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SUBMISSION

Draft NSW Water Strategy

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NSW Irrigators' Council

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 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 more than 12,000 irrigation farmers in NSW, a wealth of knowledge is available. Participatory decision making and extensive consultation 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 offers the expertise from our network of irrigation farmers and organisations to ensure water management is practical, community-minded, sustainable and follows participatory process.

NSWIC welcomes this opportunity to provide a submission on the Draft NSW Water Strategy.

NSWIC sees this as a valuable opportunity to provide expertise from our membership to inform the Inquiry. 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 Irrigation Farming

Irrigation farmers in Australia are recognised as world leaders in water efficiency. For example, according to the Australian Government Department of Agriculture, Water and the Environment:

“Australian cotton growers are now recognised as the most water-use efficient in the world and three times more efficient than the global average”¹

“The Australian rice industry leads the world in water use efficiency. From paddock to plate, Australian grown rice uses 50% less water than the global average.”²

Our water management legislation prioritises all other users before agriculture (critical human needs, stock and domestic, and the environment), meaning our industry only has water access when all other needs are satisfied. Our industry supports and respects this order of prioritisation. Many common crops we produce are annual/seasonal crops that can be grown in wet years, and not grown in dry periods, in tune with Australia's variable climate.

Irrigation farming in Australia is also subject to strict regulations to ensure sustainable and responsible water use. This includes all extractions being capped at a sustainable level, a hierarchy of water access priorities, and strict measurement requirements.

¹ <https://www.agriculture.gov.au/ag-farm-food/crops/cotton>

² <https://www.agriculture.gov.au/ag-farm-food/crops/rice>



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.



Introduction

NSWIC supports the purpose of the NSW Water Strategy to provide a blueprint for managing water resources in the long term (next 20 years). Water is the most limiting factor for agricultural production in NSW, and as such, planning efforts to improve water security are critically important to the irrigation industry and rural communities in NSW.

Under the current NSW legislation and policy framework, irrigation farmers are the first to lose access to water during dry periods, as higher priority needs (critical human, stock & domestic, and environmental) are prioritised. This, combined with climate change - which forecasts more frequent and severe droughts, interspersed with more intense rainfall events - means irrigation farmers will be the first and hardest hit by the impacts of climate change on water availability. NSWIC seeks that the State Water Strategy address this vulnerability.

NSWIC understands that the State Water Strategy will set high level objectives and principles to guide water service delivery and management; build on the progress made from previous reforms and set future directions; identify challenges, opportunities, strategic priorities and actions; and, articulate the water management and service delivery framework and policy context in NSW.

Whilst NSWIC appreciates the need for continued efforts in water resource management, the extent of recent reforms to water management in NSW has left communities feeling reform-fatigue and this must be taken into consideration. Future planning must serve to balance the need to meet future challenges, with providing stability, certainty and predictability in water management systems.

Given the vulnerability of irrigation farmers as the first to lose access to water during dry periods, NSWIC would like to see a greater focus in the State Water Strategy on building up the agricultural sector's resilience to water insecurity. Our primary recommendation is that an Agricultural Water Security Taskforce should be established to explicitly develop the options, objectives and strategies for the sector within both the state and regional water strategies, so constructive ways forward can be reflected within these plans.

NSWIC notes that at the time of public consultation, several significant public consultations were simultaneously occurring, as well as major flooding events, which have impacted upon the industries capacity to respond. NSWIC emphasises that a lack of responsiveness from the industry is not reflective of a lack of interest, but rather a product of reform inundation and natural disaster events. For this reason, NSWIC strongly recommends further focused consultation opportunities with regional stakeholders, such as targeted engagement through an Agricultural Water Security Taskforce.



Overview

Key Finding

- Under the current NSW legislation and policy framework, irrigation farmers are the first to lose access to water during dry periods, as higher priority needs (critical human, stock & domestic, and environmental) are prioritised. Given existing hierarchies and systems, the users most significantly hit by climate change and requiring the most significant support will be access licence holders at the bottom of the hierarchy. NSWIC seek that the State Water Strategy seeks to address this vulnerability in our sector.

Recommendations

1. Establish an Agricultural Water Security Taskforce to further develop actions for Priority 5.
2. Insert a Fact Box in the final NSW Water Strategy with details on the importance of irrigation to regional communities and economies, to the national economy and to consumers in Australia and overseas.
3. Clearly describe the existing hierarchy for water sharing in the final NSW Water Strategy, and make explicit that the existing systems of water sharing automatically reduce access licences share based on water availability, and thus additional policy interventions for water sharing are not required in response.
4. Reaffirm commitments to the Sustainable Diversion Limits & Cap as the limits on water use in NSW, up to which limits productive water users can use water.
5. Identify options to foster usage up to these limits in valleys with chronic underusage.
6. In the final Strategy, retain the outline of actions required for the Murray-Darling Basin Plan to deliver its intended outcomes, such as the need for a renewed focus on adaptable and flexible implementation, amended timeframes and complementary measures.
7. Remove reference to any further Commonwealth reforms post-2024 as this is premature.



Submission

Importance of irrigation in NSW

NSWIC would like to see more information in the final NSW Water Strategy regarding the importance of irrigated agriculture in NSW. This includes the sector's contribution to regional communities, and regional, state, national and export economies and communities, as well as to consumers. More than 90% of Australia's fruit, nuts and grapes; more 76% of vegetables; 100% of rice and more than 50% of dairy and sugar, came from irrigated agriculture in 2018-19, even as severe drought conditions were setting in across Australia's irrigation food bowl in the Murray-Darling Basin.

NSWIC recommends inserting further actions in the final NSW Water Strategy (Priority 5) to support the prosperity of the NSW irrigation sector, to build (but at least maintain) industry production and employment, by enhancing water security (within the Sustainable Diversion Limits & Cap). NSWIC recommends that an Agricultural Water Security Taskforce be established to develop further actions within Priority 5.

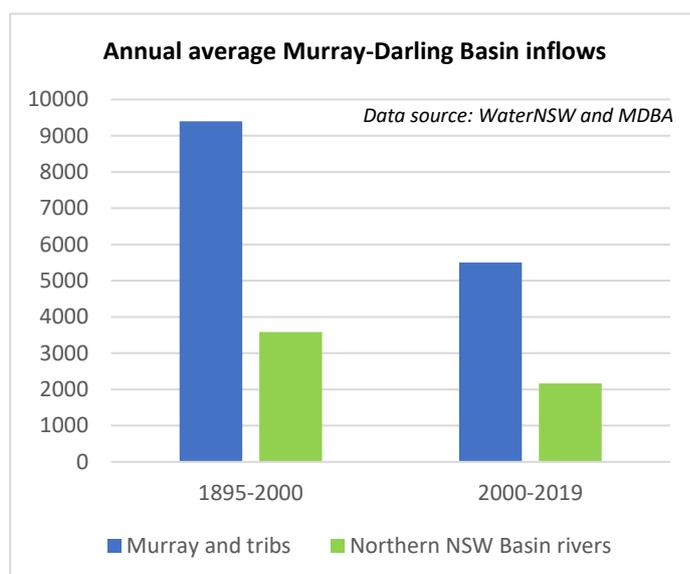
Recommendations:

- Establish an Agricultural Water Security Taskforce to further develop actions for Priority 5.
- Insert a Fact Box in the final NSW Water Strategy detailing the importance of irrigation, including its importance to consumers.

Climate Change & Priorities of Use

Irrigation farmers are on the frontline of climate change. The warming drying trend over the last 20 years has seen inflows into rivers across the Murray-Darling Basin almost halve. This trend is consistent with climate change forecasts for longer, hotter droughts interspersed with more intense but relatively short-lived rainfall events.

Figure 1: Annual average Murray-Darling Basin inflows





As is outlined in the draft NSW Water Strategy, the *NSW Water Management Act 2000* clearly prioritises water use. This legislative hierarchy places irrigation at the very end, meaning irrigators are the first to have the tap turned off when conditions turn dry.

NSWIC reinforces the points raised in the draft NSW Water Strategy regarding the sharing of water and legislative priorities. For example:

Excerpt from NSW Water Strategy (P 32):

During normal operations, the highest priority for water sharing is the environment, followed by basic landholder rights (domestic and stock, Native Title and harvestable rights). During extreme events, such as prolonged droughts, the priority changes. Critical human water needs and essential town water services (authorised by an access licence) become the highest priority, followed by the environment.

Figure from NSW Water Strategy (P 33):

Figure 12. Priorities for water sharing

Priority	Extreme events	Normal circumstances
Highest	<ul style="list-style-type: none"> Critical human water needs 	<ul style="list-style-type: none"> Needs of the environment
	<ul style="list-style-type: none"> Needs of the environment 	<ul style="list-style-type: none"> Basic landholder rights
	<ul style="list-style-type: none"> Stock High security licences Commercial and industrial activities authorised by local water utility Water for electricity generation on a major utility licence Conveyance in supplying water for any priority 3 take 	<ul style="list-style-type: none"> Local water utility access licences Major utility access licences Stock and domestic access licences
	<ul style="list-style-type: none"> General security licences 	<ul style="list-style-type: none"> Regulated river (high security) access licences
	<ul style="list-style-type: none"> Supplementary licences 	<ul style="list-style-type: none"> All other forms of access licences Supplementary access licences
	Low	

NSWIC highlights that a sound understanding of these priorities is required to inform future water planning efforts. The system and priorities for sharing water are generally poorly understood by the public, and thus NSWIC firmly recommends the final strategy clearly explains the hierarchy. Further, NSWIC recommends that this section is made even more explicit to communicate that irrigation farmers only receive water after (and if) these critical needs have been met. This is necessary to counter the common public misunderstandings around agricultural water use.

In reality, the warming drying trend means even less water is now available for irrigation after meeting other priorities first. This reduction occurs effectively automatically (i.e. with no additional policy intervention required) through existing systems of water sharing, allocations and available water determinations. It is important that this automatic adjustment through existing water sharing systems is clearly understood, to prevent duplication or re-inventing the wheel in climate change responses to shifting water availability. Ultimately, given existing hierarchies and systems, the users most significantly hit by climate change and requiring the most significant support will be access licence holders at the bottom of the hierarchy – i.e. irrigators. This means increased efforts are required to support the irrigation sector under climate change.

NSWIC supports the investment in new modelling methods and datasets to develop a better understanding of both historical climate variability and likely future climate conditions. These



new scientific methods augment the observed historical record (about 130 years of rainfall, temperature and evaporation data) with paleoclimate data.

Recommendation:

- Continue to clearly outline the priorities for water sharing in the final NSW Water Strategy, and make explicit that existing systems of water sharing automatically reduce access licences share based on water availability, and thus additional policy interventions are not required in response.

Underusage

NSWIC notes the issue of chronic underusage in a number of valleys in NSW, and seeks that this is addressed through the State Water Strategy.

NSWIC recommends that the State Water Strategy should note that legal limits on water take operate through both the Cap and Sustainable Diversion Limit, and reaffirm commitments to these. NSWIC seeks that the State Water Strategy finds ways to ensure water users in NSW are using up to these legal limits in the long term, and provides opportunity to identify means to optimise reaching these limits.

Recommendation:

- Reaffirm commitments to the Sustainable Diversion Limits or Cap as the limit on water use in NSW, up to which productive water users can use water.
- Identify options to foster usage up to these limits in valleys with chronic underusage.

Murray-Darling Basin Plan

NSWIC strongly supports the comments in the draft NSW Water Strategy that for the Basin Plan to deliver on its intended outcomes, the following is needed:

- *“A renewed focus on adaptable and flexible implementation of the Plan with a focus on genuine and balanced outcomes.*
- *An amendment to the Basin Plan to extend the 2024 deadline for implementation of the Sustainable Diversion Limit adjustment mechanism and water recovery, as the current deadline is not achievable.*
- *A commitment to complementary measures, or a range of non-flow projects, that deliver significant Basin Plan environmental outcomes without taking productive water away from our towns and communities.”³*

NSWIC recommends this is retained into the final NSW Water Strategy.

NSWIC have concerns, however, regarding the following:

“A clear pathway forward beyond 2024 is critical to provide certainty to our Basin communities and ensure that high quality projects deliver the economic, social, cultural and environmental outcomes sought by the Basin Plan.”⁴

NSWIC is of the position that it is premature to be discussing a pathway beyond 2024, as:

- Implementation of the Basin Plan remains incomplete, with a significant proportion of work remaining (primarily the SDL Adjustment Mechanism) which requires prioritisation given it is considered at risk of not meeting 2024 timeframes.

³ NSW Water Strategy [P 39].

⁴ NSW Water Strategy [P 39].



- Basin Plan reconciliation has not yet occurred (2024), nor the review of the Basin Plan (due for 2026), and as such there is insufficient evidence to inform a pathway forward.
- The crux of the Basin Plan was to implement Sustainable Diversion Limits (SDLs) which are now in effect (as of 2019), and the Commonwealth Environmental Water Holder now has a significant holding of Held Environmental Water.
- To our knowledge, neither the Commonwealth Government nor Basin Ministerial Council has made a commitment to developing a multijurisdictional pathway beyond 2024 (i.e. 'Basin Plan 2').
- Water users in NSW are facing significant reform fatigue and remain heavily impacted from the Basin Plan and other reforms. Consequently there is little/no appetite for further major reforms on this scale.

For these reasons, NSWIC does not consider it appropriate to include in the NSW Water Strategy any suggestion of further Commonwealth reforms beyond the current Basin Plan itself. At best, the NSW Water Strategy could refer to working effectively with other jurisdictions in the Basin to ensure water resources are managed suitably between States. In particular, this could reference the nation-leading metering and compliance standards in NSW, and efforts to ensure other Basin states adopt equal standards and systems.

Recommendation:

- In the final Strategy, retain the outline of actions required for the Basin Plan to deliver on its intended outcomes, such as the need for a renewed focus on adaptable and flexible implementation, amended timeframes and complementary measures.
- Remove reference to any further Commonwealth reforms post-2024 as it is premature.

Conclusion

NSWIC and our members are available at your convenience, if you have any questions or would like any further information.

Kind regards,

NSW Irrigators' Council.

Appendix 1: Summary of NSWIC Responses to Priorities and Actions

The below table summarises the NSWIC response to the priorities and actions in the draft State Water Strategy. The NSWIC response is indicated via colour-coding, as per the below key. Additional commentary is also provided for key actions.

Status Key:

- Green = support;
- Yellow = some concerns, as detailed;
- Red = not supported.

Priority	Actions	NSWIC status
Priority 1 Build community confidence and capacity through engagement, transparency and accountability.	1.1 Improve engagement, collaboration and understanding	
	1.2 Increase the amount and quality of publicly available information about water in NSW	For more information, see: https://www.nswic.org.au/wordpress/wp-content/uploads/2021/01/2021-01-25-NSWIC-Letter-re-Public-Information-on-Water-Ownership-and-Trade.pdf
	1.3 Enhance modelling capabilities and make more data and models openly available	
	1.4 Reinforce the effectiveness of the Natural Resources Access Regulator	
	1.5 Take the final steps in floodplain harvesting reform.	NSWIC continues to fully support the Healthy Floodplains Project, particularly the key element of the FPH compliance framework, involving the reduction of FPH to be compliant with the Cap, as well as metering and licensing requirements. The irrigation industry accept that we need a stronger regulatory and compliance framework for FPH, even though this means farmers will access less floodwater than historically. Importantly, this process does not involve new or more water to irrigators - quite the opposite - it requires a historic form of water access to also be compliant with established limits on total water take, meaning FPH will need to be reduced to fit within this limit. It must be noted, that this reform will involve



		significant social and economic implications for the impacted valleys, and government should be seeking for a smooth transition to minimise these impacts.
	1.6 Review the regulation of domestic and stock basic landholder rights	
	1.7 Make sure the majority of non-urban water take in NSW is accurately measured	NSWIC agrees and notes this will be achieved through the new NSW Non-Urban Water Metering Policy which is currently being rolled out. NSWIC note that this is a world-leading reform, consistently applied across the state, and communications to demonstrate this are required (and are important to building public confidence).
Priority 2 Recognise Aboriginal rights and values and increase access to and ownership of water for cultural and economic purposes	2.1 Establish a partnership agreement with the Aboriginal Water Coalition.	
	2.2 Strengthen the role of First Nations in water planning and management.	
	2.3 Develop a state-wide Aboriginal water strategy.	
	2.4 Provide Aboriginal ownership of and access to water for cultural and economic purposes.	NSWIC recognises and supports the traditional and cultural uses of water by Aboriginal people. NSWIC is developing a Billabong Restoration Project, designed by our First-Nations advisor, and seeks opportunities for this Project to be adopted and delivered by Government. The objective of the Project is to reach Closing the Gap targets, by providing culturally appropriate employment opportunities that harness the cultural creativity of custodians to manage local environments through Community Development Programs. The Project is backed by CSIRO research, and has been piloted at the Ngemba Old Mission Billabong. Further information is available upon request.
	2.5 Work with First Nations to improve shared water knowledge.	
	2.6 Work with Aboriginal people to maintain and preserve water-related cultural sites and landscapes.	
Priority 3 Improve river, floodplain and aquifer	3.1 Implement NSW Long Term Water Plans to protect and enhance ecological systems.	NSWIC is of the understanding that the EWRs in LTWPs are aspirational targets, and as such, sees implementation as problematic.



<p>ecosystem health, and system connectivity</p>		<p>NSWIC recommends that assessments are conducted into the impacts on water entitlement reliability of implementing the LTWPs.</p> <p>NSWIC recommends that the LTWPs are assessed against the feasibility of attaining EWRs under climate change scenarios. Whilst it may be confronting, under climate change scenarios, it may not be feasible to continue trying to maintain the rivers of past centuries (including their EWRs) into the future, particularly with such significant declines in inflows as experienced in the past 20 years. Striving to achieve rivers of the past may set unattainable expectations, and have significant adverse impacts in the pursuit. Action 3.1b should include permitting flexibility of EWRs to take into consideration how a natural river system changes in response to climate change.</p> <p>NSWIC further recommends assessments of what EWRs are already met under existing management frameworks to guide the extent of change required.</p>
	<p>3.2 Take landscape scale action to improve river and catchment health.</p>	
	<p>3.3 Take action to address threats to native fish.</p>	<p>NSWIC strongly supports measures to address threats to native fish, such as through fish passageways (as part of the NSW Fish Passage Strategy). However, NSWIC strongly reject the current IPART cost-shares for measures of this kind, which has irrigators paying 80% of the costs, up from the 50% proposed in the past before the program was put on hold. NSWIC argues that measures of this kind to support native species are in the broad public interest and should be funded largely from government revenue.</p>
	<p>3.4 Invest in long-term and effective monitoring, evaluation, reporting and research.</p>	
	<p>3.5 Adopt a more intense, state-wide focus on improving water quality.</p>	
	<p>3.6 An enhanced, state-wide focus on sustainable groundwater management.</p>	
	<p>3.7 Work with communities to better understand and improve system connectivity.</p>	
<p>Priority 4 Increase resilience to changes in water availability (variability and climate change)</p>	<p>4.1 New actions to improve and apply our understanding of climate variability and change.</p>	



	4.2 Review water allocation and water sharing in response to new climate information.	<p>NSWIC has some hesitations regarding the action to ‘review water allocation and water sharing in response to climate information’, whilst we welcome the intent.</p> <p>This action must recognise existing systems of water sharing, including priorities. Any measures taken within this action must ensure no impacts on the property rights of entitlement holders, including their reliability. Any measure must ensure a reliability impact assessment is undertaken, and clearly communicated to stakeholders.</p> <p>NSWIC strongly supports increased transparency of water allocations (Action 4.2C). As a principle, all water users should be able to clearly understand water allocations and these should be predictable.</p> <p>NSWIC also strongly supports looking for alternative town water supplies where water security for towns cannot be guaranteed in extreme events (Action 4.2A).</p>
	4.3 Improve drought planning, preparation and resilience.	
	4.4 Better integrate land use planning, development approvals and water management.	
Priority 5 Support economic growth and resilient industries within a capped system	5.1 Provide greater certainty to regional businesses that rely on secure access to water	
	5.2 Invest in R&D and new technologies to lift water productivity in NSW industries	
	5.3 Improve the operation and transparency of water trade in NSW	
	5.4 Identify infrastructure and operational options for each region of NSW	
Priority 6 Support resilient, prosperous and liveable cities and towns	6.1 Increase resilience to changes in climate and water availability in Greater Sydney and the Lower Hunter	
	6.2 Work collaboratively with local water utilities to reduce risks to town water supplies	



	6.3 A new Town Water Risk Reduction Program	
	6.4 Continue to deliver the Safe and Secure Water Program	
	6.5 A new state-wide Water Efficiency Framework and Program	NSWIC strongly supports increased water efficiency as a principle. Importantly, NSWIC notes that what is proposed under the draft Strategy is separate to the Commonwealth 'efficiency measure' program in that it does not entail transferring water entitlements or savings to the environment.
	6.6 Proactive support for water utilities to diversify sources of water	
	6.7 Investigate and enable managed aquifer recharge	
	6.8 Promote and improve Integrated Water Cycle Management	
	6.9 Enable private sector involvement in the NSW water sector	
	6.10 Foster the circular economy in our cities and towns	
Priority 7 Enable a future focused, capable and innovative water sector	7.1 Pilot new technologies to increase our water options	
	7.2 Collaborate to harness new research, innovation and technology	
	7.3 Invest in water sector workforce and capability	NSWIC observes that there is a shortage of specific water policy professionals, and rapid turn-over of staff in these roles. Building the water policy workforce is important to the whole sector, as well as developing ways to retain staff in roles to support ongoing corporate knowledge and continuity of expertise.