

Effects of NRCS Conservation Practices - National

Tree/Shrub Site Preparation

Treatment of areas to improve site conditions for establishing trees and/or shrubs.

Code: 490

Units: ac

Typical Landuse:

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

<u>Soil Erosion</u>	<u>Effect</u>	<u>Rationale</u>
Soil Erosion - Sheet and Rill Erosion	-1	An area with disturbed soil or reduction in vegetative cover and surface litter has potential for increases in erosive water energy.
Soil Erosion - Wind Erosion	-1	An area with bare soil or reduction in vegetative cover and surface litter has potential for increased exposure of the soil surface to erosive wind energy.
Soil Erosion - Ephemeral Gully Erosion	-2	An area with disturbed soil or reduction in vegetative cover and surface litter has potential for increases in erosive water energy.
Soil Erosion - Classic Gully Erosion	-1	An area with disturbed soil or reduction in vegetative cover and surface litter has potential for increases in erosive water energy.
Soil Erosion - Streambank, Shoreline, Water Conveyance C	0	Not Applicable
<u>Soil Quality Degradation</u>		
Organic Matter Depletion	-2	Removal of vegetation and litter from a site removes organic material that could have become soil organic matter.
Compaction	-1	Use of heavy equipment compacts soil.
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	0	Temporary site condition.
Excess Water - Seasonal High Water Table	0	Temporary site condition.
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	5	Mechanical disturbance of soil surface increases infiltration rate and soil moisture retention.
<u>Water Quality Degradation</u>		
Pesticides in Surface Water	-1	Herbicides, if used, could reach surface water.
Pesticides in Groundwater	-1	Herbicides, if used, could reach groundwater.
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	Temporary site condition.
Excess Pathogens and Chemicals from Manure, Bio-solic	0	Increased woody vegetation on site may encourage microbial activity in the soil, reducing pathogen numbers.

Excessive Sediment in Surface Water	-1	Soil disturbance increases erosion from the site.														
Elevated Water Temperature	0	Eventual canopy cover of stand will shade streams.														
Petroleum, Heavy Metals and Other Pollutants Transport	0	Not Applicable														
Petroleum, Heavy Metals and Other Pollutants Transport	0	Increased woody vegetation on site may result in minor uptake of contaminants.														
<u>Air Quality Impacts</u>																
Emissions of Particulate Matter (PM) and PM Precursors	-2	Exhaust from equipment operation and dust from soil-disturbing activities add particulate matter to the air.														
Emissions of Ozone Precursors	0	There is a short-term increase in vehicle emissions and ozone precursors from site preparation equipment.														
Emissions of Greenhouse Gases (GHGs)	0	There is a short-term increase in vehicle emissions from site preparation equipment.														
Objectionable Odors	0	Not Applicable														
<u>Degraded Plant Condition</u>																
Undesirable Plant Productivity and Health	5	Site is altered to allow more suitable species to grow resulting in increased productivity, improved health and vigor.														
Inadequate Structure and Composition	3	Site is altered to allow more suited and desired species to grow.														
Excessive Plant Pest Pressure	5	Site conditions are managed to minimize undesired vegetation.														
Wildfire Hazard, Excessive Biomass Accumulation	3	Activities reduce fuel load buildup.														
<u>Fish and Wildlife - Inadequate Habitat</u>																
Inadequate Habitat - Food	0	Temporary site conditions may decrease food species used by wildlife.														
Inadequate Habitat - Cover/Shelter	0	Temporary site conditions may decrease cover/shelter for wildlife.														
Inadequate Habitat - Water	-1	Not Applicable														
Inadequate Habitat - Habitat Continuity (Space)	0	Conditions created are temporary. The action is designed to recreate woody habitat/space.														
<u>Livestock Production Limitation</u>																
Inadequate Feed and Forage	0	Not Applicable														
Inadequate Shelter	-1	Activities can remove protective brush and trees.														
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														
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