



Stormwater Facilities & Maintenance

Bioretention facilities

Bioretention facilities (cells, swales, planter boxes) are a type of Low Impact Development (LID) typically designed as depressions and located in parking lots or along sidewalks and roadways. They are engineered with specific media and vegetation to provide flow control and treat stormwater runoff. Treated stormwater is then either retained or detained, infiltrating into the ground.

Pro Tip:

Watch for standing water (e.g. ponding), indicating that the percolation rate and performance standards are not being met. If the facility has not drained in roughly 3 days after a storm has passed, it is likely in need of maintenance.



McAllister Meadows Bioretention swale



Grand Mound Bioretention area



Grand Mound traffic circle - Bioretention cells

Maintenance required when:

- Sedimentation accumulates
- Soil media becomes compacted
- Trash or debris in facility
- Oil observed on water surface
- Invasive or noxious weeds present
- Facility not draining 3 days after a storm
- Overgrown shrubs/bushes
- Inlet/outlet pipe overgrown, clogged, or damaged

Contact your HOA or property manager immediately if:

- Oil observed in water leaving structure
- Structure is overflowing
- Flooding in/around facility

Visit us online:

ThurstonStormwater.org

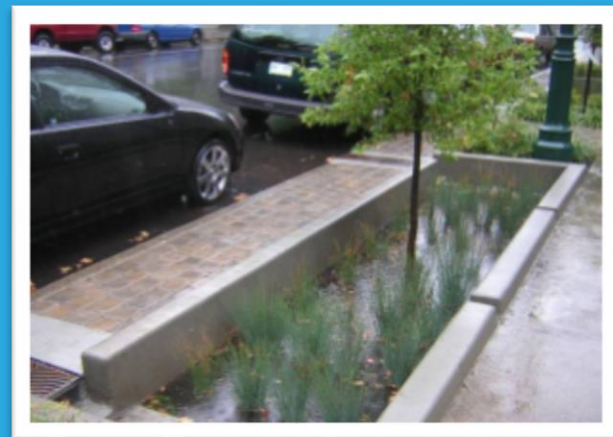
Don't let your systems fail.

Prevent compaction of bioretention soils by not walking or driving on before, during, or after construction.



Source: Kitsap County, WA

If compaction does occur, be sure to aerate the bioretention soils before planting to ensure required performance standards. During maintenance activities, consider creating a working platform with fiberboard to reach hard to access areas.

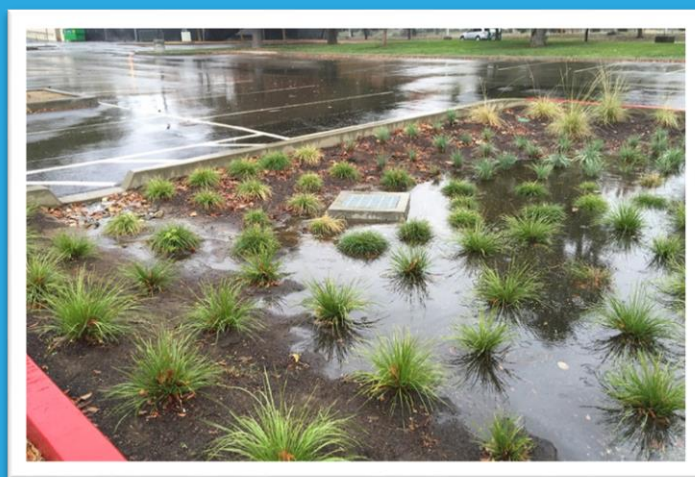


Source: WA State Dept. of Ecology

Because bioretention facilities are reliant on multiple layers of engineered media to perform pollution removal, it is imperative that media layers remain unclogged for effective functionality. Nearby pre-treatment devices should be kept clean and clear to avoid sedimentation buildup in bioretention facilities.

Keep water clean. Protect county roads from flooding. Save money.

It is critical that planting specs are maintained as described in the facility's as-built drawing. Also, bioretention media will need to be replaced with media that meet the original engineered design specs - as they become sediment or pollutant laden over time. The regularity of this will depend on the volume and concentration of stormwater pollutants draining to the site.



Source: Sacramento State Water Programs

For additional information regarding stormwater management in Thurston County, reference our Stormwater Drainage Manual at DM.ThurstonStormwater.org.