

## Chair's message



In this issue of BWF news you will read about the Queensland Government's commitment to protecting and managing strategic cropping land for the long term. You will also read about a farm-scale trial that is taking place with the aim of improving the quality of water run off, whilst increasing yields with lowered water usage. Managing our land and water resources is a priority for the future sustainability and resilience of our region's environmental, social and economic future. This needs to be done on varying scales, from across the nation and across the state, to catchment-scale and farm-scale. We all can contribute and BWF encourages you to do so.

*Cr Lyn McLaughlin, BWF Chair*

## High Value Agricultural Land to be Protected

Increasing global demand for energy, food and fibre, together with Queensland's strong population growth heightens the competition between the economic sectors of mining, agriculture and development for the state's cropping land. The Queensland Government has acknowledged that the best cropping land in the state (strategic cropping land) is a finite and valuable resource that should be protected, conserved and managed for the long term. As part of its commitment to this cause, the government has released its policy framework for strategic cropping land. The framework sets out the policy principles and legislative model for implementing the Queensland Government's policy and comprises three elements:

- A new Act for strategic cropping land resources – to identify areas of strategic cropping land across Queensland
- A new State Planning Policy – to regulate the impacts of urban and other developments
- Amendments to existing resources legislation – to regulate mining and other resource developments

This policy framework will continue to be developed in consultation with the Strategic Cropping Land Stakeholder Advisory committee. A Regulatory Assessment Statement outlining potential impacts of the framework will be released for public consultation later this year. The new Act, policy and amendments will commence following assent by Parliament early in 2011.

For more information or to register to receive updates, please visit the DERM website [www.derm.qld.gov.au](http://www.derm.qld.gov.au)

## We Need to be Involved - By BWF member Michael Hoey

Involvement with Burdekin Water Futures is very important for the North Burdekin Water Board as it allows us to have direct input in the ongoing management of the water resource for the whole of the lower Burdekin catchment. Our participation respects the roles and responsibilities of all members and the need for each individual organisation to perform its respective job.



We believe that better outcomes are achieved when all parties affected by the decisions of government and water management bodies can debate the initiatives in a logical and considered manner. This does not mean there is always agreement. However, we have an obligation and opportunity to express our concerns and, as a collective, push for the best possible outcome for the region and community as a whole. In working together at the local level and combining the skills and experience of many organisations, we can support each other in developing our individual roles. Group discussion on ideas and initiatives from all sections, as well as input from external scientists or practitioners, helps promote a better understanding of the problems and issues. There are many challenges for our region and we need all water users to achieve good outcomes in a sustainable way for the success of our district's future. This sounds like a motherhood statement, however we must all work towards a common goal as expressed in our mission statement.

## Flood Slows to a Trickle

Extract of article by Kathy Cogo, NQ Dry Tropics

Paul Willis grows cane near Ayr and he's trialling trickle irrigation on part of his farm. Trickle irrigation comprises rows of plastic tape buried underground that deliver water directly to the roots of the plant through tiny drippers that regulate water flow.

Most Burdekin farms are irrigated by flooding the inter-rows which is labour intensive but, from an infrastructure point of view, is cheap. Most of Paul's cane blocks are flood irrigated. He has installed trickle on a small area because the shape and form of the blocks weren't suited to flooding. He has seven hectares under trickle with potentially more to come.

With Burdekin farmers under increasing pressure to improve the quality of water running off farms and into lagoons, creeks and the water table, trickle irrigation provides an alternative option. Actual water usage is also reduced using trickle.

Trickle irrigation infrastructure is a lot more expensive than that required for flood irrigation, but when Paul weighed up the cost of laser levelling the problem blocks for flood irrigation against installing trickle, the costs were comparable.

Trickle tape costs \$3,500 a hectare alone. Other infrastructure, like pumps, filters and computerised timers, is on top of that. Paul says, "It's a 10-year project really. You've got to look at the life of it. The life of the tape is 10 years plus."

Funding through the Australian Government's Reef Rescue program made the conversion much more affordable. NQ Dry Tropics administers the program's funding throughout the Burdekin Dry Tropics region. Reef Rescue is about helping landholders make the changes that will improve the quality of water running into the Great Barrier Reef.

From the initial small trial block, yields increased from 160 tonnes a hectare under flood irrigation to 195 tonnes a hectare under trickle. CCS values are around 14.9. Paul thinks that, if the results of the small trial are consistent, the cost of trickle tape will be paid for in less than three years.

Paul has stuck to the same fertiliser rates as he would use under flood irrigation and sees potential savings in fertiliser requirements. Trickle isn't as demanding on labour as flood is. One of the other big differences is the



Paul Willis at the computerised irrigation switchboard

irrigation frequency. Paul used to water the blocks once a week under flood, whereas trickle watering occurs every day. The system is controlled by a computerised switchboard which schedules timing.

Steve Attard from CSIRO is helping Paul with his irrigation scheduling. Steve thinks trickle has the potential to be applied to a number of fields in the Burdekin. He says, "There's scope for more drip irrigation in the Burdekin especially in small paddocks that are hard to furrow irrigate and have soils that have high infiltration rates, like sandy soils."

The downsides to trickle are the risks of the tape and drippers clogging, cane roots getting into drippers and rats damaging the tape. So far, one season on from installation, none of these things has happened.

Trickle irrigation is green trash friendly. Paul has tried cutting his cane green in the past, but it doesn't work in flood-irrigated paddocks because the trash blanket prevents water from running down the rows. With trickle that's not a problem since the tape is underground and it feeds water directly to the root zone.

Paul says he won't be rushing in to convert other blocks to trickle at this time. He will wait for further trial results, but indicates that water restrictions and future water price increases would be the main driving influences to make trickle affordable for farmers.

"Trickle has the potential to deliver the best water quality outcome in the area. Everyone's sitting on the fence waiting to see if it works or not," he says.

BWF members visited Paul's farm in July to see first hand how he was using trickle irrigation to improve water and nutrient management. The members were impressed with the infrastructure put in place to support the trial and could see the potential for similar systems to be used in other parts of the lower Burdekin.