

Effects of NRCS Conservation Practices - National

Contour Orchard and Other Perennial Crops

Planting orchards, vineyards, or other perennial crops so that all cultural operations are done on or near the contour.

Code: 331

Units: ac.

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

Typical Landuse: C

<u>Soil Erosion</u>	<u>Effect</u>	<u>Rationale</u>
Soil Erosion - Sheet and Rill Erosion	4	Contouring reduces runoff velocities and changes overland flow direction, thus reducing the detachment and transport capacity of over-land flow.
Soil Erosion - Wind Erosion	0	Not Applicable
Soil Erosion - Ephemeral Gully Erosion	1	Contouring reduces runoff velocities and changes overland flow direction, thus reducing the detachment and transport capacity of concentrated over-land flow.
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	2	Reduced soil erosion decreases organic matter loss.
Compaction	0	Not Applicable
Subsidence	0	Not Applicable
Concentration of Salts or Other Chemicals	0	Not Applicable
<u>Excess Water</u>		
Excess Water - Seeps	-2	Increases water infiltration that may move laterally to a seep area, particularly during fallow periods.
Excess Water - Runoff, Flooding, or Ponding	1	Increases water infiltration which will slightly reduce the potential for flooding or ponding.
Excess Water - Seasonal High Water Table	-1	Increases infiltration which could contribute to excess subsurface water.
Excess Water - Drifted Snow	0	Not Applicable
<u>Insufficient Water</u>		
Insufficient Water - Inefficient Use of Irrigation Water	1	Contouring reduces slope grade, velocities of irrigation applied water and increases infiltration.
Insufficient Water - Inefficient Moisture Management	2	Increases water infiltration resulting in improved water storage in the profile.
<u>Water Quality Degradation</u>		
Pesticides in Surface Water	1	The action reduces runoff and erosion.
Pesticides in Groundwater	-1	The action increases infiltration.
Nutrients in Surface water	2	The action decreases sheet and rill erosion 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, 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, resulting in increased water infiltration which could move salts to groundwater.
Excess Pathogens and Chemicals from Manure, Bio-solic	0	Not Applicable
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Excessive Sediment in Surface Water	2	Contouring reduces sheet and rill erosion and slows 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 Transport	0	Not Applicable
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<u>Air Quality Impacts</u>		
Emissions of Particulate Matter (PM) and PM Precursors	0	Not Applicable
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	1	Increased infiltration increases the amount of available water for crop growth.
Inadequate Structure and Composition	0	Not Applicable
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	0	Not Applicable
Inadequate Habitat - Cover/Shelter	0	Not Applicable
Inadequate Habitat - Water	4	Not Applicable
Inadequate Habitat - Habitat Continuity (Space)	0	Not Applicable
<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	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

<u>CPPE Practice Effects:</u>	<i>0 No Effect</i>
<i>5 Substantial Improvement</i>	<i>-1 Slight Worsening</i>
<i>4 Moderate to Substantial Improvement</i>	<i>-2 Slight to Moderate Worsening</i>
<i>3 Moderate Improvement</i>	<i>-3 Moderate Worsening</i>
<i>2 Slight to Moderate Improvement</i>	<i>-4 Moderate to Substantial Worsening</i>
<i>1 Slight Improvement</i>	<i>-5 Substantial Worsening</i>