SUBMISSION BY THE

AUSTRALIAN GOVERNMENT DEPARTMENT OF AGRICULTURE AND WATER RESOURCES

NATIONAL WATER REFORM – PRODUCTIVITY COMMISSION ISSUES PAPER

This submission responds to issues raised in the Commission's Issues Paper on water reform in Australia. In particular it focusses on matters that the Department of Agriculture and Water Resources (DAWR) has an interest in and that the Commission may wish to examine.

We encourage the Commission to consider this Review as an opportunity to examine the expected benefits and costs of full implementation of the National Water Initiative over the coming decade. This should ideally be cast in terms of potential economic, social and environmental outcomes and be able to be interpreted at both an individual level (what it would mean for individual water users) and in terms of the national outcomes that are possible. Given the length of time that is needed to achieve outcomes from these reforms in the water sector it is necessary for the national focus of investment in these reforms to take a long view over the next decade and beyond.

Currency of the National Water Initiative

The National Water Initiative (NWI) 2004 combines an aspirational national microeconomic reform plan for water management and a Council of Australian Governments (COAG) action plan with agreed outcomes and delivery dates. As the NWI was agreed 13 years ago many of these dates are now in the past and there are references to redundant matters and organisations, such as the National Water Commission. If the NWI is to continue to function as an enduring framework and action plan for water reform it is necessary to at least administratively update the NWI. Such an update should focus on removing or updating obsolete dates, processes and organisations. A minimal approach of this nature would still require consultation and negotiation with jurisdictions to establish new targets and dates for those agreed reforms not already fully implemented.

Expanding the scope of the NWI to be able to cover contemporary or short term water management issues would also be of value. This could include planning for and responding to extreme natural events such as floods and drought; salt water intrusion due to sea level rise; climate trends in rainfall; black water and other events impacting on water quality and aquatic biosecurity threats.

Water markets and the importance of a level playing field

The NWI (paragraph 34) allows parties to the agreement to have separate water access and entitlement arrangements for the minerals and petroleum sectors from those applying to other sectors of the economy, such as agriculture and manufacturing. Water markets are now well developed in the Murray Darling Basin and in some other areas and could efficiently allocate water between alternative water users, both within and across sectors. However, water trading

within and between sectors needs to be more transparent and have similar costs and administrative rules. This is particularly important given the scale of agriculture water use relative to other sectors. More than 70% of total Australian water use was attributable to irrigation and related uses in 2014/15 (BoM, 2014/15 National Water Account). In that year, 5.6 million ML of water was traded within and between mainly rural areas, an 8% increase on the previous year. This compares to only 1.73 million ML of water used by Australia's urban water users in the same period. In other words, more than three times as much water was traded in 2014/15 than was used by all of our cities and towns. The importance of ensuring that water markets operate efficiently becomes obvious.

While some rules are required for the efficient operation of markets and to allow for hydrological constraints, the current plethora of rules and trading arrangements inhibit the effective operation of the market. Of concern are rules that constrain cross-border or cross-catchment trade to limit the efficient movement of water across jurisdictional boundaries. Additionally, some rules may make it harder for water to be delivered in the volumes and at the times it is required – an example is rules around the volume of water that can be delivered through the Murray River 'choke' to the lower Murray, leading to potential production impacts on the horticulture sector. Complex rules also allow better resourced and more knowledgeable traders to obtain real or perceived market advantages.

Concerns over trading rules are potentially being exacerbated by the development of new irrigated cropping areas which may change the pattern of water use across the Basin. The expansion of the almond industry in Sunraysia is an example of this. Water trading has been successful in facilitating these developments, but a policy issue has emerged around whether this is a matter that should be left to markets or whether there is a need for additional land and water planning or coordination arrangements. It is recognised that this is a common issue for network industries.

Water brokers provide an important service in facilitating market trading, but concerns have been raised by some irrigators around the behaviours of some brokers in exploiting these rules to their benefit. Equity and access to trading are issues the Commission should also consider. Irrigators are concerned by difficulties in understanding, gaining confidence about markets and participating in water markets. This includes impediments the Commission describes in Section 4.2 of its Inquiry report on Regulation of Agriculture. Examples often cited are discriminatory (including possibly anti-competitive) impacts of certain rules, leading to comparatively higher costs for trading smaller volumes and transfers outside of an area.

Establishing and expanding water planning and entitlement frameworks, the basis of water markets, may be hindered by uncertainty about the net benefits. We encourage the Commission to explore areas for ongoing reforms. The reforms should focus on the ongoing state and territory legal reforms necessary to enable separation of water rights from land, enhancing inter-valley trade; and facilitating trade for surface and groundwater as well as within or between unregulated systems. Water markets could also be expanded to other sectors, such as the urban sector— noting some trading already occurs (an example is Victoria's trial described at http://delwp.vic.gov.au/water/water-for-victoria/realising-the-potential-of-victorias-water-grid-and-water-markets).

As noted earlier, although the NWI allows parties to have different arrangements for the minerals and petroleum sectors (para. 34), we encourage the Commission to consider the resulting missed

trading potential. For example, mines are typically a net user of water in their early years, but after this have the potential to become net providers of treated mine water. If statutory-based water planning is able to be implemented nationally, taking full account of all industries that use water as an input, then there is the potential for greater long-term investor confidence in the water sector.

It is also now clear that the creation and issuing, preferably by competitive market means, of statutory water entitlements under secure planning arrangements does fundamentally underpin private sector investment in both water infrastructure and water-related infrastructure such as intensive horticulture farms. For example, this has been recognised in the White Papers on Northern Australia and on Agricultural Competitiveness, where compliance with NWI-water management principles is a prerequisite for receiving public funding for water infrastructure.

Transparency of market information

A key outcome of the NWI is for parties to facilitate the operation of efficient water markets (para. 58). This depends on market participants having complete, accurate and timely information, supporting them to make well-informed trading decisions and, in turn, promoting market confidence and increased trading activity. We continue to observe issues arising from the lack of transparent and timely data including: the price and volume of individual trades; the type of trade (for example, spot, environmental, bundled and in-kind transfers); and, details of alternative products (such as multiple year leases of allocation water, carryover and other forms of storage).

More public information is needed on how water markets operate, including trading rules, processes and details about water rights. The jurisdictions that manage and administer water entitlement trades can provide this information, but it can be made simpler and easier to access for current and potential market participants.

The government has also established a register of foreign ownership of water entitlements to increase transparency about foreign investment in Australian water resources. From 1 July 2017, foreign persons must register their legal interests in registrable water entitlements and contractual water rights with the Australian Taxation Office, which also administers the register of foreign ownership of agricultural land.

Notwithstanding the comments above, the NWI's water planning and entitlement framework and outcomes for water markets and trading have proven to be relevant and enduring. Thirteen years after the NWI was agreed, Australia's water markets have continued to develop and mature, providing benefits to individual water holders, the economy and the environment. In support of this success, there is also the potential to further develop a set of indicators to methodically assess the degree that water markets have developed and matured, building on existing analysis such as the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) water markets dashboard available at agriculture.gov.au/abares/research-topics/water/aust-water-markets-reports.

Urban Water

The Australian urban water sector is highly significant and its operational and economic significance is capable of affecting the national balance sheet and overall quality of life. The urban

water sector delivers services to over 20 million Australians, across some 220 urban water utilities with revenues of over $15 billion per annum and employing around 30 000 people. Water supply, sewerage and drainage services are provisioned almost exclusively by government owned utilities with assets worth over $160 billion. Each year Australia invests $3.5 – 4.5 billion in water and wastewater infrastructure. The capital intensive nature of the current urban water industry also means that many service functions are natural monopolies, where third party competition would be inefficient or likely to be constrained. Ensuring that the sector is operating in the most efficient and effective manner possible is of national interest.

The Australian urban water sector, similar to the situation faced in many countries around the world, faces increased financial constraints as well as pressures to meet growing and changing consumer demands. NWI-consistent reforms in areas such as water pricing and infrastructure investment could help to address pressures from higher water bills for customers, an erosion of taxpayer value in public water utilities and missed opportunities for innovation, efficiency and diversification of water supplies.

Since the 2011 Productivity Commission Inquiry into Australia's Urban Water Sector, several studies have highlighted the need for reform in the urban water sector. These pressures arise from contemporary issues such as population growth, climate change, growing customer and community expectations for secure access to potable water, consumer sensitivity to price, and the de-linking of water pricing policies with operational and budget requirements for funding of infrastructure.

The Productivity Commission 2011 inquiry in particular concluded that:

> "*Conflicting objectives and unclear roles and responsibilities of governments, water utilities and regulators have led to inefficient allocation of water resources, misdirected investment, undue reliance on water restrictions and costly water conservation programmes.*"

The Productivity Commission at that time considered that rather than trying to create a NWI-consistent competitive market, the largest gains were likely to come initially from establishing clearer objectives and improving the performance of institutions with respect to roles and responsibilities, governance, competitive procurement of supply and pricing. The 2014 Urban Water Futures report prepared by the National Water Commission (NWC) provides evidence that these issues have not diminished and in fact have increased, in some cases, since government's committed to the NWI. The NWC pointed to increased pressures arising from issues such as:

- Drought and climate change
- Higher than expected population growth
- Legacy of under-investment in water infrastructure
- Inadequate institutional structures and management arrangements

The NWC found that there remained priority areas of reform needs in the urban water sector. The report found that governments had yet to fully achieve agreed separation of policy, regulation and service delivery functions as outlined in the NWI. In particular, the capacity of utilities to manage operational and investment decisions was being undermined by a shifting policy environment and, occasionally, by political interventions. The NWC found that policy and

regulatory structures typically reflected a single monopoly provider model that needed to be able to adapt to allow for private ownership, private investment and competition. The report also found that delivering on the NWI reforms would further improve outcomes and help ensure the longer term sustainability of the sector.

In August 2014, Frontier Economics produced a report for the Water Services Association of Australia (WSAA) titled '*Improving Economic Regulation of Urban Water*'. The report acknowledged deficiencies identified by WSAA in the urban water sector and recommended (among a wide range of recommendations):

- legislative change in some jurisdictions to provide economic regulators with deterministic powers to regulate prices and service standards (WA and NT)
- clarifying regulatory objectives and providing greater guidance on trade-offs;
- providing for a limited merits review of decisions by economic regulators;
- cost-benefit analysis and rigorous Regulation Impact Statements being undertaken in regard to standards set by other regulators;
- a range of actions by economic regulators to more effectively achieve underlying objectives including:
    - periodic 'step back' reviews of their approaches with a view to potentially reducing prescription and regulatory burden
    - undertaking 'financeability' tests as a matter of course
    - potential adjustments to methodologies in applying the building blocks model
- adopting appropriate forms of price control (e.g. revenue caps) to suit circumstances; including incentive and risk sharing mechanisms in regulatory controls measures; and
- utilities improving customer engagement processes, improving the quality of regulatory submissions and integrating internal processes into regulatory process requirements.

Further, in November 2015 WSAA and Infrastructure Partnerships Australia jointly presented a report on the urban water sector. The report identified that sector performance is being impacted by:

- Fragmented economic regulation which fails to effectively incentivise innovation or promote the primacy of the customer-utility relationship
- Pricing approaches that preclude signalling of actual service costs, distorting competition and impeding efficient investment
- Poorly identified and inconsistent linkages between economic and environmental regulation, impeding a sufficient focus on customer needs and preferences
- Utility and broader state balance sheet constraints, impacting public utilities' capacity to maintain and renew assets in time to meet population growth
- Unclear and embryonic frameworks governing competition and third party access, creating barriers to private investment and long run financial uncertainty for public utilities
- Insufficient consideration- and coordination in respect to the potential use of stormwater as part of the total urban water cycle; and
- Ongoing exposure to pressures from climate variability and extreme events

Notwithstanding the issues raised above, the Department acknowledges that the millennium drought, adversely affected several of Australia's most populated cities along with the nation's food producing regions. This consequentially affected the country's environment, economy and arguably the national psyche. This resulted in an increased focus on the security of urban water supplies and a concerted effort by all governments to diversify the water supply mix and use water more wisely.

Urban water networks emerged from the millennium drought with enhanced water infrastructure but this has come at significant cost to consumers and to the utilities themselves. Water prices have risen substantially and, along with rising electricity prices, has led to increased sensitivity of consumers about their utility bills. Higher infrastructure costs have been largely absorbed by the water utilities themselves through increased borrowings, leaving the sector financially depleted and under-resourced. The role of price setting for water and long term planning for re-investment in urban water supply networks is therefore critical. It is important that price setting for bulk water supply is independent and transparent. Differences in approach to water price setting in New South Wales, Queensland and Victoria are of particular note. We would also value comment from the Commission on the validity of concerns about state-owned water corporations providing dividends and depreciation allowances to government, where these funds would otherwise have been used for reinvestment in water infrastructure.

The Harper Review notes that water sector reform has not progressed as far as the electricity sector. Recent examples from the Australian Energy Regulator in relation to final price determinations for electricity transmission and distribution indicate savings of up to 35% over a 5 year period have been achieved in operating expenditure and 25% in capital expenditure. In the 2014-15 financial year, the Bureau of Meteorology's Urban National Performance Report of water utilities identified operating expenditure of $7.3 billion and capital expenditure of $3.6 billion for the sector (the lowest in 5 years). If this level of expenditure were assumed over a similar 5 year regulatory period to that of the energy sector and a conservative 10% efficiency saving could be achieved through measures such as those proposed across both operating and capital expenditure for the total period, it could represent a saving to the economy of approximately $5 billion or $1 billion per annum. This translates into a $105 per annum saving for the 9.5 million customers connected to urban water and sewerage services.

Establishing whether a refreshed and concerted national effort in urban water reform is still relevant a further six years into implementation of the NWI (from the 2011 inquiry) would be helpful in understanding whether new approaches to determining the efficient allocation of resources in the urban water sector need to be developed or, alternately, a renewed effort in implementing the 2011 recommendations is required.

The NWI and regional and rural water infrastructure investment

Australian Government investments through the National Water Infrastructure Development Fund (fund) ($500 million) and the National Water Infrastructure Loan Facility (loan facility) ($2 billion) are conditional upon the implementation of operational arrangements consistent with the NWI. This approach is intended to encourage state and territory governments to further develop and implement arrangements congruous with the NWI and underpin investment security for both government and private sector investors. Further information about the fund and the loan

facility is located at www.agriculture.gov.au/water/national/national-water-infrastructure-development-fund and www.agriculture.gov.au/water/national/nwilf, respectively.

The policy requirement for the fund was articulated in the Agricultural Competitiveness White Paper and the approach was replicated for the water infrastructure loan facility. In this context, Australian Government investments in water infrastructure are in part designed to leverage and expedite the implementation of the national water reform agenda and drive the profitable and sustainable use of new and affordable water for regional economic development.

We support the principles of water resources development, as expressed through the NWI, when making infrastructure funding recommendations to the Government. Many actions of the NWI, if fully implemented, would directly support informed investment by the private sector by providing greater certainty around the rights, responsibilities and likely costs for water users. When considering whether a water infrastructure project warrants Commonwealth funding, the funding criteria require that the project should align with the following NWI principles:

- Be located in areas where NWI compliant water planning and entitlement frameworks are or will be put in place (NWI paragraphs 25-57)
- Demonstrate that costs will be recovered through fees (NWI paragraph 66)
- Be economically viable and ecologically sustainable (NWI paragraph 69)
- Demonstrate that unallocated water will be released for consumptive use through market-based mechanisms (NWI paragraphs 70-72)

The issue of inconsistency in approaches to pricing of water by utilities and regulators should also be considered by the Commission. This is particularly important in the current circumstances of substantial government funds being made available under national water infrastructure investment programs. Where there are government grants provided to fund water infrastructure there is an important question around whether the full asset value should form part of the regulated asset base for the purpose of charging consumers, in addition to depreciation or sinking fund charges intended to provide for maintenance and eventual replacement of the asset. The operation of efficient capital markets and resource allocation may dictate the use of full asset value. However, where (say) the Commonwealth government funds infrastructure that will be owned by a state entity, arguably the resource allocation decision is made at that point (and the cost is sunk). Moreover, the intent of the grant is most likely intended to be to benefit consumers of the asset services. If a rate of return on the asset value is incorporated in charges then this would effectively result in the full benefit of the grant being appropriated by the asset owner.

We encourage the Commission to consider whether a decision needs to be made (up front), on a case-by-case basis, as to whether the purpose of an infrastructure grant is to encourage uptake by developers or use of the infrastructure by end-users, or a combination of both. This will dictate any restrictions that might be placed (at least initially) on pricing behaviour of the asset owner.

Conclusion

Australia can rightly claim to be a world leader in water management and is frequently engaged as a model for how water reforms can and should be approached, and at a global level. Yet, it is also clear that the national commitments to implementation of the National Water Initiative made by First Ministers at COAG in 2004 have not been equally and comprehensively implemented across the nation. Based on numerous reports and analyses, Australia could have been better placed for provision of secure and affordable water to all citizens and for all purposes if more complete and timely implementation of the NWI had been achieved. We encourage the Productivity Commission to use its first review of NWI implementation as an opportunity to re-focus efforts on continued implementation of our comprehensive national water policy.

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