ACTIVITY: Level Spreader

Targeted Constituents

- Significant Benefit
- Partial Benefit
- Low or Unknown Benefit

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<th>Constituent</th>
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<td>Sediment</td>
<td>A level spreader handles concentrated runoff from a ditch or temporary diversion channel and turns it into sheet flow. It should be used only for small flows where a gentle stabilized grass slope is available. A level spreader will significantly reduce erosion and sediment by reducing flow velocities.</td>
<td>Temporary diversion channels with an adjacent gentle stabilized slope, for which downstream drainage infrastructure may not be completed.</td>
<td>The purpose of a level spreader is to turn concentrated stormwater runoff from a ditch into sheet flow, for the purpose of increasing infiltration and reducing volume of runoff. It is meant for use on small flows, typically with a design storm flow less than 5 cfs. If stormwater runoff is discharged through a culvert as large as 12” diameter, then this runoff is usually too large to be a candidate for a level spreader.</td>
<td>Inspect temporary level spreaders weekly and after rainfall events. Look for excessive sediment, scour or undercutting, and for concentrated flows downhill from level spreader. Since the level spreader is not a sediment-removing device, additional erosion controls may be necessary. Note any problems and correct promptly.</td>
<td>A level spreader can only handle small flows from ditches or channels. It may be prudent to have additional measures (or an emergency overflow or bypass) to handle larger storms. A level spreader with vegetated lip needs to be protected from traffic (even riding mowers) in order to maintain a smooth level surface for the overflow weir.</td>
<td>33, 141, 162, 167, 179 (see BMP Manual Chapter 10 for list)</td>
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</table>
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**Level Spreaders**

**Vegetated Lip:**
- Flow: 0 to 5 cfs
- Length: 10'
- Width: 10'

**Rigid Lip:**
- Flow: 5 to 15 cfs
- Length: 2 x flow = 10' to 30'
- Width: 10' to 15'

**Notes:**
1. Vegetated lip for level spreader should not be constructed from fill material. Do not allow any traffic (even riding mowers) onto vegetated lip.
2. The last 20' of approach channel should have a grade less than 1%.

**Figure ES-26-1**

**Level Spreaders**

**NOT TO SCALE**

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