Crane Group Limited

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Submission to the Productivity Commission
Inquiry into Market Mechanisms for Water Recover in the MDB

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EXECUTIVE SUMMARY

The current funding and administrative demarcation between investment in water infrastructure and water entitlement buy-backs is retarding industry rationalisation in the irrigation sector, delaying sales of water by willing sellers and acting as a disincentive to investment in infrastructure.

Treating the entire Murray Darling Basin (MDB) as a single market creates price signals which do not accurately reflect the environmental and economic value of water across the eighteen identified river system areas within the MDB.

Markets should be established for each river system (within a whole-of-basin framework), and water infrastructure investors required to compete with buy-backs to deliver water to the river. This approach will create a market environment in which price signals better reflect the environmental and economic value of water.

Irrigators will be liberated to make rational business decisions which collectively drive industry structural adjustment. Investment risk for water infrastructure projects will be reduced to manageable levels.

Current Arrangements

On the 3rd of July 2008, the Council of Australian Governments (COAG) issued a Communiqué announcing the allocation of approximately $3.7 billion for water infrastructure upgrades and related projects.

Each participating state was allocated a fixed amount of the total funding pool and required to submit proposals for infrastructure projects to a "due diligence" assessment conducted by the Commonwealth Department of Environment, Water, Heritage and the Arts.

In parallel, the government plans to spend $3.1 billion buying back permanent water entitlements from willing sellers, under the "Restoring the Balance" program.

Consensus on future water availability in the MDB

The consensus among scientists, economists and irrigators is that future water flows into the Murray Darling Basin will be significantly reduced.

The CSIRO's Sustainable Yield Report for the Murray Darling Basin, released on the 24th of November 2008, predicts that "under the median scenario for 2030 climate, diversions in driest years would fall by more than 10 percent in most New South Wales regions, around 20 percent in the Murrumbidgee and Murray regions and from around 35 to over 50 percent in the Victorian regions." [1]

"Under the dry extreme 2030 climate, diversions in driest years would fall by over 20 percent in the Condamine-Balonne, around 40 to 50 percent in New South Wales regions (except the Lachlan), over 70 percent in the Murray and 80 to 90 percent in the major Victorian regions"[2].

The CSIRO's report - combined with the Murray Darling Basin Commission's sustainable rivers reports, the latest ABARE research on irrigator intentions and the best available future rainfall and temperature projections - provide sufficient information to make informed decisions about water availability.

Some irrigators are already responding to this reality by selling their water rights, exiting the industry and/or changing crops and investing in more efficient on-farm infrastructure.

ABARE reports that 11% of irrigators in the MDB have indicated they are planning to reduce the area irrigated over the next three years, with 8% indicating they are planning to sell some of their permanent entitlements and 4% planning to sell all their permanent entitlements.

The 16% of irrigators planning to increase the area irrigated are not doing so in anticipation of a return to previous rainfall patterns – they all intend to use temporary water rather than buying permanent entitlements.

These decisions – taken in advance of the implementation of a fully rational water market - indicate the industry is already gearing up for rationalisation.

Unfortunately, however, the current administrative arrangements prevent all stakeholders from translating their knowledge and intentions into investment decisions that both restore the river system and rationalise the irrigation sector for long term sustainability.

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[1] "Water Availability in the Murray-Darling Basin", CSIRO, October 2008, p5.

[2] *ibid*.

Irrational Incentives

As Professor Mike Young noted recently, the National Water Initiative implies an agreement between the Commonwealth and all State Governments that "Australia and the irrigation industry as a whole will be better off if and when all water users are required to pay the full cost of providing access to water supply infrastructure and of delivering water. Most professional policy analysts do not recommend subsidies to existing irrigators, but support sensible grants to help facilitate adjustment by those wishing to exit the industry."[3]

Crane Group believes that the current arrangements subsidise certain water managers over others without regard to each irrigator's relative efficiency and commercial viability.

Crane agrees with Professor Young that "whenever governments step in and give money to the less able managers, the more talented managers can't compete and move to other areas in a manner that can cause regional economies to go backwards. Money follows opportunity, not barriers, to change."

The challenge is to create a regime in which water managers operating in a market have the correct incentives to drive the necessary industry structural adjustment.

Recommended market dimensions

Eighteen separate water markets should be established in the Murray Darling Basin.

These markets should be geographically consistent with the eighteen regions identified in the CSIRO's Sustainable Yields Report, which "reflect existing river system models and surface water sharing plan areas".[4]

Designed in this way, each market will send price signals which best reflect the environmental and economic value of water shared by users and the environment in a particular region. Guided by the best available science and these more accurate market signals, Australia's governments can with greater certainty allocate adequate funding to restore the river to health.

The price of water will almost certainly differ between markets, as environmental and commercial values vary from place to place. Entitlement holders, infrastructure owners and the government as environmental stewards will have a consistent price signal for the water resources they share within a river system/region/market.

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[3] Young, M. And McColl, J., "Securing Water: What is the best and fairest way to secure water for the environment?" *Droplet No. 18*, 26 July 2009, University of Adelaide.

[4] "Water Availability in the Murray-Darling Basin", CSIRO, October 2008, p12.

As illustrated in Acil Tasman's "Australia's Working Rivers" Report released in May 2008,[5] there are many potential water infrastructure projects in planning – but not funded – which could deliver water at a lower cost per ML than the price at which entitlement holders are willing to sell. The markets should therefore be designed to facilitate competition between buy backs and water infrastructure projects.

Recommended Market Mechanism

One market mechanism available to facilitate open competition between buy backs and infrastructure is a variant of the "reverse auction" approach, under which a clearing price is paid after "a range of offer prices are set and participants are invited to indicate how many shares they would sell at that price".[6] Professor Young argues that the reverse auction would work well to ensure that the least efficient water users would exit the irrigation industry.

Crane Group argues that allowing proposed infrastructure project proponents to participate in these reverse auctions would ensure the seamless integration of infrastructure investment and industry rationalisation.

Irrigators will have a clear signal as to the value of the entitlements they hold. Irrigation Trusts will have a much better indication of future water use by members. The danger of building "gold plated redundant assets" – for private and public investors alike - is dramatically reduced.

In this way, individual irrigators and the industry as a whole will have sufficient information on which to base rational decisions about the future of irrigation industries in each particular region – all within a market framework where price signals accurately reflect the environmental and economic value of the water concerned.

[5] "Australia's Working Rivers", ACIL Tasman, May 2008, pp28-30.

[6] Young, M. And McColl, J., *op cit*.