

Effects of NRCS Conservation Practices - National

Grazing Land Mechanical Treatment

Modifying physical soil and or plant conditions with mechanical tools by treatment such as; pitting, contour furrowing, and ripping or sub-soiling.

Code: 548
Units: ac.

Typical Landuse:

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	1	Increased surface roughness and improved vegetation cover will increase infiltration, reduce runoff, reduce soil movement.
Soil Erosion - Wind Erosion	1	An increase in vegetative cover decreases erosion by wind.
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	1	Improved plant vigor and productivity increases organic matter.
Compaction	0	Not applicable.
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	2	Increased infiltration and decreased runoff.
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	2	Increased water infiltration and improved plant, soil, moisture, and air relationships.
<u>Water Quality Degradation</u>		
Pesticides in Surface Water	0	Not applicable.
Pesticides in Groundwater	0	Not applicable.
Nutrients in Surface water	1	Modifications to soil conditions will increase infiltration and reduce runoff. Improved plant growth will better utilize nutrients, decreasing the potential for losses in runoff.
Nutrients in Groundwater	0	Not applicable.
Salts in Surface Water	0	Not applicable.
Salts in Groundwater	0	Not applicable.
Excess Pathogens and Chemicals from Manure, Bio-solic	1	Slight improvement because of increased infiltration and decreased runoff.
Excess Pathogens and Chemicals from Manure, Bio-solic	0	Not applicable.

Excessive Sediment in Surface Water	5	Improved hydrologic indicators increase infiltration and decreases runoff.														
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	Intensive disturbance of soil can release particulate matter.														
Emissions of Ozone Precursors	0	Not Applicable														
Emissions of Greenhouse Gases (GHGs)	-2	Intensive disturbance of soil can release stored soil carbon as carbon dioxide.														
Objectionable Odors	0	Not Applicable														
<u>Degraded Plant Condition</u>																
Undesirable Plant Productivity and Health	4	Site is modified to enhance the health and vigor of desired species.														
Inadequate Structure and Composition	2	Site is modified to enhancing suited and desired species.														
Excessive Plant Pest Pressure	-1	Undesired plants can colonize newly treated areas.														
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	1	Not applicable.														
Inadequate Habitat - Habitat Continuity (Space)	0	Not Applicable														
<u>Livestock Production Limitation</u>																
Inadequate Feed and Forage	1	Treatment improves plant production and species diversity.														
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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