

NSW SUSTAINING THE BASIN *Irrigated farm modernisation*

Andrew Watson, Boggabri

February 2014

Location: 'Kilmarnock', Boggabri

Water Sources: Namoi Regulated Water Entitlement

Soil type: Medium heavy clay loams to hard setting, red sandy clay

Enterprise: Cotton and winter cereals with a long fallow

Existing irrigation system: Furrow and lateral move.

Total area irrigated: 900 ha

Total water savings: 240ML with 59% returned to the environment.

Background

Andrew Watson of 'Kilmarnock', Boggabri in the lower Namoi region is clear that the "millenium drought" prompted him to investigate options to improve the security of his water supply and reduce the risk involved with his farm business.

STBIFM was a great opportunity to do just that!

"Our results from an existing lateral move irrigator showed that our cotton yields had increased by 17 percent with water savings of 12 percent.

"Our wheat yielded about 2.08 t/ML under the lateral move compared to 1.5 t/ML on furrow.

"While these results were only over a one year period it was enough for us to invest into further conversions to lateral move irrigation," Mr Watson said.



Andrew Watson of 'Kilmarnock', Boggabri with his new lateral move irrigator prior to installation. Image: S. Bray.

"Have a go. It's worth doing to improve water security and reduce risk!"

Description of the project

Mr Watson was successful with two projects during Round two of STBIFM.

The projects included:

- construction of new supply channels
- two lateral move irrigators with a buried guidance wire and telemetry system

The benefits of the project

Mr Watson expects the following benefits from his irrigation development:

- 240 ML of water savings
- a reduction in moisture stress and waterlogging
- improved nutrient management because the roots are shallow where fertilisers are absorbed
- easier fertiliser application with the option of being able to water straight after the application or apply fertiliser through the sprinkler system itself
- reduced labour costs
- improved management of rainfall events
- easier management given that the lateral moves can be controlled from a smart phone so when something goes wrong he gets an instant notification.

Landholders experience

Mr Watson points out that whilst STBIFM helps irrigators fund capital intensive, high tech infrastructure that this also creates high tech problems.

"Understanding and learning how to use high tech equipment and training staff to do the same shouldn't be overlooked in the planning," he said.

STBIFM provides fully subsidised training opportunities to support irrigators and their staff in the change to different irrigation systems and achieve the projected water savings.

What aspect was most challenging

Mr Watson found the process of applying for the STBIFM funding quite straight forward and the implementation of his projects to date has been routine.

"The most difficult thing was fitting the change to the lateral move system into the existing crop rotation without causing too much disruption," he said.

What advice would you give others?

Mr Watson is convinced that buying irrigation equipment locally is very important.

"Everyone is under time pressure and when there's a problem, you need people to come quickly.

"When you buy locally they are not far away and can get to you quickly.

"It also keeps investment in our region which can only be good for regional economic development," Mr Watson said.

What are your thoughts on STBIFM?

"Have a go. It's worth doing!

"It's a good way to make the high risk, high capital cost changes we required to remain viable as irrigators in this changing environment.

"I'm not sure if improving your irrigation system on existing irrigation land increases the value of the land but it sure can make life easier and less risky," Mr Watson said.



Andrew Watson with his new centre pivot and a Durum wheat crop in the background. Image: S. Bray

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