

Effects of NRCS Conservation Practices - National

Vegetated Treatment Area

An area of permanent vegetation used for agricultural wastewater treatment.

Code: 635

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	

<u>Soil Erosion</u>	<u>Effect</u>	<u>Rationale</u>
Soil Erosion - Sheet and Rill Erosion	4	Permanent vegetation established.
Soil Erosion - Wind Erosion	4	Permanent vegetation established.
Soil Erosion - Ephemeral Gully Erosion	0	Not Applicable
Soil Erosion - Classic Gully Erosion	0	Not Applicable
Soil Erosion - Streambank, Shoreline, Water Conveyance C	0	Not Applicable
<u>Soil Quality Degradation</u>		
Organic Matter Depletion	3	Permanent vegetation established and organic matter captured
Compaction	3	Permanent vegetation established
Subsidence	0	Not Applicable
Concentration of Salts or Other Chemicals	-2	Use of the practice requires adding contaminants to the soil surface, some of which will infiltrate.
<u>Excess Water</u>		
Excess Water - Seeps	-1	Infiltration at area has the potential to aggravate already saturated conditions.
Excess Water - Runoff, Flooding, or Ponding	0	Not Applicable
Excess Water - Seasonal High Water Table	-2	Infiltration in the treatment area will add to subsurface water.
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	4	Infiltration and plant uptake in the treatment area will remove contaminants from polluted runoff and waste water.
Nutrients in Groundwater	-2	The action entails the application of waste which increases the potential for groundwater contamination.
Salts in Surface Water	2	Infiltration in the treatment area may remove some salts from polluted runoff and waste water.
Salts in Groundwater	-2	The action entails the application of waste which increases the potential for groundwater contamination.
Excess Pathogens and Chemicals from Manure, Bio-solic	5	Infiltration and plant uptake in the treatment area will remove contaminants from polluted runoff and waste water.
Excess Pathogens and Chemicals from Manure, Bio-solic	0	Infiltrating water in treatment area will increase soluble contaminants moving to groundwater, however there will be die-off as pathogens are trapped in the vegetation and increased microbial activity enhances competition with pathogens.

Excessive Sediment in Surface Water	2	Vegetation protects soil surface and traps sediment, nutrients and other materials.
Elevated Water Temperature	0	Not Applicable
Petroleum, Heavy Metals and Other Pollutants Transport	0	Heavy metals are rarely associated with manure; however, infiltration and plant uptake in the treatment strip will remove contaminants from polluted runoff and waste water.
Petroleum, Heavy Metals and Other Pollutants Transport	0	Heavy metals are rarely associated with manure, however, infiltrating water in treatment strip will increase soluble contaminants moving to groundwater.
<u>Air Quality Impacts</u>		
Emissions of Particulate Matter (PM) and PM Precursors	0	Not Applicable
Emissions of Ozone Precursors	0	Not Applicable
Emissions of Greenhouse Gases (GHGs)	1	Vegetation removes CO2 from the air and stores it in the form of carbon in the plants and soil.
Objectionable Odors	2	Can be used to prevent need for long term storage of manure
<u>Degraded Plant Condition</u>		
Undesirable Plant Productivity and Health	2	Treatment area will receive excess nutrients which could be toxic and diminish plant health.
Inadequate Structure and Composition	5	Plants selected are adapted and suited.
Excessive Plant Pest Pressure	4	Vegetation is installed and managed to control undesired species.
Wildfire Hazard, Excessive Biomass Accumulation	0	Not Applicable
<u>Fish and Wildlife - Inadequate Habitat</u>		
Inadequate Habitat - Food	0	Not Applicable
Inadequate Habitat - Cover/Shelter	0	Not Applicable
Inadequate Habitat - Water	4	Not Applicable
Inadequate Habitat - Habitat Continuity (Space)	0	Area provides only limited additional space for most species.
<u>Livestock Production Limitation</u>		
Inadequate Feed and Forage	1	There may be some use of the planting for feed and forage by 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

CPPE Practice Effects:	
5 Substantial Improvement	0 No Effect
4 Moderate to Substantial Improvement	-1 Slight Worsening
3 Moderate Improvement	-2 Slight to Moderate Worsening
2 Slight to Moderate Improvement	-3 Moderate Worsening
1 Slight Improvement	-4 Moderate to Substantial Worsening
	-5 Substantial Worsening