CLARK COUNTY
WASHINGTON
COMMUNITY DEVELOPMENT
BUILDING SAFETY

BMP C203
Water Bars

v. 1/7/16

Working together. Securing your safety. Protecting your investment.

Purpose and Description

A small ditch or ridge of material is constructed diagonally across a road, driveway, or right-of-way to divert stormwater runoff from the road surface, wheel tracks, or a shallow road ditch.

Conditions of Use

Give special consideration to each individual outlet area, as well as to the cumulative effect of added diversions. Use gravel to stabilize the diversion where significant vehicular traffic is anticipated.

Design Criteria

Height: 8-inch minimum measured from the channel bottom to the ridge top.

- Side slope of channel: 2H:1V maximum; 3H:1V or flatter when vehicles will cross.
- Base width of ridge: 6-inch minimum.
- Locate them to use natural drainage systems and to discharge into well-vegetated stable areas.

Guideline for Spacing:

Slope %	**Spacing (ft)**
< 5	125
5 - 10	100
10 - 20	75
20 - 35	50
> 35	Use rock lined ditch

- Grade of water bar and angle: Select angle that results in ditch slope less than 2 percent.
- Install as soon as the clearing and grading is complete. Reconstruct when construction is complete on a section when utilities are being installed.
- Compact the ridge when installed.
- Stabilize, seed and mulch the portions that are not subject to traffic. Gravel the areas crossed by vehicles.

Public Service Center
1300 Franklin St.
Vancouver, WA 98660
564.397.2375
permitservices@clark.wa.gov
www.clark.wa.gov/community-development

For more information, refer to Clark County Stormwater Manual.

Maintenance Standards

Periodically inspect right-of-way diversions for wear and after every heavy rainfall for erosion damage.

- Immediately remove sediment from the flow area and repair the dike.
- Check outlet areas and make timely repairs as needed.
- When permanent road drainage is established and the area above the temporary right-of-way diversion is permanently stabilized, remove the dikes and fill the channels to blend with the natural ground and appropriately stabilize the disturbed area.

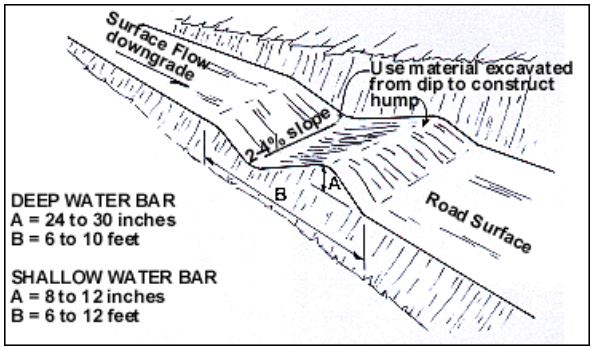

Figure 33. Water Bar (Source: SMMWW)