



*Submission to: NSW Department of Planning,  
Industry and Environment - Water*

*Proposed legislative amendments for floodplain  
harvesting in NSW*

*By:*

*Gwydir Valley Irrigators Association Inc  
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*making every drop count*

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## 1 Summary and Purpose

This document has been developed by the Gwydir Valley Irrigators Association (GVIA) on behalf of its members as a formal submission for consideration by the NSW Government during their consultation on proposed amendment for floodplain harvesting in NSW, contained within these four proposed regulations:

1. Water Management (General) Amendment (Floodplain Harvesting) Regulation 2020
2. Water Management (General) Amendment (Floodplain Harvesting Measurement) Regulation 2020
3. Water Management (General) Amendment (Exemption for Rainfall Run-off Collection) Regulation 2020
4. Water Management (General) Amendment (Floodplain Harvesting Exemptions) Regulation 2020

This document aims to represent the concerns, views and experiences of our members, not as individuals but as a local industry. Each member reserves the right to express their own opinion and is entitled to make their own submission of which we have encouraged.

Every member of the GVIA is also a member of the NSW Irrigators Council and as such we endorse their submission unless clearly outlined otherwise.

## 2 Introduction

The Gwydir Valley Irrigators Association (GVIA) is the representative body for irrigation entitlement holders in the Gwydir Valley and we recognise the importance of this historical reform for our members, our community and communities everywhere. It is imperative that NSW continues to move forward with how they manage, account and report on water take by water users and floodplain harvesting must be licenced in NSW. We see these proposed amendment for floodplain harvesting in NSW within these four proposed regulations.

There are broad benefits of implementing this reform that should be acknowledged and can only be achieved once licensing is fully implemented.

The benefits to industry that values this important source of water are through providing certainty to this historical access arrangements and confidence that there is sharing of flood flows. Industry also benefits from the confidence in knowing there are sustainable into the future, accessing water within their limits, no more or no less. Overland flows provide a rare opportunity for our members and others to efficiently share in water when it is most abundant, when our rivers are full and spilling. It is not regular and is naturally constrained by the farm infrastructure, the requirement of floodplain structures to provide a flood flow and the nature of the flood itself. The last time the region had valley-wide opportunity to capture overland flow was in 2012, after significant flooding had already occurred just a months beforehand in 2011. During this time, our members captured some of the passing flood waters and 8,500 gigalitres of water was measured at Bourke and Menindee Lakes filled and spilled because of the ongoing floodwater from NSW and QLD. These flow outcomes occurred, without the restrictions likely to be required once floodplain harvesting is finally licenced. The estimated total floodplain harvesting volume at the time, to be confirmed via modelling, was less than 10% of the total flow at Bourke.

There are benefits of the finalisation of this reform for our local community that have certainty that the local industry is sustainable. Irrigation is an important component of our local economy and that of NSW. The Moree Plains Shire is the most agriculturally productive state in NSW producing on average 8% along of the NSW Gross Domestic Product and this is underpinned by the benefits that irrigated agriculture can provide to value add our agriculture production.

There are benefits for communities and water users elsewhere, to have transparency and certainty that the sharing of floodplain flows occurs with no more or no less than what is within the required limits. Implementation of his program will provide the transparency that many including our own industry have been demanding.

The environment will also benefit, particularly in the Gwydir where most of our water natural flows towards our watercourse and the Gwydir Wetlands. The reductions in long-term floodplain take will naturally provide for more water to these areas in the long-term.

For these reasons and those contained within our recommendations and subsequent comments, we support the implementation of the Floodplain Licencing program and as such recognise that these regulations provide a critical pathway to enable these licences to be implemented.

We have provided six recommendation as part of this submission to address each of the four regulations presented.

## 2.1 Our region's economy

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 its 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>1</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>2</sup>.

## 2.2 Our region's water availability and use

Copeton Dam is a 1,300 gigalitres headwater storage capturing 45% of the Gwydir Valley's inflows. The dam accounts for dam losses, essential supplies including town water supplies, high security and stock and domestic water, an environmental contingency allowance and general security entitlements and the delivery of those entitlements and are allocated in that order of priority.

Water Sharing Plan rules reserve approximately 7% capacity for essential supplies including high security water which is secured for 2-years in advance. Essential supplies usage is between 1-2% total water use annually and has never not been delivered, although its delivery has been limited to specific bulk releases to manage losses as was undertaken in 2019-20. Any changes to either the reserve or the usage patterns of this water, directly impacts the lower priority water users including the Environmental Contingency Allowance, which make up the vast majority of shares to water in Copeton Dam.

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.

The triggering of supplementary sharing rules which are any flows downstream of Copeton Dam up to 500 megalitres per day, are designed to protect base-flows for the river and the wetlands, with any and flows above the minimum threshold are shared 50:50 with the environment. These rules provide natural connectivity of water sources within our region and downstream, when inflows occur. Changes to the Water Sharing Plan proposed as part of Water Resource Plan development allow for environmental water managers more

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<sup>1</sup> Cotton Catchment Communities CRC Communities and People Series 2009

<sup>2</sup> 2010 2011 Agricultural Census Report – agdata cubes, 71210D0005-201011 Agricultural Commodities, Australia

authority over where the 50% share of any flow maybe delivered, providing more scope for additional environmental benefit.

Our region’s irrigators recognise as historically having access to overland flows a function of the natural hydrology of the valley. This is an irregular but important source of water for the industry accounting for up to a third of the long-term water used by the industry.

The total volume of water available to be accessed by irrigators has been reduced significantly over time due to reforms as outlined below in Table 1: Summary of Water Reform. Entitlements owned for environmental purposes totals more than 186,000ML, which includes an Environmental Contingency Allowance (ECA) 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. Despite 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.

**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
	NSW Government infrastructure works	3,141ML Supplementary
	Commonwealth buy-back program.	1,249ML High Security
2016		88,133ML General Security
	Commonwealth infrastructure programs.	20,451ML Supplementary
2016	Commonwealth infrastructure programs.	4,508ML High Security

Year	Program	Volume of entitlement
		1,392ML General Security
<b>TOTALS</b>		5,757 High Security 156,617ML General Security (including ECA) 23,592 ML Supplementary

As a result, only approximately 19% of the total river flows are available for diversion for productive use<sup>3</sup>. This equates irrigators holding 575,000ML from regulated entitlement (high security, general security and supplementary water) and 28,000ML available from groundwater aquifers.

The main broad acre irrigated crop is cotton with irrigated wheat, barley and Lucerne also occurring depending on commodity prices. The total broad acre irrigated area is approximately 90,000 ha (although recent analysis indicate that maximum planting area is now 70,000ha) but is rarely cropped in one year. In 2010-11 census data indicated the total production value of irrigated cotton was \$623M and is estimated to be worth three times that to the local community using the Cotton Catchment Communities Research Corporation economic multiplier for cotton regions<sup>4</sup>. For more information on the long-term production trends of cotton in the region visit the Gwydir Cotton Growers website [www.gwydircotton.com.au](http://www.gwydircotton.com.au).

Currently there are also pecans, walnuts, oranges and olives being grown within the region covering approximately 1,500 hectares and generating an estimated \$31M with considerable benefits to the local community as a high intensity, permanent crop. There is significant potential for expansion into horticulture and improvement in water utilisation but the area of expansion is limited by the availability of high security water.

Changes in water availability either through climate or government policy has a direct impact on the productivity of the region as well as on 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.

### 2.3 Our region's hydrology and geomorphology

The Gwydir River is an inland terminal river network that is also classified as "distributary" network by the Murray Darling Basin Commission back during water sharing plan development. This indicates that the rivers become a series of branching channels that distribute their flows across large areas especially during flood times. This distribution of water represents the watercourse areas of which the Gwydir has internationally recognised

<sup>3</sup> Based on IQQM long-term modelling and the volume of water purchased for the environment

<sup>4</sup> Social and Economic Analysis of the Moree Community, 2009. Cotton Catchment Communities CRC



Gwydir Wetlands. There are four parcels of land within the Gwydir Wetlands that are listed under the Ramsar Convention on Wetlands.

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 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 channelization and re-regulation occurred throughout the last century to initially deliver regular stock and domestic water supplies to users and then to deliver irrigation water more efficiently. However, even with these modifications there remains limited capacity to securely move water through these systems with channel constraints limiting the daily flows. That’s largely due to in-river flows being highly constrained by river channel limitations which are below 1000 megalitres per day on the Mehi constrained upstream at Bronte and 300 megalitres per day on the Gil Gil creek, these are the two main regulated systems that contribute to the Barwon River.

The relative contribution of the Gwydir is rather low, and the contribution is highly variable from year to year. For example, in 2016-2017 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, 2016-2017 and to a lesser extend February 2020. These years correspond with overland flow opportunity in the region as well, indicating that floodplain harvesting and downstream connectivity are not mutually exclusive of each other as often suggested.

## 2.4 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>8</sup>.

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<sup>5</sup> State of The Darling Interim Hydrology report, MDBC 2007

<sup>6</sup> End of system calculations from Water Balance Reporting by NSW Government

<sup>7</sup> Independent Assessment of the Lower Darling Fish Deaths

<sup>8</sup> For more information, see our corporate video on <https://vimeo.com/177148006>

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

The GVIA organisation is voluntary, funded by a nominal levy, cents/megalitre on regulated, unregulated and groundwater irrigation entitlement. In 2016-17 the levy was paid and supported by more than 84% of the eligible entitlement (excludes entitlement held by the NSW and Commonwealth governments).

Much of the activity of the association revolves around negotiating with government at a Federal, State and Local level to ensure the rights of irrigators are maintained and respected. While the core activities of the Association are funded entirely through the voluntary levy, the Association does also undertake programs to maintain and improve the sustainability of members on-farm activities and from time to time, undertakes special projects, 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.

The GVIA and its members, are members of both the National Irrigators Council and the NSW Irrigators Council.

## 2.5 *Contacts*

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## 3 *Recommendations*

1. The GVIA recommend the implementation of the Water Management (General) Amendment (Floodplain Harvesting) Regulation 2020 because it replicates the clear and transparent process implemented as part of the Healthy Floodplains Project within the current regulatory framework, which upon implementation will have the following key benefits:



- Protect the environment and users from further growth, providing certainty to communities who rely on floodplain flows.
  - Restrict future growth will maintain and improve floodplain flows downstream, including any environmental assets.
  - Mandate measurement and reporting.
  - Improve compliance options through volumetric monitoring as well as controls of floodplain works.
  - Improve the communities confidence in water management.
2. The GVIA recommend the implementation of the Water Management (General) Amendment (Floodplain Harvesting Measurement) Regulation 2020 as it reflects the conditions in the Floodplains Harvesting Measurement Policy and because it mandates a fit-for-purpose, repeatable, auditable measurement and reporting approach for floodplain harvesting take that can be verified by the regulator which is consistent with all other major forms of water take.
  3. The GVIA recommend that any measurement approach should be supported by a strong and proactive compliance framework that uses the most current technology, we support that this regulation enables a three-fold compliance approach that includes:
    1. The measurement and reporting of take by individuals (new);
    2. The monitoring of valley-wide take within valley-limits (currently estimated but to be actual volumes); and
    3. The compliance of floodplain structures to standardised floodplain management plans.
  4. The GVIA recommend that the draft regulations are amended to refer to “a floodplain harvesting measurement period”, which clearly defines the point when overland flow is being taken and when the exemption would not apply and has consistency with the Water Management (General) Amendment (Floodplain Harvesting Measurement) Regulation 2020.
  5. The GVIA recommend the Water Management (General) Amendment (Exemption for Rainfall Run-off Collection) Regulation 2020 is implemented providing state-wide consistency to the incorporation of long-standing activity of retaining rainfall runoff within irrigation developments, as required by existing conditions and approvals to maintain the environmental benefits they were designed to protect.
  6. The GVIA acknowledge and support the amendments to the Water Management (General) Amendment (Floodplain Harvesting Exemptions) Regulation 2020 and recommend the implementation of this regulation to provide a constrained and temporary clarity for all water users in NSW who undertake this historical and legitimate activity.

## 4 Specific comments

### 4.1 Water Management (General) Amendment (Floodplain Harvesting) Regulation 2020

Floodplain harvesting is the capture of overland flow across a floodplain which is a legitimate form of historical water take that is not well understood. The requirement to establish volumetric licences for floodplain harvesting does not create new water but rather allows for the volumetric representation of historical access.

The abovementioned regulation enables the implementation of the NSW Floodplain Harvesting Policy 2018 (updated) and the Implementation Guideline, which contains the details steps and process taken throughout the implementation of the Healthy Floodplains Project. We support this regulation as a way to clearly outline the process undertaken in our region and the other northern valleys within the regulatory framework and set the foundation for the rest of the state if its required.

This is legitimate historical access being bought into the current regulatory framework by converting a descriptive take under NSW Water Act 1912 into a volumetric license consistent with the NSW Water Management Act 2000.

With all water available to irrigators limited, future licensing of floodplain flows will provide tools to better measure and monitor take to ensure overall usage remains within limits, as set out in water sharing plans and the Basin Plan.

While the issuing of licences for historical forms of take is not without its challenges, as irrigators will be subjected to further regulation and costs, it will include the following benefits:

- Licensing will protect the environment and users from further growth, providing certainty to communities who rely on floodplain flows
- Restricting future growth will maintain and improve floodplain flows downstream, including any environmental assets.
- Regulation of access will be via a new three-fold compliance approach rather than the two options available today (to be discussed in the next section).
- Communities should have confidence that not only water volumes but floodplain works will be monitored, with all farms on the floodplain (not only irrigation farms) will have their works inspected to ensure they are compliant to current regulations.

We have supported implementation and have been seeking finalisation for more than 20-years. It is time to move forward and realise the benefits of licencing this form of take and to better align the security of this water right with other entitlements already within the current regulatory framework, as a means to maintain the future of the industry and economic activity in our region

The GVIA is committed to implementing the Healthy Floodplains Project to incorporate legitimate floodplain access into the contemporary licencing framework.

We support the increased transparency and accountability of this form of take once it is licenced and recognise that this regulation is designed to establish this within the Water Management Act 2000. For those reasons, we support the detailed process to outline how floodplain harvesting licences will be determined, so it is clear and transparent and repeatable if needed.

Whilst the outcome of licencing is not known in our valley, the process to-date has been clear and transparent and backed up through independent peer reviews, the probity review and a third-party anomaly committee. Not everyone will be satisfied with the outcome. Licensing will likely reduce individuals and the valley's access to this form of water under such a program. However, the process has been fair and transparent and the rules and eligibility clear. Consistency in approach has been important, particularly when individuals

span multiple valleys and we have welcomed the improvement in consistency provided by the independent peer review and the commitment of the anomalies committee members.

We note there is a continuing anomaly with the eligibility criteria around works that have been approved and not yet constructed, which we urge the NSW Government to consider a resolution that matches the intent of the reform. To recognize those legitimately accessing floodplain harvesting. Legacy issues with delays in approvals by the Department should not be at the expense of individuals, who through no fault of their own, did not have the appropriate timeframe to complete the construction of their approved works before the eligibility date.

While the implementation of floodplain licensing is likely to reduce the valley's availability of water below current levels, the industry supports ensuring all water take is within legal limits. Reductions are an appropriate and necessary to ensure our industry is sustainable into the future and we put a stop to future growth and for public confidence.

We support the regulation particularly as through its implementation it will also prevent future growth in water take by managing water volumetrically and not only through works.

The benefits of implementing this regulation for industry, the community and the environment are substantial. The future sustainability of the local irrigation industry relies on the continuation of this unique form of take and reductions in take in the long-term, will result in water returning to floodplains as a result of its implementation.

**The GVIA recommend the implementation of the Water Management (General) Amendment (Floodplain Harvesting) Regulation 2020 because it replicates the clear and transparent process implemented as part of the Healthy Floodplains Project within the current regulatory framework, which upon implementation will have the following key benefits:**

- **Protect the environment and users from further growth, providing certainty to communities who rely on floodplain flows.**
- **Restrict future growth will maintain and improve floodplain flows downstream, including any environmental assets.**
- **Mandate measurement and reporting.**
- **Improve compliance options through volumetric monitoring as well as controls of floodplain works.**
- **Improve the communities confidence in water management.**

#### 4.2 *Water Management (General) Amendment (Floodplain Harvesting Measurement) Regulation 2020*

To ensure floodplain harvesting take is transparent, measurable and accountable, consistent with most other major forms of water take by water users, then it must have a strong measurement and compliance approach. We support the above-mentioned regulation as a

means to enact the NSW Floodplain Harvesting Measurement Policy 2020. The regulation and Policy should align.

The Floodplain Harvesting Measurement Policy has consulted on multiple times with many iterations of the draft monitoring and auditing strategy.

Because floodplain harvesting is a unique form of take; it is site specific in terms of capacity (infrastructure) and opportunity (flood events), highly episodic and therefore variable on temporal and spatial scales it requires a unique monitoring solution.

We fully support a robust strategy that is achievable for both government and water users and benefits everyone. It's important we can measure and account for overland flow like all other forms of water and the most practical and effective approach is via storage devices, as all water on a farm ends up here regardless of how it intercepted.

The final policy appears repeatable, auditable and can be verified by the regulator, its cost-effective and fit-for-purpose. The measurement requirements are ambitious in nature, due to the scale required and the limited testing on emerging technologies but appears flexible enough to account for improved options and farm-specific solutions if required.

Our members commit to fast-tracking the achievement of those measurement requirements provided there is capacity to supply devices and qualified installers.

The measurement and accounting of any water take, should also be subsequently supported by a strong and proactive compliance framework that uses the most current technology. We welcome the NSW Governments trial of technology as part of the first flush monitoring in February 2020 (as reported here).

We support the implementation of a three-fold compliance strategy as part of monitoring floodplain take and ensuring growth is managed. This three-fold compliance approach rather than the two tools available today, includes:

1. The measurement and reporting of take by individuals (new);
2. The monitoring of valley-wide take within valley-limits (currently estimated but to be actual volumes); and
3. The compliance of floodplain structures to standardised floodplain management plans.

As the NSW Government is also responsible for managing all water take within limits, therefore they must ensure that there is not any future growth in any form of access including floodplain. Transitioning this access into the current framework will provide better tools to help NSW achieve this, including providing users security of access through restricting industry access to a historical level of take to industry, monitoring that and restricting future growth, which will maintain or improve floodplain flows downstream, including to any environmental assets.

**The GVIA recommend the implementation of the Water Management (General) Amendment (Floodplain Harvesting Measurement) Regulation 2020 as it reflects the conditions in the Floodplains Harvesting Measurement Policy and it mandates a fit-for-purpose, repeatable, auditable measurement and reporting approach for**

**floodplain harvesting take that can be verified by the regulator which is consistent with all other major forms of water take.**

**The GVIA recommend that any measurement approach should be supported by a strong and proactive compliance framework that uses the most current technology, we support that this regulation enables a three-fold compliance approach that includes:**

- 1. The measurement and reporting of take by individuals (new);**
- 2. The monitoring of valley-wide take within valley-limits (currently estimated but to be actual volumes); and**
- 3. The compliance of floodplain structures to standardised floodplain management plans.**

### *4.3 Water Management (General) Amendment (Exemption for Rainfall Run-off Collection) Regulation 2020*

Water users and infrastructure operators in NSW have complex obligations under a range of Acts, regulations and approval conditions which currently contradict each other when managing overland flow. This is relevant when considering the Water Management Act was amended to include rainfall in the definition of overland flow.

The contradictions are most prevalent when considering the Water Management Act and conditions on use approvals, issued under the Act that contradict each other, by placing a mandatory condition on licenced to not allow any tailwater or drainage water to discharge, by means including surface or sub-surface drains or pipes, from the approval holders property into or onto:

- Any adjoining public or crown land
- Any other persons land
- Any crown land
- Any river, creek or water course
- Any groundwater aquifer
- Any area of native vegetation described in Native Vegetation Conservation Act 1997 or the Native Vegetation Act 2003
- Any wetland of environmental significance
- Any identified site of aboriginal significance
- Any identified site of cultural significance.

It is therefore currently impossible for an irrigator to operate in full compliance of their obligations through no fault of their own, if they incidentally capture rainfall within their irrigation developments as required by their licence conditions. The harvestable rights order in most cases will not adequately capture this activity, as 100% of the rainfall is being captured and the order applies only to the capture of such water in a dam constructed on a first or second order stream.

The requirement to capture rainfall was established as a means to meet Environment Planning and Assessment Act requirements to not pollute a waterway. Such requirements are in place to protect our water ways and not providing the legal clarity to represent this historical practice will jeopardise these environmental improvements and put water users at risk of breaching the EP&A Act.

The collection of rainfall runoff within irrigation developments is a state-wide practice. The proposal to incorporate this component into floodplain harvesting licences in the five-northern valleys which are being licenced was inequitable as a state-wide policy. Whereby the NSW Government was licencing a subsection of the state for a state-wide activity, requiring those areas to report, measure and pay for water that their irrigation practices and design, enhanced in the first place.

Rainfall runoff collected from irrigation areas is not floodplain harvesting. The collection and re-use of rainfall is not legally or in practicality take but part of the management of irrigation developments within irrigation developed areas for environmental purposes and must be consistently regulated throughout NSW. Runoff from irrigated areas has been enhanced by design due to:

- a) Land improvements and levelling to improve drainage (runoff);
- b) Farming practices that create runoff including minimum soil-water deficits and limited groundcover;
- c) Water reticulation and storage systems to enable water recycling; and
- d) Irrigation application that artificially wets the profile.

The alternative solution to recognise this important state-wide activity within the contemporary regulatory framework whilst also ensuring the practical implementation of the floodplain harvesting measurement policy, rainfall runoff during an overland flow event was proposed to be considered floodplain harvesting and subject to licence conditions. However, any rainfall runoff collected while no overland flow was being taken would be exempted. This regulation enables this proposal to occur and is critical for state-wide consistency and clarity around this activity.

The regulation should be amended to reflect the measurement approach for floodplain harvesting licences, to provide a clear indication of when the exemption would not apply. For water users not on a floodplain or without a floodplain harvesting licence, the “no other overland flow” measure would still adequately address whether the exemption is in force or not. A communications package around these key components should be encouraged if implemented, to provide water users clarity about when and if the exemption ceases to apply to them.

**The GVIA recommend that the draft regulations are amended to refer to “a floodplain harvesting measurement period”, which clearly defines the point when overland flow is being taken and when the exemption would not apply and has consistency with the Water Management (General) Amendment (Floodplain Harvesting Measurement) Regulation 2020.**

**The GVIA recommend the Water Management (General) Amendment (Exemption for Rainfall Run-off Collection) Regulation 2020 is implemented providing state-wide consistency to the incorporation of long-standing activity of retaining rainfall runoff within irrigation developments, as required by existing conditions and approvals to maintain the environmental benefits they were designed to protect.**

#### 4.4 *Water Management (General) Amendment (Floodplain Harvesting Exemptions) Regulation 2020*



As stated within our submission to the NSW Upper House Inquiry Inquiry on the Impact and implementation of the Water Management (General) Amendment (Exemptions for Floodplain Harvesting) Regulation 2020, an exemption was a foreshadowed transitional and temporary step within the NSW Floodplains Policy (“the policy”) since 2013. The Department at the time and now, considered it necessary to provide a transitional coverage for water users with eligible works to address any legislative gaps during the conversion of licences from the NSW Water Act 1912 to the NSW Water Management Act 2000.

The need for the regulation as we raised during the inquiry remains unclear, plagued by various legal opinions from both the Crown Solicitor and other independent solicitors, there are a range of interpretations on what may or may not be needed. Whether the floodplain is indeed a water source and take from within it requires a licence, exemption or right and how the incomplete transition from the Water Act 1912 into the Water Management Act 2000 impacts the historical activity of capturing overland flow.

Nonetheless, many water users felt personally let down by NSW, who through no fault of their own remain on the same pathway to a floodplain harvesting licence that they have been on since 2004 albeit, somewhat closer, having received clear directions on eligible works, draft water supply work approvals and indicative farm scale modelling outputs.

The public debate and ambiguity around multiple and differing legal opinions has highlighted that regardless of the legal requirement for the exemption, the undue stress and anxiety and unwarranted media attention, suggest a very specific and tightly managed exemption could be warranted for clarity and peace of mind for all. We specifically refer to the Natural Resources Access Regulator’s strong preference for clarity, for the entire state of NSW not just those who are currently on a licensing pathway, as in our valley.

For this reason, we support the proposed regulation with the amendments provided. These changes together with the consultation approach, provided during this process, address the concerns that we and many other stakeholders have previously raised on this regulation. The exemption reflects the eligibility conditions provided by the existing policy, providing an important transitional line in the sand to reduce take. This will allow for the environmental benefits of the program to be fast-tracked.

The proposed regulation will also allow for a transition to an improved accountability and reporting framework by formally trialing the proposed mandatory conditions for measurement and reporting and providing the Natural Resources Access Regulator compliance opportunity. The measurement requirements should be matched to those existing in the Floodplain Harvesting Measurement Policy 2020. All of which will provide greater confidence immediately in the short-term prior to licensing being finalized.

The proposed sunset clause provides a clear measure of temporariness, ensuring there is a commitment to licensing by its due date. However, we note that the sunset clause provides a challenges for valleys not currently on a pathway to licensing. The regulation provides these regions a temporary pathway. The NSW Government should engage with those regions, who are not currently on a pathway to licensing, to consider what future arrangements past the sunset clause should be adopted.

As with any state-wide policy, we expect consistency and equity in its implementation.

We acknowledge the work that NSW has undertaken to consider the feedback from the Inquiry and stakeholders in making these improvements.

**The GVIA acknowledge and support the amendments to the Water Management (General) Amendment (Floodplain Harvesting Exemptions) Regulation 2020 and recommend the implementation of this regulation to provide a constrained and temporary clarity for all water users in NSW who undertake this historical and legitimate activity.**

## 5 Conclusion

Gwydir Valley Irrigators Association (GVIA) is the representative body for irrigation entitlement holders in the Gwydir Valley and support the implementation of the Floodplain Licencing program and as such recognise that these regulations provide a critical pathway to enable these licences to be implemented.

Floodplain licencing is a historical reform with benefits for industry, the environment and communities everywhere.

It is imperative that NSW continues to move forward with how they manage, account and report on water take by water users and floodplain harvesting must be licenced in NSW.

We have provided six recommendation as part of this submission to provide support and suggestions to improve the four regulations presented.