



Our country, Our future.



Managing water

Reaping the benefits of step-by-step improvements

With a lengthy background in contract farming across southern and central Queensland and northern New South Wales, the Bradley family has gained extensive knowledge about effective farming techniques.

Led by Peter Bradley, Wool-a-roo Pty Ltd is a family-owned operation that also employs Peter's wife Kerrie, their son Luke and his wife Sophie. Together the Bradleys apply the lessons they have learnt through contract farming to their property Lindley Downs, a 4000 hectare property 50 kilometres south-east of Springsure.

Although they still do a small amount of contract farming, the Bradleys are focused on planning and implementing long-term improvements to Lindley Downs. Their experience across so many farming operations has given them first-hand insight into efficient farming methods they can apply at Lindley Downs.

The Bradleys run a mixed enterprise operation, with most of the property dedicated to growing their main crop sorghum, as well as some wheat, barley and chickpeas. In addition, they run about 300 cows and their calves.

Their main philosophy is that farming is first and foremost about managing water. They believe in retaining as much of their rainfall as possible, ensuring it infiltrates their soil and is accessible to their crops or grass. Helping the water to infiltrate their soils, rather than run off them, also results in better soil biology and structure.

Downpour highlights the problem

About two years ago, Lindley Downs received 114 millimetres of rain in 44 minutes, causing significant erosion. As a result, the Bradleys decided to change the direction of their runs so they were farming on an angle across the hill slope instead of down it. This change allows water to slow down and infiltrate the soil, instead of gaining momentum and causing erosion.

To make these changes, the Bradleys realised they needed to develop a holistic plan. They needed to access the most accurate information available so they could make informed decisions; and to use equipment that would give them the data they needed to implement their plans with the greatest control possible.

Improvements made in stages

The Bradleys received support from Central Highlands Regional Resource Use and Planning Cooperative (CHRRUP) and Fitzroy Basin Association (FBA) through funding from the Queensland Government's Innovations Program to help implement the changes. Firstly, they upgraded their GPS guidance, section control and software systems. This allowed greater accuracy for planting and fertiliser application, enhanced germination and harvesting, and also minimised run-off.

Secondly, they installed TerraCutta and iGrade software systems to develop their on-ground works with precision. They installed contour banks to make their water flow and infiltrate evenly across the paddock where it would have the greatest benefit, instead of causing erosion and losing chemicals and fertiliser in run-off. This involved using the TerraCutta software for mapping and planning, with iGrade then used to mark out the contours on paddock maps.

Despite the significant costs to their business, the Bradleys believe the improvements have been worthwhile. The benefits from their investment became obvious during the 2015–16 summer. The season was particularly dry and prevented many surrounding properties from planting summer crops. However, the Bradleys were able to plant a sorghum crop and despite the tough season, they were still able to see a return.



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Working towards a long-term plan

By sticking to their overall plan and working towards it in stages, the Bradleys are reducing their overall costs because they gain benefits from the early work before they fund later stages. Initial results indicate their plan is on track and achieving its aims. The changes have significantly reduced erosion, increased water filtration, and achieved more accurate fertiliser placement and minimal waste.

In the long term, the Bradleys plan to continue improving Lindley Downs and then expand the size and scope of their operations. Peter has spoken at a local Innovations Field Day to share their project and their innovative ideas with other growers in the region.

“We are appreciative of the grants provided through CHRRUP and FBA, and although the amount was a small percentage of the overall investment, the important part is not the financial contribution but being able to highlight the issues and share information about the results achieved,” Peter said.

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Peter Bradley and his son Luke have used their experience in contract farming to inform their long-term planning and decision-making for their property, Lindley Downs.



Installing contour banks across Lindley Downs' paddocks slows down water movement, helping rainfall penetrate the soil and leading to better returns during tough seasons.