

Effects of NRCS Conservation Practices - National

Field Border

A stripe of permanent vegetation established at the edge or around the perimeter of a field.

Code: 386

Units: ft.

Typical Landuse:

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

<u>Soil Erosion</u>	<u>Effect</u>	<u>Rationale</u>
Soil Erosion - Sheet and Rill Erosion	4	Permanent vegetation planted across the slope reduces erosive water energy.
Soil Erosion - Wind Erosion	4	Stiff-stemmed, permanent vegetation traps saltating particles. More roughened surface slows wind velocities.
Soil Erosion - Ephemeral Gully Erosion	1	Vegetation across the slope reduces erosive energy of concentrated flows where they exit the field.
Soil Erosion - Classic Gully Erosion	0	Not Applicable
Soil Erosion - Streambank, Shoreline, Water Conveyance C	1	Increased vegetation can reduce concentrated runoff flowing over streambanks.
<u>Soil Quality Degradation</u>		
Organic Matter Depletion	4	Permanent cover and lack of soil disturbance reduces decomposition of soil organic materials such as roots and allows accumulation.
Compaction	2	Root penetration and organic matter helps restore soil structure.
Subsidence	0	Drainage has the predominant impact on subsidence.
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	1	Permanent vegetation will reduce runoff and increase infiltration.
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 erosion. Also, the borders may attract beneficial insects or trap insect pests, reducing the need for pesticide applications.
Pesticides in Groundwater	2	The action may attract beneficial insects or trap insect pests, reducing the need for pesticide applications.
Nutrients in Surface water	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.
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	0	Not Applicable
Salts in Groundwater	1	The action will result in increased uptake by plants.
Excess Pathogens and Chemicals from Manure, Bio-solic	1	Less erosion and runoff reduces delivery of pathogens. More moist environment in permanent vegetation may slow pathogen mortality, however.
Excess Pathogens and Chemicals from Manure, Bio-solic	0	Permanent vegetation increases soil organic matter and microbial activity, which competes with pathogens. However, permanent vegetation may delay mortality of some pathogens by slowing desiccation.

Excessive Sediment in Surface Water	2	Vegetation protects soil surface and traps sediment.														
Elevated Water Temperature	0	Not Applicable														
Petroleum, Heavy Metals and Other Pollutants Transport	0	Not Applicable														
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<u>Air Quality Impacts</u>																
Emissions of Particulate Matter (PM) and PM Precursors	1	Permanent vegetation around the field edge reduces particulate emissions from vehicle traffic and tillage in the border area.														
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	Vegetation is installed and managed to control undesired species.														
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 for wildlife.														
Inadequate Habitat - Cover/Shelter	2	Plants may be chosen and managed to enhance value as cover/shelter.														
Inadequate Habitat - Water	4	Not Applicable														
Inadequate Habitat - Habitat Continuity (Space)	2	Permanent vegetation may provide added habitat and connectivity for selected wildlife species.														
<u>Livestock Production Limitation</u>																
Inadequate Feed and Forage	0	There may be some use of the planting for feed and forage by livestock.														
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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