

VEGETATIVE FILTER STRIP - Sediment Removal Efficiency: MODERATE when used in series with another sediment removal BMP that does not result in a concentrated discharge onto the vegetative filter strip. This device, when used in this way, is an ABACT for HQ but not for EV watersheds. A vegetative filter strip consists of a well-vegetated, grassy area below a disturbed area that can be used to remove sediment from runoff prior to its reaching surface waters.



Lebanon County Conservation District

To be effective, runoff should be in the form of sheet flow, and the vegetative cover should be established prior to the disturbance. Due to the time required to establish vegetation and the need to control runoff from the areas disturbed while constructing filter strips, constructed vegetative filter strips are not recommended. The suitability of natural vegetative filter strips should be either field verified by the Department or conservation district or documented by photo(s) submitted by the applicant prior to approval. Vegetative filter strips on neighboring properties should not be proposed unless permission to use that area as a vegetative filter strip has been obtained from the owner of the property along with an agreement to leave the filter strip area undisturbed for as long as it is needed. Where control of the filter strip cannot be assured throughout its intended use, a substitute BMP that will be installed should the filter strip no longer be available should be specified in the E&S Plan.

Vegetative filter strips may be used to remove sediment from project runoff that is directed to the strip as sheet flow. The minimum filter strip width should be determined from Table 4.6.

Vegetation should be an existing, well-established, perennial grass. Wooded and brushy areas are not acceptable for purposes of sediment removal.

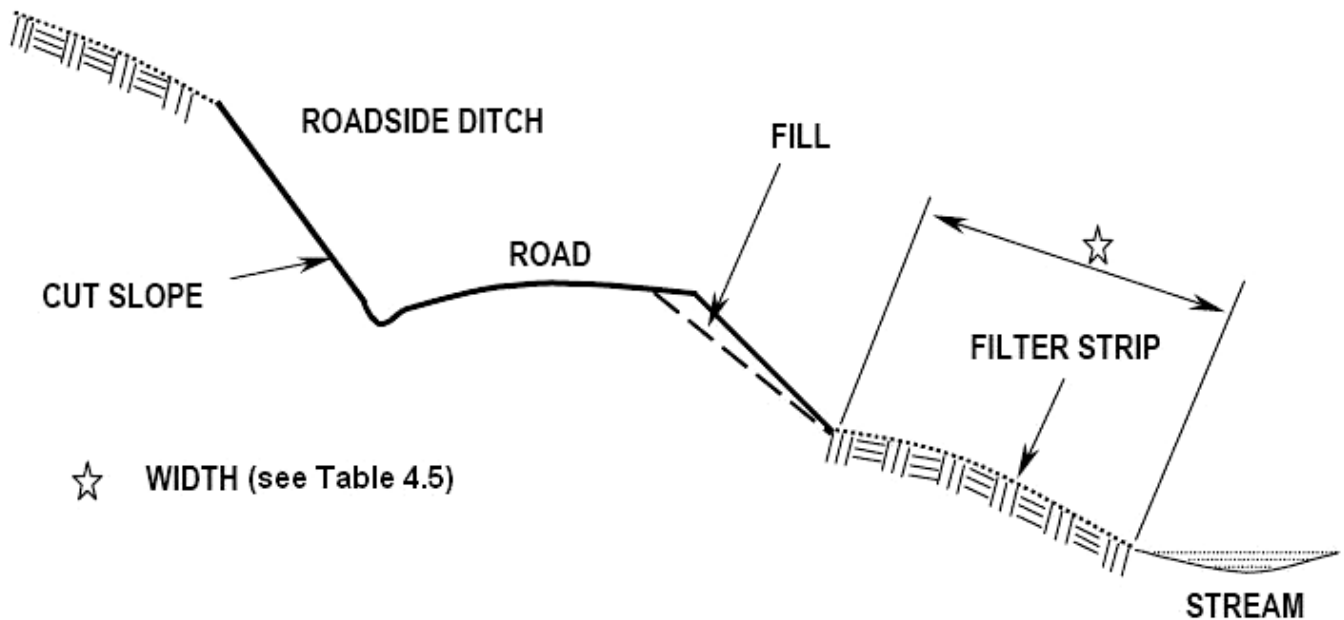
The total width of the filter strip should be at least half that of the disturbed area tributary to it. Minimum width of the filter strip should be:

$$W_{\min} = 2S + 25 \text{ ft (50 ft min. or } \frac{1}{2} \text{ that of the disturbed area tributary to it, whichever is longer)}$$

Where: W_{\min} = Minimum filter width in feet
 S = Average slope (in percent) of the filter strip

If at any time, the width of the vegetative filter strip has been reduced by sediment deposition to half its original width, suitable alternative BMPs should be installed immediately. The E&S Plan should specify what BMPs will be installed should this occur. Specifications, typical details, locations, etc. should be included.

**FIGURE 4.5
Vegetative Filter Strip**



PA DEP

**TABLE 4.6
Minimum Filter Strip Widths for Sediment Removal**

Land Slope (%)*	Minimum Filter Strip Width (ft.)
≤ 10	50
20	65
30	85
40	105
50	125
60	145
70	165

* Land Slope is at location of filter strip.

Adapted from Professional Timber Harvesters Action Packet



pennsylvania

DEPARTMENT OF ENVIRONMENTAL PROTECTION

**EROSION AND SEDIMENT POLLUTION
CONTROL PROGRAM MANUAL**

FINAL

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