

Cross Sloped Trail and Water Bars

In an effort to minimize erosion on the trail, and to keep the trail as dry as possible, the trail is cross sloped and water bars were dug into the steep parts of the trail. The cross sloping causes the water to run off the side of the trail instead of pooling in the middle as it would if the trail was level. The water bars are channels dug into the trail so water flows off the trail instead of straight down it. The water bars help mitigate erosion by getting water off the un-vegetated trail, and slowing the water down. Ideally, there would be logs set into the channels so the water would not erode the channels, but since the part of the trail with water bars is on the Decorah shale layer, securing logs was not possible. The part of the trail with the water bars is a logging road and after skidding logs on this route, the trail was re-graded to shed water along the entire length rather than let water run in tracks. Water bars with a smooth trench and berm crossing the trail help divert water in heavy runoff events but permit easy passage on foot or by machine.



Water bar on the Lost Creek Hiking Trail

MORE RESOURCES:

Waterbars--Diverting water off paths and trails
Portland Water District, Main Department of
Environmental Protection

http://www.pwd.org/pdf/water_resources/conservation%20fact%20sheets/waterbar.pdf

Water Bar Basics

North Carolina Forest Service

http://www.dfr.state.nc.us/water_quality/pdf/the_water_bar/WB_Spring_06.pdf