



# Stormwater Facilities & Maintenance

## Pipes, Culverts & Slotted Drains

Pipes are underground conveyance systems carrying stormwater from a catch basin to a discharge point. Culverts are pipes that cross under roads. Both pipes and culverts must be inspected on a regular basis to ensure performance standards and structural integrity.

Slotted drains are pipes with grated entry points along the roadway where stormwater can enter directly into the underground conveyance system.

### Pro Tip:

When maintaining pipes and culverts, beware of any corrosion, loose joint connections, warping, cracking, roots breaking through, and illicit discharges. To remain in compliance with flow standards, never let sediment accumulate to above 20% of the pipe/culvert diameter.



Pipes and Culverts can come in a variety of shapes and materials



Slotted Drains are built length-wise to drain directly into storm pipes



This pipe is accumulating sediment and debris and will need maintenance



This illegal connection is sending contaminants directly into our waterways

### Maintenance required when:

- Sediment exceeds 20% of pipe diameter
- Sediment or vegetation buildup around pipes or slotted drains
- Signs of erosion around inlet/outlet
- Rusting or damaged pipes
- Damaged or missing trash rack
- Overgrown or damaged splash pad

### Contact your HOA or property manager immediately if:

- Signs of oil found in water leaving structure
- There are signs of a spill or Illicit connection
- Broken pipes

Visit us online:

[ThurstonStormwater.org](http://ThurstonStormwater.org)

# Don't let your systems fail.

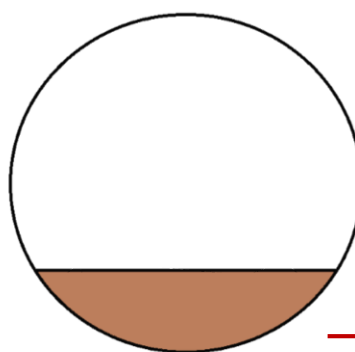
Set up a regular inspection schedule to maintain areas around inlet and outlet pipes, being sure to remove or clean up any overgrown vegetation, tree saplings, invasive or noxious species, spills, garbage, and anything that could potentially be moved into the stormwater system that is not rain. Pipes accumulate sediment, debris, and garbage when slotted drains and catch basins are not kept clean, and will eventually need to be blown or vactored out.



Source: Picturreso.com – Vactor Truck



A well-designed and maintained splash pad can reduce or eliminate end-of-pipe erosion



At 20% sedimentation, pipes will need to be maintained

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

Stormwater can move through pipes pretty quickly depending on the storm intensity and duration.

Energy dissipating devices (e.g. splash pads, riprap) are meant to absorb the force of the water. Inspection should include maintaining a clear and even spread of riprap around the outlet pipe.



Keep vegetation growth low around pipes

*For additional information regarding stormwater management in Thurston County, reference our Stormwater Drainage Manual at [DM.ThurstonStormwater.org](http://DM.ThurstonStormwater.org).*