



CONSIDERATIONS

- : Soils
- : Area Required
- : Slope
- 9 Water Availability
- : Aesthetics
- 9 Hydraulic Head
- : Environmental Side Effects

DESCRIPTION:

Level spreaders are devices used at stormwater outlets to spread out collected stormwater flows into sheetflow (runoff that flows over ground surface in a thin, even layer). Typically, a level spreader consists of a depression in the soil surface that spreads the flow onto a flat area across a gentle slope. Level spreaders then release the stormwater flow onto level areas stabilized by vegetation to reduce speed and increase infiltration.

APPLICATION:

Level spreaders are most often used as an outlet for temporary or permanent stormwater conveyances or dikes. Runoff that contains high sediment loads should be treated in a sediment trapping device prior to release into a level spreader.

INSTALLATION/APPLICATION CRITERIA:

- < The length of the spreader depends upon the amount of water that flows through the conveyance.
- < Larger volumes of water need more space to even out.
- < Level spreaders are generally used with filter strips (see Filter Strips BMP).
- < The depressions are seeded with vegetation (see Permanent & Temporary Seeding BMP).
- < Level spreaders should be constructed on natural soils and not on fill material.
- < The entrance to the spreader should be level so that the flow can spread out evenly.
- < Level Spreader should have a grade of 0%; minimum width should be 6' and minimum depth should be 6" minimum.

LIMITATIONS:

- < Can easily develop short circuiting (concentration of flows into small streams instead of sheetflow over the spreader) because of erosion or other disturbance.
- < Cannot handle large quantities of sediment-laden stormwater.

MAINTENANCE:

- < The spreader should be inspected after every storm event to check for damage.
- < If ponding or erosion channels develop, the spreader should be regraded.
- < Dense vegetation should be maintained and damaged areas reseeded as needed.



TARGETED POLLUTANTS

- ▬ Sediment
- : Nutrients
- 9 Heavy Metals
- 9 Toxic Materials
- : Oxygen Demanding Substances
- 9 Oil & Grease
- 9 Floatable Materials
- 9 Bacteria & Viruses

▬ High Impact
: Medium Impact
9 Low or Unknown Impact

IMPLEMENTATION REQUIREMENTS

- : Capital Costs
- : O&M Costs
- : Maintenance

▬ High	: Medium	9 Low
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9 Training