



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

*Newly prescribed wetlands as a component of the
Public Exhibition Draft of the Water Sharing Plan
for the Gwydir Unregulated River Water Sources
2025*

By:

Gwydir Valley Irrigators Association Inc

January 2025



Table of Contents

1	Summary and Purpose	2
2	Overall Recommendations	3
3	Wetland identification and inclusion in Water Sharing Plans	3
3.1	Table 1: Example of sites identified as wetlands that are not wetlands	9
4	About the GVIA	13
4.1	Our region	13
4.2	Our region's hydrology and geomorphology	15
4.3	What we do	16
4.4	Contacts	17

I Summary and Purpose

The Gwydir Valley Irrigators Association (GVIA) is the representative body for water entitlement holders in the Gwydir Valley and welcome the opportunity to provide our feedback to the NSW Department of Climate Change, Energy, Environment and Water (DCCEE) (the Department) for the newly prescribed wetlands as identified in the WSP Prescribed Wetlands Map available on the Department website as part of the public exhibition draft of the Water Sharing Plan for the Gwydir Unregulated River Water Sources 2025 from the perspective of our region.

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

We refer to the GVIA submission on the 10th of January 2025 into the public exhibition draft of the Water Sharing Plan for the Gwydir Unregulated River Water Sources 2025 for more detail on other aspects of the plan.

This submission is focused primarily on the wetlands associated with the public exhibition draft of the Water Sharing Plan for the Gwydir Unregulated River Water Sources 2025.

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

2 Overall Recommendations

Given the issues identified in this submission, the GVIA make the following overall recommendations.

1. **We request that any wetland identification not be included as a component of any Water Sharing Plan regulated or unregulated now or at any time into the future.**
2. **We request clarity on the financial, legal and production implications of gazetting new or existing wetlands.**
3. **Although we do not support the creation of wetlands on private land, if the government wishes to identify any new wetlands as a standalone process, unrelated to any Water Sharing Plan, the process must include individual consultation with all landholders likely to be impacted by the identification of a wetland, this includes all neighbouring landholders.**
4. **We request that the Department consult with all landholders directly and that ground truthing of wetlands include all sites gazetted in all earlier versions of the Gwydir Unregulated Water Sharing Plan.**
5. **We request that following ground truthing and consultation with landholders, the confirmed wetlands, if the Department continues to include them in Water Sharing Plans, then they should be included as a detailed list as in Schedule 4 and Schedule 5 of the Water Sharing Plan for the Gwydir Unregulated River Water Sources 2012 and be supported by the interactive map.**

3 Wetland identification and inclusion in Water Sharing Plans

The GVIA is extremely concerned with the manner in which the 327 additional wetlands have been included into the public exhibition draft of the Water Sharing Plan for the Gwydir Unregulated River Water Sources 2025 (the Plan).

As stated in our submission on the 10th of January 2025 into the public exhibition draft of the Water Sharing Plan for the Gwydir Unregulated River Water Sources 2025, the NSW Water Minister has clearly said that she does not want to do things that are not going to work. We would say that the identification of these 327 newly prescribed wetlands from a desk top process utilising incomplete, or inaccurate data bases (as acknowledged by DCCEEW) without any form of ground truthing was not going to work.

We highlight the NSW Governments' Better Regulation principles. These principles are the articulation of what is considered good regulation and the minimisation of red tape through seven Better Regulation principles¹. *"All new and amending regulatory proposals, submitted for the approval of Cabinet or the Executive Council, must demonstrate the application of the Better Regulation principles."*

The principles are designed to improve the quality of regulation, by ensuring the decision maker is fully informed when considering regulatory proposals.

¹ [TPP19-01 - Guide to Better Regulation.pdf](#)

We would like to see more transparency with regard the application of these principles in the development of regulatory proposals or in response to recommendations from other entities such as the Natural Resource Commission (NRC) for our region.

As outlined proposals should be - required, reasonable and responsive. We would argue that creating 327 additional wetlands is not required as the majority if not all significant wetlands have already been included in the existing Water Sharing Plan for the Gwydir Unregulated River Water Sources 2012, the large number of sites is not reasonable and given that the NRC recommendation was only to protect “significant wetlands” not an appropriate response.

The wetland mapping is clearly a flawed process which has caused enormous stress to a large number of landholders in the Gwydir Valley. It has introduced significantly more layers of uncertainty for landholders who are continuously trying to navigate their way through the ever increasing barrage of legislation and regulation from both state and federal governments.

The adoption of Natural Resources Commission (NRC) recommendations raises concerns for us. We thank DCCEEW Water for providing the Fact sheet DCCEEW’s response to the Natural Resources Commission recommendations for the Water Sharing Plan for the Gwydir Unregulated River Water Sources² although we question the changes in response to recommendation 7b.

We note that in the Water Management Act 2000, Part 3, Management Plans, Division 8, Section 43A (3) it states

(3) Before deciding whether to extend a management plan that deals with water sharing or to make a new management plan, the Minister is to consider a report of the Natural Resources Commission that reviews (within the previous 5 years) the following—

- (a) the extent to which the water sharing provisions have materially contributed to the achievement of, or the failure to achieve, environmental, social and economic outcomes,*
- (b) whether changes to those provisions are warranted.*

We raise the specific reference to the fact that the Minister is only “to consider” the NRC report, and if those recommendations are not justified, or not able to be included with confidence then they must not be included. We go back once more to the Ministers statement that she does not want to do things that are not going to work.

We refer once again to the NSW government Better Regulation requirements. Within the guide there are details as to what is expected as part of meeting the requirements, we note the following three points.

- 1. new and amending regulatory proposals must demonstrate compliance with the Better Regulation principles;*
- 2. a BRS is required for significant new and amending regulatory proposals, and must be published online;*

² [DCCEEW Waters response to the Natural Resources Commission recommendations for the Water Sharing Plan for the Gwydir Unregulated River Water Sources](#)

3. *the impacts of the proposal must be identified and justified through quantitative and qualitative analysis of all available data. The level of analysis should be proportionate to the significance of the proposal;*

The Government has developed seven Better Regulation principles detailed following. *“The principles are the cornerstone of the government’s commitment to good regulation and must be followed in the development of every regulatory proposal. In doing so, it is demonstrated the proposal is required, reasonable and responsive.”*

We would argue that the inclusion of 327 additional wetlands in the public exhibition draft Water Sharing Plan for the Gwydir Unregulated River Water Sources 2025, that the NSW DCCEEW have failed to adhere to the first five Better Regulation Principles.

The Better Regulation principles

Principle 1: The need for government action should be established. government action should only occur where it is in the public interest, that is, where the benefits outweigh the costs.

Principle 2: The objective of government action should be clear.

Principle 3: The impact of government action should be properly understood, by considering the costs and benefits (using all available data) of a range of options, including non-regulatory options.

Principle 4: government action should be effective and proportional.

Principle 5: Consultation with business, and the community, should inform regulatory development.

Principle 6: The simplification, repeal, reform, modernisation or consolidation of existing regulation should be considered.

Principle 7: Regulation should be periodically reviewed, and if necessary reformed, to ensure its continued efficiency and effectiveness.

Principle 1 and 4: The public interest and benefits outweigh the costs and that Government actions should be effective and proportional.

The inclusion of 327 additional wetlands was part of the DCCEEW response to the NRC recommendation 7³, where it recommended, *“As part of a Plan replacement, to protect significant wetlands and clarify operating rules for structures involved in delivering water to significant wetlands, DPE-Water should: b) update the Plan schedules to include all significant wetlands including those listed as part of endangered ecological communities, internationally, nationally and regionally significant wetlands in the Plan area.”*

We contend that as there are already significant areas of the Gwydir where wetlands have been identified and listed in the existing unregulated WSP (schedule 4 and schedule 5), that the “significant” wetlands have already been accounted for.

³ [DCCEEW Waters response to the Natural Resources Commission recommendations for the Water Sharing Plan for the Gwydir Unregulated River Water Sources](#)

The Department have stated that there are still mistakes in the wetlands maps and that they will be corrected by late February. The Department also stated that there were problems with the database sources used to identify the wetland sites, therefore it is unclear what criteria has actually been applied? As such these newly prescribed wetlands should not be included in the Plan.

We know that wetlands are not river channels and are supposed to have “natural or near natural features”, yet many of the sites identified are actual river channels (several with regulated river access points, or Floodplain Harvesting works approval which would be impacted by the proposals), manmade stock dams, or depressions in country that has been cultivated for 30 years or more. Many more are infested with weeds including Yellow Mimosa (*Vachellia farnesiana*) listed as a feral species for all land in the state of NSW, or African boxthorn (*Lycium ferocissimum*).

This raises the question of why the Department has rushed through the inclusion of additional wetlands now, when they know the data is incorrect. Again, we note the NRC intention to protect “significant wetlands” which are likely to have already been identified as one of the 37 existing wetlands listed in the existing Water Sharing Plan for the Gwydir Unregulated River Water Sources 2012. Although we are unsure if each of the landholders impacted by these 37 sites were appropriately consulted at the time.

We note that as part of meeting the Better Regulation requirements that “*the impacts of the proposal must be identified and justified through quantitative and qualitative analysis of all available data. The level of analysis should be proportionate to the significance of the proposal;*” We don’t believe that the impacts of the proposal has been clearly identified or justified appropriately. We have heard repeatedly that the department did not have the time, resources or funding to complete any ground truthing of proposed site. We do not accept this as a justifiable excuse not to complete the appropriate due diligence which would be required by any other business in NSW. Additionally, it brings into question the level of analysis, which we feel has not been “*proportional to the significance of the proposal*”.

The fact that landholders are having to provide information back to the department demonstrating that the majority of the sites included in the mapping are clearly not wetlands is not acceptable. Landholders should not be expected to do the work of any department. This is especially so when that department has a pricing policy with significant increases in pricing under review by IPART.

We have found no evidence of any analysis that demonstrates how any perceived benefits outweigh the costs. If such information does exist, we request that it be distributed to all impacted landholders to enable them the right to assess the analysis.

Principle 2 and 3: Objectives should be clear and impacts properly understood.

We are not confident that the Department has applied due process to the objectives of the policy. There is no transparency around the methodology use in the mapping exercise, nor a clear understanding of the objective of each of the individual sites identified, what is the value proposition to the people of NSW from gazetting each of these 327 sites.

We have received verbal comment suggesting that the intent is only to restrict new surface water supply works and trade. We have requested on numerous occasions including prior to and during the wetland webinar, evidence that this claimed intent is correct and that there is

no potential for this intent to be overridden by any other piece of legislation, and that there will be no additional management challenges such as diminished water access or restrictions on land use for landholders. In addition, we are concerned that these uncertainties will have implications for land values and the mortgageable value of water entitlements across the region.

In addition, landholders either adjacent to or with existing wetlands on their properties are already facing impacts in the management of their country. A member of the organisation has not been able to get a commercial spray applicator to spray an area of his property. The property is adjacent to an existing wetland, although the application was not intended to be in close proximity to the wetlands site.

It does not seem that the Department has considered either the financial or the management implications of their proposal. Although we do not support the inclusion of wetlands on private land into the Plan, if the Government insists on their inclusion, we would like to have all these uncertainties properly addressed prior to the Government proceeding with the inclusion of any wetlands into Water Sharing Plan for the Gwydir Unregulated River Water Sources 2025.

Recommendation

- 1. We request that any wetland identification not be included as a component of any Water Sharing Plan regulated or unregulated now or at any time into the future.**
- 2. We request clarity on the financial, legal and production implications of gazetting wetland sites.**

Principle 5: Consultation with business, and the community, should inform regulatory development.

There was no consultation with business nor the community prior to the release of the public exhibition draft Water Sharing Plan for the Gwydir Unregulated River Water Sources 2025. Many impacted landholders were not and still have not been notified that there were newly prescribed wetlands on their properties. This is unacceptable.

We would argue that it is not appropriate to gazette wetlands on properties, without the consent and support of the individual landholders. We raise this as we feel it is relevant now, with the proposed inclusion of an additional 327 wetland sites in the public exhibition draft of the Water Sharing Plan for the Gwydir Unregulated River Water Sources 2025 and with the inclusion of sites identified in the 2012 plan.

The identification of 37 Sites in earlier 2012 version of the Water Sharing Plan for the Gwydir Unregulated River Water Sources is of concern. Following consultation with landholders impacted by the identification of the Mallowa Wetlands as detailed under Schedule 4, we believe that at least some of the landholders were not consulted individually, although there may have been some more general consultation.

We are unaware of the level of engagement or consultation with landholders for any of the 37 sites listed in Schedule 4 or Schedule 5 in the 2012 plan. With this in mind we request that the Department consult with all landholders directly and that ground truthing of wetlands include all sites gazetted in all earlier versions of the Gwydir Unregulated Water Sharing Plan.

Recommendation

- 3. Although we do not support the creation of wetlands on private land, if the government wishes to identify any new wetlands as a standalone process, unrelated to any Water Sharing Plan, the process must include individual consultation with all landholders likely to be impacted by the identification of a wetland, this includes all neighbouring landholders.**

The Department held two webinars. These webinars should have been managed more appropriately. The initial webinar failed to provide the necessary insight into how the wetland mapping was completed. The wetland webinar that was added following landholder feedback provided more insight, but was poorly facilitated, questions were claimed to be answered, when they were not. Some questions (mostly from effected landholders) were completely ignored.

There was only one face to face information session conducted by the Department in Bingara, as the department wanted to focus on changes to access rules, which are important and those impacted deserved the opportunity to discuss their concerns with the department. The Department didn't perceive that 327 new wetlands was problematic. There should have been a minimum of two face to face information sessions one for changes to access rules and at least one for wetlands.

One on one sessions were also found to be of minimal use, feedback from an impacted landholder indicated that they "Got a big fat nothing" from their session.

Recommendation

- 4. We request that the Department consult with all landholders directly and that ground truthing of wetlands include all sites gazetted in all earlier versions of the Gwydir Unregulated Water Sharing Plan.**

We acknowledge that the interactive map provided by the Department, was useful to assist landholders to determine if their country was impacted by the proposal. The initial interactive map released had significant errors (1,000's of hectares of errors), which were corrected shortly after release, but this clearly demonstrated a lack of quality control and exacerbated the issue for landholders in the Gwydir.

The existing Water Sharing Plan for the Gwydir Unregulated River Water Sources 2012⁴ includes specific listings in Schedule 4 and Schedule 5. This at least clearly identifies what is included, we believe that the interactive map is a supporting tool to an actual listing of sites. We have concerns that the WSP Prescribed Wetlands Map⁵ under clause 7 in the public exhibition draft is not suitable as a mechanism to clearly identify wetland sites if not accompanied by a listing, there is a risk that the map could be altered without landholder knowledge. In addition, we note that the potential for mistakes is high, as demonstrated in the case of the initial map released in early November 2024.

⁴ [Water Sharing Plan for the Gwydir Unregulated River Water Sources 2012](#)

⁵ [draft-gwydir-unregulated-wsp-prescribed-wetland-map.pdf](#)

Following ground truthing and consultation with landholders, despite not supporting the inclusion of wetlands on private land in Water Sharing Plans, if they are incorporated, wetlands should be included as a detailed list as part of the plan, supported by the map.

Recommendation

5. **We request that following ground truthing and consultation with landholders, the confirmed wetlands, if the Department continues to include them in Water Sharing Plans, then they should be included as a detailed list as in Schedule 4 and Schedule 5 of the Water Sharing Plan for the Gwydir Unregulated River Water Sources 2012 and be supported by the interactive map.**

3.1 Table 1: Example of sites identified as wetlands that are not wetlands

ObjectID	Lot/DP number	Explanation as to why it is not a wetland site
2765	Lot 13 DP44067	<p>This area is a slightly low lying part of a cultivated paddock connected to a man made stock dam. The paddock has been cultivated consistently since the mid 1990's and was previously either opportunistically cultivated or used for livestock grazing.</p> <p>This is not a wetland and never has been.</p>
2721	Lot 13 DP44067	<p>This area is a low off shoot of the Moomin creek which only gets water from the Moomin when it is flowing. Water backs into the area and drains as the creek level decreases. Water does not site in this area for any extended timeframe. Prior to regulation the Moomin typically would flow maybe once every two to three years.</p> <p>The vegetation is primarily regrowth, it is not natural or near natural vegetation and is not adapted to nor dependant on moist conditions for any part of their lifecycle. It provides a refuge for feral pigs, causing only negative impacts on the surrounding area.</p> <p>This is not a wetland and never has been.</p>
2701	Lot 100 DP1 128216	<p>This section of land is an intensely shaded part of our grazing land which provides valuable shade and grass for our cattle grazing enterprise. The plants within this area are not plants that would be associated with a wetland as they are not specifically adapted to nor dependant on moist conditions. We rely on this part of the paddock for shade and protection for our stock, especially in the hot summer months where they congregate and camp in this area on a regular basis. The densely shaded area also provides protection for our cattle who often have calves at foot, from storms and strong winds.</p>
2941	Lot 2 DP1213585	<p>This section is a regulated river system which we access regulated water from Copeton Dam and have done here since before the dam's construction. This section is an anabranh which is known as Cowell Lagoon and is a part of the Gwydir River.</p>

		Any restrictions for new works or trades would be costly to our business and cannot be supported.
2748	Lot11 DP852042	<p>This area is just a localised low lying area in the landscape. This is a farming paddock with boundaries of this so called wetland along fence lines, I didn't know that water recognises fence lines. It has been cultivated for years and does not include natural or near natural vegetation.</p> <p>Every single landholder that is going to be affected by the new declared wetland areas deserve the right to discuss, whether agree or nor agree. The prescribed wetland map is a complete shambles. There are areas everywhere that are definitely not wetlands. They have been farmer for many years.</p>
2756	Lo2 2 DP 607688	This is so obviously a cultivated block and Not a wetland
2914	Lot 2 DP1195430	<p>This proposal is an anabranch of the Lower Gwydir River that lies mostly within private property.</p> <p>This section has been used by the landholder, his neighbour and prior owners, to legally access regulated water from Copeton Dam for some 50 years.</p> <p>This section of the Gwydir River supplies regulated water from Copeton Dam to thousands of hectares of irrigation development further downstream, many landholders with riparian rights, and also the existing wetlands at the Gwydir Rivers termination.</p> <p>This is clearly a river ... a conduit. It is a narrow, fast flowing waterway with vertical banks 2 or 3 meters high. There are no flood runners or tributaries, and no areas where the water spreads beyond its banks. River Channels should not be included as newly Prescribed wetlands.</p> <p>It has very low bio-diversity values. It supports little waterbird and fish populations. The main animals that rely on it are feral pigs, a few kangaroos, and cattle.</p> <p>It has no immediate connectivity to any other wetlands, upstream or downstream.</p> <p>Curiously, this section of the Gwydir River has recently been re-named as "Cowell Lagoon" It is not Cowell Lagoon.</p> <p>It most certainly is not a "lagoon"</p> <p>In no way does it resemble a wetland.</p>
2920	Lot 102 DP 1097801 and others	This proposal is a section of the main Gwydir River. It is used by myself, and other irrigators and graziers to legally access our water rights.

		<p>It is a major river – a conduit used to convey water downstream to many other right holders - public, private, and riparian.</p> <p>It has mostly 3mt vertical banks on both sides, with no tributaries or flood runners, and no areas where it spreads beyond its banks. It has a consistent flow, and has no immediate connectivity with any other wetlands, upstream or downstream.</p> <p>Again, it has also been recently re-named ... from the “Gwydir River” to the “Gwydir Pool”</p> <p>It is a river ... it is not a “pool”</p> <p>In no way does it resemble a wetland.</p>
2856	Lot102 DP1097801	<p>This proposal lies entirely on my private property, and within a flood protectable area as designated by the Gwydir Floodplain design.</p> <p>It’s grazing country, and is subject to my two LMC’s and a PVP. There is no difference between the plant species in the identified site and the plants across my grazing country. The plants within this area are not adapted to nor dependent on moist conditions for any part of their lifecycle.</p> <p>It is a small depression ... less than 1 metre deep, and covering an area less than a single hectare.</p> <p>I’ve only ever seen it hold water on 4 occasions in the last 50 years, and then only for a few weeks following a major flood that had breached my protections.</p> <p>Given the proposed area is within a flood protected zone, has never been filled from rainfall alone, and has held water for less than 3 months in the last 50 years, I suggest that this proposal is also clearly not a wetland.</p>
2796	Lot 3 DP584035	<p>The area marked is a low section in an open paddock that has been growing food & fibre for over sixty years, contributing to the local economy.</p> <p>There is no natural vegetation in this area, nor do birds breed here.</p> <p>We don’t need another feral pig breeding area to manage in this valley.</p>
2885	Lot A DP405872	<p>This area is a low section immediately beside our cultivation. The vegetation is not adapted to nor dependent on moist conditions for any part of their life cycle.</p> <p>We don’t need another feral pig breeding area to manage in this valley.</p>
2806	Lot 1 DP 204423	<p>The area marked is a low section running through an open paddock that has been growing food & fibre for over sixty years, contributing</p>

		<p>to the local economy. This is a depression in the floodplain which can channel flood water in a significant flood.</p> <p>There is no natural vegetation in this area, nor do birds breed here.</p> <p>We don't need another feral pig breeding area to manage in this valley.</p>
2919	<p>Adjacent to Lot 50/DP1164312 Lot46/DP46801</p>	<p>This is the Tycannah creek river channel It is not, and never has been a wetland</p>
2785	<p>Lot34/ DP751785 Lot 33/ DP751785 Lot32/ DP751785 Lot31/ DP751785 and Lot29/ DP751785</p>	<p>This area is adjacent to Tycannah Creek, It has been significantly infested with Mimosa bush (<i>Varchellia farnesiana</i>) for some 100 or more years. There have been efforts to control the Mimosa bush, and we can confidently state that the vegetation in the area is not natural nor near natural and is not adapted to nor dependant on moist conditions for any part of their lifecycle.</p> <p>The area is only wet following flooding from the Tycannah creek, a creek that spreads over the entire floodplain during floods.</p> <p>It is not and never has been a wetland.</p>
2928	<p>Lot 141 DP 751750</p>	<p>This area was developed and has been maintained for over 100 years through human intervention by desilting, to create an area to catch water for stock and domestic use for the Alice Downs homestead. There is no habitat, animals, or plants to support a wetland ecosystem in this area.</p>
2920	<p>N/A</p>	<p>This is the Gwydir River downstream of the Tyreel regulator up to the start of the Gwydir Raft. It is a river within banks the same as the section upstream of Tyreel</p> <p>It is 1km downstream from our licenced access point for regulated river water from Copeton Dam which we have used since the dam's construction. Defining the river as a wetland creates restrictions for new works or trades which would be costly to our business and cannot be supported.</p> <p>Also, there is currently a licenced pump site in this section of the river for our neighbour to access water with his unregulated licence. He has an easement channel through our property from this point.</p>
2853	<p>Lot 20 & 21 DP 751783</p>	<p>This is a flood runner in an area of native vegetation, it is not a wetland. It is located close to the above-mentioned easement channel both our and our neighbours FPH take approved works. Again, any restrictions for new works or trades would be costly to our business and cannot be supported.</p>

2816	Lot1 DP1154771	This section is a tail water return system for Pechelba. Over many years it has been modified into what it is now which is a cultivation paddock with a licenced irrigation channel.
	Lots 9, 10, 29, 53, 57, 58 and Portion 42	Please refer to submission from PJ Hatton Investments Pty Ltd.

4 About the GVIA

4.1 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 Shire⁶.

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 crops⁷.

The Gwydir is characterised as having low water reliability with most water held as general security water with a reliability of 36% (that means entitlement holders 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, significantly reducing access for the region, 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.

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. Our region experienced rapid growth in the environmental portfolio from 2008 onwards with the purchase of licences by the NSW and Commonwealth Governments.

⁶ Cotton Catchment Communities CRC Communities and People Series 2009

⁷ 2010 2011 Agricultural Census Report – agdata cubes, 71210D0005-201011 Agricultural Commodities, Australia

The Gwydir has had more environmental water recovered than required by the Murray Darling Basin Authority modelling and legislation. There is an additional 5,000 megalitres of water owned by Government's above the legislated amount for our region⁸. The total volume of water available to be accessed by water entitlement holders has been reduced significantly over time due to reforms as outlined in Table 1: Summary of Water Reform.

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
TOTALS		5,757 High Security

⁸ 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. Error! Bookmark not defined. Based on IQQM long-term modelling and the volume of water purchased for the environment

Year	Program	Volume of entitlement
		156,617ML General Security (including ECA)
		23,592 ML Supplementary

Entitlements owned for environmental purposes total 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 is primarily used to contribute waterbird and fish breeding events, to maintain the condition and extent of the Gwydir Wetlands. This significant environmental portfolio 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. As the environmental water 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 use⁹. This equates irrigators holding 575,000ML from regulated entitlement (high security, general security and supplementary water) and 28,000ML available from groundwater aquifers.

The reform was difficult as regional communities such as those of Collarenebri and Moree were forced to adjust to a region with less water, and less capacity to recover from droughts. The impacts of the reforms are still evident in these communities.

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 region¹⁰.

4.2 Our region's hydrology and geomorphology

The Gwydir River is an inland terminal river network classified as “distributary” network by the Murray Darling Basin Commission during water sharing plan development. The rivers

⁹ Based on IQQM long-term modelling and the volume of water purchased for the environment

¹⁰ 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>

become a series of branching channels that distribute flows across large areas especially during floods (MDBC, 2007a). This distribution of water represents the watercourse areas of Gwydir Wetlands. There are four parcels of land within the Gwydir Wetlands 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.

The natural hydrology has been altered via modification of the river and operations with an increase in end-of-system connectivity. 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. Flows are now regulated down the Mehi, Moomin and Carole, which can now join the Barwon River. However, even with these modifications there remains limited capacity to move water through these systems with channel constraints limiting the daily flows.

4.3 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 do this together by making every drop count in the river or the aquifer, on-farm, for the environment, or for our community¹¹.

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 water entitlement. The levy is paid and supported on average by 85% of the eligible entitlement (excludes NSW and Commonwealth entitlement).

The Association's primary activities revolve around negotiating with government at a Federal, State and Local level to ensure equality and the rights of entitlement holders 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 entitlement holders 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.

¹¹ For more information, see our corporate video on <https://vimeo.com/177148006>

4.4 *Contacts*

Gwydir Valley Irrigations Association

ABN: 49 075 380 648

100 Balo St (PO Box 1451)

Moree, 2400

Ph: 02 6752 1399

Mobile: 0427 521 498

Email: gvia@gvia.org.au

Chair: Jim Cush

Executive Officer: Louise Gall