

# Effects of NRCS Conservation Practices - National

## Row Arrangement

A system of crop rows on planned grades and lengths.

Code: 557  
Units: ac.

Typical Landuse: C F

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

<u>Soil Erosion</u>	<u>Effect</u>	<u>Rationale</u>
Soil Erosion - Sheet and Rill Erosion	3	Rows are arranged in direction, grade, and length to reduce erosion
Soil Erosion - Wind Erosion	1	Adding roughness to the soil across the prevailing wind direction reduces saltation.
Soil Erosion - Ephemeral Gully Erosion	3	Rows are arranged in direction, grade, and length to reduce erosion
Soil Erosion - Classic Gully Erosion	0	The action not installed in gully area
Soil Erosion - Streambank, Shoreline, Water Conveyance C	0	Reduced erosion and sediment load can create water energy/stream bank erosion from runoff
<u>Soil Quality Degradation</u>		
Organic Matter Depletion	1	Reduced erosion reduces loss of organic material in sediments
Compaction	0	Not Applicable
Subsidence	0	Not Applicable
Concentration of Salts or Other Chemicals	1	Improved moisture control may result in leaching of contaminants below the root zone
<u>Excess Water</u>		
Excess Water - Seeps	-1	Row arrangement may result in more infiltration.
Excess Water - Runoff, Flooding, or Ponding	2	Correct row arrangement provides better drainage control.
Excess Water - Seasonal High Water Table	-1	Row arrangement may result in more infiltration.
Excess Water - Drifted Snow	0	Not Applicable
<u>Insufficient Water</u>		
Insufficient Water - Inefficient Use of Irrigation Water	4	Row arrangement with proper grade and length improves irrigation efficiency.
Insufficient Water - Inefficient Moisture Management	4	Row arrangement with proper grade and length improves water capture.
<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 facilitates the removal of surface runoff, thus increasing the potential for surface water contamination by organics and nutrients.
Nutrients in Groundwater	2	The action facilitates the removal of surface runoff, thus reducing percolation of water and nutrients.
Salts in Surface Water	0	The action can increase percolation, which reduces the runoff of soluble salts. The action can also increase surface drainage, which moves contaminants from the site.
Salts in Groundwater	0	Increased percolation may move soluble salts into groundwater.
Excess Pathogens and Chemicals from Manure, Bio-solic	1	Retarding surface water flow will reduce transport of pathogens
Excess Pathogens and Chemicals from Manure, Bio-solic	0	Not Applicable

Excessive Sediment in Surface Water	2	Reduced slope and water velocity will reduce erosion.
Elevated Water Temperature	0	Not Applicable
Petroleum, Heavy Metals and Other Pollutants Transport	0	Collected runoff may discharge into surface water.
Petroleum, Heavy Metals and Other Pollutants Transport	0	Not Applicable
<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)	0	Improved production and vegetative density 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	Conserving moisture and reduced erosion will improve plant productivity and health.
Inadequate Structure and Composition	0	Not Applicable
Excessive Plant Pest Pressure	0	Not Applicable
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	3	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	0	Not Applicable
Farming/Ranching Practices and Field Operations	0	Not Applicable

<b>CPPE Practice Effects:</b>	<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>