



STORM WATER MANAGEMENT PROGRAM
FOR
THE CITY OF GROSSE POINTE PARK
MUNICIPAL SEPARATE STORM SEWER SYSTEM

PREPARED FOR:
THE CITY OF GROSSE POINTE PARK
by Cowles Environmental

APRIL 1, 2014
REVISED FEBRUARY 22, 2019
REVISED APRIL 8, 2021
REVISED APRIL 4, 2024
REVISED JANUARY 2, 2025





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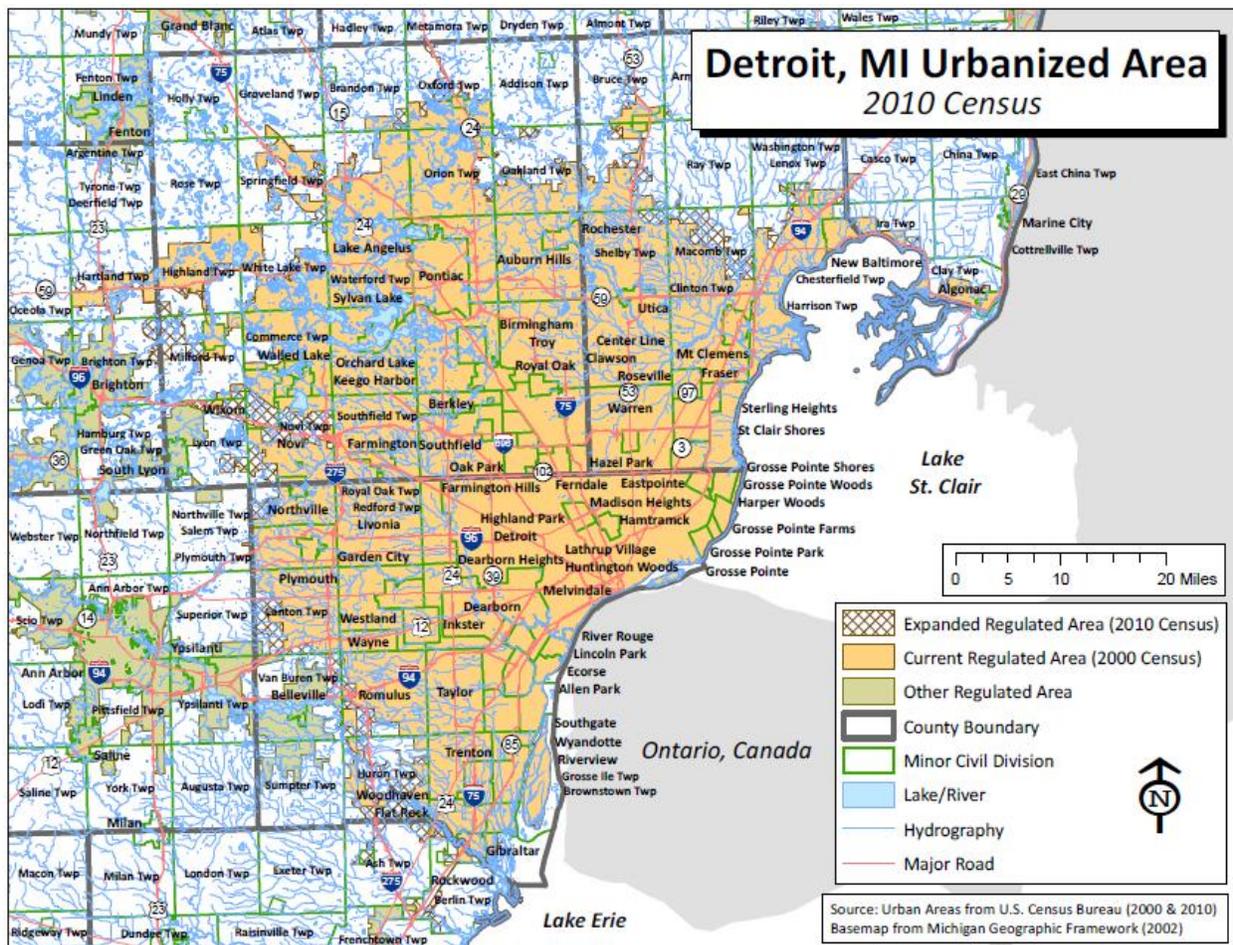
BMPs	Best Management Practices
City	City of Grosse Pointe Park
CRWC	Clinton River Watershed Council
DPW	Department of Public Works
<i>E. coli</i>	Escherichia coli
EGLE	Michigan Department of Environment, Great Lakes & Energy
Federal Act	Federal Water Pollution Control Act, as amended (33 USC 1251 et seq)
IDEP	Illicit Discharge Elimination Program
MEP	Maximum Extent Practicable
MS4	Municipal Separate Storm Sewer System
NPDES	National Pollutant Discharge Elimination System
O&M	Operation and Maintenance
OSDS	Onsite Sewage Disposal Systems
PEAS	Pollution Emergency Alerting System
PEP	Public Education Plan
SEMCOG	Southeast Michigan Council of Governments
SESC	Soil Erosion and Sedimentation Control
State Act	Michigan Act 451, Public Acts of 1994, as amended
SWMP	Storm Water Management Program
TMDL	Total Maximum Daily Load
WQS	Water Quality Standards

1 Purpose

The purpose of this Storm Water Management Program (SWMP) is to comply with the provisions of the Federal Water Pollution Control Act, as amended (33 USC 1251 et seq; the “Federal Act”), Michigan Act 451, Public Acts of 1994, as amended (the “State Act”) Part 31, and the Michigan Part 21 Rules, Wastewater Discharge Permits (R 323.2101 et seq.). The SWMP is designed to do both of the following:

- (a) Reduce the discharge of storm water pollutants to the maximum extent practicable (MEP), and
- (b) Protect water quality and satisfy the appropriate water quality requirements of the Federal and State Acts.

Figure 1 – Map of the Detroit Urbanized Area





2 Background

The City of Grosse Pointe Park (City) lies entirely within the Detroit Urbanized Area (See Figure 1) designated by the US Census Bureau and therefore is required to obtain a National Pollutant Discharge Elimination System (NPDES) discharge permit. Most of the City is served by a Municipal Separate Storm Sewer System (MS4), but most of Patterson Park, and most of Windmill Pointe Park are served by combined sewers. Only the portion of the City served by separate storm sewers comprises the “regulated area” (See Figure 2). As a waterfront community, having many water-oriented active and passive recreational opportunities, the City recognizes the importance of proper storm water management. This direct stormwater drainage can have a significant impact on waterfront activities in the City as well as in Lake St. Clair as a whole.

The City is committed to minimizing the impact of its drainage through the implementation of this Storm Water Management Program.

Grosse Pointe Park is an affluent city in Wayne County in the U.S. state of Michigan. The population was 11,601 at the 2020 census. Bordering on Detroit with frontage on southern Lake Saint Clair, it is the westernmost of the noted Grosse Pointe suburbs, with the oldest overall housing stock of the five cities. Grosse Pointe Park is 6 miles (9.7 km) east of downtown Detroit and thus is home to many who commute to the city daily.

The City has a total area of 3.71 square miles, of which 2.17 square miles is land and 1.54 square miles is water. The water is part of Lake St. Clair. There are no other surface waters within the City.

As a commercial waterway, Lake St. Clair is a vital link to the world for the distribution of the invaluable natural resources of Michigan, Minnesota, Wisconsin, Illinois, Indiana, and Ontario, Canada providing an anchor to the economic influence in the region. Waterborne commerce exceeds 60 64 million shipping tons per year; of which nearly 45 million originates in Michigan and includes iron ore, limestone, coal, and grain.



The neighborhoods in Grosse Pointe Park are built on a standard grid street pattern which flows out of Detroit, and housing ranges from tightly-packed single- and multi-family brick houses, often rentals, on the far west side of the Park, to rows of traditionally-styled single family homes generally averaging over 3,000 square feet, to multi-million dollar mansions, some of which are found on the lakeshore. The west side of the city features mixed-use neighborhoods, where retail, schools, and churches are within close walking distance. The rest of the city is basically residential, but at the eastern edge residents are in close walking distance to "the Village" shopping district in the City of Grosse Pointe. Many of the houses in the Park were built prior to World War II, and many of these were designed by noted architects using the finest materials. Windmill Pointe Drive, and streets such as Bishop, Kensington, Yorkshire, Edgemont Park, Three Mile Drive, Devonshire, Buckingham, Berkshire, Balfour, and Nottingham among others, each have dozens of large, architecturally significant homes. These mansions and mini-manses were often placed on large lots which were often split up, the result being that some post-war ranch style homes are mixed in with homes of traditional design.

Grosse Pointe Park includes a large neighborhood located on Windmill Pointe, a once-swampy piece of land roughly south of Jefferson Avenue, the edge of which marks the entrance to the Detroit River and the end of Lake St. Clair.

Windmill Pointe Park, Grosse Pointe Park's active park, is located at Barrington and Windmill Pointe Drive. This is where most recreational programs originate and are carried out. Facilities include an Olympic size swimming pool, wading pool, bath house, the marina, a fishing pier, a privately operated concession stand, four lighted tennis courts, two sand volleyball courts, two horseshoe pits, playground equipment, picnic tables and grills. Also located at Windmill Pointe Park are the Tompkins Community Center and the Lavins Activity Center. The Lavins Activity Center houses a theater, fitness center, and gymnasium. At the foot of Three Mile Drive, is another large park, Patterson Park, which is known for its skating rink and walking trails.

As citizens use Lake St. Clair for both active and passive recreational enjoyment, they take responsibility to do what they can to protect this precious natural resource. Boaters already know that Lake St. Clair is a relatively shallow lake. The lake, averaging only 10 foot in depth with many areas as low as 3 feet, requires periodic dredging. This shallow depth makes it vulnerable to outside unnatural influences.

Grosse Pointe Park actively participates with the Clinton River Watershed Council as one of the communities in the Lake St. Clair Direct Drainage Sub-watershed. As evidenced by improved water quality and vibrant habitat, the City has made great progress in meeting the early goals. The Watershed Council is a consortium of Cities, Townships, Counties, School Districts, and other environmental interests that



directly contribute to the water quality of Lake St. Clair. Along with these other organizations, the City continues to strive for the highest quality of water for our continued use and for future generations.

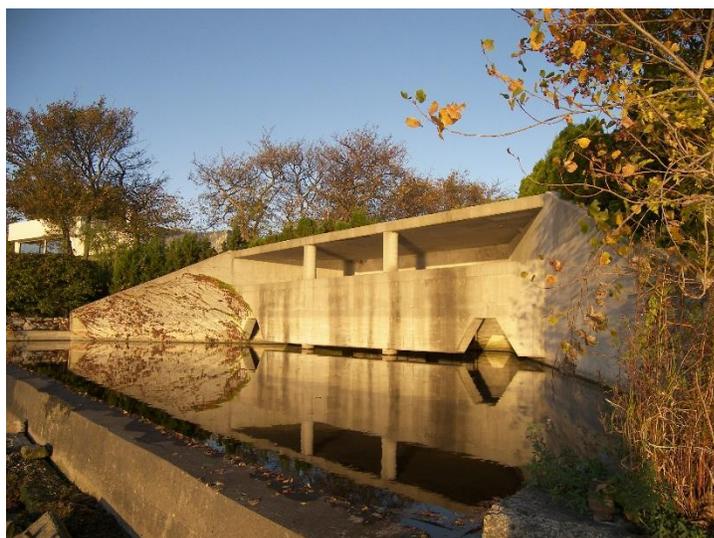
The entire City was once served by combined sewers and during wet weather raw sewage was discharged directly to Fox Creek and/or Lake St. Clair. However, the City's Sewer Separation Program eliminated all of the Combined Sewer Overflows leaving only most of Patterson Park, and most of Windmill Pointe Park with combined sewers. A very discrete area of the south parking lot in Windmill Pointe Park has two very small separate storm sewers discharging to Fox Creek. Most of the roof drainage of Tompkins Community Center and the Lavins Activity Center in Windmill Pointe Park is directed to the combined sewer. The remainder discharges to the ground surface. The north parking lot drains to the combined sewer. None of the stormwater generated in Windmill Pointe Park enters the MS4. In Patterson Park four catchbasins near the entrance drain to the combined sewer to the north. The skating rink, tennis courts, and Lindell Lodge drain to the combined sewer to the west. The parking lot and restrooms drain to the combined sewer to the east. The children's splash pad and play area drain to the MS4 outfall. The remainder simply soaks into the ground.

The Municipal Separate Storm Sewer System has exactly one discharge point or "outfall" (See Figure 3) that discharges to Lake St. Clair via a stormwater pumping station located in Patterson Park. See Table 1.

Figure 3 – Listing of Outfalls and Points of Discharge

Outfall No.	Name	Latitude	Longitude	Receiving Water
001	Patterson Park	N42° 22.314'	W82° 55.224'	Lake St. Clair

Figure 4 – Outfall 001





3 Storm Water Management Program

3.1 Enforcement Response Procedure

The Storm Water Management Program (SWMP) is implemented by the City of Grosse Pointe Park utilizing the following Enforcement Response Procedure. Actions will be taken to control storm water pollution to the maximum extent practicable, including, where appropriate, enforcement action. Instances of non-compliance will be tracked from initial report/discovery to verification of resolution. An example tracking sheet is included in Appendix 1.

The City uses education, assistance, and enforcement to assure compliance with the SWMP. The City views enforcement as only one tool available to achieve compliance. In general, the least onerous remedies will be utilized to achieve compliance. Enforcement in and of itself is not a goal – compliance is the goal.

- Enforcement actions must be timely.
- Enforcement actions must be appropriate to the violations alleged.
- Enforcement actions must be consistent for like violations.
- Enforcement actions in response to repeat or continuing violations must be progressive in nature.
- Enforcement actions must be responsive to program priorities and needs.

By judiciously using education, assistance, and enforcement tools, the goals of reducing the discharge of storm water pollutants to the maximum extent practicable (MEP) and protecting water quality should be met.

It is not wise to be overly prescriptive regarding responses because every instance of a violation is unique. Obtaining cooperation and compliance through communication and understanding is far superior to resentful compliance gained through citations and fines. The remedies are likely to be longer lasting and result in fewer violations in the long term.

The following are examples of education, assistance, and enforcement that will be considered with suggested timelines:

- A landscaper is observed blowing lawn clippings into the street. The city staff member stops what they are doing and immediately seeks the job foreman on the site. The job foreman is informed that the lawn clippings are pollutants and that they will result in pollution of Lake St. Clair unless properly handled. A copy of “What Every Landscaper Must Know About Stormwater” is provided to the foreman. The landscaper sweeps up the clippings and removes them from the site for proper



disposal. The city staff member fills out the “Water Pollution Report - Non-Compliance and Illicit Discharge Tracking Sheet” (see Appendix 1) and forwards it to the Stormwater Coordinator.

- A homeowner is attempting to repair a broken section of his driveway with ready-mix concrete prepared in a rented mixer. Things go wrong and matters get out of control. Diluted concrete starts flowing into the street. City DPW staff observes the potential disaster and offers assistance. The City Vector is called in to prevent the concrete from entering the storm sewer. The homeowner is informed that the concrete could have damaged the storm sewer and/or polluted Lake St. Clair. Had the homeowner been a contractor, the contractor would have been billed for the city services and potentially fined. Since the homeowner had no prior incidents, he was only given a warning. The city staff member fills out the “Water Pollution Report - Non-Compliance and Illicit Discharge Tracking Sheet” (see Appendix 1) and forwards it to the Stormwater Coordinator.
- A contractor is building a home expansion, pool, pool-house, garage, and driveway that disturbs more than one acre of land. During a rain event muddy water is observed leaving the construction site and entering the city storm sewer. The city staff member calls the Stormwater Coordinator and reports on the situation. The Stormwater Coordinator immediately investigates and confirms the illicit discharge. The contractor is ordered to immediately stop the discharge of pollutants. The contractor, not knowing what to do, asks for help from the city. The Stormwater Coordinator recommends that the contractor hire one of several pollution emergency abatement companies active in the area. Mobilization of the abatement company is not instantaneous thus sediment reaches Lake St. Clair. The Stormwater Coordinator notifies EGLE and Wayne County Soil Erosion staff. Since a Wayne County Soil Erosion Control permit was not issued, Wayne County commences enforcement action. The city requires the contractor to sweep the sediment off the street and to clean the storm sewer. The Stormwater Coordinator fills out the “Water Pollution Report - Non-Compliance and Illicit Discharge Tracking Sheet” (see Appendix 1). The matter is referred to the city attorney for civil action regarding the violation of several city ordinances including unauthorized use of the storm sewer, building permit violations, and planning and zoning violations.

3.2 Nested Jurisdictions

A city, village, or township (primary jurisdiction) may have, within its political or territorial boundaries, “nested” drainage systems owned or operated by public bodies that include, but are not limited to, public school districts; public universities; or county, state, or federal agencies. If the primary jurisdiction and the nested jurisdiction agree to cooperate in carrying out the responsibilities for control of the drainage system, the nested jurisdiction does not need to apply for a separate storm water drainage system permit. Otherwise, the nested jurisdiction shall apply for a permit.



The City has NOT entered into a cooperative agreement to carry out the terms and conditions of the Federal and State Acts with any public bodies.



4 Public Participation/Involvement Program

4.1 Public Notification

The City will comply with state and local public notice requirements when implementing a public involvement/participation program related to the stormwater management program. Currently there are no state or local public notice requirements when implementing a public involvement/participation program related to the stormwater management program.

4.2 Opportunity for Public Participation and Involvement

The City intends to have the SWMP document available for public inspection and comment at the City Hall and on the City website within 3 months of being approved by EGLE. The public will be notified of its availability in the following quarterly newsletter sent to all residents. It will state that public comments should be directed to the City Manager. Pertinent comments will be addressed in a timely manner, possibly resulting in modification of the SWMP.



5 Public Education Program

5.1 Public Education Program Collaboration

A storm water management program for a regulated MS4 shall include a plan for implementing a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff.

The City is collaborating with the Clinton River Watershed Council (CRWC), along with many other municipalities, to implement an effective Public Education Program for the entire Clinton River/Lake St. Clair Direct Drainage Watershed.

The CRWC completed a watershed wide Collaborative Public Education Plan (PEP) to inform the public within the Clinton River Watershed about their role in protecting water quality and preventing storm water pollution. This plan was created by the municipalities and other partners in the Clinton River Watershed with the input of stakeholders and professionals in the environmental education field. This plan outlines the public education goals and messages that must be communicated under the requirements of the National Pollutant Discharge Elimination System (NPDES) Phase I and Phase II regulations. The PEP also describes the existing and future efforts the communities and other partners will undertake to achieve these education goals, and how these efforts will be evaluated. The PEP was approved by EGLE on March 21, 2023 and is included here as referenced in Appendix 5.

5.2 Permittee Specific Activity and Actions

The Collaborative Public Education Plan calls on each of the participating municipalities to fulfill certain activities and actions individually. The City commits to the following activities and actions.

5.2.1 Presentations and Displays

Display CRWC materials at city building(s) or events at a minimum of once during the 5-year permit cycle. Invite CRWC to make presentations on water quality-related issues in conjunction with other Lake St. Clair communities.



5.2.2 Regional Public Education Efforts

Continue to participate in the Southeast Michigan Partners for Clean Water group facilitated by the Southeast Michigan Council of Governments (SEMCOG) and support/share the resources available from this group, including: Seven Simple Steps to Clean Water brochures, tip cards and kids activity sheets. Topics include: fertilizer, car care, pet care, household hazardous waste disposal, earth-friendly landscaping, water conservation and storm drain awareness. Materials from the "Our Water. Our Future. Ours to Protect" campaign will be distributed when provided.

5.2.3 Subwatershed Website

Provide a link to the CRWC website on the City's website. The CRWC website features subwatershed maps, photos, descriptions, events, and links to education resources.

5.2.4 Community Information

Articles about watersheds, green infrastructure, watershed friendly practices for homeowners, and other stormwater pollution related topics will be distributed or published in existing newsletters, e-newsletters or website. Four articles per year will be distributed or published.

5.2.5 Household Hazardous Waste Information

The City will continue to coordinate with the other Grosse Pointe communities and Wayne County for Household Hazardous Waste collection. The City will continue to publicize information on proper Household Hazardous Waste Disposal via web links, newsletters, or brochures.

5.2.6 Recreational Vehicle Waste Dumpsites

Post links and/or locations to recreational vehicle (RV) waste dumpsites in the region and the State of Michigan. One such link is <http://www.rvdumps.com/dumpstations/michigan> .

5.2.7 Riparian Information Distribution

Distribute riparian landowner educational material such as the Waterfront Wisdom brochure, or other information. The materials will be made available through web links, events, meetings, or through mailings.



5.2.8 Stormwater Education for Industrial and Commercial Facilities

Provide educational materials and BMP fact sheets to industrial and commercial facilities. Distribute BMP information via email or other means that is created specifically for the retail/commercial sector. The materials will be made available through web links, events, meetings, or through mailings

5.3 Procedure for Evaluating and Determining Effectiveness

A variety of mechanisms will be employed to determine effectiveness. Some will quantify the usage of materials (e.g. number of materials distributed, website hits) and participation in events (e.g. number of attendees at a presentation or workshop, number of participants at an event). These mechanisms can be useful in determining whether the education effort is reaching the audience; however, it is difficult to evaluate behavior change resulting from the education activity using these purely quantitative methods.

The Clinton River Watershed Council will use an online survey tool to measure post contact behavioral changes. For example, email addresses will be collected from all CRWC facilitated event attendees, 60-90 days following the event an email with a link to the online survey will be sent asking the participant some questions about their general knowledge and behavior changes. While the surveys are not scientifically significant, the results of the survey can help mold the Public Education Efforts throughout the watershed.

Through CRWC's Adopt-A-Stream monitoring program, it is possible to evaluate long-term changes in water quality. The results are compiled in an annual data summary, which allows a simple mechanism for measuring improvements or declines in water quality across the various subwatersheds. This data is managed in a document that records water quality monitoring results for up to the past five years. Improvements in water quality cannot be attributed solely to a successful public education effort, but indicate the overall effectiveness of the stormwater management efforts in the community, subwatershed, and watershed wide.



6 Illicit Discharge Elimination Program

Under the illicit discharge elimination program, the City performs all of the following:

(i) Maintains a storm sewer system map, showing the location of all outfalls the City owns or operates, or points of discharge into an MS4 owned or operated by another public body, and the names and location of all waters of the state that receive discharges from the City's MS4.

(ii) Implements a plan to detect and address non-storm water discharges to the municipal separate storm sewer system, including illegal dumping and failing on-site sewage disposal systems as appropriate.

(iii) Informs public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste into the municipal separate storm sewer system.

(iv) To the extent allowable under state or local law, effectively prohibits, through ordinance, or other regulatory mechanism, non-storm water discharges into the municipal separate storm sewer system and implements appropriate enforcement procedures and actions. Discharges already authorized under an NPDES permit are excluded from this requirement. Discharges or flows from fire fighting activities are excluded from the effective prohibition against non-storm water and need only be addressed where they are identified as significant sources of pollutants to waters of the state. The following categories of non-storm water discharges or flows are prohibited only if identified as significant contributors to violations of state water quality standards:

- (A) Water line flushing.
- (B) Landscape irrigation.
- (C) Diverted stream flows.
- (D) Rising ground waters.
- (E) Uncontaminated ground water seepage into storm sewers.
- (F) Uncontaminated pumped ground water, except for groundwater cleanups.
- (G) Discharges from potable water sources.
- (H) Foundation drains.
- (I) Air conditioning condensation.
- (J) Irrigation water.
- (K) Springs.
- (L) Water from crawl space pumps.
- (M) Footing drains.
- (N) Lawn watering.
- (O) Water from noncommercial car washing.
- (P) Flows from riparian habitats and wetlands.
- (Q) Residential swimming pool discharges and dechlorinated swimming pool discharges.
- (R) Street wash water.

"Illicit connection" means a physical connection to a separate storm sewer that primarily conveys non-storm water discharges other than uncontaminated groundwater into the storm sewer; or a physical connection



not authorized or permitted by the local authority, where a local authority requires authorization or a permit for physical connections.

“Illicit discharge” means any discharge to, or seepage into, a separate storm sewer that is not composed entirely of storm water or uncontaminated groundwater. Illicit discharges include non-storm water discharges through pipes or other physical connections; dumping of motor vehicle fluids, household hazardous wastes, domestic animal wastes, or litter; collection and intentional dumping of grass clippings or leaf litter; or unauthorized discharges of sewage, industrial waste, restaurant wastes, or any other non-storm water waste directly into a separate storm sewer.

The City has implemented and continues to implement a program to find, prioritize, and eliminate illicit discharges as described in the following sections.

6.1 Methods for Finding Point Source Discharges

6.1.1 Field Verification of Point Sources

During the design stages of the City’s Sewer Separation Program, historical blueprints, maps and site plans were reviewed and field surveys were conducted to identify all point source discharges to Lake St. Clair. Upon completion of the City’s Sewer Separation Program initial testing of the outfall was performed and no problems and or issues were identified. Inspection of the outfall is performed periodically and includes removal of any sediment and debris. The storm sewer system is routinely cleaned and televised upon need.

The outfall has been located using a handheld global positioning system (GPS) and surveyed for signs of an illicit discharge. This survey included an olfactory and visual screening of the discharge (if any), the surrounding waterbody bank condition, and the outfall structure and vegetation conditions.

6.1.2 Staff Training

Staff participating in IDEP activities, including field staff, will be trained on the following topics:

- Definition of illicit discharges and illicit connections.
- Techniques for finding and identifying illicit discharges and illicit connections.
- Recognizing naturally occurring phenomena and their sources (i.e. bacterial sheens, slimes, films, etc.).
- Techniques for sampling, analyzing and recording results.
- Proper methods and procedures for eliminating the illicit discharges and illicit connections.
- Safety issues associated with IDEP activities.



6.1.3 Complaint Line

Continuing efforts to identify new and/or previously unidentified illicit discharges will be enhanced through the continued utilization of observations made by the public. Pollution reports from the public are typically made to the City's Public Service Department (313-822-6200) and to the 24-hour Public Safety Department hotline (313-822-7400) for emergency situations. The personnel responding to citizen reports have received training on how to properly respond to pollution concerns. This effort, coupled with a public education effort allows the public to assist in identifying illegal dumping. As part of the effort, the City will follow up on these reports. The target response time will recognize that some reports are not immediate concerns (e.g. the neighbor occasionally blows lawn clippings into the street), while others may demand immediate actions (e.g. a landscaper's tank ruptured, and hundreds of gallons of nitrogen fertilizer are pouring into the street). Obviously, the latter example requires immediate attention while the former may take a week to respond.

In addition to the City's self-supported resources, the City also relies on Wayne County's 24-hr environmental hotline (888-223-2363) to handle pollution complaints.

The City will maintain a database (See Appendix 1) of all pollution reports received. This database will record both status and outcome, and will serve to evaluate the effectiveness of illicit discharge elimination efforts. Effectiveness will be determined by the number of calls received and the number of discharges eliminated. This information will be included in the progress report.

6.1.4 Outfall Survey

A dry weather outfall survey was last completed on December 13, 2023 and will be repeated during the term of each five year permit. Screening will include noting observations of the following physical characteristics:

- Flows during dry weather conditions
- Water clarity and color
- Presence of foam, oil sheen, trash, and/or floatable materials
- Presence of bacterial sheen or slimes
- Staining of the banks, outfall structure, and/or vegetation
- Excessive vegetative growth
- Odor

Any outfall discharging during dry weather will immediately be sampled for conductivity and *E. coli*, if possible. Otherwise, sampling will be completed within 1-2 days. The sample may be screened for



surfactants if it has signs of soap suds or foam. The data collected during these surveys will be organized in a database. Effectiveness of the City's efforts will be based on the number of drains inspected, the number sampled, and the number placed on the priority list. This information will be included in the progress report.

6.1.5 Prioritizing of Illicit Discharges/Illicit Connections for Elimination

If a potential illicit discharge is identified, the drain will be placed on a priority list for follow-up and corrective action. Discharges having the greatest impact on the lake will have top priority if multiple events occur simultaneously. Illicit discharges will likely be identified through different methods, thus each discharge will have different information available regarding it. In each case, the best, most immediate, and permanent resolution will be identified and pursued. Factors in determining the solution will consider any and all information regarding the specific illicit discharge, and may include:

- Ambient water quality analysis;
- Dry weather observations;
- Chemical and bacterial analysis;
- Video observations of sewers;
- Dye testing (with EGLE permit) and smoke testing results; and
- Evaluation of impacts on receiving waters, fauna, or flora.

Effectiveness will be determined on a biennial basis. The City will actively maintain an inspection record of illicit discharges and review and improve the prioritization between illicit discharges. This review, and an estimate of volume, loading, and location, will be included in the progress report.

6.2 Source Investigations

The City will investigate suspicious discharges that are found to be utilizing the MS4 within 2 weeks. First, a visual survey of the drain will be completed attempting to trace the path of the discharge, thus identifying the source of such a discharge. Although various methods may be used, the City anticipates that the most effective method will be to observe and/or sample various manholes along the drain.

Investigative techniques will be adapted to the investigation at hand and the most effective but least environmentally obtrusive method will be sought in each case. These techniques may include but will not be limited to:

- Visual and olfactory surveys;
- Televising;
- Dye Testing (with EGLE permit); and



- Smoke Testing.

Once a source has been identified, the property owner will be notified within 30 days of discovery. The City will track the status of each suspected suspicious discharge that has been identified. Tracking will consist of a dated log of activities that have been performed to locate the source(s) of the problem. The City's goal is to have each illicit connection corrected within 90 days of notification to the property owner if a sanitary sewer is readily available and the cost for correction is not prohibitive for the property owner. However, if more complicated solutions are required, the City will set up a schedule for correction with each individual property owner. In the event that the property owner does not correct the problem within the agreed time frame, the City will pursue legal action if necessary.

6.3 Progressive Enforcement Procedures for Eliminating Illicit Discharges

In past practice, the City has found that proactive cooperation and communication with property owners works better than heavy-handed enforcement. However, the City is prepared to pursue enforcement techniques when necessary.

The City has developed and enforces a Stormwater Discharge Control ordinance, Ordinance No. 216 adopted on March 9, 2020, that specifically addresses illicit discharges. See Appendix 4. Several other ordinances complement these efforts. These ordinances include but are not limited to:

Chapter 7	BUILDINGS AND BUILDING REGULATIONS
Chapter 11	FLOOD PREVENTION AND PROTECTION
Chapter 12	GARBAGE AND REFUSE
Chapter 15	NUISANCES
Chapter 16	OFFENSES
Chapter 21	STREETS, SIDEWALKS AND OTHER PUBLIC PROPERTY
Chapter 23	UTILITIES
Chapter 27	ZONING

In each case, specific existing administrative procedures and enforcement efforts will be utilized and all efforts will be documented for the purposes of compliance with the IDEP.

If a drain outside the jurisdiction of the City is suspected to be improperly discharging into a City drain, the City will notify the appropriate jurisdiction verbally as soon as practical and in writing within 30 days of the discovery of the suspected discharge including any pertinent information pertaining to the suspected discharge. The City will track these notifications and do follow-up as necessary to assure that the responsible jurisdiction corrects the problem.



In addition, the City may also utilize the local enforcement options available in the Michigan Natural Resources and Environmental Protection Act (451 PA 1994, as amended) and/or the federal Clean Water Act.

Elimination of illicit discharges and illicit connections will be verified through onsite inspections by City personnel. If experience demonstrates that existing legal authority is not sufficient, the City will pursue appropriate ordinance revisions.

6.4 Methods to Minimize Seepage from Sanitary Sewers

During the course of follow-up investigations on a suspected illicit discharge, investigators may find that the source of an illicit discharge is a cross-connected or leaky sanitary sewer. If this is found, the appropriate steps will be undertaken by the City to eliminate the illicit discharge. If wet weather overflows of the sanitary sewer are detected during field investigations, they will be reported to EGLE as required by Part 31, Section 3112a of the Natural Resources and Environmental Protection Act, Act 451 (PA 1994), as amended. Other discharges of polluting materials are discussed in Section 6.6.

As part of the City's sanitary sewer maintenance program, the City has developed and implemented a routine Sanitary Sewer Cleaning and Inspection Program for all sanitary sewers. Through this program all sanitary sewer lines are cleaned by City personnel. Upon completion of the cleaning, the sanitary sewer system is evaluated for structural integrity. The City will correct sanitary sewer problems within 180 days of discovery if funding is available. In any case where seepage is discovered, the City will place the problem on a schedule for correction and ask for funding in the following fiscal year.

6.5 Onsite Sewage Disposal Systems (OSDS)

Sanitary sewer service is available to all properties in the City, and the City is unaware of any properties that discharge sanitary waste to OSDS. If OSDS are found during the City's day-to-day operations, the Wayne County Department of Public Health will be notified for inclusion in their database. The City will uphold the Wayne County Department of Environmental Health Division Onsite Sewage Disposal System Evaluation and Maintenance Ordinance, effective countywide in September 2003. Any OSDS found within the City will be inspected under the guidelines of this ordinance.

6.6 Reporting Illicit Discharges to EGLE

In addition to sanitary sewer overflows discussed in Section 6.4, discharges of polluting materials from the city's storm sewers will be reported to EGLE when such discharges are suspected to be capable of



environmental impacts to Lake St. Clair based on professional judgment. Immediate reporting should be made to the EGLE Warren Michigan District Office at 586-753-3700 during daytime hours. After hours reporting should be made to the 24-hour Pollution Emergency Alerting System at 1 800-292-4706.



7 Construction Stormwater Runoff Control Program

EGLE has determined that the Part 91 of the State Act and Michigan’s Permit by Rule (Rule 323.2190) programs are “qualifying local programs” for the control of wet weather discharges from construction activities that result in a land disturbance of greater than or equal to one acre, or disturb less than one acre that is part of a larger common plan of development or sale. A “qualifying local program” provides control for soil erosion, offsite sedimentation, and other construction-related wastes, consistent with Federal storm water control requirements for MS4 permittees.

The Wayne County Department of Public Services is the approved “qualifying local program” for Wayne County. The following is the current contact information:

Figure 5 – Wayne County Soil Erosion Contact Information

Part 91 Agency	Contact Person	Phone	Fax
Wayne County Dept of Public Services Land Resource Management Division 3600 Commerce Court Building E Wayne, MI 48184	John Demerjian Department Administrator jdemerjian@waynecounty.com	734-326-3936	734-326-4421

The City has developed and is implementing procedures to ensure adequate protection of the MS4 from construction storm water runoff. The City’s Building Permit Application includes a certification by the Building Permit applicant that the applicant is aware that a Soil Erosion and Sedimentation Control Permit may be needed from the County and that a National permit for storm water discharge from construction activity may be needed from EGLE.

When the City becomes aware that pollutants are discharged from a construction site activity in violation of Michigan law, and the pollutants enter the City’s MS4:

- The City will notify the Part 91 agency (above) and EGLE when soil or sediment is discharged.
- The City will notify the EGLE when other pollutants are discharged.

If the City suspects the discharge may endanger public health or the environment, the discharge will be reported to EGLE within 24 hours of becoming aware of the discharge. The notification will include (if known) the name of the person responsible for the discharge, the location of the discharge into the MS4, the location where the MS4 discharges to the surface waters, the nature of the discharge and the pollutants, and clean-up and recovery measures taken or planned.

Notice to EGLE will be given to:

Ms. Melinda Steffler
Warren District Supervisor



EGLE Water Resources Division
27700 Donald Court
Warren, MI 48092-2793
stefflerm@michigan.gov
(586) 208-5075

If the notice is provided after regular working hours, EGLE's 24-Hour Pollution Emergency Alerting System (PEAS) will be used: PEAS telephone number: 1-800-292-4706.

The procedures ensure adequate allowance for soil erosion and sedimentation controls (SESC) on preliminary site plans, as applicable. The procedures ensure proper handling of complaints or other information submitted by the public regarding construction activities discharging wastes to the MS4.



8 Post-Construction Stormwater Runoff Program

The City has adopted Ordinance No. 216 (See Appendix 4) to regulate treatment of stormwater for water quality. The ordinance recognizes that channel protection criteria shall not be required for discharges to Lake St. Clair. Currently, the only MS4 discharge is directly to Lake St. Clair.

Figure 6 – Ordinance to Regulate Post-Construction Stormwater Runoff - Excerpts

Sec. 23-114. Purpose.

(a) The purpose of this ordinance is to provide for the health, safety, and general welfare of the citizens of the City of Grosse Pointe Park through the regulation of stormwater and non-stormwater discharges to the municipal separate storm sewer system to the maximum extent practicable as required by federal and state law.

Sec. 23-121 Requirements to prevent, control, and reduce stormwater pollutants by the use of best management practices.

(a) The City may impose requirements identifying Best Management Practices (BMPs) for any activity, operation, or facility which may cause or contribute to pollution or contamination of stormwater, the MS4, or waters of the United States.

(e) New development and redevelopment projects that disturb one (1) or more acres, including projects less than one (1) acre that are part of a larger common plan of development or sale, and that discharge into the MS4, shall provide BMPs capable to treat the first one inch of runoff from the entire site such that the discharge does not exceed a concentration of Total Suspended Solids of 80 milligrams per liter (mg/l). The owner shall ensure long-term operation, maintenance, repair, and replacement of all necessary BMPs in perpetuity.

Wayne County's stormwater management program will be used as guidance in determining what BMPs will be required and the criteria for BMP design.

Wayne County Ordinance No. 2021-526a is available at:

<https://www.waynecounty.com/documents/environmental/wqm-sw-control-ord2021-526a-8-24-2021.pdf>

Wayne County Stormwater Administrative Rules are available at:

<https://www.waynecounty.com/documents/environmental/wqm-sw-res2021-526b-9-15-2021.pdf>

The Wayne County Storm Water Standards Manual is available at:

<https://www.waynecounty.com/documents/environmental/wqm-wcsw-mgmt-plan-9-3-2021.pdf>

The City has developed and enforces several ordinances that will complement these efforts. These ordinances include but are not limited to:

- Chapter 7 BUILDINGS AND BUILDING REGULATIONS
- Chapter 11 FLOOD PREVENTION AND PROTECTION



Chapter 12	GARBAGE AND REFUSE
Chapter 15	NUISANCES
Chapter 16	OFFENSES
Chapter 21	STREETS, SIDEWALKS AND OTHER PUBLIC PROPERTY
Chapter 23	UTILITIES
Chapter 27	ZONING

Chapter 7 of the City Code Book adopts the State Construction Code which is administered by the City.

Sec. 7-1. Enforcement of State Construction Code Act

The City of Grosse Pointe Park assumes responsibility for administration and enforcement of the Stille-DeRossett-Hale Single State Construction Code Act and the Code promulgated thereunder.

The State Construction Code (STILLE-DEROSSETT-HALE SINGLE STATE CONSTRUCTION CODE ACT, Act 230 of 1972) requires that building permits be issued prior to start of construction of any building or structure. MCL 125.1510.

Sec. 10. (1) Except as otherwise provided in the code, before construction of a building or structure, the owner, or the owner's builder, architect, engineer, or agent, shall submit an application in writing to the appropriate enforcing agency for a building permit.

In the event that an infiltration Best Management Practice (BMP) is proposed as part of new development or re-development that disturbs one or more acre of soil where soil/groundwater contamination exists, a building permit will not be issued until it can be demonstrated that the BMP will not exacerbate the contamination. Developments in "areas with the potential for significant pollutant loading" will need to be addressed in the building permit application.

Long-term maintenance of stormwater Best Management Practices (BMPs) will be assured by requiring the applicant to provide assurances consistent with the Wayne County Ordinance No. 2021-526a, which states in part:

ARTICLE VII. LONG-TERM MAINTENANCE

Sec. 95-71. DEMONSTRATION OF LONG-TERM MAINTENANCE

The applicant for a stormwater construction approval shall demonstrate to the County in the application or during the application review process, as determined appropriate by the County, that the stormwater control system shall be maintained in perpetuity. This demonstration shall be made in the manner specified in this Ordinance and in rules promulgated pursuant to this Ordinance.

Sec. 95-72. SCOPE OF LONG-TERM MAINTENANCE

For purposes of this Ordinance and rules promulgated pursuant to this Ordinance, long-term maintenance shall include: site monitoring, inspection and preventative maintenance activities necessary to ensure that a stormwater control system functions properly as designed; maintenance of structural and vegetative BMPs installed and implemented to meet the performance standards; remedial actions necessary to repair, modify, or reconstruct the system in the event the system does not function properly as designed at any time; notification to subsequent owners of limitations or restrictions on the property; actions necessary to enforce the terms of restrictive covenants or other



instruments applicable to the property pursuant to this Ordinance and rules promulgated pursuant to this Ordinance; and such other actions as may be set forth in rules promulgated hereto, all such actions to be performed in perpetuity.



9 Pollution Prevention and Good Housekeeping for Municipal Operations

Municipal operations cover a wide variety of activities and land uses that are potential sources of storm water pollutants. These include: roadways; parking lots; transportation and equipment garages; fueling areas; warehouses; stockpiles of salt and other raw materials; open ditches and storm sewers; turf and landscaping for all municipal properties, including parks; and waste handling and disposal areas.

The City has developed and is implementing procedures to ensure compliance with a program of operation and maintenance (O&M) of Best Management Practices (BMPs), with the ultimate goal of minimizing pollutant runoff to the maximum extent practicable from municipal operations. The procedures use BMP guidance and training materials that are available from federal, state, or local agencies, or other organizations. Specific actions and implementation schedules for the BMP O&M program are provided.

9.1 Municipal Facility and Structural Stormwater Control Inventory

The City has completed an inventory of all municipally owned properties. The inventory identified one structural control at the new DPW, that being a stormwater detention basin. The City's 900 catch basin sumps are the only other Stormwater BMPs in the City. The inventory will be updated, if required, upon application for reissuance of the stormwater discharge permit.

9.2 Facility-Specific Stormwater Management

Each City-owned facility within the Regulated Area identified as having a discharge of stormwater to the City's MS4 has been assessed for the potential to discharge pollutants as follows:

Patterson Park	Very Low
Department of Public Works Detention Basin	Medium
All other properties in the Regulated Area	Very Low

The following factors were considered when assessing each facility:

- Amount of pollutants stored at the site
- Identification of improperly stored materials
- The potential for polluting activities to be conducted outside
- Proximity to Waterbodies
- Poor housekeeping practices
- Discharge of pollutants of concern to impaired waters.



9.3 Structural Stormwater Control Operation and Maintenance Activities

All City catchbasins located within the Regulated Area have been prioritized as “medium” for routine inspection, maintenance, and cleaning. There is no basis for differing priorities based on preventing or reducing pollutant runoff. The prioritization will be updated and revised giving consideration to inspection findings and citizen complaints as needed and upon application for NPDES permit renewal. City procedures for catchbasin cleaning call for detailed inspection and cleaning every 2 to 5 years. EGLE guidance on Catch Basin Cleaning Activities has been considered. Material removed from catch basins via Vector truck should be considered pollutants. Any decant from the truck shall be to an approved sanitary sewer discharge location. All solid material shall be deposited in a designated area at the Windmill Pointe Park (14920 Windmill Pointe Dr, Grosse Pointe Park, MI 48230), where the liquid is allowed to drain off into a sanitary sewer. Once dry the material shall be disposed as solid waste.

The DPW Stormwater Detention Basin includes a Stormceptor™ Water Quality Unit (STC 2400). Although annual servicing is recommended by the manufacturer, the frequency of maintenance may need to be increased or reduced based on local conditions (i.e. if the unit is filling up with sediment more quickly than projected, maintenance may be required semi-annually; conversely maintenance may only be required every two or three years). The following procedures should be taken when cleaning out Stormceptor™:

1. Check for oil through the oil cleanout port.
2. Remove any oil separately using a small portable pump.
3. Decant the water from the unit to the sanitary sewer.
4. Remove the sludge from the bottom of the unit using a vacuum truck.
5. Re-fill Stormceptor™ with water.

The City requires any new city-owned facilities to meet the same stormwater control criteria required of privately-owned facilities.

9.4 Municipal Operations and Maintenance Activities

The City has adopted the following procedure that calls for reducing the discharge of pollutants to the maximum extent practicable from O&M activities.

City employees (and contractors working on behalf of the City) shall perform all work in a manner that controls the discharge of pollutants to the maximum extent practicable. To accomplish this, dirty water may not be allowed to flow into the City’s storm sewer system or to Lake St. Clair. As part of doing any work, the City is taking preventive measures to stop pollutants from reaching storm sewers or the lake in case of rain or other circumstances.



- Road, parking lot, and sidewalk maintenance

Maintenance typically involves using concrete, asphalt, and other materials to create impervious surface areas or repair existing road surfaces. Pollution control activities focus on ensuring that removed materials and concrete wastes remain controlled and are not released to the environment. Environmental stewardship practices for ready mix concrete operations include:

1. Schedule activities for dry weather.
2. Identify and protect nearby storm drains prior to breaking up, grinding, cutting, drilling, or resurfacing concrete.
3. Limit the amount of concrete that is mixed and mix only what is needed for the job.
4. Return leftover materials to the mixer and dispose of small amounts of hardened materials in the trash.

- Managing Roadside Vegetation

Erosion can be seen in areas where tree roots are exposed, small furrows or channels begin to show, or sediment begins to collect in areas due to soil being exposed. Without vegetative cover along roadsides, soil erosion can significantly impact the environment. To prevent erosion plant vegetation with deep roots. Additional structural controls can be implemented to help prevent erosion, like terraces or a retaining wall. These catch runoff, giving water time to soak into the ground and also make attractive planting beds. Slope terraces by about two percent perpendicular to the incline to direct drainage to one side or the other.

- Cold weather operations

During plowing operations of large areas, such as parking lots, it may become necessary to accumulate large piles of snow. Wherever possible, minimize the environmental impact from the snow melt of large piles.

1. Pile snow on grassed areas or other porous surfaces to help prevent surface water contamination.
2. Pile snow where there is an adequate depth of soil (approximately 30 inches) between the ground level and the water table. The soil and vegetation will act as a filter for pollutants in the melting snow.
3. Avoid plowing snow into Lake St. Clair.
4. Avoid piling snow on or near storm drains.
5. Install a silt fence if piling snow near drains or the lake.
6. Remove and properly dispose of accumulated trash when the snow melts.

- Vehicle washing and maintenance of city-owned vehicles

When washing vehicles on-site, wash equipment and vehicles in designated facilities where the wash water drains to the sanitary sewer system. If it is necessary to clean equipment outdoors, do so in an area where cleaning water will not flow to the street or storm drain. This area should be isolated from the storm drain by 25', a berm, or curbing. Soap or detergent should not be allowed to reach a storm drain.

- Water and sewer repairs

Care should be taken to ensure that spoil from excavations is not allowed to reach storm sewer inlets or Lake St. Clair. This can be challenging especially during emergency repairs or during rain events. Spoil piles should be covered at night and during rainfall. Dewatering water may not be discharged to storm sewers or allowed to reach Lake St. Clair. Disturbed soil should be stabilized with sod as soon as possible following the repair. All litter should be removed from the site.

- Street sweeping

Currently the City sweeps its streets seasonally every 2-5 weeks. Sweeping methods shall be based on sweeping equipment manufacturer's recommendations. The procedure for sweeping the streets and for disposal of the material collected shall prevent pollution of Lake St. Clair. All streets



and municipal parking lots in the Regulated Area are prioritized as “medium”. The entire area is residential or commercial and there is no rationale for higher or lower priority. The prioritization will be updated and revised giving consideration to street sweeping findings and citizen complaints as needed and upon application for NPDES permit renewal.

Material removed from streets and parking lots via street sweeper should be considered pollutants. Any decant from the truck shall be to an approved sanitary sewer discharge location. All solid material shall be deposited in the designated area at the Windmill Pointe Park (14920 Windmill Pointe Dr, Grosse Pointe Park, MI 48230), where the liquid is allowed to drain off into a sanitary sewer. Once dry the material shall be disposed as solid waste.

9.5 Managing Vegetated Properties

The City does not use Phosphorus fertilizers on lawns maintained by the City. Any pesticides or herbicides applied on City-owned property is accomplished by personnel certified by the State of Michigan.

9.6 Employee Training

The City ensures training for staff and contractors associated with potential storm water pollutant sources.

Topics that affect the water quality entering the MS4 include:

- Storm water pollution sources and solutions
- Park and open space maintenance
- Construction and land disturbances
- Post-construction storm water management
- Storm water system maintenance
- Roadway and parking lot maintenance
- Other activities that are potential sources of storm water pollutants

The Training Topics, Employee Group, Training Frequency, and Training Type are identified in Appendix 3.

9.7 Contractor Requirements and Oversight

Contractors hired to perform operation and maintenance activities on City-owned property are required to receive stormwater training prior to starting work. Training may include the “What Every Earth Work Contractor Must Know About Storm Water” brochure developed by the City, the “What Every Landscaper Must Know About Storm Water” brochure developed by the City, a requirement to view a commercially produced storm water training video, or similar training. All work undertaken by contractors will be under the direct supervision of City personnel who will ensure that all City policies are followed and will inspect the work upon completion.



10 Total Maximum Daily Load Implementation Plan

EGLE adopted a Total Maximum Daily Load (TMDL) for *E. coli* for Lake St. Clair Metropolitan and Memorial Beaches in August 2007. EGLE has determined that the City may contribute to the non-attainment in this area and has required that the TMDL be addressed in the City's Storm Water Management Program.

10.1 Priority Actions

The City does not admit that stormwater from the City contributes to the non-attainment at Metropolitan and Memorial Beaches. The TMDL establishes a "Waste Load Allocation" that mandates swimming water quality at the storm sewer outfall. This is not an attainable goal. However, the City commits to reducing *E. coli* in its storm water to the maximum extent practicable and thereby make progress towards that goal. The City identifies and prioritizes the following actions as high priority to reduce pollutants in storm water discharges from the MS4 and make progress in meeting Water Quality Standards (WQS) for *E. coli* in the TMDL area.

These HIGH-PRIORITY actions are:

- Corrections to faulty sanitary sewer connections.
- Investigate pollution sources and illicit connections.
- Pet waste stations and education.
- Wildlife (geese) management in urban areas.
- Storm drain marking or stenciling.

10.2 Assessment of Effectiveness

EGLE requires a monitoring plan/demonstration to assess effectiveness of the BMPs to make progress towards meeting the TMDL goal.

Past TMDL Monitoring

Assessment of the effectiveness of the City's BMPs is provided by the dry weather screening conducted under the Illicit Discharge Elimination Program. Dry weather screening was last conducted on December 13, 2023. No discharge was observed during the screening and no evidence of illicit discharges was apparent.



Future TMDL Monitoring

The City will continue to conduct Dry Weather Screening in accordance with Section 6 – Illicit Discharge Elimination Program. The City will repeat the Dry Weather Screening during the term of each five year permit.

Wet weather sampling will be conducted twice during the term of each five year permit

Sampling wet weather flows is always difficult, because one never knows when rain will start and stop or how much rain will fall in any particular area. Then mobilizing staff to collect the sample and deliver it to a laboratory within the approved holding time is difficult due to staffing hours. Therefore, some flexibility is necessary.

Optimally, a wet weather sample should be taken after at least 0.25 inches of rain has fallen in the catchment area, preferably over 0.5 inches. The sample should be collected from the center of the flow stream and not be contaminated by sediment stirred up by the sample collection. To avoid the “first flush”, which is notorious for high pollution levels and inconsistency, the sample should be taken after the time of concentration for the particular outfall. Without undertaking the effort of calculating the time of concentration, we estimate it to be between 30 minutes to an hour for Grosse Pointe Park.

Therefore, we would propose that the sample be collected from the outfall approximately an hour after discharge commences for a rainfall of over 0.25 inches in the first hour of the event. If the event continues for several hours, additional samples should be collected and the geometric mean of all the sample results should be calculated. All individual sample results should be reported along with the geometric mean in the bi-annual progress report.

If the geometric mean of all *E. coli* results is greater than 1000 /100 ml, then the City will increase implementation of high priority actions and focus on source elimination.

Evidence of accomplishing the priority actions will be reported in the periodic progress reports submitted to EGLE, including reports of illicit discharges reported by City staff or citizens, actions taken to address faulty sewer connections, and status of pet waste stations, urban wildlife management, and storm drain marking. Direct monitoring of Lake St. Clair Metropolitan and Memorial Beaches is not within the authority of the City so the City will rely on progress monitoring conducted by Huron Clinton Metropolitan Authority and Macomb County Health Department.



Appendix 1 – Example Enforcement Tracking Sheet



City of Grosse Pointe Park

Water Pollution Report

Non-Compliance and Illicit Discharge Tracking Sheet

INCIDENT NUMBER <small>(provided by DPW)</small>		Entry made by:
DATE		
NAME OF PERSON MAKING REPORT		
NAME OF VIOLATOR		
LOCATION OF THE VIOLATION		
DESCRIPTION OF THE VIOLATION		
NAME OF INVESTIGATOR		
DATE OF INVESTIGATION		
RESULT OF INVESTIGATION		
ACTION TAKEN		
DATE ACTION WAS TAKEN		
ACTION CONFIRMING RESOLUTION		
DATE RESOLUTION		
ADDITIONAL INFORMATION <small>(include date of comment)</small>		



City of Grosse Pointe Park Water Pollution Report

Non-Compliance and Illicit Discharge Tracking Sheet

INSTRUCTIONS

When City employees or the public report on a situation that results or may result in water pollution, the report must be documented and transmitted to the Supervisor of Public Works. This form is provided to make the documentation and reporting as little burdensome as possible.

The purpose is to ensure that all reports of pollution are taken seriously and that the reports receive proper follow-up. The Supervisor of Public Works is responsible for follow-up and reporting the actions to the Michigan Department of Environment, Great Lakes, and Energy.

Incident numbers will be assigned by the Supervisor of Public Works.

The right column is to indicate the person entering the information on the form. In some cases this name will be the same as in the center column, but not necessarily. The first entry should spell out the name, but subsequent entries may use initials or quotation marks ("").

DATE – Is the date of the initial report. Inclusion of time of day may also be helpful.

NAME OF PERSON MAKING REPORT – This is usually obvious but some reports may be made anonymously. An attempt should be made to have the person making the report identify themselves with contact information for possible follow-up, but it is better to have an anonymous report than no report at all.

NAME OF VIOLATOR – This is not always known, but guesses are helpful. Simply identify in some way how certain the identity of the violator is.

LOCATION OF THE VIOLATION – A street address is best but other identifiers are often appropriate, such as street corner or facility name.

DESCRIPTION OF THE VIOLATION – Describe what was observed and why pollution is suspected. Was this a momentary event like a spill, a continuing event like pumping wastewater, or a potential event like pollutants that will likely flow to a drain when it rains?

The remainder of the form will usually be filled in by the Supervisor of Public Works or his/her designee.

ADDITIONAL INFORMATION – This space is for anything else that is important or potentially helpful. Indicate the date of entry as well.

The form should be emailed to:

Mr. Tom Jenny
Director of Public Works
jennyt@grossepointepark.org

For situations that appear to be urgent, the email should be immediately followed by a phone call to the Public Works Office at 313 822-5100.



Appendix 2 – Structural Storm Water Controls

Structural Storm Water Control Measure	Inspection Frequency	Maintenance Schedule	Operation & Maintenance Program (Location)	Effective Date or Projected Effective Date
City streets				
Catchbasin sumps	2-5 Years	2-5 Years	DPW Office	2024
DPW				
Stormceptor	1-3 Years	1-3 Years	DPW Office	2024



Appendix 3 – Employee/Contractor Training Related to Storm Water Management Activities

Training Topic	Employee Group	Training Date(s)	Training Type
Storm water pollution sources and solutions, incl IDEP Awareness	All Employees	Once every 5 years	Poster or Flyer
Park and open space maintenance	Department of Parks and Recreation	Once every 5 years	Live Presentation, DVD, Flyer or equal
Park and open space maintenance	Landscaping Contractor	Upon issuing a contract	Training required in bid documents
Construction and Post-construction storm water management	Building Department, Ordinance Enforcement	Once every 5 years	Live Presentation, DVD, flyer or equal
Storm water system, roadway & parking Lot maintenance	Department of Public Works	Once every 5 years	Recorded Presentation and/or Procedures Manual
Traffic-related small spill response	Representatives of Fire, Police & Public Works Departments	Once every 5 years	Staff Meeting discussion topic, DVD, or Flyer
Other activities that are potential sources of storm water pollutants	Selected Employees	As Needed	As Appropriate
IDEP – Conducting Follow-up inspections and locating the source	Selected Employees	Prior to conducting inspections	Live Presentation, DVD or equal
Advanced stormwater topics	Stormwater Manager & DPW Supervision	As Needed	Conference, Seminar, or Webinar



Appendix 4 – Stormwater Ordinance

CITY OF GROSSE POINTE PARK Ordinance No. 216

Mayor Denner presented to Council for consideration adoption of Ordinance No. 216 as presented.

The Ordinance reads as follows:

AN ORDINANCE TO AMEND THE CODE OF THE CITY OF GROSSE POINTE PARK BY REVISING AND AMENDING CHAPTER 23, ARTICLE II, OF THE CODE OF THE CITY OF GROSSE POINTE PARK TO ADD DIV. 6, SECTIONS 23114 THROUGH 23-123 - STORMWATER DISCHARGE CONTROL

THE CITY OF GROSSE POINTE PARK ORDAINS:

Section 1. Chapter 23 of Article II of the Code of the City of Grosse Pointe Park is amended to add Division 6, Sections 23-114 through 23-123, entitled “Stormwater Discharge Control,” as follows:

Division 6. Stormwater Discharge Control

Sec. 23-114. Purpose.

(a) The purpose of this ordinance is to provide for the health, safety, and general welfare of the citizens of the City of Grosse Pointe Park through the regulation of stormwater and non-stormwater discharges to the municipal separate storm sewer system to the maximum extent practicable as required by federal and state law.

(b) This ordinance establishes methods for controlling the introduction of pollutants into the municipal separate storm sewer system in order to comply with requirements of the National Pollutant Discharge Elimination System (NPDES) permit process.

(c) The objectives of this ordinance are:

- (1) To regulate the contribution of pollutants to the municipal separate storm sewer system by any user.
- (2) To prohibit illicit connections and illicit discharges to the municipal separate storm sewer system.
- (3) To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this ordinance.



(d) This ordinance shall apply to all water entering the municipal separate storm sewer system generated on any developed and/or undeveloped lands unless explicitly exempted by the Director of the Department of Public Service.

(e) The City of Grosse Pointe Park shall administer, implement, and enforce the provisions of this ordinance. Any powers granted or duties imposed upon the City may be delegated in writing by the City Manager to persons or entities acting in the beneficial interest of or in the employ of the City. Except as otherwise provided herein, the Director of the Department of Public Service shall, acting under the supervision of the City Manager, administer, implement and enforce the provisions of this ordinance.

(f) The standards set forth herein and promulgated pursuant to this ordinance are minimum standards; therefore this ordinance does not intend nor imply that compliance by any person will ensure that there will be no contamination, pollution, nor unauthorized discharge of pollutants.

Sec. 23-115. Definitions.

The following words and phrases, when used in this ordinance, shall have the following meaning ascribed to them:

Authority. The word “authority” shall mean the Director of the Department of Public Service or his/her designee.

Best management practices (BMPs). The words “best management practices (BMPs)” shall mean those schedules of activities, prohibitions or practices, general good housekeeping practices, pollution prevention and educational practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants directly or indirectly to stormwater, receiving waters, or separate stormwater conveyance systems. BMPs also include treatment devices, operating procedures, and practices to control site runoff, spillage or leaks, sludge or water disposal, or drainage from raw materials storage.

Clean Water Act. The words “Clean Water Act” shall mean the Federal Water Pollution Control Act, 33 U.S.C. §1251 et seq., as amended, and the applicable regulations promulgated thereunder.

Illicit connection. The words “illicit connection” shall mean a physical connection to the municipal separate storm sewer system that conveys or may convey illicit discharges into the system and/or is not authorized or permitted by the City; or any drain or conveyance connected from a commercial or industrial land use to the municipal separate storm sewer system which has not been documented in plans, maps, or equivalent records and approved by the authority.

Illicit discharge. The words “illicit discharge” shall mean any discharge (or seepage) to the municipal separate storm sewer system that is not composed



entirely of stormwater except discharges pursuant to a NPDES permit or as otherwise exempted by Section 23116(b)(4) of this ordinance.

Municipal separate storm sewer system (MS4). The words “municipal separate storm sewer system (MS4)” shall mean those facilities located within the City and owned or controlled by the City or the county drain commissioner or the county board of road commissioners or the Michigan Department of Transportation by which stormwater may be collected and conveyed to the waters of this state, including any streets or roads with drainage systems, inlets, curbs, gutters, storm pipes and retention, detention or infiltration basins, which are not part of the publicly-owned sanitary sewage collection system.

National Pollutant Discharge Elimination System (NPDES). The words “national pollutant discharge elimination system (NPDES)” shall mean a permit issued by the federal Environmental Protection Agency or a state under authority delegated pursuant to the Clean Water Act that authorizes the discharge of pollutants to waters of the United States. *Non-stormwater discharge.* The words “non-stormwater discharge” shall mean any discharge to the municipal separate storm sewer system that is not composed entirely of stormwater.

Stormwater. The word “stormwater” shall mean any surface flow, runoff, and drainage consisting entirely of water from any form of natural precipitation and resulting from such precipitation.

Stormwater pollution prevention plan (SWPPP). The words “stormwater pollution prevention plan (SWPPP)” shall mean a document which describes the best management practices and activities to be implemented by a person or business to identify sources of pollution or contamination at a site and the actions to eliminate or reduce pollutant discharges to stormwater, stormwater conveyance systems, and/or receiving waters to the maximum extent practicable.

Sec. 23-116. Prohibition of illicit discharges.

- (a) No person shall discharge or cause to be discharged into the municipal separate storm sewer system or watercourses any materials, including any pollutants or waters containing any pollutants that cause or contribute to a violation of applicable water quality standards, other than stormwater.
- (b) The commencement, conduct or continuance of any illicit discharge to the MS4 is prohibited except as described as follows:
 - (1) The following discharges are exempt from discharge prohibitions established by this ordinance, provided that they do not result in a violation of State of Michigan water quality standards:
 - a. Water line flushing.
 - b. Landscape irrigation runoff.
 - c. Diverted stream flows.
 - d. Rising groundwaters.
 - e. Uncontaminated groundwater seepage into storm sewers.



- f. Uncontaminated pumped ground water (except for groundwater cleanups not specifically authorized by NPDES permits).
- g. Discharges from potable water sources if authorized by the director of public service.
- h. Foundation drains.
- i. Air conditioning condensation.
- j. Irrigation waters.
- k. Springs.
- l. Water from crawl space pumps.
- m. Foundation and footing drains and basement sump pumps.
- n. Lawn watering runoff.
- o. Waters not containing soaps or detergents from noncommercial car washing.
- p. Flows from riparian habitats and wetlands.
- q. Dechlorinated swimming pool waters (less than one ppm chlorine) if authorized by the director of public service.
- r. Residual street wash waters.
- s. Uncontaminated industrial wastes if authorized under an NPDES permit and authorized by the director of public service.
- t. Flows from firefighting and fire training activities.
- u. Any other water source not containing pollutants if authorized by the director of public service.

(2) Discharges specified in writing by the City as being necessary to protect public health and safety.

(3) Dye testing is an allowable discharge but requires a verbal notification to the Director of the Department of Public Service prior to the time of the test.

(4) The prohibition shall not apply to any non-stormwater discharge permitted under an NPDES permit, waiver, or waste discharge order issued to the discharger and administered under the authority of the federal Environmental Protection Agency, provided that the discharger is in full compliance with all requirements of the permit, waiver, or order and other applicable laws and regulations, and provided that written approval of the Director of the Department of Public Service has been granted for any discharge to the municipal separate storm sewer system.

Sec. 23-117. Prohibition of illicit connections.

- (a) The construction, use, maintenance or continued existence of illicit connections to the MS4 is prohibited.
- (b) 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.
- (c) A person is considered to be in violation of this ordinance if the person connects a line conveying sewage to the MS4, or allows such a connection to continue.

Sec. 23-118. Suspension of discharges to municipal separate storm sewer system.

- (a) Suspension due to illicit discharges in emergency situations. The City may, without prior notice, suspend municipal separate storm sewer system discharge access to a person when such suspension is necessary to stop an actual or threatened



discharge which presents or may present imminent and substantial danger to the environment, or to the health or welfare of the public, or to the municipal separate storm sewer system or waters of the United States. If the person fails to comply with a suspension order issued in an emergency, the City may take such steps as deemed necessary to prevent or minimize the damage to the MS4 or waters of the United States, or to minimize danger to the public.

- (b) Termination due to detection of illicit discharge. Any person discharging to the municipal separate storm sewer system in violation of this ordinance may have their municipal separate storm sewer system access terminated if such termination would abate or reduce an illicit discharge. The City will notify a violator of the proposed termination of its access to the MS4. The violator may petition the authority for reconsideration and hearing.
- (c) A person who reinstates a municipal separate storm sewer system access to premises terminated pursuant to this ordinance without the prior approval of the City shall be guilty of a misdemeanor punishable as provided by section 1-8(a) of this Code.

Sec. 23-119. Industrial or construction activity discharges.

Any person subject to an industrial or construction activity NPDES stormwater discharge permit shall comply with all provisions of such permit. Proof of compliance with said permit may be required in a form acceptable to the City prior to the allowing of the discharges to the municipal separate storm sewer system.

Sec. 23-120. Access to facilities.

- (a) The City shall be permitted to enter and inspect premises subject to regulation under this ordinance as often as may be necessary to determine compliance with this ordinance. If a discharger has security measures in force which require proper identification and clearance before entry into its premises, the discharger shall make the necessary arrangements to allow access to representatives of the City.
- (b) Facility operators shall allow the City ready access to all parts of the premises for the purposes of inspection, sampling, examination and copying of records that must be kept under the conditions of an NPDES permit to discharge stormwater, and the performance of any additional duties as defined by state and federal law.
- (c) The City shall have the right to set up on any premises such devices as are necessary in the opinion of the City to conduct monitoring and/or sampling of the facility's stormwater discharge.
- (d) The City has the right to require any discharger to install monitoring equipment as necessary. The facility's sampling and monitoring equipment shall be maintained at all times in a safe and proper operating condition by the discharger at its own expense. All devices used to measure stormwater flow and quality shall be calibrated timely to ensure their accuracy.
- (e) Any temporary or permanent obstruction to safe and easy access to the premises to be inspected and/or sampled shall be promptly removed by the owner at the written



or oral request of the City and shall not be replaced. The costs of clearing such access shall be borne by the owner.

- (f) Unreasonable delays in allowing the City access to a permitted facility is a violation of a stormwater discharge permit and of this ordinance. A person who is an operator of a facility with a NPDES permit to discharge stormwater associated with industrial activity commits an offense if the person denies the City reasonable access to the permitted facility for the purpose of conducting any activity authorized or required by this ordinance.
- (g) If the City has been refused access to any part of the premises from which stormwater is discharged, and he/she is able to demonstrate probable cause to believe that there may be a violation of this ordinance, or that there is a need to inspect and/or sample as part of a routine inspection and sampling program designed to verify compliance with this ordinance or any order issued hereunder, or to protect the overall public health, safety, and welfare of the community, then the City may seek issuance of a search warrant from any court of competent jurisdiction.

Sec. 23-121 Requirements to prevent, control, and reduce stormwater pollutants by the use of best management practices.

- (a) The City may impose requirements identifying Best Management Practices (BMPs) for any activity, operation, or facility which may cause or contribute to pollution or contamination of stormwater, the MS4, or waters of the United States.
- (b) The owner or operator of a commercial or industrial establishment shall provide, at their own expense, reasonable protection from accidental discharge of prohibited materials or other wastes into the municipal separate storm sewer system or watercourses through the use of structural and/or non-structural BMPs.
- (c) Any person responsible for a property or premise, which is, or may be, the source of an illicit discharge, may be required to implement, at said person's expense, additional structural and nonstructural BMPs to prevent the further discharge of pollutants to the municipal separate storm sewer system.
- (d) Compliance with all terms and conditions of a valid NPDES permit authorizing the discharge of stormwater associated with industrial activity, to the extent practicable, shall be deemed compliance with the provisions of this ordinance. The BMPs shall be part of a stormwater pollution prevention plan (SWPPP) as necessary for compliance with the requirements of the NPDES permit.
- (e) New development and redevelopment projects that disturb one (1) or more acres, including projects less than one (1) acre that are part of a larger common plan of development or sale, and that discharge into the MS4, shall provide BMPs capable to treat the first one inch of runoff from the entire site such that the discharge does not exceed a concentration of Total Suspended Solids of 80 milligrams per liter (mg/l). The owner shall ensure long-term operation, maintenance, repair, and replacement of all necessary BMPs in perpetuity.

Sec. 23-122. Notification of spills.



Notwithstanding other requirements of law, as soon as any person responsible for a facility or operation, or responsible for emergency response for a facility or operation has information of any known or suspected release of materials which are resulting or may result in illicit discharges or pollutants discharging into stormwater, the MS4 or waters of this state, said person shall take all necessary steps to ensure the discovery, containment, and cleanup of such release. In the event of a release of hazardous materials, said person shall immediately notify emergency response agencies of the occurrence via emergency dispatch services. In the event of a release of nonhazardous materials, said person shall notify the City in person or by phone no later than the next business day. Notifications in person or by phone shall be confirmed by written notice addressed and mailed to the City within three business days of the phone notice. If the discharge or prohibited materials emanates from a commercial or industrial establishment, the owner or operator of such establishment shall also retain an on-site written record of the discharge and the actions taken to prevent its recurrence. Such records shall be retained for at least three years.

Sec. 23-123. Sanctions for violation.

- (a) Except as provided by Sec. 23-118(c), and notwithstanding any other provision of the City's laws, ordinances, and regulations to the contrary, a person who violates any provision of this ordinance (including, without limitation, any notice, order, permit, decision or determination promulgated, issued or made by the authority under this ordinance) is responsible for a municipal civil infraction, subject to payment of a civil fine of not less than \$500 per day for each infraction and not more than \$5,000 per day for each infraction, plus costs and other sanctions.
- (b) Increased fines may be imposed for repeat offenses. As used in this ordinance, "repeat offense" means a second (or any subsequent) municipal civil infraction violation of the same requirement or provision of this ordinance (i) committed by a person within any 12-month period and (ii) for which the person admits responsibility or is determined to be responsible. The increased fine for a repeat offense under this ordinance shall be as follows:
 - (1) The fine for any offense that is a first repeat offense shall be not less than \$2,000, plus costs.
 - (2) The fine for any offense that is a second repeat offense, or any subsequent repeat offense shall be not less than \$5,000, plus costs.
- (c) Subject to the minimum fine amounts specified in Sections 23-123(b), above, the following factors shall be considered by a court in determining the amount of a municipal civil infraction fine following the issuance of a municipal civil infraction citation for a violation of this ordinance: the type, nature, severity, frequency, duration, preventability, potential and actual effect, and economic benefit to the violator (such as delayed or avoided costs or competitive advantage) of a violation; the violator's recalcitrance or efforts to comply; the economic impacts of the fine on the violator; and such other matters as justice may require. A violator shall bear the burden of demonstrating the presence and degree of any mitigating factors to be considered in determining the amount of a fine. However, mitigating factors



shall not be considered unless it is determined that the violator has made all good faith efforts to correct and terminate all violations.

- (d) Notwithstanding any other provision of the City's laws, ordinances, and regulations to the contrary, the following persons are designated as the authorized local officials to issue municipal civil infraction citations (directing alleged violators to appear in district court) and/or notices (directing alleged violators to appear at the City's Municipal Violations Bureau, as applicable) for violations of this ordinance: the City manager, the director of public services, and any police officer.
- (e) Except as otherwise provided by this ordinance, the requirements and procedures for commencing municipal civil infraction actions; issuance and service of municipal civil infraction citations; determination and collection of court-ordered fines, costs and expenses; appearances and payment of fines and costs; failure to answer, appear or, pay fines; disposition of fines, costs and expenses paid; and other matters regarding municipal civil infractions shall be as set forth in Act No. 236 of the Public Acts of 1961, as amended.
- (f) Any person who (1) at the time of a violation knew or should have known that a pollutant or substance was discharged contrary to any provision of this ordinance, or contrary to any notice, order, permit, decision or determination promulgated, issued or made by the authority under this ordinance; or (2) intentionally makes a false statement, representation, or certification in an application for, or form pertaining to a permit, or in a notice, report, or record required by this ordinance, or in any other correspondence or communication, written or oral, with the authority regarding matters regulated by this ordinance; or (3) intentionally falsifies, tampers with, or renders inaccurate any sampling or monitoring device or record required to be maintained by this ordinance; or (4) commits any other act that is punishable under state law by imprisonment for more than 90 days; shall, upon conviction, be guilty of a misdemeanor punishable by a fine of \$500 per violation, per day, or imprisonment for up to 90 days, or both in the discretion of the court.
- (g) The authority is authorized, after giving reasonable notice and opportunity for compliance,
 - (1) to correct any violation of this ordinance or damage or impairment to the stormwater drainage system caused by a discharge, and
 - (2) to bill the person causing the violation or discharge for the costs of the work to be reimbursed.

The costs reimbursable under this ordinance shall be in addition to fees, amounts or other costs and expenses required to be paid to the City under other sections of this ordinance.

Motion by Councilmember Grano, supported by Councilmember Read, to adopt Ordinance No. 216 as presented.

AYES: Councilmembers Grano, Relan, Read, Hodges, Robson, and Fluitt, and Mayor

Denner NAYS: None



Appendix 5 – Collaborative Public Education Plan

**Clinton River Watershed
Anchor Bay
Lake St. Clair Direct Drainage**

Collaborative Public Education Plan

Approved:

March 21st, 2023

**Submitted by the Clinton River Watershed Council on behalf of
Macomb County, Oakland County
and the MS4 permit holders that participate in the
Clinton River Watershed Council's Stormwater Education Program**



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I. INTRODUCTION

This watershed wide Public Education Plan (PEP) was developed to inform the public within the Clinton River Watershed about their role in protecting water quality and preventing stormwater pollution. This plan was created by the municipalities and other partners in the Clinton River Watershed with the input of stakeholders and professionals in the environmental education field. This plan outlines the public education goals and messages that must be communicated under the requirements of the National Pollutant Discharge Elimination System (NPDES) Phase I and Phase II regulations. The PEP also describes the existing and future efforts the communities and other partners will undertake to achieve these education goals, and how these efforts will be evaluated.

II. PARTNERS & STAKEHOLDERS

This watershed wide PEP is submitted on behalf of Macomb County, Oakland County and the MS4 permit holders that participate in the Stormwater Education Program facilitated by the Clinton River Watershed Council (CRWC). Municipal staff, county agencies, and CRWC participated in the development of the PEP. The CRWC Stormwater Education program was developed to assist communities that must comply with the NPDES Phase I or Phase II stormwater discharge regulations. Activities facilitated by CRWC, Macomb and Oakland Counties, and the MSU Extension Office will be reported on behalf of the following permit holders and their nested MS4's.

Avondale School District	City of Fraser	City of Utica
Charter Township of Chesterfield	City of Harper Woods	City of Warren
Charter Township of Clinton	City of Hazel Park	Independence Township
Charter Township of Harrison	City of Madison Heights	Macomb Intermediate School District
Charter Township Orion	City of Mount Clemens	Macomb Township
Charter Township of Oxford	City of New Baltimore	Macomb County
Charter Township of Shelby	City of Orchard Lake Village	Oakland County
Charter Township of Washington	City of Pontiac	Oakland University
City of Center Line	City of Rochester	Oxford Area Community Schools
City of Keego Harbor	City of Rochester Hills	Rochester Community Schools
City of Eastpointe	City of Roseville	Village of Lake Orion
City of Fraser	City of St. Clair Shores	Village of New Haven
City of Grosse Pointe	City of Sterling Heights	Village of Oxford
City of Grosse Pointe Farms	City of Sylvan Lake	Village of Romeo
City of Grosse Pointe Park	City of the Village of Clarkston	
City of Grosse Pointe Shores	City of Troy	



Clinton River watershed communities, subwatershed groups, and partners agreed that approaching stormwater education on a watershed, cross-jurisdictional basis is both cost-effective and environmentally sound. The watershed approach allows the partners to share information and resources to address stormwater concerns at their source. Similarly, developing and implementing a public education program on a watershed basis provides a consistent and effective mechanism for protecting water resources across the region, while leveraging financial resources in each community.

During preparation of this PEP, various municipal staff, environmental organizations, county agencies, and the MSU Extension offices were contacted.

The following information was compiled to identify and organize existing stormwater education materials and programs:

- Existing materials or programs used to educate the public about watersheds and water quality protection (e.g. brochures, videos, displays, school programs, etc.).
- Existing audiences to target for watershed education (e.g. homeowners associations, lake associations, churches, civic groups, business associations, etc.).
- Existing communication methods that could be used to disseminate watershed education (e.g. cable access channel, email, website, newsletter, water bills, etc.).

III. CLINTON RIVER WATERSHED COUNCIL'S STORMWATER EDUCATION PROGRAM

The CRWC is a nonprofit organization dedicated to protecting, enhancing, and celebrating the Clinton River, its watershed, and Lake St. Clair. For over 50 years, the CRWC has worked collaboratively with local governments, businesses, individuals, and other community groups to address water quality and land use issues in the watershed. Stormwater runoff is the leading source of pollution in the Clinton River today, thus CRWC's efforts are focused primarily on decreasing the amount of stormwater and stormwater pollution reaching our streams, rivers, and lakes. CRWC works to achieve its mission by providing education and stewardship programs to the more than 1.5 million people, 63 communities, and 4 counties in the Clinton River watershed.

Upon the request of a number of communities, CRWC developed the Stormwater Education Program to assist its members in meeting their Phase I or Phase II public education requirements. The components of the Stormwater Education Program are outlined in this PEP, along with materials and programs offered by the counties, CRWC, and MSU extension. These materials and programs will be supported and promoted by the MS4 permittees named in this PEP. In subscribing to the Stormwater Education Program, each participating entity has entered into contract with the watershed council. CRWC has agreed to provide the programs outlined in this plan.

As outlined in this PEP, CRWC's program includes the following major components:

- Education of the public and recruitment of volunteers in each subwatershed through a variety of outreach methods (presentations, workshops, websites, cable TV, print media, etc.).
- Regular volunteer training sessions and establishment of water quality monitoring sites throughout each subwatershed.
- Quarterly stormwater management forums for municipal staff, City Council members, planners, engineers, consultants, MDEQ MS4 permit staff, and other watershed stakeholders to share information and discuss topics related to stormwater management, planning, and infrastructure development.
- Coordination of other on-going education and stewardship efforts, including River Day, Weekly Clean, Clinton Clean-Up, paddling events, water festivals, Adopt-A-Stream citizen science



program, the Stream Leaders student river monitoring program, and the RiverSafe LakeSafe program.

- Engage and collaborate with municipalities to promote and facilitate CRWC's WaterTowns™ place making initiative focused on connecting communities to their waterways through education, green stormwater infrastructure, history, art, and ecology.
- Development and distribution of supporting print and web-based materials.

IV. GOALS & OBJECTIVES

The goal of this PEP is to promote, publicize, and facilitate watershed education for the purpose of encouraging the public to reduce the discharge of pollutants in stormwater to the maximum extent practicable. Pollution prevention shall be encouraged.

“Public” is defined to include all persons who potentially could affect the authorized stormwater discharges, including, but not limited to, residents, visitors to the area, public employees, businesses, industries, construction contractors, and developers.

This PEP is designed to ensure that the targeted audiences (“public”) are reached with the appropriate messages for the following nine topics as required in the 2003 NPDES Phase II stormwater permit:

1. Responsibility and stewardship in their watershed.
2. The connection of MS4 catch basins, storm drains, and ditches to area waterways, and the potential impacts these could have on the surface waters of the state.
3. Public reporting of illicit discharges or improper disposal of materials in MS4s.
4. The effects and need to minimize the amount of residential or noncommercial wastes discharged into MS4s, including:
 - i. Preferred cleaning materials and procedures for car, pavement, and power washing.
 - ii. Acceptable application and disposal of pesticides, herbicides, and fertilizers.
 - iii. Proper disposal practices for grass clippings, leaf litter, and animal wastes that get flushed into MS4s and the surface waters of the state.
5. The availability, location, and requirements of facilities for disposal or drop-off of household hazardous wastes, travel trailer sanitary wastes, chemicals, yard wastes, and motor vehicle fluids.
6. For property owners with septic systems, the proper septic system care and maintenance, and how to recognize system failure.
7. The benefits of using native vegetation as well as other landscape practices that enhance water quality such as rain gardens and rain barrels.
8. For permittees with riparian land owners, methods for managing riparian lands to protect water quality.
9. Additional pollutants unique to commercial, industrial, and institutional entities as the need is identified.
10. Green stormwater infrastructure development and benefits.

All PEP participating permittees were required to apply for a new MS4 permit in their respective permit cycle years. The following key messages will be covered within the Clinton River Watershed and Lake St. Clair Direct Drainage Collaborative Public Education Plan. This Collaborative PEP was developed and will be implemented to continue meeting the PEP requirements of the 2003 MS4 permit as well as the new MS4 permit going forward.

- A. Promote public responsibility and stewardship in the applicant’s watershed(s).



- B. 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.
- C. Educate the public on illicit discharges and promote public reporting of illicit discharges and improper disposal of materials into the MS4.
- D. Promote preferred cleaning materials and procedures for car, pavement, and power washing.
- E. Inform and educate the public on proper application and disposal of pesticides, herbicides, and fertilizers.
- F. Promote proper disposal practices for grass clippings, leaf litter, and animal wastes that may enter into the MS4.
- G. Identify and promote the availability, location, and requirements of facilities for collection or disposal of household hazardous wastes, travel trailer sanitary wastes, chemicals, and motor vehicle fluids.
- H. Inform and educate the public on proper septic system care and maintenance, and how to recognize system failure.
- I. Educate the public on and promote the benefits of green stormwater infrastructure and Low Impact Development.
- J. Promote methods for managing riparian lands to protect water quality.
- K. Identify and educate commercial, industrial, and institutional entities likely to contribute pollutants to stormwater runoff.

V. REQUIRED ELEMENTS –EDUCATION ACTIVITIES

Appendix A details the activities and methods that the **Clinton River Watershed Council, Macomb County, Oakland County, and MSU extension will perform on behalf of the participating communities**. The matrix breaks out the activities according to the elements and key messages that they address and describes the target audiences, delivery mechanisms, timeline, responsible parties, and evaluation methods for each activity. An overall evaluation plan is also included in Section VI.

VI. EVALUATION PLAN

A variety of mechanisms will be employed. Some will quantify the usage of materials (e.g. number of materials distributed, website hits) and participation in events (e.g. number of attendees at a presentation or workshop, number of participants at an event). These mechanisms can be useful in determining whether the education effort is reaching the audience; however it is difficult to evaluate behavior change resulting from the education activity using these purely quantitative methods.

The CRWC will use an online survey tool to measure post contact behavioral changes. For example; email addresses will be collected from all CRWC facilitated event attendees, 60-90 days following the event an email with a link to the online survey will be sent asking the participant some questions about their general knowledge and behavior changes. While the surveys are not scientifically significant the results of the survey can help mold the Public Education Efforts throughout the Clinton.

Through CRWC's Adopt-A-Stream monitoring program, it is possible to evaluate long-term changes in water quality. The results are compiled in an annual data summary, which allows a simple mechanism for measuring improvements or declines in water quality across the various subwatersheds. This data is managed in a document that records water quality monitoring results for up to the past five years. Improvements in water quality cannot be attributed solely to a successful public education effort, but indicate the overall effectiveness of the stormwater management efforts in the community, subwatershed, and watershed-wide.



VII. REPORTING

The Clinton River Watershed Council will provide a Biennial Progress Report on this Public Education Plan to the Michigan Department of Environmental Quality. This Biennial Report of the watershed wide collaborative PEP is submitted by the CRWC on behalf of Macomb County, Oakland County and the MS4 permit holders that participate in the Stormwater Education Program facilitated by CRWC. Activities facilitated by CRWC, Macomb and Oakland Counties, and the MSU Extension Office will be reported on behalf of the permit holders and their nested MS4s.

VIII. APPENDIX A: ACTIVITIES DETAIL TABLE 1

IX. APPENDIX B: COMMUNITY SPECIFIC ACTIONS TRACKING SPREADSHEET

X. APPENDIX C: LETTERS OF COMMITMENT FOR SERVICES AND PROGRAMS

1. Macomb County Public Works Office
2. Oakland County Water Resources Commissioner's Office
3. MSU Extension

For Appendices see: <https://www.crw.org/programs/education/communities>