



*Submission to the Department of Climate Change, Energy,  
the Environment and Water on:*

*Draft framework for delivering the 450GL of additional  
environmental water.*

*By:*

*Gwydir Valley Irrigators Association Inc*

*March 2024*



*making every drop count*

## Table of Contents

1	Summary and Purpose .....	2
2	Introduction .....	3
2.1	Recommendations.....	5
3	About the GVIA.....	6
3.1	Our region .....	6
3.2	Our region’s hydrology and geomorphology .....	8
3.3	What we do .....	9
3.4	Contacts .....	9
4	General comments.....	10
5	Draft framework for delivering the 450 GL of additional environmental water.....	10
5.1	Key Issues.....	11
5.2	Cumulative impacts and the need for integration .....	11
5.3	Rule Based Recovery.....	12
5.4	Overy Recovery.....	14
5.5	Water Recovery Framework .....	15
5.6	Regulatory Impact Statement .....	16
5.7	Complementary Measures.....	17
5.8	Sustainable Communities Program.....	19
6	Conclusions .....	20

## 1 Summary and Purpose

The Gwydir Valley Irrigators Association has provided this submission to the Federal Department of Climate Change, Energy, the Environment and Water (DCCEEW) for consideration as part of their 2024 Draft framework for delivering the 450GL of additional environmental water. Our focus in this submission will be on the aspect of the framework that directly impact water entitlement holders and communities in the Gwydir Valley and the Northern Basin.

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 welcome the opportunity to provide our feedback to the Department of Climate Change, Energy, the Environment and Water into the Draft framework for delivering the 450GL of additional environmental water from the perspective of our region. We support the original aims of the Murray Darling Basin Plan 2012 (the Plan) and accept that changes such as the extension of timeframes for the delivery of the Plan were necessary.

Water reform and 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's<sup>1</sup>, long before the 1994 Council of Australian Governments (COAG) water reform framework, the 2004 Intergovernmental Agreement on a National Water Initiative<sup>2</sup> (the Agreement) and the Murray Darling Basin Plan 2012. 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 Plan<sup>3</sup> 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 Plan<sup>4</sup> that there is an additional 5,000 megalitres of water owned by Government's above the legislated amount for our region<sup>5</sup>. Yet we face ongoing policy and rule changes to further erode certainty for our region.

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 confirm the over-recovery before addressing it. Interestingly, these factors have not

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<sup>1</sup> Refer to the section About the GVIA or visit our website for more information [www.gvia.org.au/thegwydirvalley/thegwydirvalley](http://www.gvia.org.au/thegwydirvalley/thegwydirvalley).

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

<sup>3</sup> The Murray Darling Basin Plan.

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

<sup>5</sup> 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 entitlements<sup>4</sup>. Based on IQQM long-term modelling and the volume of water purchased for the environment

restricted the Australian Government in pursuing more water for the environment where an unreconciled gap is targeted for purchase via the Bridging the Gap tenders just closed<sup>6</sup>. It should be noted that this process has resulted in other valleys becoming over recovered<sup>7</sup>. 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 past Productivity 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.

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. It is also critical that the Government recognise that simply adding more water is not the solution, for environmental outcomes to be achieved there needs to be significant investment in complementary measures such as fish ladders.

We welcome the opportunity to provide further input if required.

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

<sup>7</sup> [Strategic water purchasing – Bridging the Gap 2023 - DCCEEW](#)

## 2.1 Recommendations

1. The DCCEEW implement the Productivity Commission recommendation 2.4: Develop a renewed approach to water recovery.
2. DCCEEW engage an external review of governance arrangements for Basin Plan recovery programs with an aim of identifying implementation efficiencies.
3. The Australian Government establish a clear and transparent process to assess the viability of rules-based recovery options towards the 450GL program to ensure they remain consistent with water resource planning arrangements, existing water management agreements and the 2013 IGA.
4. That if over-recovered water is allocated to the 450GL, the valleys where this over-recovered water exists should be protected from any form of additional water recovery through rule changes or any possible adjustments to SDLs.
5. The Australian Government must consult with affected over recovered valleys prior to repurposing the Bridging the Gap water to the 450GL program.
6. That if past over recovered water is allocated to the 450GL, the impacted valleys are eligible for community adjustment assistance.
7. The 2012 Basin Plan Regulatory Impact Statement be updated prior to any purchases of entitlement or rule changes to contribute to the 450 GL.
8. That guidelines as to what “consider social and economic impacts” means are developed to provide transparency for communities.
9. Voluntary water purchase program design should include a principle of avoiding negative third-party impacts on remaining water entitlement holders.
10. Investments in complementary measures are eligible to be included in integrated Resilient Rivers Program projects.
11. Community adjustment funding is broadened beyond one-off grants program and looks at broader and integrated economic measures, to encourage new businesses and reduce barriers to keeping people in our regions, with a focus to enable communities to adapt to less water.
12. The community adjustment assistance Principle 3 – Proportionality is expanded to consider a community or regions, vulnerability, or resilience to additional water recovery, in addition to the volume and impacts expected and/or observed.
13. The community adjustment assistance Principle 7 – Evidence-based is supported by further information on which data sources will be utilised and how regional community experiences including First Nations, will be incorporated into decision making.

## 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 Shire<sup>8</sup>.

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 crops<sup>9</sup>.

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. 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 use<sup>10</sup>. This equates irrigators holding 575,000ML from regulated entitlement (high security, general security and supplementary water) and 28,000ML available from groundwater aquifers.

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<sup>8</sup> Cotton Catchment Communities CRC Communities and People Series 2009

<sup>9</sup> 2010 2011 Agricultural Census Report – agdata cubes, 71210D0005-201011 Agricultural Commodities, Australia

<sup>10</sup> Based on IQQM long-term modelling and the volume of water purchased for the environment

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
	Commonwealth buy-back program.	88,133ML General Security 20,451ML Supplementary
2016	Commonwealth infrastructure programs.	4,508ML High Security 1,392ML General Security
2022	Licensing of Floodplain Harvesting in the regulated and unregulated water sources	24.8% reduction equating 10.4 GL long-term take
<b>TOTALS</b>		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 region<sup>11</sup>.

### 3.2 *Our region's hydrology and geomorphology*

The Gwydir River is an inland terminal river network that was also classified as a “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 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”<sup>5</sup>. This channelisation 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 1,000 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

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<sup>11</sup> 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>



156,000 megalitres<sup>6</sup> 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 water<sup>7</sup>. Generally, the contribution occurs largely due to significant flood events such as in 2011-2012, and 2021-2022.

### 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 community<sup>12</sup>.

GVIA members hold entitlements within the Gwydir regulated and unregulated 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.

### 3.4 Contacts

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Chair: Jim Cush

Interim Executive Officer: Louise Gall

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<sup>12</sup> For more information, see our corporate video on <https://vimeo.com/177148006>

## 4 General comments

The Water Amendment Act 2023 commenced on 7<sup>th</sup> December 2023. The Act made changes to the Water Act 2007 and the Basin Plan 2012. These amendments lifted the cap on buybacks and changed the way the 450GL, as modelled in the *Hydrologic modelling of the relaxation of operational constraints in the southern connected system* can be recovered and removed the initial objectives of the 450GL from the southern connected system to the whole basin<sup>13</sup>.

The original Murray Darling Basin Plan 2012 (the Plan) has achieved a significant amount, and has helped to balance the needs of communities, environment and production, a fact the government should be actively promoting. We support the principles of the Murray Darling Basin Plan (MDBP) 2012 and believe it is important that we finalise the Plan.

Bridging the Gap is a crucial program aiming to achieve the valley based Sustainable Diversion Limit targets but there is concern that buy backs continue to result in “incidental over recovery”<sup>14</sup>. As a valley directly impacted by over recovery, the Gwydir can assure you that the local community does not see the recovery of water over and above that required by the Basin Plan as “incidental”.

The GVIA appreciate that the delays in the implementation of the Plan are frustrating, and that the extension of the timeframe for delivery was a practical step to push for the completion of the Plan. We are disappointed that the principle of the Plan; a healthy working basin with optimised social, economic and environmental outcomes, has been overshadowed by politics and that the focus is on volumes as opposed to the environmental outcomes, that include productive and resilient water dependent industries and communities with confidence in their long-term future<sup>15</sup>.

The Government must recognise that simply adding more water is not the solution. Complementary measures such as fish passage, and progress on constraints measures as noted in 7.09 need to be implemented as they play an important role in water quality and the ability to get water to areas in the southern basin.

## 5 Draft framework for delivering the 450 GL of additional environmental water.

The Water Amendment Act 2023 made changes to the Water Act 2007 and the Basin Plan 2012. These amendments lifted the cap on buybacks and changed the principles of Schedule 5 of the Plan, allowing direct water purchases across the basin towards the 450GL enhanced environmental outcomes referred to in 7.09(e). These enhanced environmental outcomes reflect the results of modelling with relaxed constraints scenario reported in: *Murray Darling Basin Authority (MDBA) 2012, Hydrologic modelling of the relaxation of*

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<sup>13</sup> [Hydrologic modelling of the relaxation of operational constraints in the southern connected system: methods and results | Murray–Darling Basin Authority \(mdba.gov.au\)](#)

<sup>14</sup> [Strategic water purchasing – Bridging the Gap 2023 - DCCEEW](#)

<sup>15</sup> Water Act 2007 – Basin Plan 2012 Federal Register of Legislative Instruments F2012L02240

*operational constraints in the southern connected system: Methods and results, MDBA publication no: 76/12, Murray-Darling Basin Authority, Canberra.* The 450GL was targeting outcomes in the southern connected system and 7.09(e) aimed to improve the efficiency of water use through the easing or removal of constraints, Northern Basin Water recovery will not achieve these outcomes.

The draft framework states, “In the northern Basin, key environmental risks arise from prolonged dry periods when long stretches of rivers stop flowing and river systems become disconnected.” This statement fails to recognise that the northern basin is a system of ephemeral rivers, which have always stopped flowing during extended dry periods. The Government should also acknowledge that in the regulated systems the length of cease to flow events are less than they would be without the construction of dams in the northern basin. For example, during the 2018-2020 dry spell environmental water was available to keep key sections of our main river and refuge pools with water<sup>16</sup> hence maintaining river flows longer than would have occurred prior to development.

## 5.1 Key Issues

- i. *Cumulative impacts and the need for integration*
- ii. *Rule Based Recovery*
- iii. *Over Recovery*
- iv. *Water Recovery Framework*
- v. *Regulatory Impact Statement.*
- vi. *Complementary Measures*
- vii. *Sustainable Communities Program*

## 5.2 Cumulative impacts and the need for integration

The GVIA wish to highlight issues with lack of integration of aspects of the Amendment Bill 2023. They are concerned that there does not seem to be a clear understanding of the cumulative impacts of water recovery. This is especially concerning as the additional rule changes proposed in the Northern Basin Water Recovery component of the draft framework are being informed by the NSW government connectivity program, the over recovered water from northern valleys is “intended” to count to the 450GL and there are potential changes to SDLs.

It is essential that the cumulative impacts of all these reductions in availability of entitlement are integrated to inform balanced accurate reporting and to minimise the potential for individual valleys to carry a disproportionate share of the water recovery under the Basin Plan.

With this in mind we support the Productivity commission in the 2023 inquiry into the Murray Darling Basin Plan recommendation 2.4 to Develop a renewed approach to water recovery.

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<sup>16</sup> Gwydir Refuge Pool Flow 2019-2020 <https://www.dcceew.gov.au/water/cowo/catchment/gwydir-valley-river-refuge-pool-flow>

The GVIA make specific reference to what such a water recovery should incorporate.

*“The Australian Government should update and publish its water recovery strategy to clarify how this renewed water recovery program will proceed. The strategy should outline:*

- *the sequencing of different water recovery targets (both the 450 GL/y and any expected 605 GL/y shortfall), based on the progress of supply and constraints measure implementation.*
- *how different water recovery options will be used, based on the availability of projects, their cost-effectiveness and likely socioeconomic impact*
- *when and how community adjustment programs will be implemented, based on socioeconomic monitoring.*
- *requirements for monitoring, evaluation, reporting and improvement on adjustment program design<sup>17</sup>.“*

**Recommendation: The DCCEEW implement the Productivity Commission recommendation 2.4: Develop a renewed approach to water recovery.**

In addition, the GVIA recommend that external review and advice should be provided to integrate recovery components, streamline decision making and timeframes, and set a framework for monitoring progress more regularly than the reporting requirements to the Australian Parliament.

**Recommendation: DCCEEW engage an external review of governance arrangements for Basin Plan recovery programs with an aim of identifying implementation efficiencies.**

### 5.3 Rule Based Recovery

The draft framework indicates that; “Rule based changes that improve connectivity have greater potential to enhance environmental outcomes by leaving more water in rivers at key times. It is important to note that, rule-based changes still require the transfer of water entitlements.”

Further information on how rule based changes meet the Water Act 2007 requirements of the 450GL program, to create an entitlement without diminishing the rights of remaining entitlement holders, including the Commonwealth is required.

The NSW government has included rule based changes as a recovery option<sup>18</sup>, it sets a precedent, it is imperative that clear processes be established prior to implementing any rule based changes, these include:

- how the rules are developed.
- an assessment of any real benefits to the 450GL Basin Plan objectives.
- what the cumulative impacts of repurposing over recovery, SDL changes and rule based changes are within effected valleys.
- the impacts on existing water entitlement holders and regional communities.

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<sup>17</sup> [Inquiry report - Murray–Darling Basin Plan: Implementation review 2023 \(pc.gov.au\)](https://www.pc.gov.au/inquiry/murray-darling-basin-plan/implementation-review-2023)

<sup>18</sup> NSW Government, 2024. Alternatives to Buybacks Plan, page 20.

- how such changes would integrate within existing water sharing plans and water resource planning arrangements.
- support from existing water entitlement holders if there are impacts on water reliability.

Without the above processes in place, rule based recovery that generates new entitlements for the Commonwealth Environmental Water Holder (CEWO), risks being a form of compulsory acquisition. This would have a direct impact on existing entitlements by permanently reducing their reliability. Such a policy would trigger compensation, and as such would be just another form of buybacks.

It is unacceptable that some of the recovery of the 450GL should be voluntary, and some compulsory. The compulsory nature of rule based changes are not likely to be consistent with the 2013 Intergovernmental Agreement (IGA), whereby the Commonwealth Government committed *“to ‘Bridge the Gap’ between Baseline Diversion Limits (BDLs) and Sustainable Diversion Limits (SDLs) in the Basin Plan. As a result, it is intended that no water entitlements will be eroded or compulsorily acquired as a result of the Basin Plan.”*<sup>19</sup>

In addition, without an independent assessment of the cumulative impacts of over recovery and rule based changes there is potential for disproportional impacts to be felt in some regions.

The draft framework refers to the use of “temporary water restrictions” which the document suggests were successfully implemented during the northern basin drought of 2017 to 2020. The use of temporary water restrictions creates uncertainty for entitlement holders and have been demonstrated to be poorly used causing in valley flooding or failing to delivery downstream outcomes.

The Northwest flow targets in schedule 2 of the Gwydir Regulated Water Sharing Plan (WSP) restrict in valley access to supplementary water events limiting local stability, as demonstrated in 2018 where Schedule 2 Flow targets were triggered from July to December 2018, these flow embargos were implemented but did not have the capacity to achieve the targets for 1) Basic Landholder Rights (BLR) along the Barwon Darling River, 2) fish passage across the major weirs in the Barwon Darling River, or to 3) protect flow needed to suppress algal bloom as detailed in schedule 2.

Any potential “changes to water sharing plan flow targets (triggers) to improve water flows across the connected catchments of the NSW northern Basin at important times” must firstly consider the potential to achieve actual connectivity and to balance the availability of flows to all, both in the upper and lower reaches of the system.

The GVIA do not support the use of Section 324, temporary restriction orders in the NSW Water Management Act 2000 without firstly using existing Water Sharing Plan rules nor without the application of the following general principles.

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<sup>19</sup> Intergovernmental Agreement on Implementing Water Reform in the Murray Darling Basin, 2013 – amended in 2017 and 2019. <https://federation.gov.au/sites/default/files/about/agreements/iga-on-implementing-water-reform-mbd-9-august-2019.pdf>

- I. ability for the inflows to meaningfully contribute to meeting critical water needs downstream.
- II. uncertainty in future rainfall and flow predictions.
- III. utilisation of flow forecasting.
- IV. recognition of system operation capacities and efficient water delivery to maximise the social, economic and environmental benefit of water use.

The Australian Government should therefore provide more transparency on how rule based option can be considered. This is important considering the lack of transparency around the NSW Government's connectivity panel and their work to date.

**Recommendation: The Australian Government establish a clear and transparent process to assess the viability of rule based recovery options towards the 450GL program to ensure they remain consistent with water resource planning arrangements, existing water management agreements and the 2013 IGA.**

The other significant concern for the over recovered valleys in Northern NSW is the proposal to count the over-recovered volumes to the 450GL. The Macquarie (38GL) and Gwydir (5GL) valleys have been over recovered for a very long time and have received no recognition or community adjustment for the loss of productive capacity. If these volumes of over recovered water are allocated to the 450GL these communities will be carrying more of the burden for a healthy working basin than is appropriate. They should also be protected from any form of additional water recovery through rules changes or any possible adjustments to SDLs.

**Recommendation: That if over-recovered water is allocated to the 450GL, the valleys where this over-recovered water exists should be protected from any form of additional water recovery through rule changes or any possible adjustments to SDLs.**

#### 5.4 Overy Recovery

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

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 reviews.

We note that the Macquarie is also significantly over recovered, and the Bridging the Gap purchase program has resulted in additional valleys being over recovered. The proposal in the draft framework to count the over recovered water in the Gwydir to the 450GL is not supported. As a valley we have actively pursued the return of this to the region, and do not

believe simply repurposing the volumes of over recovered water without local consultation is acceptable.

As the NSW Irrigators Council (NSWIC) state in their submission, “The 2012 Basin Plan set Sustainable Diversion Limits taking in account what the Murray Darling Basin Authority considered to be acceptable socio-economic impacts, as well as the environmental benefits possible within a constrained system. Over-recovery beyond what was required to meet the SDLs has imposed a greater socioeconomic burden than necessary on the affected communities.”

In the Gwydir we have been carrying this burden since 2008. The MDBA reviews including the ‘Independent assessment social and economic conditions basin<sup>20</sup>’ and the ‘Northern Basin Review Technical overview of the social and economic analysis’ detailed the impacts and the decline in the population, employment and general economic and social conditions. The Northern Basin Review Technical overview of the social and economic analysis<sup>21</sup> found the Socio-economic Indices of Area (SEIFA) for Moree declined from 2006 to 2011

- From decile 5 to 3 for education and occupation.
- From decile 5 to 3 for advantage and disadvantage.
- From decile 4 to 2 for economic resources.

Many of the communities impacted by these declines are home to First Nations people. The valleys carrying the burden of past over recovery should be eligible to be included in the community adjustment assistance program.

**Recommendation: The Australian Government must consult with affected over recovered valleys prior to repurposing the Bridging the Gap water to the 450GL program.**

**If over-recovered water is allocated to the 450GL, the valleys where this over-recovered water exists should be protected from any form of additional water recovery through rule changes or any possible adjustments to SDLs.**

**That if past over recovered water is allocated to the 450GL, the impacted valleys are eligible for community adjustment assistance.**

## 5.5 Water Recovery Framework

As the NSWIC submission details, the framework provides no detail on the Government’s water recovery plans that would help to inform individual, industry, irrigation districts or local government decisions and planning now and in future. It is critical to provide transparency and to avoid further disproportionate recovery at a valley level as experienced by over recovered valleys in the past.

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<sup>20</sup> [Independent assessment of social and economic conditions in the Basin | Murray–Darling Basin Authority \(mdba.gov.au\)](https://www.mdba.gov.au/independent-assessment-social-economic-conditions-basin)

<sup>21</sup> [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-social-economic-analysis)

The Government should be providing details on their purchase strategy, supported by evidence and environmental objects from the MDBA and the Commonwealth Environmental Water Holder. Industry and communities need to know:

- How much of the 450 GL is the shared downstream target for South Australia?
- What volume of water recovery is being sought in the northern and southern Basins?
- What volume of water recovery is being sought from each Basin valley?
- If any valleys will be excluded, such as those already over-recovered or those treated as disconnected systems (Lachlan and Wimmera).
- How much water is being targeted for recovery annually?
- For what purpose is water being recovered in each valley (i.e., how much for environmental watering within the valley, and how much for the shared downstream target to South Australia).
- Whether the buybacks are open to any/all licence types or will purchases be targeted to select licence types?

The Productivity Commission in its 2023 interim report on its 10 year-review of the Basin Plan warned again, as it did in its five-year review report in 2019, about the lack of a clear strategy on the 450 GL recovery:

*The absence of a credible delivery pathway for the 450 GL/y over the next four years – including catchment-specific targets – provides no certainty to Basin communities or water market participants, potentially undermining planning and investment decisions.*

*The government risks being seen as just chasing a volumetric target, with no interest in the consequences or enough focus on the outcomes sought.<sup>22</sup>*

This strategy is even more essential given the Amendment Bill 2023. A credible strategy is necessary for stakeholders and Australian taxpayers to have confidence that water recovery is being pursued in a strategic and systematic way consistent with the three guiding principles: value for money, environmental utility, and minimising socioeconomic impacts.

## 5.6 Regulatory Impact Statement

The Department is seeking input from stakeholders on appropriate evidence, indicators or measures of socioeconomic impacts. This feedback is proposed to inform the Government's impact analysis to update the 2012 Basin Plan Regulatory Impact Statement (RIS). The updated RIS is intended to meet the Water Amendment (Restoring our Rivers) Act 2023 requirement that the minister consider social and economic impacts before approving a water purchase program.

The GVIA are concerned that the Regulatory Impact Statement is only now being considered. This should have been prepared prior to the Amendment Bill being tabled in parliament. This is especially concerning given that the Amendment Bill has removed the cap on buy backs and has changed the principle of the 450GL to enable direct water purchase from across the Basin. Too often socio-economic analysis and economic impact

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<sup>22</sup> <https://www.pc.gov.au/inquiries/completed/basin-plan-2023/interim>



assessments are an afterthought. They are no less important than environmental objectives of the Basin Plan.

As the National Irrigators Council (NIC) submission indicates, “the scale and pace of any purchase program can have detrimental impacts on the regions that the water is recovered from<sup>23</sup>. Numerous communities have been impacted by water recovery. The priority, sequencing, scale, transparency and communication of any purchase programs is therefore critical to consider in 450GL program design. The program should also be designed to avoid negative third-party impacts on remaining irrigators.

The GVIA believe the requirement that the minister consider social and economic impacts before approving a water purchase program is essential but are concerned that there is little detail as to what this means. When water was purchased in 2007-2008 there were no considerations of minimising social and economic impacts, the Gwydir communities have carried this burden ever since and do not feel any community should be exposed to this in the acquisition of water or for rule changes contributing to the 450GL.

**Recommendation: The 2012 Basin Plan Regulatory Impact Statement be updated prior to any purchases of entitlement or rule changes to contribute to the 450 GL.**

**That guidelines as to what “consider social and economic impacts” means are developed to provide transparency for communities.**

**Voluntary water purchase program design should include a principle of avoiding negative third-party impacts on remaining water entitlement holders.**

## 5.7 Complementary Measures

The Federal Government must acknowledge that to effectively achieve environmental outcomes complementary measure including fish screens and fish passage must be included. In 2018 the Productivity Commissions review into the implementation of the Basin Plan found that unless river constraints were addressed water recovered may be unusable<sup>24</sup>. This is concerning given the 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.

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<sup>23</sup> PC, 2024. Final Report into 5-year Implementation of the Murray Darling Basin Plan, page 92.

<sup>24</sup> [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)

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.<sup>25</sup> A significant step towards restoring the environmental health of the basin. Many more examples are available at Fish Screens Australia<sup>26</sup>.

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 decision making has the potential to reduce their impact.

Implementing complementary measures, such as 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. Simply acquiring 450GL of additional environmental water will not achieve environmental outcomes if there isn't significant investment in complementary measures.

The NIC encourage the inclusion of any complementary measure elements into new projects within the Resilient Rivers program in their submission. Whilst the legislation does not allow them to be included as an environmental equivalent to offset water recovery targets, this does not preclude the investment in these within a broader range of projects. Without complementary measures, the water reserved for the river and the environment will not produce the desired environmental outcomes nor meet the expectations of communities. A flow target is not an environmental outcome, but just one part of the mechanism to achieving an outcome.

Complementary Measures (also known as toolkit measures in the Northern Basin) facilitate:

- delivering equivalent ecological outcomes required to meet Basin Plan objectives that will not be met through existing water recovery measures.
- the rehabilitation of native fish species.
- improving productivity within aquatic ecosystems.
- improving the resilience of threatened species.
- contributing to the achievement of cultural water objectives.

These are critical measures designed to underpin short-, medium- and long-term outcomes to ensure native species have the greatest opportunity to thrive. This approach will help to ensure the achievement of the Basin Plan's environmental objectives over time.

**Recommendation: Investments in complementary measures are eligible to be included in integrated Resilient Rivers Program projects.**

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<sup>25</sup> Email from NSW DPI Fisheries May 2023 about Fish Screen Project outcomes.

<sup>26</sup> <https://fishscreens.org.au/case-studies/>

## 5.8 Sustainable Communities Program

The GVIA welcome the opportunity to comment on the draft community adjustment assistance principles, noting that even relatively small reductions in water availability for productive use can have impacts on regional communities, especially where communities are highly reliant on irrigation.

There is significant potential for all levels of government to improve the structural adjustment for communities impacted by water reform. Water reform has been found to significantly impact communities leading to falls in Socio-Economic Indexes for Areas (SEIFA) for education and occupation, disadvantage and economic resources.

The challenge is developing a program which can deliver real adjustment to these communities. Previous attempts to support regional communities to adjust have typically fallen short as there are numerous challenges to consider (as identified in the NIC submission), including:

- Predicting which communities are most at risk to provide early intervention.
- Providing enduring new or alternative industries when agriculture is their livelihood.
- Significant on-farm efficiencies have already been made, meaning opportunities to improve production with less water are diminishing.
- Accounting for the impacts of past water reforms and how that influences the resilience of a community,
  - the principles do not consider the cumulative impact of water recovery and many communities are at their threshold for absorbing further reductions to water, which will impact their economy of scale, access to services and resources including skilled staff.
- Managing the discrepancies of modelled impacts versus the lived experience of those in a community, and how both forms of evidence are important.
- Recognising that there is a proportion of the population that will remain in a regional community, regardless of the changes in water availability or if they become unemployed.
- Consideration of the possible lag in impacts, depending on the type of water entitlements removed and other factors such as climate, carryover conditions and trade.

The Draft community adjustment assistance principles could be enhanced. Principle 1, Support diversification and resilience is critical, but given the remoteness, resources and limited alternative land use options this principle will need to include a broad range of economic incentives to support new or expansion of regional businesses. Options which may be of value could include deposit schemes to offset income variability, payroll tax incentives to attract, retain and support skill development of staff, regional startup grants, funding for business re-locations, expansions or new business enterprises, electricity and technology subsidies, targeted travel and study support options that keep regional people and could provide longer lasting benefits than previous adjustment attempts. With this in mind we support Principles 2, 4 and 5 whereby communities guide investment that fits their strategic alignment, is place based and designed in partnership with the community to genuinely support diversification and resilience. We note that community adjustment

assistance my need to be longer term than typical grant programs. Local government and Chamber of Commerce involvement will be critical to achieving longevity in the adjustment to reduced water.

**Recommendation: Community adjustment funding is broadened beyond one-off grants program and looks at broader and integrated economic measures, to encourage new businesses and reduce barriers to keeping people in our regions, with a focus to enable communities to adapt to less water.**

As noted by NIC, we have concerns with Principle 3, proportionality. It appears to ignore the cumulative impacts of past water recovery and does not consider the sensitivity of a region or community to further water reductions. As such we support the NIC recommendation that proportionality should include a measure of a community's vulnerability to water recovery or a resilience index assessment.

**Recommendation: The community adjustment assistance Principle 3 – Proportionality is expanded to consider a community or regions, vulnerability, or resilience to additional water recovery, in addition to the volume and impacts expected and/or observed.**

In addition, the GVIA support the NIC request for further clarity on Principle 7. It is important to understand how the Australian Government values the lived experience of those within the regions and balances this with modelled data and what actual data is used. As seen with the original Regulatory Impact Assessment of the Murray Darling Basin Plan and the subsequent evaluation of socio-economic impacts, there can be wide ranging discrepancies between the modelled and the actual impact. We recommend further information is provided on the data sources and how regional communities experiences including First Nations, will be incorporated into decision making.

**Recommendation: The community adjustment assistance Principle 7 – Evidence-based is supported by further information on which data sources will be utilised and how regional community experiences including First Nations, will be incorporated into decision making.**

## 6 Conclusions

The Intergovernmental Agreement, the creation of the National Water Initiative and the Murray Darling Basin Plan 2012 have facilitated significant improvement in the management of Australia's water resources and have provided real improvements in delivering the Plan outcome of a healthy working basin. Since the initiation of these water reforms there has been recovery of more than 2,100 GL of water for the environment which has brought a sustainable balance to the Murray-Darling Basin.

Our submission details our concerns around the following.

1. The cumulative impacts of various forms of water recovery and the need for an integrated approach.
2. The projected compulsory rules based recovery proposed for the northern basin,
3. The proposal to simply count the existing over recovery in the northern basin to the 450GL, and the lack of recognition of the inequitable impacts of past and new over recovery.

4. the Water Recovery Framework,
5. the lack of an upfront Regulatory Impact Statement,
6. the lack of commitment to and acknowledgment of the critical importance of complementary measures, and
7. the community adjustment principles as detailed in the Sustainable Communities Program.

The GVIA has welcomed this opportunity to provide this submission to the Federal Department of Climate Change, Energy, the Environment and Water (DCCEEW) for consideration as part of their 2024 Draft framework for delivering the 450GL of additional environmental water.