

NSW SUSTAINING THE BASIN *Irrigated farm modernisation*

Update bulletin 13

December 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

Seeing is believing . . .

'Seeing is believing' is one way irrigators described the recent tour north to look at irrigation systems in the Border Rivers and Southern Queensland irrigation areas.

DPI recently took a group of irrigators, designers and irrigation consultants involved in the STBIFM program on a study tour of a variety of surface irrigation systems in the north.

The group left Dubbo at 5.30am and made it to the first stop at 'Clyde' station: a 16,000 ha property near Dirranbandi which includes 4,000ha of irrigation of which 1,100ha is a bankless head ditch style system, known locally as a Glenn Lyons (GL) bay.

John Waterman, the Manager, discussed how the topography of 'Clyde' pushed the limits of design but they are now growing their third cotton crop on the first stage of their bankless development.



Irrigators on the first day of the northern tour at 'Clyde' near Dirranbandi. Image: S. Priest





Glenn Lyons explains the bankless channel design on 'Clyde'. Image: S. Priest.

Next stop – 'Cubbie Station'. 'Cubbie' is arguably the most well known irrigation property in Australia. It is a 20,000ha irrigation development using 'PipesThrough the Banks' (PTBs) on a 32m spacing.

The tour group was in awe of the magnitude of the 'Cubbie' operation and were treated to the insights of developing and operating such an enormous enterprise by Simon Graham, the Operations Manager.

After overnighting in St George the troop headed to 'Katoota', owned and operated by Rob Gracie.

'Katoota' has a variety of soil types from heavy to hard setting red soils that require frequent irrigation. Rob successfully operates a number of different irrigation systems including centre pivots, PTBs and a novel and innovative permanent siphon system. To contend with soil variation and frequent irrigations, Rob has installed permanent siphons laid horizontally through the head ditch bank. Rob was happy to share his experiences on all of the systems.



Rob Gracie of 'Katoota'. Image: S. Priest



The tour group were impressed with the whole operation of Cubbie Station. Image: S. Priest.

Craig Saunders of 'Thuraggi Overflow' near St George and Justin Shultz of 'WaterBiz' showed the group around a siphonless irrigation system using PTBs with variable flow rates on a 12 m spacing.

Mr Saunders emphasised the importance of understanding what's happening to your water when you irrigate.

"If you don't know, then employ someone to help you.

"A better understanding of soil infiltration rates enables us to optimise our flow rates and run times which has resulted in water savings, labour savings and increased yields," Mr Saunders said.

[Read more on the irrigation development of 'Thuraggi Overflow'.](#)



Craig Saunders (right on bank) and Justin Shultz (far right) speak to the tour group on the irrigation development on 'Thuraggi Overflow'. Image: S.Priest.





The tour group at 'Bullamon Plains' about to head home. Image: S. Priest.

The final stop at 'Bullamon Plains' was the icing on the cake. 'Bullamon Plains' is owned and operated by Bill and Ed Willis who won the 2011 Cotton Grower of the Year and the 2006 High Achiever of the Year. The 2,000 ha irrigation development comprises 500 ha siphons and 1,500 ha of bankless GL bays.

The Willis' have trialled various bankless designs, including rooftop and Ed explained how the present design has evolved.

"We can now irrigate the entire irrigation area in four days.

"My advice to irrigators looking to implement a bankless system is to consider the size of the steps between fields, the depth of launch bays, the need for wide drains and the inclusion of rat walls under cement slabs, Mr Willis said.

[Read more on the irrigation development of 'Bullamon Plains'](#)

Every irrigator found the tour a great experience and valued the opportunity to talk to irrigators who have overcome a range of issues successfully through careful planning and trial and error.

Janelle Montgomery, tour organiser and DPI Irrigation Officer said the tour was a great way for DPI to provide an opportunity for our irrigators to see these operations first hand.

"Learning from other irrigators is a huge advantage," she said.

"There were lots of opportunities to ask questions and then to discuss what they had seen further amongst

themselves and with the other designers and consultants during the travel time.

"This was a very effective alternative to traditional training to build the knowledge and skills of the participants and show that infrastructure does not just mean pivots and laterals," Ms Montgomery said.

Value comes in many forms

DPI offered the northern tour opportunity as a subsidised training event for STBIFM participants.

It is just one example of the value being offered to participants of STBIFM that is not available elsewhere.

Could this have been valuable to you too?

Here is what was said. . .

"The most useful part of the tour for me was the choice of quality farms."

Irrigator

"The most useful thing was comparing the slight variations implemented by the different growers using the same systems."

Irrigator

"I found just looking at and comparing the different types of designs very valuable."

Irrigator

"It was one of the best and most informative field days I have ever been too."

Consultant

Other resources of interest

DPI is involved in developing a lot of resources to assist irrigators in developing and managing all aspects of irrigation.

Take a look at the latest offerings in partnership with the Cotton Research & Development Corporation (CRDC).

Pump Monitors - assessing the fuel efficiency on-farm.

Better the system you know - improving your current system with some structural changes.

Centre pivot evaluation process - important to regularly check on the performance of pressure systems.

The importance of scheduling - comparing furrow irrigation with centre pivots or lateral moves.

Farewell to Renee Molloy

Renee Molloy, the STBIFM Legal Officer, recently secured a new position within DPI and also commenced maternity leave on 2 December 2013.

Renee played a pivotal role in the delivery of STBIFM and has left a huge pair of shoes to fill.

She has shown a great commitment to the project and the participants which has been reflected in the feedback we have received from participating irrigators.

Renee said I have thoroughly enjoyed working with irrigators during my time in the project.

"I'd like to thank all the irrigators for their cooperation and patience!

"I wish them all the best in completing their projects and hope that their farming businesses continue to develop and prosper in the future."

The STBIFM project team wish to congratulate Renee on becoming a mother with the recent arrival of her little boy and also in her new position when she returns.

DPI advises that recruitment for the Legal Officer position is underway and an



Renee Molloy, STBIFM Legal Officer during a team planning meeting. Image: S. Bray

announcement of the outcome will be made in the New Year.

Farewell to 2013

2013 has been challenging but phenomenally successful for the STBIFM team and the participating irrigators. STBIFM has been acknowledged for kicking a lot of goals all round for irrigation industries and regional communities alike.

The team wish to acknowledge the enthusiastic participation and commitment of, not only irrigators, but all of the stakeholders involved in STBIFM to achieve the outcomes we have.

Thank you for showing that infrastructure programs are a viable and effective option for water recovery and irrigators are supportive of this initiative.

DPI will be in recess from Tuesday 24 December returning on Monday 06 January 2014.

We wish everyone a safe and merry Christmas and look forward to working with you for a happy, healthy and productive 2014.

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