

## Net Wire Diversions are used frequently to control erosion in gullies.

Steel posts are driven firmly into the ground, 10' or less apart, with galvanized net wire fencing fastened to the upstream side. A series of these are installed in the gully to trap debris and reduce the velocity of the water. The reduced velocity causes sediment to build up, thus creating a more shallow grade. Due to the open nature of the structure, higher flows can pass through without significant damage.

## Contact Us

Otero Soil and Water Conservation District  
Vicky Milne  
3501 Mesa Village Drive  
Alamogordo, NM 88310

(575) 437-3100 ext. 3  
victoria.milne@nm.nacdnet.net

Visit us on the web: [oteroswcd.org](http://oteroswcd.org)



# Net Wire Diversions

## Installation guide

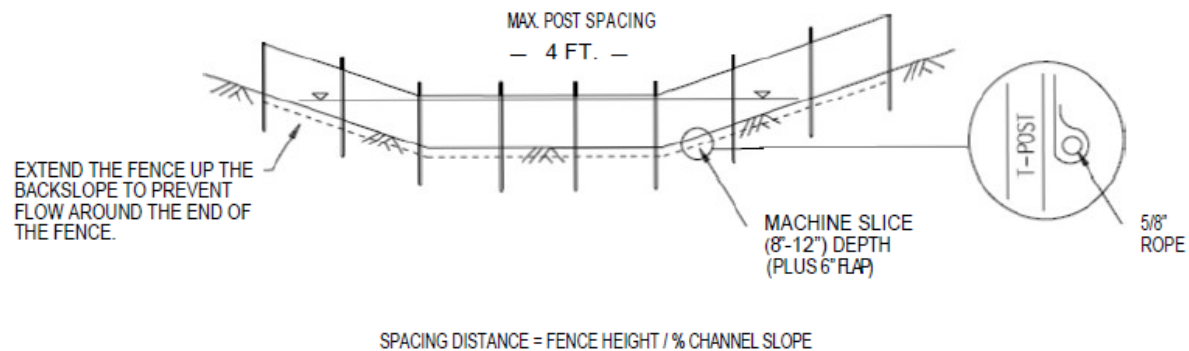
Net wire diversions are used to control arroyo (gully) erosion.



| ITEM              | 1 FT. HEIGHT DIVERSION |                | 1.5 FT. HEIGHT DIVERSION |                |
|-------------------|------------------------|----------------|--------------------------|----------------|
|                   | Method 1               | Method 2       | Method 1                 | Method 2       |
| T-post spacing    | 12 feet                | 8 feet         | 10 feet                  | 6 feet         |
| Buried post depth | 1.5 - 2.0 feet         | 1.5 - 2.0 feet | 2.0 - 2.5 feet           | 2.0 - 2.5 feet |

Wire - wire is bought in rolls of various widths (48"-58"). These rolls can be cut in 1/2 or 1/3's making 495 feet out of one 165 foot roll (easiest to cut while still in roll). Wire should overlap on the ground 4 - 6 " on the upstream side. You may need rock fill on the backside. Walk or drive on the overlap to squash it down.

Tie wire - 14 gauge galvanized. Tie post at top and bottom.



NET WIRE DIVERSION

| DESIGN CRITERIA    |                |
|--------------------|----------------|
| STORM FREQUENCY    | 2 YR. - 24 HR. |
| MAX. DITCH GRADE   | 5%             |
| MAX. DRAINAGE AREA | 1 ACRE         |

NOTE: WHEN SEDIMENT BUILD UP REACHES 1.5ft. THE SILT SHOULD BE REMOVED OR A SECOND FENCE BUILT UPSTREAM AT A SUITABLE DISTANCE.

### General Design and Construction Criteria:

1. The grade is the key to success. More grade is better than not enough.
2. The purpose is to stop the water from channeling and to extend the run-off over a large surface area to prevent rilling, gullyng and headcuts.
3. When staking these diversions, you need to know the critical starting point. If they are staked wrong, they can be changed by pulling up the wire diversion intact and changing the grade to make it work.
4. When crossing a dip, rill or concentrated flow area the diversion will need to be:
  - a. Strengthened by rocks on the downstream side.
  - b. Increased in "away" grade.
  - c. Increase height of wire and posts and put the posts along the center line of the depression.
5. If needed, gently smooth the areas. Do not disturb natural grass cover.