

# HOW TO MAINTAIN YOUR GRASS DRAINAGE SWALE

## What is a grass drainage swale?

A grass drainage swale is an open channel that collects water from hard surfaces and allows it to percolate into the ground, reducing the amount of runoff leaving the road or property. The grass covering the side slopes and swale bottom provides a filtration surface for the water and helps to reduce the flow velocity. In steeper areas, some swales have stone or concrete 'check dams' across the width to help slow the flow rate, promote infiltration, and prevent erosion. Swales are commonly found along roads, parking lots, or between properties of some residential lots.

Typical grass swale



### Who is responsible for this maintenance?

As the property owner, you are responsible for mowing & maintenance of your grass drainage swale. Some grass swales are structurally maintained by Anne Arundel County.

## SUGGESTED MAINTENANCE ACTIONS\*

### MONTHLY

- Inspect your swale during and after storms to make sure that rainwater has drained and there is no erosion.
- Remove sediment and debris from in and around the swale.
- Remove weeds and plants that do not belong.
- Check for any obstruction or blockage of flow along inflow areas or pipes, including trash, debris, or sediment.

### SEASONALLY

- Mow grass no shorter than 3 to 6 inches. Remove and compost all grass clippings.
- Adjust mower height to avoid scalping the edges of the side slopes.
- Remove and compost leaves in the fall and spring. Leaves may smother the grass and block the flow or rainwater.

### AS NEEDED

- Reseed bare areas to avoid erosion. Be sure to water during the initial establishment period.
- Inspect and maintain or repair components.
- After rainfall, check the swale to ensure the water does not pond longer than 2 or 3 days after a rain storm.

### DO NOT:

- Use excessive fertilizer or pesticides in your swale.

## WHY IT'S IMPORTANT TO MAINTAIN YOUR GRASS DRAINAGE SWALE

An unmaintained grass drainage swale area may:

- Stop filtering the rainwater and allow trash and pollutants to enter into our local streams.
- Block the flow of rainwater and cause local flooding.
- Allow water to pool on the surface long enough to allow mosquitoes or other insects to breed (longer than 3 days).

\* Please refer to the Maryland Stormwater Design Manual, Volumes I and II for minimum requirements and procedures for maintaining BMPs. This document serves as the official guide for stormwater management principles, methods, and practices in the State of Maryland. Visit <http://bit.ly/MDESWDM>.

## Troubleshooting Issues

Symptom	Possible Cause	Solution
Poor grass health	You grass may be the wrong type for your shade and moisture conditions or they may be smothered by weeds.	Remove dead or disease grass and plant new vegetation as needed. Also be sure to regularly remove weeds and other invasive plants.
Standing water for over 48 hours after a rain event.	Clogging due to leaf litter, grass clippings sediment, or debris accumulation.	Remove any visible debris from the surface. Depending on severity, the swale may need to be tilled and replanted.
Erosion or bare soil	The rainwater is moving too fast and/or vegetation is lacking or nonexistent.	Stabilize the eroded areas by planting new vegetation. Consider using rocks to slow the flow of rainwater.

### Recommended timeframes for routine maintenance

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Remove sediment, leaves and debris		•			•			•			•	
Remove trash	•	•	•	•	•	•	•	•	•	•	•	•
Mowing				•	•	•	•	•	•	•	•	
Watering, replanting, erosion control	— As needed —											

### Typical Grass Swale Cross-Section (for illustrative purposes only)

