

Soil erosion solutions

Helping North Coast landholders reduce soil erosion

Newsletter 9: June 2008

Welcome to this issue No. 9 of Soil Erosion Solutions, our update on what's been achieved by landholders in reducing soil erosion on the north coast, and what the SES team is up to.

A dam to stop a gully

The most recently completed SES project is the construction of a dam at **Tabulam**. The site had a deep gully already over 500 metres long, with an active head cut that was migrating upslope with each major rain event.



Above: The gully at Tabulam, looking downstream from the new dam.

Josh Quinn has built a dam that will submerge the area of the gully head. The dispersive soils at the site can make it difficult to build successful dams, so the dam needed some special design features. The dam wall was lined with 2mm builders plastic with 1m overlaps between sheets to prevent tunnel erosion through the embankment. Gypsum was used to help stabilise the soil on top of the liner and around the dam.



Above: Gypsum was spread on the finished embankment and dam surrounds.

A large pipe runs through the dam wall, delivering water safely down to a rocky area of the gully floor. The large diameter of the pipe means that most of the throughflow goes through the pipe, and only major rain events (greater than 1 in 10 years) send water over the spillway. All the disturbed soil areas were seeded with oats immediately after construction to provide a quick cover crop to stabilise the soil until perennial pasture can re-establish.



Above: Rock protects the outlet of the dam's trickle pipe. Below: A cover crop of oats greens the new embankment.



Still too wet for some

Spare a thought for those landholders who have not yet been able to get underway with their gully erosion projects because of wet conditions. Each time it is almost dry enough we have more rain, and they have more erosion. Let's hope for a dry spell over winter to get these projects underway.

Gully erosion field day soon

We are planning our next field day to be a bus tour to look at successful SES gully head projects that use the three commonly used approaches:

- stabilisation of the headcut with an armoured flume;
- diverting water around the gully head; and
- building a dam to submerge the gully head.

This day should be very interesting and useful to people wondering what to do to manage a gully. Two of the sites we will look at are projects that have been delayed by wet weather, so we can't confirm a date yet, but will keep you posted.

Events

Soil Erosion Solutions had a presence at the SoilCare Expo at Wollongbar on March 5, and at the Brunswick Valley Nature Festival at Mullumbimby on June 1. Our run-off model that shows the effect of groundcover on erosion and infiltration attracted a lot of interest. You can see this model on our display at PRIMEX at Casino 12 - 14 June 2008, and catch up with Stephanie or Lyn at the NSW DPI stand.



Look out for the NSW DPI stand at PRIMEX to speak with SES staff.

Green Pigeon corrections

In the last newsletter I made two big mistakes in the report on Green Pigeon. First the rainfall missed out on a decimal point - 92.2 mm not 922 mm on the 2nd January. A few days later they did have 175.2 mm one day and 227.4 mm the next

which led to the gully washout. Secondly Vic's last name is Walters, not Clarence. Sorry everyone.

New case studies booklet

We are currently working on a new case studies booklet, a sequel to our very popular first booklet that you may have already seen. The booklet will tell the stories of recent projects carried out by north coast land holders to fix soil erosion problems on their properties. We hope the booklet will be helpful and inspiring for others planning erosion projects. If you are on the mailing list for this newsletter you will receive a copy in a couple of months.

We can't tell you about more funding for new projects yet

The Soil Erosion Solutions project is funded by Northern Rivers Catchment Management Authority. NRCMA receives its operating funds from the Federal Government. The recent change of government at the Federal level has meant changes in what funding is available, and how funds for environmental works are distributed. We are not sure at this stage what funds and direction Soil Erosion Solutions will receive for new projects in the coming financial year.

In the meantime, if you have a soil erosion problem on your property that you would like assistance with, please continue to contact Stephanie or Lyn (details below) so we can help by providing advice on what to do and seeking funding opportunities on your behalf, and you can get a copy of our Expression of Interest form.

SES staff

Soil Erosion Solutions leader Abigail Jenkins is away on leave until April 2009. Project officer Stephanie Alt is continuing to run the project in her absence, with the help of Lyn Andersen who is also based at NSW DPI's Wollongbar Agricultural institute. Stephanie works part time, and is usually in the office on Thursdays and Fridays.

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