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SUBMISSION

Senate Standing Committee on Rural and Regional Affairs and Transport

Federal Government's response to the drought, and the adequacy and appropriateness of policies and measures to support farmers, regional communities and the Australian economy

February 2020

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 Senate Inquiry into the *Federal Government's response to the drought, and the adequacy and appropriateness of policies and measures to support farmers, regional communities and the Australian economy*. 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 welcomes the Senate Inquiry into the Government's response to the drought, and the adequacy and appropriateness of policies and measures to support farmers, regional communities and the Australian economy.

NSWIC understands that the Inquiry will have particular reference to:

a) *loans and financial support;*
b) *water availability, infrastructure, agreement and supply measures;*
c) *various market impacts of the measures;*
d) *interaction with existing legislative and regulatory instruments across jurisdictions;*
e) *the response to the Drought Coordinator's report;*
f) *preparedness for the current drought and the capacity of the Australian Government to prepare for future drought; and*
g) *any other related matters.*

Whilst NSWIC supports investigation of each of these elements, this submission will focus on aspects (b), (d), (f) and (g).

It is now widely known that Australia is facing the worst drought on record, which comes off the back of the Millennium Drought (the previous worst drought on record).

Many irrigation farmers have been without water for close to 3 years (with some slight relief from recent rainfall), and this has had tremendous impacts on communities, families, business and the economy. The reality of towns reaching their 'Day 0' (the day they run out of water) is a reality that hit irrigation farms three years ago, when water allocations hit 0%.

Submission

Water availability, infrastructure, agreement and supply measures

Water Availability

Water availability is a product of both **climatic water availability** (droughts) as well as **regulatory water availability** (allocations, sharing agreements, water recovery programs, etc). At the present time, water availability for irrigation farmers is dramatically reduced because of both climatic water availability (with the worst drought in Australia's recorded history), as well as regulatory water availability with the implementation of arguably the largest water reform in Australia's history (Murray-Darling Basin Plan) and 0% allocations. The culmination of both the climatic and regulatory hindrances on water availability has been unfortunate and puts increased pressure on the implementation of these reforms.

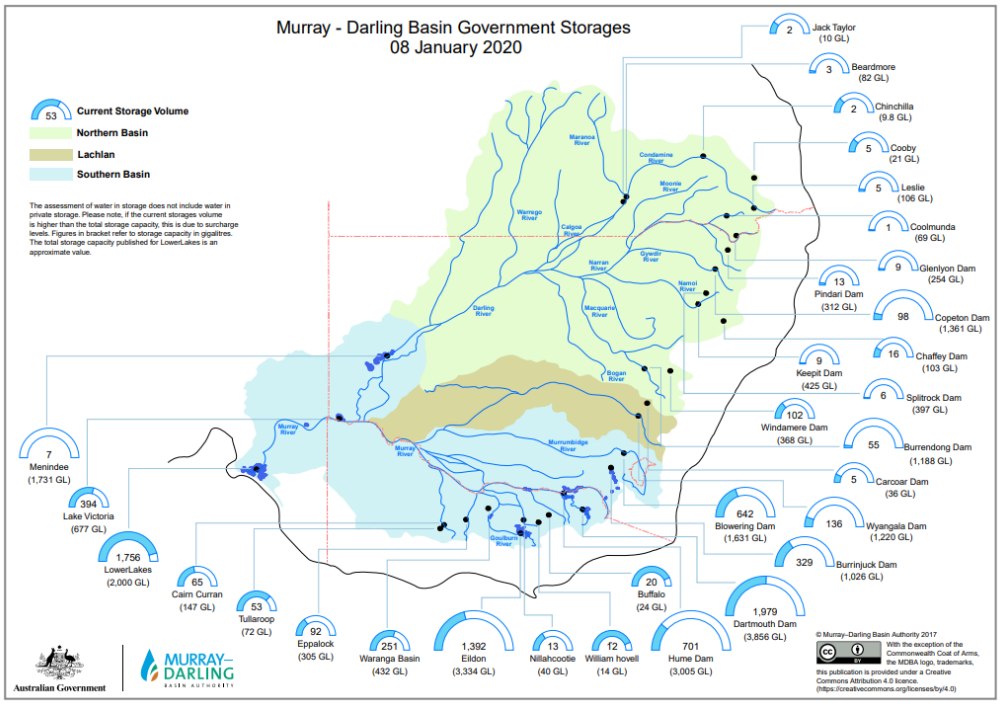
The challenges of implementing significant reforms amidst such a critical drought have been evident. As such, NSWIC is of the view that flexibility and adaptability is required in the further implementation of the Basin Plan. In particular, flexibility and adaptability for new and improved Sustainable Diversion Limit Adjustment Mechanism (SDLAM) projects are essential to its success. The SDLAM as a concept is

the most critical component to future implementation of the Basin Plan, providing the lowest risk to communities, and realising targeted environmental outcomes. However, many of the specific projects within the mechanism were poorly developed (not developed with local communities), and many are thus not supported.

> ***Recommendation:***
> *Allow flexibility and adaptability for new and improved Sustainable Diversion Limit Adjustment Mechanism (SDLAM) projects.*

The *Murray-Darling Basin Agreement* (MDB Agreement) is also a point of interest, in terms of how water is shared between states during drought, and what impact that has on water availability beyond the immediate drought epicentre. There is a commonly held view that it was timely to review the MDB Agreement to ensure it remains appropriate to contemporary times. NSWIC notes that this is currently addressed to some extent through the Interim Inspector General (IIG) *Inquiry into management of Murray–Darling Basin water resources*. This is because the climatic and regulatory environment is fundamentally different today, than at the time the MDB Agreement was developed. To be effective, the MDB Agreement must reflect the contemporary climatic and regulatory conditions.

Looking at the MDBA *Water in Storages* reports, it becomes immediately clear why concerns exist that the drought impacts are not flowing downstream.



Source: Murray-Darling Basin Authority (January 2020)[1]

The below table illustrates why many are concerned about water sharing arrangements.

[1] See: https://www.mdba.gov.au/managing-water/water-storage

Table 1: Water in Storages in the Murray Darling Basin

Catchment	Water in Storages (%)	Water in Storages (GL)
Border Rivers	4%	23 of 635 GL
Gwydir	7%	98 of 1,364 GL
Macquarie	8%	157 of 2,046 GL
Namoi	3%	32 of 923 GL
Lachlan	11%	141 of 1,253 GL
Lower Darling	0%	7 of 1,731 GL
Murrumbidgee	36%	970 of 2,659 GL
Upper Murray	39%	2,680 of 6,861 GL
Lower Lakes**	91%	1,756 of 1,924 GL

**Data sourced from the Murray Darling Basin Authority, January 2020*[2]
*** Water in the Lower Lakes is a combination of South Australian entitlement flow, volume for dilution to reduce salinity and to mitigate the impact of seawater intrusion.*

NSWIC recognises that as part of negotiations, a compromise was reached for a lower volume of water to South Australia for higher reliability. However, that arrangement, combined with trends of water demand moving downstream, the requirement for large parcels of environmental water to move downstream, and the extensive drought across the Basin has put enormous pressure on the Murray when the Northern Basin has been out of water from extreme drought.

It is critical that drought risk and burden is appropriately shared.

In recent times, with no or low inflows coming into the Basin system, and many northern rivers no longer running, there is enormous pressure on the Southern Basin to meet water requirements (such as those to South Australia). This management regime effectively concentrates the drought burden on the Murray. Unlike other parts of the Basin, water users along the Murray physically can see water, but the regulatory arrangements mean they must watch it flow by.

This means that some of the most fertile productive land is currently idle as there simply isn't any allowable water access. In effect, due to the physical lack of water in the Northern Basin, the impacts of the drought have now been concentrated on the Murray as that region now must meet the full water volume requirements. There is evidently a need to reassess how water sharing arrangements have led to that outcome, and the significant impacts on communities and agricultural production that have resulted.

Recommendation:
When Menindee Lakes are offline, that should be a trigger point to reduce intergovernmental flow entitlements by the proportion of the Darling's contributions. If that does not occur, the Murray faces unfeasible requirements to compensate for this amount.

[2] https://www.mdba.gov.au/managing-water/water-storage

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, agricultural water, and for flood mitigation. 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 population has grown without the necessary water infrastructure to meet the growing demands. An assessment is required as to whether the current storage capacity in NSW (or Australia more broadly) is sufficient to withstand droughts into the future, and what additional water storage capacity is required.

There is also opportunity to investigate innovative solutions to water supply issues. Options such as Managed Aquifer Recharge have proven highly successful in many locations (e.g. Kern Water Bank in California) as a way of storing water underground. The feasibility of this option, as well as other new innovative engineering and technical solutions, would be a valuable investigation.

Recommendation:
Respond and adapt to a changing climate of water availability by investing in innovative infrastructure to enhance water conservation capacity for increased resilience to prolonged dry periods.

- A study into whether existing water storages are sufficient for towns, farms and the environment to withstand longer and more frequent dry periods.
- A program for the identification, construction and operation of innovative infrastructure to improve the total available water balance for all water users (including farmers, the environment, towns and communities) is required.

Preparedness for the current drought and the capacity of the Australian Government to prepare for future drought

Research, Development and Extension

Water is the most limiting factor to agriculture in Australia. Yet, there is no national research body for addressing constraints on water availability, water productivity, and on-farm management that impairs the capacity of the sector. This must be addressed.

The current worst-on-record drought crippling the agricultural sector and its people demonstrates the need for new and sustained investments in Research, Development and Extension (RD&E) for the sector. This will underpin prosperity, sustainability and resilience for the future in which water security is most likely to become increasingly under threat.

There is every reason why the driest inhabited continent on Earth, must be the world leader in agriculture that is water efficient and climate resilient. The future of our

agriculture sector should be a future of continuous improvements in water governance and management through innovative technologies and best-practice management options to support the industry's vision for a $100 billion sector by 2030.

In 2019, NSWIC proposed a research vehicle – a cooperative research centre or an institute – dedicated to the economic, environmental and socio-cultural challenges in the Murray Darling Basin primarily and the irrigation regions across the country. The vehicle is to develop cutting edge technology, best-practice for off and on-farm water management, capacity development, and public education on water, as well as scientifically sound evidence-based policy options for irrigation farming sector and dependent communities.

Our objectives are in alignment with those of the One Basin CRC being developed by the University of Melbourne. We therefore strongly endorse the One Basin initiative.

***Recommendation*:**
The Federal Government supports the establishment of the One Basin CRC as a centre of excellence that brings together research providers with complementary expertise, industry, and the community into partnership to address research priorities for enduring irrigation farming and its dependent communities.

We were pleased when the former water Minister, and current Agriculture Minister, David Littleproud stressed the need for a research facility for ensuring water security for Australia by saying[3]:

> *"**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?"*

Interaction with existing legislative and regulatory instruments across jurisdictions

Cost Share Arrangements for Rural Water

NSWIC believes the rural water cost share arrangements are highly inappropriate, unjust and restricts drought-resilient development opportunities given costs must be met by water users. In short, the current cost share arrangements, especially at a time when water users are in a poor financial position from prolonged droughts, hinders the ability to finance vital drought resilience and preparedness projects.

At present, the Independent Pricing and Regulatory Tribunal (IPART):

[3] ABC Q&A "The Drought" (28/10/2019). Transcript available at: https://www.abc.net.au/qanda/2019-28-10/11624850

"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."*[4]

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.

NSWIC has particular concerns with:

1. The premise of applying the impactor-pays principle to water management. It is unfair and inappropriate that water users (irrigation farmers) are required to pay 80% of the Capital Expenditure (CAPEX) and 100% of the Operational Expenditure (OPEX) even for activities that are considered for public interest and community benefit (water quality monitoring, environmental management, flood mitigation, etc).
2. The application of 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****.*[5]

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: *"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."*[6]

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 management. It also disregards the societal role of agricultural water – specifically the fact that society requires food and fibre, which requires water to be produced. 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, including for drought preparedness, 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, insensitive to the lack of water (and thus production/income) in recent times, and inhibits the financial ability for projects to progress.

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4 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
5 Ibid.
6 Ibid.

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

The review should include the limitations and hindrances of the NSW rural bulk water cost sharing arrangement, in applying the impactor pays principle in an extreme drought.

Waiving the fixed component of water licences during prolonged and extreme drought may be appropriate in extreme circumstances.

Other related matters

- There would be benefit in improving the coordination of drought related information between agencies to ensure that it is easily accessible.
- Where Farm Management Deposit schemes are adopted, they are generally considered a good risk management tool, however, they are not a single solution particularly in multi-year drought scenarios. Other tax incentives including the instant asset write-off provide capacity for farmers to invest in drought-proofing infrastructure reducing their tax-burden in times when they need it most. This incentive should be adopted as a permanent measure for drought-proofing infrastructure such as farm feed storages or water savings measures.
- The option of subsidised loans is often favoured by farmers, as this provides the flexibility to carry on in severe circumstances, whilst feeling dignity of paying it back in the future.
- Mental health support must be a strong focus.
- Mental health measures must include public education, due to the abuse, bullying and threats made towards farmers and the farming industry, particularly through social media, at times of critical water insecurity.
- There is a need for the recognition of farmers who are caretakers of environmental assets on private property, and for those farmers to be supported in their environmental stewardship. There are many cases whereby farmers manage valuable ecological assets on their land, and these practices must be supported, particularly in times of water insecurity.

Conclusion

Droughts have enormous impacts on agriculture, and particularly irrigation farming, which is responsible for producing our food and fibre in Australia. This impacts on jobs on-farm, in regional communities and across the full length of the supply chain. These impacts go beyond farmers and regional communities, but extend to the cities and people in other countries who rely upon Australian grown food and fibre.

As outlined in this submission, Australia must develop new innovative water infrastructure to ensure our water supply can endure long droughts; develop a pricing system that does not inhabit drought resilience efforts by burdening costs onto financially constrained farmers; allow flexibility for ongoing reforms in which implementation has been hampered by droughts; ensure drought impacts are

appropriately distributed; and invest in research and development so Australia continues to be world-leading in agricultural water efficiency and productivity.

As a country very familiar with droughts, and with available data indicating that they will become increasingly severe and prolonged, Australia must develop means to not only be resilient to these conditions, but to continue to prosper despite them. Australia now has the opportunity to lead the way in innovative water infrastructure and engineering, water productivity and efficiency research and development, and best practice water management.

Kind regards,

NSW Irrigators' Council.