

# **CRC IF Submission to Productivity Commission Research Project on “Rural Water Use and the Environment: The Role of Market Mechanisms”**

## ***Background***

The CRC for Irrigation Futures is a coalition of 14 research providers and water managers across Australia. Our interests lie in the improved management of irrigated water resources for productive and environmental outcomes.

The comments made below come from the collective experience of CRC IF members and our specific experience as a research team over the past 2½ years.

## ***Observations***

The establishment of water entitlement legislation and associated water trading opportunities has stimulated one of the most significant advances in water management on and off farm ever seen in this country. Specific benefits of this system include:

- defining the “market” value of water and establishing a sound basis for business investment and performance analysis by irrigators and water managers;
- providing greater certainty for many in terms of planning investment; and
- encouraging investment in improved farm water use productivity supported by saved water trading dividends.

Many authors and commentators have pointed out some of the more obvious pitfalls of the system including:

- potential increase in overall extractions through activation of sleeper and dozer licences;
- social inequity associated with windfall gains by the water owning sectors of our agribusiness communities;
- the negative socio-economic and infrastructure maintenance impacts of water trading out of communities and regions especially if this occurs rapidly; and
- the potential environmental impact of unfettered water movement into new areas.

Many of these are being addressed by a range of innovative mechanisms throughout our irrigation districts.

We have a major concern is that the current water trading debate is largely one dimensional and tends to focus around intra-sectoral trade aimed primarily at maximising the value of use. There is only limited thinking and process that will deliver multi-purpose water productivity improvement.

## ***Opportunities***

- There is a need to encourage standardisation of terminology and conditions associated with trade. This will facilitate more innovative ways of accounting for trade (especially across jurisdictions) that incorporate multi-purpose benefits.
- A focus on multi-purpose water productivity will assist the important process of connecting irrigators to the condition of their water supplies to give effect to their vested and political interest in ensuring the reliability, longevity and productive use of water.
- Market mechanisms that acknowledge and reinforce the connection between surface and groundwater; the connection of water, salt and nutrients; and connection of water for production use and water for river and riverine health.

- Change the one dimensional view that is largely encapsulated in the term water use efficiency to water use productivity that makes better use of water for multiple purposes i.e. rural production, environmental conservation, urban and industrial well being.
- Recognition that greatly improved regional development comes when system infrastructure upgrades stimulates private investment – this is priming irrigation regions and enterprises to be investment ready.

Our experience indicates that in order to fully realise the full triple bottom line benefits of our national water resources we need to develop mechanisms which actively support Multi-Purpose Water Productivity. That is, to not simply focus on mechanisms which improve Water Use Efficiency or Environmental Benefits or Social Equity in isolation, but systems which support the generation of multiple benefit streams.

In practical terms this will require a more open trading architecture for water and the establishment of a broader range of externality markets focused around market defined and valued ecosystem service products and services.

Few would argue about the theoretical value of such a system but the critical operational outcome required by our industry is the need to make the irrigation water sector a more desirable investment environment.

The Irrigation Industry's key challenge is to increase water productivity for all purposes in order to attract an ongoing flow of capital that supports coordinated investment in on- and off-farm infrastructure. Without this the environmental management of our working rivers, the social-cultural diversity of many regional areas and a substantial component of our national economy are at risk.

It is not clear to us that the current use of the water trading environment will make our industry a more desirable investment opportunity because of the one dimensional focus of these trades.

It is also not clear how those sectors of our industry which are not major water holders – principally the water service providers and catchment management authorities, can capture the financial benefits they need in order to justify and support on going investment in their infrastructure and outcomes.

### ***In short:***

- All sectors of the “TBL irrigation value chain” should have equal access and ability to trade;
- Ecosystem service markets need to be developed in parallel with water trading markets in order to support multi-dimensional and multi-purpose water productivity improvements; and
- The performance of the water trading system should be evaluated against its impact on the investment attractiveness of both on farm and off farm components of the irrigation sector in addition to the well documented short term economic gains.

### ***Additional information available from the CRC***

The following projects undertaken by the CRC IF have been pivotal in establishing the observations noted below (further details of these projects are available from our website <http://www.irrigationfutures.org.au/>):

- A Birds Eye View;
- Impact of COAG Policies;

- Goulburn Broken Futures Project;
- Seasonal Flows Management in the Murrumbidgee;
- System Harmonisation;
- Toolkits to optimise irrigation at the enterprise level.