

# Effects of NRCS Conservation Practices - National

## Filter Strip

A strip or area of herbaceous vegetation that removes contaminants from overland flow.

Code: 393

Units: ac.

AL-Aso Land  
 O-Other  
 W-Water  
 D-Developed  
 FS-Farmstead  
 Pr-Protected  
 P-Pasture  
 R-Range  
 F-Forest  
 C-Crop

Typical Landuse: C F R P Pr FS D O AL

<u>Soil Erosion</u>	<u>Effect</u>	<u>Rationale</u>
Soil Erosion - Sheet and Rill Erosion	0	Not Applicable
Soil Erosion - Wind Erosion	0	Not Applicable
Soil Erosion - Ephemeral Gully Erosion	0	Not Applicable
Soil Erosion - Classic Gully Erosion	0	Not Applicable
Soil Erosion - Streambank, Shoreline, Water Conveyance C	0	Not Applicable
<u>Soil Quality Degradation</u>		
Organic Matter Depletion	5	Decreased erosion, increased root mass and less oxidation from lack of soil disturbance under permanent cover will increase or maintain organic matter.
Compaction	5	Root penetration and organic matter helps restore soil structure.
Subsidence	0	Not Applicable
Concentration of Salts or Other Chemicals	0	Not Applicable
<u>Excess Water</u>		
Excess Water - Seeps	0	Not Applicable
Excess Water - Runoff, Flooding, or Ponding	0	Not Applicable
Excess Water - Seasonal High Water Table	0	Not Applicable
Excess Water - Drifted Snow	0	Not Applicable
<u>Insufficient Water</u>		
Insufficient Water - Inefficient Use of Irrigation Water	0	Not Applicable
Insufficient Water - Inefficient Moisture Management	0	Not Applicable
<u>Water Quality Degradation</u>		
Pesticides in Surface Water	2	The action reduces runoff and traps adsorbed pesticides. Also, the strips may attract beneficial insects or trap insect pests, reducing the need for pesticide applications.
Pesticides in Groundwater	1	There is a potential to increase infiltration and absorption by plant roots and breakdown of pesticides with biological activity.
Nutrients in Surface water	5	Solid organics and sediment-attached nutrients are filtered out. Soluble nutrients infiltrate the soil and may be taken up by plants or utilized by soil organisms.
Nutrients in Groundwater	2	Permanent vegetation will take up available nutrients and increase organic matter. The increased organic matter will increase cation exchange capacity which will hold nutrients.
Salts in Surface Water	1	The action slows runoff, which may increase water infiltration, reducing the potential for transport of salts to surface water.
Salts in Groundwater	1	The action will result in increased uptake by plants.
Excess Pathogens and Chemicals from Manure, Bio-solic	3	Filter strips capture and delay pathogen movement, but mortality may also be delayed because vegetative cover may protect pathogens from desiccation.
Excess Pathogens and Chemicals from Manure, Bio-solic	1	The action captures and delays pathogen movement, but pathogen mortality may also be delayed because vegetative cover may protect pathogens from desiccation.

Excessive Sediment in Surface Water	5	Vegetation protects soil surface and traps sediment, nutrients and other materials.														
Elevated Water Temperature	0	Not Applicable														
Petroleum, Heavy Metals and Other Pollutants Transport	4	Runoff containing heavy metals is slowed, trapping sediment and increasing infiltration into the soil where metals are often tied up. Some plants can take up heavy metals.														
Petroleum, Heavy Metals and Other Pollutants Transport	1	Higher organic matter levels increases buffering capacity of the soil. Some plants can take up some heavy metals.														
<u>Air Quality Impacts</u>																
Emissions of Particulate Matter (PM) and PM Precursors	1	Areas converted to permanent vegetation reduce the area susceptible to wind erosion and tillage.														
Emissions of Ozone Precursors	0	Not Applicable														
Emissions of Greenhouse Gases (GHGs)	1	Vegetation removes CO2 from the air and stores it in the form of carbon in the plants and soil.														
Objectionable Odors	0	Not Applicable														
<u>Degraded Plant Condition</u>																
Undesirable Plant Productivity and Health	5	Plants are selected and managed to maintain optimal productivity and health.														
Inadequate Structure and Composition	5	Plants selected are adapted and suited.														
Excessive Plant Pest Pressure	4	Filter strips are installed and managed to control target species. Dense, permanent cover limits invasion by noxious plants.														
Wildfire Hazard, Excessive Biomass Accumulation	0	Not Applicable														
<u>Fish and Wildlife - Inadequate Habitat</u>																
Inadequate Habitat - Food	2	Increased quality and quantity of vegetation provides more food and cover for wildlife, but vegetation removal limits cover.														
Inadequate Habitat - Cover/Shelter	2	Increased quality and quantity of vegetation provides more food and cover for wildlife, but vegetation removal limits cover.														
Inadequate Habitat - Water	0	Not Applicable														
Inadequate Habitat - Habitat Continuity (Space)	2	Increased quality and quantity of vegetation provides more food and cover for wildlife, but vegetation removal limits cover.														
<u>Livestock Production Limitation</u>																
Inadequate Feed and Forage	0	Not Applicable														
Inadequate Shelter	0	Not Applicable														
Inadequate Water	0	Not Applicable														
<u>Inefficient Energy Use</u>																
Equipment and Facilities	0	Not Applicable														
Farming/Ranching Practices and Field Operations	0	Not Applicable														
		<table border="1"> <thead> <tr> <th colspan="2"><u>CPPE Practice Effects:</u></th> </tr> </thead> <tbody> <tr> <td>5 Substantial Improvement</td> <td>0 No Effect</td> </tr> <tr> <td>4 Moderate to Substantial Improvement</td> <td>-1 Slight Worsening</td> </tr> <tr> <td>3 Moderate Improvement</td> <td>-2 Slight to Moderate Worsening</td> </tr> <tr> <td>2 Slight to Moderate Improvement</td> <td>-3 Moderate Worsening</td> </tr> <tr> <td>1 Slight Improvement</td> <td>-4 Moderate to Substantial Worsening</td> </tr> <tr> <td></td> <td>-5 Substantial Worsening</td> </tr> </tbody> </table>	<u>CPPE Practice Effects:</u>		5 Substantial Improvement	0 No Effect	4 Moderate to Substantial Improvement	-1 Slight Worsening	3 Moderate Improvement	-2 Slight to Moderate Worsening	2 Slight to Moderate Improvement	-3 Moderate Worsening	1 Slight Improvement	-4 Moderate to Substantial Worsening		-5 Substantial Worsening
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