

# PREPARING WITH HINDSIGHT

Reflections of real farmers from before, during & after drought



SOUTHERN NSW  
**Innovation Hub**

SUSTAINABLE AGRICULTURE,  
LANDSCAPES AND COMMUNITIES



Peter Sheppard has moved from growing soybeans to cotton.  
Photo source Matt Beaver Photography and CICL.

## LOCATION

Coleambally | NSW

## OWNER/OPERATORS INTERVIEWED

Peter Sheppard

## PROPERTY SIZE

1,000ha

## ENTERPRISES

Irrigated summer & winter crops  
(Cotton, Rice, Maize, Soybeans  
& Winter Cereals)

## INTRODUCTION

Peter is a second-generation irrigation farmer who has been running a mixed farming, family irrigation farm at Coleambally since 1963. The long-term average rainfall for Coleambally is 408mm/year so all crops are fully irrigated except in dry, low allocation years where some of the winter cereals will not be irrigated.

Peter is in the process of developing a succession plan as his children are not interested in farming. As a result, Peter has recently entered into a share farming arrangement for two of his properties to reduce his workload as he is the only worker on the farm.

Peter believes it is vital to have off farm investments. Peter's wife was a schoolteacher until retirement so brought extra income into the household. Peter is also currently the chair of Coleambally Irrigation Co-operative Limited.

*Luckily I married  
a professional  
so we had  
off-farm income.*

## EXPERIENCE OF DROUGHT & BUILDING RESILIENCE

There are a number of challenges to Peter's farming business. The fluctuating water allocations, coupled with the cost price pressures of inputs including water, lowers percentage turnover for increased inputs costs. It ultimately means the risk of failure is higher. It's all about making good decisions about what to grow when constrained.

### *Keeping good employees is a big challenge.*

Peter depends on a number of people to help him face challenges, this includes his wife and family, his crop advisor, friends from Lions Club as well as his share farmer.

Drought resilience is multi-faceted, *"you have to be prepared to adapt and be versatile. You also must be financially prepared and make the hard decisions to temporarily trade your water instead of growing a crop. It's a hard decision for us to make, as we love growing things to feed and clothe people."*


*As an irrigation farmer one of the greatest challenges for our business is fluctuating water allocations.*

The 2018/2019 drought was not all bad, as it improved the regional perched water table to below two meters across Peter's farm.

*It was hard to make the decision to scale back or trade water but once it was done you could move on.*

He diversified crops, grew less area in some crops but continued to improve the on-farm irrigation layouts with lasering and installing concrete structures.

From a community business point of view, it was more difficult. Coleambally lost the newsagency and hardware shop. "The local club felt the impacts but the pub seemed to be unaffected".



*New improved irrigation layouts, such as this has improved irrigation efficiency.*  
Photo source Peter Sheppard.



## INNOVATION AND ADOPTING NEW PRACTICES IN RESPONSE TO DROUGHT

Compared to the Millennium drought, the 2018/19 drought was easier to handle.

As a result of the lesson's learned, Peter is now in a better position (mentally and informed) to make the decision on whether to grow a crop or not.

*We were more comfortable because we had been in that position before. The millennial drought taught us many things - mainly making the decision NOT to grow crops no matter what.*

*Innovation and adopting new practices in response to drought is paramount.*

Peter had been improving his farm layouts and irrigation systems for a long time to allow him to manage risk.

*We made sure we were in a good financial position to allow us to ride it out with reduced income but temporary trading water buffered that.*

A real game changer for Peter was the installation of an irrigation bore so he could access water more reliably. He had to buy allocation to be able to use it, which he does when needed. Peter advises you need to keep finances strong and prioritise what you do so you minimise your risk.



*Installation of a bore has enabled Peter to have a secure source of irrigation water, during periods of low allocation (surface water). Photo source Peter Sheppard.*



## INNOVATION AND ADOPTING NEW PRACTICES IN RESPONSE TO DROUGHT

The Sheppard's also changed crops, reduced crop area, share farmed a couple of their holdings and sold what little water allocation they had on the temporary water market.

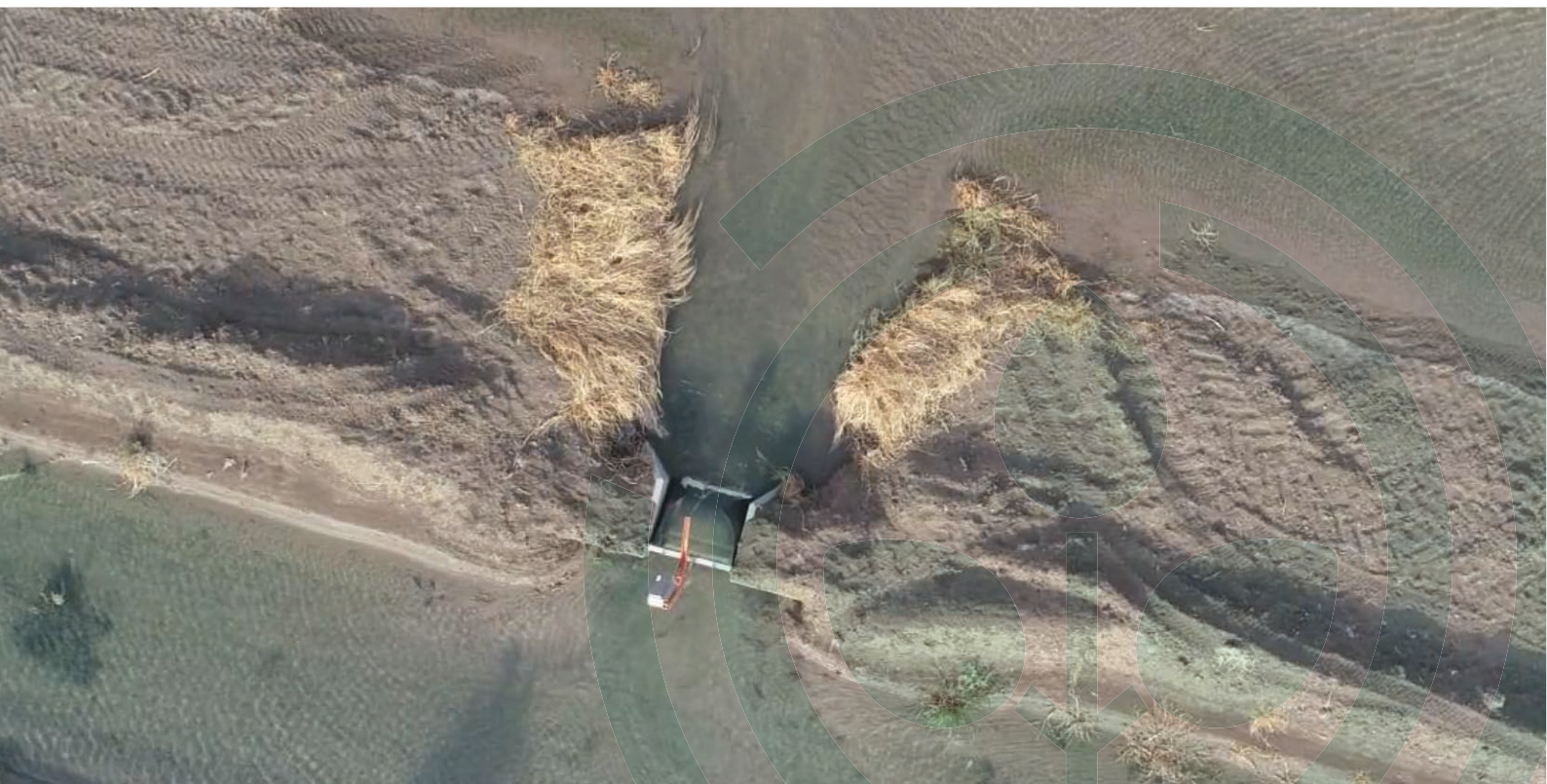
Peter took the opportunity to install soil moisture monitoring and scheduling technology as well as semi-automation in irrigation system to improve irrigation efficiency. These will not only improve efficiency but result in more informed decision making.

*Luckily the business emerged from the drought in pretty good nick. The Sheppard's prepared to start a full program again and be efficient.*

During the drought Peter accessed some financial support such as free registration of farm trucks, CICL waived water delivery charges & paid membership of shareholders to IREC.

*We kept busy but we didn't holiday. As chair of CICL, I had interests off-farm which kept me busy. My wife and I are involved in many community initiatives so we socialised off-farm with friends*

*It was a good opportunity to get some accreditations and training*



*Automated irrigation structures can improve irrigation efficiency by 10-30%.  
Photo source Peter Sheppard.*





*The irrigation bore helped Peter spread his risk and plant crops with confidence*  
Photo source  
Peter Sheppard.

## THE FUTURE ... AND WHAT ROLE CAN THE SNSW HUB PLAY

Peter believes drought resilience depends on an individuals' stage of life as well as commodity prices.

***Business planning support as well as research and development on all crops will continue to refine growers' options for dealing with drought.***

Peter believes the SNSW Innovation Hub can contribute by improving the knowledge of irrigators on the value of water and how to make good decisions for their business which also sustains the broader community. Peter acknowledged there is a lot of competition already in this space so there is a need to coordinate better collaborations and encourage industry to play a role.

The SNSW hub also has a role in supporting IREC and other farming systems groups to continue their priority programs. By doing so, farmers and land managers will not only be more efficient but they will also have more informed decision making.

Looking to the future, Peter is Implementing a two-hectare soil testing grid. He is very interested in doing trials around Phosphorus and investigate ways to free it up.

***I think we have around four to five tonnes available right now in our row cropping enterprises.***

Peter is aiming to continuously improve water application and would like to try automatic tractors in the future.

***We all need to make farming attractive by telling good stories.***

The HUB must use as many different approaches as it can to get a message out, because digital delivery of information is not always easy in more remote regions.

Peter also stressed that farmers are time poor. As a priority, Peter thinks the SNSW Innovation HUB could focus on coordination of stakeholders and commodity groups, providing consistent consultation. The HUB would then be better placed to forecast future needs and enable the whole community to be prepared for new challenges.

***Don't reinvent the wheel. Get greater collaboration in strategic initiatives with all the players in this space... and there's a lot! Support IREC in their programs.***



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## PREPARING WITH HINDSIGHT

Preparing with Hindsight was a community engagement project conducted by Southern NSW Drought Resilience Adoption and Innovation Hub partner - the Farming Systems Group Alliance – consisting of FarmLink Research, Central West Farming Systems, Riverine Plains, Southern Growers, Irrigated Cropping Council, Irrigation Research and Extension Committee and Holbrook Landcare Group. The project resulted in the collection of experiences of a range of landholders through the stages of pre-drought, in drought and drought recovery from the 2018/19 event. It will contribute to the Hub's focus on working with farmers and communities to identify how we can increase our resilience to drought. A series of seven case studies was created as a part of the engagement project.

This project received funding from the Australian Government's Future Drought Fund.



Australian Government  
Department of Agriculture,  
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Future  
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