

Rooftop Disconnection

Rooftop disconnection involves directing flow from downspouts onto vegetated areas where it can soak into or filter over the ground. This "disconnects" the rooftop from storm drains and swales, thereby reducing both runoff volume and pollutants delivered to receiving waters.

STORMWATER MANAGEMENT

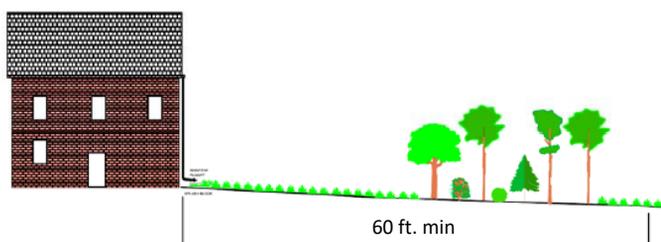
QUEEN ANNE'S COUNTY, MD

STORMWATER RUNOFF: WHAT IS IT & WHY SHOULD YOU CARE ABOUT IT?

It is water from rain or snowmelt that is not absorbed into the ground, but instead flows over land and paved surfaces. It picks up trash, chemicals, pet waste, and other pollutants. Unlike water from your house which is carried via pipes to a wastewater treatment plant or a septic system, stormwater runoff goes straight from the storm drain system to local waterways without being treated. As a result, stormwater runoff is a major cause of polluted water in our local waterways.



Image from Boston Water and Sewer Commission



Lush lawn



Lawn with bare spots

ROOFTOP DISCONNECTION BENEFITS:

Rooftops disconnections reduce the amount of stormwater runoff leaving the property. This helps to:

- ↓ Reduce polluted runoff to our local streams
- ↓ Reduce downstream flooding
- ↓ Reduce downstream erosion of streambanks
- ↑ Increase infiltration and groundwater recharge

By maintaining the facility on your property, you are doing your part to help protect local waterways in Queen Anne's County as well as the Chesapeake Bay.

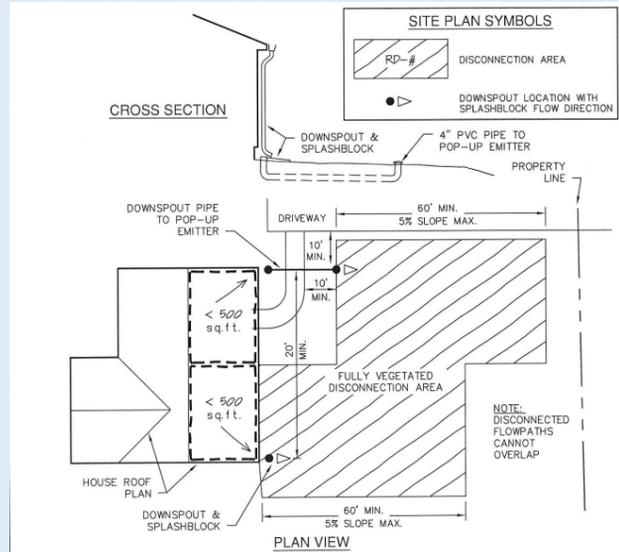
WHAT SHOULD YOU EXPECT IF YOU HAVE ROOFTOP DISCONNECTS?

For every 500 ft² of roof, you should see a downspout directed toward at least 60 feet of vegetation. Downspouts should be 10 feet away from impervious surfaces. Therefore you might see your downspout connecting to an underground pipe to "pop out" on the other side of impervious surfaces such as driveways or walkways. The flow paths reserved for disconnection must be perpetually maintained with healthy vegetation and free from further development, such as installation of pools, sheds, and walkways.

ROOFTOP DISCONNECTION COMPONENTS:

The primary components of a roof-top disconnection (as shown in Figure 1) include the downspout, underground pipe with popup emitter as applicable and a vegetated area.

- ☼ **Downspout:** directs flow from the rooftop to the vegetated area.
- ☼ **Pipe with Popup Emitter:** takes water from the downspout and "popsup" to discharge the water at least 10 feet away from impervious surfaces.
- ☼ **Vegetated Area:** Vegetation can range from lawn to meadow to forest. Vegetation must be lush without bare spots.



MAINTENANCE: WHAT, WHEN & WHY?

As a property owner, you are responsible for regular maintenance of the facility. They require upkeep similar to other landscaped areas on your property including:

- ☼ Keep gutters and downspouts clear of leaves
 - ☼ Weed, if necessary
- ☼ Trash and Debris Removal
- ☼ Consider using native plants to foster habitat

Unmaintained facilities will stop filtering stormwater, will become more expensive to maintain, and will no longer function properly.

MAINTENANCE DO'S & DON'TS	
DO:	DON'T:
Remove weeds, invasive plants, trash, & debris	Don't use fertilizer or pesticides
Maintain dense vegetation. Consider not mowing to less than 3"	Don't compact soil
Check with us if projects you want to do are in areas of disconnection	Don't disconnect/redirect downspouts elsewhere on the property or to swales and ditches
Place screen guards on gutters to help remove debris/leaf litter	Don't let the disconnection flow toward your building foundation
Inspect regularly and notify SWM Team if you have concerns	Don't pave over or remove facility

The first year following installation is critical for many of the disconnection maintenance activities, especially watering. New plants should be watered regularly for the first 18 months or in times of drought (no rain for more than 10 days). Table 1 provides recommended time frames for typical maintenance activities:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Remove Leaves & Debris from Gutters				★	★	★	★	★	★	★	★	
Check Gutters for Ice Damage	★	★	★									★
Mow facility or weed as applicable				★	★	★	★	★	★			
Water, Replant, Repair, Stabilize Eroded/Bare Areas	PERFORM AS NEEDED											
Maintain Pipes & Gutters	PERFORM AS NEEDED											

Queen Anne's County gratefully acknowledges the Cecil County Stormwater Management Division for assisting with these materials

HAVE QUESTIONS OR NEED ADDITIONAL INFORMATION?

If you have questions or would like additional information, please contact the SWM Team at 410.758.0925 or visit our website at: <https://www.qac.org/997/Stormwater-Management>