

Effects of NRCS Conservation Practices - National

Land Reclamation, Currently Mined Land

Restoring currently mined land to an acceptable form and planned use.

Code: 544

Units: ac.

Typical Landuse:

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

0

| <u>Soil Erosion</u> | <u>Effect</u> | <u>Rationale</u> |
|--|---------------|---|
| Soil Erosion - Sheet and Rill Erosion | 4 | Reshaping of disturbed land and establishing vegetative cover can reduce erosion from water. |
| Soil Erosion - Wind Erosion | 4 | Reshaping of disturbed land and establishing vegetative cover can reduce erosion from wind. |
| Soil Erosion - Ephemeral Gully Erosion | 4 | Reshaping of disturbed land and establishing vegetative cover can reduce erosion from water. |
| Soil Erosion - Classic Gully Erosion | 1 | Onsite gullies are reclaimed and stabilized. |
| Soil Erosion - Streambank, Shoreline, Water Conveyance C | 0 | Not Applicable |
| <u>Soil Quality Degradation</u> | | |
| Organic Matter Depletion | 3 | Soil organic matter is a major concern that will be addressed by mulching, soil amendments, manure, compost, and high biomass producing plants |
| Compaction | 1 | Mulching, soil amendments, compost, and tillage will address soil compaction of the reconstructed area. |
| Subsidence | 0 | Not Applicable |
| Concentration of Salts or Other Chemicals | 4 | Contaminated soil will be removed from the surface and buried using precautions that prevent water contamination |
| <u>Excess Water</u> | | |
| Excess Water - Seeps | 0 | Not Applicable |
| Excess Water - Runoff, Flooding, or Ponding | 3 | Land reconstruction will include grading, shaping, and revegetation to reduce potential for flooding and ponding. |
| Excess Water - Seasonal High Water Table | 0 | Not Applicable |
| 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 | 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 | Improved vegetative cover will stabilize slopes reducing runoff from salt-affected soils. |
| Salts in Groundwater | 1 | The action results in increased vegetative growth which may take up contaminants. |
| Excess Pathogens and Chemicals from Manure, Bio-solic | 3 | Reconstructed mine land provides reduced runoff and erosion and the filtering effects of vegetation reduces the risk of harmful levels of pathogens entering surface water. |
| Excess Pathogens and Chemicals from Manure, Bio-solic | 0 | Not Applicable |

| Excessive Sediment in Surface Water | 4 | Erosion control and revegetation will reduce concerns about sediments. | | | | | | | | | | | | | | |
|--|--------------------------------------|---|-------------------------------|--|---------------------------|-------------|---------------------------------------|---------------------|------------------------|---------------------------------|----------------------------------|-----------------------|----------------------|--------------------------------------|--|--------------------------|
| 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 results in increased vegetative growth which may take up heavy metals. | | | | | | | | | | | | | | |
| <u>Air Quality Impacts</u> | | | | | | | | | | | | | | | | |
| Emissions of Particulate Matter (PM) and PM Precursors | 1 | Vegetation stabilizes the soil surface and helps to keep soil particulate from being emitted. | | | | | | | | | | | | | | |
| Emissions of Ozone Precursors | 0 | Not Applicable | | | | | | | | | | | | | | |
| Emissions of Greenhouse Gases (GHGs) | 1 | Vegetation removes CO2 from the air and stores it in the form of carbon in the plants and soil. | | | | | | | | | | | | | | |
| Objectionable Odors | 0 | Not Applicable | | | | | | | | | | | | | | |
| <u>Degraded Plant Condition</u> | | | | | | | | | | | | | | | | |
| Undesirable Plant Productivity and Health | 4 | Vegetative cover species will be selected and maintained at optimal conditions for the intended purpose. | | | | | | | | | | | | | | |
| Inadequate Structure and Composition | 5 | When species are selected for stabilization, they are adapted and suited. | | | | | | | | | | | | | | |
| Excessive Plant Pest Pressure | 4 | Vegetation is installed and managed to control undesired species. | | | | | | | | | | | | | | |
| Wildfire Hazard, Excessive Biomass Accumulation | 0 | Not Applicable | | | | | | | | | | | | | | |
| <u>Fish and Wildlife - Inadequate Habitat</u> | | | | | | | | | | | | | | | | |
| Inadequate Habitat - Food | 2 | Increased quality and quantity of vegetation provides more food and cover for wildlife. | | | | | | | | | | | | | | |
| Inadequate Habitat - Cover/Shelter | 2 | Increased quality and quantity of vegetation provides more food and cover for wildlife. | | | | | | | | | | | | | | |
| Inadequate Habitat - Water | 4 | Not Applicable | | | | | | | | | | | | | | |
| Inadequate Habitat - Habitat Continuity (Space) | 1 | Reconstruction plans will provide for wildlife habitat improvements according to client objectives | | | | | | | | | | | | | | |
| <u>Livestock Production Limitation</u> | | | | | | | | | | | | | | | | |
| Inadequate Feed and Forage | 4 | Revegetation efforts could include species that provide quality forage for livestock. | | | | | | | | | | | | | | |
| Inadequate Shelter | 0 | Not Applicable | | | | | | | | | | | | | | |
| Inadequate Water | 0 | Not Applicable | | | | | | | | | | | | | | |
| <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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