

# Creating a Water Action Plan

**Location:** Cowell

**Region:** Eyre Peninsula, SA

**Industry:** Agriculture, Grazing

**Topic:** Importance of planning for your future water needs

## Key Outcomes:

Farming businesses can reap rewards in a very short time if they are committed to reviewing their current system, understand their future needs and opportunities and develop a new Farm Water Action Plan to take them into the future..

## Background

The Cowell farming district has a reliance on limited water sources of variable quality and quantity, with ageing water infrastructure that is limiting both their productivity and their opportunities to grow their farm businesses.

As a result of attending the 'Water Use on Farm Workshops' at Cleve in 2015 landholders identified that they wanted to undertake further small group property planning sessions to develop more detailed individual plans and spend more time exploring the range of options available.

## The Project

Warren Dickie from Port Lincoln Rural Supplies shared his knowledge and experience with seven farming businesses at a pilot workshop at Cowell to address their water needs. In particular he emphasised the importance of having a water plan and the latest technologies available to move water..

"Every long journey starts with a first step," said Warren as he encouraged landholders to look at their whole water scheme not just a short section of piping on their property with short term outcomes. When contemplating the installation of a water reticulation scheme, carefully consider whether there is any possibility or likelihood this may be extended at any time in the future, and allow for this extension in all your planning deliberations.

Landholders undertook a SWOT analysis of the water issues facing the Cowell district as well as conducting an individual SWOT analysis of their current water infrastructure and prioritised the issues and concern.



**Cowell farmers sharing information at workshop. L to R Mark Carmondy, Justin and Francis Bienke, Bevan Siviour, Martin Deer and David Franklin.**



**Mapping current and future water infrastructure.**



**David Franklin looking to utilise his soaks as an alternative water supply.**



Landholders assessed their future water requirements by quantifying the amount of water they will require daily by 1) using their 'summer maximum water requirements' as the basis for their calculations, 2) identifying the types of water sources available, 3) thinking holistically about infrastructure requirements and finally factoring in new technologies and available options.

With this information they mapped their future water action plan and overlaid it over their current system. This enabled them to understand where there was common infrastructure and where the water infrastructure needed to be changed or replaced.

Each landholder developed an action plan with timelines to implement the changes identified to upgrade their system. It was identified that farmers need to set a definite start time or implementation will not occur.

In developing their farm water plan, farmers realised that there is always more than one option and seeking advice was invaluable in making the best decisions. Farmer, Bevan Siviour said "I will work on costing different options and then implement the best one that suits my needs."

### Outcomes

It was stressed through the workshop "Do not skimp on pipe size. Do it once and do it properly. If you do it right and follow the rules right from inception, you will always get the results you are seeking". If you are not sure, always seek competent help in this regard.

"It is a fact that if you double the size of your pipe, under the same set of circumstances, you will obtain four times the quantity of water. Mathematically, this is correct: in actual practice, it is not quite, due to the fact that frictional losses within the pipe work need to be taken into account," said Warren and "never, never use 3/4" piping as a main feed or trunk line. It has absolutely hopeless flow capabilities."

Landholders identified that they had gained new information from the workshop including;

- Aluminium sulphate can be used to reduce flocking in dam water
- Laying the pipe in a trench, then fill with water on a cool day to check for leaks particularly at joins before filling in trench
- Water in Cement tanks stays cooler reducing calcium scale while water in black poly tanks heats up causing calcium carbonate to come out of solution.
- Tank repair material are available for sealing leaks in cement tanks
- PVC can be a good option to poly
- Laying poly through scrub areas can increase white ant attack on poly pipe
- Installing water storage tanks at strategic sites allows access to available water and can buffer reduced supply in time of need.

### The Future

Feedback from landholders was very positive. The workshop helped them clarify their thoughts; develop practical farm water action plans and key actions to implement the plans. Seeking the right information from Regional Landcare Facilitators and local consultants, having a better understanding of what to look for when making decisions, possible pitfalls and solutions were important lessons.

As a result of the positive feedback it is planned to hold more of these workshops in the eastern Eyre Peninsula district in 2017.



**Members of the farming business developing their plans together.**

*"I didn't have a plan in my head, but now I can have a clear set of actions to develop a plan and have a new harvesting and water pipeline system,"*

**Mark Carmody  
Farmer, Cowell.**

*"This has inspired me to put planned infrastructure in place, as we have lots of material on hand."*

**Francis Binkie  
Yabmana.**

*"I will test all my water for quality before proceeding with pipeline upgrades. I am open to other options not just running water from a dam."*

**Marin Deer  
Farmer.**



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