

PC-2 SHEET FLOW TO BUFFERS

Reference: Denver Urban Drainage and Flood Control District, Volume 3 Criteria Manual.

**BMP Objectives**

- | | |
|-------------------------------------|-----------------------|
| <input type="checkbox"/> | Perimeter Control |
| <input checked="" type="checkbox"/> | Slope Protection |
| <input type="checkbox"/> | Borrow and Stockpiles |
| <input checked="" type="checkbox"/> | Drainage Areas |
| <input checked="" type="checkbox"/> | Sediment Trapping |
| <input checked="" type="checkbox"/> | Stream Protection |
| <input type="checkbox"/> | Temporary Stabilizing |
| <input checked="" type="checkbox"/> | Permanent Stabilizing |

Definition and Purpose

This is a structural BMP used to filter pollutants as stormwater runoff moves to a swale, stream, or other flow area. It protects streams, lakes, and/or wetlands from high concentrations of sediment in runoff. The flows are discharged over the buffer zone where sediments and other pollutants can be filtered out before the flows reach the natural drainage way.

Appropriate Applications

- Zones where stormwater runoff is treated by a natural buffer before it enters a stream or forested area.
- Runoff from pervious and impervious areas is discharged through buffer.
- Buffer generally consists of grass, meadow, forest, or a mix.
- Generally used to treat overland flow in the green space of a development site.
- Level spreader or similar BMP can be used along upstream edge of buffer zone to enhance treatment.

Design Parameters

- Minimum buffer width is 50 feet and is measured from the bank elevation of the stream.
- Maximum contributing length is 150 feet for pervious surfaces and 75 feet for impervious surfaces.
- Runoff will enter the buffer as sheet flow. If sheet flow cannot be achieved at the edge of the buffer, a level spreader or similar BMP will be used to establish sheet flow.
- Contributing overland slope should be less than 5 percent.

- Buffer is not applicable where rooftop or non-rooftop disconnections are already in place.
- Buffers should be located within accepted easements, right-of-way, or other enforceable areas that will ensure protection of the buffer area.

Maintenance and Inspection

- Conduct inspections as required by the NPDES permit or contract specifications during construction.
- Periodic inspection and maintenance will be required based on post-construction site conditions.
- Make any repairs necessary to ensure the measure is operating properly.
- If observations show concentrated surface flow occurs after installation, utilize other BMPs in the areas of concentrated flow to direct and spread the flow.