

Vegetated Swale

Goal: Dense, healthy grass cover

- » Grass should not exceed 18 inches.
- » Herbicide and fertilizer use should be eliminated or minimized.
- » Sediment accumulating near culverts and in channels needs to be removed when it results in a significant amount of standing water.
- » A healthy dense grass should be maintained in the channel and side slopes. Grass damaged during the sediment removal process should be immediately replaced using the same seed mix used during swale establishment.
- » Pet waste should be removed to prevent contamination.



Vegetated Filter Strip

Goal: Healthy, dense vegetation; overland flow

Care and maintenance in the first few months is most important.

- » Mow to a height of 18 inches or 2x/year. Herbicide use should be eliminated or kept to a minimum.
- » Sediment may accumulate along the upstream boundary of the strip, preventing uniform overland flow. Excess sediment should be removed by hand or with flat-bottomed shovels.
- » A healthy dense grass should be maintained on the filter strip. Vegetation will require irrigation immediately after planting and during dry periods.



Permeable Pavement

Goal: Immediate drain time

- » Vacuum sweep at least 2x/year, followed by high-pressure hosing to open pores in the top layer.
- » Potholes and cracks can be filled with patching mixes unless more than 10 percent of the surface area needs repair.
- » Spot-clogging may be fixed by drilling half-inch holes through the porous pavement every few feet.
- » Inspect several times during the first few months after installation, and annually thereafter.
- » Inspect after large storms, when puddles make clogging obvious.



Infiltration

Goal: Drain time 48 hours or less

- » Observe drain time after completion or modification to confirm drain time of 48 hours.
- » Inspect annually for erosion of the basin side slopes and invert, standing water, and sediment accumulation.
- » Remove trash and debris.
- » To avoid reversing soil development, soil disturbance should only occur when clogged.
- » Always remove deposited sediments before disturbing the soil, and use a hand-guided rotary tiller, or a disc harrow pulled by a very light tractor.



Bioretention

Goal: Drain time 48 hours or less

- » Inspect at least 2x/year, once during or immediately following wet weather.
- » Repair and revegetate eroded areas inside and downstream of facility.
- » Remove sediment when it hinders flow of water into the facility.
- » Annually, or when drain time exceeds 48 hours, the top few inches of filter media should be removed and replaced. This will also prevent mosquito breeding.
- » Clean underdrain to remove sediment buildup.
- » Remove debris and litter.
- » 2x/year evaluation of shrubs. Remove dead vegetation.



Enhanced Detention

Goal: Stable banks and flow capacity

- » Remove debris and litter regularly.
- » Mow side-slopes, embankment, and emergency spillway 2x/year to prevent woody growth.
- » 2x/year, evaluate for insects, weeds, odors, algae, etc. Herbicides and pesticides should be minimized.
- » Inspect side slopes, embankment and emergency spillway for subsidence, slumping, erosion, leakage, cracking, and tree growth. Regrade or revegetate as necessary.
- » Remove sediment in the forebay every two yrs for storage capacity.
- » Replace inlets/outlets and risers as needed, every 25-75 years.
- » Dredge every ~20 years, or when sediment impairs function of outlet.

