

Effects of NRCS Conservation Practices - National

Brush Management

The management or removal of woody (non-herbaceous or succulent) plants including those that are invasive and noxious.

Code: 314

Units: ac.

Typical Landuse:

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

<u>Soil Erosion</u>	<u>Effect</u>	<u>Rationale</u>
Soil Erosion - Sheet and Rill Erosion	1	Reduction of brush canopy will increase herbaceous ground cover resulting in increased infiltration, reduced overland flow and reduced soil detachment. There may be a temporary increase in exposure of the soil surface following mechanical treatment.
Soil Erosion - Wind Erosion	1	Reduction of brush canopy will increase herbaceous ground cover resulting in increased infiltration, reduced overland flow and reduced soil detachment. There may be a temporary increase in exposure of the soil surface following mechanical treatment.
Soil Erosion - Ephemeral Gully Erosion	1	Reduction of brush canopy will increase herbaceous ground cover resulting in increased infiltration, reduced overland flow and reduced soil detachment. There may be a temporary increase in exposure of the soil surface following mechanical treatment.
Soil Erosion - Classic Gully Erosion	1	Reduction of brush canopy will increase herbaceous ground cover resulting in increased infiltration, reduced overland flow and reduced soil detachment. There may be a temporary increase in exposure of the soil surface following mechanical treatment.
Soil Erosion - Streambank, Shoreline, Water Conveyance C	0	Not applicable.
<u>Soil Quality Degradation</u>		
Organic Matter Depletion	0	Not applicable.
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	1	Runoff is reduced by increased ground cover.
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	There will be increased moisture availability and plant use efficiency caused by decrease in undesirable species.
<u>Water Quality Degradation</u>		
Pesticides in Surface Water	-1	Pesticides may be used to control brush.
Pesticides in Groundwater	0	Not applicable.
Nutrients in Surface water	0	Not applicable.
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	0	Not Applicable
Excess Pathogens and Chemicals from Manure, Bio-solic	0	Not applicable.

Excessive Sediment in Surface Water	2	The decrease is due to improved plant cover and increased infiltration, reducing overland flow and runoff.
Elevated Water Temperature	0	Not applicable.
Petroleum, Heavy Metals and Other Pollutants Transport	0	Not applicable.
Petroleum, Heavy Metals and Other Pollutants Transport	0	Not applicable.
<u>Air Quality Impacts</u>		
Emissions of Particulate Matter (PM) and PM Precursors	0	Removal of vegetation by mechanical means or burning can increase short-term PM emissions. However, there should be no long-term effect from brush management.
Emissions of Ozone Precursors	0	Removal of vegetation by chemical means or burning can increase short-term VOC and/or NOx emissions. However, there should be no long-term effect from brush management.
Emissions of Greenhouse Gases (GHGs)	1	Removal of vegetation by burning can increase short-term CO2 emissions. However, there should be a positive long-term carbon sequestration effect from brush management.
Objectionable Odors	0	Not Applicable
<u>Degraded Plant Condition</u>		
Undesirable Plant Productivity and Health	2	The removal of competition increases desirable plant community health, vigor, and biodiversity.
Inadequate Structure and Composition	4	Undesirable brush species will be managed by physical, chemical, or biological means to make it suitable for the desired plant community.
Excessive Plant Pest Pressure	4	There will be a removal of competition to increase desirable plant community health, vigor, and biodiversity.
Wildfire Hazard, Excessive Biomass Accumulation	4	Management reduces fuel loadings.
<u>Fish and Wildlife - Inadequate Habitat</u>		
Inadequate Habitat - Food	2	There will be an improvement in composition, structure, amount, and availability of plants for food.
Inadequate Habitat - Cover/Shelter	2	The degree will depend on the amount of brush removed and the enhancement of stand composition and structure.
Inadequate Habitat - Water	1	Not Applicable
Inadequate Habitat - Habitat Continuity (Space)	1	Removal or control of brush is planned to provide habitat continuity.
<u>Livestock Production Limitation</u>		
Inadequate Feed and Forage	4	The reduction of undesirable brush species increases production of forage that meets nutritional and productive needs for 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

<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>