



Submission to the Productivity Commission on:

National Water Reform 2024

By:

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making every drop count

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I Summary and Purpose

The Gwydir Valley Irrigators Association has provided this submission to the Productivity Commission (the Commission) for consideration as part of their 2024 review into the National Water Initiative.

This document aims to represent the concerns, views and experiences of our members. Each member reserves the right to express their own opinion and is entitled to make their own submission.

The GVIA and our members, are members of the NSW Irrigators Council and National Irrigators Council and we support the submissions made by both those organisations.

2 Introduction

The Gwydir Valley Irrigators Association (GVIA) as the representative body for irrigation entitlement holders in the Gwydir Valley and welcome the opportunity to provide our feedback to the Productivity Commission (the Commission) on the Inquiry into the National Water Initiative from the perspective of our region. We support the original aims of a nationally-compatible, market, regulatory and planning based system of managing surface and groundwater resources for rural and urban use that optimises economic, social and environmental outcomes.

Environmental water management is not new in the Gwydir Valley, we have had environmental water in one form or another since the construction of Copeton Dam in the late 1970's¹, long before the 1994 Council of Australian Governments (COAG) water reform framework and the 2004 Intergovernmental Agreement on a National Water Initiative² (the Agreement). Our region experienced rapid growth in the environmental portfolio from 2008 onwards with the purchase of licences by the NSW and Commonwealth Governments. This significantly altered behavioural assumptions and influenced how the system operates, it has impacted what environmental and economic outcomes can be achieved and how the community is affected by the sharing of water resources. The reform was difficult as the community was forced to adjust to a region with less water, as Government's entered the water market with a no regrets policy without any plan in place.

The Murray Darling Basin Plan³ was finally agreed and since, then, the Gwydir has had more environmental water recovered than required by the Murray Darling Basin Authority modelling and legislation. This is confirmed in regular progress reporting water recovery for the Murray Darling Basin Plan⁴ that there is an additional 5,000 megalitres of water owned by Government's above the legislated amount for our region⁵. As such objective 4 of the Agreement, "complete the return of all currently overallocated or overused systems to environmentally sustainable levels of extraction" has been achieved. Yet we face ongoing policy and rule changes to further erode objective 1 of the Agreement "clear and nationally-compatible characteristics for secure water access entitlements"

Despite the opportunity that this water could create, neither the Australian Government or NSW Government have made any commitment to address this over-recovery and it has never been formally recognised. Stating the need for an accredited Water Resource Plan, to

¹ Refer to the section About the GVIA or visit our website for more information www.gvia.org.au/thegwydirvalley/thegwydirvalley.

² <https://www.agriculture.gov.au/sites/default/files/sitecollectiondocuments/water/Intergovernmental-Agreement-on-a-national-water-initiative.pdf>

³ The Murray Darling Basin Plan.

⁴ <https://www.dcceew.gov.au/sites/default/files/documents/surface-water-recovery-including-sdlam.pdf>

⁵ The Gwydir Valley has met the legislative requirements of the Murray Darling Basin Plan of 42,000 megalitres of LTDLE entitlement for local/instream environmental outcomes and a further 7,600 megalitres for shared contribution to the northern basin. The NSW and Australian Government's hold 54,600 megalitres LTDLE entitlements⁴. Based on IQQM long-term modelling and the volume of water purchased for the environment

confirm the over-recovery before addressing it. Interestingly, these factors have not restricted the Australian Government in pursuing more water for the environment where an unreconciled gap is targeted for purchase via the bridging tenders just closed⁶. The inconsistency in policy approaches by Governments creates gross inequities between communities all trying to achieve the objectives of the Agreement and the outcomes of the 2012 Murray Darling Basin Plan. As indicated in previous Commission Water inquires, over recovery and the increased risk of many other valleys being pushed well below Sustainable Diversion Limits must be addressed and new legislation considered to provide certainty to communities.

There is much to learn from regions like the Gwydir who have a long history of environmental water management and use, and at times, with good success⁷ delivering outcomes in line with desired environmental outcomes for our region and those downstream. For example, during the recent drought environmental water was available to keep key sections of our main river and refuge pools with water⁸. This was due to the planning program which allowed for a reserve of water during the drought for this purpose using water available due to the recovery of water for the Plan.

The process moving forward will need leadership from all levels of government and must recognise that compromise by all, not just some, will be needed and that there are limitations to what we can achieve and these need to be acknowledged or addressed.

We welcome the opportunity to provide further input if required.

2.1 Recommendations

1. The National Water Initiative recognise that the majority of catchments are not overallocated.
2. The complementary measures are an integral component of any National Water reform initiative as without them it will not be possible to achieve the environmental or cultural outcomes intended.
3. That the National Water reform Initiative recognise
 - a. That the NSW Water Sharing Plans provide the reform principle recommended by the commission in 2020 for strong capacity to deal with droughts, floods and shocks and to adapt to a changing climate.
 - b. The NSW systems are looking to use the best available information in decision making with regards available water determinations. There is however scope to improve understanding and management of extreme low flows so that balance and equality can be achieved.
4. Existing NSW Water Sharing Plans be recognised as providing sound foundations for sharing water with recognition of the suitability to provide balance and sharing

⁶ <https://www.dcceew.gov.au/water/policy/mdb/commonwealth-water-mdb/strategic-water-purchasing>

⁷<http://www.environment.nsw.gov.au/topics/water/water-for-the-environment/gwydir/annual-environmental-water-priorities>

⁸ Gwydir Refuge Pool Flow 2019-2020 <https://www.dcceew.gov.au/water/cewo/catchment/gwydir-valley-river-refuge-pool-flow>

- between environmental and consumptive uses as a result of climate change, with new environmental, consumptive and cultural objectives.
5. The GVIA agree in principle that reform should develop policy and institutional arrangements to make the best use of environmental water to achieve agreed environmental outcomes. But that these policies should be guided by rules that
 - a. minimise negative third party impacts and
 - b. do not exceed limitations caused by channel capacity constraints or natural system limitations such as limited connectivity
 6. The GVIA agree that the National Water initiative reform principle requires fit for purpose regulatory, governance and management arrangements, and that the NSW non-urban metering reform still needs to improve to be fit for purpose.
 7. Opportunities to enhance services such as medical, education and technology in regions impacted by water policy decisions should be made available to provide community support to transition to a region with less water.
 8. Financial subsidies for new or existing businesses in regions impacted by water recovery should be provided to allow them to invest locally and diversify for example, deposit schemes to offset income variability, payroll tax incentives to attract, retain and support skill development of staff.

3 About the GVIA

3.1 Our region

The Gwydir Valley Irrigators Association (GVIA) represents more than 450 water entitlement holders in the Gwydir Valley, centred around the town of Moree in North-West New South Wales. Our mission is to build a secure future for members, the environment and the Gwydir Valley community through irrigated agriculture.

The Moree Plains Shire region alone is highly dependent on agriculture and irrigated agriculture for economic activity contributing over 72% of the value of gross domestic product (cotton is around 60%), employing 20-30% of the population and accounting for almost 90% of exports from the Shire⁹.

The 2011 agricultural census estimates that the total value of agricultural commodities for the Moree Plains Shire region was \$911,951,079 up from \$527,744,851 in the 2005-06 census. This is an estimated 7.83% of NSW's total agricultural production from a 1,040,021Ha principally used for agricultural crops¹⁰.

The Gwydir is characterised as having low water reliability with most water held as general security water with a reliability of 36% (that means irrigators could expect in the long-term just over a third of their entitlement can be accessed). Supplementary water entitlement is somewhat more reliable with 55% but accounts for less than a quarter of the total volume.

⁹ Cotton Catchment Communities CRC Communities and People Series 2009

¹⁰ 2010 2011 Agricultural Census Report – agdata cubes, 71210D0005-201011 Agricultural Commodities, Australia

Groundwater reliability is considered 100% but there is less than 30,000ML available. Floodplain harvesting licences were issued in 2022 and contribute almost a quarter of the water use in the region over the long term. However, access is episodic, in line with moderate to major floods.

The total volume of water available to be accessed by irrigators has been reduced significantly over time due to reforms as outlined in Table 1: Summary of Water Reform. Entitlements owned for environmental purposes totals more than 186,000ML, which includes an Environmental Contingency Allowance of 45,000ML. The NSW and Commonwealth environmental water managers are now responsible for 28.5% of high security entitlement, 29% of general security entitlement and 13% of supplementary entitlement for environmental use. Environmental water being held in the Gwydir prior to the first Water Sharing Plan. Environmental water is primarily used to contribute waterbird and fish breeding events and to maintain the condition and extent of the internationally recognised Gwydir Wetlands but as the portfolio has grown, so has the application and use of environmental water.

As a result of water reform, only approximately 19% of the total river flows are available for diversion for productive use¹¹. This equates irrigators holding 575,000ML from regulated entitlement (high security, general security and supplementary water) and 28,000ML available from groundwater aquifers.

Table 1: Summary of Water Reform

Year	Program	Volume of entitlement
1970	Creation of replenishment flow	5,000ML
1995	Murray-Darling Basin 1993/94 Interim Cap established to limit future growth in access	
1996	Voluntarily reduced their general security reliability by 5%, by establishing the original Gwydir Valley Environmental Contingency Allowance (ECA) of general security equivalent water.	25,000ML General Security
2004	Gwydir Regulated River Water Sharing Plan further reduced reliability by 4%, primarily through increasing the ECA and enhancing its use and storage provision. Rules created for the WSP also reduced access, particularly to supplementary flow previously known as high flow.	20,000ML General Security
2006	Lower Gwydir Groundwater Source Water Sharing Plan reduced groundwater entitlements from 68,000 megalitres to 28,700 megalitres.	39,300ML Groundwater
2008 +	NSW State Government has purchased general security entitlement as well as supplementary for wetlands recovery programme.	17,092ML General Security 3,141ML Supplementary
	NSW Government infrastructure works	1,249ML High Security

¹¹ Based on IQQM long-term modelling and the volume of water purchased for the environment

Year	Program	Volume of entitlement
	Commonwealth buy-back program.	88,133ML General Security 20,451ML Supplementary
2016	Commonwealth infrastructure programs.	4,508ML High Security 1,392ML General Security
2022	Licencing of Floodplain Harvesting in the regulated and unregulated water sources	24.8% reduction equating 10.4 GL long-term take
TOTALS		5,757 High Security 156,617ML General Security (including ECA) 23,592 ML Supplementary

Changes in water availability either through climate or government policy has a direct impact on the productivity of the region and the local economy. Analysis by the Murray Darling Basin Authority highlighted this relationship during the northern review and revealed that for both Moree and Collarenebri social and economic indicators declined through 2001 to 2011 including education, economic resources and disadvantage, resulting in an estimated 200 jobs lost due to the implementation of the Basin Plan in the region¹².

3.2 Our region's hydrology and geomorphology

The Gwydir River is an inland terminal river network that is also classified as “distributary” network by the Murray Darling Basin Commission back during water sharing plan development. This indicates that the rivers become a series of branching channels that distribute their flows across large areas especially during flood times (MDBC, 2007a). This distribution of water represents the watercourse areas of which the Gwydir has internationally recognised Gwydir Wetlands. There are four parcels of land within the Gwydir Wetlands that are listed under the Ramsar Convention on Wetlands (MDBA, 2010c).

This natural geomorphology means the Gwydir River under natural conditions would have a very low ability to contribute to surrounding catchment inflows. The State of The Darling Interim Hydrology report puts the average percentage flow of the Darling River from the Gwydir River to be 12%, although updated estimates have this percentage between 8-7% as reported in the Independent Assessment of the 2018-19 Fish Deaths in the Lower Darling. The low contribution, which is consistent with other terminal wetland systems, is a

¹² Refer to the Murray Darling Basin Authorities Socio Economic condition reports, Social and Economic Analysis of the Moree Community, 2009. Cotton Catchment Communities CRC

[630-nbr-community-profile-moree-hr.pdf \(mdba.gov.au\)](https://www.mdba.gov.au/sites/default/files/publications/630-nbr-community-profile-moree-hr.pdf)

<https://www.mdba.gov.au/sites/default/files/publications/630-nbr-community-profile-collarenebri.pdf>

result of most of the water within the system flowing naturally towards the terminal wetlands and watercourse.

While the natural hydrology has been altered via modification of the river and operations with an increase in end-of-system connectivity since irrigation development. Flows are now “regulated down the Mehi, Moomin and Carole, which [can] join up with the Barwon River”⁵. This channelization and re-regulation occurred throughout the last century to initially deliver regular stock and domestic water supplies to users and then to deliver irrigation water more efficiently. However, even with these modifications there remains limited capacity to securely move water through these systems with channel constraints limiting the daily flows. That’s largely due to in-river flows being highly constrained by river channel limitations which are below 1000 megalitres per day on the Mehi constrained upstream at Bronte and 300 megalitres per day on the Gil Gil creek, these are the two main regulated systems that contribute to the Barwon River. The relative contribution of the Gwydir is low, and highly variable from year to year. For example, in 2016-2017 156,000 megalitres⁶ flowed into the Barwon following a spring cyclonic event causing moderate flooding in the mid-catchment but the following year 2017-2018 the contribution was 29,000 megalitres predominately because of environmental water⁷. Generally, the contribution occurs largely due to significant flood events such as in 2011-2012, 2016-2017 and to a lesser extend February 2020.

3.3 What we do

The GVIA’s mission is to build a secure future for our members, the environment and the broader Gwydir Valley community through irrigated agriculture, we can do this together by making every drop count in the river or the aquifer, on-farm, for the environment, or for our community¹³.

GVIA members hold entitlements within the Gwydir regulated and un-regulated surface water areas, in addition to groundwater resources. All of which are managed through water sharing plans, which have been progressively developed since early 2000.

The GVIA organisation is voluntary, funded by a nominal levy, cents/megalitre on regulated, unregulated and groundwater irrigation entitlement. The levy is paid and supported on average by 85% of the eligible entitlement (excludes NSW and Commonwealth entitlement).

Much of the activity of the association revolves around negotiating with government at a Federal, State and Local level to ensure equality and the rights of irrigators are maintained and respected. The core activities of the Association are funded entirely through the voluntary levy, the Association does however undertake programs and projects to maintain and improve the sustainability of members on-farm activities, which can be funded by government or research corporations.

The Association is managed by a committee of a minimum 11 irrigators and employs a full-time executive officer and a part-time administrative assistant, as well as hosting a Project Officer funded through the Cotton Research and Development Corporation, the Gwydir Valley Cotton Growers Association and the GVIA.

¹³ For more information, see our corporate video on <https://vimeo.com/177148006>

3.4 Contacts

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Chair: Jim Cush
Interim Executive Officer: Louise Gall

4 Objectives and Elements of the National Water Initiative¹⁴

Full implementation of this Agreement will result in a nationally compatible, market, regulatory and planning based system of managing surface and groundwater resources for rural and urban use that optimises economic, social and environmental outcomes by achieving the following objectives

4.1 Objectives

- i. clear and nationally compatible characteristics for secure water access entitlements.*
- ii. transparent, statutory-based water planning.*
- iii. statutory provision for environmental and other public benefit outcomes and improved environmental management practices.*
- iv. complete the return of all currently overallocated or overused systems to environmentally sustainable levels of extraction.*
- v. progressive removal of barriers to trade in water and meeting other requirements to facilitate the broadening and deepening of the water market, with an open trading market to be in place.*
- vi. clarity around the assignment of risk arising from future changes in the availability of water for the consumptive pool.*
- vii. water accounting which is able to meet the information needs of different water systems in respect to planning, monitoring, trading, environmental management and on-farm management.*
- viii. policy settings which facilitate water use efficiency and innovation in urban and rural areas.*

¹⁴ <https://www.agriculture.gov.au/sites/default/files/sitecollectiondocuments/water/Intergovernmental-Agreement-on-a-national-water-initiative.pdf>

- ix. *addressing future adjustment issues that may impact on water users and communities; and*
- x. *recognition of the connectivity between surface and groundwater resources and connected systems managed as a single resource.*

4.2 Elements

Agreed outcomes and commitments to specific actions are set out on the basis of the following key elements:

- i. *Water Access Entitlements and Planning Framework.*
- ii. *Water Markets and Trading.*
- iii. *Best Practice Water Pricing.*
- iv. *Integrated Management of Water for Environmental and Other Public Benefit Outcomes.*
- v. *Water Resource Accounting.*
- vi. *Urban Water Reform.*
- vii. *Knowledge and Capacity Building; and*
- viii. *Community Partnerships and Adjustment.*

5 Discussion

5.1 Environmentally sustainable levels of extraction.

Objective four requires the return of all currently overallocated or overused systems to environmentally sustainable levels of extraction. As the NSWIC Submission indicates, “This objective be considered achieved in the Murray-Darling Basin with Sustainable Diversion Limits now in place and being met,” “A sustainable balance has been attained in the Murray-Darling Basin through the recovery more than 2100 GL of water for the environment¹⁵ under the Murray-Darling Basin Plan.”

As detailed earlier, The Gwydir Valley has met the legislative requirements of the Murray Darling Basin Plan of 42,000 megalitres of LTDLE entitlement for local/instream environmental outcomes and a further 7,600 megalitres for shared contribution to the northern basin. The NSW and Australian Government’s hold 54,600 megalitres LTDLE entitlements¹⁶. As a result of water reform, only approximately 19% of the total river flows are available for diversion for productive use. Despite our region having contributed through reform 5,000 megalitres more than necessary under the Plan and having achieved

¹⁵ [Progress on Murray-Darling Basin water recovery - DCCEEW](#)

¹⁶ <https://www.dcceew.gov.au/sites/default/files/documents/surface-water-recovery-including-sdlam.pdf>

“environmentally sustainable levels of extraction” we continually receive pressure for further contributions. This is undermining the security and commercial certainty of water access entitlements.

Entitlements owned for environmental purposes in the Gwydir totals more than 186,000ML, which includes an Environmental Contingency Allowance of 45,000ML. The NSW and Commonwealth environmental water managers are now responsible for 28.5% of high security entitlement, 29% of general security entitlement and 13% of supplementary entitlement for environmental use.

There needs to be improved recognition of significant progress in “achieving sustainable levels of extraction” and acknowledgment that this has had significant social and economic impact on communities as detailed in MDBP reviews¹⁷.

Recommendation

1. The National Water Initiative recognise that the majority of catchments are not overallocated.

The National Water Initiative and reform must acknowledge that to effectively achieve environmental outcomes complementary measure including fish screens and fish passage must be included. In 2018 the Commissions review into the implementation of the Plan found that unless river constraints were addressed water recovered may be unusable¹⁸. This is concerning given to overarching principle of the Agreement is to optimise economic, social and environmental outcomes.

These complementary measures are demonstrating positive environmental outcomes. For example, the fish screening program in the northern toolkit.

- The Gwydir project was over-subscribed. With the funding available, there will be 16 sites, 49 pumps, ~2,944 ML/d implemented, and given the scientific literature should protect ~925,000 native fish per year. These sites will compliment other activities to improve fish passage in the northern basin such as the Macquarie program.
- The Macquarie River Screening Program, funded by the NSW Government, is well underway and predicted to protect 885,000 native fish every year.

Together, these two examples of complementary measures indicate that the north is well on the way to protecting two million native fish every year, with three million on the horizon.¹⁹ A significant step towards restoring the environmental health of the basin. Many more examples are available at Fish Screens Australia²⁰.

¹⁷ [Northern Basin review – social and economic condition reports | Murray–Darling Basin Authority \(mdba.gov.au\)](https://www.mdba.gov.au/northern-basin-review-social-and-economic-condition-reports)

¹⁸ [Inquiry report - Murray-Darling Basin Plan: Five-year assessment - Productivity Commission \(pc.gov.au\)](https://www.pc.gov.au/inquiry-report-murray-darling-basin-plan-five-year-assessment-productivity-commission)

¹⁹ Email from NSW DPI Fisheries May 2023 about Fish Screen Project outcomes.

²⁰ <https://fishscreens.org.au/case-studies/>

Given the significant environmental events experienced in the northern basin in the last five years with the Menindee Fish Deaths in 2019 and 2023, The implementation of fish passage should be a priority for all governments. Whilst blackwater events cannot be avoided, fish passage together with improved management decision making has the potential to reduce their impact.

There is still enormous potential to be achieved from complementary measures, implementation of fish passage at Menindee Lakes as identified in the NSW fish passage strategy or fish screens along the Southern Basin could protect millions more native fish.

Recommendation

- 2. The complementary measures are an integral component of any National Water reform initiative as without them it will not be possible to achieve the environmental or cultural outcomes intended.**

5.2 Climate Change

Into the future, water resource management and water service provision will have to respond to changing demands on the limited water resources of Australia, balancing the needs of a growing population and the predicted increased variability of our climate. Recent experiences have reminded us of massive climatic extremes of Australia, not a new phenomenon. As Dorothea Mackellar wrote in the early 1900's Australia is a land of "drought and flooding rains". We need to remain cognisant of the variability in our climate and consider how changes are predicted to impact the different regions of our nation, but we need to ensure that policy is not overly conservative and that it does not overcompensate nor under compensate for predicted changes. Over recent years we have observed both extremes of the water spectrum, with intense droughts and floods. We need to recognise this but remain vigilant to look beyond our most recent experiences, balancing this with the past and changing populations and land use to present a realistic picture of the variability ahead, so planning can be fit for purpose.

The Gwydir is a low reliability water catchment and evolved to manage water resources, based on the local variability of wet and dry cycles. Regional Water Sharing Plans account for reliability and variability. Much greater recognition needs to be given to how the existing water allocation system already manages climate change and variation. The calculation of available water determinations using worst case inflow scenarios address climate variability. When there are no minimum inflows or no base flows, allocations are not provided. When minimum inflows are met, essential needs and baseflows provided then allocations are provided on a sharing arrangement between water licences and their priority. These Water Sharing Plans provide the reform principle recommended by the commission in 2020 for strong capacity to deal with droughts, floods and shocks and to adapt to a changing climate.

In extreme droughts, the environment in NSW is delivered the higher priority requirement, outside the current water framework, through the establishment of temporary water restrictions. Past experiences demonstrate issues in the implementation of temporary restrictions, and the GVIA do not see this as an enduring solution to extreme periods of drought. The Water Sharing Plan is just that a "Sharing" plan and had much contribution

from all members of community in its development, with a statute five year review. For it to be suspended in drought when it is needed most is absolutely disrespectful to the people who put so much time and effort into its development, in fact by applying Ministerial suspensions it totally undermines the principle of having a sharing plan and rules. The plan is in place to provide rules but also to remove emotion from decision making and should also remove politics from the decision making. Importantly Queensland have NOT suspended water sharing plans in droughts as they have faith in the development of their plans with improvements or alterations made in the five yearly review process.

There is a need to transition towards and remain committed to a rules-based system, with realistic objectives articulated to enable risk to be shared more appropriately and to not disproportionately impact users.

In NSW the adoption of the full climate record as opposed to the Plan's defined climate record ensures that a more recent record of climate variability is used to determine the long term average annual extraction limit and monitor take to be within that limit. For example, the Gwydir Valley's model was recently updated for the determination of floodplain harvesting licences with climate information to 2020 and the Lower Gwydir Groundwater model was also recently updated to 2022.

We therefore consider that NSW management systems consider the most current climate information and share the risk, of changes in climate through the framework and monitoring. The NSW systems are looking to use the best available information in decision making with regards available water determinations. There is however scope to improve understanding and management of extreme low flows so that balance and equality can be achieved.

Irrigated agriculture has been actively pursuing improvements in water use efficiency as demonstrated by Research and Development Corporations and Federal government projects such as Smarter Irrigation for Profit²¹. As an industry, irrigators must adhere to best management practice and continue to innovate and develop systems that provide sustainable output for communities reliant on them. This supports the reform principles of using the best available information in decision making in partnership with innovation and adaptive management.

Recommendation:

- 3. That the National Water reform Initiative recognise**
 - a. that the NSW Water Sharing Plans provide the reform principle recommended by the commission in 2020 for strong capacity to deal with droughts, floods and shocks and to adapt to a changing climate.**
 - b. The NSW systems are looking to use the best available information in decision making with regards available water determinations. There is however scope to improve understanding and management of extreme low flows so that balance and equality can be achieved.**

5.3 Water Planning

²¹ [Smarter Irrigation for Profit](#)

The Agreement recognises that there will be a need to set trade-offs between competing outcomes for water systems and that these trade-offs will involve judgements informed by best available science, socio-economic analysis and community input. It is essential that equality and fairness is applied to decision making. Too often socio-economic analysis and economic impact assessments are an afterthought. They need to be included with the environmental objectives from the start of any proposed adjustment to water sharing plans and water access entitlements.

The Agreement clauses 36 to 40 describe the purpose of water planning as assisting “governments and the community to determine water management and allocation decisions to meet productive, environmental and social objectives.”

Clause 37 (ii) in the Agreement notes that water planning by States and Territories will provide for: “resource security outcomes by determining the shares in the consumptive pool and the rules to allocate water during the life of the plan.”

The Commission in 2020 suggested in its guidance for water entitlement and planning that in “fully developed systems, a process for rebalancing between environmental and consumptive uses as a result of climate change, with new environmental, consumptive and cultural objectives, should be developed.”

The GVIA would argue that much greater recognition needs to be given to how the existing water allocation system already manages climate change and variation, environmental, cultural and consumptive requirements. Water sharing plans (WSP) across NSW automatically reduce the share of water to consumptive uses to reflect water availability in real time and critical higher priority needs. This planning process enables balanced sharing and real time assessment of the actual water availability, ensuring that critical human needs remain front and centre.

The water sharing plans in NSW provide the foundations to ensure the sharing of water, maintenance of water quality and prioritisation of water for critical human needs. WSP’s need to clearly detail rules that enable fair and balanced sharing of water resources. The implementation of ad hoc, non-transparent processes, extensively implemented in the last drought with significant consequences to upstream water users should be avoided. See GVIA First Flush report²².

These Water Sharing Plans and the rules within provide balance, security and commercial certainty of water access entitlements, implementation of decisions without clear rules and outcome objectives are undesirable, too often leading to unintended outcomes and imbalance in the sharing of the water resource.

The NSW Water Sharing Plans were developed to share resources between environmental assets and water access entitlements. However, the priorities and outcomes have shifted over time, from local wetland focused outcomes to broader environmental outcomes with a downstream focus. This downstream focus must not override the upstream requirements, balance is only possible when all parties share the responsibility. Sharing of resources and balance in access in real time should be the focus. Priority downstream should not shift all the responsibility upstream; the risk should be shared to provide equality between

²² [Northern Basin First Flush Assessment - Public Submissions Draft Report \(nsw.gov.au\)](https://www.nsw.gov.au/northern-basin-first-flush-assessment-public-submissions-draft-report)

communities. There is opportunity to include balanced cross valley considerations, where the balanced contribution of all regions, upstream and downstream are included. This supports the outcome 25 (iii) “planning process in which there is adequate opportunity for productive, environmental and other public benefit considerations to be identified and considered in an open and transparent way.”

Recommendation:

- 4. Existing NSW Water Sharing Plans be recognised as providing sound foundations for sharing water with recognition of the suitability to provide balance and sharing between environmental and consumptive uses as a result of climate change, with new environmental, consumptive and cultural objectives.**

5.3.1 Environmental management and planning

Understanding the potential negative impacts of environmental water management should also be undertaken as the use of environmental water has not always been beneficial. For example, the third-party impacts of environmental water use in the Gwydir Valley with the changing river conditions post the 2021 flooding resulted in more than 22 landholders being flooded out in an attempt to reach a RAMSAR listed wetland site in the western portion of the Valley. The impact was significant to those landholders, who could not operate their farms effectively due to the environmental water flowing through their properties.

This leads into the issue of third party impacts as discussed in the NSWIC submission. While Clause 58 (v) addresses protecting third parties, this is further detailed in Schedule F (3); the NWI only narrowly defines third parties as holders of entitlements. Subsequently, the Water Act 2007 and the 2012 Murray-Darling Basin Plan both adopt the NWI objective of protecting third parties without providing an improved understanding of third parties.

Third parties extend beyond entitlement holders to the broader social and economic and environmental impacts. Third party impacts should be defined to recognise the potential impacts on landholders (regardless of whether they are entitlement holders), business, community, and the environment. This recognition must include limitations caused by channel capacity constraints and natural system limitations such as limited connectivity.

Recommendation:

- 5. The GVIA agree in principle that reform should develop policy and institutional arrangements to make the best use of environmental water to achieve agreed environmental outcomes. But that these policies should be guided by rules that.**
 - a. minimise negative third party impacts and**
 - b. do not exceed limitations caused by channel capacity constraints or natural system limitations such as limited connectivity.**

5.4 Monitoring, Evaluation and Compliance

The GVIA continues to support monitoring and consistency of compliance for all users of our limited water resources.

As outlined in Action 79, the GVIA would like to see improved accountability for the management of environmental water provisions and better transparency of the achievement of environmental and other public benefit outcomes. This could benefit from better implementation of 79 (d) in the intergovernmental agreement “periodic independent audit, review and public reporting of the achievement of environmental and other public benefit outcomes and the adequacy of the water provision and management arrangement in achieving those outcomes.”

The non-urban metering reform has had its barriers and challenges, we believe it is imperative that there is consistency and an agreed minimum level of monitoring and compliance to ensure there is public confidence nationally. Care should be taken to ensure the implementation of monitoring and measurement provides improved monitoring and that the meters and telemetry are fit for purpose. The NSW non-urban metering reform was poorly implemented and lacked the practical requirements need to achieve progress in this space. There were issues with availability and suitability of AS4747 meters, issues with availability of and requirements of DQPs, telemetry issues, as well as poor education and communication of metering requirements and reporting. Many of these challenges still exist, although progress is being made. NSWIC published their “Addressing Metering Compliance Barriers²³” in 2023 which details many of these issues.

Recommendation:

- 6. The GVIA agree that the National Water initiative reform principle requires fit for purpose regulatory, governance and management arrangements, and that the NSW non-urban metering reform still needs to improve to be fit for purpose.**

5.5 Indigenous needs

As members of all communities’ Indigenous needs should be included in the overarching Intergovernmental agreement objective of optimising economic, social and environmental outcomes. There is opportunity to explore options for indigenous people to be more involved in environmental water management and planning, to determining specific use of environmental water, which can be aligned with targeted cultural and environmental outcomes.

5.6 Structural Adjustment

The Productivity Commission 2020 report stated that; “adaptation to a likely drier and more variable water future will require difficult decisions by governments, communities and individual entitlement holders.” There is a need for the environment and the environmental water holders to also make these difficult decisions. This is because the risks associated with climate variability and change must be shared across all users and the community.

There is significant potential for all levels of government to improve the structural adjustment for communities impacted by water reform. Water reform has significantly impacted

²³ [2023-11-23-Addressing-Metering-Compliance-Barriers-NSWIC-Report.pdf](#)

communities leading to falls in Socio-Economic Indexes for Areas (SEIFA) for education and occupation, disadvantage and economic resources²⁴.

The Commission in 2020 recommended that government responses to adjustment pressures should “target the welfare and skills of individuals, and to regional development planning to leverage community level capabilities and competitive advantages” and that government “direct assistance on building adaptive capacity in affected communities and securing employment or business opportunities for the most vulnerable individuals.”

The GVIA support investment into genuinely impacted communities but ask governments to consider the approach in which support is provided. For example, improving access to technology, addressing mobile blackspots, coupled with funding for business re-locations, expansions or new business enterprises could provide longer lasting benefits than investment opportunities to date.

Recommendation:

- 7. Opportunities to enhance services such as medical, education and technology in regions impacted by water policy decisions should be made available to provide community support to transition to a region with less water.**
- 8. Financial subsidies for new or existing businesses in regions impacted by water recovery should be provided to allow them to invest locally and diversify for example, deposit schemes to offset income variability, payroll tax incentives to attract, retain and support skill development of staff.**

5.7 Best Available Science

We support the use of best available science to inform decision makers but acknowledge, there are often other factors that are considered when Government’s make a decision. This is reflected by a triple or quadruple bottom line approach, whereby the cultural, economic, environmental, and social elements are considered as part of the decision framework. Understanding how government’s weight these factors, whether their information is current and the best available, being used in their decisions is important and currently, lacks transparency.

6 General Comments

The Intergovernmental Agreement and the creation of the National Water Initiative have facilitated significant improvement in the management of Australia’s water resources. This is especially so in the Murray Darling Basin where there has been recovery more than 2,100 GL of water for the environment which has brought a sustainable balance to the Murray-Darling Basin. There is now a foundation for efficient and sustainable water resource management. Water planning has established transparent processes for determining how the volume of water available in a system is shared between consumptive users (people and businesses) and the environment, so that there is a sustainable balance between consumptive and environmental uses. There are opportunities to make further improvements as we continue to increase the productivity and efficiency of water utilisation. We must

²⁴ [Northern Basin Review – technical overview of the social and economic analysis | Murray–Darling Basin Authority \(mdba.gov.au\)](https://www.mdba.gov.au/northern-basin-review-technical-overview-the-social-and-economic-analysis)

ensure that any ongoing reform provides equality and balance for all and does not create inequalities. Reform must remain committed to the original aims of a nationally-compatible, market, regulatory and planning based system of managing surface and groundwater resources for rural and urban use that optimises economic, social and environmental outcomes.

The GVIA has welcomed this opportunity to provide this submission to the Productivity Commission on the National Water Initiative.