# **Stormwater Management**



### **Public Stormwater System Facilities Maintenance**

The Village of Lake Orion maintains the storm sewer system facilities located on village-owned streets and properties and complies with state and federal regulations governing stormwater collection and discharge systems.

#### Stormwater

Stormwater can be generally defined as the runoff of rain or snowmelt from a site that is not absorbed into the ground. This runoff comes from the impervious or hard surfaces such as roofs, driveways, streets and parking areas. It is captured through storm drains and pipes, creeks and basins, where it is released over time to mimic the release prior to development. Runoff can pick up pollutants as it travels to the storm system, such as lawn fertilizers, oils from cars, pet waste, eroded soils and any trash. Storm water is not treated so it is important to all of us that we try and keep these waters as clean as possible. Wherever you live or work, you are in a watershed and we need to keep our watersheds healthy for today and into the future.

#### What is Stormwater runoff?

Runoff is the rain or snowmelt that flows off a property rather than being absorbed into the ground. This runoff is the result from the addition of driveways, parking lots, a building roof or

any other impervious surface.

#### What is an impervious surface?

An impervious surface does not let water become absorbed into the ground like it did before the property was developed. The original grassy or wooded property that absorbed the water is replaced with different surfaces that act as a barrier to absorption. These surfaces can be buildings, driveways, streets, sidewalks or parking lots. As the impervious surface generates greater runoff than the natural property, this additional runoff requires some type of storage to limit the impacts downstream. Most subdivisions have a required stormwater basin for this reason.

#### Why is it important to manage Stormwater runoff?

Stormwater picks up pollutants as it travels to the storm system and creeks. There is no treatment to remove these pollutants, so it is important to keep the waters clean. Most public water supply systems are downstream of urban runoff areas. Types of pollutants can include fertilizers, car wash soaps and oils as well as pet waste.

#### **About Lake Orion's Stormwater management program**

Lake Orion is located within the **Detroit Urbanized Area** of the National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) regulations. The Village of Lake Orion is part of the **Stony/Paint Creek Subwatershed** of the Clinton River Watershed system and covered by the subwatershed's management plan. As part of NPDES regulatory compliance, the village does the following:

- Applies for and maintains a NPDES Phase II MS4 permit through the Michigan Department of Environment, Great Lakes, and Energy (EGLE)
- Contracts with the Clinton River Watershed Council (CRWC) to administer the village's storm water education program in compliance with the village's MS4 permit requirements
- Periodically designs, installs, maintains, inspects, rehabilitates, and replaces municipal storm sewer facilities as needed
- Identifies and takes action to eliminate illicit discharges to the municipal storm sewer system
- Coordinates with the Oakland County Water Resources Commissioner's Office
  (OCWRC) to ensure that private property owners install proper storm water facilities and
  comply with storm water collection and discharge regulations

Below please find web links and copies of important documents related to the Village of Lake Orion's comprehensive stormwater management and public education program.

- EGLE Pollution Prevention Website
- EGLE Pollution Emergency Alerting System (PEAS) Hotline: 800-292-4706
- OCWRC 24-Hour Pollution Hotline Brochure
- What You Can Do to Protect Our Waterways (SEMCOG)
- Clinton River Watershed Council Events
- A Citizens Guide to Lawn Care (EGLE)
- SEMCOG Stormwater Resources
- Oakland County Water Resources Commissioner's Water Education Resources
- Oakland County Water Resources Commissioner's Stormwater Management Program
- MSU Extension Gardening Program

## **Supporting Documents**

National Pollutant Discharge Elimination System Permit - 2024-25 199.93 KB

Total Maximum Daily Load Implementation Plan - December 2023 6.25 MB

Public Education Program Biennial Report - 2022-2024 14.37 MB

Auto Care Best Management Practices Flyer 146.01 KB

Catch Basin Cleaning and Waste Disposal Standard Operating Procedures 199.19 KB Clean Boating Practices Fact Sheet 618.6 KB Coal Tar Sealant Reduction Flyer 305.67 KB Concrete Washout Best Management Practices 238.27 KB Homeowner Association Best Management Practices Flyer 119.47 KB Lawn Care and Fertilizer Tip Card - SEMCOG 1.88 MB Microplastics Pollution Prevention Flyer 941.51 KB Pet Care Tip Card - SEMCOG 2.01 MB Rain Barrel Citizens Guide 476.58 KB Schools Best Management Practices Flyer 226.09 KB Seven Simple Steps to Clean Water 262.13 KB Stony/Paint Creek Subwatershed Management Plan 6.32 MB Waterfront Wisdom Healthy Habits for Clean Water Guide 15.16 MB Winter Salt Tips Flyer 1.26 MB