



### Chair's Message



As you read this issue, you will see that BWF is providing its support to a number of projects investigating the groundwater and waterways of our Burdekin region. Data collection and monitoring are both important tools in the process of understanding our system and building and improving knowledge for decision making purposes.

As our mission states, we will continue to provide support towards the improved understanding and management of our system as a whole for the long-term sustainability of the region.

*Cr Lyn McLaughlin, BWF Chair*

### Groundwater – Knowledge is Empowering

Groundwater has emerged as one of the hottest topics for 2011. The newest groundwater project, GW Pixel, will provide the Burdekin with its best water quality snapshot since 1997.

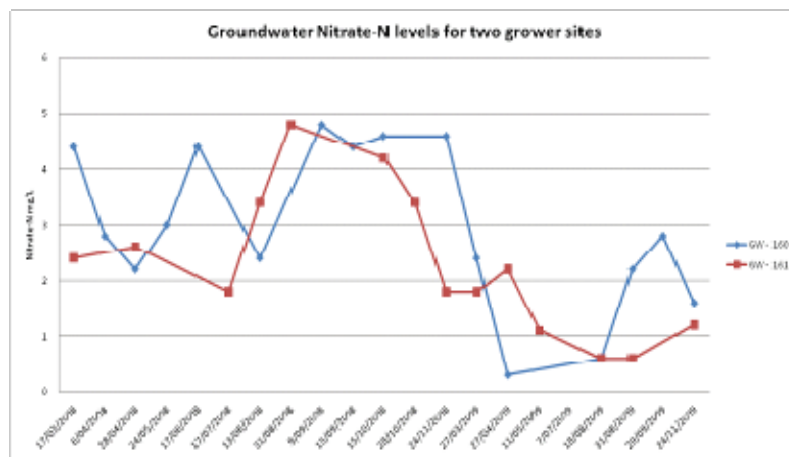
BBIFMAC (Burdekin Bowen Integrated Floodplain Management Advisory Committee Inc.) with funding from the Department of the Environment and Resource Management (DERM) is aiming to monitor for nitrates a minimum of 300 bores over a 15-month period. A full water analysis will be carried out on 100 of those bores.

The project aims primarily to provide growers with knowledge of their groundwater nitrates and how these vary over time. Previous work completed through the WQ Pixel project has shown large nitrate variations, both spatially and temporally (see figure below). This information will be coupled with advice to assist growers in managing their groundwater resource.

A secondary aim of the project is a long-term goal of developing BBIFMAC's capacity to meet the growing water quality analysis needs of the region.

BBIFMAC and Lower Burdekin Water are currently negotiating the sharing of certain aspects of the data that is collected. From a groundwater management point of view, sharing of this level of spatial and temporal information will benefit the region.

The project is going ahead with the support of CANEGROWERS, the water boards and Burdekin Water Futures. To get involved, or for more information on the GW Pixel project, contact Tom McShane from BBIFMAC on 4783 4344.



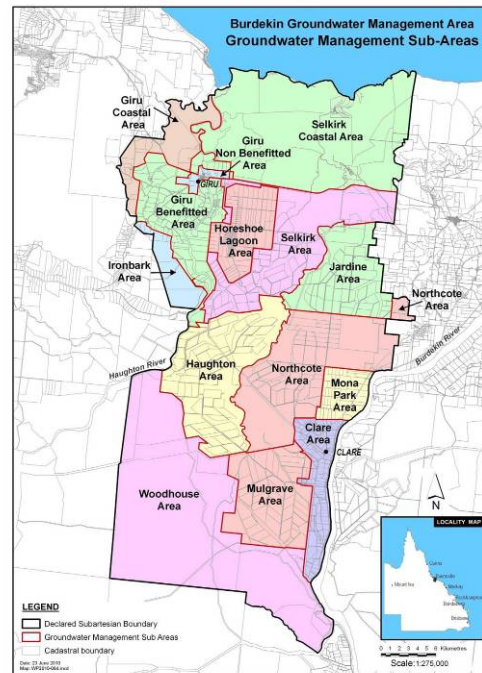
## The Rising Groundwater Table Project

An important new project will support the development of an integrated management solution to re-balance the water table in the Burdekin groundwater management area.

The area under study in the Lower Burdekin Rising Groundwater Table Project is the “left bank” of the Burdekin Haughton Water Supply Scheme (see map at right).

The specific project goal is to provide the technical basis for the next stage of decision making on managing the risk of land, water and environmental degradation that could potentially occur due to rising groundwater and salinity levels.

Bob Bennett, Department of the Environment and Resource Management (DERM), has been appointed project manager. Bob is based in Townsville and has regular access to key groups and technical experts in the lower Burdekin.



One of the outcomes of the project is a technical report which will highlight the reasons for the upward trend in groundwater levels, outlining options to address the issue. Drawing heavily on previous hydrological and groundwater salinity work in the lower Burdekin, the project report will also provide insights on surface water use patterns based on updated data collected. A review of the existing work in the area has been undertaken, and new work on the water balance is advancing. The technical report is due for completion in September 2011, and will be followed by community engagement until project completion in July 2012.

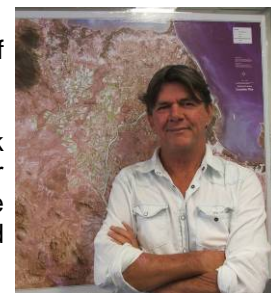
The project is part of a suite of initiatives currently being undertaken in the lower Burdekin including the provision of a groundwater modelling toolkit, programs to improve water use efficiency, and research into distribution system efficiencies, especially in regard to the potential for channel leakage.

The project is progressing with the support of Burdekin Water Futures and the BRIA Irrigators' Committee. More information can be obtained by contacting Bob Bennett, DERM, on 07 4760 7473 or [bob.bennett@derm.qld.gov.au](mailto:bob.bennett@derm.qld.gov.au)

### Member Profile: Bob Bennett

Bob Bennett (right) is a Principal Project Officer with the Department of Environment and Resource Management (DERM).

Bob relocated to Townsville from Brisbane in August 2010 to work exclusively on the issue of rising groundwater in the Burdekin groundwater management area. Prior to taking on this project, Bob worked with the Water Allocation and Planning unit of DERM and with the Queensland Water Commission.



Bob's experience includes work on agronomy, salinity and hydrology projects in the Liverpool Plains area of New South Wales, technical and policy input to the NSW water reforms process, native vegetation legislative reform and natural resources compliance and licensing.

His current project is aimed at facilitating a 'common understanding' of issues associated with rising groundwater and salinity in the lower Burdekin and providing an analysis of options designed to allow the community to effectively address the issue.

Bob is enjoying working with key groups in the lower Burdekin including Burdekin Water Futures and the BRIA Irrigators' Committee.

### Monitoring the Waterways

Lower Burdekin Water maintains a keen interest in the water quality within the channel and lagoon system in the lower Burdekin. This is an important part of the overall management of the region's water resources.

In line with this, Lower Burdekin Water has commenced a program to regularly test the water in the channel/lagoon system over a 12-month period. Collection of this data will allow the group to ascertain any triggers in water quality from farming practices, industry and other influences on the waterways.

Initial testing was carried out after the wet season, before the majority of farming practices had commenced, and when the pumps were not operating. Due to this, the water in the system at the time was wholly groundwater that was finding its way back into the lower reaches of the irrigation area. The results from the initial tests have revealed no pesticides or herbicides found in the system.



More information in regard to the water testing can be obtained by contacting Andrew Kelly on (07) 4783-1988 or [manager@nbwb.com.au](mailto:manager@nbwb.com.au)

Visit the BWF website:

<http://www.clw.csiro.au/naif/casestudies/burdekin-water-futures.html>

### Groundwater for Decision Makers Course

The National Centre for Groundwater Research & Training is holding a training course on "The Fundamentals of Groundwater-Surface Water Legal Issues and Policy Management" in Canberra on September 1, 2011.

This one-day course is designed for professionals in consulting, research and public authorities. Participants will gain an understanding of groundwater terminology, processes and concepts, as well as a fundamental knowledge of the policy and legal issues affecting groundwater management.

Topics include:

- Water rights and water law: rationale for water entitlement transferability, historic and contemporary transferability;
- The National Groundwater Action Plan;
- The Water Act;
- Policy drivers for integrated groundwater and surface water management;
- Groundwater management at both aquifer and paddock level.

For further details and to register, visit

<http://www.groundwater.com.au/industrytraining>

### **BWF Members**

**BRIA Irrigators' Committee** - Wayne Smith and Mauro Garbuio

**BSES** - Toni Anderson

**Lower Burdekin Water** - Andrew Kelly

**North Burdekin Water Board** - Michael Hoey (Deputy Chair, BWF)

**South Burdekin Water Board** - Robin Juffs and Michael Caspanello

**NQ Dry Tropics** - Scott Crawford

**SunWater** – Colin Bendall and Jason Williams

**Burdekin Shire Council** – Cr Lyn McLaughlin (Chair, BWF) and Trevor Williams

**Dept of Environment & Resource Management** – Bob Bennett and Graham Herbert

**CSIRO** - Keith Bristow

Contact any of the above members to provide input and/or find out more about the BWF and its activities.