



## **Maintaining Your Detention Basin: A Guide for Macomb Township Residents**

### **What is the purpose of a detention basin and why do I need to maintain it?**

Detention basins improve stormwater quality and reduce peak stormwater runoff from parking lots, streets, and roof tops by providing stormwater storage during large storm events. Detention basin maintenance is critical in helping to remove pollutants from stormwater, providing the required designed storage volume, and reducing flooding. Additionally, poorly maintained basins create unpleasant odors, nuisance insects, algae blooms, and an undesirable aesthetic appearance.

### **Who is responsible for maintenance of the basin?**

The property owners Association is responsible for the correct operation and proper maintenance of detention basins in residential areas. In commercial and industrial areas, individual property owners are responsible for the detention basin operation and maintenance except where property owners Associations or separate agreements exist. Macomb Township does not provide regular maintenance for detention basins.

### **What needs to be done to maintain a basin?**

In general, a basin should be monitored to ensure it is properly functioning. Keeping the basin clear of debris is good practice. A general maintenance schedule for maintaining your basin is provided on the next page.

### **Recommended Maintenance Schedules**

(Task and Frequency)

#### **Storm Sewer System:**

- Inspect for trash or other debris blocking inlet/outlet pipes, rise/standpipe cover, and emergency spillway. **Monthly and after rain events.**
- Inspect for sediment accumulation at the inlet pipes. **Semiannually or after rain events.**
- Inspect stone around the riser/standpipe (outlet pipe). **Semiannually or after rain events.**
- Remove accumulated sediment at basin inlets or in forebay. **Semiannually or after rain events.**
- Inspect inlet/outlet pipes for structural integrity. **Annually.**
- Inspect riprap at inlet pipes. **Annually.**
- Inspect for excess sediment accumulation in the basin. **Annually.**
- Have the basin and outlet control structures inspected by a Professional Civil Engineer to ensure they are functioning properly. **Annually.**
- Inspect and clean storm sewer system and catch basins upstream of the detention basin. **Every 5 years or as needed.**

**Detention Basin Vegetation:**

- Inspect side slopes, berms and spillways for erosion. **Annually and after significant rain events.**
- Re-establish permanent native vegetation on eroded slopes. **Annually and after significant rain events.**
- Maintain 15-25 foot "no mow and chemical-free" zone around basin edge. **Annually.**
- Mow the "no mow" buffer zone once a year. **Annually – late April/early May.**
- Inspect basin and "no mow" zone for invasive species.\* **Annually – July.**
- Have a qualified professional selectively herbicide invasive species. **Annually – July/August.**
- Increase plant diversity by planting additional vegetation around basin. **Annually – fall or early spring.**

**Property Management:**

- Inspect basin for signs of chemicals; identify and remove/dispose of properly. **\*\* Monthly and after rain events.**
- Street sweeping. **Semiannually.**
- Maintain common areas. **Annually.**
- Review maintenance plan. **Annually.**

\*Invasive species such as purple loosestrife, phragmites, buckthorn, honeysuckle and autumn olive that out-compete vegetation.

\*\*Chemicals such as solvents, gas, diesel, paint, natural gas, etc.

## **Who can be contacted for assistance with specific basin maintenance issues?**

Below is a list of consultants/contractors that may be appropriate for basin maintenance tasks. This list is not inclusive and is not intended to be a recommendation by Macomb Township.

### **Professional Civil Engineers:**

Urban Lan Consultants  
8800 23 Mile Road  
Shelby Township, MI 48316  
Phone: 586-731-8030

Seiber Keast Lehner  
17001 19 Mile Road, Suite 3  
Clinton Township, MI 48038  
Phone: 586-412-7050

G2 Consulting Group  
1866 Woodslee Street  
Troy, MI 48083  
Phone: 248-680-0400

Testing Engineers & Consultants, Inc.  
1343 Rochester Road  
Troy, MI 48083  
Phone: 248-588-6200

### **Storm Sewer Cleaning Contractors:**

Advanced Underground Inspection, LLC  
38657 Webb Drive  
Westland, MI 48185  
Phone: 734-721-0081

Pipetek Infrastructure Services  
15155 Fogg St.  
Plymouth, MI 48170  
Phone: 1248-392-2894

Rogue Industrial Services  
1250 Fox Chase Road  
Bloomfield Hills, MI 48301  
Phone: 313-468-8888

Pipeline Management Co., Inc.  
2673 E. Maple Road  
Milford, MI 48381  
Phone: 248-685-1500

### **Basin Maintenance/Restoration & Storm Sewer Replacement/Repair Contractors**

FDM Contracting, Inc.  
49159 Van Dyke Road  
Shelby Township, MI 48317  
Phone: 586-739-8400

Ocean View Excavating  
1100 Wadhams Road  
St. Clair, MI 48079  
Phone: 810-329-3870

Fontana Construction, Inc.  
6340 Sims Drive  
Sterling Heights, MI 48313  
Phone: 810-560-9377

Teltow Contracting, Inc.  
4678 Meldrum Road  
Casco, MI 48064  
Phone: 586-727-1585

TR Pieprzak Company, Inc.  
6267 St. Clair Highway  
China Township, MI 48054  
Phone: 810-329-4027

### **Invasive Species Removal/Aquatic Vegetation Control Contractors:**

Tri-County Aquatics, Inc.  
PO Box 173  
Washington, MI 48094  
Phone: 586-786-6234

Aquatics Services, Inc.  
8249 Ridge Road  
Goodrich, MI 48438  
Phone: 810-636-3303

**Detention Basin Definitions:**

Wet Detention Basin: A basin designed to have a remaining permanent pool of water after a storm event.

Dry Detention Basin: A basin designed to NOT have a significant pool of water remaining after a storm event.

Regional Basin: A basin designed to capture stormwater runoff from a larger regional area that drains into a basin.

Impervious Area: A solid surface that does not allow rain to be absorbed.

Stormwater Runoff: Runoff that occurs as a result of a rain or storm event hitting an impervious surface and running off.

Inlet: The point where stormwater enters the basin.

Forebay: A smaller basin located at the inlet of a larger basin to trap and settle out sediment and heavy pollutants before they reach the main basin.

Outlet: A structure that controls the rate of release from the basin and the water depth and storage volume in the basin.

Restrictor/Orifice: A controlled opening on the outlet structure through which stormwater is discharged from the basin.

Trash Rack: A structural feature of the outlet that filters stormwater by trapping debris before runoff is discharged.