

## dam spillway repairs

<b>Landholder</b>	Suzanne Hopfner and Harry Wolf
<b>Map reference</b>	12
<b>Land use</b>	Land managed for conservation use only
<b>Soil Erosion Solutions Grant</b>	\$5,000 (earthworks, seeds/mulch, hessian, stakes, gabion baskets, geotextile fabric)
<b>Landholder's in-kind contribution</b>	\$6,240 (labour)
<b>Landcare</b>	\$660 (administration)

### The site

This former grazing property had two severely eroded catch drains leading to a dam with a badly eroded spillway and back batter. The landholder wanted to fix the erosion without getting rid of the dam.

### The project

- The larger catch drain was filled in.
- Small check structures constructed from hessian secured with wooden stakes were placed across the smaller diversion drain to slow down the water flow and trap some of the sediment.
- The eroded batter on the upslope side of the dam was reshaped.
- The spillway gully was realigned and reinforced with a drop structure made of gabion baskets that directs water flow over a central area onto a Reno mattress (rock held in place with wire) below which protects the soil and prevents a scour pool from forming below the new 'waterfall'.
- Geotextile fabric was used to protect the waterline where it will have to carry high velocity flows.

- All disturbed areas were mulched and seeded with native grasses to promote rapid revegetation.

### The benefits

- Active erosion has stabilised, reducing sediment into the creek downslope.
- Innovative techniques used to stabilise the spillway have allowed the dam to be retained for water storage.
- The establishment of native grasses on the site has increased its conservation value.



The eroding spillway

### Landholder's experience

What was the **best thing** about this project?

"The availability of advice and support by community natural resource support officer, Anne Gibbs and NSW DPI soils advisory officer Abigail Jenkins at all stages of the project greatly helped the implementation. The gabion structure coped with 500mm of rain from November 2007 till January 2008."

What was the **most difficult** aspect of the project?

"Sourcing an appropriate earthmoving contractor and meeting the deadlines despite the weather."



The gabion drop structure that stabilises the dam spillway