



How to maintain your Green Roof

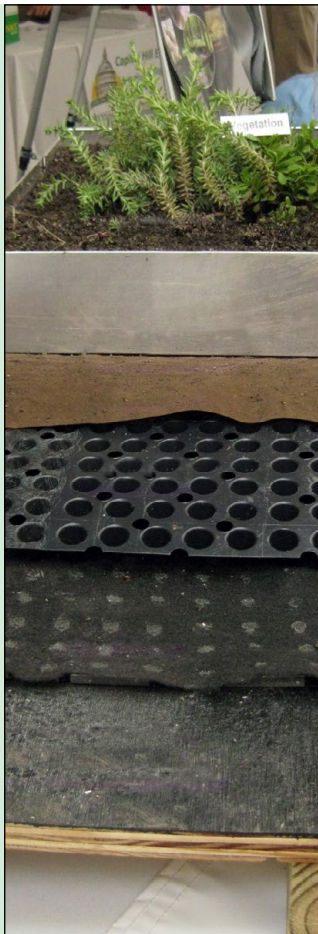
What is a green roof?

A green roof is a roof of a building that is structurally enhanced to hold a soil media layer and vegetation. Most green roofs are roofs that contain 6" or less of soil media meant to filter some rainwater, while allowing large storms to drain off of the roof. In addition to improving local stream quality, green roofs may be an amenity for the property and reduce energy costs.

**Green roofs need regular maintenance, similar to other landscaped areas:
Removing debris from drains
Weeding**

Components of a green roof:

- Vegetation →
- Soil media →
- Filter fabric/ root barrier →
- Drainage/ water storage layer →
- Filter fabric/ root barrier →
- Waterproof layer →



Actions you or a Green Roof Professional should take

Seasonal

- ✓ Remove weeds and invasive plants regularly during the first 18 months and at least twice a year after plants are established.
- ✓ Inspect the drain inlets and outlets and remove any blockages.

Annually

- ✓ Check the entire system to ensure the green roof is functioning properly and is not ponding water in any location.
- ✓ Annually inspect the irrigation system (if present).
- ✓ Observe the health and coverage of vegetation to determine whether any plants need to be replaced or added. *Plant coverage should be a minimum of 80%.*
- ✓ Send a soil sample out for testing.

As needed

- ✓ Water the green roof's soil and vegetation during the first 18 months and during extreme droughts.
- ✓ Only if needed during the plant establishment period, use fertilizer sparingly. Since a green roof is a stormwater management practice, it is important to not have any excess nutrients leaving the roof.

Who is responsible for this maintenance?

As the property owner, YOU are responsible for all maintenance of your green roof. We recommend that a qualified roofing contractor perform regular inspections of your green roof. Maintenance contracts with the manufacturers of proprietary green roof systems are recommended.



White Oak Community Center green roof

Why is it important to maintain your green roof?

An unmaintained green roof may:

- Be difficult or expensive to restore if left unmaintained
- Allow water to pool on the surface long enough for insects to breed (longer than 3 days), if the drains are clogged

By maintaining your green roof, you are doing your part to help the environment and protect your local streams and the Chesapeake Bay.

Can I remove the green roof?

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

You can prolong the life of your green roof and save money on maintenance costs by performing regular inspections and maintenance to ensure it is functioning properly.

Troubleshooting

Symptom	Possible Cause	Solution
Dead plants	The plants are not getting adequate water, sunlight, or the roots are not established.	Make sure appropriate plants are being used. Remove dead plants and replace. Water during the establishment period and during extreme droughts.
Holes or depressions in soil media	Wind or animal activity.	Have the roofing contractor inspect for damage and replace soil media and vegetation.



Photo credit: Hydrotech, Inc.
North Bethesda Center green roof



Photo credit: Furbish Company
NIH green roof



Example residential green roof

Recommended time frames for typical maintenance

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
Weeding				✓	✓	✓	✓	✓	✓	✓	✓	
Watering					--- AS NEEDED ---							
Inspect Drains		✓			✓			✓			✓	

NEED HELP OR HAVE QUESTIONS?
 DEP can answer your questions and provide additional guidance about maintaining your green roof.
 Email us at AskDEP@montgomerycountymd.gov, call the Montgomery County Customer Service Center at **3-1-1**, or visit our website: montgomerycountymd.gov/stormwater.