



National Irrigators' Council

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Water Act Amendment Bill 2015

Submission to the
Senate Environment and Communications
Legislation Committee

July 2015

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1. Introduction

The National Irrigators' Council (NIC) is the national peak body representing irrigators in Australia. The Council supports twenty seven (27) member organisations covering the Murray Darling Basin states, irrigation regions and the major agricultural commodity groups. Council members collectively hold approximately 5.4 million megalitres of water entitlements.

The NIC is the policy and political voice of those who use water for commercial agricultural purposes, producing food and fibre for local consumption as well as making a significant contribution to Australia's export income.

The national body is funded by irrigators, for the benefit of irrigated agriculture which provides jobs in rural and regional communities. An irrigator is defined as '*a person or body with irrigation entitlement for commercial agricultural production*'.

Member organisations are located in irrigation regions across Australia within the Murray-Darling Basin and beyond. They represent a diversity of organisations from irrigation infrastructure operators to agricultural commodity groups who produce food and fibre for domestic consumption and significant export income.

The NIC advocates on behalf of irrigated agriculture and aims to develop projects and policies to ensure the efficiency, viability and sustainability of Australian irrigated agriculture and the security and reliability of water entitlements. The NIC advocates to governments, statutory authorities and other relevant organisations for the adoption of policy.

Irrigated agriculture contributes to the social and economic wellbeing of rural and regional communities and to the national economy, producing a range of food and fibre commodities. The total gross value of irrigated agricultural production in Australia was \$13.4 billion in 2012-13, constituting 28% of the total gross value of all agricultural production (\$48 billion) over the same period. *{Australian Bureau of Statistics}*

The NIC is directed by guiding principles designed to underpin current and future policy decisions impacting on our members.

Guiding Principles

The objective of the National Irrigators' Council is to protect or enhance water as a property right and to champion a vibrant sustainable irrigation industry.

- A healthy environment is paramount
 - Sustainable communities and industries depend on it
- Protect or enhance water property rights
 - Characteristics of water entitlements should not be altered by ownership
- No negative third party impacts on reliability or availability
 - Potential negative impacts must be compensated or mitigated through negotiation with affected parties
- Irrigators must be fully and effectively engaged in the development of relevant policy
- Irrigators expect an efficient, open, fair and transparent water market
- Irrigators require a consistent national approach to water management subject to relevant geographical and hydrological characteristics
- Irrigators expect Government policy to deliver triple bottom line outcomes
- Regulatory and cost burdens of reform be minimised and apportioned equitably.

2. Executive Summary

The National Irrigators' Council (NIC) has long argued the case for a balance between social, environmental and economic outcomes to ensure the Basin Plan is fair and workable. Without this objective, irrigated agriculture communities will continue to bear the burden of an unsatisfactory Basin Plan. Our members will be reluctant to engage with policy makers on untried and untested 'modelling'. Technical assumptions must be able to be proved and fully explained to build stakeholder confidence.

We are concerned that the trajectory of reform under the Basin Plan is too heavily biased towards water as the only management solution and that the environment is taking precedence over the welfare of people, communities and food and fibre production. Irrigators remain committed to genuine reform, but not at the expense of communities and industries. Our commitment continues to focus on a viable, productive irrigated agriculture sector in Australia.

The 2004 National Water Initiative (NWI) sought to achieve economically efficient water use and investment that maximises the economic, social and environmental value of Australia's water resources. At the inception of the Basin Plan in 2012, and in good faith, irrigation communities well understood the principle that some water would be returned to the environment for the broader benefit, including to ensure sustainable extraction into the future.

At that time however, we raised concerns around the social and economic dislocation the recovery of 2750 GL of long term cap equivalent water would unleash on communities across the Basin. We cannot emphasise strongly enough just how real these concerns are in 2015.

We have long advocated for a legislated 1500 gigalitre (GL) cap on water buybacks in the Murray-Darling Basin and we welcome the legislation currently before the Australian Parliament to provide for this measure. The NIC will continue to advocate for bipartisan political support to remove any doubt and ensure that the cap is legislated. Securing a legislated cap will help to improve business confidence in the irrigated agriculture sector in the Basin and underpin greater long term certainty for the social and economic benefit of the communities that depend on the Basin's water resources.

The NIC also contends that until the 2750 GL recovery is achieved, and there is a full account by Government that it has been directed for the purposes for which it was intended, then it would be premature to recover a further 450 GL of 'up-water'.

Contracted water recovery in the Murray-Darling Basin is estimated at 1951 GL or 71% of the targeted 2750 GL. Yet no baseline studies are available on the Basin's environmental health for stakeholders to understand the level of water recovery needed to meet environmental objectives. Monitoring and measurement within the Basin Plan appears to be episodic and lacking coordination. Communities need to see the evidence around how the water recovered for the environment will be used, where it will be directed and for what purpose.

We continue to emphasise the importance of maximising objectives through the building and/or upgrading of existing, environmental supply and efficiency measures, with a focus on projects under the localism model. If these objectives can be achieved then the Sustainable Diversion Limited (SDL) adjustment mechanism should continuously be increased at the implementation of works and measures. Water recovery should not only focus on privately held water entitlement but must also examine operational efficiency of seventy percent of water flows in the Murray Darling Basin already allocated to the environment.

As promised during the development of the Basin Plan, and in keeping with NIC principles, any rule and operating changes must see the characteristics and reliability of water entitlements maintained with no third party impacts, unless otherwise agreed by all stakeholders.

There must be greater use of local knowledge and input on key decisions around water. Irrigators have long supported healthy working rivers and river systems; it is in their interests to do so and the

interests of the communities in which they reside. The NIC challenges the theory of 'just add water' as the solution to a complex structure of environmental challenges in the Basin. The Basin Plan must be balanced; it must consider the needs of people, communities and food and fibre production in parallel with the environment.

3. Water Amendment Bill 2015

The NIC is pleased to provide comments in relation to the Water Amendment Bill 2015, which proposes to:

- amend the Water Act 2007 to impose a duty on the Commonwealth not to exceed the 1500 GL limit on surface water purchases in the Murray-Darling Basin at the time of entering into a water purchase contract; and
- amend the Murray-Darling Basin Plan 2012 to provide increased flexibility in the recovery of 450 GL of water through efficiency measures funded under the Water for the Environment Special Account.

3(a) 1500 GL limit on water purchases in the Murray Darling Basin

The NIC has actively campaigned for a legislated 1500 cap on water buybacks in the Murray-Darling Basin and welcomes the legislation currently before the Australian Parliament to provide for this measure. We commend the Government on its commitment to irrigated agriculture and its understanding of the benefits of water left in production. The NIC will continue to advocate for bipartisan political support for the cap and to ensure that the commitment is finally legislated.

The cap sets a limit on how much water will be recovered through water purchases. It will help to improve business confidence in the irrigated agriculture sector in the Basin and support greater long term certainty for the social and economic benefit of the communities that depend on the Basin's water resources.

The cap does not change the volume of water to be recovered under the Basin Plan. It does though, form part of the mix of policy and programs used to recover the remaining volume of water required to 'bridge the gap' between previous levels of extraction and the requirements of the Basin Plan.

Above the cap, water will be recovered by investment in on-farm and distribution system efficiency projects. NIC members and the irrigation industry more broadly have been active participants in efficiency projects and are committed to continue to deliver projects to implement the Plan.

The NIC supports the investment directed to upgrading and modernising irrigation systems producing some of the most efficient systems in the world. This investment provides short and long term benefits for communities. Short term local stimulus occurs through the construction phase of projects. Water savings from infrastructure projects are shared, and result in water being retained on farm; this contributes to direct employment in irrigated agriculture, fewer job losses on farms and opens opportunities for important downstream processing industries. This employment supports the social and economic underpinnings of many communities in the Basin.

We have previously raised the fact that funds were removed from the \$5.8 billion committed for the Sustainable Rural Water Use and Infrastructure Program (SRWUIP), directed towards projects not related to recovering water through infrastructure, leaving an amount of around \$3.4 billion to recover water through infrastructure upgrades.

A key recommendation from the 2012 report of the Standing Committee on Regional Australia noted that the '*Commonwealth develop a mechanism to adjust sustainable diversion limits (SDL) automatically in response to efficiencies gained by environmental works and measures*'.

The SDL will take effect in 2019 and we note that Basin states will have three years until late 2015 to consult with communities, develop proposals, and assess the benefits prior to presenting them to the

Murray Darling Basin Authority (MDBA) for consideration. In 2016 the Commonwealth Minister will receive a recommendation from the MDBA about how much to adjust the SDLs for surface water. This will allow time for the adjusted SDL to be reflected in state water resource plans prior to the SDL taking effect from 2019.

Governments must acknowledge the resilience of irrigation communities as they continue to adapt to change. As they do so, it is important that the path of least impact be taken through the Basin Plan implementation process. Independent studies conducted to inform the development of the Basin Plan showed that buybacks have greater localised negative social and economic impacts on irrigation dependent communities than investment in water efficiency projects¹.

Implementation of the Basin Plan must occur in the manner that was promised, and that is, an unwavering adherence to the commitments given to the irrigation industry and Basin communities by the Government and the MDBA. These commitments include:

- a balanced Plan with triple bottom line outcomes
- willingness to reduce the amount of water to be recovered through improved river management and more efficient environmental watering
- adaptive management and 'localism', and integration of environmental, social and economic modelling
- no changes that would impact on the reliability of irrigators' water allocations
- no changes to rules that would result in negative impacts on third parties
- no changes that would lead to a change in the characteristics of a class of water due to that water being transferred to the Commonwealth (for example, the use of a megalitre of general security water held by the Commonwealth's would be governed by the same rules and terms as apply to an irrigator holding a like entitlement).

While the window has not closed on any of these core commitments, it cannot be considered at this juncture that they have been locked-in or secured

A key concern of our members in particular, is that there is little evidence to **reflect the commitment made in relation to adaptive management and 'localism'**. Despite local knowledge and feedback, through formal and informal mechanisms, around the behaviour of river systems and waterways during certain periods, this is not adequately taken into account and reflected in the reports generated by Governments. As a result, community and stakeholder confidence in the Basin Plan is undermined. Examples of these concerns include:

- Constraints Management Strategy: the MDBA continues to rely on modelling parameters that are in some cases at odds with existing knowledge of maximum flow rates.
- Long-term Diversion Limit Equivalent (LTDLE) factors: current reliability factors adopted by the Department of Environment and MDBA for reporting the yield of entitlement recovered in Macquarie and Gwydir Valleys are inconsistent with reliability measures derived from the hydrological modelling underpinning the MDBA's determination of Sustainable Diversion Limits (SDLs).
- Northern Basin Review: community discontent that the Review process is unclear around desired objectives and outcomes. Information provided by the Northern Basin Advisory

¹ See for example Arche Consulting (2011) Assessing the local economic impacts of the draft basin plan - Final report Prepared for the Department of the Environment.

<http://www.mdba.gov.au/sites/default/files/archived/proposed/Arche-Basin-Case-Studies-final-report.pdf>
and

RMCG (2013) Cost Benefit Analysis of Farm Irrigation Modernisation Final Report, prepared for Dairy Australia
<http://www.dairyaustralia.com.au/~media/Documents/Industry%20overview/About%20the%20industry/CURRENT-INDUSTRY-issues/LMDB%209/RMCG%20CBA%20OnFarm%20Irrigation%20Efficiency%20Program%20May%202013%20OC1357415.PDF>

Committee (NBAC) to MDBA is not reflected in any discernible way in work programs or outcomes.

A legislated cap on buyback is critical to assuring irrigators and Basin communities that the Department of Environment does not simply resort to buyback in the event that the MDBA and/or Basin State Governments lack the will to deliver on these core commitments. NIC submits, for example, that the results of the MDBA's modelling of SDL offset proposals² to date is not encouraging and the MDBA is now acknowledging that it will not have the time to model all of the proposals it will receive from Basin States. Against this backdrop, it is unlikely that the water recovery target in the Basin Plan of 2750 GL³ will be offset by 650 GL as provided for in the Plan. It is therefore not unreasonable to suggest that in the absence of a cap on buyback, the Department of Environment's most likely default position would be buyback.

Communities dependent upon irrigated agriculture within the Basin are only too aware of the impacts the Basin Plan will have on the economies that drive their communities. They need to see tangible positive outcomes and will no longer accept debates based solely on modelling. Results of monitoring of changes in economic, social and environmental factors within the Basin prior to, during and after implementation must be available to stakeholders.

3(b) Recovery of 450 gigalitres (GL)

The NIC has long supported the use of infrastructure and efficiency works over other water recovery methods as mechanisms of **least harm** to communities. However, the NIC position firmly remains that there should be no acquisition of 'up water' until the existing recovery target is met. It must be remembered that the 450 GL was not part of the original Basin Plan.

The Water Amendment Bill 2015 will amend s 7.17(2) of the Basin Plan to add new sub-paragraph 7.17(2)(b)(ia) which will provide for the participation of consumptive water users in projects that recover water through works to improve water use efficiency off-farm. Under the 450 GL measure, the Commonwealth is providing funding of \$1.77 billion for the removal of river system constraints and water recovery through projects designed to have neutral or improved social and economic impacts/outcomes.

We note that some existing funding will be reallocated for water purchases to fund any agreed supply projects recommended by the MDBA. This will be additional to existing projects under the Sustainable Rural Water Use and Infrastructure Program (SRWUIP). It is proposed that the recovery of 450 GL of water through efficiency measures will be funded under the Water for the Environment Special Account.

We also note that the 450 GL has not been subjected to the same level of scrutiny as other aspects of the Plan principally due to the fact that this 'feature' was a last-minute inclusion to secure the support of the South Australian Government. It is noted that the MDBA completed two 'relaxed constraints' scenarios where eight key river operating constraints were relaxed in the southern connected system to model flows of 2800 and 3200 GL/year and that the MDBA concluded that *'that the constraints relaxed modelling confirmed the MDBA's previous assessment that increasing the SDL to 3200 GL/year without changing some of the restrictions on environmental watering would achieve few additional benefits'*.

The MDBA modelling at the time found that the combination of relaxing constraints and an additional 400 GL would allow it to reach 17 out of 18 targets for the River Murray compared to 13 under current

² The Basin Plan provides for the water recovery target of 2750 GL to be reduced by up to 650 GL through supply and efficiency arrangements that allow for the same environmental outcomes with reduced watering.

³ This figure is commonly misunderstood – the figure of 2750 GL is the long term average yield that is being secured per annum and in order to secure such a volume approximately **3,600 GL of water entitlement** must be recovered from irrigators.

constraints. Subsequently, in December 2014, the MDBA released its Constraints Management Strategy Annual Report which made it clear that the eight key constraints could not be relaxed and the flow targets could not be achieved. Despite repeated requests by the NIC, there has been no clear explanation as to what benefits and outcomes will be achieved by removing an additional 450 GL at a cost of \$1.5 billion to Australian taxpayers.

It remains a concern that the MDBA appears to depend on modelling parameters that in some cases conflict with existing knowledge of maximum flow rates.

4. Conclusion

During an interview with The Land newspaper in January 2015, the former Chair of the Murray Darling Basin Authority, the Hon Craig Knowles said on reflecting on community anger during a meeting at Griffith, NSW in 2010:

'At a human level, people weren't being treated with the respect they deserved or being listened to, andit was a fatal error to ignore the needs and expertise of people living and operating within the river system.'

Irrigated agriculture businesses operate in an environment of 'real world' conditions. Communities at the outset were promised adaptive management and localism; there is no-one better positioned to provide this local knowledge and feedback than local communities, yet there is a wide-held view that feedback provided is not reflected in ongoing policy measures. Until this occurs in tandem with genuine consultation, community confidence in the Basin Plan will continue to be eroded.

The Parliamentary Secretary, the Hon Bob Baldwin stated during a visit to the northern NSW Murray-Darling Basin in mid-July that the issue that was most often raised by communities and farmers was that they needed certainty for their businesses and certainty for the environment. Confidence is critical for irrigation communities who already face significant challenges.

We have frequently put the case for a whole of government approach to examine options and implement policy measures designed to increase returns for agriculture producers by reducing costs and unnecessary barriers to productivity and profitability. The contribution of the agricultural sector to the social, economic and environmental fortunes of regional communities, and to the national economy, cannot be ignored.

For decades, Australia's agriculture producers have sustained significant increases in costs, while income derived from their food and fibre has not matched the level of input cost increases. The agricultural sector has demonstrated its ability to adapt to a changing operating environment, embracing new market opportunities while taking up new technologies. Over this period at a global level, many of Australia's major agriculture competitors have not fully embraced the elimination of tariff and trade barriers and other agriculture support mechanisms.

Through the Agricultural Competitiveness White Paper, we welcome the Australian Government's desire to '*seek to identify new dam and infrastructure projects that can deliver Australia's water supply needs in the future, including options for moving water from northern catchments to southern and from eastern to western*'. We have previously argued for Government commitment to the development of new water conservation infrastructure, not only to enable growth in the agriculture sector but as a mitigation measure during times of major flooding and protection of public and private infrastructure.

While these initiatives are supported, there must however be equal commitment by Government to the improvement and modernisation of existing water resources and roads and rail infrastructure in irrigation communities. We have consistently argued that the delivery of water must be achieved efficiently and cost effectively.

Food and fibre producers in Australia continue to work through a range of industries to find water efficiencies. The **Australia cotton industry** has achieved a 40% increase in water productivity over the past decade. *{The Australian Cotton Water Story, 2012}* The industry is considered the most water-efficient in the world, producing 'more crop per drop' than any other nation at two and a half times the world's average yields. Identifying appropriate crop varieties through significant research effort and using the latest technologies has assisted the Australian cotton industry to farm using less water per hectare than in the past.

Australia's cotton growers have improved their water use efficiency by 3-4% per year since 2003. *{Third Australian Cotton Industry Environmental Assessment, September 2012}*. Growers have almost doubled their Irrigation Water Use Index, producing 1.1 bales per mega litres in 2000-01 to an increase of 1.9 bales per mega litre in 2009-10. Australian growers are now producing more cotton with less water. *{Source: The Australian Cotton Water Story, 2012}*

The **rice industry** operates within a rigorous restrictions regime. Allowable water consumption levels for rice growing are set by irrigation companies utilising climatic data records by the CSIRO. If these limits are exceeded, farmers may face fines, restrictions on the use of individual paddocks for rice in subsequent year, or the banning of rice production on those paddocks.

The industry undertakes a range of measures to ensure that rice grown is of high quality and water efficient:

- The industry adheres to strict regulations for the growing of rice such as location, soil types and water availability
- In some locations, growers plant shorter season rice varieties which require substantially less water to grow
- Many growers plant a winter crop directly into the remaining soil moisture following the rice crop harvest, resulting in two crops for the one application of water
- Rice farmers are required to implement actions consistent with local Land and Water Management Plans designed to minimise the impact of irrigation on environments.

{Source: Ricegrowers' Association of Australia Inc}

Dairy is the largest irrigation-based livestock industry in the Murray Darling Basin, and accounts for 28% of Australia's total milk production. The Basin dairy industry's 2014-15 farm gate milk value was \$1.3 billion, with regional processing worth \$3250 million in value-added dairy products. Producing more milk with less water is critical to the industry's future prosperity with less water available under the Basin Plan and climate change.

Over the last 15 years, dairy farmers have accordingly adapted their production systems and modernised their on-farm irrigation infrastructure. For example, more than 60% of participants in government-funded on-farm irrigation efficiency programs in the Goulburn Murray Irrigation District are dairy farmers, with many more opting to fund their own water-saving infrastructure works. Upgrades include automation, pipes and risers to better regulate water flow, computerised soil moisture sensing, and pivots. The Basin dairy industry has also initiated programs such as Accelerating Change, designed to increase farmers' understanding and uptake of new technologies to boost water efficiency and improve pasture and fodder production. *{Source: Dairy Australia}*

The NIC supports measures that reduce barriers to irrigated agriculture's competitiveness and that provide new opportunities for the growth of food and fibre production in Australia. While the sector is working to find ways to become more efficient, it is often against the backdrop of significant hurdles.

The NIC has been at the forefront of a campaign to reduce the cost of electricity for irrigated agriculture, focusing on reducing the network costs charged to consumers by electricity network companies. The 'water efficiency versus energy efficiency' conundrum is impacting on the ability of farmers to make new water efficient systems profitable. Financial pressures caused by electricity price

increases are also impacting on the ability of farmers to move to new pressurised water efficient systems.

The NIC is working with the Australian Renewable Energy Agency (ARENA) to ensure irrigated agriculture is a key priority as ARENA undertakes a review of its business strategies. We have also engaged the Clean Energy Finance Corporation (CEFC) to identify opportunities to undertake projects on behalf of the irrigated agriculture sector for investment in renewable energy and low emissions technology.

The NIC supports the principle of *'improving access to reliable water supplies and better managing existing water resources.....for the continued growth of the agriculture sector'*, as stated in the Government's Agriculture White Paper. The contribution by irrigated agriculture to the social and economic wellbeing of rural and regional communities and to the national economy is well recognised. In a period of climate variability, projected increased world population and resultant pressures on global food security, there is an opportunity for irrigated agriculture in Australia to play a major role in maintaining and building on Australia's recognised high level of food safety and security.

There remains however, significant effort by the Government and the MDBA to work in a genuine and transparent way with the irrigated agriculture sector and our communities to inject confidence back into the Basin Plan
