

soil conservation on a blueberry farm

Landholder	Sohan Atwal
Map reference	16
Land use	Bananas and blueberries
Soil Erosion Solutions Grant	\$9,300 (gabion rock, gravel, cracker dust, pipes, excavator hire, geofabric sandbags, grass seed)
Landholder's in-kind contribution	\$9,300 (labour, tractor work)

The site

Part of this steep coastal farm was being converted from bananas to blueberries. The new mounds for blueberry rows ran downslope, so there was a risk of erosion down the interrows. An intermittent watercourse with subsurface flow runs through the centre of the farm. This made traffic turning areas boggy for a lot of the year, and the disturbed ground prone to further erosion.

The project

- A soil conservation plan for the blueberry area was prepared with the NSW Soil Conservation Service.
- A gravel bank was constructed to stop water from the road running down an orchard track.
- Long blueberry rows were broken up with cross banks to intercept run off water and deliver it safely to managed watercourses.
- The central drainage line was improved with subsurface drainage.
- The capacity of the existing sediment basin was increased, and scour areas protected with rock.
- Disturbed soil was fertilised, seeded with grasses and mulched.
- Small erosion points at the edge of blueberry mounds were protected with geotextile sandbags to direct water flows into the grassed interrows.



Subsurface drainage improves the central flow line



The new sediment basin with rocky outlet

The benefits

- The orchard has become a model for best practice in soil and water management.
- Banks and groundcover mean less soil is eroding from the orchard.
- The improved sediment pond means more sediment is being trapped on the farm.
- Less sediment and nutrients are being carried into a coastal stream.
- The subsurface drainage has stabilised important turning areas, making orchard operations easier.
- The cross banks to break up long slopes have also improved watering efficiency.

Landholder's experience

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

"Achieved everything wanted. The water does not flow down the gully anymore so the erosion has stopped, the drainage is improved so the tractor no longer gets bogged."

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

"The steepness of the slope meant none of the trucks were able to get up it – so the materials had to be double-handled from the truck to a bucket on the tractor making the job slower."



Grassed crossbanks intercept water running down the blueberry rows