

STRAW BALE DIKES

Straw bale dikes are a temporary sediment barrier constructed of straw bales located downslope of a disturbed area or around a storm drainage outlet to redirect debris flows or trap debris materials.

They are usually installed in areas requiring protection from sedimentation expected from predicted rainfall events that will cause erosion.

They are intended to provide protection for a limited time, usually less than 3 months.

Installation Tips

Drainage area limits:

- **0-15% slope:** Maximum drainage area is 1 acre and maximum slope length is 200 feet.
- **More than 15% slope:** Maximum drainage area is ½ acre, maximum slope length is 100 feet.

Bind bales with wire or nylon twine (jute twine-bound bales are less durable). Bales should be made from clean weed free straw. Place bales in a row with ends tightly abutting

adjacent bales. Do not place bales with wire or twine touching—see illustration. Compress some loose straw between adjacent bales to close voids. The tops of bales should all be level and set at the same direction.

Staking

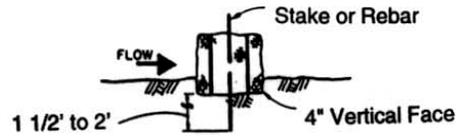
Each bale should be embedded in the soil a minimum of 4 inches. Drive 2x2 stakes or rebar through the bales and into the ground 1.5 to 2 feet for anchorage. The first stake in each bale should be driven toward a previously laid bale to force the bales together—see illustration.

Maintenance

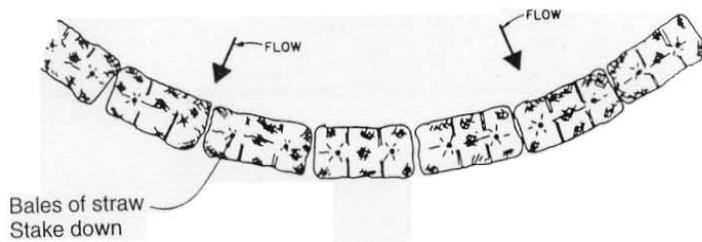
Inspect dikes and provide necessary maintenance following each storm event. It is important to ensure that loose straw does not enter storm drain facilities. Remove bales once permanent drainage and stabilization are re-established. Use the straw as mulch in other areas.

July 2002 Arizona

Straw Bale Dikes



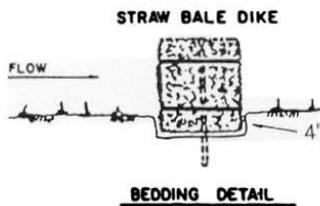
EMBEDDING DETAIL
N.T.S.



PLAN
N.T.S.



ELEVATION
N.T.S.



Angle first stake toward
previously laid bale

