

Wire Mesh PCDs (Porous Check Dams)

Construction Pointers



TO TREAT

Gullies with flat beds, sandy to sandy loam soils, and/or plenty of organic matter in catchment to build up weir

MATERIALS

1. Heavy gauge wire mesh (50 mm apertures; 1.2m wide is best).
2. Plain wire for tying and supporting the mesh
3. Steel pickets
4. Pins – 300 mm landscaping pins (available from Geofabrics Australia, Bundaberg 07 4155 9968)

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TOP TIPS

1. Check PCDs after rainfall events and carry out maintenance as necessary.
2. For the best outcomes, excluding (fencing out) stock from gullies facilitates faster revegetation.

Find more information on other methods in the “Reef Trust Phase IV Gully and Stream Bank Toolbox”.

PLANNING

1. Determine the size of catchment(s) draining into the gully. To avoid out-flanking (water going around the ends of the PCD), catchments should be <2 hectares in size on steep country, or <10 hectares in flatter landscapes.
2. Determine the place of your first PCD. PCDs should be placed in flatter, wider sections of gully where the flow is slowest (not immediately downstream of the headcut or in steep sections).
3. Once an appropriate place is determined, refer to the Gully and Stream Bank Toolbox to work out the distance required between additional PCDs downstream.

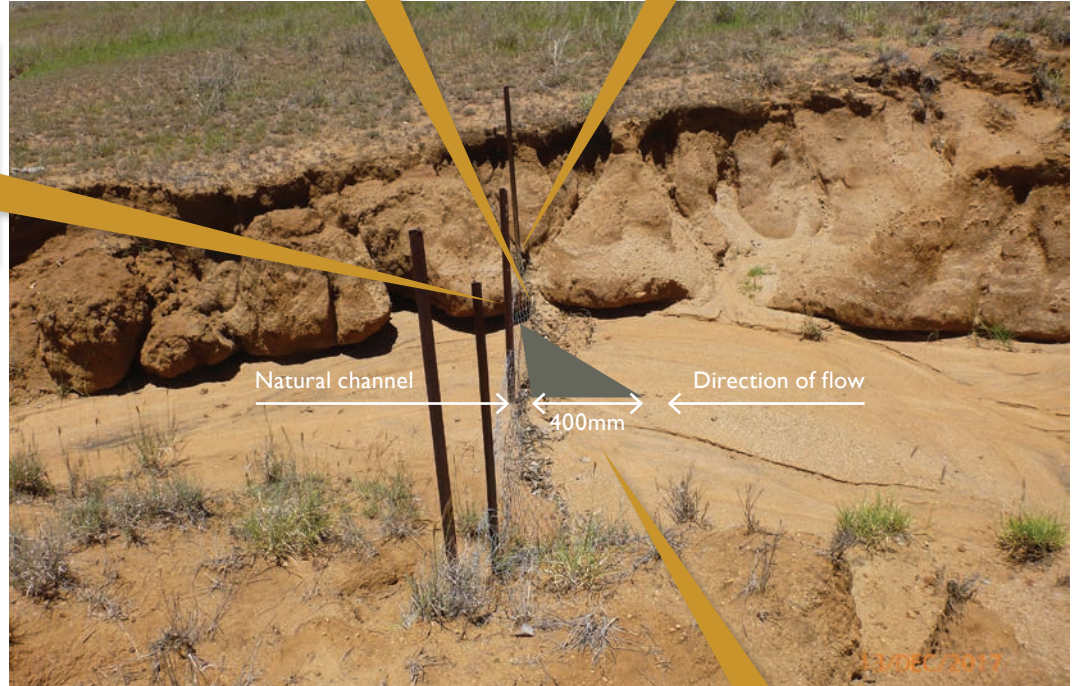
CONSTRUCTION

1. At the lowest point in the gully channel, place pickets across the gully every 2m. The last picket on each side is best placed up the gully walls in order to prevent out-flanking.
2. Run a strand of plain wire from one end picket to the other through the same middle hole in each picket and sink the pickets so the wire is ~400mm above the gully floor (in the lowest part of the channel, sink to ~300mm). Secure plain wire at both ends.
3. Drive both end pickets in deeper in case of out-flanking.
4. Upstream of the pickets, cut length of mesh to reach across the gully and 1m past each end picket.
5. Affix mesh to plain wire strand (bending 100 – 200mm of the mesh above the plain wire back towards the gully head).
6. Stretch the other edge of the mesh back upstream and secure the edge to the gully bed with pins.
7. Pin the mesh either side of the end pickets to the gully walls.
8. Plug any gaps between mesh and gully bed with organic debris.

This information sheet is provided by Fitzroy Basin Association through funding from the Australian Government and delivered through Reef Trust.

STEP 1

At the lowest part of the cross-section, position one steel picket (narrower gullies) or two steel pickets (wider gullies). Don't sink deeply!



STEP 4

Lay the mesh on the upstream side of the steel pickets

STEP 5

Affix one side of mesh to plain wire 100-200mm in from edge of mesh

STEP 1

Stand up additional pickets across the channel about every two metres

STEP 7

Stretch the long side of wire netting upstream to make a wedge shape

STEP 2

Thread wire through one of the middle holes in each picket and sink so that the wire is $\approx 400\text{mm}$ above the gully floor



STEP 3

Take extra care to secure the end pickets to prevent out-flanking