

Effects of NRCS Conservation Practices - National

Pond Sealing or Lining, Flexible Membrane

A manufactured hydraulic barrier consisting of a functionally continuous layer of synthetic or partially synthetic, flexible material.

Code: 521A

Units: no.

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	0	Not Applicable
Soil Erosion - Wind Erosion	0	Not Applicable
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	0	Not Applicable
Compaction	0	Not Applicable
Subsidence	0	Not Applicable
Concentration of Salts or Other Chemicals	1	Lining decreases contamination immediately below the pond.
<u>Excess Water</u>		
Excess Water - Seeps	1	Reduction in seepage due to less water seeping from ponds.
Excess Water - Runoff, Flooding, or Ponding	0	Not Applicable
Excess Water - Seasonal High Water Table	2	Reduced seepage from the pond will result in less contribution to the ground water, particularly in the immediate area of the pond.
Excess Water - Drifted Snow	0	Not Applicable
<u>Insufficient Water</u>		
Insufficient Water - Inefficient Use of Irrigation Water	2	Retention of water in pond will allow more optimal use of water.
Insufficient Water - Inefficient Moisture Management	2	Retention of water in pond will allow more optimal use of water.
<u>Water Quality Degradation</u>		
Pesticides in Surface Water	0	Not Applicable
Pesticides in Groundwater	0	Not Applicable
Nutrients in Surface water	2	Liners reduce or prevent seepage losses from waste storage ponds, reducing the delivery of nutrients to surface water.
Nutrients in Groundwater	2	The action will retain a substantial amount of contaminants in the pond. The magnitude of the effect will depend on the integrity of the pond before lining.
Salts in Surface Water	0	Not Applicable
Salts in Groundwater	3	The action prevents contaminants in the pond from moving below the pond to the groundwater.
Excess Pathogens and Chemicals from Manure, Bio-solic	0	Not Applicable
Excess Pathogens and Chemicals from Manure, Bio-solic	2	The action limits seepage to prevent leaching of pathogens from the pond.

Excessive Sediment in Surface Water	0	Not Applicable														
Elevated Water Temperature	0	Not Applicable														
Petroleum, Heavy Metals and Other Pollutants Transport	0	Not Applicable														
Petroleum, Heavy Metals and Other Pollutants Transport	1	The action limits seepage to prevent leaching of heavy metals from the pond.														
<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	Not Applicable														
<u>Degraded Plant Condition</u>																
Undesirable Plant Productivity and Health	1	Available water to facilitate grazing management improves growth and vigor of plants.														
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	0	Not Applicable														
Inadequate Habitat - Cover/Shelter	0	Not Applicable														
Inadequate Habitat - Water	0	Duration of water in pond is extended.														
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	4	Lining will prolong availability of water for livestock.														
<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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