disposal of pesticides, herbicides, and fertilizers.	Update webpages as necessary. Confirm posting & track webpage reviews.	Students, faculty and community	WEBSD

BMP Topic	Description of BMP	Timeframe	Measurable Goal & Key Messages	Measure of Assessment	Target Audience	Responsible Party
of pesticides, herbicides, and fertilizers.	SEMCOG posters placed strategically throughout the district.		Goal to maintain three (3) various SEMCOG posters at each facility. Strategic locations include Main Office, Lounge, and Receiving Area (if available).	Annual review of postings. Number of posters placed throughout district.		
BMP #2.2.3.6 Promote proper disposal practices for grass clippings, leaf litter, and animal wastes that may enter into the MS4.	SEMCOG posters placed strategically throughout the district.	Ongoing 2017-2021	Goal to maintain three (3) various SEMCOG posters at each facility. Strategic locations include Main Office, Lounge, and Receiving Area (if available).	Annual review of postings. Number of posters placed throughout district.	Students, faculty and community	WEBSD
BMP #2.2.3.7 Identify and promote the availability, location and requirements of facilities for collection and disposal of household hazardous wastes, travel trailer wastes, chemicals, and motor vehicle fluids.	Maintain a district "Household Hazardous Waste" informational page on stormwater management webpages.	Ongoing 2017-2021	Address the environmental (including water quality) and public health effects resulting from improper handling and disposal of household hazardous waste, reduce the use of home toxics, keep citizens informed about the choices and responsibilities associated with purchasing, handling and disposing of toxic substances. Increase the number of residents using the program to dispose of home toxics.	Update webpages as necessary. Confirm posting & track webpage reviews.	Students, faculty and community	WEBSD

BMP Topic	Description of BMP	Timeframe	Measurable Goal & Key Messages	Measure of Assessment	Target Audience	Responsible Party
BMP #2.2.3.8 Inform and educate the public on proper septic system care and maintenance, and how to recognize system failure.	Maintain a district “Sewer Overflows and Septic Systems” informational page on stormwater management webpages.	Ongoing 2017-2021	Educate why sewer overflows and septic systems are pollution issues. Promote proper and consistent maintenance of septic systems.	Update webpages as necessary. Confirm posting & track webpage reviews.	Students, faculty and community	WEBSD
BMP #2.2.3.9 Promote methods for managing riparian lands to protect water quality.	Maintain a district “Riparian Zone Management” informational page on stormwater management webpages.	Ongoing 2017-2021	Educate on why riparian zones are important, what riparian zone management is (river friendly lawn care, riparian buffer zones, stream bank stabilization, woody debris management, river maintenance). Increase number of riparian landowners who implement BMPs	Update webpages as necessary. Confirm posting & track webpage reviews.	Students, faculty and community	WEBSD
	Encourage teachers and students to participate in stream bank monitoring programs.		Increase awareness, inspire people to take actions that lead to better river protection at home and in their communities.	Report on schools that participated in monitoring programs.	Students and faculty	
	Include guidance and links on Stormwater webpage on native vegetation.	Ongoing 2017-2021	Maintain a district “Native, Non-Native, & Invasive Species” and “Why Use Native Plants?” informational page on stormwater management webpages. Increase the use of native plants, and encourage the use of gardens at school facilities.	Update webpages as necessary. Confirm posting & track webpage reviews.	Students, faculty and community	WEBSD



BMP Topic	Description of BMP	Timeframe	Measurable Goal & Key Messages	Measure of Assessment	Target Audience	Responsible Party
BMP #2.2.3.10 Identify and educate commercial, industrial and institutional entities likely to contribute pollutants to stormwater runoff.	Require contractors or vendors whose activities have potential to impact water quality to train applicable staff and follow the requirements of the SWMP. Direct contractors to online training. [All Stormwater Training is outlined in Section 3.0 Training].	Ongoing 2017-2021	Contractors training and informed of pollution prevention and good housekeeping techniques.	Copy of sign in sheets, pre-project meeting notes or inspections.	Contractors & vendors	WEBSD & Contractors/ Vendors
BMP #2.2.3.11 Stormwater Education Program Effectiveness Survey	Post survey on district website	Annually 2017-2021	A survey has been posted on the stormwater webpages, and will be posted throughout the permit term to ascertain behavioral changes.	Annual results of survey.	Students, faculty and community	WEBSD
BMP #2.2.3.12 Public Education Program Assessment	Summary of annual public education activities for the "Public Education" component to evaluate the effectiveness.	Annually 2017-2021	Determine the level of education provided and identify areas of improvement.	Annual SWMP review. Summary of public education activities.	Students, faculty and community	WEBSD

2.2.4 Curriculum

WEBSD has conducted a review of the current State of Michigan K-12 science curriculum to determine which topics and grade levels have applicability toward the goals of the SWMP. The WEBSD K-12 science curriculum has been developed as required under Michigan Department of Education “Grade Level Content Expectations.” WEBSD encourages schools to incorporate watershed awareness, pollution prevention, recycling, ecology, and energy conservation into the core curriculum throughout the district.

The current K-7th grade Earth Science curriculum provides students with a wide range of topics specifically related to this permit. A listing of current elementary (K-7) grade level curriculum topics including grade level, curriculum code, description, and any additional activities included in the specific course work is provided in the table below.

Stormwater Program Related Science Curriculum K-7th Grade

Curriculum Code	Description
K-ESS3-3	Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.
2-ESS1-1	Use information from several sources to provide evidence that Earth events can occur quickly or slowly
2-ESS2-2	Develop a model to represent the shapes and kinds of land and bodies of water in an area.
2-ESS2-3	Obtain information to identify where water is found on Earth and that it can be solid or liquid.
4-ESS2-1	Make observations and/or measurements to provide evidence of the effects of weathering or the rate of erosion by water, ice, wind, or vegetation
5-ESS2-2	Describe and graph the amounts and percentages of water and fresh water in various reservoirs to provide evidence about the distribution of water on Earth.
5-ESS3-1	Obtain and combine information about ways individual communities use science ideas to protect the Earth’s resources and environment.
MS-ESS2-4	Develop a model to describe the cycling of water through Earth’s systems driven by energy from the sun and the force of gravity.
MS-ESS3-1	Construct a scientific explanation based on evidence for how the uneven distributions of Earth’s mineral, energy, and groundwater resources are the result of past and current geoscience processes.
MS-ESS3-3	Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.
MS-ESS3-4	Construct an argument supported by evidence for how increases in human population and per-capita consumption of natural resources impact Earth’s systems.

Curriculum Code	Description
HS-ESS2-5	Plan and conduct an investigation of the properties of water and its effects on Earth materials and surface processes.
HS-ESS3-1	Construct an explanation based on evidence for how the availability of natural resources, occurrence of natural hazards, and changes in climate have influenced human activity
HS-ESS3-6	Use a computational representation to illustrate the relationships among Earth systems and how those relationships are being modified due to human activity.

2.2.5 Public Education Program Effectiveness

The effectiveness of the public education program will be evaluated based on progress made towards meeting the BMP objectives described above.

WEBSD has implemented a “Watershed Awareness Survey” to be used as an evaluation. WEBSD will implement this survey during the 2016/17 fiscal year. The purpose of these surveys is to provide an assessment of public understanding of issues in the watershed related to pollution from stormwater runoff. Results would be used to guide WEBSD in identifying opportunities for enhancement of the PEP. Additionally, WEBSD will conduct an annual review of the public education activities to determine the level of education provided and identify areas of improvement.

2.3 Illicit Discharge Elimination Program (IDEP)

The following WEBSD Illicit Discharge Elimination Program is designed to identify, locate, prohibit and effectively eliminate illicit discharges, including discharges of sanitary wastewaters, to the permitted separate stormwater drainage systems.

2.3.1 Illicit Discharge Elimination Program (IDEP) Program Objectives

1. Establish authority to investigate, inspect and monitor suspected illicit discharges.
2. Maintain maps of the MS4, points of discharge, and outfalls.
3. Prohibit non-stormwater discharge into the MS4.
4. Provide regular training to staff.
5. Instruct contractors to prevent dumping into the MS4.
6. Conduct routine dry weather screening.
 - a. Conduct source investigations if the source of an illicit discharge/connection is not identified by field screening.
7. Illicit discharge identification and elimination program performance & effectiveness.

2.3.2 Facility Site Storm Sewer System Maps and Lists

WEBSD and consultants completed storm sewer system mapping at each of the owned operated properties identified in Section 1.0 of this Stormwater Management Plan. Storm sewer system maps include detailed

information of the storm sewer system, including the locations of outfalls, points of discharge, and waters of the State that receive the discharges. The maps include a unique identification number for each storm sewer location identified on the map. Latitude and longitude are also noted for outfall and points of discharge location. Storm sewer system information will be maintained and updated and reported in Progress Reports.

Outfalls are discharge points where stormwater is discharged directly to surface waters of the state. Surface waters of the state include streams, lakes, ponds, county drains, and wetlands. Outfalls can be pipes, ditches, or even sheet flow from the facility. Some facilities will have an outfall where they can manually control the discharge.

Points of Discharge are discharge points where stormwater is discharged to a municipal or private separate storm sewer system. The visual assessment should be conducted as close to the point of discharge as possible before the storm water enters the municipal or private separate storm sewer system. Points of discharge include on-site catch basins and trench drains, in-street catch basins, and conveyances to roadside ditches.

Copies of the current facility storm sewer system maps are available at the Facility Operations Building, 3340 Orchard Lake Road, Bloomfield Hills, Michigan 48324. Additionally, copies of the storm sewer system maps and a list of the outfalls and points of discharge are provided in Appendix "A."

2.3.3 Illicit Discharge Identification & Investigation Procedure – Field Observations

WEBSD will conduct field observations for 100% of all outfalls and points of discharge locations during dry weather or more expeditiously if WEBSD becomes aware of a non-stormwater discharge. Outfalls and points of discharge will be inspected by personnel trained to recognize all signs of possible illicit discharges. Dry weather screening will occur at least once every 5 years. WEBSD next 5-year dry weather screening cycle will be conducted starting between year 2017 and year 2018. Preferably, each outfalls and points of discharge will be inspected and evaluated following a period of at least 48-72 hours of dry weather.

The field observations will focus on visual inspection for the following:

- Outfall/point of discharge number
- Date/name of inspector
- Date of last rainfall
- Presence or absence of flow
- Presence or absence of standing water
- Water clarity and color
- Presence of oil sheen, trash and or other floatable materials
- Presence of bacterial sheen or slimes
- Excessive vegetative growth
- Odor
- Suds
- Presence of oil
- ❖ These characteristics are documented even if no flow is observed at the time of the inspection.

All field observations are detailed on a "Screening Inspection Log." A copy of the *Screening Inspection Log* is provided in Appendix "D."

During field observations, in instances where the storm sewer outfalls and points of discharge are submerged or are connected to another enclosed sewer, the inspector will observe the nearest upstream storm sewer location or access point. Additionally, if dry weather flow is observed and it is obvious that an illicit discharge is present and the source of the discharge is obvious, WEBSD will document the observations and the source and follow-up with applicable parties. Once a potential discharge is indicated at an outfall or point of discharge, additional inspection, field screening and source investigation activities are conducted.

2.3.4 Illicit Discharge Identification & Investigation Procedure – Field Screening & Source Investigation

At the time of the outfall or discharge point inspection, if dry weather flow is observed and the source is not obvious, the inspector who identified the discharge shall continue and conduct an upstream source investigation to determine the origin of the flow. The initial investigation includes visual and olfactory observations upstream from the outfall/point of discharge. If necessary, relevant indicator field screening or dye tracing will be conducted.

If the origin of the flow is not identified during the visual upstream investigation, a grab sample is immediately collected from the discharge for indicator field screening analysis. Indicator monitoring/field screening is the secondary tool utilized for dry weather flow without obvious indicators such as very high turbidity, strong odors or visible discharge. Screening may include some or all of the indicator parameters:

- Temperature
- pH
- Detergents (i.e., surfactants)
- Chlorine
- Ammonia
- Turbidity
- Conductivity

Indicator parameters used to assess the dry weather flow shall be determined by the visual and olfactory observations and upstream source investigation.

Additional grab samples may be collected and delivered for external laboratory analysis, only if additional test parameters are required for the source investigation. The laboratory analysis parameters for grab samples are determined by the type of contamination suspected at the time of the source investigation. A copy of the AEG Stormwater Sampling and Analysis Protocol Screening is included in Appendix “D.”

Laboratory indicator parameters are based on MDEQ guidance and as specified in the reference sources identified above. The selected laboratory parameters are:

- Fluoride
- Coliform
- E-coli
- Potassium
- Color
- Ammonia

The exact procedure for tracking the illicit discharge will depend on the particular facts of each incident. At the time of the identification of the observed dry weather flow, the flow will be tracked upstream until the source is isolated. Once the source has been isolated down to a specific site location, the work will become source confirmation. If the source is not confirmed, additional fieldwork, building evaluation, or dye testing may be necessary. Additional source investigations will be conducted within 30 days of the original observed dry weather flow.

Once the elimination of an illicit connection or illicit discharge has occurred, an elimination report detailing the corrective actions with attached work orders, photos or dye tracing results will be compiled for documentation purposes. Field inspections will continue until it can be reported that no illicit connection or discharge is present at that outfall/point of discharge. Information regarding specific techniques are provided in the AEG Stormwater Sampling and Analysis Protocol Screening included in Appendix "D."

2.3.5 Illicit Discharge/Connection Elimination Procedure

Illicit discharges and connections are identified through reporting, routine storm sewer system inspections and dry weather screening inspections. A "How to Spot Illicit Discharges" poster along with a "How to Report/Hotline Numbers" posters are placed in the receiving/custodial areas in each facility to report concerns. WEBSD goal is to evaluate all potential unauthorized or suspected illicit discharge to the municipal separate storm sewer system (MS4), and perform any necessary notifications and reporting to the applicable agencies (i.e., MDEQ, local drain commission, etc.) within the required time period(s).

WEBSD will evaluate and conduct the following actions regarding reported or observed illicit discharges/illegal dumping spills into the storm drainage system.

- If, in the opinion of WEBSD, immediate action to address the suspected discharge is indicated, WEBSD will ensure that the site is investigated within 7 days.
- Conduct source investigations, including applicable field screening to trace the origin of the materials within 30 days of the reported/observed illicit discharge.
 - WEBSD will follow existing spill response procedures outlined in Section 2.3.10, under Spill Response, Policy & Procedures, if required.
- Once the source has been isolated down to a specific site location, the work will become source confirmation
- If the responsible party is identified, educate the party on the impacts of their actions, explain the stormwater requirements and provide information regarding Best Management Practices.
- Evidence of illicit discharges traced to other MS4 jurisdictions will be provided to the responsible MS4 operator along with any collected data to assist that MS4 operator in completing their investigations to correct the illicit discharge or connection.
- WEBSD will cooperate with the MS4 operator in determining the source or type of illicit discharge and/or connection and will follow-up to ensure that appropriate action has been completed by the MS4 operator to eliminate the discharge.
- Continue inspection and follow-up activities until the illicit discharge activity has ceased.
- Document all activities utilizing the Illicit Discharge/Illegal Dumping Reporting form.

A copy of the Illicit Discharge/Illegal Dumping Reporting form is located in Appendix "E."

Once an illicit discharge has been confirmed from a WEBSD facility, the discharge will be corrected using the most expedient method possible based on the type and configuration of the discharge or connections. Other illicit discharges or releases of polluting materials will be corrected through administrative measures including employee training, placement of signs or markings, policy revisions, or any other steps necessary to eliminate the continued release of polluting materials to the MS4.

Within 60 days of a confirmed illicit connection from a WEBSD facility, WEBSD will take steps to fix or eliminate the illicit connection. These steps include a review of corrective methods to be used to repair or eliminate the connection, determine the length of time the repair or elimination will take to complete, the cost of the elimination, the pollution potential and consider how the removal of the illicit connection will be confirmed. Corrective methods include capping, closing, or re-routing illicit connections to the sanitary sewer or other collection systems.

2.3.6 Illicit Discharge Elimination Program Policy

Prevention of pollution from storm water runoff and the protection of the quality of the waters of the State of Michigan are of utmost importance to WEBSD. WEBSD does not have regulatory authority to create or enforce ordinances. WEBSD has developed a Board Policy Resolution to direct compliance and identify specific actions to be taken by WEBSD to ensure compliance with applicable NPDES permit Standards.

WEBSD has a board policy resolution to direct compliance with these requirements. The WEBSD updated School Board Resolution was reviewed and passed on February 22, 2016. A copy of the original School Board Policy Resolution and the updated School Board Policy are provided in Appendix "B."

The WEBSD Stormwater Manager or designee will be provided full access to all WEBSD facilities and properties owned and operated by the district as required to inspect, investigate, and monitor suspected or confirmed illicit discharges or connections to the MS4.

Illicit Discharge means any discharge to, or seepage into the separate stormwater drainage system that is not composed entirely of stormwater or uncontaminated groundwater except discharges pursuant to an NPDES permit. Illicit discharges include but are not limited to the following:

- Dumping of motor vehicle fluids
- Improper disposal of household hazardous wastes
- Grass clippings
- Leaf litter
- Pet & other animal wastes
- Unauthorized discharges of sewage
- Industrial wastes
- Restaurant wastes
- Vehicle & equipment wash waters
- Any non-stormwater waste

All activities are documented utilizing the Illicit Discharge/Illegal Dumping Reporting form.

Illicit Connection means a physical connection to the MS4 separate stormwater system that primarily conveys non-stormwater discharges other than uncontaminated groundwater into the MS4 separate storm sewer system; or a physical connection not authorized or permitted by the local authority, where a local authority requires authorization or a permit for physical connections.

WEBSD's policy is to eliminate all illicit connections or discharges from their facilities and restrict the discharge of polluting substances to the separate storm sewer system. The process to achieve these goals will consist of the inspection and screening of all storm sewer systems and elimination of any improper connection from any WEBS D facility to any waterway or the municipally owned separate storm sewer system (MS4).

Discharge Prohibitions

1. Prohibition of Illicit Discharges:
 - a. WEBS D prohibits the discharge of non-stormwater discharges into the storm drain system, including but not limited to pollutants or waters containing any pollutants.
2. The following discharge is not prohibited:
 - a. This policy excludes prohibitions from the discharge or flows from firefighting activities to the WEBS D MS4. Discharge or flows from firefighting activities will be addressed only if they are identified as significant sources of pollutants to surface waters of the state.
 - b. The following activities are not prohibited under this policy unless they are determined to be significant sources of pollutants to surface waters of the state:
 - Water line flushing and discharges from potable water sources.
 - Landscape irrigation runoff, lawn water runoff, and irrigation waters.
 - Diverted stream flows and flows from riparian habitats and wetlands.
 - Rising groundwater and springs.
 - Uncontaminated groundwater infiltration and seepage.
 - Uncontaminated pumped groundwater, except groundwater cleanups specifically authorized by NPDES permits.
 - Air conditioning condensation.

Prohibition of Illicit Connections

1. Improper connections in violation of this regulatory mechanism must be disconnected and redirected.
2. Illicit discharge and connections will be eliminated.
3. The construction, use, maintenance or continued existence of illicit connections to the storm drain system is prohibited by WEBS D. This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.

2.3.7 Illicit Discharge Elimination Training

A training program is an important component of to an effective IDEP. Training is required for all employees whose job responsibilities involve illicit discharge related activities, or indicate a potential to cause, witness, or report and illicit discharge or connection. Training is discussed in detail in Section 3.0 of this SWMP.

BMP Operation and Maintenance (O&M) guidance manuals have been developed for each facility and include a listing of all structural and non-structural controls along with specific guidance and instructions for each BMP.

BMP O&M manuals include schedules for routine inspection and maintenance as well as policies and procedures for collection, transportation, and disposal of wastes collected during maintenance operations.

2.3.8 Illicit Discharge Elimination Program Effectiveness

WEBSD is required to track implementation of the illicit discharge elimination program stormwater management items and evaluate its effectiveness. Documentation of these items includes documentations of actions taken to eliminate illicit discharges. The following are examples of the types of performance measures and effectiveness measures that may be used to evaluate the effectiveness of the IDEP program. The following information will be reviewed annually, and will be used to focus and modify activities to maximize environmental benefits of the plan:

- Verify the distribution of public education posters.
- Number of outfalls/discharge points screened.
- Number of illicit connections found.
- Number of illicit connections eliminated.
- Number and type of discharges that are investigated.
- Actions conducted to follow-up discharges that are identified or reported.
- Number of scheduled clean-outs and routine maintenance work conducted.

2.3.9 Illicit Discharge Elimination Program – BMP Table

BMP	Description of BMP	Timeframe	Measurable Goal	Measure of Assessment	Responsible Party
BMP #2.3.9.1 Facility Storm Sewer System Maps	Provide an up-to-date storm sewer system map. The maps shall identify the storm sewer system, location of outfalls and points of discharge, and names and locations of the surface waters of the state receive the discharge.	Maps Completed in 2010.	100% of facilities mapped, and 100% of storm sewer system updates mapped.	Maintain facility site maps at Facility Operations Building.	WEBSD
		Updates ongoing as needed. Within 30 days of new outfalls, discharge points, structures and conveyances. 2017-2021		Update facility map with sewer system updates. Maintain maps for progress report submittal.	WEBSD
BMP#2.3.9.2 Enforcement	Written policy to enforce elimination of illicit discharges into MS4 owned by the Permittee.	Board Resolution passed in February 2016.	Updated Board Policy Resolution approved.	Copy of Board Policy Resolution.	WEBSD
BMP #2.3.9.3 Dry Weather Screening	Dry Weather Screening conducted every 5 years. Dry weather screening will be conducted by personnel trained to recognize all signs of possible illicit discharges.	Completed in 2013. Subsequent round of DWS Scheduled for 2017-2018.	100% of outfalls and point of discharges inspected and evaluated following a period of 48-72 hours of dry weather. Outfalls/points of discharges re-inspected if necessary.	Maintain dry weather screening inspection logs/reports.	WEBSD
BMP #2.3.9.4 Illicit Discharge Reporting	Eliminate illicit discharges and connections through reporting, routine storm sewer system inspections and dry weather screening inspections.	Ongoing 2017-2021	Place “How to spot illicit discharge/ How to Report-Hotline Numbers” posters placed in Receiving Rooms at each WEBSD facility. Goal is to have one poster at each facility.	Annually verify number of posters in place throughout the district.	



BMP	Description of BMP	Timeframe	Measurable Goal	Measure of Assessment	Responsible Party
			Advertise reporting hotline on district webpage.	Track number of calls and document calls onto Illicit Discharge/Illegal Dumping Reporting form. (Appendix "E").	WEBSD
BMP #2.3.9.5 Unauthorized Discharge/ Illicit Discharge Complaint Response	WEBSD will immediately evaluate any potential unauthorized or suspected illicit discharge to the municipal separate storm sewer system (MS4) and perform any necessary notifications and reporting to the applicable agencies (i.e., MDEQ, local drain commission, etc.) within the required time period(s). This procedure is outlined in Section 2.3.10 Polluting Materials Emergency and Spill Response Policy & Procedures.	If, in the opinion of WEBSD, immediate action to address the suspected discharge is indicated, WEBSD will follow up within 7 days.	100% of unauthorized or suspected illicit discharges evaluated (field observation, field screening, and source investigation) and eliminated.	Documentation of relevant field observations, field screening or source investigations.	WEBSD
		Within 30 days of reported suspected discharge.			
BMP #2.3.9.6 Illicit Connections	Reroute, repair, or disconnect any illicit connections.	Within 60 days of identified illicit connection	Take steps to eliminate 100% of identified illicit connections.	Work order, receipt or report detailing the illicit connection correction activities.	WEBSD
BMP #2.3.9.7 Illicit Discharge Elimination Training	Train staff on the identification and reporting of illicit discharges or improper connections and the cleanup/notification procedures for spills of polluting materials.	Once per permit cycle or during the 1 st year of employment 2017-2021	Goal of providing illicit discharge elimination training to all maintenance, transportation, custodial and skilled trade staff who work for WEBSD. [All Stormwater Training is outlined in Section 3.0 Training]	Copy of sign-in sheets and agenda (if available).	WEBSD
BMP #2.3.9.8 Notice of Intent to Discharge Tracer Dyes	Maintain approval from the MDEQ for authorization to discharge tracer dyes in surface waters per General Rule 97 to conduct source investigations.	As needed 2017-2021	MDEQ approval to discharge tracer dyes.	Documentation of MDEQ approval.	WEBSD



BMP	Description of BMP	Timeframe	Measurable Goal	Measure of Assessment	Responsible Party
BMP #2.3.9.9 IDEP program Performance & Effectiveness	Review performance measures to evaluate the effectiveness of the IDEP program. Items include; posting of IDEP public education posters, number of outfalls/discharge points screened, number of illicit connections found, number of illicit connections eliminated, number and type of violations investigated, and number of scheduled clean-outs and routine maintenance work conducted.	Annually 2017-2021	Annual review of SWMP IDEP program performed.	Maintain copy of SWMP annual review and evaluation information for progress reporting.	WEBSD



2.3.10 Polluting Materials Emergency and Spill Response Policy and Procedures

Purpose

This policy and associated procedures have been developed to define appropriate and safe response procedures for spill or accidental releases of hazardous materials or substances at all WEBSD’s facilities.

Policy

WEBSD will comply with all Federal, State, and local regulatory requirements for the management and reporting of all hazardous materials and/or waste releases.

The Maintenance Department will maintain responsibility for monitoring any changes in regulatory requirements regarding hazardous materials and waste spills or accidental releases. This policy will be revised as necessary based upon any changes in the regulatory requirements or internal experiences. All hazardous materials spills or releases will be thoroughly investigated by the Supervisor of Facility Operations, Energy Management, & Sustainability.

The Supervisor of Facility Operations, Energy Management, & Sustainability will immediately report any release of any polluting materials from the MS4 to surface waters or groundwater of the state, unless a determination is made that the release is not in excess of the threshold reporting quantities in the Part 5 Rules.

If it is determined that the release poses a threat to the safety or the environment outside the facility, the Supervisor of Facility Operations, Energy Management, & Sustainability will report the release during regular working hours to the **MDEQ District Office at (586)-753-3700**, or after hours to the 24-hour **Michigan Pollution Emergency Alerting System (PEAS) at 1-800-292-4706** immediately or within 24 hours of knowledge of the release. Any release of oil (includes gasoline, diesel fuel, used oil and mineral spirits) to navigable waters or adjoin shorelines will be reported to the 24-hour **National Response Center (NRC) at 1-800-424-8802** immediately or within 24 hours of knowledge of the release. In the event the spill takes place after working hours, site personnel will contact the assigned coordinator to notify the Supervisor of Facility Operations, Energy Management, & Sustainability that an incident has occurred.

The Supervisor of Facility Operations, Energy Management, & Sustainability is responsible for notifying the MDEQ and/or other local, state, or federal regulatory agencies in the event that a release to the MS4 or surface waters occurs at levels above the threshold reporting quantities referenced in the PA 451 Part 5 rules.

Emergency Spill Response Procedures

Each facility having the potential for the release of a hazardous material or substance shall have trained and knowledgeable staff members to respond and/or implement spill response procedures for that facility. Spill containment materials such as absorbent pigs, pads, booms, diking materials, storm drain covers, etc. are to be stored and maintained at all facilities for use by trained employees in the event of a spill or accidental release.

The following general guidelines are to be implemented as applicable in managing spills and accidental releases:

- 1) **For spills in which there is no immediate dangers to employees, students, or the general public and does not represent a danger of contamination to a sanitary sewer, storm sewer, or the ground:**
 - A. Contain spill to the smallest area possible.
 - B. Review the Material Safety Data Sheet/Safety Data Sheet for determination of proper spill handling, and appropriate personal protective equipment selection.
 - C. Place compatible absorbent material or spill pads on the area.

- D. Clean up and containerize the absorbent materials.
- E. Contact the Operations and Maintenance Department for waste disposal instructions and additional cleaning requirements.

2) For a spill that represents an immediate danger to employees, students, or the general public and/or has the potential to impact the sanitary sewer, storm sewer, or the ground:

- A. Notify the Operations and Maintenance Department.
- B. If there is the treat of fire, explosion, or if any person(s) exhibits severe symptoms of exposure, contact 911 to initiate local emergency services.
- C. Alert anyone in the area and begin evacuation procedures.
- D. Use absorbent socks, booms, or other absorbents to dike the spill area if safe to do so, and secure the area from unauthorized personnel. Refer to the Material Safety Data Sheet to determine the proper personal protective equipment.
- E. Remove all sources of ignition for releases of flammable or combustible materials.
- F. The Operations and Maintenance Department will initiate all notification procedures and contact the contracted emergency response contractor to mitigate and remediate the release.
- G. Complete the "Hazardous Material or Waste Spill Exposure Form" for all exposed persons.
- H. The Supervisor of Facility Operations, Energy Management, & Sustainability will assess the spill and notify all agencies as required.

3) Spills of Elemental Mercury

- A. Contact the Operations and Maintenance Department immediately.
- B. Remove all personnel from the immediate spill area without traveling through the spill area, and if possible, close the door and lower the thermostat in the affected room.
- C. Keep all potential contaminated persons in a close area to the spill but outside of the affected area to minimize additional exposure to mercury vapors.
- D. Remove and containerize any potentially contaminated clothing or other articles from affected persons.
- E. The Supervisor of Facility Operations, Energy Management, & Sustainability will contact the appropriate emergency response contractor to clean-up the spill and properly decontaminate and/or dispose of all contaminated articles.

Refer to sections **2.3.4 Illicit Discharge Identification & Investigation Procedure – Field Screening & Source Investigation** and **2.3.5 Illicit Discharge/Connection Elimination Procedure** for implementation timeframes.

This guidance has been developed in anticipation of potential releases of hazardous materials and substances. The procedures outlined in this guidance should only be implemented by those persons who have received sufficient training and are competent in the handling of the released material.

As appropriate, illicit discharges or releases of polluting materials will be corrected through administrative measures including employee training, placement of signs or markings, policy revisions, or any other steps necessary to eliminate the continued release of polluting materials to the MS4. WEBSD will conduct follow-up inspections and sampling as needed to ensure that appropriate action has been completed.

2.4 Construction Site Stormwater Runoff Control Program



WEBSD's goal is to establish procedures for construction stormwater runoff control to meet minimum measure requirements to maximum extent practicable.

Construction refers to actions that result in a disturbance of the land, including clearing, grading, excavating, and other similar activities.

Construction-related activities are activities that support the construction project such as stockpiles, borrow areas, concrete truck washouts, fueling areas, material storage areas and equipment storage areas.

2.4.1 Construction Site Stormwater Management Program Objectives

- A. Process for notify the Part 91 Agency appropriate staff when soil or sediment is discharged to the MS4 from a construction activity.
 - The procedure shall allow for the receipt and consideration of complaints or other information submitted by the public or identified internally as it relates to construction stormwater runoff control.
- B. Procedure for when to notify the MDEQ when soil, sediment, or other pollutants are discharged to the MS4.
 - Other pollutants include pesticides, petroleum derivatives, construction chemicals, and solid wastes that may become mobilized when land surfaces are disturbed.
- C. Procedure for ensuring that construction activity one acre or greater in total land disturbance obtains a Part 91 Permit.

2.4.2 Construction Notification Procedure

The MDEQ certified construction stormwater operator inspector conducting site inspections will normally detect any soil or sediment entering the MS4.

In the event an inspector identified a discharge during an inspection:

1. The inspector shall document all details of the soil erosion and sedimentation control deficiency and report to the Supervisor of Facility Operations, Energy Management, & Sustainability/WEBSD Stormwater Manager.
2. The Supervisor of Facility Operations, Energy Management, & Sustainability/WEBSD Stormwater Manager (or designee) is responsible for assessing any suspected or confirmed discharge and notifying the appropriate agency.
3. WEBSD will notify the local Part 91 agency or MDEQ when significant runoff of soil, sediment, or other pollutants such as pesticides, petroleum derivatives, construction chemicals, or solid wastes from the construction site discharges to the MS4 or surface waters of the state within 24 hours of discovery or as otherwise required by the issuing agency.

In the event of a public complaint:

WEBSD will track the receipt of complaints submitted by the public or noted by staff during regular course of business of soil, sediment, or other pollutants such as pesticides, petroleum derivatives, construction chemicals, and solid wastes are being discharged into the MS4.

The tracking will include:

- Name of person providing the complaint.
- Location (address or nearest cross street).
- Description of follow-up (e.g., date referred to the Part 91 enforcing agency).

WEBSD will notify the Part 91 Agency, when soil, sediment, and other pollutants such as pesticides, petroleum derivatives, construction chemicals, and solid wastes are discharged into MS4.

WEBSD ensures that construction activity one acre or greater in total earth disturbance with the potential to discharge to the MS4 does obtain a Part 91 Permit and State of Michigan Permit by Rule.

2.4.3 Part 91 Permit

WEBSD will ensure that any construction activity that result in a land disturbance meeting the following criteria:

- Greater than or equal to one (1) acre, or
- Disturb less than one (1) acre that is part of a common plan of development or sale.

Will obtain a Part 91 Permit through the site plan review process with the appropriate county or municipal permitting agency.

2.4.4 Permit by Rule Compliance

WEBSD shall comply with the State of Michigan Permit by Rule (Rule 323.2190) for stormwater discharge from construction activity. Sites disturbing one (1) to five (5) acres with a point source discharge to the waters of the state receive automatic storm water coverage upon securing a SESC permit from the appropriate Part 91 recognized County Enforcing Agency, Municipal Enforcing Agency, or Authorized Public Agency (APA) under the authority of Part 91.

1. Construction sites with at least one (1) acre but less than five (5) acres of soil disturbance with a surface water discharge, must obtain a county or municipal SESC permit, and are required to follow the provisions of the Permit by Rule, but do not need to notify the MDEQ of the construction activity.
2. Construction sites disturbing over five (5) acres with a point source discharge to the waters of the state must obtain a county or municipal SESC permit, and submit a Notice of Coverage (NOC) and other pertinent documents and the appropriate fee to the MDEQ.

Requirements of Permit by Rule include, but are not limited to:

- Weekly site inspections conducted by a Certified Construction Stormwater Operator.
- Inspection within 24 hours of a precipitation event that results in a discharge from the site by a Certified Construction Stormwater Operator.

2.4.5 Construction Site Stormwater Management-BMP Table

BMP	Description of BMP	Timeframe	Measurable Goal	Measure of Assessment	Responsible Party
BMP #2.4.5.1 Notification of Deposit during Inspection	WEBSD will notify the local part 91 agencies (West Bloomfield Township) or MDEQ when runoff from the construction site discharges significant pollutants to the MS4 or surface waters of the state within 24 hours of discovery or as otherwise required by the issuing agency. The WEBSD Stormwater Manager (or designee) is responsible for assessing any suspected or confirmed discharge and notifying the appropriate agency. (Refer to section 2.4.2)	As necessary 2017-2021	100% discharges identified and appropriate agencies notified. Control of potential system failure.	Documentation of Construction Stormwater Operator site inspection.	WEBSD
	Track complaints submitted by the public or noted by staff during regular course of business of soil, sediment, or other pollutants such as pesticides, petroleum derivatives, construction chemicals, and solid wastes are being discharged into the MS4.			Documentation of public complaint (Name of person providing the complaint, location [address or nearest cross street] description of follow up [e.g., date referred to the Part 91 enforcing agency]).	WEBSD
BMP #2.4.5.2 Part 91 Permit	WEBSD will ensure that any construction activity that result in a land disturbance greater than or equal to one (1) acre or disturb less than one (1) acre that is part of a common plan of development or sale will obtain a Part 91 Permit through the site plan review process.	As necessary 2017-2021	100% of permits obtained.	Copy of permit and associated soil erosion and sedimentation control plans.	WEBSD



BMP	Description of BMP	Timeframe	Measurable Goal	Measure of Assessment	Responsible Party
BMP #2.4.5.3 Permit by Rule	Construction sites between (1) acre but and five (5) acres of soil disturbance follow the provisions of the Permit by Rule, but do not need to notify the MDEQ of the construction activity.	As necessary 2017-2021	Goal of 100% of weekly and precipitation event inspection completed by certified Construction Stormwater Operator.	Copy of inspections.	WEBSD
	Construction sites disturbing over five (5) acres with a point source discharge to the waters of the state must follow provisions of the Permit by Rule and submit a Notice of Coverage (NOC) and other pertinent documents and the appropriate fee to the MDEQ.		Goal of 100% of weekly and precipitation event inspection completed by certified Construction Stormwater Operator.	Copy of inspections.	WEBSD
			100% NOC obtained.	Copy of NOC	WEBSD

2.5 Post Construction Stormwater Controls for New Developments & Redevelopments

The following WEBSD Illicit Discharge Elimination Program is designed to identify, locate, prohibit and effectively eliminate illicit discharges, including discharges of sanitary wastewaters, to the permitted separate stormwater drainage systems.

2.5.1 Post Construction Stormwater Management Program Objectives

The post-construction stormwater run-off controls are necessary to maintain or restore stable hydrology in receiving waters by limiting surface runoff rates and volumes and reducing pollutant loadings from sites that undergo development or significant redevelopment.

The objects of this program and associated procedures are to:

- a. Develop and implement regulatory mechanisms to address post-construction stormwater runoff for new development and redevelopment projects, including preventing or minimizing water quality impacts.
- b. Develop and implement regulatory mechanisms for projects that disturb one or more acre, including projects less than an acre that are part of a larger common plan of development or sale and discharge into the applicants MS4.
- c. Ensure post construction controls to minimize water quality impacts by following water quality treatment standards.
- d. Require that BMPs be designed on a site-specific basis to reduce post-development total suspended solids loading.
- e. Procedure to meet water quality treatment and channel protection standards of new development or redevelopment projects.
- f. Address "hot spots."
- g. Submit site development plans for review and approval.
- h. Require adequate long-term O&M of BMPs by ordinance or other regulatory mean

WEBSD has developed and passed a board policy resolution on February 22, 2016, to direct compliance with these requirements. In addition to the board policy resolution, the following sections identify specific actions to be taken by WEBSD to ensure compliance with the applicable standards. WEBSD has an updated board policy resolution to direct compliance with these requirements. The WEBSD updated School Board Resolution was reviewed and passed on February 22, 2016. A copy of the current approved WEBSD School Board Policy Resolution and updated Board Policy Resolution are provided in Appendix "B."

2.5.2 Water Quality Treatment Standard

WEBSD goal is to include water quality treatment volume standards for each new construction or redevelopment of projects where the area of disturbance exceeds one (1) acre. One or more of the following treatment standards should be included as part:

- 1) Treat the first one inch of runoff from the area of new construction or redevelopment.
- 2) Treat the runoff generated from ninety percent (90%) of all runoff-producing storms for the project site.

The source of the rainfall data for the water quality treatment standard of requiring the treatment of the runoff generated from the ninety percent (90%) of all runoff-producing storms is:

- The MDEQ memo dated March 24, 2006, which is available via the internet at www.michigan.gov/documents/deq/lwm-hsu-nps-ninety-percent_198401_7.pdf.

Treatment methods shall be designed on a site-specific basis to achieve the following:

1. A minimum of eighty percent (80%) removal of total suspended solids (TSS), as compared with uncontrolled runoff, or
2. Discharge concentrations of TSS not to exceed 80 milligrams per liter (80mg/L).

A minimum treatment volume standard is not required where site conditions are such that TSS concentrations in storm water discharges will not exceed 80mg/L.

Treatment methods shall be designed on a site specific basis to reduce the discharge of sedimentation or TSS from the site. Such methods may include:

1. Stand pipe filters in storm water detention basins
2. Sediment filter tanks
3. Catch basin sumps
4. Aqua-Swirls®
5. Treatment trains
6. Rain Gardens
7. Pervious pavement systems

2.5.3 Channel Protection Performance Standard

WEBSD understands that channel protection criteria is necessary to maintain post-development stormwater runoff volumes and peak flow rates at or below existing levels for all storms up to the 2-year, 24-hour event. "Existing Levels" means the runoff volume and peak flow rate for the last land use prior to the planned new development or redevelopment.

Where more restrictive channel protection criteria already exists, or is needed to meet the goals of reducing runoff volume and peak flows to less than existing levels on lands being developed or redeveloped, WEBSD will consider use of the more restrictive criteria rather than the standard permit requirements.

A post-construction stormwater runoff program compliance assistance document is available via the internet at http://www.michigan.gov/documents/deq/lwm-hsu-nps-ninety-percent_198401_7.pdf.

2.5.4 Site –Specific Requirements

Because each site has its' own special circumstances and conditions, the following BMPs will be considered as appropriate according to site conditions:

- Reduce runoff from the site to greatest extent possible (provide holding basins, divert water through grassed swales).
- Prevent spills and discharges.
- Control waste such as building materials, concrete washout, chemicals, litter, and sanitary waste.
- Phasing will be considered to limit amount of exposed soils.
- Interim soils stabilization methods are to be considered (temporary seeding, mulching etc.).
- Buffer preservation (avoid exposing soils to property limits).



- Inspection staff will be trained in the proper maintenance and operation of Soil Erosion and Silt Prevention measures.

Construction plans will be reviewed for sites with known soil and/or groundwater contamination, including potential “hot spots” and evaluate the use of infiltration BMPs to meet water quality treatment and channel protection criteria to ensure that infiltration BMPs do not exacerbate existing conditions. Hot spots include areas with the potential for significant pollutant loading such as vehicle service and maintenance facilities, vehicle equipment cleaning facilities, fleet storage areas for buses, and outdoor liquid container storage.

Additional water quality standards or pretreatment measures may be required in addition to those included in the water quality criteria in order to remove potential pollutant loadings from entering either groundwater or surface water systems.

Pretreatment measures include:

Stormwater Hot Spots	Minimum Pre-Treatment Options
Vehicle service and maintenance facilities	<ol style="list-style-type: none"> 1. Oil/Water Separators/Hydrodynamic Devices 2. Use of Drip Pans and/or Dry Sweep Material under Vehicles/Equipment 3. Use of Absorbent Devices to Reduce Liquid Releases 4. Spill Prevention Response Program
Fleet storage areas for buses	BMPs that are part of a Stormwater Pollution Prevention Plan (SWPPP)
Vehicle Fueling Stations	<ol style="list-style-type: none"> 1. Oil/Water Separators/Hydrodynamic Devices 2. Water Quality Inserts for Inlets 3. Spill Prevention Response Program
Vehicle equipment cleaning facilities	BMPs that are part of a Stormwater Pollution Prevention Plan (SWPPP)
Outdoor liquid container storage	Spill Prevention Response Program

2.5.5 Site Plan Review

This policy is to establish requirement to submit a site plan for review as required by the MDEQ NPDES Phase II Stormwater Discharge Permit. WEBSD will prepare and submit a written application, including a site plan for review and approval of post-construction stormwater runoff BMPs, for all new construction or redevelopment projects where the area of disturbance exceeds one (1) acre. The application will be completed in a form and manner as prescribed by the local municipality or governing unit in which the property is located. The site plan will be reviewed by the appropriate local municipal, county, state or other governmental agency. The review of the stormwater site plan will provide local municipal, county, state or other governmental agency with the ability to ensure that water quality objectives, erosion and sediment control requirements, and BMP maintenance are adequately considered.

The goal of the site plan review is to:

- Minimize clearing and grading.
- Protect waterways.



- Limit soil exposure.
- Protect steep slopes and cuts.

2.5.6 Long-term Operation & Maintenance of Stormwater Controls

WEBSD will identify all stormwater controls and mechanisms for all new construction or redevelopment projects where the area of disturbance exceeds one (1) or more acres. WEBSD will develop “BMP Operation and Maintenance” guidance manuals for each property, including:

- Develop a map of each facility identifying the location and type of structural controls, if any exist.
- Develop a guidance manual that will provide a listing of structural controls including a site diagram showing the location of each control, instructions for inspection and operation, and the inspection and/or maintenance schedules for each control mechanism.
- Stormwater runoff facilities, after construction and approval, shall be maintained in good condition, in accordance with the approved storm water plan.
- Update and revise the stormwater structural controls on facility site diagrams as identified during scheduled inspections or within 30 days following the completion a new facility or reconstruction/redevelopment site project.

The Supervisor of Facility Operations, Energy Management, & Sustainability will ensure that local work instructions are developed based on BMP and O&M Guidance Manuals. WEBSD trained staff or certified contractors will conduct routine inspection of all identified structural controls and complete maintenance, repair, or replacement as necessary.



2.5.7 Post Construction Stormwater Management-BMP Table

BMP	Description of BMP	Timeframe	Measurable Goal	Measure of Assessment	Responsible Party
BMP #2.5.7.1 Regulatory Mechanism	Develop and implement regulatory mechanisms to address post-construction stormwater runoff for new development and redevelopment projects, including preventing or minimizing water quality impact.	Board Policy Resolution passed February 22, 2016.	Updated Board Policy Resolution passed.	Copy of current 2016 Board Resolution Policy.	WEBSD
	Develop and implement regulatory mechanisms for projects that disturb one or more acre, including projects less than an acre that are part of a larger common plan of development or sale and discharge into the applicants MS4.				
BMP #2.5.7.2 Post Construction Standards	Ensure post-construction channel protection standards and water quality treatment standards are met.	As necessary 2017-2021	All applicable site plan are reviewed by the appropriate local municipal, county, state or other governmental agency.	Copy of site plan.	WEBSD
BMP #2.5.7.3 Site Specific	WEBSD will review construction plans for sites with known soil and/or groundwater contamination, including potential “hot spots” and evaluate the use of infiltration BMPs to meet water quality treatment and channel protection criteria.	As necessary 2017-2021	Reduce or eliminate discharge of pollutants during construction on contaminated sites.	Documentation of additional stormwater controls.	WEBSD
BMP #2.5.7.4 Site Plan Review	Prepare and submit a written application, including site plan for construction of storm water management systems for all new construction or redevelopment projects where the area of disturbance meets or exceeds one (1) acre.	As necessary 2017-2021	All applicable site plan are reviewed by the appropriate local municipal, county, state or other governmental agency.	Copy of reviewed plans.	WEBSD



BMP	Description of BMP	Timeframe	Measurable Goal	Measure of Assessment	Responsible Party
<p>BMP #2.5.7.5 Operation & Maintenance</p>	<p>All WEBSD owned sites will have an O&M guidance manual including location, description, instructions for inspection, repair, and maintenance, and a schedule for each BMP.</p>	<p>All current facilities have completed O&M Manuals.</p> <p>Within 30 days of following the completion a new facility or reconstruction/ redevelopment site project.</p> <p>2017-2021</p>	<p>Ensure O&M requirements are met for all WEBSD owned BMPs.</p>	<p>Keep copies of BMP O&M plans and all inspection, maintenance, and repair reports conducted by staff or contractors. Update annually.</p>	<p>WEBSD</p>

2.6 Pollution Prevention & Good Housekeeping Program

Develop, implement, and ensure compliance through a program of operation & maintenance of BMPs, with the ultimate goal of preventing or reducing pollutant runoff to the maximum extent practicable from operation that discharge stormwater to surface waters of the state.

2.6.1 Pollution Prevention & Good Housekeeping Program Objectives

- a. Maintain an up-to-date inventory of owned facilities and stormwater structural controls.
- b. Procedure for updating and revising inventory of stormwater structural controls.
- c. Procedure for assessing each facility for the potential to discharge pollutants.
- d. Develop an SOP (SWPPP) for all facilities with a high potential for pollutant runoff.
- e. Procedure identifying BMPs currently implemented or to be implemented to prevent or reduce pollutant runoff at each facility with medium and lower potential to discharge.
- f. Procedure for prioritizing of catch basins/manholes for maintenance and cleaning.
- g. Schedule for routine catch basin/manhole inspection, maintenance and cleaning.
- h. Provide the geographic location of stormwater structures.
- i. Procedure for dewatering, storage and disposal of materials extracted from storm sewer cleaning.
- j. Procedure for inspecting and maintaining storm water controls.
- k. Procedure for new structural controls to be designed and implemented in accordance with post-construction stormwater runoff control performance standards.
- l. Best management practices for operation and maintenance activities.
- m. Procedure for street sweeping.
- n. Procedure for pesticide application.
- o. Training.
- p. Contractor requirements and oversight.

It is the ultimate goal of WEBSD to prevent and reduce pollutant/contaminant runoff from WEBSD facilities to the maximum extent practicable. All BMPs are implemented at all low, medium and high priority facilities.

2.6.2 Structural Control Inventory & Schedule Table

No prioritization will be needed, as all structures are to be inspected and maintained equally. All structural controls will have routine inspection, maintenance schedules, and long-term procedures which adequately control, to the maximum extent practicable, pollution removal and control. Structural control effectiveness will be determined based on the results of these inspections and repaired, upgraded, or replaced as indicated.

Facility Name	Priority Level of Potential Discharge* (High, Med, Low)	Type of Structural Control	No. of Controls	Inspection/Maintenance Schedule
Abbott Middle School 3380 Orchard Lake Rd. West Bloomfield Township, MI. 48324	Low	Catch Basin	9	Inspect Annually, Clean Once per Permit Cycle
		Manhole	2	Inspect Annually, Clean Once per Permit Cycle
		Infiltration Basin	1	Inspect Annually, Clean as Needed
Administration Building 5810 Commerce Rd. West Bloomfield Township, MI. 48324	Low	Catch Basin	5	Inspect Annually, Clean Once per Permit Cycle
		Manhole	2	Inspect Annually, Clean Once per Permit Cycle
		Open Pipe Outlet	2	Inspect Annually, Clean as Needed
		Riprap	1	Inspect annually/Maintain as needed
Doherty Elementary School 3575 Walnut Lake Rd. West Bloomfield Township, MI. 48322	Medium	Catch Basin	8	Inspect Annually, Clean Once per Permit Cycle
		Manhole	2	Inspect Annually, Clean Once per Permit Cycle
		Open Pipe Outlet	2	Inspect Annually, Clean as Needed
		Trench Drain	1	Inspect Annually, Clean as Needed
		Flow Splitter	1	Inspect Annually, Clean as Needed
		Underground Detention System	1	Inspect Annually, Clean as Needed



Facility Name	Priority Level of Potential Discharge* (High, Med, Low)	Type of Structural Control	No. of Controls	Inspection/Maintenance Schedule
Gretchko Elementary School 5300 Greer Rd. West Bloomfield, MI. 48324	Low	Catch Basin	16	Inspect Annually, Clean Once per Permit Cycle
		Manhole	8	Inspect Annually, Clean Once per Permit Cycle
		Open Pipe Outlet	4	Inspect Annually, Clean as Needed
		Stormwater Conveyance Channel	1	Inspect Annually, Clean as Needed
		Drainage Receptor	2	Inspect Annually, Clean as Needed
		Stabilized Outlet	1	Inspect Annually, Clean as Needed
		Detention Pond	3	Inspect Annually, Clean as Needed
Orchard Lake Middle School 6000 Orchard Lake Rd. West Bloomfield, MI. 48322	Low	Catch Basin	7	Inspect Annually, Clean Once per Permit Cycle
		Manhole	5	Inspect Annually, Clean Once per Permit Cycle
		Drainage Receptor	9	Inspect Annually, Clean as Needed
		Open Pipe Outlet	11	Inspect Annually, Clean as Needed
		Flow Splitter	1	Inspect Annually, Clean as Needed
		Stormwater Conveyance Channel	8	Inspect Annually, Clean as Needed
		Culvert	4	Inspect Annually, Clean as Needed
		Riprap	1	Inspect Annually, Clean as Needed
Roosevelt Elementary School 2065 Cass Lake Rd. Keego Harbor, MI. 48320	Low	Catch Basin	12	Inspect Annually, Clean Once per Permit Cycle
		Manhole	3	Inspect Annually, Clean Once per Permit Cycle
		Open Pipe Outlet	1	Inspect Annually, Clean as Needed
		Stormwater Conveyance Channel	1	Inspect Annually, Clean as Needed



Facility Name	Priority Level of Potential Discharge* (High, Med, Low)	Type of Structural Control	No. of Controls	Inspection/Maintenance Schedule
		Stormwater Lift Station	1	Inspect Annually, Clean as Needed
Scotch Elementary School 5959 Commerce Rd. West Bloomfield, MI. 48324	Low	Catch Basin	5	Inspect Annually, Clean Once per Permit Cycle
		Infiltration Basin	1	Inspect Annually, Clean as Needed
		Open Pipe Outlet	6	Inspect Annually, Clean as Needed
		Drainage Receptor	5	Inspect Annually, Clean as Needed
		Stormwater Conveyance Channel	7	Inspect Annually, Clean as Needed
		Retention Basin	1	Inspect Annually, Clean as Needed
		Riprap	3	Inspect Annually, Clean as Needed
Sheiko Elementary School 4500 Walnut Lake Rd. West Bloomfield, MI. 48323	Low	Catch Basin	18	Inspect Annually, Clean Once per Permit Cycle
		Manhole	2	Inspect Annually, Clean Once per Permit Cycle
		Open Pipe Outlet	9	Inspect Annually, Clean as Needed
		Drainage Receptor	6	Inspect Annually, Clean as Needed
		Stormwater Conveyance Channel	5	Inspect Annually, Clean as Needed
		Landscape Drain	2	Inspect Annually, Clean as Needed
Transportation & Maintenance 5810 Commerce Rd. West Bloomfield, MI. 48324	High	Catch Basin	6	Inspect Annually, Clean Once per Permit Cycle
		Manhole	2	Inspect annually/Clean once per cycle or as needed
		Open Pipe Outlet	3	Inspect Annually, Clean as Needed
		Drainage Receptor	1	Inspect Annually, Clean as Needed
		Detention Pond	1	Inspect Annually, Clean as Needed



Facility Name	Priority Level of Potential Discharge* (High, Med, Low)	Type of Structural Control	No. of Controls	Inspection/Maintenance Schedule
		Underground Storage Tank	1	Inspect monthly according to the UST Inspection schedule
		Oil Water Separator	1	Inspect annually/Cleanout as needed
West Bloomfield High School 4925 Orchard Lake Rd. West Bloomfield, MI. 48323	Medium	Catch Basin	50	Inspect Annually, Clean Once per Permit Cycle
		Manhole	13	Inspect Annually, Clean Once per Permit Cycle
		Infiltration Basin	1	Inspect Annually, Clean as Needed
		Open Pipe Outlet	5	Inspect Annually, Clean as Needed
		Stormwater Conveyance Channel	1	Inspect Annually, Clean as Needed
		Detention Basin	1	Inspect Annually, Clean as Needed
		Landscape Drain	3	Inspect Annually, Clean as Needed

2.6.3 Facility Assessment & Prioritization

WEBSD has identified all applicant owned facilities with a discharge of stormwater to surface waters of the state, and during mapping of each facility, inventoried the number of stormwater structural controls (i.e. catch basins, detention basins, etc.) at each site. Each location was assessed to determine high, medium and low potential to discharge pollutants to surface waters of the state.

WEBSD considered the following when assessing each facility:

- Absence of any factors,
- Presence of urban pollutants stored at the site (i.e. sediment, nutrients, metals, hydrocarbons, pesticides, fertilizers, herbicides, chlorides, trash, bacteria, or other site-specific pollutants,
- Identification of improperly stored materials,
- Potential for polluting activities to be conducted outside (i.e. vehicle washing),
- Proximity to water bodies,
- Poor housekeeping practices,
- Discharge of pollutants of concern to impaired waters.

For facilities that have a high potential to discharge pollutants to surface waters of the state, a Stormwater Pollution Prevention Plan (SWPPP) and/or Pollution Incident Prevention Plan (PIPP) for salt storage facilities will continue to be implemented.

BMPs currently implemented by WEBSD at facilities with medium and lower potential for the discharge of pollutants to surface waters of the state include:

1. Good housekeeping practices,
2. Employee training,
3. Routine visual inspections,
4. Spill prevention and response.

This inventory will be updated as facilities and structural stormwater controls are added, removed, or no longer owned or operated by the applicant following routine inspections or following new construction or redevelopment projects. Priority level assessments will be revised within 30 days following the completion a new facility or reconstruction/redevelopment.

2.6.4 Storm Sewer Structure Controls Inspection & Maintenance Policy & Procedure

1. Develop a schedule for inspecting and maintaining catch basins and stormwater controls at each facility, for the reduction of pollutant runoff. A schedule is included in [Section 2.6.2 Structural Control Inventory & Schedule Table](#).
2. Visually inspect all stormwater controls identified on facility maps. Inspection includes; structural integrity of the structure, sediment build-up, flow, overall functionality and presence of erosion.
3. Note inspection information on the inspection form. A copy of the inspection form "Structural BMP Table" is located in Appendix "D."
4. When inspecting stormwater controls, review the site for BMPs currently implemented to prevent or reduce pollutant runoff at each facility. BMPs include:
 - Review of "No Dumping" stencils at storm drains.

- Review of catch basins/manholes cleaned.
 - Dumpster good housekeeping practices.
 - Garden, green space and signage inventories.
 - “SEMCOG” poster placement at facilities.
 - Illicit discharge reporting numbers poster placement at facilities.
 - “How to spot illicit discharge/ How to Report-Hotline Numbers” poster placement at facilities.
 - Spill kit availability at facilities.
5. Document BMPs identified during inspection.
 6. Following the inspection, the stormwater controls should be prioritized for cleaning and maintenance.
Prioritize locations based on the following:
 - Drainage structures that are designated as consistently generating the highest volumes of trash and/or debris.
 - Areas with high amounts of build-up sediment. A build-up of accumulated solid material that is greater than or equal to the one-third guideline established by the EPA. Areas of significant erosion.
 - Areas of significant cracking or sinkholes.
 7. Once the inspection is complete, the stormwater manager or designated person will review the report and determine if a work order or other item is needed to work with relevant departments or contractors to fix any problems.
 8. If an illicit discharge is suspected, follow the procedure outlined in Section 2.3 Illicit Discharge Elimination Program.
 9. Retain inspection forms for each stormwater structural control inspected.
 10. Retain documentation regarding the scheduling or completion of the repair/maintenance if completed.
 11. Debris and maintenance waste removed as part of the maintenance and/or repairs shall be disposed of in accordance with Section 2.6.6 Structural BMP Operation & Maintenance Waste Disposal procedures.

Furthermore, staff members conducting maintenance and grounds activities are provided IDEP and pollution prevention/good housekeeping training. All structural controls will have routine inspection, maintenance schedules, and long-term procedures which adequately control, to the maximum extent practicable, pollution removal and control. Structural control effectiveness will be determined based on the results of these inspections and repaired, upgraded, or replaced as indicated. This procedure will be reviewed on an annual basis and updated as needed or 30 days following the implementation of a new stormwater structural control.

2.6.5 Structural BMP Operation & Maintenance Manuals

Structural BMP operation, inspection, and maintenance manuals have been developed for each WEBSD facility to ensure that they are well maintained and continue to function properly. BMP guidance manuals include a description of each BMP located at the specific facility, a map showing the type and location of each structure, schedule for inspection based on the specific structures, along with instructions for proper operation and recommended maintenance. The manuals are reviewed annually to ensure updated maps, BMP information sheets, and current inspection sheets are available.

2.6.6 Structural BMP Operation & Maintenance Waste Disposal Procedures

Waste materials generated from operation, maintenance, and cleaning activities associated with storm sewer systems has typically been discharged back into the storm sewer system. This type of discharge is unauthorized per Part 31, Water Resources Protection (Part 31) of the Natural Resources and Environmental Protection Act, 1994 PA

451, as amended (NREPA) and is therefore illegal. The combined solid and liquid waste stream (solid/liquid waste) from cleaning storm sewer systems is legally defined as “Liquid Industrial Waste” pursuant to Part 121, Liquid Industrial Wastes (Part 121) of NREPA.

WEBSD will ensure that all waste materials generated during operation and maintenance of structural stormwater controls are properly characterized, transported, and disposed as required under State of Michigan PA 451 Part 111 (hazardous wastes), Part 121 (liquid industrial wastes), and Part 115 (solid wastes). At a minimum, the following procedures will be implemented for wastes generated from cleaning or maintaining storm sewer structural controls.

Structural BMP Operation & Maintenance Waste Characterization

Prior to conducting cleaning or maintenance to storm sewer structural controls, a certified stormwater operator will complete a waste generation determination. This determination will include a visual inspection of the structure and identification of any waste materials to be generated during the cleaning or maintenance process. The certified operator will document a description of materials currently in the structure and other observations used to determine if potential contaminants are present. Visual observations and physical characteristics to be examined and documented as part of the waste characterization protocols include identification or the presence of:

- Oil or petroleum sheens
- Sedimentation or solids
- Odors
- Color
- Staining
- Vegetation conditions
- Floatables
- Other damage to the structure or observations identifying potential contaminants

Visual observations will be recorded and an assessment completed determining if additional evaluation or testing will be required prior to removal of the wastes. Contaminated materials will be characterized using physical & chemical analysis as required to determine if the resulting wastes are hazardous wastes regulated under part 111 of PA 451 (NREPA). Non-hazardous contaminated materials will be removed and managed as “Liquid Industrial Waste” as required under part 121 of PA 451 (NREPA).

Waste Disposal Methods for Non-Contaminated Materials

Non-contaminated waste materials generated during cleaning or maintenance of storm sewer structures will be properly disposed using one of the following methods:

1. Have the waste transported to drying beds to separate the solid/liquid waste. This is usually performed at a publicly owned treatment plant or at a privately owned permitted facility where the liquid portion of the waste stream is separated from the solids and treated.
2. Request permission from the local wastewater treatment plant operator to discharge the combined solid/liquid waste into the sanitary system. Most treatment plants will require pre-treatment prior to the discharge. All applicable local ordinance provisions must be followed.

3. When conducting catch basin maintenance activities where the above options are not available, the following methods can be used as long as there are no discharges to surface waters during dry weather conditions:
 - Conduct visual inspection to ensure the water in the sump has not been contaminated. If necessary, collect a grab sample of the water and look for signs of contamination such as visible sheen, discoloration, obvious odor, etc. If there is any doubt of the quality of the water, it should be collected into a vacuum truck and treated as waste under Part 121 or Part 115 of PA 451 (NREPA).
 - Using a sump pump, or any other pumping mechanism, remove the majority of water in the sump of the basin without disturbing the solid material below. Do not use pumps connected to the vacuum truck's holding tank.
 - The clear water may then be directly discharged to one of the following:
 - Sanitary system (with prior approval from local sewer authority).
 - Curb and gutter.
 - Back into the storm sewer system as long as it is contained within the system during dry weather condition to ensure no discharge into surface water.
 - Applied to the ground adjacent to the catch basin (evenly distributed at a maximum rate of 250 gallons/acre/year).
 - The remaining liquid/solid in the sump should be collected with a vacuum truck and disposed of off-site in accordance with MI P.A. 451 Parts 115 or 121.

WEBSD does not currently own or operate storm sewer cleaning or transportation equipment. If WEBSD contracts with a private contractor to transport liquids generated from cleaning of catch basins or other structures, that contractor must be registered and permitted as a Uniform Liquid Industrial Waste Hauler under the provisions of HMTA.

Waste Disposal Methods for Contaminated Materials

Waste materials generated during operation and maintenance of storm sewer systems found or suspected to be contaminated with pollutants or hazardous substances will be characterized, packaged, marked, labeled, stored, transported, and disposed as a regulated waste under Part 121 or Part 115 of PA 451 (NREPA).

2.6.7 Pollution Prevention/Good Housekeeping – Municipal Operations & Maintenance Activities

WEBSD recognizes the importance of reducing pollutant runoff from maintenance activities. The following procedure will include an assessment of the potential activities for the potential to discharge pollutants. The assessment shall identify the pollutants that could be discharged from the applicable operation and maintenance activity and the BMPs implemented or to be implemented to prevent or reduce pollutant runoff.

PROCEDURE

Applicable operations and maintenance activities include parking lot and sidewalk maintenance, cold weather operations, vehicle washing, maintenance of vehicles, land disturbance and landscape. Bridge maintenance, right-of-way maintenance and unpaved road maintenance do not apply to WEBSD.

Roadways/Parking Lots

Maintenance: Pothole, sidewalk, curb and gutter repair.

Possible Pollutants: Fuel, oil, sediment, concrete.

BMPs to address Pollutants:

1. Contractors and in-house staff contracted to complete for these jobs are informed of stormwater management practices to reduce pollution in stormwater.
2. Avoid mixing excess amounts of fresh concrete or cement.
3. Never dispose of washout into the street, storm drains, ditches or creeks.
4. Stencil storm drains to prevent disposal of wash water.
5. Schedule patching, resurfacing and surface sealing during dry weather.
6. If it rains unexpectedly, take appropriate action to prevent pollution of stormwater runoff (e.g., divert runoff around work areas, cover materials).
7. Maintain pollution prevention/good housekeeping practices, which is to remove stockpiles (asphalt materials, sand, etc.) by the end of the day to a covered location. Alternatively, cover the piles if they cannot be moved.

Process for updating assessment: Contractor or project is assessed on an ongoing basis, and problems are addressed when found.

Cold Weather Operations

Maintenance: Plowing, sanding, deicing, snow pile disposal.

Possible Pollutants: Sodium, magnesium, calcium, potassium, chloride, turbidity.

BMPs to address Pollutants:

1. Keep all deicing material covered or in waterproof containers.
2. Prevent deicer drainage to storm sewers.
3. Mechanical removal of as much snow or ice as possible prior to applying deicing chemicals.
4. Proper salt storage management.
5. Maintain application equipment in good working condition.

Process for updating assessment: BMPs will be assessed for effectiveness within 30 days following their addition or removal.

Vehicle Washing

Maintenance: Washing of buses, staff vehicles and maintenance equipment.

Possible Pollutants: Petroleum based wastes, metals, and nutrients.

BMPs to address Pollutants:

1. All vehicle washing and maintenance is to be performed indoors where drains connecting to the sanitary system can receive all wastes.
2. Alternatively, vehicle washing can be performed at a commercial auto wash facility.
3. Alternatively, rinse grass from lawn care equipment on permeable (grassed) areas.
4. School car wash fundraising events will not be permitted on school grounds.

Process for updating assessment: BMPs will be assessed for effectiveness within 30 days following their addition or removal.

Vehicle Maintenance

Possible Pollutants: Petroleum based wastes, metals, and nutrients.

BMPs to address Pollutants:

1. Oil-water separators will be inspected routinely and serviced as necessary to maintain efficiency.

2. All vehicle or equipment maintenance will take place inside or away from storm drains where drains connecting to the sanitary system can receive all wastes.
3. All drains within maintenance garages will be dye tested to assure that no drains flow into the separate storm sewer system.
4. Recycle used motor oil, diesel oil, other vehicle fluids, and vehicle parts whenever possible.

Process for updating assessment: BMPs will be assessed for effectiveness within 30 days following their addition or removal.

Landscaping

Possible Pollutants: Wood chips, sediment, sand, and compost.

BMPs to address Pollutants:

1. Place temporary stockpiled material away from storm drains, and berm or cover stockpiles to prevent material releases into the storm drain. Alternatively, place stockpiles on permeable (grassed) areas.
2. Conduct annual stream back inspections.
3. Provide adequate buffer areas at stream banks.
4. Proper Storage, handling, and use of pesticides, herbicides, and fertilizers.

Process for updating assessment: BMPs will be assessed for effectiveness within 30 days following their addition or removal.

Land Disturbance

Possible Pollutants: Sediment runoff.

BMPs to address Pollutants:

1. Plan land clearing so soil is not exposed for long periods of time.
2. Place temporary stockpiled material away from storm drains, and berm or cover stockpiles to prevent material releases into the storm drain.
3. Protect against sediment flowing into drains.
4. Install sediment barriers.

Process for updating assessment: BMPs will be assessed for effectiveness within 30 days following their addition or removal.

ASSESSMENT

Pollution prevention inspections ensure that these BMPs are carried out properly. Any issues identified during the inspections will be reviewed and addressed by the Stormwater Manager.

2.6.8 Street Sweeping Procedure, Prioritization & Schedule

PRIORITIZATION

The MDEQ NPDES Phase II Stormwater Discharge Permit requires a procedure for prioritizing owned streets, parking lots, and other impervious infrastructure for street sweeping based on the potential to discharge pollutants. WEBSD evaluated each facility for the presence of the following factors:

- Potential for polluting activities to be conducted outside
- Proximity to water bodies
- Traffic volume
- Land use
- Absence of any factors



PROCEDURE

WEBSD does not own or operate sweeping equipment. However, WEBSD will be proactive and undertake the following activities to reduce the potential to discharge pollutants to surface waters of the state from parking lots and other impervious infrastructures.

1. Conduct seasonal efforts to remove leaves.
2. Inspect parking lot and street areas.
3. Conduct hand sweeping of debris to prevent accumulated wastes.
4. Waste disposal areas will be kept free of litter and debris.
5. Analyze sediment, removed from an inlet cleaning if it is suspected of being contaminated with a hazardous material, prior to disposal. Sediment or materials determined to be hazardous waste will be disposed of in accordance with Section 2.6.6 Structural BMP Operation & Maintenance Waste Disposal procedures.
6. Contract out street cleaning when appropriate.

This prioritization will be updated as facilities and structural stormwater controls are added, removed, or no longer owned or operated by the applicant following routine inspections, or as traffic volume, land use or sediment and trash accumulation increases.

PRIORITIZATION LEVELS & SCHEDULE

All low, medium and high prioritized parking lots and streets are inspected on the same schedule in an effort to reduce pollutants.

Facility Name	Priority Level of Potential Discharge* (High, Med, Low)	Street Sweeping Schedule
Abbott Middle School	Medium	Hand Sweep Annually in the Spring
Administration Building	Low	Hand Sweep Annually in the Spring
Doherty Elementary School	Low	Hand Sweep Annually in the Spring
Facilities and Operations Facility	High	Hand Sweep Annually in the Spring
Gretchko Elementary School	Low	Hand Sweep Annually in the Spring
Orchard Lake Middle School	Medium	Hand Sweep Annually in the Spring
Roosevelt Elementary School	Low	Hand Sweep Annually in the Spring
Scotch Elementary School	Low	Hand Sweep Annually in the Spring

Facility Name	Priority Level of Potential Discharge* (High, Med, Low)	Street Sweeping Schedule
Sheiko Elementary School	Low	Hand Sweep Annually in the Spring
West Bloomfield High School	High	Hand Sweep Annually in the Spring

If required, following monthly inspections indicating higher traffic volume, land use or sediment and trash accumulation at all low, medium and high prioritized parking lots and streets, the District shall contract a commercial street sweeping company.

DISPOSAL

If a commercial street sweeper is contracted to clean a parking lot and street areas for WEBSD, the street sweeping activities are subject to the solid waste requirements. Solid waste must be managed under Part 115 requirements. Dispose of the solid waste in a licensed landfill. The contractor hired to do the street sweeping is responsible for proper disposal of the waste material. The contracted sweeping will not be completed when streets are wet, so dewatering of the collected debris should not be required.

2.6.9 Managing Vegetated Properties

WEBSD has established this policy to prevent or reduce pollutant runoff from vegetated land:

1. WEBSD requires all contracted personnel who participate in the application of pesticides, to will be trained and licensed by the State of Michigan under the Commercial Pesticide Application Certification Program for relevant categories as applicable, to prevent or reduce pollutant runoff from vegetated land.
2. Whenever practicable, an integrated pest management techniques will be implemented.

2.6.10 Contractor Requirements & Oversight

WEBSD requires contractors to comply with pollution prevention and good housekeeping BMPs. WEBSD will perform one or all of the following activities for applicable contractors and projects to comply with all pollution prevention and good housekeeping BMPs as appropriate and comply with pollution as well as provide oversight to ensure compliance:

- Contractor Notification
- Contractor Training
- Pre-project Meeting/Review
- Periodic Inspections

Prior to conducting work, contractors will be directed to conduct online “Contractor Training.”

2.6.11 Pollution Prevention/Good House Keeping Training



A training program is an important component to effective pollution prevention. Training is required for all employees whose job responsibilities involve municipal or maintenance activities. Training is discussed in detail in Section 3.0 of this SWMP.

2.6.12 Pollution Prevention/Good Housekeeping –BMP Table

BMP	Description of BMP	Timeframe	Measurable Goal	Measure of Assessment	Responsible Party
BMP #2.6.12.1 Structural Control Inventory	Provide an up-to-date inventory of the number of stormwater structural controls for each facility's (i.e. catch basins, detention ponds). Update facilities potential to discharge pollutants (high, medium, low) following the update.	Initial update completed, further updated as needed within 30 days following the completion a new facility or reconstruction/redevelopment. Ongoing 2017-2021	100% of stormwater structural controls inventoried.	Maintain list of inventory and potential to discharge priority level. Submit updated list with progress report, noting if priority levels have changed.	WEBSD
BMP #2.6.12.2 SWPPP development & implementation (SOP)	Develop a "Stormwater Pollution Prevention Plan (SWPPP)" for maintenance, transportation, and storage facilities/Implement policies & procedures.	Developed & Implemented Ongoing 2017-2021	SWPPP completed and 100% of inspections implemented.	Copy of SWPPP and copy of inspections.	WEBSD
BMP #2.6.12.3 Stormwater Structural Control Inspections	Visually inspect stormwater controls identified on facility maps.	Annually 2017-2021	Routine schedule implemented and inspections reviewed by stormwater manager.	Maintain inspection forms/reports.	WEBSD
BMP #2.6.12.4 Review for BMP's Implemented	While inspecting stormwater controls, review the site for BMPs currently implemented to prevent or reduce pollutant runoff at each facility; such as storm drain stencils, garden areas, areas cleaned, areas repaired, SEMCOG poster placement, Illicit discharge education posters, and spill kits.	Annually 2017-2021	Annual inspections completed and reviewed by stormwater manager.	Documentation of inspection findings (number of posters, number of spill kits, inventory of gardens, pictures of stencils, pictures of spill kits).	WEBSD

BMP	Description of BMP	Timeframe	Measurable Goal	Measure of Assessment	Responsible Party
BMP #2.6.12.5 Prioritization of Storm Sewer Locations for Maintenance & Cleaning	Following the inspection, the stormwater controls should be prioritized for cleaning and maintenance. Prioritize locations based on: (1) drainage structures that are designated as consistently generating the highest volumes of trash and/or debris, (2) areas with high amounts of build-up sediment, (3) areas of significant cracking or sinkholes.	Annually 2017-2021	Prioritization locations identified.	Copy of prioritization.	WEBSD
BMP #2.6.12.6 Cleaning & Maintenance (Catch Basin/ Manhole Cleaning)	WEBSD will ensure that all waste materials generated during operation and maintenance of structural stormwater controls are properly characterized, transported, and disposed as required under State of Michigan PA 451 Part 111 (hazardous wastes), Part 121 (liquid industrial wastes), and Part 115 (solid wastes).	As needed or once per permit cycle 2017-2021	Prioritized locations cleaned once per permit cycle. All waste disposed as required.	Copies of Waste Manifests.	WEBSD
BMP #2.6.12.7 BMP Operation & Maintenance (O&M) Guidance Manuals	Maintain existing schedules, maps and inspection reports in current Operation & Maintenance Manuals. Develop Manuals for new facilities.	Annually 2017-2021	Manuals reviews and updated annually.	Manuals up-to-date and available for review.	WEBSD
BMP #2.6.12.8 Roadways & Parking Lots	Storm drains stenciled to prevent disposal of wash water into storm drains.	As needed 2017-2021	Storm drain stencils inspected and maintained as need.	Copy of work order. Photos of stenciling.	WEBSD
BMP #2.6.12.9 Cold Weather Operations	Proper salt storage management. Maintain storage bags and equipment in good working condition.	Ongoing 2017-2021	Continue proper salt storage and management as previously implemented.	Copy of SWPPP comprehensive inspection report.	WEBSD

BMP	Description of BMP	Timeframe	Measurable Goal	Measure of Assessment	Responsible Party
BMP #2.6.12.10 Vehicle Washing	All vehicle washing and maintenance is to be performed indoors where drains connecting to the sanitary system can receive all wastes.	Ongoing 2017-2021	100 % of applicable staff trained on were to wash vehicles.	Copy of sign-in sheets and Agenda (if available).	WEBSD
	Alternatively, rinse grass from lawn care equipment on permeable (grassed) areas.		100 % of applicable staff trained on were to wash vehicles.	Copy of sign-in sheets and Agenda (if available).	
	School car wash fundraising events will not be permitted on school grounds.		Notice sent to staff regarding policy.	Copy of e-mail or policy.	
BMP #2.6.12.11 Vehicle Maintenance	All drains within maintenance garages will be dye tested to assure that no drains flow into the separate storm sewer system.	Completed, additional testing as needed 2017-2021	100% of floor drains inspected.	Copy of inspection report.	WEBSD
	Oil-water separators will be inspected routinely and serviced as necessary to maintain efficiency.	Annually 2017-2021	Oil-water separators cleaned and functioning properly.	Copy of invoices or shipping papers.	
	Recycle used motor oil, diesel oil, other vehicle fluids, and vehicle parts whenever possible.	As needed 2017-2021	Reduction in amount of disposed material and amount of material shipped for off-site disposal.	Copy of invoices or shipping papers.	
BMP #2.6.12.12 Stream Bank Inspection	Conduct stream bank inspections. Inspect banks along properties to identify erosion or potential erosion problems and check for water clarity conditions. Properly maintain buffer areas.	Annually 2017-2021	100% of bank inspections completed.	Copy of inspection sheets/reports.	WEBSD

BMP	Description of BMP	Timeframe	Measurable Goal	Measure of Assessment	Responsible Party
BMP #2.6.12.13 Land Disturbance	Place temporary stockpiled material away from storm drains, and berm or cover stockpiles to prevent material releases into the storm drain. Protect against sediment flowing into drains.	As needed 2017-2021	100 % of applicable staff trained.	Copy of sign-in sheets and Agenda (if available).	WEBSD
BMP #2.6.12.14 Street Sweeping	Hand sweep annually in the Spring.	Monthly 2017-2021	Inspections completed.	Copy of work order or schedule.	WEBSD
	Street sweeping conducted by a professional sweeping company.	As needed 2017-2021		Copy of invoice or disposal documentation.	
BMP #2.6.12.15 Vegetated Properties (Pesticides)	WEBSD requires all contracted personnel who participate in the application of pesticides will be trained and licensed by the State of Michigan under the Commercial Pesticide Application Certification Program for relevant categories as applicable, to prevent or reduce pollutant runoff from vegetated land.	Ongoing 2017-2021	Application of pesticides will only be completed by trained and licensed applicators.	Documentation of in-house staff license or copy of contractor receipt.	WEBSD
BMP #2.6.12.16 Contractor Oversight	WEBSD requires contractors to comply with pollution prevention and good housekeeping BMPs. WEBSD will complete contractor notification, pre-project meeting and periodic inspections to provide oversight to ensure compliance.	As needed 2017-2021	Contractors training and informed of pollution prevention and good housekeeping techniques.	Copy of sign-in sheets, pre-project meeting notes or inspections.	WEBSD & Contractors/ Vendors
	Direct contractors to online "Contractor Training" prior to conducting work. [All Stormwater Training is outlined in Section 3.0 Training]				
BMP #2.6.12.17 Training	Pollution prevention and good housekeeping training.	Once per permit cycle or during the 1 st year of employment 2017-2021	Goal of providing training to maintenance staff who work for WEBSD. [All Stormwater Training]	Copy of sign-in sheets and Agenda (if available).	WEBSD



BMP	Description of BMP	Timeframe	Measurable Goal	Measure of Assessment	Responsible Party
			is outlined in Section 3.0 Training]		
BMP #2.6.12.18 Pollution Prevention & Good Housekeeping Activities Review	Summary of annual activities for the “Pollution Prevention and Good Housekeeping.”	Annually 2017-2021	Annual review of SWMP performed. Maintain copy of SWMP annual review. Determine the level of district involvement and identify areas of improvement.	Maintain copy of SWMP annual review and evaluation information for progress reporting.	WEBSD

3.0 Training

WEBSD will provide education and training for applicable employees and contractors using a variety of methods depending on their specific job function. At a minimum, all applicable WEBSD employees will be required to have general awareness training on the topics included in the PEP. All applicable WEBSD employees will be required to attend or otherwise obtain general awareness training at least once per permit cycle or during the 1st year of employment.

WEBSD has implemented a comprehensive staff training program based on each employee's participation and responsibilities under this program. The employee training program is categorized in three (3) separate levels summarized as follows:

LEVEL I TRAINING-General Awareness Training

Level I training is required for all district employees at least once per permit cycle for current employees and during the 1st year of employment for new employees. General Awareness training is provided in the form of an 11-minute video produced by Arch Environmental Group titled, **"When it Rains, It Drains...The Stormwater Question."** This video is also available on the stormwater webpage.

LEVEL II TRAINING-General Awareness, Pollution Prevention & Good Housekeeping, and Illicit Discharge Reporting

Level II training is required for all employees whose job responsibilities involve illicit discharge related activities, or indicate a potential to cause, witness, or report an illicit discharge or connection. This training includes the previously described video as well as a review of the district's Stormwater Management Program Plan and instruction on identification and notification of illicit discharges or connections. This training is provided to applicable transportation, maintenance, custodial, and food service employees.

LEVEL III TRAINING-Maintenance and Storage Facility Stormwater Pollution Prevention Plans, Lawn Maintenance, and Structural Control Inspection, Maintenance, and Repair Training

Level III training is provided in the form of videos, PowerPoint presentations, and hands-on training. This training is provided to district supervisors, maintenance, and lawn service staff.

LEVEL IV TRAINING (CONTRACTORS) – Contractor Training

Contractors employed by WEBSD to conduct activities with a potential to impact water quality. Contractor training is provided in the form of an online video produced by Arch Environmental Group titled, **"Stormwater Awareness & Pollution Prevention Training for Contracted Public School District Vendors & Employees."**

3.1 Training Table

BMP	Description	Measurable Goal	Target Audience	Timeframe
Level I Training	General Awareness Training	Record attendance with sign-in sheets for each training session. WEBSD will retain records of trainings for future review with regard to SWMP.	All district employees.	Once per permit cycle for current employees and during the 1 st year of employment for new employees. 2017-2021
Level II Training	General Awareness, Pollution Prevention & Good Housekeeping, and Illicit Discharge Reporting	Record attendance with sign-in sheets for each training session. WEBSD will retain records of trainings for future review with regard to SWMP.	In-house custodial, maintenance, transportation and food service employees.	Once during permit cycle current employees and during the 1 st year of employment for new employees. 2017-2021
Level III Training	General Awareness, Pollution Prevention & Good Housekeeping, Illicit Discharge Reporting, Maintenance and Storage Facility Stormwater Pollution Prevention Plans, Lawn Maintenance, and Structural Control Inspection, Maintenance, and Repair Training	Record attendance with sign-in sheets for each training session. WEBSD will retain records of trainings for future review with regard to SWMP.	District supervisors, in-house maintenance, and lawn service staff.	Once every three (3) years within permit cycle for current applicable employees if conducting activities outlined in the SWMP. 2017-2021
Contractor Training	Stormwater specific training for on-site contractors.	Require stormwater-specific training for on-site contractors. WEBSD will provide referral information for contractors to obtain stormwater education through private or state training resources. Additionally, the referral will notify contractors of the location of the current WEBSD SWMP for review. Obtain records of training for future	Contractors employed by WEBSD to conduct activities with a potential to impact water quality.	At the time of employment. 2017-2021

BMP	Description	Measurable Goal	Target Audience	Timeframe
		review of the SWMP.		

4.0 Total Maximum Daily Load (TMDL) Restrictions

4.1 What are TMDLs

When a lake or stream fails to meet federal water quality standards, the Clean Water Act requires that a “Total Maximum Daily Load (TMDL)” limit be developed. Studies are completed to determine the sources impacting the water body and to develop goals so that the water body can meet the applicable standards.

A TMDL describes the process used to determine how much of a particular pollutant a lake or stream can assimilate and sets pollution reduction targets for the water body.

In order for this SWMP to be consistent with the requirements and assumptions of the TMDL approved by the USEPA, WEBSD has identified and prioritized the following actions to reduce pollutants in stormwater discharges and make progress in meeting the Water Quality Standards (WQS). The following sections outline the prioritized actions and TMDL monitoring designed to meet these objectives.

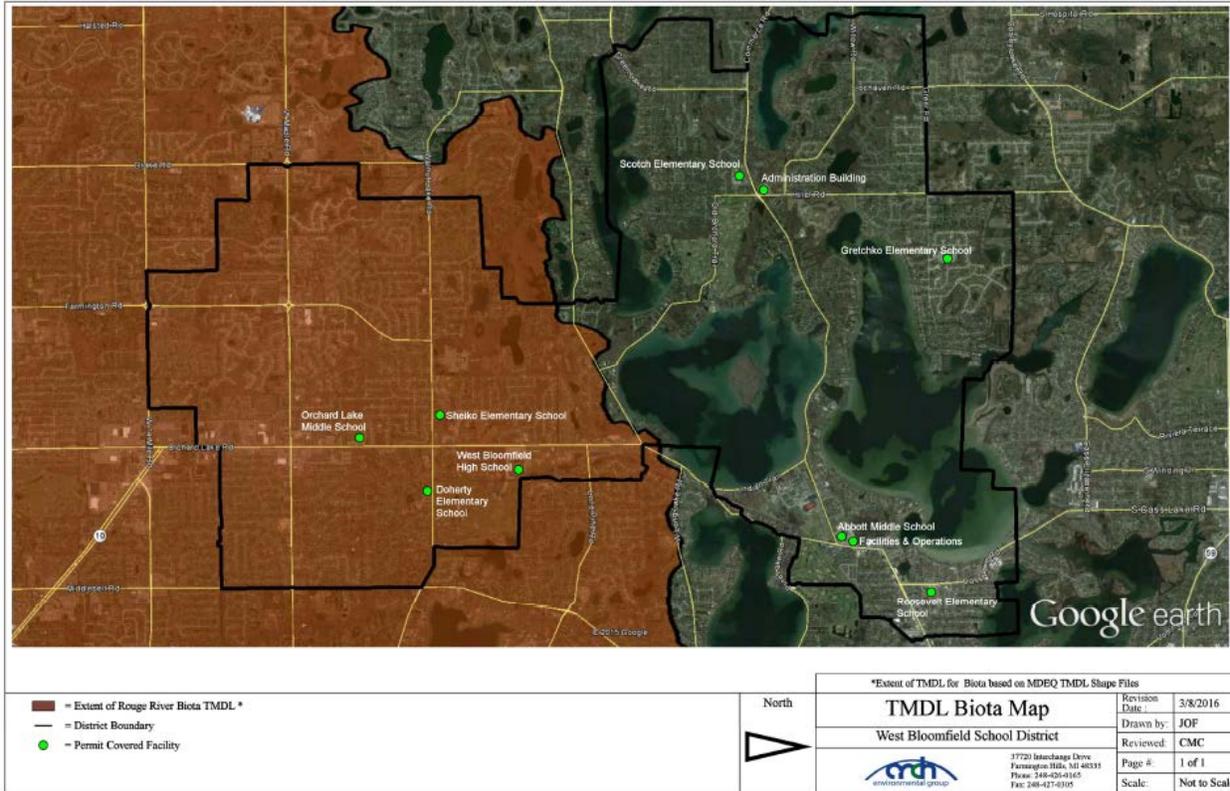
4.2 Rouge River TMDL

The Rouge River was placed on Section 303(b) list for both **E. coli & biota (sedimentation/siltation)**. The rouge was placed on the list for biota due to poor macroinvertebrate and fish community levels. Surveys conducted indicated that lack of habitat along with siltation/sedimentation were the predominant issues. Additionally, the Rouge River was placed on the Section 303(d) list due to impairment of recreational uses as indicated by the presence of elevated levels of E. coli.

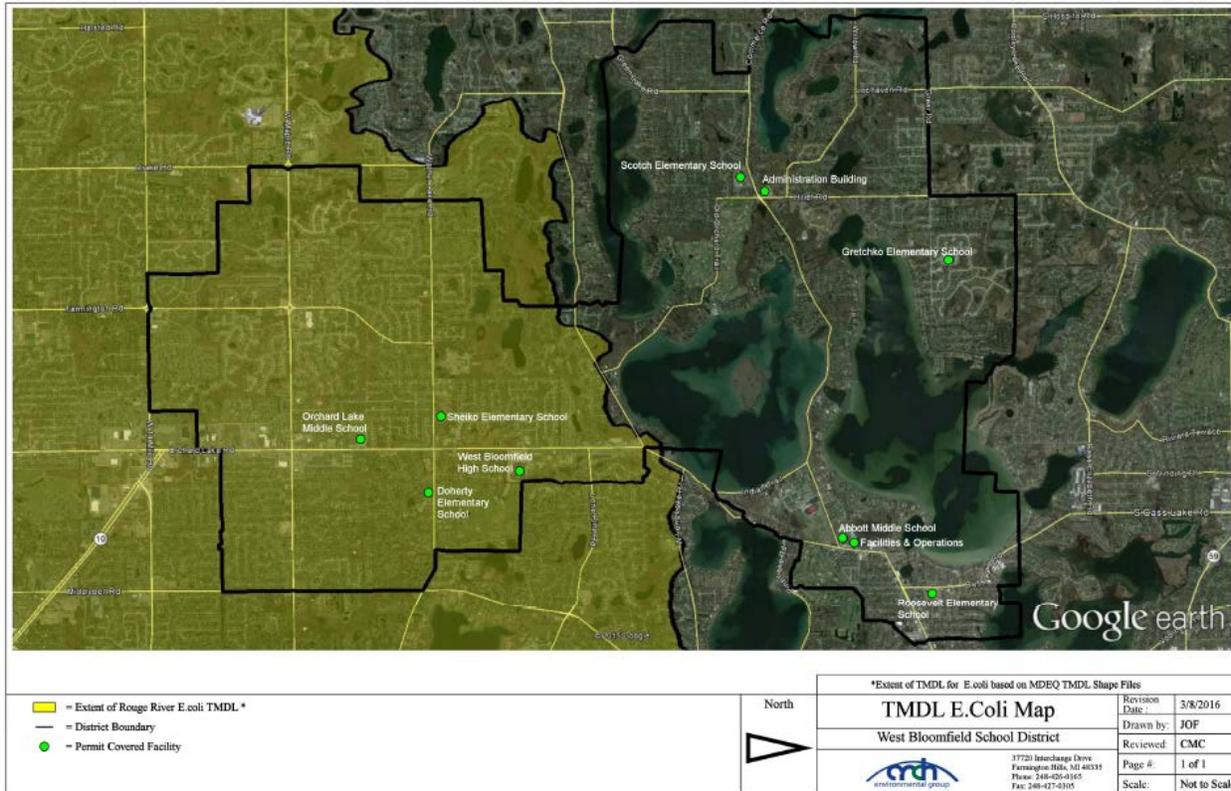
The following WEBSD facilities discharge stormwater either directly or indirectly within the Rouge River TMDL boundaries as identified in Map 3 and 4 below:

1. Doherty Elementary School
2. Orchard Lake Middle School
3. Sheiko Elementary School
4. West Bloomfield High School

Map 3 – Rouge River Biota TMDL Area



Map 4 – Rouge River E.coli TMDL Area



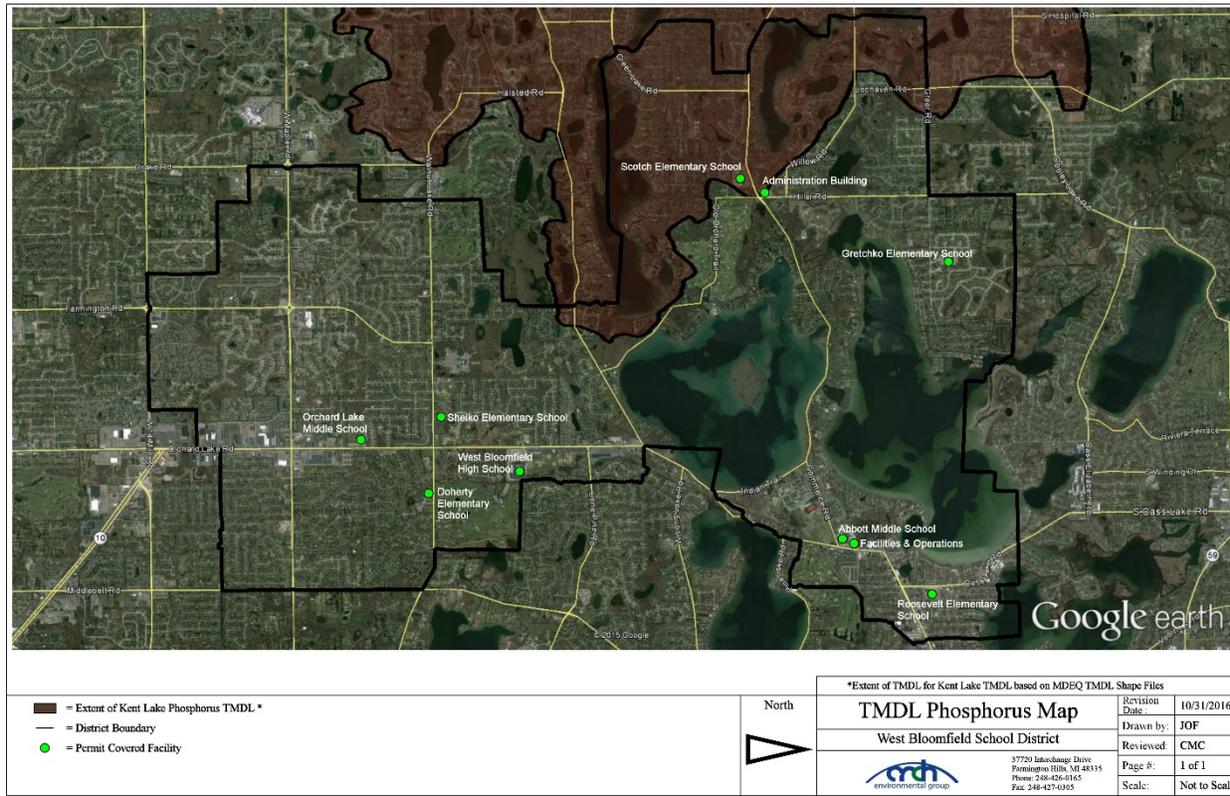
4.3 Kent Lake TMDL

Kent Lake is an impoundment of the Huron River and placed on the Section 303(d) list for **phosphorous**. These lakes receive high nutrient loadings, causing severe water quality problems, most notably nuisance algae blooms.

The following WEBSD facilities discharge stormwater either directly or indirectly within the Huron River TMDL boundaries and are subject to the TMDLs identified in Map 5 below:

1. Scotch Elementary School
2. Administration Building

Map 5 – Kent Lake Phosphorous TMDL Area



4.5 TMDL Implementation – Monitoring Plan

4.5.1 Prioritized TMDL Best Management Practices

The below lists stormwater BMPs that are targeted to improve water quality impairments associated by the TMDL.

E. COLI/BIOTA

1. WEBSD will use its website to provide the public with information regarding pet waste (SEMCOG links). Additionally, SEMCOG pet waste posters are placed at various school buildings.
2. WEBSD will prohibit illicit discharges, inspect and monitor suspected illicit discharges, and enforce elimination of the illicit discharges and connections.
3. WEBSD has reviewed all facilities for cross-connections between the sanitary and storm sewer systems.
4. WEBSD will conduct bimonthly inspections of parking lot and curb areas and hand clean as needed.
5. WEBSD has established programs for soil erosion and sediment control from new or redevelopment construction. Such developments require permits and inspections for practices to keep exposed soils on site or controlled from runoff.
6. WEBSD has implemented routine visual inspections of stormwater structural controls.
7. WEBSD will remove excessive sediments from structural sediment removal systems to maintain the maximum designed performance. Sediments will be disposed of offsite in accordance with Parts 115 or 121.

PHOSPHOROUS

1. The use of Phosphorous containing fertilizers is restricted for use at all WEBSD facilities (unless soil testing indicates the necessity of adding phosphorous). In addition, all fertilizer use is restricted to athletic fields and/or areas designated as “curb appeal”.
2. WEBSD will continue to use its website to provide the public information regarding pesticide use, pollution prevention, soil testing, stream buffers, and lawn fertilizers.
3. WEBSD will continue to use its website to provide the public with information on “school” carwashes.
4. WEBSD will continue to use its website to provide the public with information regarding pet waste. Additionally, SEMCOG pet waste posters are placed at various school buildings.
5. WEBSD has established programs for soil erosion and sediment control from new or redevelopment construction. Such developments require permits and inspections for practices to keep exposed soils on site or controlled from runoff. WEBSD conducts routine visual inspections of stormwater structural controls. WEBSD will remove excessive sediments from structural sediment removal systems to maintain the maximum designed performance. Sediments will be disposed of offsite in accordance with Parts 115 or 121.

ALL TMDLs

1. WEBSD will continue to use its website to provide the public information regarding local TMDL issues (phosphorous, E.coli, and biota TMDL Best Management Practice).
2. WEBSD will continue to educate staff, faculty, and students using various venues including the “**Seven Simple Steps to Clean Water**” program educational materials developed by the various watershed groups specifically related to these issues on the stormwater management webpage.
3. The district passed a post-construction stormwater board resolution to require implementation of the stormwater standards for construction.
4. Adequately maintains vegetation around stormwater facilities, ditches, and ponds.
5. Provide training to applicable staff and confirm training from contractors including restrictions on the use of phosphorous containing fertilizers, soaps, cleaners and other chemicals that could impact the separate storm drain system.

Procedure

Prioritization of BMPs is based on WEBSD targeted TMDL pollutants. Priority is given to BMPs that reduce E. coli loads, reduce phosphorous, and address water quality for biota.

Assessment

The MDEQ Phase II Stormwater Discharge Permit Application requires a monitoring plan for assessing the effectiveness of the BMPs currently being implemented, or to be implemented, in making progress toward achieving the TMDL pollutant load reduction requirement. Monitoring shall be specifically for the pollutant identified in the TMDL. Monitoring may include wet weather outfall/discharge point monitoring and dry-weather screening. A summary of the monitoring results and conclusions related to TMDLs will be provided during progress reporting.

WEBSD will conduct the following for applicable TMDLs:



**West Bloomfield School District
Stormwater Management Program Plan (SWMP)**



1. Samples will be collected at least twice during the permit cycle; including previous monitoring. The goal is to collect samples from at least 50% of the outfall/discharge points at facilities associated with the TMDL. An effort will be made to sample water quality parameters during a representative (i.e. >0.25" and <1.5") wet weather event.
2. The results of the sampling will be assessed and summarized in a brief report to be shared with the public via the stormwater webpage at least once during the permit cycle.
3. Based on a review of the sampling results, BMP implementation will be reviewed and BMPs may be updated or revised to ensure progress toward achieving TMDL pollutant load reductions.

4.5.2 TMDL - BMP Table

BMP	Description of BMP	Timeframe	Measurable Goal	Measure of Assessment	Responsible Party
BMP #4.5.2.1 Webpage	WEBSD will use its website to provide the public with information regarding pet waste (SEMCOG links). Additionally, SEMCOG pet waste posters are placed at various school buildings.	Ongoing 2017-2021	Posters placed throughout WEBSD facilities.	Maintain links on webpage. Maintain copies of webpage review.	WEBSD
	WEBSD will continue to use its website to provide the public information regarding local TMDL issues (phosphorous, E.coli, and biota TMDL Best Management Practice).		Material available on webpages.		
BMP #4.5.2.2 Sampling	Samples will be collected outfall/discharge points at facilities associated with the TMDL. An effort will be made to sample water quality parameters during a representative (i.e. >0.25" and <1.5") wet weather event.	Twice per Permit Cycle 2017-2021	The goal is to collect samples from at least 50% of the outfall/points of discharge at facilities associated with the TMDL.	Copy of inspection paperwork and sample results.	WEBSD
BMP #4.5.2.3 Sample Summary	The results of the sampling will be assessed and summarized in a brief report to be shared with the public via the stormwater webpage at least once during the permit cycle.	Once per Permit Cycle 2017-2021	Report available for public review.	Report completed and available on webpage.	WEBSD



Appendix "A"

Outfall/Discharge Point Receiving Water Table & Site Stormwater Structure Maps



Appendix "B"

**School Board Policy Resolution, Post Construction Stormwater Runoff Program Policy and
Procedures &
Municipal Separate Storm Sewer System Noncompliance Enforcement Tracking Sheet**



Appendix "C"

SEMCOG Posters



Appendix "D"

Inspection Field Worksheets & Stormwater Sampling & Analysis Protocol for School District MS4 Clients (SOP-101)



Appendix "E"

Illicit Discharge Illegal Spill Reporting Form