

Effects of NRCS Conservation Practices - National

Land Clearing

Removing trees, stumps, and other vegetation from wooded areas to achieve a conservation objective.

Code: 460

Units: ac.

Typical Landuse:

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

<u>Soil Erosion</u>	<u>Effect</u>	<u>Rationale</u>
Soil Erosion - Sheet and Rill Erosion	0	Establishment of temporary vegetative cover is needed to protect the treated area from erosion until the planned use is in place.
Soil Erosion - Wind Erosion	0	The action requires that temporary cover will be established as necessary to control wind erosion on the cleared area until the planned land use is in place.
Soil Erosion - Ephemeral Gully Erosion	0	The action requires that temporary cover will be established as necessary to control water erosion on the cleared area until the planned land use is in place.
Soil Erosion - Classic Gully Erosion	0	Clearing will reduce vegetation resulting in a short term increase of erosion.
Soil Erosion - Streambank, Shoreline, Water Conveyance C	0	Clearing will reduce vegetation resulting in a short term increase of erosion.
<u>Soil Quality Degradation</u>		
Organic Matter Depletion	-3	Organic material may be removed by clearing.
Compaction	-1	Clearing may allow for increased vehicle traffic.
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	Removal of vegetation may increase runoff.
Excess Water - Seasonal High Water Table	0	Removal of vegetation may decrease evapotranspiration.
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	0	Not Applicable
<u>Water Quality Degradation</u>		
Pesticides in Surface Water	-1	Removal of trees, stumps, and other vegetation increases runoff and erosion.
Pesticides in Groundwater	0	Not Applicable
Nutrients in Surface water	-1	Removal of permanent vegetative cover may increase runoff and erosion and the delivery of sediment-attached nutrients to surface water.
Nutrients in Groundwater	0	Not Applicable
Salts in Surface Water	0	Removal of cover may increase transport of salinity if contained in runoff and erosion related sediments.
Salts in Groundwater	0	Not Applicable
Excess Pathogens and Chemicals from Manure, Bio-solic	-1	removal of cover may increase runoff and erosion
Excess Pathogens and Chemicals from Manure, Bio-solic	0	Not Applicable

Excessive Sediment in Surface Water	-1	Removal of trees and vegetation will increase runoff and erosion. Mitigation is part of practice design.
Elevated Water Temperature	-2	Removal of canopy cover reduces the amount of shade and cooling effects on streams and water courses. Mitigation is part of practice design.
Petroleum, Heavy Metals and Other Pollutants Transport	-1	Removal of cover may increase runoff and erosion.
Petroleum, Heavy Metals and Other Pollutants Transport	0	Not Applicable
<u>Air Quality Impacts</u>		
Emissions of Particulate Matter (PM) and PM Precursors	-1	Equipment operations temporarily produce particulate emissions and exhaust emissions. Also, disturbance of the soil surface can release particulate emissions and cleared land may have more susceptibility to PM emissions from wind erosion.
Emissions of Ozone Precursors	0	There is a short-term increase in vehicle emissions and ozone precursors from land clearing equipment.
Emissions of Greenhouse Gases (GHGs)	-1	Carbon can be released with the disposal of material if the material is burned and/or soil surface disturbed.
Objectionable Odors	0	Not Applicable
<u>Degraded Plant Condition</u>		
Undesirable Plant Productivity and Health	2	Removal of undesirable plants will provide a better growing environment for desired plant species.
Inadequate Structure and Composition	0	Not Applicable
Excessive Plant Pest Pressure	-2	Undesired species can colonize areas left bare.
Wildfire Hazard, Excessive Biomass Accumulation	4	Activities reduce fuel load buildup.
<u>Fish and Wildlife - Inadequate Habitat</u>		
Inadequate Habitat - Food	-2	Clearing removes tree-related food.
Inadequate Habitat - Cover/Shelter	-2	Removal of vegetation will reduce cover/shelter.
Inadequate Habitat - Water	0	Not Applicable
Inadequate Habitat - Habitat Continuity (Space)	-2	Loss of habitat occurs as land is disturbed.
<u>Livestock Production Limitation</u>		
Inadequate Feed and Forage	0	Not Applicable
Inadequate Shelter	-2	Removal of vegetation will reduce shelter.
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

CPPE Practice Effects:	<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>