

NSW SUSTAINING THE BASIN *Irrigated farm modernisation*

Update bulletin 12

November 2013

This bulletin provides updates on the NSW Sustaining the Basin: Irrigated Farm Modernisation (STBIFM) project. This project is funded by the Australian Government's '*Sustainable Rural Water Use and Infrastructure*' Program.

The bulletin will keep interested stakeholders informed of key dates and activities for the duration of the project. It will also alert you to opportunities for training and learning more about emerging issues and technologies.

DPI encourages you to be involved and stay informed using this service. You can, of course, unsubscribe at any time.

For more detailed information on any aspects of the project please send an email to IFM.info@dpi.nsw.gov.au or visit www.dpi.nsw.gov.au/info/sustainingthebasin

Regional updates

DPI project officers have been busy doing field inspections and working with irrigators to implement their on-farm works efficiently.

Rob Hoogers, Irrigation Development Officer with DPI tells us that there are 51 projects currently being implemented in the Macquarie valley.

"We've completed three projects from Round one plus a large number of the others are close to being finished."

"We've already completed two projects in Round two as well which is a great result," Mr Hoogers said.

[Listen](#) to a complete update on progress in the Macquarie Valley plus the recent bus trip to the Murrumbidgee Irrigation Area. It will take less than three minutes!

Irrigators in the lower Namoi and Peel Valleys are also making hay while the sun shines.

Stuart Bray, DPI Project Officer at Gunnedah said that the lack of rain has been good for some who are doing above ground storages.

"For others it has been catastrophic.

"Despite this about 50 percent of the projects across a range of infrastructure options will be completed by the end of November." Mr Bray said.

[Listen](#) to a complete update on progress in the Namoi and Peel Valleys with Stuart's podcast.



A recently completed centre pivot in the Macquarie Valley. Image: R. Hoogers



A recently completed centre pivot in the Peel Valley. Image: S. Bray

What we know from working with irrigators

The advantage of having an implementation process that involves working closely with irrigators is . . . you hear the good stories.

Take Andrew Watson for example. Andrew is a cotton grower from Boggabri whose previous experience with lateral move irrigators prompted him to make the most of the funding opportunity available with STBIFM.

Andrew is pictured beside a Durum wheat crop that yielded 5.2 tonnes per hectare and used 2.5 ML per hectare of water last season under his lateral move irrigator.

In comparison, his furrow irrigated Durum wheat crop in the same season used 3.5ML per hectare and yielded an average of 5.61 tonnes/ha.



Andrew Watson of Boggabri next to his Durum wheat crop irrigated with a lateral move irrigator last season.
Image: S. Bray

In a nutshell: A 38 percent increase in Irrigation Water Use Index (t/ML) with the lateral move irrigation system.



We're on the road again ♫ . . .

Whilst some Macquarie Valley irrigators may have thought 'why why why Delilah' when they set off at 5.30 am from Trangie recently, they sure knew 'why' by the time they got home!

DPI has a commitment to provide useful training and events to irrigators participating in STBIFM.

Recently, a group of Macquarie Valley irrigators jumped on a bus and headed south to the Murrumbidgee Irrigation Area to have a look at different types of bankless channel irrigation systems.

They visited three farms to look at four different layouts of bankless bed and furrow irrigation systems.

During the day, there was an opportunity to discuss the pros and cons of each system with the irrigators using them. DPI irrigation experts and local irrigation designers were also present to provide input and answer questions.

The tour allowed irrigators, who are looking to improve their current furrow irrigation systems with higher flow rates, to see for themselves the benefits of bankless channel systems and hear about the experiences of other irrigators.

Other advantages of a bankless channel design are:

- Mediates the flow of drainage water during rain events so drainage pumps have time to remove the water to a storage facility.
- Allows quicker, more accurate watering of bays with less labour required.
- Allows automation of irrigation.
- Is easily managed to meet a range of different crop requirements.

The day was a great use of time to showcase what this layout can offer and how it can be applied in other regions. The irrigators all learnt a lot and look at the fun they had! [Hear more](#)



Macquarie Valley irrigators during the MIA tour. Images: E. Joshua



Macquarie Valley irrigators during the MIA tour.
Images: E. Joshua

What is a bankless channel irrigation system?

Bankless channel irrigation systems deliver water to a bay quickly and then hold the water on the bay only as long as needed to wet up the soil before the water is released into the next bay.

The amount of water needed has to be available at one time to fill the bay so the design needs the ability to handle high flow rates without eroding the paddock.

Soil types require a significant clay content to hold the water in the bay. Sandy soils allow high losses to deep drainage.

Crops are planted on rows or beds with deep furrows to allow the bay to fill without over-topping the plants or water logging the crop.

Water can flow from both ends of a furrow to fill the bay and is held in the bay until all furrows or beds are wetted up. Then it is released.

Bankless systems are used in the MIA to grow cotton, sweet corn, maize, rice, tree crops and a range of winter cereals.

Another new member for the team

Bill Williamson is the latest addition to the STBIFM team based in the Dubbo office and servicing irrigators in the Macquarie Valley.

Bill is well known around the Narromine district where he has worked for some time in various roles in the irrigated cropping industry.

Bill is no stranger to large Australian Government projects either and was involved in the Trangie-Nevertire and the Narromine Irrigation Scheme Modernisation project as well the Cooperative Research Centre for Irrigation Futures (CRCIF).

Bill brings a great depth of understanding to the STBIFM team on the development and implementation of on-farm water efficiency projects.

Bill said he was looking forward to working with the other members of the team and with the irrigators participating in the project.

"This project has been very positive for the Macquarie Valley and I'm pleased to have the opportunity to really make a difference to the local irrigation industry," Bill said.

Update on the internal review

STBIFM has been in recess while undertaking a review as part of our normal governance processes.

The review is almost complete, with the recommendations now being finalised prior to the release of the review outcomes.

A third round of funding is expected to be announced early in 2014.

How can I participate in STBIFM?

For more information or to register your interest in STBIFM, please contact your DPI regional project staff member, send an email to IFM.Info@dpi.nsw.gov.au or visit the website at www.dpi.nsw.gov.au/info/sustainingthebasin



Bill Williamson on a recent tour of Macquarie Marshes. Image MVFF