

Planter Box Maintenance for Homeowners

The planter box on your property is required for stormwater management. Prior to submitting your biennial Stormwater Management Facility Operation and Maintenance Inspection Form, use this fact sheet to review your planter box and ensure it is in compliance.

Planter Box: A regulated above-ground rain garden. It receives stormwater from a downspout, which ponds in the box and soaks into the soil. Stormwater may be used by plants or released through an underdrain within 48-72 hours following a rain event. The soil profile absorbs pollutants like nutrients and heavy metals.

A Well-Maintained Planter Box



This example has:

- Adequate plant coverage by native plants.
- Energy dissipater (the stones) below the downspout.
- Correct mulch and ponding depths.
- Grated cover on overflow.

Common Planter Box Issues



Overmulching. The ponding depth is eliminated when too much mulch is added. Instead of soaking into the planter's soil, the water exits through the overflow during small storm events.

Undermulching. Planter box soil can sink over time, especially in the first few years after construction, as soil settles and organic matter decomposes. The soil height must be replenished to maintain the hydrologic function of the planter box. Regular mulch additions mitigate height changes.

Installation ponding depths range from 3 to 12 inches. The correct depth for your box can be found under the “form/facility verification” tab of the online inspection form.



Inflow redirected or lacking energy dissipation. The downspout/inflow should discharge into the planter box, onto a layer of splash rocks or a splash block above the soil. Any erosion which occurs around the inflow should be repaired. When mulch is added, remove and reset the energy dissipator so that it isn't covered by mulch.

Too few plants or the wrong type of plants. 80% plant coverage is required by native species. The use of seeds to plant the area is not acceptable. The use of annuals and vegetables are also not permitted. Specific, native species are required because they thrive in the planter box environment and provide year-round benefits. Voluntary species such as weeds, invasives, or tree saplings must be removed.

Additional Maintenance Guidance

Inspection for the above items should occur at a minimum every other year, during the biennial inspection cycle. More frequent inspections and spot maintenance can reduce work and prevent the need for multiple inspection form submissions during the biennial inspection cycle.

In addition to the item listed above, inspect your planter box for:

- Structural defects.
- Water pooling for longer than 72 hours.
- Accumulation of weeds or debris.
- Erosion or sediment accumulation.

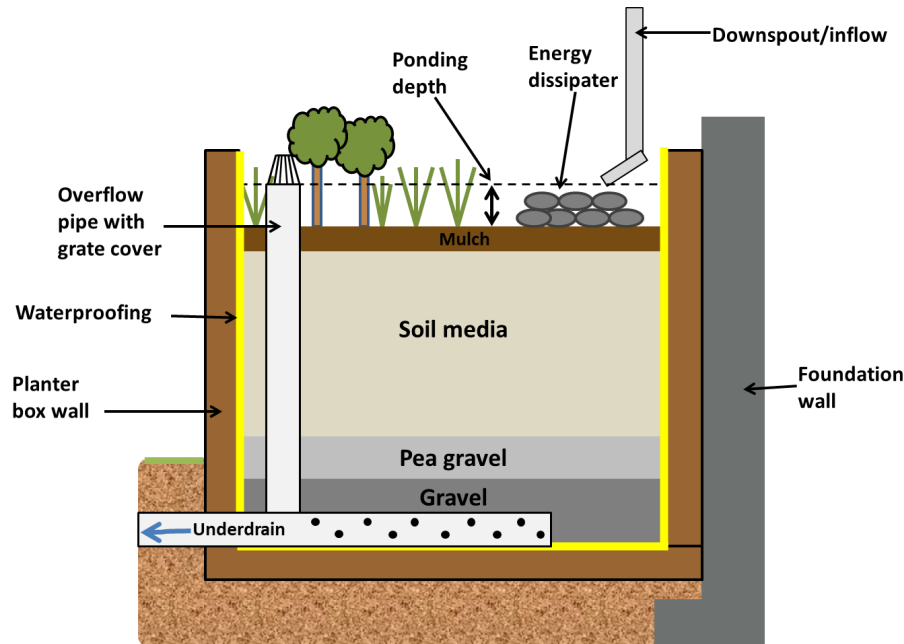
Pretreatment:

Some planter boxes have pretreatment, which captures sediment and debris before they enter the box. If you have pretreatment, the inspection form you fill out may prompt you for an extra photo showing it. Types include:

- **Stone diaphragm:** A shallow strip of gravel. Keep the gravel clean, tidy, and together.
- **Gutter guard:** Debris screens covering roof gutters. Have your gutters periodically cleaned.

Key Elements of a Planter Box

Some elements vary with different designs or as guidelines are updated over time.



Energy Dissipater—Cobble or splash block prevents incoming water from eroding the soil or damaging nearby plants.

Mulch—An even depth of 2-3 inches of hardwood mulch extends across the entire surface.

Overflow—Drains stormwater from large storms which exceed the soil's capacity to infiltrate water, preventing water from overtopping the planter and pooling along the foundation. The grate keeps large debris out of the underdrain, preventing clogging.

Ponding Depth—Maximum depth of water during a storm event, prior to entering the overflow. Measured from top of overflow to mulch.

Soil Media—A specific sand, soil, and organic matter blend which filters, slows, and holds stormwater, mitigating flooding and improving water quality. Nutrient-enriched top soil is not permitted, and could negatively impact water quality.

Structural Soundness—Planter box walls (concrete or wood/liner) must be free of cracks, separation, settling, etc. Buckling walls, deteriorating box materials, tears in liner, and signs of water damage are not acceptable.

Underdrain—Perforated pipe buried in the stone layer ensures proper drainage. Carries water to the storm drain system or another location on your lot.

Approved Plant List:

[Virginia DCR 2013 Design Specification No. 9 Bioretention, version 2.0—Table 9.6, Popular Native Plant Materials for Bioretention](#)

Planter Box Design Criteria:

[Arlington's Stormwater Manual: A Guide to Stormwater Requirements for Land Disturbing Activities in Arlington County](#)

[Virginia DEQ 2013 Design Specification No. 9 Bioretention, version 2.0](#)