

## Effects of NRCS Conservation Practices - National

### Surface Drainage, Main or Lateral

An open drainage ditch constructed to a designed cross section, alignment and grade.

Code: 608

Units: ft.

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	-1	Improving drainage may increase surface soil drying.
Soil Erosion - Ephemeral Gully Erosion	2	Reducing soil profile saturation increases infiltration by improving drainage and therefore decreases water runoff.
Soil Erosion - Classic Gully Erosion	-1	Because of higher concentration and velocities from water collection.
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	2	Because of improved drainage.
Excess Water - Seasonal High Water Table	2	Control of water table - subsurface water is collected and conveyed to a proper outlet.
Excess Water - Drifted Snow	0	Not Applicable
<u>Insufficient Water</u>		
Insufficient Water - Inefficient Use of Irrigation Water	2	Drains can collect water for beneficial use or reuse and improved soil, water air relationship.
Insufficient Water - Inefficient Moisture Management	2	Drains can collect water for beneficial use or reuse and improved soil, water air relationship.
<u>Water Quality Degradation</u>		
Pesticides in Surface Water	0	Not Applicable
Pesticides in Groundwater	0	Not Applicable
Nutrients in Surface water	-2	Increasing the rate of runoff from a field can increase the amount of soluble pollutants delivered to surface water.
Nutrients in Groundwater	1	The action facilitates the removal of surface water, thus reducing percolation of water and nutrients.
Salts in Surface Water	-2	The action removes both surface and subsurface water and associated contaminants from the site.
Salts in Groundwater	2	The action removes both surface and subsurface water and associated contaminants from the site.
Excess Pathogens and Chemicals from Manure, Bio-solic	-2	Where pathogens are transported by sediments
Excess Pathogens and Chemicals from Manure, Bio-solic	2	The action removes both surface and subsurface water and associated contaminants from the site.

Excessive Sediment in Surface Water	-2	Increased drainage and runoff will carry sediments.														
Elevated Water Temperature	0	Surface water is conveyed relatively quickly, reducing the risk of warming.														
Petroleum, Heavy Metals and Other Pollutants Transport	-2	Heavy metals are carried with sediment to surface waters.														
Petroleum, Heavy Metals and Other Pollutants Transport	2	The action removes both surface and subsurface water and associated contaminants from the site.														
<u><i>Air Quality Impacts</i></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><i>Degraded Plant Condition</i></u>																
Undesirable Plant Productivity and Health	2	Improved drainage enhances growing environment for non-hydrophytes. If hydrophytes are desired, drainage will increase the problem.														
Inadequate Structure and Composition	0	Not Applicable														
Excessive Plant Pest Pressure	0	Not Applicable														
Wildfire Hazard, Excessive Biomass Accumulation	0	Not Applicable														
<u><i>Fish and Wildlife - Inadequate Habitat</i></u>																
Inadequate Habitat - Food	0	Increase or decrease in food supply depends on plant species on the site and degree of drainage.														
Inadequate Habitat - Cover/Shelter	0	Increase or decrease in cover/shelter depends on plant species on the site due to soil moisture/plant relationships.														
Inadequate Habitat - Water	0	The action will increase available wet habitat for some species and decrease it for others.														
Inadequate Habitat - Habitat Continuity (Space)	0	Not Applicable														
<u><i>Livestock Production Limitation</i></u>																
Inadequate Feed and Forage	4	Quantity and quality of forage species will be improved if drainage is installed to enhance their production.														
Inadequate Shelter	0	Not Applicable														
Inadequate Water	0	Not Applicable														
<u><i>Inefficient Energy Use</i></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><i>CPPE Practice Effects:</i></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><i>CPPE Practice Effects:</i></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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