Effects of NRCS Conservation Practices - National

Irrigation Ditch Lining

A lining of impervious material or chemical treatment, installed in an irrigation ditch, canal, or lateral.

Code: 428
Units: ft

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

Soil Erosion	*Effect*	*Rationale*
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
Soil Quality Degradation		
Organic Matter Depletion	0	Not Applicable
Compaction	0	Not Applicable
Subsidence	0	Not Applicable
Concentration of Salts or Other Chemicals	0	Not Applicable
Excess Water		
Excess Water - Seeps	1	Seepage from ditch or canal will be eliminated.
Excess Water - Runoff, Flooding, or Ponding	0	Not Applicable
Excess Water - Seasonal High Water Table	-1	Seepage from ditch or canal will be eliminated.
Excess Water - Drifted Snow	0	Not Applicable
Insufficient Water		
Insufficient Water - Inefficient Use of Irrigation Water	5	Lining eliminates water losses providing more water for irrigation.
Insufficient Water - Inefficient Moisture Management	0	Not Applicable
Water Quality Degradation		
Pesticides in Surface Water	0	Not Applicable
Pesticides in Groundwater	0	Not Applicable
Nutrients in Surface water	1	Lined ditches reduce the delivery of sediment-attached nutrients to surface water.
Nutrients in Groundwater	1	Lining eliminates seepage.
Salts in Surface Water	1	The action eliminates the potential for irrigation water to pick up salts from the ditch.
Salts in Groundwater	2	The action eliminates seepage from earth canals which can move soluble salts to the ground water.
Excess Pathogens and Chemicals from Manure, Bio-solic	-1	May collect runoff and return flows that could deliver contaminates to surface water.
Excess Pathogens and Chemicals from Manure, Bio-solic	1	The action eliminates seepage losses from canals, which reduces the potential for movement of pathogens to groundwater.

Excessive Sediment in Surface Water	1	Impervious materials prevents erosion.
Elevated Water Temperature	0	Conservation irrigation systems minimize affects to surface water quality.
Petroleum, Heavy Metals and Other Pollutants Transporte	-1	The action may collect runoff and return flows may deliver possible contaminates to surface water.
Petroleum, Heavy Metals and Other Pollutants Transporte	1	The action eliminates seepage losses from canals, which reduces the potential for movement of heavy metals to groundwater.
Air Quality Impacts		
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
Degraded Plant Condition		
Undesirable Plant Productivity and Health	2	Increased water availability and access enhances plant growth, health and vigor.
Inadequate Structure and Composition	0	Not Applicable
Excessive Plant Pest Pressure	0	Not Applicable
Wildfire Hazard, Excessive Biomass Accumulation	0	Not Applicable
Fish and Wildlife - Inadequate Habitat		
Inadequate Habitat - Food	0	Not Applicable
Inadequate Habitat - Cover/Shelter	0	Not Applicable
Inadequate Habitat - Water	0	Water is temporarily provided when operating.
Inadequate Habitat - Habitat Continuity (Space)	0	Not Applicable
Livestock Production Limitation		
Inadequate Feed and Forage	0	Not Applicable
Inadequate Shelter	0	Not Applicable
Inadequate Water	0	Not Applicable
Inefficient Energy Use		
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.

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