Effects of NRCS Conservation Practices - National

Contour Buffer Strips

Narrow strips of permanent, herbaceous vegetative cover established around the hill slope, and alternated down the slope with wider cropped strips that are farmed on the contour.

Code: 332
Units: ac.

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

Typical Landuse: C

Soil Erosion	*Effect*	*Rationale*
Soil Erosion - Sheet and Rill Erosion	4	Maintaining vegetation on the contour reduces runoff velocities, thus reducing the detachment and transport capacity of over-land flow.
Soil Erosion - Wind Erosion	0	If the practice layout is coincidentally oriented across the direction of the erosive wind, soil particles borne by wind are trapped and soil detachment is reduced.
Soil Erosion - Ephemeral Gully Erosion	2	Vegetation across the slope reduces runoff velocity and volume and increases infiltration reducing concentrated flow.
Soil Erosion - Classic Gully Erosion	1	Reduces runoff causing erosion in the gully.
Soil Erosion - Streambank, Shoreline, Water Conveyance C	1	Reduces runoff causing erosion.
Soil Quality Degradation		
Organic Matter Depletion	2	Not Applicable
Compaction	0	Not Applicable
Subsidence	0	Not Applicable
Concentration of Salts or Other Chemicals	0	Vegetation will increase opportunity for infiltration and evapotranspiration with no net effect.
Excess Water		
Excess Water - Seeps	-2	Reduces runoff and traps drifting snow resulting in increased water infiltration that may move laterally to a seep area, particularly during fallow periods.
Excess Water - Runoff, Flooding, or Ponding	1	Reduces runoff resulting in increased water infiltration which will slightly reduce the potential for flooding or ponding.
Excess Water - Seasonal High Water Table	-1	Reduces runoff resulting in increased water infiltration which increases subsurface water.
Excess Water - Drifted Snow	0	Not Applicable
Insufficient Water		
Insufficient Water - Inefficient Use of Irrigation Water	0	Not Applicable
Insufficient Water - Inefficient Moisture Management	1	Reduces runoff resulting in increased water infiltration.
Water Quality Degradation		
Pesticides in Surface Water	2	The action reduces runoff and erosion and the amount of pesticide applied.
Pesticides in Groundwater	0	The action increases infiltration which is offset by increased soil organic matter and biological activity .
Nutrients in Surface water	2	The action decreases soil erosion by water and may increase water infiltration, thereby reducing the transport of nutrients and organics to surface water.
Nutrients in Groundwater	-1	The action reduces the velocity of runoff and traps drifting snow resulting in increased water infiltration which could move nutrients and organics to groundwater.
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 reduces the velocity of runoff and traps drifting snow resulting in increased water infiltration which could move salts to groundwater.
Excess Pathogens and Chemicals from Manure, Bio-solic	1	Contour Buffer Strips decrease sheet and rill erosion and slow runoff velocities, thereby reducing the potential for transport of pathogens to surface water
Excess Pathogens and Chemicals from Manure, Bio-solic	-1	Increased water infiltration could move pathogens into the soil.

Excessive Sediment in Surface Water	**2**	**Contour Buffer Strips reduce sheet and rill erosion and slow the velocity of runoff, thereby reducing the transport of sediment to surface water**
Elevated Water Temperature	**0**	**Not Applicable**
Petroleum, Heavy Metals and Other Pollutants Transporte	**2**	**Strips of vegetation decrease sheet and rill erosion and slow runoff velocities, thereby reducing the potential for transport of heavy metals to surface water.**
Petroleum, Heavy Metals and Other Pollutants Transporte	**0**	**The action may result in increased water infiltration, but this will have a negligible effect on heavy metals in groundwater.**
Air Quality Impacts		
Emissions of Particulate Matter (PM) and PM Precursors	**1**	**Vegetation reduces erosive wind velocities and provides a stable area which stops saltating particles.**
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**
Degraded Plant Condition		
Undesirable Plant Productivity and Health	**2**	**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**
Fish and Wildlife - Inadequate Habitat		
Inadequate Habitat - Food	**2**	**Increased quality and quantity of vegetation provides more food for wildlife.**
Inadequate Habitat - Cover/Shelter	**2**	**Increased quality and quantity of vegetation provides more cover for wildlife.**
Inadequate Habitat - Water	**4**	**Not Applicable**
Inadequate Habitat - Habitat Continuity (Space)	**2**	**Increased cover will increase space for wildlife. May be used to connect other cover areas.**
Livestock Production Limitation		
Inadequate Feed and Forage	**1**	**There may be some use of the planting for feed and forage by livestock.**
Inadequate Shelter	**0**	**Not Applicable**
Inadequate Water	**0**	**Not Applicable**
Inefficient Energy Use		
Equipment and Facilities	**1**	**Equipment operated on the contour vs up and down hill**
Farming/Ranching Practices and Field Operations	**1**	**Equipment operated on the contour vs up and down hill**

CPPE Practice Effects:	
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