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SUBMISSION

NSW Productivity Commission

Discussion Paper: Kickstarting the Productivity Conversation

November 2019

Introduction

The NSW Irrigators' Council (NSWIC) is the peak body representing irrigation farmers and the irrigation farming industry in NSW. Our Members include valley water user associations, food and fibre groups, irrigation corporations and commodity groups from the rice, cotton, dairy and horticultural industries. Through our members, NSWIC represents over 12,000 water access licence holders in NSW who access regulated, unregulated and groundwater systems.

NSWIC engages in advocacy and policy development on behalf of the irrigation farming sector. As an apolitical entity, the Council provides advice to all stakeholders and decision makers. Irrigation farmers are stewards of tremendous local, operational and practical knowledge in water management. With over 12,000 irrigation farmers in NSW, there is a wealth of knowledge available. To best utilise this knowledge requires participatory decision making and extensive consultation to ensure this knowledge can be incorporated into best-practice, evidence-based policy. NSWIC and our Members are a valuable way for Governments and agencies to access this knowledge.

NSWIC welcomes this public exhibition as an opportunity to share local, practical and operational knowledge and expertise in water management. NSWIC offers the expertise from our network of irrigation farmers and organisations on an ongoing basis to ensure water management is practical, community-minded and follows participatory process.

This submission represents the views of the Members of NSWIC with respect to the *NSW Productivity Commission Discussion Paper: Kickstarting the Productivity Conversation*.

Each member reserves the right to independent policy on issues that directly relate to their areas of operation, expertise or any other issues that they deem relevant.

NSW Irrigators' Council's Guiding Principles

Integrity	Leadership	Evidence	Collaboration
Environmental health and sustainable resource access is integral to a successful irrigation industry.	Irrigation farmers in NSW and Australia are world leaders in water-efficient production with high ethical and environmental standards.	Evidence-based policy is essential. Research must be on-going, and include review mechanisms, to ensure the best-available data can inform best-practice policy through adaptive processes.	Irrigation farmers are stewards of tremendous knowledge in water management, and extensive consultation is needed to utilise this knowledge.
Water property rights (including accessibility, reliability and their fundamental characteristics) must be protected regardless of ownership.	Developing leadership will strengthen the sector and ensure competitiveness globally.	Innovation is fostered through research and development.	Government and industry must work together to ensure communication is informative, timely, and accessible.
Certainty and stability is fundamental for all water users.	Industry has zero tolerance for water theft.	Decision-making must ensure no negative unmitigated third-party impacts, including understanding cumulative and socio-economic impacts.	Irrigation farmers respect the prioritisation of water in the allocation framework.
All water (agricultural, environmental, cultural and industrial) must be measured, and used efficiently and effectively.			Collaboration with indigenous nations improves water management.

Overview

NSWIC recognises that the NSW Productivity Commission Discussion Paper – *Kickstarting the Productivity Conversation* (herein, the Discussion Paper) – aims to start a conversation about how the NSW Government can best support continued growth in the State's living standards. One of the largest hindrances on living standards in regional NSW, and for those in the agriculture sector or related industries, relates to water insecurity.

NSWIC recognises that this Discussion Paper is part of a broader body of work to give effect to the Premier's Priorities and NSW Government Objectives. NSWIC notes that this public consultation seeks to:

A. gauge whether the right priorities have been developed; and
B. define what policy options should be considered.

In summary, NSWIC strongly welcomes the inclusion of 'Water and Energy' as a focus area, but recommend this additionally includes productive water (agricultural water) within the focus area. There are a number of issues and challenges for agricultural water use which are raised in this submission, as well as reform options to produce better outcomes for secure, sustainable and productive water use.

Part A) Priorities

Water is the most limiting factor to agricultural production in Australia.

Water management, therefore, is one of the most critical components to the prosperity, productivity, viability and sustainability of the agricultural sector, as well as NSW. NSWIC is therefore highly supportive of the inclusion of "*Water and Energy*" as one of the six focus areas.

The amount of water available for agriculture in NSW has been in continual decline, following a lengthy series of reforms. There has been a 28% annual average decline in the amount of water available to agriculture as a result of this suite of reforms.

Water represents production opportunity. A reduction in water, is a reduction in production; which is a reduction in profits, employment and growth; which has flow on effects along the supply chain, throughout the regional and national economy, and impacts on living standards and the cost of living. The flow-on and ripple effects (multiplier effects) from water are extensive.

> ***Recommendation:***
> The priority "reliable, sustainable and productive use of our water and energy" must remain, as this is a critical and fundamental priority. This priority should be brought forward into the Premier's Priorities and NSW Government Objectives.

The Discussion Paper identifies a number of focus areas within this Water Priority. These include:

- Improving governance in the rural and urban water sectors;
- Improving service delivery in regional areas;
- Expanding the role of water recycling and greater efficiency.

A notable omission from this list is fostering productive water use for agriculture. It is pleasing to see the inclusion of 'productive' in the priority itself, but the details of productive water use within

this priority require further expansion to capture the issues and challenges for productive water. In this submission, we aim to provide you with those further details. Whilst there are links to the three points above, a more specific focus area regarding the secure, sustainable and productive use of water for food and fibre production in NSW is fundamental. This could be:

- Improving water security for agriculture in NSW;
- Optimising the use of agricultural water, including the availability, accessibility and efficiency (such as by facilitating usage up to the Sustainable Diversion Limit);
- Ensuring the future viability and prosperity of the irrigated agriculture sector;
- Improving the regulatory environment for agricultural water users;
- Improving the fairness and appropriateness of cost-share arrangements for rural water.

The particular issues within this focus area (as addressed in the submission) may include:

- Years of **large reforms have reduced the volume of water available** to agriculture by 28%, with reforms on-going, which has hampered production.
- **Increasing prices of water** jeopardise the viability and profitability of particular commodities, and is leading to new trends in agricultural production and water demand.
- Concerns over the **deliverability of water** which risks the accessibility of water allocations, if available.
- An increasingly **unfavourable regulatory environment** restricts optimal usage of water resources within the consumptive share of water.
- Increasing **frequency and severity of droughts** creates water insecurity challenges, requiring new and improved water infrastructure to enhance supply.
- Lack of a positive, strategic, long-term **vision for the future of irrigated agriculture**, by government and administrators, which leads to short-term reactionary policy.
- Absence of coordinated and strategic research, development and extension to improve water productivity, efficiency and management in agriculture.

Recommendation:
The priority "reliable, sustainable and productive use of our water and energy" must remain, as this is a critical and fundamental priority. This priority should be brought forward into the Premier's Priorities and NSW Government Objectives.

Part B) Policy Options

Water Vision: 2050

The long-term vision for water management in NSW is largely missing.

For many decades, the vision for water management in Australia was on maximising the productive potential of water. This saw the development of, and government investment in, many large-scale irrigation schemes, water infrastructure, and incentives for irrigated agricultural production.

More recently, the vision for water management in Australia has reversed, with a shift to focus on environmental objectives, with significant public pressure against the use of water for productive outcomes. Whilst NSWIC supports the Murray-Darling Basin Plan (the Plan), it has fundamentally changed the trajectory of irrigated agriculture and the communities depending on it. Water recovery has reduced the pool of water available for irrigation by an annual average of 28%, as a result of the Plan and recovery from other programs such as The Living Murray. Alongside a suite of reforms, this

has seen a substantial decline in the productivity, viability, profitability and nature of irrigated agriculture in NSW, with flow on effects to both the national and regional economies.

Whilst this broad range of reforms at both a state and commonwealth level of government strive for Ecologically Sustainable Development (i.e. triple bottom line objectives), there are concerns that a secure long-term vision is lost in favour of short-term reactive responses to droughts, ecological crisis, public pressure and political agendas. Whilst the paradigm shift to sustainability is important and highly valued by the irrigated agriculture sector, the nature of the shift has significantly hampered the productive potential of water, and the economies and communities that production supports.
Clearly a long-term, forward-thinking vision is needed to foster productive water use in a sustainable and secure manner, through increased integration of these management components. We need to define new goal posts and ensure policy development and decision-making continues to work towards those goals.

NSWIC has commenced developing a strategy of this kind – **Water Vision 2050** – and we wish to express our interest in working with the Productivity Commission and others to develop this strategy. Water Vision 2050 seeks to set the strategic focus for water management into the future to be **Secure, Sustainable & Productive**. The strategy will be developed through a collaborative, multidisciplinary, and cross-sectoral participatory development process.

NSWIC has commenced work on this project. More information is available at: https://www.nswic.org.au/water-vision-2050/

Optimisation of Consumptive Water

Water users (irrigation farmers) consistently use well below the volume of water that is permitted to be diverted. This unused productive water represents an enormous opportunity cost for potential agricultural production. This opportunity cost also extends to the lost flow-on effects (multiplier effects) along the production line, and through regional economies and communities.

Anecdotally, the focus of water reforms in recent times has largely been on shifting the usage of water, rather than focusing on how that water is used – i.e. focus has been on shifting water between buckets, not what happens within each bucket. If we wish to look to the future of water management, and adopt a long-term and forward-thinking vision for the future of water management, the optimisation of water within each 'bucket' will be critical. Into the future, industry will be needing to encourage government to conduct optimisation studies on consumptive water usage with an aim of maximising the productive potential of consumptive water.

The extent of lost productive water is over 2000GLs per year. This is demonstrated in the MDBA's *Transition Water Take Report 2017-18*[1], as well as the Cap Register[2]. Whilst measuring usage against the 1995 Cap on diversions became redundant in July this year, with the transition to the Sustainable Diversion Limit accounting framework, the enormous accumulation of 'Cap Credits' demonstrates the persistent and extensive underusage. Water users feel that, given no favourable change in the productive environment (but many unfavourable changes), SDL Credits will also accumulate.

There are a number of causes of underusage. Two significant causes are: capital availability (particularly coming out of the Millennium drought), as well the regulatory environment. Water users who have been active in public engagement processes such as Stakeholder Advisory Panels (SAPs)

[1] https://www.mdba.gov.au/sites/default/files/pubs/Transition%20Period%20Water%20Take%20Report%202017-18.PDF - specifically see: https://www.mdba.gov.au/sites/default/files/pubs/Appendix%202%20-20201718%20SurfacE%20watER%20trial%20SDL%20accounts.PDF

[2] https://www.mdba.gov.au/sites/default/files/pubs/Cap-register-2017-18_1.pdf

have reported continual reluctance from Government departments to change rules which would benefit usage by irrigators, even if it is within the consumptive water share and compliant with requirements. This unfavourable administrative and regulatory environment is hampering optimal water usage within the permitted share of consumptive water.

In response to efforts by industry to date to seek improvements to the issue of underusage, the response by Government departments has been that underusage is a result of 'irrigator behaviour' and is thus outside the realm of policy change. However, this ignores the fact that 'irrigator' behaviour is a function of many causes, including a function of the rules in place that govern water access. We believe underusage can be conceptualised as follows:

Underusage = involuntary underusage + voluntary underusage

Involuntary underusage: where underusage is the result of rules that restrict optimal usage (beyond the control of water users).

Voluntary underusage: where underusage is the result of decision making or behaviours of water users (within the control of water users).

Where underusage is the result of rules that restrict optimal usage (we can call this 'involuntary underusage'), it should be a priority of Government to work with water users to enable optimisation of the share of water available for consumptive use. Where underusage is the result of decision making or behaviours of water users (we can call this ' voluntary underusage') because of factors such as capital availability for example, and if that trend is sustained, then that reduction in usage and diversions should be recognised and formally accounted for in any plan to reduce diversions, such as the Basin Plan. This would ensure that additional water recovery measures are not called upon unnecessarily. In summary:

- Government must work with water users to develop regulatory changes to reduce involuntary underusage (arising from non-optimal regulatory settings);
- voluntary underusage (irrigator behaviour) must be accounted for as a reduction in diversions, and recognised as (temporarily) accounting towards reduced diversion objectives (such as those in the Basin Plan). The extent of voluntary underusage may disregard any further calls for additional water recovery (including the 450GL and if the SDLAM stalls).

The ability for water users to optimally use the available share of water resources is an important area of focus for industry and policy makers alike, given persistent trends of underusage against allowable limits in recent times.

Recommendations:

- Include as an objective in relevant regulations (i.e. Water Resource Plans and Water Sharing Plans), an objective akin to: To facilitate usage up the Sustainable Diversion Limit.
- Include a review trigger in appropriate regulations (i.e. Water Resource Plans) to respond if a trend of under-utilisation occurs to allow for the timely investigation of the cause of underuse and whether there may be a need to amend the instrument.
- Develop a clearly defined SDL credit mechanism or process to outline transparently
- what happens if 'SDL credits' do accumulate.
- Undertake a 'stock-take'/assessment of agricultural water underusage, as well as an optimisation study to identify rule changes that would allow improved optimisation of water usage within the consumptive water share. This study must be done in consultation with water users.

Sustainable Diversion Limit Adjustment Mechanism

One of the highest risks to productive water users is the uncertainty surrounding the further implementation of the Basin Plan.

The NSW Government is required to implement a range of projects under the Sustainable Diversion Limit Adjustment Mechanism (SDLAM). The SDLAM aims to achieve environmental outcomes with less water, thereby reducing the impact on farmers and communities. The SLDAM involves 'supply projects' (which aim to improve water infrastructure and operating rules, such as by managing constraints), and 'efficiency projects (which aim to improve water delivery systems, including urban and on-farm infrastructure) and resulting in an increase in the volume of held water entitlement by government.

The SDLAM is crucial to minimising the social and economic impacts of the Basin Plan in the Southern Basin. NSWIC strongly supports well-designed and locally supported SDLAM projects to achieve the equivalent of 650GL of water recovery as the most critical component to future implementation of the Basin Plan, providing the lowest risk to communities, and realising targeted environmental outcomes.

The challenge is that the SDLAM projects have been poorly designed, and often without consultation of local communities. This means that despite the significance of these projects overall to prevent further water recovery, the projects in their current form are not supported locally. Flexibility and adaptability for new and improved projects are essential to success. All stakeholders and communities affected by projects must be effectively involved in development and delivery.

NSWIC are also concerned by the persistent calls from certain NSW politicians, and individuals, for NSW to withdraw from the Basin Plan. It is our understanding that, if that were to occur, the Commonwealth Government would then be required to buyback a large volume of water (estimated at 287GLs). This would have significant negative impacts on the sector. Improved communications around the ramifications of this are required so the consequences can be better understood.

> ***Recommendation:***
> Ensure the NSW Government maintains the commitment to the Sustainable Diversion Limit Adjustment Mechanism, but with flexibility to ensure projects can be supported by local communities.

Water Infrastructure

With increasing climate variability, including more frequent and severe periods of drought, it is critical that water infrastructure is sufficiently developed to ensure water supply can meet these changing demands.

Water infrastructure is critical for all water users – for town water supply, holding environmental water supplies, and agricultural water. Water infrastructure also enables improved management of scarce water resources, by improving efficiencies, reducing losses, and enhancing river operations.

Until very recently, there has been major resistance to any new water infrastructure developments. This has meant that the NSW population has grown without the necessary water infrastructure to meet the growing demands.

Recommendation:
Government must invest in advancing NSW water infrastructure to address water supply issues into the future.

Cost Share Arrangements for Rural Water

NSWIC believes the rural water cost share arrangements are highly inappropriate, unjust and restricts development opportunities given costs must be met by water users. NSWIC has particular concerns with:

1. The premise of applying the impactor-pays principle to water management;
2. The unfairness and inappropriateness of the cost-share arrangement whereby water users (irrigation farmers) are required to pay 80% of the Capital Expenditure (CAPEX) and 100% of the Operational Expenditure (OPEX) even when for public interest and community benefit activities (water quality monitoring, environmental management, flood mitigation, etc).

At present, IPART:
*"Continue to allocate the efficient costs of rural bulk water services between water customers and the NSW Government on the basis of the **impactor pays principle**. That is, those that create the need to incur the costs should pay the costs."*[3]

The impactor-pays principle suggests that water users (irrigation farmers) are the "impactor" and thus have to pay for a range of community and public interest water operations, including water quality monitoring, flood mitigation and environmental measures (such as fishways). This premise is strongly objected to.

In particular, NSWIC have significant concerns with the counterfactual used by IPART:

*"the counterfactual starting point (which anchors our application of the impactor pays principle) is a **world without high consumptive use of water resources**.*[4]

In the current context, in a world with a growing population who all require water for domestic consumption, as well as the food and fibre production to support that population, this counterfactual is absurd. This counterfactual is overly simplistic and would always lean towards aligning the cost to water users. The counterfactual also does not allow any flexibility to consider the history and original intent of the need for the activity. It also fails to recognise that a baseline level of consumptive water use is required to sustain a population.
Examples of the application of this principle in the Final Report include claims by IPART that:

- *[*W01-01 Surface water quantity monitoring*] "In a world without high consumptive water use this activity would not be required"*
- *[*W05-03 Environmental water management] *"In a world without high consumptive water use there is no need to store and deliver water for extractive users therefore there is no impact on environmental flows and no need to undertake environmental water management."*[5]

These statements are highly erroneous – particularly in an environmentally conscious society who value the health of river systems and would thus demand environmental monitoring and

[3] https://www.ipart.nsw.gov.au/files/sharedassets/website/shared-files/investigation-administrative-water- rural-water-cost-shares/legislative-requirements-water-rural-water-cost-shares/final-report-rural-water-cost- shares-february-2019.pdf
[4] Ibid.
[5] Ibid.

management. It also disregards the societal role of agricultural water – specifically, the fact that society requires food and fibre, and that requires water to produce. Furthermore, to deliver on the objects of the Water Management Act, the expectation for clean and plentiful water would provide for water monitoring regardless of extraction.

The impact of this cost arrangement is that new developments are constrained to the ability of water users to pay. At a time of extreme drought, increases to the costs for farmers is counter to drought recovery efforts, and insensitive to the lack of water (and thus production/income) in recent times.
In 2012, the ACCC suggested that new regulations that impose significant costs should be grandfathered. Doing so would recognise that, had the cost of that regulation existed prior to the development of extractive industries, those industries may not have established. The ACCC's basis was that existing users should not be materially disadvantaged by new regulations.

The precedent for taking this approach is the pre-1997 Dam Safety activity costs which recognises that many dams were constructed to encourage development and that this development may not have occurred had the full extent of the cost to users been apparent. A similar philosophy needs to be applied to recognise that new community expectations and government regulations have led to increased costs that may have stifled development had they existed at the time.

At the time when much of the irrigation development occurred, prior to the adoption of the user pays system, infrastructure and rivers were managed primarily for consumptive users or navigation.
The objects of the NSW Water Management Act 2000 establish the concept of the sustainable use and management of water to "foster significant social and economic benefit to the State." As such, it must be recognised that extractive users are not the sole impactor on water management decisions.

Recommendations:
Review the cost share arrangements for rural water to develop more sound and acceptable principles/methodologies/arrangements for rural water costs. These arrangements must be mindful of costs incurred to irrigation farmers for public interest and community benefit activities.

Review the limitations of applying the user pays principle in an extreme drought.

Deliverability

There are growing issues of 'Deliverability' in the Murray region of NSW. Deliverability refers to the ability for water to be physically delivered to the water user, relating to the channel capacity of river systems and constraints within the system. Simply, there is growing concern that the river system simply cannot deliver the required volume of water to all water users (agricultural, environmental, and domestic).

This is a result of increasing downstream demand (from growing irrigation developments, and large parcels of environmental water delivery), and a declining capacity of the river (siltation, erosion, etc.). The consequence for irrigation farmers is a risk to both the reliability of water entitlements, and risk to the accessibility of allocations. The risk to reliability is a result of substantial losses in the system reducing the total water balance; and the risk to accessibility is a result of the physical capacity of the system to deliver desired volumes of water.
The key deliverability issues include:

1. Sharing arrangements *between* states (bulk water within whole system);
2. Sharing arrangements *within* states (priority rights along the river);
3. Impact of environmental water delivery on other water user's delivery (i.e. management regime for environmental water and consideration of better options);

4. Regulation of new developments to address long-term deliverability risks - acknowledgement/understanding of the risk of new irrigation development going in; and
5. Data availability and accessibility (greater transparency and greater level of involvement by the irrigation sector in the governments consideration of options for addressing deliverability).

In addressing deliverability, the core principles to be respected are:

1. Seek to minimise operational losses;
2. Maintain NSW irrigators' access to water;
3. Improve the understanding of risk, and the management of risk, for all water users (historical and new);
4. Provide certainty through formalised regulations;
5. Put in place arrangements that seek to maximise NSW irrigation access and production;
6. Ensure regulations are developed in consultation with stakeholders.

NSWIC are currently investigating a number of options to present to Government as recommended responses to manage deliverability risk. The options under investigation include Individual Daily Extraction Limits (IDELs), or a system of tradable Delivery Entitlements (market-mechanism). NSWIC would welcome the opportunity to discuss these options in further detail.

Recommendation:
A clear and transparent mechanism to manage deliverability risks is required.

Investment in Research and Development: National Agricultural Water Security Centre of Excellence

Water is the most limiting factor to agriculture in Australia. Yet, there is no national research body to improve water productivity, efficiency and management in agriculture. This must be addressed.
The current worst-on-record drought crippling the agricultural sector and its people demonstrates the need for further Research, Development and Extension (RD&E) for the sector to be prosperous, sustainable and resilient by adapting to growing concerns of water insecurity into the future.
There have been significant changes to the operating and business conditions for irrigation farming over the past 20 years. The combined changes in public policy, climatic conditions, and public demands on social licence, result in the irrigation industry never having been in such a perilous situation. Availability and access to water remains the critical and overarching challenge to the sector, and thus our ability to sustainably produce food and fibre in Australia. We need to be able to produce more, with less water (improve water productivity).
There is every reason why the driest inhabited continent on Earth must be the world leader in water efficient agricultural production and climate resilience. The future of our agriculture sector should be a future of unprecedented improvements in water use efficiency, technology and productivity – bringing unprecedented ability to be prosperous and sustainable to future droughts, climate variability, and to reach the $100billion growth target for our agriculture industry.
NSWIC have this year been undertaking a program of work to develop a Centre of Excellence of this kind, but to date, have been unable to source funding. Key aspects of the proposal developed by NSWIC include:

Strategic Objective: To establish a research and development Centre of Excellence to secure a resilient and sustainable irrigation farming sector to prepare for future droughts through demonstrable environmental stewardship and thriving communities.

Aim: To establish a centre of excellence involving collaborating institutions that have complimentary expertise and resources dedicated to addressing research priorities in drought resilient irrigated agriculture. The Centre will generate new knowledge, technologies and practices:

1. To enable the Australian agriculture industry, and the people it supports, to better adapt to water scarcity and be resilient to future droughts.
2. To optimise water productivity in agriculture through cutting edge technological advancement, best-practice agricultural water use, as well as scientifically sound evidence-based policy options to foster the industry.
3. To ensure the Australian irrigation industry continues to be recognised as world-leading for water efficient agricultural production, and at the forefront of technological advancement.

There are many examples of where research could make a difference to improve water use, including: reducing evaporation losses, coping with drought and extreme heat events, optimising the water–energy nexus, new innovations to measure water on farms, and more accurate soil moisture knowledge - just to name a few. This involves bringing together knowledge from agronomy, biology, climate/meteorology, economics, energy, hydrology, ICT, modelling, satellite/remote sensing technology, soil science, and others.
We must strive to improve our water management, and research is an important strategy that is being overlooked. If cross-sectoral RD&E occurs without a coordinated strategic approach, there is continual risk that the full benefits of these various efforts will not be achieved. We need more than a strategy and the occasional project. The best possible use of water in agriculture will be critical to both our sector, the communities which depend on it, the economy and the food and fibre supplies all Australians enjoy.
We have written to Minister Pavey on this matter, and we are pleased to have her interest:

> *"I would be interested in hearing more from you about this proposal, and in particular how it could link with the $20million for further research recently announced by Minister Littleproud, and the Basin Science Platform, which will help guide future research priorities in the basin."*

We note that Minister Littleproud has also stated:

> *"**We should have a centre of excellence here in this country on research and development.** We are ranked number 20 in the world. US and the Netherlands are sixth and fourth in the world, and we've got more researchers. So how do we get better bang for buck and get into the new jobs of ag tech, into science and innovation, to give our farmers the tools they need to be able to adapt to a changing climate?"*

A Centre of Excellence for agricultural water security is critical for the agriculture sector to be resilient to future droughts, continue to improve water efficiency, and water productivity.

Recommendation:
Seek a securely funded National (or state) Agricultural Water Security Centre of Excellence.

Volumetric focus

There are concerns that in seeking to achieve environmental outcomes in river management, Government adopts a 'just add water' approach (volumetric focus). This approach has an enormous opportunity cost, and there have been numerous concerns raised about the effectiveness and efficiency of this approach in achieving environmental outcomes.

As summarised by the NSW Department of Planning, Industry and Environment (DPIE):

> *In 2016, the water ministers agreed to consider implementing a range of complementary projects intended to contribute to the triple bottom line outcomes under the Basin Plan. Complementary measures are projects that do not provide water offsets or an offset volume, but which help to provide improved environmental outcomes through a range of other interventions. These include management activities such as:*
>
> - *The installation of fishways and fish diversion screens*
> - *Carp management activities including release of the carp herpes virus*
> - *Investments and infrastructure to manage cold water pollution, and*
> - *Habitat restoration and riparian management activities.*
>
> *These projects are intended to be part of an integrated approach to addressing environmental issues and seek to provide a 'more than water' approach to environmental management. Complementary measures projects remain at the conceptual stage, and funding for them has not yet been made available.*
>
> *In 2017, the MDBA commissioned the CSIRO to assess the relative benefits of complementary measures. Their findings are available on the MDBA website.*[6]

Industry has been consistently calling for increased complementary measures, which can achieve environmental outcomes more efficiency (less water). With a range of complementary measures in place, producing real improved environmental outcomes, there would be less pressure on government to further limit the volumes of water accessible to farmers (as well as having healthier river systems).

Likewise, consideration must be given to the effectiveness and efficiency of buybacks in achieving environmental outcomes, particularly given the permanent socio-economic costs which a permanent loss of water to farming communities carries. Furthermore, it is strongly felt that the social and economic value of water, including the multiplier effects, are insufficiently understood. It would be valuable to know more about key benefits of agricultural water, such as how many jobs each megalitre creates, and what level of economic development in a community it fosters. This would be information for policy makers, as well as the general public to understand.

> ***Recommendation:***
> Government must invest in complementary measures to improve environmental outcomes in river systems.

[6] https://www.mdba.gov.au/publications/independent-reports/csiro-complementary-measures-assessment-method

Community Engagement and Empowerment v Consultation Fatigue

NSWIC note that communities are experiencing significant consultation and reform fatigue, owing to the constant and extensive nature of water reforms in the previous decade.
Water users often feel that decisions have been made prior to consultation, that the consultation is not genuine or meaningful, and that it occurs too late in the policy development process. Water users also report that the information provided is either insufficient (lack of local knowledge), or not comprehendible (lengthy and dense documents). Many water users also report that they lack the resources to engage fully, and fear that silence will be taken as consent/approval. In small communities, it is often the same individuals who are stretched to participate in every consultation process.

Water users feel that the Stakeholder Advisory Process (SAP) is ineffective. Water users feel that there is continued reluctance from Government departments to consider rule changes which would benefit productive water users, even if within the allowable share of water allocated to agriculture, and compliant with requirements. SAPs are primarily composed of Government departments and not water users or community members themselves. This is not only a missed opportunity for local knowledge, local ownership of policies, but skews the representation within the SAP.

The lack of community involvement in water policy may also contribute to the lack of support and significant angst amongst many communities, who have been left feeling disempowered, removed from the process, and as a collateral damage.

Recommendations:
Develop a new model of community engagement that involves communities in the early stages of the policy development cycle, aimed at empowering local communities.

NSWIC have commenced work on such a model and would welcome further discussions.

Conclusion

NSWIC hopes the information provided in this submission is informative towards the future development of this work.

NSWIC and our members welcome further engagement with the NSW Productivity Commission in response to this submission, or others matters.

Kind Regards,

NSW Irrigators' Council

Appendix 1: Australian Government Productivity Commission – Murray-Darling Basin Plan: Five-year assessment

Under the Water Act 2007 (Cth), the Australian Government Productivity Commission is required to undertake five-yearly assessments of the effectiveness of the implementation of the Basin Plan and water resource plans.

The most recent report[7] (January 2019) has been highly supported by industry, including NSWIC and the National Farmers Federation. The support for the Productivity Commission recommendations have seen the recommendations become a centrepiece of advocacy for industry on matters relating to the Basin Plan. NSWIC encourages the NSW Productivity Commission to align with the recommendations provided in the Final Report.

Whilst the Final Report was strongly supported, the government response has been viewed as insufficient, and not going far enough to truly adopt the recommendations. NSWIC believes there is opportunity for the NSW Productivity Commission to analyse the recommendations of the Final Report and develop actions to further respond to those recommendations at a state level.

Recommendation:
Align with the Australian Government Productivity Commission Final Report and develop actions to further respond to those recommendations at a state level.

The particular recommendations which industry felt were not properly responded to by government have been developed through the National Farmers Federation Water Committee, to which NSWIC is a Member. A summary of the key issues with the government response are listed in Table 1 below.

Table1: Industry Response to the Government Response on the Productivity Commission Final Report

Productivity Commission Recommendation	Commentary
Recommendation 3.1 – addressing over-recovery of water	The lack of commitment in this response is concerning and will inevitably delay action. While the final amount of over-recovery may not be known for some time, a process must be established to provide certainty for basin communities to avoid unnecessary delays when volumes are eventually known. Holding onto over-recovered water represents an opportunity cost in lost agricultural production, especially when the consumptive pool continues to tighten. Industry expects Governments to promptly establish a clear, proper process for over-recovered water, including exploration of the option to add water to the resource pool to increase the reliability of existing entitlements. This process should be informed by meaningful consultation with communities in affected valleys.
Recommendation 4.1 – resolving governance and funding issues for supply measures	Industry is underwhelmed by this response. While industry supports full implementation of well-designed projects to achieve the 605 GL, the inflexibility of projects and lack of adequate community involvement in project development has led to significant resistance from some local communities which ultimately undermines progress and erodes community trust.

[7] https://www.pc.gov.au/inquiries/completed/basin-plan#report

	There is now a real fear that projects will stall as a result, risking further buybacks on regional communities. This will be difficult to reconcile without proper action. Governments must explore flexible pathways to allow new or improved SDLAM projects and ensure greater participation and communication. Industry requires Governments to conduct a series of community workshops to: (a) inform communities of the proposed project details to enhance community understanding and transparency; and, (b) workshop improvements or new projects by enabling flexibility and adaptability. The PC's stakeholder consultation process proved effective in their inquiry and should be considered. While NSWIC recognises this will require disproportionate amount resources being used, this is the cost of a process that has been so poorly managed it has eroded community trust fundamental to the successful implementation of the Plan.
Recommendation 4.2 – extending the 2024 deadline	Industry is disappointed at the response which appears to delay necessary action. Despite best efforts, it is becoming increasingly apparent that the 2024 deadline for specific supply projects is highly ambitious, if not unrealistic, and should be an inevitable reality Governments must confront as they consider how to implement supply measures. Industry recognises that project deadlines should be considered on a case-by-case basis. Governments must take a clear position on this recommendation, before detailed business cases are complete, to provide certainty to communities that there will be flexibility with supply project deadlines rather than inadvertently locking in the uncertainty of post 2024 water buybacks if water recovery proves inadequate. Worthwhile projects, as determined by the gateway process (recommendation 4.4), should be afforded the opportunity to be implemented in realistic timeframes. This will allow good projects to be completed and for communities to realise their full benefit. Similarly, projects that fail to make reasonable progress should be removed and replaced with projects that are more feasible and are supported by community.
Recommendation 10.2 – deliverability issues and third part effects	Deliverability is a priority issue. Industry appreciates Basin Governments' acknowledgement of this; however, the response does not adequately reflect the urgency of this issue. The lack of commitment to industry consultation on solutions is equally concerning. Deliverability issues pose a significant risk to the environment, the reliability of water entitlements and access to water allocations through increased losses and a declining physical capacity of the system to deliver water which has the potential to create a negative feedback if it leads to ecological collapse. There has been little enthusiasm from Governments to materially address these emerging concerns that are centred on the Barmah Choke.

	Industry requires Governments to treat deliverability issues with greater urgency and commence industry consultation on possible solutions. The agriculture industry is currently investigating a number of mechanisms to address deliverability issues in the Murray-Darling Basin and would appreciate greater industry consultation.
Chapter 14 – Institutions and Governance	Industry is dissatisfied with the Governments' poor response to each and all recommendations in this chapter which intends to delay action. No recommendations were wholly agreed to, only 'in part', 'in-principle' or with 'further consideration needed'. Business-as-usual is not a tenable position Governments can take without further eroding community trust. The PC report identified the inherent conflict of interest between functions of the Murray-Darling Basin Authority (MDBA) and the importance of having an independent organisation — so the MDBA does not mark its own homework — and to ensure river operations are free from political interference to give basin communities confidence in the implementation of the Plan. Basin communities need to be able to trust the sole Commonwealth institution responsible for implementing the Plan, otherwise community trust will continue to erode which will only delay or ruin successful implementation. Industry seeks a commitment from Governments to reform the institutions and governance of the MDBA and separate its service delivery and regulatory functions, consistent with good public administration. As identified in the report, postponing separation carries serious short-term risks for the credibility of Governments within the community, and the long-term success of the Plan, and the institutional incentives outweigh the cost of transition. Industry notes, however, that this must be carefully managed to minimise bureaucratic inertia during the transition and avoid any undue disruption to the MDBA's ability to implement the Plan.

Source: Acknowledgements to the National Farmers Federation Water Committee.