# Stormwater Management

Maintenance Guidelines



Most new developments in Austin are required to construct on-site storm water controls (ponds) to prevent flooding, erosion, and pollution of our creeks and lakes. These controls slow down stormwater to reduce downstream flooding and erosion or filter water so that pollutants are trapped in the pond rather than traveling to waterways. This brochure provides general maintenance guidelines to help you comply with City of Austin requirements.

### **Benefits of Frequent Inspection and Maintenance:**

A well-maintained control is more attractive and best serves its purpose of flood reduction and/or water quality protection. Regular maintenance will reduce the need to rebuild a control that has failed and will reduce the risk of fines for non-compliance with government regulations. Please join us in providing a safer and healthier environment.

### **Types of Stormwater Controls**

#### Flood Detention

This type of control provides flood control. It detains stormwater for a short amount of time and then slowly releases it downstream.



### **Filtration Only**

This type of control has a sand basin through which stormwater filters before reaching a network of perforated pipes that drain the storm water back into the conveyance system.



#### **Sedimentation/Sand Filtration**

This type of control has a sedimentation basin that captures large sediment and debris before stormwater moves to the filtration basin for additional removal of fine sediment. Do not till sand filters.



### Wet pond

This type of control has a permanent pool of water. It is designed to capture and hold stormwater runoff to allow settling of suspended solids and removal of pollutants through plant uptake. These controls are not meant for recreational activities such as swimming and fishing.



### Retention/Irrigation

This type of control captures stormwater and redistributes it through an irrigation system over natural areas adjacent to the control to simulate natural infiltration with no runoff.



### **Rain Gardens/Biofiltration**

This type of control is a depressed garden designed to catch, infiltrate, and treat stormwater runoff through plant uptake of pollutants.



### **Vegetated Filter Strip**

This type of control is a dedicated strip of planted or indigenous vegetation maintained to remove or mitigate the effects of pollutants such as sediment, nutrients, pesticides, and suspended solids.



If you have a property with an existing stormwater control and need help identifying what type of structure it is, call 512-383-0016.

### **Owner Inspection and General Maintenance:**

### **Regular inspections**

Regular inspections are extremely important to ensure that stormwater controls function properly. As well as looking unattractive, trash and debris clog the controls. Accumulated sediment and excessive plant growth can create pooling and prevent water flow through the control. Early detection can prevent more serious problems that could be very expensive to fix. In general, controls should be inspected at least monthly and after rainfall events

#### **General Maintenance**

- Mow vegetation that exceeds 18" in height to no less than 4". Care should be taken that special plantings are not disturbed and are maintained as may be appropriate.
- Remove trash and debris regularly (once a month and after rain events).
- Remove sediment build-up, especially at inlet and outlet structures.
- Provide corrective maintenance when a control does not drain properly.
- Repair any deterioration or damage to concrete elements.
- Un-vegetated areas should be reseeded or sodded immediately.
- Remove nuisance and invasive trees and other plants, especially willows and Chinese tallow.

### **City Inspections**





City staff inspects commercial and residential stormwater controls for compliance with regulatory requirements. An owner may receive a Notice of Violation if a control is found to be poorly maintained, not functioning properly, or if access to the control for inspection purposes is limited.



### **Waste Disposal**

Stormwater control owners are responsible for the safe disposal of material removed from the control.

In general, sediment removed from controls in Austin has not been found to be hazardous. However, controls used to treat stormwater are designed to capture and concentrate pollutants. Normal disposal options include:

- A local solid waste landfill
- A non-hazardous waste disposal service

Contact the landfill or waste disposal service in advance for their specific waste acceptance requirements.

If you have a petroleum, pesticide, or other chemical spill that enters the control (or if you suspect that the sediment is contaminated), the media will need to be removed and replaced. You should contact the 24 Hour Pollution Hotline (512-974-2550) for more information.

### **Contacts**

### **City of Austin**

Pond Permitting Inspection and Maintenance:

- Residential & Commercial, 512-383-0016
- Operating Permits in Barton Springs Zone, 512-974-2715
- 24 Hour Pollution Hotline, **512-974-2550**

For further information, visit: www.austintexas.gov/department/field-operations

## Texas Commission on Environmental Quality

Waste Storage, Disposal, and Testing Requirements, **512-339-2929** 

### Health and Human Services

Mosquito Breeding and Stagnant Water Complaints, **512-972-5600** 



