



LEVEL SPREADERS

DEFINITION AND PURPOSE:

A level, graded area designed to slow and spread concentrated runoff and release it as sheet flow to a stabilized area. The level spreader outfall can be stabilized by vegetation, erosion control blankets or a combination of wood timber and gravel. Undisturbed vegetated areas with a minimal slope at the outfall may not require additional stabilization. Level spreaders can also be in the form of a perforated pipe laid parallel to the contour of the slope, then concentrated runoff is diverted into the perforated pipe and finally released as sheet flow through the perforated holes.

APPROPRIATE APPLICATIONS:

At the downstream end of diversion devices and the upstream end of filter strips.

CONDITIONS FOR EFFECTIVE USE:

Type of Flow: Sheet flow and concentrated flow.

Contributing Area: Flow from 2 year rainfall intensity event-under 5 cfs for vegetated lip, and up to 30 cfs for rigid lip.

WHEN BMP IS TO BE INSTALLED:

Immediately after rough grading and concurrent with diversion devices prior to completion of filter strips downstream.

STANDARDS AND SPECIFICATIONS:

Excavate to length, width, depth and slopes according to plan. For a rigid lip, excavate and stabilize a level area for timber and gravel. Fill remaining excavated area behind timber with gravel. Seed and net, or “hydroseed”, the “channel” area of spreader. For vegetated lip, staple erosion control blanket to protect the lip. Stabilize outfall area as depicted on the plan. Install monitoring posts at each end and center of the spreader. Mark maximum allowable sediment depth at $\frac{1}{2}$ the depth of the spreader.

OPERATION AND MAINTENANCE PROCEDURES:

Inspect every week and after every $\frac{1}{2}$ ” storm event. Remove sediment accumulations once sediment reaches $\frac{1}{2}$ design depth; as indicated on the monitoring posts. Repair and revegetate any erosion damage in spreader “channel” or downstream of the lip.

SITE CONDITIONS FOR REMOVAL:

Remove after upstream areas are stabilized with vegetation; subsequent to removal of diversion devices.

TYPICAL DETAILS:

RM-8.1 and RM-8.2