



# SWALE MAINTENANCE FACT SHEET

Swales are linear open grass channels that convey surface runoff to a point of discharge. Sussex County has very little topographic relief and swales are typically constructed with minimum slope. A flat/gradual slope can promote filtering and attenuation, however it has the potential to be wet after frequent or severe rainfalls. Swale maintenance can ensure the continued and optimum function of the swale conveyance system. Please note, having a vegetated swale is a preferred method of conveying stormwater runoff and provides the following environmental benefits:

- **Filters pollutants prior to discharge**
- **Slows the flow of velocity and promotes infiltration**
- **Provides recharge into the groundwater supply**
- **Helps alleviate flooding and erosion downstream**
- **Low maintenance and cost effective**

In Sussex County, roadside swales are designed to convey the 10-year storm event, which is 5.3" of rainfall in 24 hours. It is expected that the swales will flow full during heavy storm events. The water should recede in a reasonable amount of time; however, it is designed to convey water and will therefore be wet or soggy following these events.



*Landscaping and enhancement to a roadside swale with stone and plantings can impede drainage therefore creating a drainage problem.*

## SWALE DON'TS

**DO NOT**  
mow following rain event. A lawn tractor can create tire ruts in the bottom of the flow channel

**DO NOT**  
fill in your swale

**DO NOT**  
park on or drive across your swale. Cars and tire tracks can blow water flow

**DO NOT**  
do anything to cause the side slopes of your swale to erode

**DO NOT**  
place sprinkler heads in the swale

**DO NOT**  
over-irrigate the swale



*Mowing in the same pattern can create ruts in the grass which become areas for water to collect.*



If your development is still under active construction and water sits in the roadside swale for longer than 48 hours after a rain event and dead grass is present in the swale, contact Sussex County Public Works at (302) 855-7703. Swales outside the road right-of-way should be directed to the Sussex Conservation District at (302) 856-2105 for technical assistance.



*Fences installed in the drainage easement and swale flow line will impede drainage.*

## Steps for Swale Maintenance

*Swales are a natural system that will require routine maintenance to ensure optimum function.*



- \* Mow and maintain your swale at an acceptable grass height
- \* Keep your driveway culvert open and free of debris, rocks, grass, and sediment
  - \* Keep bottom of swale open to permit flow of water after heavy rains
- \* Swales convey runoff and will be soggy/wet at times; however, if water is ponding where grass cannot survive than corrective measures may be needed.
  - \* Reseed bare areas to minimize/prevent erosion.
  - \* Minimize the use of fertilizer, pesticides, and herbicides.