

Lower Burdekin Initiative

Co Ordination Meeting

Tuesday 26th March 2002

Held at: Mecure Inn Townsville

Time: 8.30am to 4.30pm

Introduction and Background

Welcome Laurie Rigano

Good-Morning Ladies and Gentlemen

A Special welcome to those delegates who have travelled distance to be with us today.

It is quite obvious judging by the attendance that the Lower Burdekin Initiative is generating a great deal of interest.

By way of introduction for those of you who have not met me, my name is Laurie Rigano. I am a third generation Cane Farmer supplying Inkerman Sugar Mill at Home Hill on the south side of the Burdekin River Delta.

I have been a member of the South Burdekin Water Board for the past twelve years, with the last six as Chairman, and I have also held a number of Lower Burdekin Sugar Industry positions.

At this point in time, I would like to give a brief history of the two Delta Water Boards.

I am sure there are people here who would not be familiar with why the Boards were established and how they have evolved in support of reliable rural water supply toward a viable Sugar Industry.

By the early 1960's with the increase in cane production, it was becoming apparent that the groundwater reserves in the Delta were being drawn down to low levels. It became obvious that if we were to continue to have a viable sugar industry and be sustainable in the long term, something had to be done.

Investigation by Queensland Irrigation and water Supply Commission which at first was received by farmers with some doubt because of the failure of the previous Inkerman Water Supply Scheme, finally resulted in the implementation of an artificial groundwater recharge scheme, involving the use of pumping plant to divert water from the Burdekin River to suitable recharge areas through a system of natural and artificial channels.

This unique groundwater area is considered the largest coastal aquifer in Australia.

In 1965 and 1966 the North Burdekin Water Board and the South Burdekin Water Board respectively came into being under similar Government Legislation providing that the:

Function of the Board is to constitute a Water Area to construct works of improvement of subterranean water supplies and to constitute a Board for constructing, maintaining and administering such works.

And that the: Purpose for which the area is constituted is to utilise part of the flow of the Burdekin River to replenish the subterranean Water Supplies of respective parts of the Burdekin Delta and to thereby increase the quantity and improve the quality of supply available from this source for irrigation, domestic, stock and industrial purpose.

These two autonomous bodies and their works are financed by growers and millers of sugar cane and initially the scheme relied on natural flow of the Burdekin River, which at times occurred after the wet season from January to March with early summer being the driest period generally with limited flow.

Stability of the Sugar Industry in the Burdekin has been enhanced by the Delta Boards Operation and as such provided much of the economic basis for more recent development of the Burdekin Falls Dam and subsequent Irrigation Area by the Queensland Government.

Irrigated Agricultural production within the Delta Water boards Area is approaching 5 million tonnes of Sugar Cane and we consider our scheme to be undoubtedly a success.

That success I believe can be attributed to the simple commonsense approach by an industry Board to relevant issues. I might add that wider community involvement is represented locally by a representative from each Local and State Government on the eight member Board.

The Delta Flood Plain is an altered landscape with some predominately different features.

The North Burdekin Water Area includes large lagoon systems for replenishment activities. Areas such as Sheepstation and Plantation Creeks accept surface water, which is also available to Farmers for direct pumping. The North Burdekin Water Area occupies the largest part of the Delta north of the Burdekin River and consequently has a much greater coastline exposure to seawater.

The South Burdekin Water Area occupies a lesser area to the South of the Burdekin River with a much less seawater interface.

The South Burdekin Water Board conducts replenishment activities by directly putting clean water into specially developed artificial Recharge Pits, which then naturally enters the aquifer through the sandy soil profiles.

Similarly as with the North Burdekin Water Board the South Burdekin Water Board makes surface water available to farmers for irrigation which compliments the replenishment process across the Water Area by "Water Spreading".

Permeability of Delta Soils assists in retention of flood or furrow irrigation excess and naturally provides deep drainage to the aquifer of water not taken up by the crop.. Consequently, farmers pumping bore water efficiently and effectively recycle this groundwater.

Following completion of the Burdekin Falls Dam in 1987 and as regulated water supply became available consistently throughout the year, a number of emerging water quality issues became more apparent to the Boards.

A comprehensive study commissioned in 1996 by the Delta Boards probably created more questions than answers in regard to Delta Water.

However it was considered a proactive step in the right direction toward gaining an understanding of what might develop into a long term change which presumably may have adverse or detrimental effect on the sustainability.

Both Delta Water Boards and the Department of Natural Resources are well down the path of developing a predictive groundwater model, and with involvement in the Queensland Governments Industry based Water Use Efficiency Project initiated through the Canegrower Organisations, it was realised by the Boards that to maximise research effort within funding parameters, the need for participating agencies to co-ordinate their respective projects appeared the most appropriate approach.

Alliance of all agencies toward a more integrated approach has been achieved under the stewardship of Townsville's CSIRO Land and Water Principal Research Scientist and Project Leader Dr. Keith Bristow.

The Lower Burdekin Initiative commenced in July 2000 as a three year Research Project.

Speakers later in today's agenda will be guiding us through the project, its development and outcomes as the day progresses.

However, as a farmer with one of my farms under the microscope of the LBI productivity and water use efficiency program, I believe the relationship and interaction between our scientists and farmers in the field is forging an alliance and better understanding of how, when, where and why!

I believe we must not lose sight of why the initiative was developed.

For instance; Farm Water Practices such as 'aquifer recycling' and 'water spreading' evolved naturally and play an integral role in the management of the aquifer. We must be sure that flow on effect does not add detriment to water quality or ultimately lead to an un-manageable water table.

And I emphasise that the cost effectiveness of current aquifer replenishment process to the irrigator support the economic highs and lows of a Sugar Industry which is very conscious of its communities wellbeing.

The Delta Water Boards encourage a whole of basin approach to long term sustainability of the Lower Burdekin. We can achieve this by working together to gain the best possible value for the input capabilities we have available.

As Chairman of the South Burdekin Water Board, I confirm that my Board remains supportive of research, in particular Water Management and Quality. The Burdekin Delta as part of the Barrier Reef Coast, is focus for increasing interest from domestic and international environmental groups, particularly in relation to runoff of sediment and nutrient.

The South Burdekin Water Board is aware that fish provide natural evidence of water health. Therefore, emphasis has been placed on determining Water Quality Status within the Water Area, as well as establishing some environmental positives through natural water use technology. During 2001 a Pilot Fin Fish Project was established under the Lower Burdekin Initiative involving LBI stakeholders and department of Primary Industry Bribie Island Aquaculture specialists.

The first stage of the Pilot Project was completed last December and later today outcomes of the trials as well as future work to be undertaken, will be presented.

A few final comments:

In my view, the successful Water Board partnership between Gowers and Miller has played a major role in the establishment of a viable Delta Sugar Industry. It has achieved development of a positive understanding of the good and bad aspects of an export commodity totally exposed to world price.

It has at times been necessary not to live beyond the means of existence and there is no doubt last seasons poor crop and this years sugar price brings back bad memories to many industry stalwarts.

We need to ensure our product is not in the world focus for questionable water management. I do believe that in time, we may be even exporting our Water Management Technology.

The LBI has moved through the past year on the basis of collaborative approach. I strongly urge you not to lose sight of this approach!

It appears most obvious that with more issues evolving, for example the National Action Plan on Salinity and water Quality, the co-operation between industry, scientific and research agencies appears more necessary to ensure duplication of effort does not occur.

With those thoughts in mind;

I thank you for allowing me the time to Welcome delegates, and now hand over to Keith Bristow to provide an Overview of the LBI.