

# Landscape Infiltration



## What is a landscape infiltration?

Landscape infiltration filters rainwater that becomes polluted as it flows over hard surfaces like streets, parking lots, roofs, and driveways. We are legally required to clean this “stormwater runoff” before it reaches our streams and rivers. The good news is that polluted water naturally becomes cleaner when it infiltrates through the landscape. Landscape infiltration, essentially a native plant garden, retains the water long enough for the plants to filter out the pollutants and use them to grow.

Landscape infiltration systems are made up of several components (see image on back of page). Rainwater falling on a roof or other hard surface flows into a strip of grass that buffers the landscape infiltration area. The grass slows and pretreats the runoff as it flows into the planted infiltration area. Native plants, soil, gravel, and sand help infiltrate, store, and filter the stormwater, allowing it to drain into the surrounding soil.

## Routine maintenance

Landscape infiltration requires routine maintenance. Ideally, these areas use native plants which fare well in this region. Once established, your planting usually won't require fertilizer or pesticides, and will require watering only during periods of extreme drought. The most important thing you can do to make sure your landscape infiltration keeps working is to inspect it regularly and repair or replace components as necessary.

### MONTHLY

- ✓ Inspect the infiltration surface and grass filter strip for any erosion of the soil layer or erosion of surrounding areas draining to the facility.
- ✓ Check for any obstruction or blockage of flow along inflow areas or pipes in and out, including trash, debris or sediment.
- ✓ Remove weeds and plants that do not belong.
- ✓ Check the area a few days after rainfall to make sure the water does not pond on the surface for more than 2 days.

### AS NEEDED

- ✓ Remove dead plant material in late winter or early spring.
- ✓ Water new plant material (first 3 months and during drought).
- ✓ Maintain a depth of 3" of mulch.
- ✓ Remove leaf accumulation in the fall to ensure that the flow of rainwater is not blocked.
- ✓ Test/monitor soil pH.
- ✓ Inspect and maintain or replace components.

**Landscape infiltration requires regular, but simple, maintenance.**

- Weeding, pruning & mulching
- Trash & debris removal

## Who is responsible for this maintenance?

As a property owner, you are responsible for maintaining the landscape infiltration.

## Can I remove or alter the landscape infiltration?

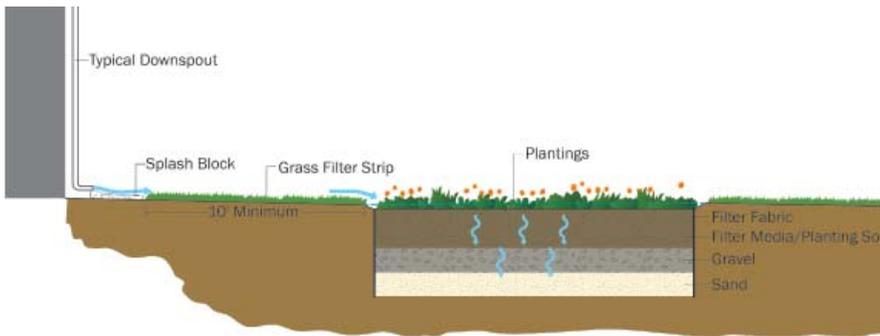
As a registered participant in the County's Stormwater Credit Program, you may not remove or change the landscape infiltration without losing your stormwater credit. Additionally, if the landscape infiltration was installed as part of the subdivision's required stormwater management, the homeowner may not remove or alter the facility without prior consultation with the County.



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## TYPICAL LANDSCAPE INFILTRATION

### CROSS SECTION



## Why maintain these areas?

If you do not maintain your landscape infiltration, the following things may happen:

- The cleansing of polluted rainwater will be impaired.
- More frequent and expensive repair will be required if simple maintenance is neglected.
- Water ponding longer than 3 days on a clogged area may allow insects to breed.

By maintaining your stormwater best management area, you are doing your part to help the environment and protect your local streams and the Chesapeake Bay.

### PRETREATMENT PLAN VIEW



## Recommended schedule for routine maintenance

TASK	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
Remove sediment, leaves & debris		■			■			■			■	
Remove trash	■	■	■	■	■	■	■	■	■	■	■	■
Weeding and mowing					■	■	■	■	■	■		
Pruning		■							■	■	■	
Mulching				■								
Watering, replanting, repair eroded areas	..... as needed .....											

## Troubleshooting

SYMPTOM	POSSIBLE CAUSE	SOLUTION
Poor plant health	Lack of water; too much shade or sun; too much salt in soil/lack of salt-tolerance; soil pH too high or low; plant disease	Irrigate during establishment and periods of drought; consider shade and sun tolerance vs. species and microclimate; select salt-tolerant species; monitor soil pH and amend (see below); treat diseased plant species or remove and replace with a different species
Erosion and exposed soil	Plant die-off or high velocity flows	Stabilize/revegetate swale areas and contributing areas with geotextile/matting and seed or sod; consider adding weirs or check dams to slow flows
Soil pH below 5.2 or above 7.0	Soil, rainwater, or stormwater pH influence	Add lime to soil if pH is below 5.2; add iron sulfate plus sulfur if pH is above 7.0
Water ponding for 2+ days	Clogging due to sediment, leaf litter, or debris accumulation	Remove sediment, leaf litter, and other debris

## WHAT IF I NEED HELP?

For further assistance contact:  
 Anne Arundel County  
 Watershed Protection  
 and Restoration Program  
 Department of Public Works  
 2662 Riva Road  
 Annapolis, MD 21401  
**410.222.4240**