

Chair's message



The past two months have held important events for the Burdekin, its water, irrigation and stakeholders.

June saw the "One Water Many Futures" Conference and Exhibition held in Sydney, drawing a huge attendance of delegates with a keen interest in water and irrigation from a global perspective right down to the farm scale. BWF member Dr Keith Bristow was one of the key note speakers at this event, which was also attended by Burdekin irrigators, researchers and students. Two of our local irrigators share their experience in this issue.

June also brought the end of the CRC for Irrigation Futures and the research projects it has undertaken across the country. Over the past seven years, this organisation has done wide-ranging research into irrigation and water-related issues, providing valuable data for the environment, industry and other water-related sectors as we head into the future.

BWF hosted the National Water Commission during July. We took this opportunity to highlight opportunities, issues and the need for a whole-of-catchment approach to include expert input from all regional organisations.

Cr Lyn McLaughlin, BWF Chair

Spotlight on the Burdekin - National Water Commission Visit

National Water Commissioners and senior management were hosted by members of the Burdekin Water Futures Group on Tuesday, July 20.

After travelling down from Townsville with BWF members, the 19-strong party met with the remainder of the BWF group to be given an overview of the Burdekin catchment and the opportunities and issues which exist within the region.

Their interest harnessed, the NWC group was taken into the field with the initial stop at the Mt Inkerman lookout providing a whole-of-system view, which was a valuable insight into the size and flatness of the floodplain. Visits to the large irrigation project being undertaken at the DAVCO farm and the smaller scale farm activities presented by Toni Anderson, BSES Natural Resource & Production Extension Officer, clearly demonstrated the range of project scale, farmer involvement and on ground achievements that are being actively undertaken in the Burdekin.

Upon returning to Townsville, BWF members were invited to participate in dinner discussions with the NWC group. This event provided another opportunity to highlight the need for a whole-of-catchment approach in the Burdekin to meet the aim of sustainable water management for the benefit of the entire system.



Overlooking Hutchings Lagoon



Mt Inkerman Lookout



Toni Anderson

More than 400 people were drawn to Sydney between June 8 and 10 to learn about, discuss and debate the future of the irrigation industry in Australia. This was the "One Water Many Futures" Conference & Exhibition jointly hosted by CRC for Irrigation Futures and Irrigation Australia Limited.

Hundreds of products were displayed at the massive trade show. At the conference sessions, international and national keynote speakers, presenters and participants highlighted challenges, issues, opportunities and successes within the field of irrigation and water. Burdekin irrigators, water managers and stakeholders, along with some Burdekin Water Futures members took the opportunity to attend this event. On the following page, two Burdekin irrigators, Paul Villis and Con Christofides, share their impressions.

Visit the One Water Many Futures web page <http://www.irrigationaustralia.com.au/>

This event also heralded the closure of the CRC for Irrigation Futures, and the work it has done towards progressing research into irrigation and water-related issues across Australia. Visit <http://www.irrigationfutures.org.au/> for a better appreciation of the work carried out by the CRC.



Paul Villis, Con Christofides and Steve Attard



Dr Sandra Postel



Prof Kader Asmal and Dr Keith Bristow



CRC IF students Matt Lenahan, Lucy Reading, Michael van der Laan and Steve Marchant

Con Christofides' Thoughts



Con Christofides was amazed at the amount of water research being undertaken across Australia, and how only a small percentage of this research is targeted at the north Queensland region. He noted that there was a particularly large investment of resources within the Murray Darling Basin.

Con found the mapping/imaging services and the measuring/sensing equipment on display at the trade show of interest, however he preferred spending his time attending as many conference sessions as possible. Some of the sessions he attended were on system modernisation, asset management, groundwater, metering, triple bottom line and impacts of water trade.

In regard to the keynote speakers, Con said, "It's always good to stand back and reassess things from a global perspective and some of the keynote speakers gave us that perspective. At times we tend to focus on our immediate environment, but taking in the big picture can help highlight future threats and opportunities which aren't always apparent".

Some examples were Professor Kader Asmal's insight into South African water policy which places basic human needs above licensed water as its core value; Dr Sandra Postel's speech on the US river system and the need to remove its dams due to environmental concerns; and Professor Chandra Madramootoo's presentation which delved into the issue of food and water security in situations where the resources of a single river system are shared by many countries, the Nile river being a particular example.

Following his conference experience, Con said: "We need to be measuring and monitoring more to get a better understanding of what makes the Burdekin tick and to avoid the crisis that everyone else around the world seems to have found themselves in. This should be funded by all stakeholders, not just irrigators and water authorities, and all should have ownership of the end products."

Con said he could also see opportunities to partner or collaborate with researchers, to provide positive outcomes for farmers, researchers and the region as a whole.

Paul Villis' Impressions



Paul Villis found the event well organised, and the venue very impressive.

Being a farmer, Paul found the trade show one of the best aspects of the convention. "As I have a trickle irrigation trial on my farm, I was able to catch up on all the latest developments," he said. "It was great to see all the other irrigation options available and talk to the distributors, as well as being able to see all things to do with irrigation under the same roof."

Paul also attended several conference sessions and found the topics of increasing crop water productivity, evapotranspiration, and estimating plant water use, of interest. However, he felt more time should have been allocated for questions and answers. Paul found the keynote speakers very enlightening, especially Dr Sandra Postel and her address on river flows and dam levels in the USA, and Professor Kader Asmal and his discussions on water policy in South Africa.

Paul took away a lot of information and new ideas from the convention, and made many useful contacts.

The BWF MISSION

To support a long-term, strategic, whole-of-system approach to understanding and managing the lower Burdekin water resources and associated systems, and thereby deliver long-term economic, social and environmental outcomes that ensure the region's sustainability

Zucchini farmer no stranger to change



“When I first started growing vegetables I was spraying them a lot and thought: ‘this is going to kill me and I don’t know about the poor beggar that’s going to have to eat it’. I thought there’s got to be a better way. People got by without these chemicals for many years before they came along. Maybe we’re going to have to get by without them again.”

Paul Le Feuvre grows 100 hectares of zucchinis and hundreds of mangoes in Giru, south of Townsville. He’s a passionate farmer, not scared of challenges, committed to doing the best he can do by the environment as long as he makes money.

He’s been doing his best to eliminate chemicals during the 21 years he’s been farming. Now he’s going to make tonnes and tonnes of his own compost to improve soil structure and replace fertilisers.

The Le Feuvres spent \$80,000 on a large machine that makes compost. It turns raw materials in long windrows two metres wide and 1.5 metres high, mixing them and spraying them with water to ensure they’ve got 40 per cent moisture. At the end of the process it even makes compost tea or liquid. Chicken manure, sorghum, hay and clay will go in the mix to make compost.

The clay is an important part of the process because microbes need to attach to something. Making the compost will follow a strict temperature curve. The aim is for the rows to heat to 65 degrees - and if it doesn’t get there start over again. The whole process from go to woe will take six to eight weeks. Paul emphasises that successful compost making is all about particle management - every piece of ingredient has to be exposed to every other ingredient. “You’ve got to get the microbes to dissect everything, pull it apart and then build it all back up again to make humus.” Once it’s done they’ll spread it on the ground and water it in.

Funding for the compost maker was received through the Australian Government’s Reef Rescue initiative in conjunction with local natural resource management group NQ Dry Tropics. Queensland horticulture industry group Growcom helped the Le Feuvres do a

farm management plan in preparation for the funding.

NQ Dry Tropics’ Brett King says the funding application he got from the Le Feuvres was different. “We got 30 applications from growers in our region for Reef Rescue funding and we funded Paul’s because it’s innovative and is an initiative that could be seen as best practice in future.

“From our perspective the most important thing is that Paul has thought about their whole farming system. They’ve looked at their farm inputs and they’ve thought that they can use Reef Rescue in terms of how it can improve water quality and also benefit their production and profitability. It’s got measurable water quality improvements that fitted in with the farm management system plan.”

They’ve improved soil organic matter, reduced the use of soluble fertilisers and stopped using hard insecticides and fungicides. They only cultivate the soil one year in four and they’ve introduced insects to control pest problems.

The Le Feuvres market their fruit and vegetables directly. They don’t leverage off the biological approach they take although they use far less chemical fertilisers and pesticides. Their zucchinis and mangoes are sold as conventional and he disputes that it might cost more to produce fruit and vegetables this way. “I think it costs less. I’m a lazy sod. Some people do recreational ploughing etc. We don’t. We use the same trickle tape for four years, we don’t dig it up.

“I reckon if we [farmers] stopped digging up our dirt straight away, we’d make the biggest impact we could ever make for soil organic matter, soil health and fertilizer use.”

Photo & Story courtesy of Kathy Cogo, NQ Dry Tropics