Guide for Detention & Retention Basin Maintenance







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Common Questions

Detention or retention basins are designed to reduce flooding by capturing, holding and slowly releasing stormwater. Some newer developments built after 2008 have additional requirements for improving water quality and protecting stream channels from erosion. This guide offers preventative and corrective maintenance tips to help you save money in the long run.

1. Who's responsible for maintenance?

Maintenance responsibilities are transferred from developer to the Home Owner's Association (HOA) when public infrastructure is accepted by the City and per requirements in subdivision covenants (also known as an indenture). Typically, HOAs are responsible for routine grounds maintenance such as mowing, erosion control, and removing litter, yard waste and mud to maintain function and prevent pollution. Over time, basins may also fill up with sediment that requires removal or dredging. Covenants may outline additional responsibilities. Alternatively, the City owns and maintains public infrastructure. The City will remove blockages inside public storm drain, pipes and overflow structures, as well as inspect or repair pipes or pipe joint leaks that can sometimes cause 'sinkholes' above them.

2. Is my basin supposed to hold water?

Yes, basins are designed to temporarily capture and store runoff and release water gradually to simulate pre-development conditions. It is common for the water level in dry and wet basins fill up to a foot higher than the concrete overflow structure (or one foot lower than the dam).

3. When should common ground grass/weeds be mowed?

Vacant common ground should be kept less than 12" in height. Common ground with structures (pavilions, pools etc.) should be kept less than 8" in height. Native landscaping is allowed and encouraged if it is in a landscaping plan approved by the City or Stormwater Facility Operation and Maintenance Plan, and maintained in accordance with the maintenance agreement.

Note: Federal mitigation areas have additional requirements. These areas are created with subdivision approval and are typically identified by posted signs. Refer to your covenants or consult the Army Corps of Engineers for details.

4. Why is the pond/basin full of aquatic vegetation?

Aquatic vegetation is recommended on shorelines to help prevent erosion and provide habitat and shade. Some newer basins are required to have native vegetation and a Stormwater Facility Operation and Maintenance Plan to help filter pollutants from runoff and improve water quality. Left unmanaged, some aquatic plants can become nuisances. Check your covenants or call the City before applying control measures. We're happy to help provide guidance.

DETENTION BASIN MAINTENANCE (TYPICALLY DRY)

Inspect for...

Maintenance Schedule

 Standing Water or Soggy 	•	Standing	Water	or	Soggy
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Pollution

Sedimentation

Bank Deterioration

Outfall Structure or Blockage

• Concrete Swale Maintenance

Algal or Fungal Growth

Foul Odor

Mosquito Control

Monthly or 72 Hours After Rain

Monthly or 72 Hours After Rain

Bi-annually or As Needed

Bi-Annually or As Needed

Bi-Annually or As Needed

Bi-Annually or As Needed

As Needed

As Needed

As Needed

RETENTION BASIN MAINTENANCE (WET PONDS)

Inspect for...

Pollution

Bank Deterioration

Outfall Structure or Blockage

Nuisance Aquatic Plants

Foul Odor

Mosquito Control

Algae Growth

Sedimentation

Maintenance Schedule

Remove Litter Monthly

Bi-Annually or As Needed When

Volume is Low

Bi-Annually or As Needed

Early Spring and Late Fall

As Needed

As Needed

As Needed (Avoid fertilizing banks

and in drainage areas)

Every 5-10 Years

Report dumping or hazardous waste spill concerns immediately to:

City of Wentzville Concern Hotline (636) 639-2121 and Missouri Department of Natural Resources at (314) 416-2960

Resources

- Detention/Retention Basin Inspection Checklist www.wentzvillemo.org Search "Yard Drainage"
- Aquatic Vegetation Management & Algae Control https://mdc.mo.gov/property/pond-stream-care/ponds-plant-management
- Mosquito Control
 St. Charles County Division of Environment

St. Charles County Division of Environmental Health & Protection http://health.sccmo.org · (636) 949-1800

- Pond Improvements
 https://mdc.mo.gov/property/improve-my-property/habitat-management
- Native Plants for Your Landscape
 www.wentzvillemo.org Search "Native Plants & Butterflies" for guides
- Resources for Stormwater Basins
 http://bit.ly/wentzvillestormwater Select "Learn"
- Report a Concern in Wentzville www.wentzvillemo.org · (636) 639-2121
- U.S. Army Corps of Engineers (Mitigation Areas) www.mvs.usace.army.mil (314) 331-8000



City of Wentzville Public Works

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