

# Effects of NRCS Conservation Practices - National

## Prescribed Burning

Controlled fire applied to a predetermined area

Code: 338

Units: ac.

Typical Landuse:

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

C F R P Pr O AL

<u>Soil Erosion</u>	<u>Effect</u>	<u>Rationale</u>
Soil Erosion - Sheet and Rill Erosion	2	Improved plant production and vegetative cover reduces erosion from water.
Soil Erosion - Wind Erosion	2	Improved plant production and vegetative cover reduces erosion from wind.
Soil Erosion - Ephemeral Gully Erosion	1	Improved plant production and vegetative cover reduces erosion from water.
Soil Erosion - Classic Gully Erosion	1	Improved plant production and vegetative cover reduces erosion from water.
Soil Erosion - Streambank, Shoreline, Water Conveyance C	1	Improved plant production and vegetative cover decreases runoff and duration to streams.
<u>Soil Quality Degradation</u>		
Organic Matter Depletion	1	Improved plant production and vegetative cover decreases depletion.
Compaction	0	Not Applicable
Subsidence	-1	Organic soils are susceptible.
Concentration of Salts or Other Chemicals	-1	Burning mineralizes organic materials.
<u>Excess Water</u>		
Excess Water - Seeps	0	Not Applicable
Excess Water - Runoff, Flooding, or Ponding	1	Improved plant production and vegetative cover reduces 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	0	Not Applicable
<u>Water Quality Degradation</u>		
Pesticides in Surface Water	0	Not Applicable
Pesticides in Groundwater	0	Not Applicable
Nutrients in Surface water	2	The action increases plant vigor and uptake of nutrients.
Nutrients in Groundwater	1	The action increases plant vigor and uptake of nutrients.
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	1	Improved plant production and vegetative cover reduces runoff and sediment.
Elevated Water Temperature	0	The action is designed or mitigated to maintain surface water temperatures.
Petroleum, Heavy Metals and Other Pollutants Transport	1	Initial removal of vegetation is followed by improved plant growth.
Petroleum, Heavy Metals and Other Pollutants Transport	0	Not Applicable
<u>Air Quality Impacts</u>		
Emissions of Particulate Matter (PM) and PM Precursors	0	Increased plant vigor reduces the potential for generation of particulates by wind erosion. However, there will be increased particulate emissions from the fire itself.
Emissions of Ozone Precursors	0	There is a minimal reduction of ozone precursors through reduced incidence of wildfire. There is a short-term increase in ozone precursors (NOx and VOC emissions) during the burn.
Emissions of Greenhouse Gases (GHGs)	1	CO2 emissions are decreased with the decreased incidence of wildfire. Increased plant vigor also increases the potential for carbon sequestration.
Objectionable Odors	-1	Fire increases smoke, particulates, and associated odors.
<u>Degraded Plant Condition</u>		
Undesirable Plant Productivity and Health	5	Growing conditions are altered to enhance health and productivity of the more desirable plants.
Inadequate Structure and Composition	4	Growing conditions are altered to allow more suitable species to grow.
Excessive Plant Pest Pressure	4	Activities are designed and carried out to manage undesirable vegetation.
Wildfire Hazard, Excessive Biomass Accumulation	5	Activities are carried out to reduce fuel loading.
<u>Fish and Wildlife - Inadequate Habitat</u>		
Inadequate Habitat - Food	2	Growing conditions are altered to provide a diverse plant community with adequate food for wildlife.
Inadequate Habitat - Cover/Shelter	2	Growing conditions are altered to provide a diverse plant community with adequate cover for wildlife.
Inadequate Habitat - Water	2	Not Applicable
Inadequate Habitat - Habitat Continuity (Space)	4	Burning can restore desired habitats/space.
<u>Livestock Production Limitation</u>		
Inadequate Feed and Forage	5	Plant and/or site conditions are restored to improve production and quality of desirable forage species.
Inadequate Shelter	-1	Some shrubs and trees which provide shelter are removed from area.
Inadequate Water	0	Not Applicable
<u>Inefficient Energy Use</u>		
Equipment and Facilities	0	Not Applicable
Farming/Ranching Practices and Field Operations	1	Reduces energy requirements for firefighting and pest control.

<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>