

Effects of NRCS Conservation Practices - National

Sediment Basin

A basin constructed with an engineered outlet, formed by an embankment or excavation or a combination of the two.

Code: 350

Units: no.

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

Typical Landuse: C F R P Pr FS D O AL

<u>Soil Erosion</u>	<u>Effect</u>	<u>Rationale</u>
Soil Erosion - Sheet and Rill Erosion	0	Not Applicable
Soil Erosion - Wind Erosion	0	Not Applicable
Soil Erosion - Ephemeral Gully Erosion	2	Controlled flow will reduce gully erosion down slope of basin
Soil Erosion - Classic Gully Erosion	2	Controlled flow will reduce gully erosion down slope of basin.
Soil Erosion - Streambank, Shoreline, Water Conveyance C	0	Stream bank erosion due to flows are reduced because of controlled flows, but 'clean' water from basin could create stream bank erosion.
<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	-2	Stored water in basin will infiltrate adding to seepage problem.
Excess Water - Runoff, Flooding, or Ponding	2	Basin will retard flows reducing the runoff and controlling water releases.
Excess Water - Seasonal High Water Table	-2	Retarded water in basin will infiltrate adding 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	2	The action collects and stores adsorbed pesticides.
Pesticides in Groundwater	-1	Water containing pesticides may seep from the basin.
Nutrients in Surface water	5	The action will tend to accumulate contaminants attached to sediments, and infiltrating waters will remove soluble contaminants.
Nutrients in Groundwater	-1	Nutrients impounded could contaminate groundwater.
Salts in Surface Water	2	Basins will tend to accumulate contaminants attached to sediments, and infiltrating waters will remove soluble contaminants.
Salts in Groundwater	-1	Infiltrating water in the basin may move soluble salts to ground water.
Excess Pathogens and Chemicals from Manure, Bio-solic	2	Basins will tend to accumulate contaminants attached to sediments, and infiltrating waters will remove soluble contaminants
Excess Pathogens and Chemicals from Manure, Bio-solic	-1	Infiltrating water in the basin may move pathogens to the ground water.

Excessive Sediment in Surface Water	4	Basin retains sediment, decreasing runoff turbidity.														
Elevated Water Temperature	0	Although water retained in basin is warmer than flowing surface water, discharge to surface waters is unlikely.														
Petroleum, Heavy Metals and Other Pollutants Transport	2	Basins will tend to accumulate contaminants attached to sediments.														
Petroleum, Heavy Metals and Other Pollutants Transport	-1	Infiltrating water in the basin may move soluble contaminants to the ground water.														
<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)	0	Not Applicable														
Objectionable Odors	0	Proper siting and management are required if used as part of an agricultural waste management system														
<u>Degraded Plant Condition</u>																
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														
<u>Fish and Wildlife - Inadequate Habitat</u>																
Inadequate Habitat - Food	-1	Any food species are eliminated in the area used for the basin.														
Inadequate Habitat - Cover/Shelter	-1	Any cover is eliminated in the area used for the basin.														
Inadequate Habitat - Water	0	Water is temporarily stored, and sediment and debris are removed from runoff.														
Inadequate Habitat - Habitat Continuity (Space)	0	Not Applicable														
<u>Livestock Production Limitation</u>																
Inadequate Feed and Forage	0	Not Applicable														
Inadequate Shelter	0	Not Applicable														
Inadequate Water	0	Captured water in basins can supplement stock water.														
<u>Inefficient Energy Use</u>																
Equipment and Facilities	0	Not Applicable														
Farming/Ranching Practices and Field Operations	0	Not Applicable														
		<table border="1"> <thead> <tr> <th colspan="2"><u>CPPE Practice Effects:</u></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>	<u>CPPE Practice Effects:</u>		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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