FITZROY BASIN ASSOCIATION

INFORMATION SHEET

Stick Trap PCDs
(Porous Check Dams)

Construction Pointers

TO TREAT
Smaller gullies and eroding drainage lines

MATERIALS
1. Wire mesh (heavy gauge; 50-100mm apertures; 1.2m wide is best)
2. Sticks (<150mm in diameter)
3. Plain wire
4. Steel pickets

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.

For more information on this method see 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 no more than 2 hectares in size on steep country, and less than 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, lay a length of mesh across the gully floor (allow enough to extend ??m up the gully banks to lower the risk of out-flanking during high flows).
2. Pile sticks or brush along the centre of the mesh to around 400 mm high (no higher than 500mm). Ensure you do not move anything from the paddock that is already slowing down runoff and collecting soil.
3. 'Wrap' the sticks in the mesh by wiring the 2 sides of mesh to¬gether. Shape the structure so it rises at both sides and the lowest point (~100-150mm lower) coincides with the lowest part of the channel. This ensures water will continue to take its natural course, lowering the risk of out-flanking.
4. Secure the PCD by driving steel pickets through its centre at each end and at ~2m intervals along its length, and tie the mesh to the pickets with wire. This prevents the PCD from washing away.
5. Plug any gaps between the mesh and gully bed with organic debris.

See over for pictures.

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

Australian Government

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STEP 1
Lay length of mesh across gully floor at position of PCD

STEP 2
Collect local materials being sure not to remove anything that is slowing water or holding soil in place

STEP 2
Lay on mesh to make pile ≈400mm high

STEP 3
'Wrap' sticks in mesh by wiring the two sides together

STEP 3
Shape the structure so that it rises at both sides and there is a low section to match the channel (≈100-150mm lower)

STEP 5
Plug any gaps between the mesh and gully floor with debris

Bottom photograph from the **"Reef Trust Phase IV Gully and Stream Bank Toolbox"**.