

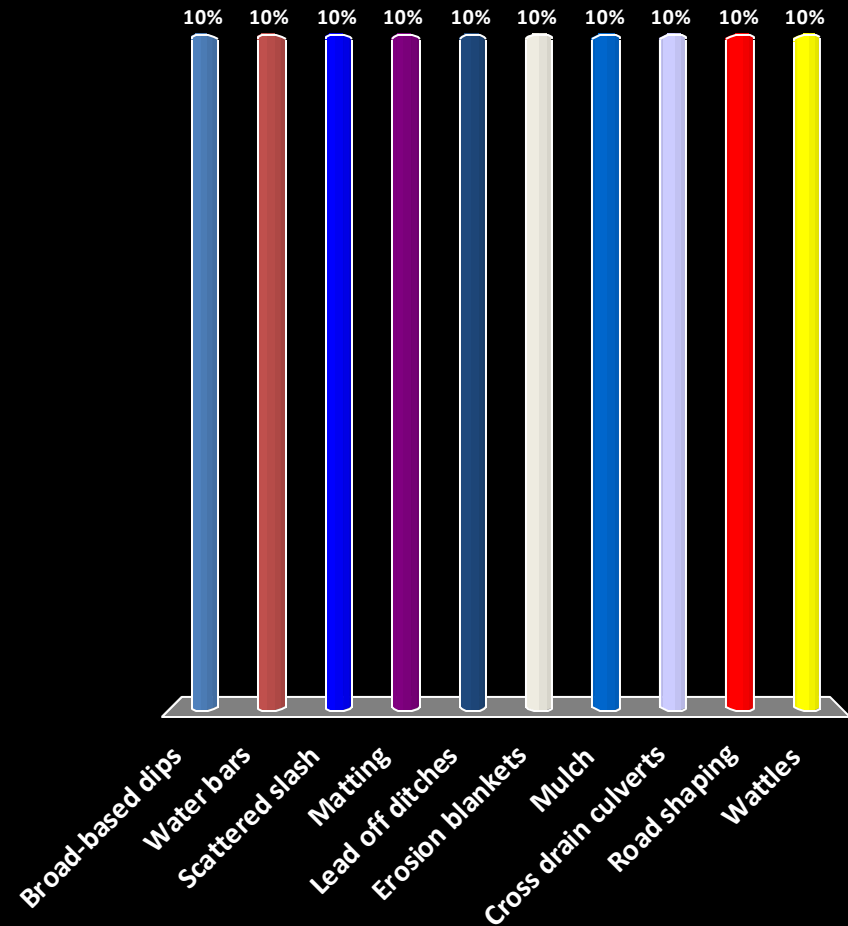
Erosion and Sediment Control Techniques

Landings and general site work

Erosion Control

Which water diversion / erosion control options do you use most commonly? (select all that apply)

- A. Broad-based dips
- B. Water bars
- C. Scattered slash
- D. Matting
- E. Lead off ditches
- F. Erosion blankets
- G. Mulch
- H. Cross drain culverts
- I. Road shaping
- J. Wattles



Ground Cover

- Vegetation
- Top soil
- Straw mulch
- Wood mulch (slash, chips)
- Rock aggregate

Mulch



Chemstar Inc.





Mulching over snow





01/19/2012

Slash Mat Video

Slash Cover

Advantages

- Can use on site materials
- Can deter ATV use

Disadvantages

- Larger slash material may not provide good soil contact

Erosion control Blankets





14/08/2008

Erosion Control Blanket Video

Material

composition





In channels

- Double netted blankets frequently used
- Place parallel to direction of flow
- Overlap edges 4 inches
- Bury blanket end sections in six inch by six inch trench

Erosion Control Blanket

Advantages

- Very good erosion control performance
- Can be installed without equipment
- Lots of product options for different sites

Disadvantages

- Requires purchase of materials and hand labor

Tackifiers

- Spray on “Glue”
- Tackifiers are mixed with water and then sprayed over the mulched area
- Typical tackifier application rate is 150lbs/acre



PAM Video

Land applied Polyacrylamides

- Short term up to 4 months
- Applied dry or wet
- Flat ground and some slopes
- Small to moderate rain events
- Use only anionic types



Tackifier

Advantages

- Very good erosion control performance
- Can be installed without equipment
- Lots of product options for different sites

Disadvantages

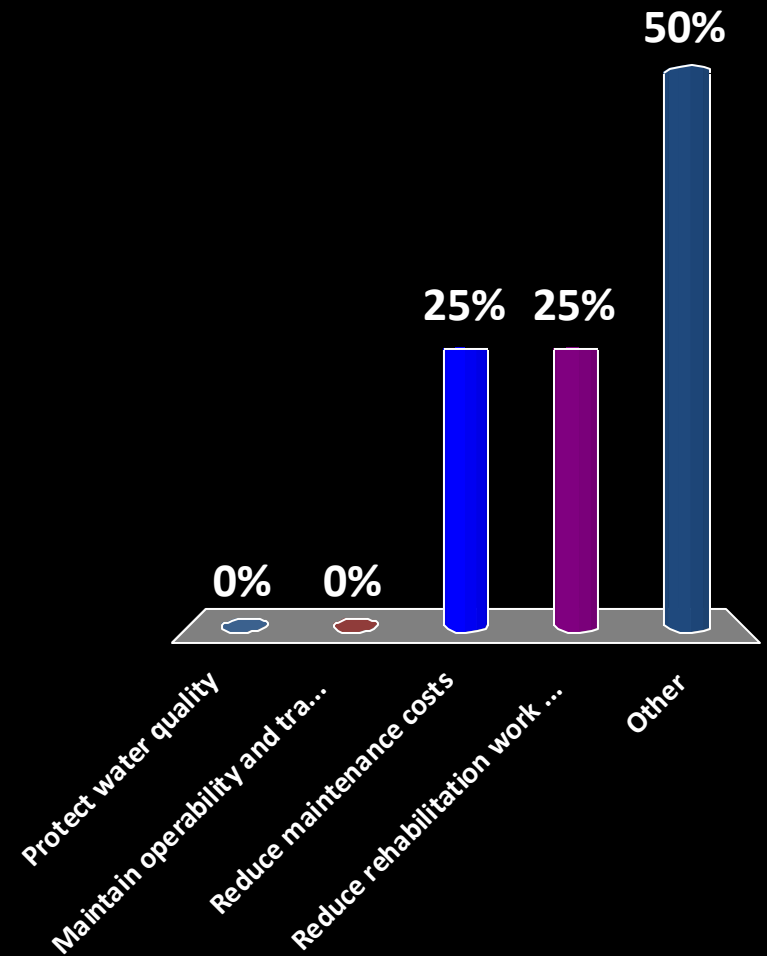
- Requires purchase of materials and hand labor
- Some chemicals can have side effects
- Doesn't last long

Slow or Divert Water



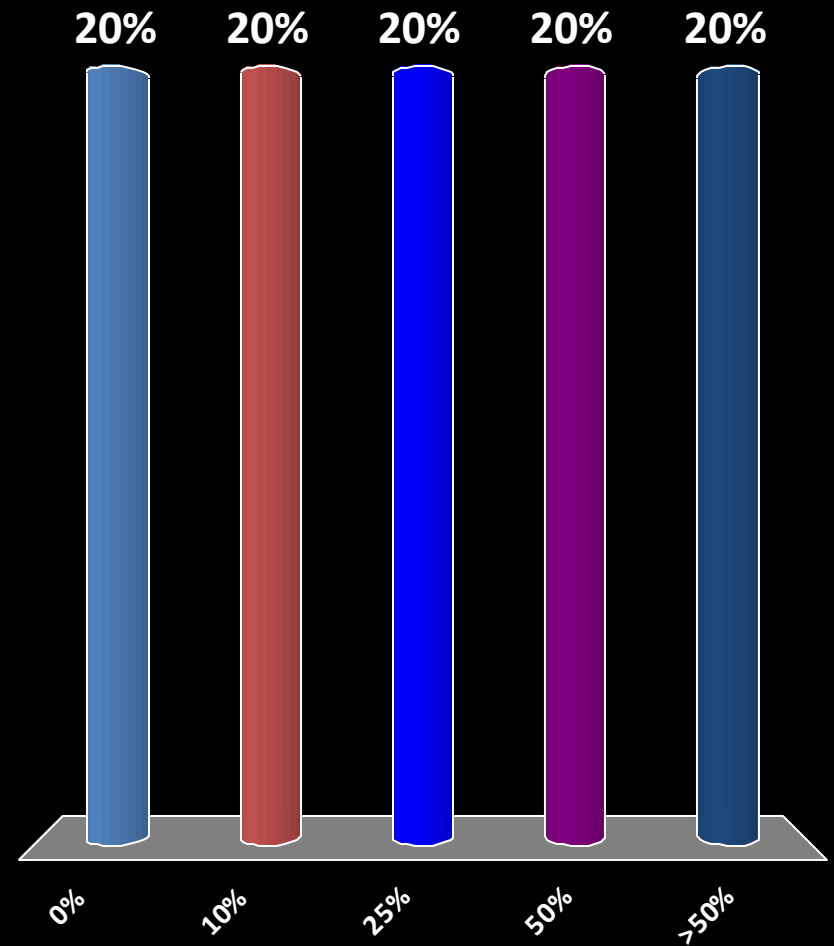
Why is it important to divert water off of infrastructure? (select all that apply)

- A. Protect water quality
- B. Maintain operability and travel speeds during use
- C. Reduce maintenance costs
- D. Reduce rehabilitation work for next entry
- E. Other



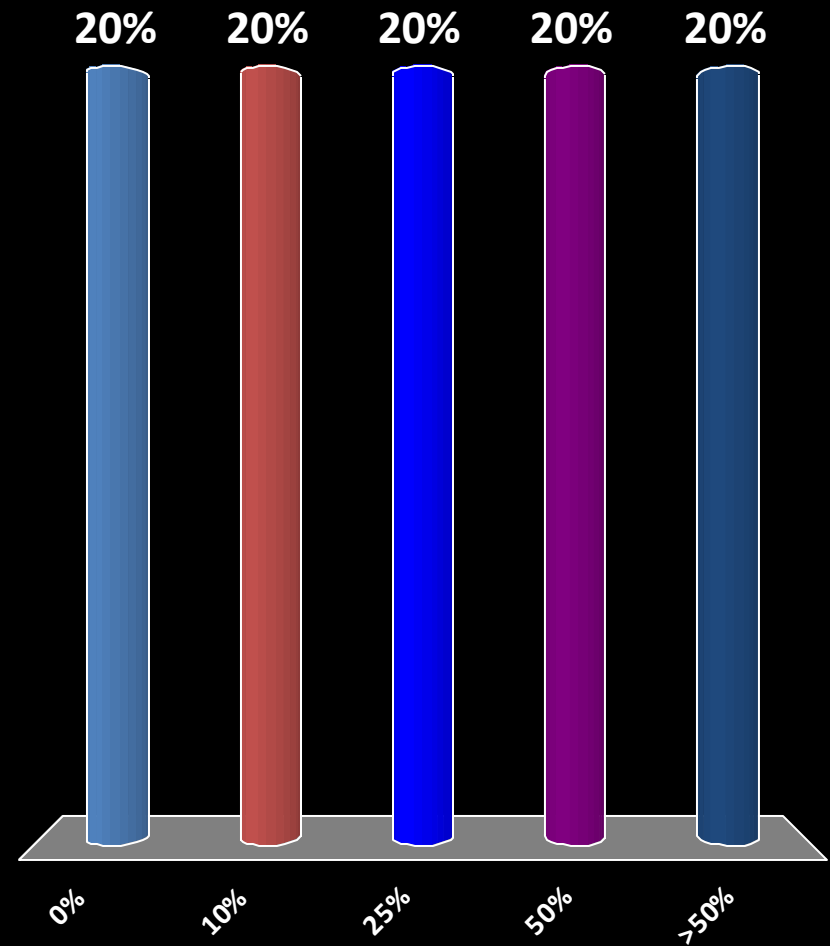
On what percentage of your sites do you install water diversion / erosion control structures?

- A. 0%
- B. 10%
- C. 25%
- D. 50%
- E. >50%



On what percentage of your sites do you maintain water diversion / erosion control structures?

- A. 0%
- B. 10%
- C. 25%
- D. 50%
- E. >50%



Road Shaping

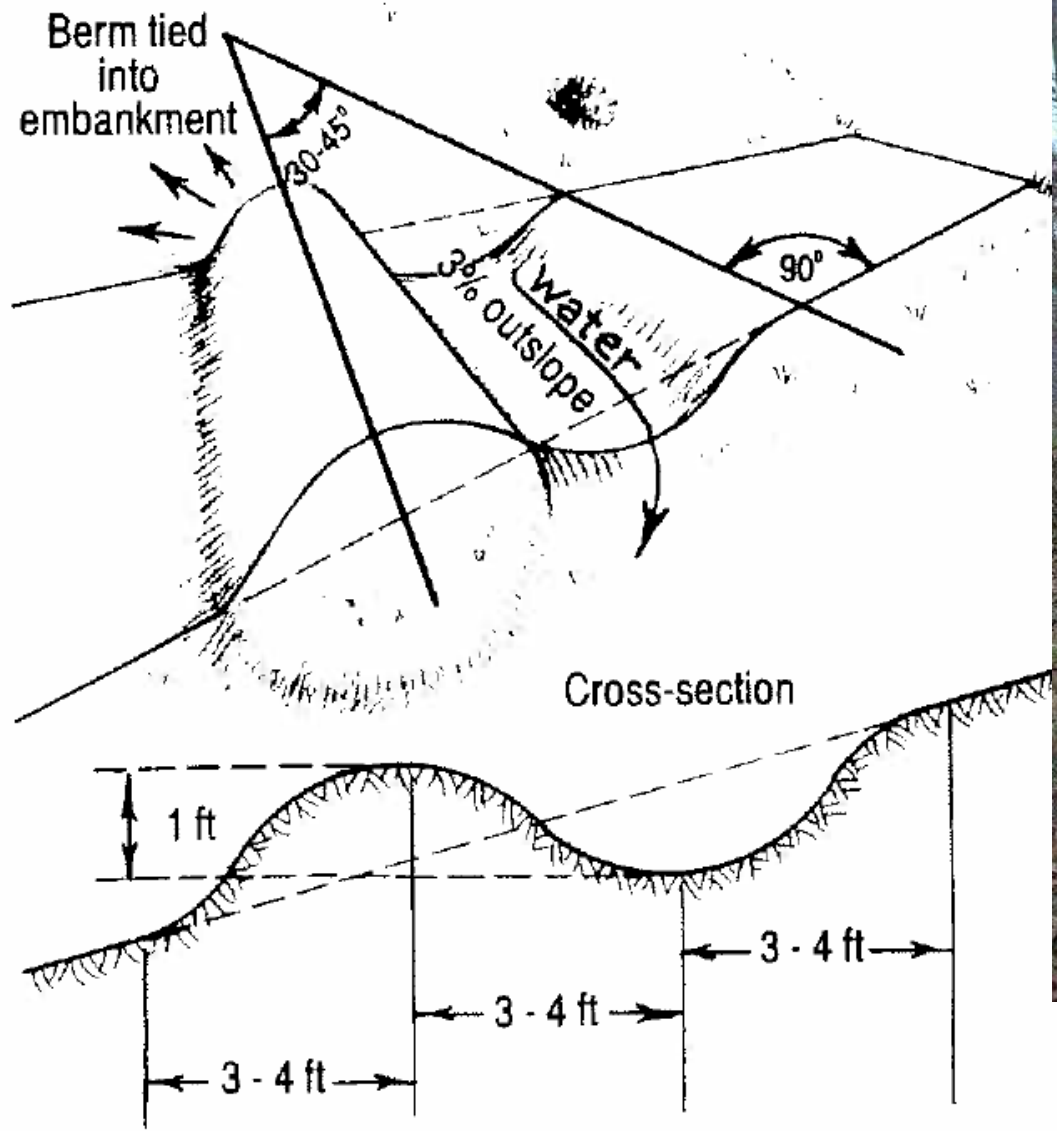
- Properly shaped roads include crowning, insloping, and outsloping. In a cross-section, this appears as:
 - crowning - sloped from the center to the outside
 - insloping - sloped into the uphill side
 - outsloping - sloped out to the downhill side
- Once water has been diverted off of the surface on any infrastructure, a lead-off ditch can be used to help direct the flow of water across the contour of the land and away from water, slowing its flow so that it can seep into the ground

Water Bars

A ditch and hump across a trail or road tied into the uphill side for the purpose of carrying water runoff into vegetation, duff, ditch or dispersion area so that it does not gain the velocity and volume that causes soil movement and erosion.

- Shallow trench with a mound (or berm) that is 1 foot tall and longer than road width
- Place at a 30 to 45 degree angle to road
- Cross drainage grade of 3%

Water Bar Installation





Water Bar Video