## Effects of NRCS Conservation Practices - National

## **Terrace**

An earth embankment, or a combination ridge and channel, constructed across the field slope.

Code: 600 Units: ft.

|                                                                             |               | Typical Landuse: c                                                                                                                                           |
|-----------------------------------------------------------------------------|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Soil Erosion                                                                | <b>Effect</b> | <u>Rationale</u>                                                                                                                                             |
| Soil Erosion - Sheet and Rill Erosion                                       | 5             | Terrace shortens slope length and reduces erosion by water.                                                                                                  |
| Soil Erosion - Wind Erosion                                                 | 1             | Vegetative terraces may shorten the unsheltered distance and trap saltating soil particles when orientation is across the prevailing wind erosion direction. |
| Soil Erosion - Ephemeral Gully Erosion                                      | 4             | The slope length of the concentrated flow channel is shortened.                                                                                              |
| Soil Erosion - Classic Gully Erosion                                        | 2             | Changes hydrology of the land unit                                                                                                                           |
| Soil Erosion - Streambank, Shoreline, Water Conveyance C                    | 1             | Reduces concentrated flow from the land unit. May increase sediment carrying capacity of runoff water entering stream.                                       |
|                                                                             |               |                                                                                                                                                              |
| Soil Quality Degradation Organic Matter Depletion                           | 1             | Reduced erosion will reduce losses of organic matter.                                                                                                        |
| Compaction                                                                  | -1            | Construction activities cause compaction in the terrace channel and embankment.                                                                              |
| Subsidence                                                                  | 0             | Not Applicable                                                                                                                                               |
| Concentration of Salts or Other Chemicals                                   | 0             | Not Applicable                                                                                                                                               |
| Excess Water                                                                |               |                                                                                                                                                              |
| Excess Water - Seeps                                                        | -2            | Because of increased infiltration                                                                                                                            |
| Excess Water - Runoff, Flooding, or Ponding                                 | 4             | Water storage is increased and runoff is reduced.                                                                                                            |
| Excess Water - Seasonal High Water Table                                    | -2            | Because of increased infiltration                                                                                                                            |
| Excess Water - Drifted Snow                                                 | -1            | Terrace embankments will collect snow                                                                                                                        |
| Insufficient Water Insufficient Water - Inefficient Use of Irrigation Water | 0             | Not Applicable                                                                                                                                               |
| Insufficient Water - Inefficient Moisture Management                        | 3             | The action reduces erosion and runoff and improves water efficiency.                                                                                         |
| Water Quality Degradation Pesticides in Surface Water                       | 2             | The action reduces runoff and erosion.                                                                                                                       |
| Pesticides in Groundwater                                                   | -2            | this practice increases infiltration                                                                                                                         |
| Nutrients in Surface water                                                  | 2             | Reduced erosion and increased infiltration can result in fewer dissolved and sediment-attached nutrients leaving the field.                                  |
| Nutrients in Groundwater                                                    | -2            | The action increases infiltration which may provide transport for nutrients.                                                                                 |
| Salts in Surface Water                                                      | 2             | The action can increase infiltration, which will reduce runoff of salts from a field.                                                                        |
| Salts in Groundwater                                                        | -2            | The action increases infiltration of water and soluble contaminants.                                                                                         |
| Excess Pathogens and Chemicals from Manure, Bio-solic                       | 2             | Increases infiltration and reduces runoff.                                                                                                                   |
| Excess Pathogens and Chemicals from Manure, Bio-solic                       | -1            | The action increases infiltration of water and contaminants, including pathogens.                                                                            |

| Excessive Sediment in Surface Water                                               | 2  | Terraces slow water and allow sediment deposition.                                                       |
|-----------------------------------------------------------------------------------|----|----------------------------------------------------------------------------------------------------------|
| Elevated Water Temperature                                                        | 0  | Not Applicable                                                                                           |
| Petroleum, Heavy Metals and Other Pollutants Transporte                           | 2  | The action traps sediment, reduces ephemeral gully erosion and increases infiltration of surface runoff. |
| Petroleum, Heavy Metals and Other Pollutants Transporte                           | -1 | The action increases infiltration of water and soluble contaminants.                                     |
| <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  | Conserving moisture and reduced erosion will improve plant productivity and health.                      |
| 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><br>Inadequate Habitat - Food        | 0  | Not Applicable                                                                                           |
| Inadequate Habitat - Cover/Shelter                                                | 1  | Vegetation-backed terraces provide limited cover.                                                        |
| Inadequate Habitat - Water                                                        | 5  | Not Applicable                                                                                           |
| 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                                                                  | 0  | Not Applicable                                                                                           |
| Inefficient Energy Use Equipment and Facilities                                   | 1  | Equipment will not need to cross gullies nor do tillage to fill the gullies                              |
| Farming/Ranching Practices and Field Operations                                   | 1  | Equipment will not need to cross gullies nor do tillage to fill the gullies                              |
|                                                                                   |    | CPPE Practice Effects: 0 No Effect                                                                       |
|                                                                                   |    | CPPE Practice Effects: 0 No Effect                                                                       |

| CPPE Practice Effects:                | 0 No Effect                          |
|---------------------------------------|--------------------------------------|
| 5 Substantial Improvement             | -1 Slight Worsening                  |
| 4 Moderate to Substantial Improvement | -2 Slight to Moderate Worsening      |
| 3 Moderate Improvement                | -3 Moderate Worsening                |
| 2 Slight to Moderate Improvement      | -4 Moderate to Substantial Worsening |
| 1 Slight Improvement                  | -5 Substantial Worsening             |