



**AUSCOTT LIMITED SUBMISSION TO THE HOUSE STANDING  
COMMITTEE ON REGIONAL AUSTRALIA**

**Inquiry into the impact of the Murray - Darling Basin Plan in Regional  
Australia**

15 December 2010

Overview

Auscott Limited operates farming, commodity processing and commodity marketing businesses in the Macquarie, Namoi and Gwydir valleys of NSW. In these locations the business depends on irrigation water supply as a primary and essential input.

The Auscott business was founded in 1963 and since that time, the company has been an integral part of the regional communities in which we operate. In particular the communities of Moree, Narrabri, Wee Waa, Nevertire, Trangie and Warren are key to our operations. Auscott employs around 120 full time positions in these towns and sources an additional casual labour force of around 175 in a full season at critical times like irrigation, harvest, ginning and shipping.

These townships also provide the point of supply for our agricultural inputs, which on cotton growing alone, exceed an annual value of \$30 million at \$2500/ha variable growing costs. Significant additional turnover results from our rotation crop and our downstream businesses of ginning, marketing and warehousing.

The irrigation streams of the Murray Darling Basin are clearly working rivers where the Plan and its solutions need to encompass and balance social, economic, cultural and environmental values. Most importantly any attempt to implement changes must have the backing of local and regional people including the State agencies who have the job to turn plans into practical actions. In recent times we have seen several major Federal initiatives run into problems and crises due to matters relating to implementation. We must ensure these lessons are not lost on this arguably much more substantive issue for the Basin.

We are concerned that the Guide gives no indication of an adaptive approach. As we mentioned we view SDLs as a very blunt and inflexible tool for managing water in a highly variable supply environment. We would like to see some environmental work done initially to deliver some defined outcomes with the water already purchased through State schemes and Buybacks. We run a significant danger that we could seriously impair our long term productive capacity if we buy water back but show no measurable and acceptable environmental outcomes. An adaptive approach allows us to move positively but not destructively and create knowledge and management skills in environmental water management as we proceed. It also allows us to examine more efficient ways to achieve outcomes in our working river environment.

## **Points of submission**

### **1. The direct and indirect impact of the Proposed Basin Plan on regional communities, including agricultural industries, local business activity and community wellbeing.**

The guide proposes significant cuts to water supply in the valleys in which we operate. The reduction to supply in the Gwydir river water is 28-37%, Namoi river water 21-27%, Namoi groundwater 13%, and Macquarie river water 24-32%. Such cuts are not at the margin but will go to the heart of the operations and hence will significantly reduce our agricultural output and the flow-on will impact our integrated business structure. With less economic activity employment, services and inputs will have to be reduced and the consequences felt by not only our business but also in our local communities.

The recent drought provides a case study of the economic and social consequences of the removal of water from these communities. The Cotton Catchment Communities Cooperative Research Centre (CRC) based in Narrabri undertook a study and published a paper in 2007 entitled "The Impact of Drought on Small business- A pilot Study on Wee Waa."

Our concern is that the MDBA's proposed reductions in access to water through the implementation of harsh and inflexible SDLs will act as a permanent "legislative" drought on these communities.

The CRC Wee Waa drought study found among other conclusions that:

- Permanent staff numbers fell 60% between 2004 and 2007 and Casual employment fell 40%;
- The main type of staff positions terminated were Professionals, however positions have been cut across all jobs;
- Of the terminated employees; 2/3 have left the region and the remaining 1/3 are either working locally or are unknown;
- 60% of businesses have downsized as a result of the drought. The majority of these businesses had downsized by at least 50%;
- 95% of businesses had a 60% or greater reliance on a healthy agricultural sector especially the irrigated cotton industry;
- Reduced access to surface and groundwater for irrigation was the biggest factor other than drought impacting on business

The Social/Community Impacts identified included:

- Combined Wee Waa Primary and Secondary school numbers declined by a total of 128 students (21%) between 2001 and 2007;
- There is less capacity for the community and business to donate time, resources and funding essential to the viability of schools;
- There has been a doubling in the number of people accessing health support/ counselling due to the drought;
- Health organizations were producing more information packages specifically for rural communities on mental health issues such as depression.

Another study on the effects of removing water from communities was conducted over an 18 month period from 2009 through 2010 by Judith Stubbs and Associates. It was entitled “Exploring the relationship between community resilience and irrigated agriculture in the Murray darling basin”. This quite detailed and field tested study covered eight local government areas in the Murray Darling Basin. The Stubbs study found that:

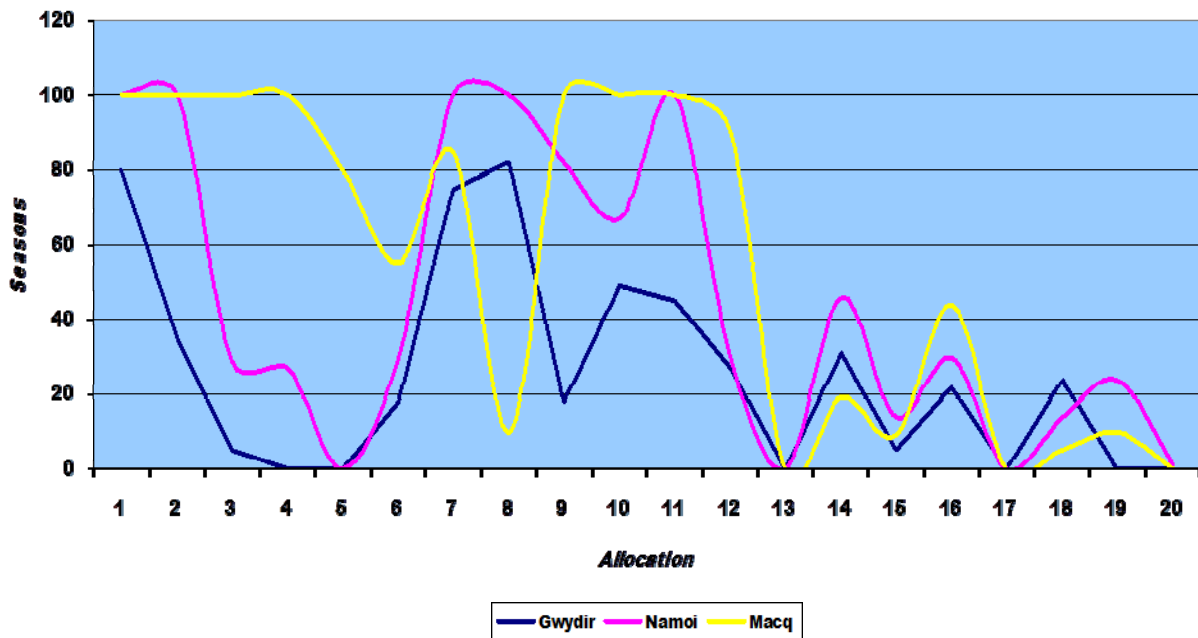
“Modelling of impacts on indicators of community wellbeing and resilience for Moree Plains from reduced water availability also predicts that there will be significant adverse impacts on such indicators as a result of employment and population loss (or failure to regain population and jobs in a post-drought period). Such adverse socio-economic impacts are generally a result of a more residual population which is both older and has a greater proportion of disadvantaged Indigenous people. Notable changes are likely to be:

- a decrease in median household income;
- an increase in disability support pension rates;
- an increase in residents with a profound or severe disability;
- a decrease in labour force participation 65+;
- an increase in youth and general unemployment; and
- decreased in-migration or population replacement.”

We don't believe the Guide deals with the socio-economic issues and hence we are very concerned that there is a major flaw in the pending Plan. Reductions in access to water for productive use using the blunt and inflexible tool of an SDL will have significant socio-economic impacts as the above studies clearly show.

2. Options for water-saving measures or water return on a region-by-region basis with consideration given to an analysis of actual usage versus licence entitlement over the preceding fifteen years.

**All Auscott Valleys**



The graph above shows the water availability to Auscott over the past 20 seasons.

In the past five seasons, excluding the current season, the average river general security allocation (Macquarie) or credit to accounts (Namoi and Gwydir) has been; Macquarie 10.5%, Namoi 20.5% and Gwydir 15.25% respectively (Source: NSW Water Information). Such low water availability represents part of a major drought sequence and an extremely stressed business environment for irrigators. In order to survive in such an environment, irrigators and the businesses that depend on irrigation need to be able to access the full enjoyment of their specific water entitlements when seasons turn around. The Guide proposes SDLs which are not in any way adaptive to the highly variable nature of flows in the Northern Basin and would inflict significant impact on our business, and critically, on the communities in which we operate.

Significant and long term droughts happen periodically in the Murray Darling Basin. The recent decade long drought and the so called Federation drought of 1895-1903 are just two examples. Undertaking an assessment of the health of rivers under such extreme circumstances where flow is a key indicator is problematic in our view. It was also a period as indicated above when extractions by irrigators were minimal.

In 2004 after a long period of significant work water sharing plans (WSP) were introduced in the catchments where we operate. This followed the introduction of the Murray Darling Basin Cap in the mid-1990s. Due to this extended drought period mentioned above there

has not been any opportunity of assessing the effect of the reductions and limits imposed by the WSPs. Yet, the Guide proposes Basin Plan SDLs with seemingly little or no scientific or practical justification which would impose further significant cuts to water use. Surely it would be due process to properly assess the impact of the NSW WSPs before imposing further restrictions on the productive water sector?

### **3. The role of governments, the agricultural industry and the research sector in developing and delivering infrastructure and technologies aimed at supporting water efficiency within the Murray-Darling Basin.**

Irrigators in the Northern Basin strive for high water use efficiency. We operate in a resource constrained system and hence the pursuit of high levels of economic water use efficiency is a prerequisite at farm level. Our irrigation activity is Best Management Practice accredited across the board and utilises tools like soil profile moisture monitoring “C probes” and Electro Magnetic soil surveys to inform and guide our professional agronomists. Private infrastructure like complete tail water return systems, lateral move irrigators and drip irrigation have been installed at considerable expense to ensure best practice.

Further improvement is possible but the farm infrastructure scheme rolled out by government is not currently conducive to wide scale participation by farmers in the northern Murray Darling but may have a greater role in southern NSW and northern Victoria.

We expect that high levels of water use efficiency should apply to farmers, environmental water management and the government controlled system infrastructure. The Guide should have placed great emphasis on this later area as there is significant room to improve system efficiencies without depleting our long term productive capacity. This issue is being addressed in the “Water for Rivers” program and the Guide should have been more instructive on this type of work.

There are enormous gains to be made by system WUE within the Basin.

- Menindee Lakes were an ephemeral system, only filling in flood times. Man-made alterations and Government policy to hold water in the lakes makes for a giant evaporation sink averaging 753GL average annually when inundated (p577Guide). Yet, the Guide provides for “maintaining lakes Wetherall and Parmaroo as predominantly permanent water bodies.” This is an unnatural situation and creates significant inefficiencies. Furthermore, the management of the Menindee system as a whole often has significant impact on the ability of upstream irrigators to access supplementary events and becomes very frustrating when this water is simply allowed to evaporate. Works and measures must be put in place to achieve wholesale savings out of all the Menindee lakes.

- The Darling Anabranch “is normally dry, only flowing into the Murray under large flood events.” (p580Guide) NSW spent some \$50m in 1979 piping the 3000mgl requirement to stock and domestic users as a sound WUE measure. The Plan now provides for a total 2191GL annual flow through Weir 32 in order to initiate and maintain flows into the Anabranch (Guidep584). The capacity of the Anabranch main stream is exceeded by a flow of 1500mgl/day (p586Guide) This means in simple terms that the MDBA proposes to send an average of 400% of the overflow capacity of the Anabranch, through Weir 32 every day of the year to initiate flow in a stream that “is normally dry, only flowing into the Murray under large flood events.” There is no concept of environmental WUE in such a proposition. A better way of operating this issue needs to be developed.
  - The management of the Lower Lakes in South Australia is a serious source of frustration. The barrages constructed clearly modify the natural flow of sea and fresh water. The recent prolonged drought resulted in low flows to the Lakes (a situation that would have occurred if there was no irrigation) but the barrages stopped the inward movement of sea water that would have moved in naturally as it did in the 1914-15 period. As a result the acid sulphate issues became serious. There has to be more open discussion about the management of the Lower Lakes and the Coorong that reduces the amount of productive water lost from the system yet still allows acceptable environmental outcomes to be achieved.
- 4. Measures to increase water efficiency and reduce consumption and their relative cost effectiveness.**

The realisation of system efficiencies will provide far superior cost effectiveness than on farm WUE investment. By way of example Sinclair Knight Mertz in their paper; Darling River Water Saving Project Part B found that at best 248GL could be saved annually for \$2.7 million. This is \$10.88 per megalitre at point of loss. The value of this water in the northern basin catchments from which it originates (with say, a 75% loss in volume in the transmission to Menindee) at the Buy Back price of \$2200 per megalitre of entitlement is \$726 million or \$2927 per megalitre. That is, water valued by industry at \$29273/mgl can be saved for \$10.88/mgl expenditure by government at Menindee.

An on farm water use efficiency measure that we are familiar with is the conversion of row crop furrow irrigation to lateral move irrigation for cotton and rotation crops. Our costs indicate that \$660000 investment will save 20% applied water in the field on 120ha cotton annually, 1.2 mgl/ha or 144mgl. Cost per megalitre is \$4583 at the farm. Assuming the Government through the on farm efficiency program pay 80% of infrastructure cost on farm and receive 50% of the water savings for the environment, then government would need to spend \$528000 to return 72 mgl to the environment. This is \$7333 per mgl.

- 5. Opportunities for economic growth and diversification within regional communities.**

Removal of water from Northern Basin communities of 25-40% will have significant socio-economic impact and so needs to be clearly understood, especially by those whose livelihoods will be affected by such changes. The Guide shows no imperative to understand or evaluate such likely effects. Instead of “adjustment” and “transition arrangements” effort should be directed to establishing how we maintain prosperous rural communities in the Basin while improving environmental outcomes. Examples of socio economic concerns with Guide;

- We strongly dispute the estimation by MDBA of long term job losses resulting from the Plan of 800. The recent report by Judith Stubbs, Exploring the Relationship between Community Resilience and Irrigated Agriculture in the Murray Darling Basin reports the loss of employment in the Gwydir Valley alone at 232 in the Moree Plains Shire. In the Namoi, local businesses estimate a loss of 218 jobs in the Valley’s cotton industry alone. The MDBA calculation of 800 for the entire Basin is clearly a gross underestimation. People undertaking these analyses need to understand how Basin communities work and the opportunities that will be lost and not replaced when water goes. It is no coincidence that the majority of vibrant rural inland towns have irrigation water as a key input.
- The township of Collarenebri provides a living experiment of what happens to a Basin community when significant water is removed from the local economy. Twynam Pastoral Company sold their Collymongle water entitlements to the Federal Government in 2008. MDBA Chair Mike Taylor gave an undertaking at the Narrabri Community Meeting that the MDBA would travel to Collarenebri to see and assess the effects for themselves. We don’t believe this undertaking has occurred.

A balanced approach to the Plan must be taken. The environment needs to sit alongside the social and economic imperatives of communities if we are to do the right thing for Australia as a nation.

## **6. Previous relevant reform and structural adjustment programs and the impact on communities and regions.**

The NSW Water Act 2000 set conditions for returning water to the environment, including the individual catchment Water Sharing Plans and the North West Unregulated Flow Management Plan. As mentioned earlier With 10 years of drought this water plan has not been able to be tested. It is not logical or prudent to embark on yet another round of theoretical adjustments before those already in place have been properly assessed.

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