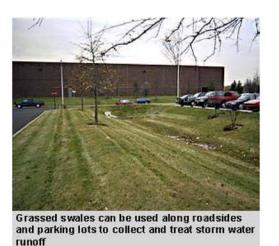
BMP: Grassed Swales



DESCRIPTION:

A series of vegetated, open channel management practices designed specifically to treat and attenuate storm water runoff. Storm water is treated through filtering by the vegetation in the channel, filtering through a subsoil matrix, and/or infiltration into the underlying soils.

APPROACH:

- Grassed swales can be applied in most situations with some restrictions. Swales are very well suited for treating highway or residential road runoff because they are linear practices.
- Grassed channels are a good treatment option within watersheds that drain to cold water streams. These practices do not pond water for a long period of time and often induce infiltration. As a result, standing water will not typically be subjected to warming by the sun in these practices.
- Grassed swales should be used on sites with relatively flat slopes of less than 4 percent slope; 1 to 2 percent slope is recommended.
- A small fore-bay should be used at the front of the swale to trap incoming sediments. A pea gravel diaphragm, a small trench filled with river run gravel, should be used as pretreatment for runoff entering the sides of the swale.
- Swales should also have the capacity to pass larger storms (typically a 10-year storm) safely.

LIMITATIONS:

- > Grassed swales cannot treat a very large drainage area.
- > Wet swales may become a nuisance due to mosquito breeding.

MAINTENANCE:

Maintenance of grassed swales mostly involves maintenance of the grass or wetland plant cover.

APPLICATIONS □ Manufacturing Material Handling □ Vehicle Maintenance ⊠ Construction I Commercial Activities Roadways □ Waste Containment □ Housekeeping Practices **PIONEERING UTAH'S FUTURE** Adapted from Lindon City BMP Fact Sheet TARGETED POLLUTANTS Sediment Nutrients □ Heavy Metals Toxic Materials Oxygen Demanding Substances

- □ Oil & Grease
- I Floatable Materials
- □ Bacteria & Viruses

High Impact
Medium Impact

Low or Unknown Impact

IMPLEMENTATION REQUIREMENTS

⊠ Capito □ O&M C □ Mainte □ Training	Costs enance	
High	🗵 Medium	Low

GS