

Effects of NRCS Conservation Practices - National

Anionic Polyacrylamide (PAM) Erosion Control

Application of water-soluble Anionic Polyacrylamide (PAM) to meet a resource concern.

Code: 450

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	2	Application aggregates soil particles making them less susceptible to detachment from flowing water.
Soil Erosion - Wind Erosion	2	Application aggregates soil particles making them less susceptible to detachment from wind energy.
Soil Erosion - Ephemeral Gully Erosion	2	Application aggregates soil particles making them less susceptible to detachment from concentrated flow.
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	0	Not Applicable
Compaction	0	Not Applicable
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	Not Applicable
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	1	Minimizing furrow erosion allows a higher water flow in the furrow that provides more efficient application.
Insufficient Water - Inefficient Moisture Management	0	Not Applicable
<u>Water Quality Degradation</u>		
Pesticides in Surface Water	2	The action decreases runoff and erosion.
Pesticides in Groundwater	-1	The action increases infiltration.
Nutrients in Surface water	2	Because irrigation-induced erosion is reduced, there is less delivery of sediment-attached nutrients to be carried off-site to surface water.
Nutrients in Groundwater	-1	The action increases infiltration.
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	4	The action reduces erosion and sediment load														
Elevated Water Temperature	0	Not Applicable														
Petroleum, Heavy Metals and Other Pollutants Transport	1	PAM will reduce transport of heavy metals attached to soils.														
Petroleum, Heavy Metals and Other Pollutants Transport	0	Not Applicable														
<i>Air Quality Impacts</i>																
Emissions of Particulate Matter (PM) and PM Precursors	2	Application of PAM can reduce the susceptibility of soil to wind erosion.														
Emissions of Ozone Precursors	0	Not Applicable														
Emissions of Greenhouse Gases (GHGs)	0	Not Applicable														
Objectionable Odors	0	Not Applicable														
<i>Degraded Plant Condition</i>																
Undesirable Plant Productivity and Health	0	Not Applicable														
Inadequate Structure and Composition	0	Not Applicable														
Excessive Plant Pest Pressure	0	Not Applicable														
Wildfire Hazard, Excessive Biomass Accumulation	0	Not Applicable														
<i>Fish and Wildlife - Inadequate Habitat</i>																
Inadequate Habitat - Food	0	Not Applicable														
Inadequate Habitat - Cover/Shelter	0	Not Applicable														
Inadequate Habitat - Water	2	Not Applicable														
Inadequate Habitat - Habitat Continuity (Space)	0	Not Applicable														
<i>Livestock Production Limitation</i>																
Inadequate Feed and Forage	0	Not Applicable														
Inadequate Shelter	0	Not Applicable														
Inadequate Water	0	Not Applicable														
<i>Inefficient Energy Use</i>																
Equipment and Facilities	0	Not Applicable														
Farming/Ranching Practices and Field Operations	2	Reduces seepage losses which can result in reduced energy use for pumping.														
		<table border="1"> <thead> <tr> <th colspan="2"><i>CPPE Practice Effects:</i></th> </tr> </thead> <tbody> <tr> <td>5 Substantial Improvement</td> <td>0 No Effect</td> </tr> <tr> <td>4 Moderate to Substantial Improvement</td> <td>-1 Slight Worsening</td> </tr> <tr> <td>3 Moderate Improvement</td> <td>-2 Slight to Moderate Worsening</td> </tr> <tr> <td>2 Slight to Moderate Improvement</td> <td>-3 Moderate Worsening</td> </tr> <tr> <td>1 Slight Improvement</td> <td>-4 Moderate to Substantial Worsening</td> </tr> <tr> <td></td> <td>-5 Substantial Worsening</td> </tr> </tbody> </table>	<i>CPPE Practice Effects:</i>		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
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