

# Effects of NRCS Conservation Practices - National

## Forage and Biomass Planting

Establishing adapted and/or compatible species, varieties, or cultivars of herbaceous species suitable for pasture, hay, or biomass production.

Code: 512

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	Establishment of adapted species increases vegetative cover and reduces erosion potential. During the establishment period, there may be a slight to moderate risk of erosion, depending on seedbed preparation, seeding method, and species planted.
Soil Erosion - Wind Erosion	1	Establishment of adapted species increases vegetative cover and reduces erosion potential. During the establishment period, there may be a slight to moderate risk of erosion, depending on seedbed preparation, seeding method, and species planted.
Soil Erosion - Ephemeral Gully Erosion	0	Establishment of adapted species increases vegetative cover and reduces erosion potential. During the establishment period, there may be a slight to moderate risk of erosion, depending on seedbed preparation, seeding method, and species planted.
Soil Erosion - Classic Gully Erosion	0	There will be an increase of vegetative cover and reduced runoff in the watershed in the long-term.
Soil Erosion - Streambank, Shoreline, Water Conveyance C	0	Not Applicable
<u>Soil Quality Degradation</u>		
Organic Matter Depletion	1	There will be enhanced biomass production, root development, litter accumulation, increased biological activity, and/or reduced tillage if associated with change in land use.
Compaction	2	There will be enhanced biomass production, root development, litter accumulation, increased biological activity, and/or reduced tillage if associated with change in land use.
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	There will be an increase in cover and infiltration, reducing runoff and overland flow.
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	1	The plant species selected will decrease runoff and erosion.
Pesticides in Groundwater	0	Not applicable.
Nutrients in Surface water	1	Permanent vegetation will uptake excess nutrients.
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	The improved vegetative cover and increased soil microbiological activity will reduce movement of pathogens, however a land use change to pasture may increase potential pathogen levels.
Excess Pathogens and Chemicals from Manure, Bio-solic	0	Not applicable.

Excessive Sediment in Surface Water	1	There will be improved vegetative cover with a reduction of runoff and sedimentation.
Elevated Water Temperature	0	Not Applicable
Petroleum, Heavy Metals and Other Pollutants Transport	1	Increased uptake by some pasture plants and reduced erosion and runoff may reduce off-site movement of heavy metals attached to sediment.
Petroleum, Heavy Metals and Other Pollutants Transport	0	Not applicable.
<u>Air Quality Impacts</u>		
Emissions of Particulate Matter (PM) and PM Precursors	1	Establishing permanent vegetation reduces the potential for generation of particulates by wind erosion.
Emissions of Ozone Precursors	0	Not Applicable
Emissions of Greenhouse Gases (GHGs)	4	Vegetation removes CO2 from the air and stores it in the form of carbon in the plants and soil. Also, use of biomass as an alternative energy source can greatly reduce the use of (and emissions of CO2 from) fossil fuels.
Objectionable Odors	0	Not Applicable
<u>Degraded Plant Condition</u>		
Undesirable Plant Productivity and Health	1	Plants are selected based on site adaptability.
Inadequate Structure and Composition	1	Plants selected are adapted and suited.
Excessive Plant Pest Pressure	0	Not applicable.
Wildfire Hazard, Excessive Biomass Accumulation	0	Not Applicable
<u>Fish and Wildlife - Inadequate Habitat</u>		
Inadequate Habitat - Food	1	Planted species provide food for certain species.
Inadequate Habitat - Cover/Shelter	1	Plant species are selected that are well-adapted and compatible to the site and provide cover for wildlife.
Inadequate Habitat - Water	1	Not Applicable
Inadequate Habitat - Habitat Continuity (Space)	0	Not applicable.
<u>Livestock Production Limitation</u>		
Inadequate Feed and Forage	5	Plant species will be selected that accommodate seasonal livestock production and nutritional needs.
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.

<b><u>CPPE Practice Effects:</u></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>