



# How to maintain your Tree Box Filters

## STORMWATER FACILITY MAINTENANCE PROGRAM

### What is a tree box filter?

A tree box filter is a concrete box filled with soil and mulch, with an under-drain, and a tree growing out of the top. Tree box filters are mini bioretention areas, designed to filter rainwater from paved areas allowing the water to be absorbed by the soil, mulch and tree. The drain under the soil provides a way to remove excess water to prevent an overflow. Tree box filters are used along roads and parking lots where stormwater inlets are located. The trees growing in these filters provide many more benefits including cleaner and cooler air and water, increased property values, and slower traffic; and they improve our sense of well-being.

**Tree box filters need regular maintenance: Remove sediment, leaves, trash, and debris from the inlet and box. Replenish mulch.**

### Why is it important to maintain your tree box filter??

An unmaintained tree box may:

- Stop filtering the rainwater and allow the trash and pollutants to enter our local streams.
- Cause rainwater to pool on the road or parking lot and become a driving hazard.
- Hold water and become a breeding place for insects.
- Not support a healthy tree that may need to be replaced.

By maintaining your tree box filter, you are doing your part to help the environment and protect your local streams and the Chesapeake Bay.

### Who is responsible for this maintenance?

**As the property owner, YOU are responsible for all maintenance of your tree box filter.**

### Actions you can take

#### Do...

##### After Rain Storms

- ✓ Inspect your tree box filter after storms to make sure that rainwater has drained.
- ✓ Remove trash and debris from in and around the inlets.

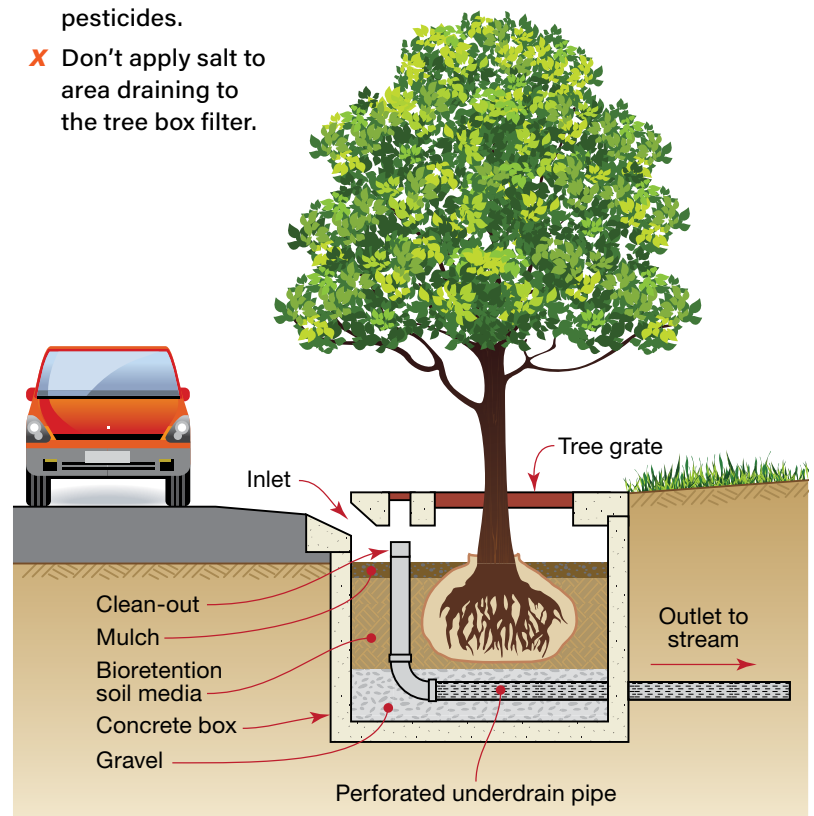
##### As needed

- ✓ Remove weeds.
- ✓ Replace or replenish mulch 1-2 times per year.
- ✓ Water the tree box filter's soil and vegetation during extreme droughts and during initial plant establishment.
- ✓ Pruning may be necessary to encourage plant growth or direct growth. Prune branches in fall if needed.



#### Don't...

- ✗ Don't apply fertilizers or pesticides.
- ✗ Don't apply salt to area draining to the tree box filter.



## Can I remove the tree box filter?

No, you may not remove any facilities that were part of your building installation. These are permitted structures and DEP maintains a database of these facility locations. DEP inspects all permitted structures. Contact DEP to find out if you have a permitted structure or if you would like to discuss options for modifying your facility.



Parking lot with adjacent tree box filters

You can prolong the life of your tree box filter and save money on maintenance costs by keeping your site clean and regularly inspecting and maintaining the filter to ensure it is functioning properly.



Vegetation and debris clogging the inlet, as shown here, should be removed.

## Troubleshooting

Symptom	Possible Cause	Solution
Standing water at inlets	If standing water occurs for more than 48 hours, the tree box filter or underground piping may be clogged.	The tree box filter inlet may need to be cleaned, or underground piping may need to be cleaned or replaced. Contact DEP for further guidance.
Dead or dying plant	Trees and shrubs die for many reasons. It could be from lack of water, too much salt, or damage from car doors or pedestrians.	Make sure an appropriate plant is being used. Replace dead plants. Water during re-establishment and during droughts.
No mulch or visibly reduced mulch	Mulch naturally decomposes over time	Once or twice a year as needed, replenish mulch to 3 inches deep. <b>Be sure to keep mulch away from base of trunk.</b>

## Recommended time frames for typical maintenance

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
Removing sediment, leaves, trash, and debris	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Weeding and Mulching				✓						✓		
Pruning		✓	✓									
Watering							✓	✓	✓			

## NEED HELP OR HAVE QUESTIONS?

DEP can answer your questions and provide additional guidance about maintaining your tree box filters.

Email us at [AskDEP@montgomerycountymd.gov](mailto:AskDEP@montgomerycountymd.gov), call the Montgomery County Customer Service Center at **3-1-1**, or visit our website: [montgomerycountymd.gov/stormwater](http://montgomerycountymd.gov/stormwater).