

Repair of cultivated land

Landholder	Rodney Ellem
Map reference	6
Land use	Cultivation, grazing
Soil Erosion Solutions Grant	\$9,954 (grader hire, tip truck, loading, excavator, fencing materials, tree guards, kikuyu and amarillo peanut seed)
Landholder's in-kind contribution	\$1,700 (labour, operating tip truck, loader and excavator, star pickets)

The site

Soil erosion was an inevitable result of the intensive farming on this mixed dairy and cropping farm. Cultivated areas had lost topsoil, and dairy laneways were eroding. An active gully in a watercourse leading to the farm's main dam was filling the dam with sediment. The lack of trees was exacerbating the instability of the soil.

The project

- > Topsoil deposited downslope in the cultivated paddocks was carted upslope to repair eroded areas.
- > Laneway surfaces were reshaped with strategic cross drains to shed water to the sides rather than down the laneway.
- > The dam was de-silted to provide material for constructing banks etc.
- > Contour banks were extended from the high water zone of the dam to intercept paddock runoff and direct it via grassed waterways to the dam.
- > Contour banks in other areas were designed to discharge runoff to permanently grassed areas.
- > The area above the high water level of the dam was planted with trees and grasses.
- > A gully was repaired with rocks and tree planting to stabilise eroding areas.
- > All stock was excluded until the sites were stabilised with dense groundcover.



Laneways accessed by livestock prior to the works

The benefits

- > Fertile topsoil has been returned to cropping paddocks.
- > Laneways are no longer eroding.
- > Silting of the dam has reduced.
- > Runoff water ends up where it is needed, either in the dam, or watering grassed areas.
- > The farm has more trees and vegetation to hold the soil and provide stock shelter.



Erosion works nearly completed on side of effluent dam

Landholder's experience

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

"The erosion repair has been a long term goal. This grant has gone a long way to making our plans a reality by purchasing materials to complete the job."

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

"Completing the works in the allocated 6 months while running the dairy proved difficult. Breakdowns and adverse weather didn't help."



Starting fence construction near the dam