

safe diversion of water

Landholder	Ian Clapham – Brooklet Farm Frank Elsworth – Figtree Plantation
Map reference	8
Land use	Macadamias
Soil Erosion Solutions Grant	\$10,000 (earthworks to construct diversion drain, matting to protect drain and grass seed)
Landholder's in-kind contribution	\$16,746 (removal of windbreak, labour)

The benefits

- Run-on water has been safely directed to the dam or watercourse.
- There is less erosion within the orchards.
- Water quality leaving the orchards has improved.
- There is now better access along the boundary, and more turning room at the end of the rows.

The site

Two neighbouring macadamia orchards had erosion problems from concentrated water flowing onto them from different parts of each orchard. There were especially deep gullies down the tree rows on Brooklet Farm from the run on water. An old windbreak on the boundary separating the two orchards had become a weedy rat haven, and made managing the water difficult. Both landholders worked together to resolve the drainage problems.

The project

- The windbreak between the two properties was removed and mulched.
- A broad shallow diversion bank was constructed along the boundary to divert water to the farm dam and into a nearby stable watercourse.
- Excavated soil was used to form low profile mounds along the adjoining eroded tree rows.
- Jute erosion control matting was installed in the high flow area of the new drain to give immediate protection.
- Carpet grass and winter ryegrass were sown in all disturbed areas.



The diversion drain is formed



Jute erosion matting laid in the new drain's flowline

Landholder's experience

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

"The advice from NSW DPI's Soil Erosion Solutions on how to tackle the biggest problem at the site. I originally wanted to deal with the erosion under the trees but it was explained to me that we would be better dealing with the cause of the problem not the symptom."

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

"We had trouble getting a suitable contractor to do the work at the time we wanted, so the works started 6 months late at the beginning of harvest. We then had some issues with the quality of the work; with heavy rain, some areas needed fixing up."



Grass growing through the erosion matting