

Effects of NRCS Conservation Practices - National

Spring Development

Collection of water from springs or seeps to provide water for a conservation need.

Code: 574

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	1	Collection of water reduces runoff.
Soil Erosion - Streambank, Shoreline, Water Conveyance C	1	Spring development removes seeps and flows that keep stream banks saturated and easily erodible.
<u>Soil Quality Degradation</u>		
Organic Matter Depletion	0	Not Applicable
Compaction	-1	Increased animal traffic around developed water source will increase compaction potential especially if the soil is moist.
Subsidence	0	Not Applicable
Concentration of Salts or Other Chemicals	0	Not Applicable
<u>Excess Water</u>		
Excess Water - Seeps	2	Water collected and removed from site.
Excess Water - Runoff, Flooding, or Ponding	1	Water collected and removed from site.
Excess Water - Seasonal High Water Table	2	Subsurface water collected and removed from the site.
Excess Water - Drifted Snow	0	Not Applicable
<u>Insufficient Water</u>		
Insufficient Water - Inefficient Use of Irrigation Water	2	Provides a dependable supply of water allowing improved management.
Insufficient Water - Inefficient Moisture Management	2	Provides a dependable supply of water allowing improved management.
<u>Water Quality Degradation</u>		
Pesticides in Surface Water	0	Not Applicable
Pesticides in Groundwater	0	Not Applicable
Nutrients in Surface water	0	Not Applicable
Nutrients in Groundwater	0	Not Applicable
Salts in Surface Water	1	Spring flows provide some dilution effect.
Salts in Groundwater	0	Not Applicable
Excess Pathogens and Chemicals from Manure, Bio-solic	1	Spring flows are typically better quality than surface flows allowing opportunity for dilution. Effect depends on the proportion of one flow to the other.
Excess Pathogens and Chemicals from Manure, Bio-solic	0	Not Applicable

Excessive Sediment in Surface Water	1	Water development will decrease livestock trampling in wet areas and nearby streams.
Elevated Water Temperature	0	Springs are cooler than surface water and their proximity to streams moderates stream temperatures, via hyporheic exchange. Development of springs may decrease amount of hyporheic water in channel. .
Petroleum, Heavy Metals and Other Pollutants Transport	2	Spring flows are typically better quality than surface flows allowing opportunity for dilution. Effect depends on the proportion of one flow to the other.
Petroleum, Heavy Metals and Other Pollutants Transport	0	Not Applicable
<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	2	Available water to facilitate irrigation or 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	Provides water for terrestrial species.
Inadequate Habitat - Habitat Continuity (Space)	2	Additional habitat/space is available once spring water is available.
<u>Livestock Production Limitation</u>		
Inadequate Feed and Forage	2	Improved distribution of animals makes forage more readily available to livestock.
Inadequate Shelter	0	Not Applicable
Inadequate Water	5	The spring increases the quality and quantity of water for livestock.
<u>Inefficient Energy Use</u>		
Equipment and Facilities	0	Not Applicable
Farming/Ranching Practices and Field Operations	0	Not Applicable

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