



21 April 2017

National Water Reform Inquiry  
Productivity Commission  
GPO Box 1428  
CANBERRA ACT 2600  
[www.pc.gov/inquiries/current/waterreform](http://www.pc.gov/inquiries/current/waterreform)

To whom it may concern,

**Subject: National Water Reform – Inquiry into the reform of Australia’s water resource sector**

**Background**

The town of Coleambally was developed in the 1960s for the sole purpose of supporting farmers who were encouraged by the NSW Government to move to the area and commence irrigated farming following the completion of the Snowy Hydro Scheme. The town remains solely dependent on irrigated farming to this day.

Coleambally Irrigation Cooperative Limited (CICL) is wholly-owned by its farmer Members; is the fourth largest irrigation company in Australia and operates the most modern open-channel irrigation system in the country. The system attracts significant international interest and is gravity fed and solar powered and incorporates state-of-the-art metering and flow regulation technologies providing automated water ordering and water accounting. In addition, CICL’s members have spent \$104m over the last decade improving their land and water management practices and enhancing local biodiversity. CICL also manages 1700ha of Crown land that has been set aside for biodiversity purposes.

**Discussion**

CICL is unable to respond to a number of questions posed by the Productivity Committee because the related issues are ones that have not impacted on it or because its knowledge is dated. That said, there has not been a week since the mid 2000s when CICL has not been required to devote resources to dealing with water reform-related issues.

Before turning to some of the specific information requests from the Productivity Commission, CICL wishes to make two overarching points and they are:

- Some of the components of the National Water Initiative and the related targets set in the related IGA were very ‘aspirational’ and where that was the case, there has been little substantive process.

While there have been some ‘gains’ from the national water reform process, irrigators are exhausted by what seems to be a never-ending reform process and that much of the promised certainty that was supposed to accrue has not. In making this observation, CICL considers the Murray-Darling Basin Plan (hereafter referred to as “the Basin Plan”) to be a subset of the national water reform process rather than a separate process.

In terms of the specific issues that the Commission has sought advice on, CICL offers the following thoughts:

- *What have been the key benefits of water sector reform to date?*

CICL considers the key benefits from water sector reform to date to have been:

- The establishment of a property rights framework for water entitlements, supported by state based legislation, as this has provided the legal framework that supports trade of water entitlements and the associated water allocations.
  - NSW Water Sharing Plans (WSP) which describe the sharing of water between the environment and consumptive users and between different classes of water entitlements. Whilst not perfect, the WSPs have provided a level of certainty to the irrigation industry and water entitlement holders than most other aspects of the water reform process – it is a pity that the ‘iterative’ approach to water recovery embedded in these plans was not allowed to be the primary means of water recovery in the Basin Plan.
  - The regulation of Government owned monopoly bulk water providers in NSW, especially with respect to water charges.
  - The transfer of irrigation schemes from Government to private ownership because this realised productivity gains that would not have occurred under a continuation of Government ownership.
- *Data and information sources that might be useful for assessing progress*

CICL refers the Commission to the following information sources:

- Aither 2017 Water markets in New South Wales, improving understanding of market fundamentals, development and current status, available at [http://www.water.nsw.gov.au/\\_data/assets/pdf\\_file/0010/709912/Water-markets-in-nsw-aither-report-for-dpi-water.pdf](http://www.water.nsw.gov.au/_data/assets/pdf_file/0010/709912/Water-markets-in-nsw-aither-report-for-dpi-water.pdf)
- NSW General purpose water accounting reports available at <http://www.water.nsw.gov.au/water-management/water-availability/water-accounting>

- The Australian Competition and Consumer Commission (ACCC )Water Monitoring Reports available at <https://www.accc.gov.au/regulated-infrastructure/water/water-monitoring-reporting>

In referencing these reports, CICL's wishes to make it clear that it is not endorsing the reports per se.

- *Areas where NWI reforms are stalled or delayed*

- Application of the National Metering Standard: CICL cites the National Metering Standard as a very concrete example of a national water initiative that was very aspirational. To the best of CICL's knowledge, are still only two meters that have met the standard. Quite simply, there two few practitioners at the table when the standard was developed; the standards were set too high; and there was a lack of regard to the fact that there was insufficient capacity in Australia to undertake the testing required for pattern (meter) approvals.

The irrigation industry is not alone in regarding the standard as a 'millstone' as State and Commonwealth Governments also continue to roll-out/fund the roll-out of non approved meters because there is no alternative but to do so.

- Inconsistent approaches by State Governments to the notion of community service obligation in the context of water pricing. CICL contends that irrigators have had to bear a disproportionate share of the cost of national water reform, particularly with respect to the cost of MDBA activity.
- Basin Plan: Although there is a reluctance by the Commonwealth and Basin States to publically admit it, aspects of the Basin Plan are behind schedule – the MDBA has found its oversight of Watering Trading far more complex that it envisaged; the MDBA's social and economic impact analysis is not at the point where it can allow the Authority and the Basin States to make judgements with any level of confidence that 450GL of up-water can be recovered without adverse social and economic consequences; the development of a Constraints Management Strategy is proving much more difficult than anticipated and all involved parties are trying to find ways in which the Sustainable Diversion Limit adjustment mechanism (and the environmental equivalence modelling mechanism therein) can be applied in a way that delivers the expected level of savings. In highlighting these Basin planning challenges, CICL is not suggesting that anyone is failing, but it is suggesting aspiration got ahead of reality and that those charged with delivering the Basin Plan are now trying to find adaptive solutions to deal with the consequences.
- Water Market reform: CICL submits that there is a functioning water market system across the Murray-Darling Basin but it is one that falls short of what Governments envisaged it would now be when they signed the IGA on national water reform in 2004.

Notwithstanding the significant amount of time and money spent by the Commonwealth, the activity of brokers and intermediaries remains largely unregulated and the commonality that was envisaged in terms of trading conditions and processes has not been attained. That said, it is Government and not market participants that established these aspirations and notwithstanding that they have not been realised, the market does function. Water trading is now a norm within the irrigation industry – as attractive as the notion of a common market with standard processes and charges might be, market participants are not prepared to pay the cost of establishing and maintaining such an approach. CICL notes that while progress has been slower than anticipated in these areas, Governments have tackled the challenge of improving the ‘front end’ of the market by providing multiple websites that provide information about water/dam storage levels, water allocations, and trading terms and conditions to the extent that the water market is now awash with such information. In contrast, the ‘back-end’ of water trading i.e. the administrative processes undertaken by States to approve trades and adjust registers has received much less attention.

CICL submits that some of the Government enthusiasm for improving market information needs to be re-channelled into improving back-end processes. It also submits that for the time being, the questions of improved market regulation and a common water market ought to be set aside because the existing market is functioning; because new water trading products are being developed without government intervention; because water is being directed to higher value uses; and because there are more significant water reforms that have yet to be sufficiently progressed e.g. the Basin Plan.

- *Water resource management*

CICL considers that:

- *Property rights for water are more clear and more secure than they were prior national water reform* but that they are less secure than they ought to be because of the Basin Plan. To clarify, there are aspects of the Basin Plan such as the notions of ‘shepherding’ and ‘piggybacking’; constraints management; the re-setting of Long Term Diversion Limit Equivalence -all of which have yet to be resolved- that have the potential to undermine water property rights if they are not dealt with properly. In addition, whenever a prerogative exists that allows a Minister to suspend a Water Sharing Plan without reference to water entitlement holders (as it does in NSW), property rights are less secure than they ought to be.
- *Transparency, inclusiveness and cost effectiveness of processes for the determination allocation and sharing of water* are largely at the levels that they can realistically be expected to be in NSW (but CICL is unable to comment on whether this is the case in other states).

- *Water trading:*
  - In addition to CICL's earlier comments, CICL submits that some of the 'constraints' to trading that were identified in the NWI are more logical than was foreseen by some of the signatories to the related IGA and that is why realisation of some of related goals has been elusive.
  - it is not just water trade that needs to be underpinned by adequate measurement, monitoring and water accounting systems, it is the entire water 'supply chain' – while ever the measurement of water within dams and river system remains as rudimentary as it is across much of the Basin, someone in that supply chain is being short-changed.
  
- *The efficiency and effectiveness of environmental management* is less than it ought be, but CICL agrees with the Commonwealth Environmental Water Officer's recent assertion that these are not things that can be managed neatly within a calendar or fiscal year and that it will take some years to establish whether the environmental arrangements embedded in the Basin Plan are working. That said, there is clear evidence in the form of fish kills, due to cold water pollution, that there are steps that can be taken now to avoid environmental harm. It is equally clear that environmental watering that is aimed at improving the health of native fish species but that also promotes increased numbers of non native species, like the European carp, are less efficient and less effective than required.
  
- *Water services*
  - *Rural and urban water services are provided efficiently:* CICL is not in a position to comment on the efficiency of urban water delivery or on rural delivery beyond the Murrumbidgee catchment in which it operates. CICL considers it enjoys a good level of service from WaterNSW but that there is scope for improved measurement within the river system. CICL is also reasonably comfortable with WNSW's charges – the Commission can access a recent CICL submission on WNSW's proposed charges for 2017-21 on IPART's website.. If the Commission does access that submission, it will note that CICL is more concerned about the MDBA's charges than WaterNSW's because it has little visibility of the MDBA's related activities within the catchment and even less of the associated benefit that is supposed to be accruing to its Members.
  
- *Water planning*
  - *Key areas of water planning where further progress is required to achieve the objectives and outcomes of the NWI?* Water planning covers a broad range of activities and occurs within and between jurisdictions. CICL levels of confidence in water planning varies from agency to agency, but in general terms:
    - it has confidence in the Bureau of Meteorology's contribution
    - it lacks confidence in the MDBA's modelling
    - it has a considerable level of confidence in the NSW's water planners but those at the operational level are working with inadequate tools to know, with what CICL would consider to be an appropriate level of confidence, how much water

they are managing at any given time i.e. the measurement systems in dams, storages and in the river are less than adequate.

- CICL has a growing level of confidence in the CEWO but that level of confidence is derived from the access it enjoys to, and the pragmatism of, the CEWH – as such, its level of confidence could be easily eroded.
  - CICL is concerned that water planning in the context of the basin Plan continues to be too heavily focussed on volumetric targets and that insufficient regard is being given to complementary measures such as the mitigation of cold water pollution, provision of fish passages and the introduction of carp herpes virus. The focus on providing additional environmental water and reducing extractions from the productive sector is too narrow and does not adequately acknowledge the importance of non-flow and non volumetric issues on flood plain and river health. In reviewing the science behind the Living Murray Initiative Benson et al<sup>1</sup> reported the River Murray Scientific Panel identified 22 activities which threatened river floodplain ecosystem health, seven of these related to flow and only two related to reduced volume.
- *Are processes for reviewing water plans sufficiently robust, transparent, open and timely.*
- CICL considers that there is insufficient time available to NSW to produce the number of surface and ground water resource plans (WRPs) required of it under the Basin Plan. Given the time taken within the MDBA to review the first WRP submitted to it, and the relative simplicity of that plan compared to those that will be NSW in respect of the Murrumbidgee and Murray catchments, for instance, the MDBA may be very challenged to meet the accreditation timelines set out in the Basin Plan.
- *Are current water entitlement and planning frameworks conducive to investor confidence, facilitating investment in major new infrastructure (such as in northern Australia) while managing risks to the supply security of existing water users?*
- The Murrumbidgee Regulated River Water Sharing Plan (WSP) is now in its second iteration and the development of the catchment's Water Resource Plan is underway. The WSP has supported continued investment in irrigated agriculture in the Murrumbidgee but it remains to be seen whether additional requirements embedded in the Basin Plan and in required in the WRP will reinforce or undermine the certainty that investors seek.

- **Environmental water management**

- *What are the guiding principles for 'best practice' management of environmental water? Are the institutional arrangements for held environmental water working well?*

Examples of guiding principles for 'best practice' management of environmental water are:

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<sup>1</sup> Benson, L, Markham A and R. Smith (2003) The Science behind the Living Murray Initiative.

- Transparent decision making processes including utilising local knowledge and integrated with other environmental water holders.
- Clear objectives
- Prioritisation to maximise environmental benefits
- Multi year outcomes
- Risk assessment
- Monitoring and evaluations
- Review of effectiveness, leading to modification

CICL's considers that the owners of held environmental water are under more obligation and scrutiny that they have ever been – while that may be somewhat uncomfortable, it is engendering closer liaison with other stakeholders and there is a growing recognition that all of those involved are on a new learning curve. The effectiveness of the institutional arrangements that are in place is very reliant of communication and co-operation at a regional level. In the Murrumbidgee catchment, these arrangements are considered to be working quite well.

- *What is the role for governments in promoting trade in environmental water, and acquiring environmental water at least cost to community?*

Water held by governments that is in excess of the environmental need at a point in time should be able to be traded. CICL considers the question of “least cost to the community” to be highly vexed in that raises the question of whether the term simply implies the \$/ML at which water is recovered, or whether it also contemplates the prospect of social and economic impacts. Suffice to say that having participated in the Water4Rivers, Water Smart Australia, PIIOP and OFIEP water recovery programs, CICL is not contemplating facilitating the recovery of more water for the environment – to do so would undermine the modernisation efforts undertaken through those programs and that of the longer term sustainability of irrigation within the Coleambally Irrigation Area.

- **Water services**

- *Has the NWIC been successful in achieving its objectives with respect to rural water services? If not, what actions are required to achieve these objectives?*

CICL mentioned earlier that some of the major reforms that have occurred in NSW under the water reform agenda have been successful e.g. the transition of government owned irrigation schemes to private ownership, the separation of land and water, water trading and the independent regulation of government-owned monopoly water service providers. Over time, the redistribution of responsibilities between WaterNSW and DPI-Water should also bring efficiencies. The increased involvement of the ACCC through the Water Charge Rules (Infrastructure, Termination Fee and Planning and Management the Rules) has resulted in far more regulatory impost for very little in the way of improvement in water services. CICL notes that the ACCC recently provide the Minister for Agriculture and Water Resources with a raft of changes to the rules by which it

regulates the irrigation infrastructure operators – CICL considers most of the proposed changes to be unnecessary, onerous and a case of more over-reach.

- *Are there any instances where similar rural water services providers should be subject to different regulatory treatments based on the nature of their and/or jurisdiction of operation? If so when and why are such different approaches warranted?*

CICL has repeatedly made the case that member-owned water service providers should be more lightly regulated than government operators and that is because member-owned operators have CEOs and Boards that cannot distance themselves from the decisions they take.

- *What role should independent economic regulators play in the regulation of rural water services?*

CICL supports the independent pricing regulation of government-owned monopoly service providers and such regulation should extend to that of the MDBA..

- *How the needs of rural water service providers (both bulk water and irrigation delivery) and preferences of users balanced in setting infrastructure charges? In what ways could this process be improved?*

In NSW, the price determination process is the mechanism for considering the preferences of water users in parallel with WaterNSW's business requirements. The current determination has involved WaterNSW, the irrigation sector and IPART considering WaterNSW's tariff structure and customers have been able to express their views directly to WaterNSW (through valley-based Customer Service Committees/Customer Advisory groups) as well as directly to IPART through its formal consultation process.

In the case of private operators, it should be left to the operators and members to establish appropriate processes. In the event that members feel disempowered in this area, they have direct recourse to their Boards and the ACCC.

- o *How effectively do infrastructure network owners engage with users (both current and prospective) to ensure infrastructure programs address current and future needs?*

CICL's Members have been consulted, in various ways, at every step in its modernisation journey and they had the opportunity to veto those activities that saw CICL return water to Government in return for funding to undertake some of that modernisation – the fact that the Members did not do so, speaks to strength of the proposals put by CICL and the way it engages its Members.

CICL's Members understand there is little point in modernising if assets can't be maintained and, over time, replaced. The Co-operative's Members are required to contribute to a replacement levy that supports a 100 year plan asset management plan.



CICL thinks it important though that the Productivity Commission understands the challenges some irrigation infrastructure operators are faced in adjusting to reduced water deliveries. For example, long- term average deliveries in the GMID are expected to be 41% lower than the volume forecast when modernisation of the network commenced in the late 1990s<sup>2</sup> Clearly, there is a fine-line in the pursuit of improved service and increased irrigation efficiency and the maintenance of sufficient ‘critical mass’ within an irrigation system.

- *Is infrastructure charging sufficiently flexible to cope with changes to the number and composition of customers within networks? If no, how could infrastructure charges be improved?*

CICL’s irrigation is one of least constrained irrigation systems in terms of capacity in Australia – nonetheless, aspects of the original layout of the Coleambally Irrigation Area act to constrain development e.g. the 200 ha size of farms. CICL considers that the larger irrigation schemes have been able to adapt to changing customer needs but notes that some of the ACCC’s proposed Water Charge Rules will serve to inhibit innovation within such schemes.

- *Have termination fees been effective in enabling infrastructure network owners to adjust their networks in response to declining usage?*

CICL has not suffered as much as other irrigation companies from declining usage and that is because its modernisation allowed it reduce its conveyance losses very significantly and this served to offset some of traded out. CICL initially used its termination fees to offset what would have otherwise been increased charges to remaining irrigators (irrigation schemes are largely fixed-cost businesses). However it subsequently used the remainder of the fees as an incentive to encourage its Members to take up additional delivery entitlement (CICL bills on the basis of delivery entitlement not water entitlement) – and its related incentive saw a 95% take-up of what had been terminated delivery entitlement. In short, CIC and its farmers have adjusted to the impact of water recovery and in concert with the arrival of new investors and new crops, there are very few farms on the market in the Coleambally area and CICL’s area of operations had expanded rather than shrunk.

- *What, if any, government oversight should there be for privately owned providers of providers of irrigation services?*

The premise that because private irrigation schemes are natural monopolies is less relevant than it ever was. Irrigators are increasing better educated and more sophisticated in their approach to their businesses. The Boards and Management of irrigation schemes are similarly more knowledgeable.

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<sup>2</sup> TC&A with Frontier Economics 2017 Social and economic impacts of the Basin Plan in Victoria.

CICL is currently bound by the following regulation/instruments:

- National Co-operatives Law
- Corporations Law
- Australia's various tax laws.
- Water Act 2007
- Water Market Rules and Water Charge Rules
- Basin Plan Water Trade Rules
- ACCC water monitoring
- Bureau of Meteorology
- Register of Foreign Land and Water Entitlements
- ABS and ABARES reporting
- Water Management Act (NSW)
  - o Operating licence
  - o Combined water supply work approval
  - o Water Access Licences
- Environment Protection Licences
- State Environmental Planning Policies
- Local Government Planning requirements

CICL submits that there is a point at which a privately-owned business ceases to be 'private' and that if much more Government intervention comes its way, like the ACCC's proposed changes to the Water Charge Rules, it would more closely resemble an agent of Government than a member-owned business.

- o *How robust are the cost-benefit analysis applied to irrigation infrastructure projects? Where could they be improved?*

CICL's invites the Productivity Commission to examine the key business indicators at Appendix 1 to form its own view of the robustness of its irrigation infrastructure projects because it has been those projects that have allowed the Co-operative to generate the water efficiency and staff savings that it has and to maintain its pricing where it has.

CICL thanks the Productivity Commission for the opportunity to make a written submission and would welcome the opportunity to present to the Inquiry.

If you require further information please contact Jenny McLeod, Policy and Communication Manager

Yours sincerely,

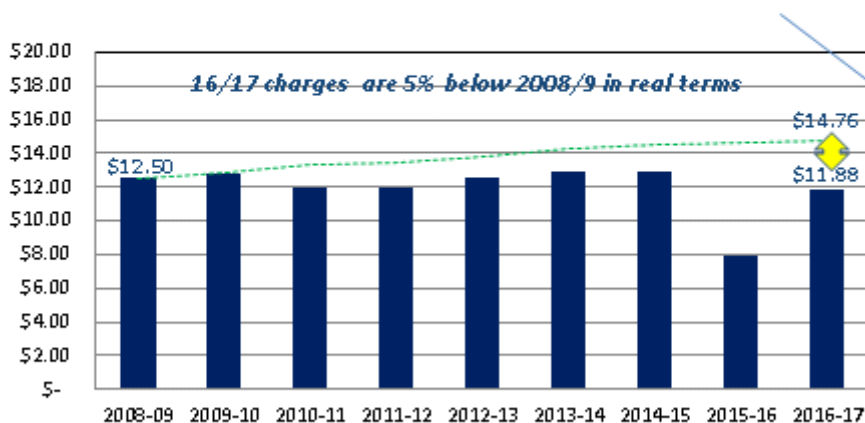
John Culleton  
Chief Executive

### Key Business Indicators

## Modernisation Outcomes – Increased Operating Efficiency (Losses in ML)

99/00	75,800	08/09	32,046
00/01	85,806	09/10	39,839
01/02	99,690	10/11	32,316
02/03	110,312	11/12	33,081
03/04	90,123	12/13	28,813
04/05	108,026	13/14	25,056
05/06	39,784	14/15	26,975
06/07	35,704	15/16	27,084
07/08	30,627		

## Modernisation Outcomes - Price Stabilisation



# Modernisation Outcomes – Increased Staff Productivity

