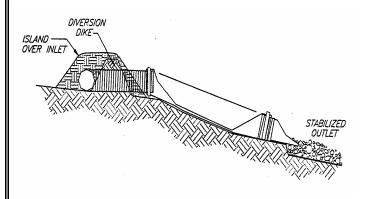
BMP: Slope Drain



OBJECTIVES

- □ Housekeeping Practices
- □ Contain Waste
- Minimize Disturbed Areas
- □ Stabilize Disturbed Areas
- ☑ Protect Slopes/Channels
- ☐ Control Site Perimeter
- ☑ Control Internal Erosion

DESCRIPTION:

A temporary pipe or lined channel that drains the top of a slope to a stable discharge point at the bottom of a slope without causing erosion.

APPLICATIONS:

- Where concentrated flow of surface runoff must be conveyed down a slope in order to prevent erosion.
- Drainage for top slope diversion dikes or swales.
- Emergency spillway for a sediment basin.
- Drainage for top of cut/fill slopes where water can accumulate.

INSTALLATION/APPLICATION CRITERIA:

- Secure inlet and surround with dikes to prevent gully erosion, and anchor pipe to slope.
- Size to convey at least the peak of a 10-year, storm event.
- Stabilize outlet. (See Outlet Protection BMP).

LIMITATIONS:

- Maximum drainage area per slope drain is 5 acres.
- Clogged slope drains will force water around the pipe and cause slope erosion.
- Dissipation of high flow velocities at the pipe outlet is required to avoid downstream erosion.
- Failure can result in flooding and severe erosion.

MAINTENANCE:

- Structure must be inspected weakly and after storms.
- Inlet must be free of undercutting and no water should circumvent the entry.
- Outlet should not produce erosion; velocity dissipators must be maintained.
- Pipe anchors must be checked to ensure that the pipe remains anchored to the slope.



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ADAPTED FROM SALT LAKE COUNTY BMP FACT SHEET

TARGETED POLLUTANTS

- Sediment
- Nutrients
- □ Toxic Materials
- ☐ Oil & Grease
- □ Floatable Materials
- □ Other Waste
- High Impact
- Medium Impact
- ☐ Low or Unknown Impact

IMPLEMENTATION REQUIREMENTS

- Capital Costs
- □ O&M Costs
- ☑ Maintenance
- □ Training
- High

 Medium
 Low