

How to use low profile contour banks to promote ground cover & pasture

Why use low profile contour banks on flood plains?

- Halt erosion
- Economically restore landscape function
- Better manage drought risk
- Slow damaging flood flows thereby allowing water to drop its silt and nutrient load on the flood plains before entering the river system.

How do low profile contour banks work?

- The contour banks restore hydrological function in the landscape by performing the role of vegetation and slowing the water down.
- This takes the damaging velocity out of the water, reducing erosion and allowing sufficient soil water infiltration to restore ground cover and pasture.
- The slowing of water also allows nutrient rich silts to deposit on the floodplains improving water quality downstream.
- This also slows the erosion process so the pasture can re-establish itself.



Low profile contour banks were installed in December 2020 including gaps to allow the safe and slower passage of overland water.



Photographed in January 2021 after 21mm of rain clearly showing successful revegetation.

Who do I contact?

If you're interested in low profile contour or spreader banks on flood plains contact:

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Spreader banks a game changer for Western Queensland grazier

Q CASE STUDY

Dan & Louise Hoch (Quilpie)

Just seven months after purchasing a 56,000-acre grazing property north of Quilpie, Dan & Louise Hoch together with brother-in-law Alan Truss have quadrupled the volume of feed on sections of their property despite under average rainfall.

Mr Hoch credits the success on "Maybe" to the installation of low profile contour banks or spreader banks on clay pan country where water was causing erosion and running off with very minimal infiltration.

He says they found out about this new concept of spreading and slowing down the water during a field day hosted by Southern Queensland Landscapes.

"About six months before we bought "Maybe" we had attended a field day at "The Lake" near Quilpie, where soil conservation expert Ray Thompson gave a talk about spreader banks," Mr Hoch said.

"And when we saw the clay pan country on "Maybe" we thought it would be the perfect opportunity to trial the concept and see if we could harness the power of the flood plains to re-establish native grasslands and increase feed volumes," he said.

Roughly 20km of low profile contour or spreader banks were installed on "Maybe" over a two day period during December 2020.

"A spreader bank is built by a grader and surveyed to a perfect level not to stop but to spread water allowing the water to soak into the ground and the grass to grow," Mr Hoch said.

"About two weeks after installing these contour banks we got about 2 inches of rain; and within a month of the work we had feed. I was just so surprised at how quickly the grass came up," he said.

"The result means a huge amount to our enterprise in the areas that we have installed the spreader banks and we

would have easily increased production or volume of feed in these areas by 3 or 4 times."

"It means the grass lasts longer and instead of having to move stock away we can keep them in this area for longer."

At an approximate cost of \$4 an acre which includes dry-hire of a grader, Mr Hoch said it's not too expensive. for the production value the banks create and that he plans on doing a lot more restoration banks on his property in the near future.

"I highly recommend trying the spreader banks to anyone who wants to give it go on problem areas of their property and suggest they do a trial and see how it goes; but I am sure they will like the concept and get the results they want.

"The introduction of the spreader banks has been a game changer for us and it will turn our low production country into high production country long term."



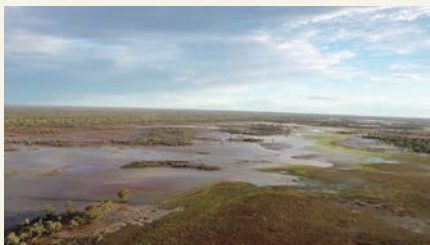
Using laser accuracy to get levels for erosion mitigation works.



Installing low profile contour banks to slow damaging flood waters.



Gaps were left in the low profile contour bank to allow safe and slow passage of overland water.



Drone footage after 21mm of rain in January 2021, just two weeks after mitigation works were complete.



Ground cover growth after 21mm of rain.



Control site on the property where low profile contour banks were not installed. This image was taken after 21mm of rain also.



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