

Gwydir Valley Irrigators Association Inc.

458 Frome St, PO Box 1451, Moree NSW 2400

Review of NSW Water Sharing Plans

Comments on the:

Gwydir Regulated River Water Source and

Cobbadah, Rocky Creek, Upper and Lower Horton Water Sources

Gwydir Valley Irrigators Association Inc

February 2013

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1 Purpose of this submission

This document has been developed by the Gwydir Valley Irrigators Association (GVIA) on behalf of its members as a formal submission for consideration by NSW Government as part of its review of NSW Water Sharing Plans. Comments within this submission are outlined for the Natural Resources Commission and the NSW Office of Water in preparation for the formulation of advice to the NSW Government.

This document represents the concerns and views of GVIA's members. However, each member reserves the right to express their own opinion and is entitled to make their own submission.

2 About the Association

2.1 *Where we are and what we do*

The Gwydir Valley Irrigators Association (GVIA) represents in excess of 250 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.

Our 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 with two of these plans under scrutiny as part of this submission.

The main broadacre irrigated crop is cotton with irrigated wheat, barley and Lucerne also occurring depending on commodity prices. Currently there are also pecans, walnuts, oranges and olives being grown within the region covering approximately 1,500 hectares. There is however, significant and potential for expansion into horticulture.

The Gwydir Valley Irrigators Association organisation is voluntary, funded by a cents/megalitre levy on regulated, unregulated and groundwater irrigation entitlement. In 2010/11 the levy was paid on in excess of 87% of the eligible entitlement (excludes entitlement held by the State and Federal Government).

The Association is managed by a committee of 11 irrigators and employs a full-time executive officer and a part-time administrative assistant, as well as hosting a Regional Landcare Co-ordinator.

Much of the activity the association revolves around negotiating with government at a Federal, State and Local level to ensure the rights of irrigators are maintained and respected.

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While the core activities of the Association are funded entirely through a voluntary levy, the Association does from time to time, undertakes special projects, which can be funded by government.

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

We support the submissions made by NSW Irrigators Council on behalf of the irrigation industry of NSW.

2.2 Association Contacts

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3 Introduction

The Gwydir Valley Irrigators Association (GVIA) welcomes the opportunity by the NSW Government to provide comment on the Water Sharing Plans for the Gwydir Regulated River and the Cobbadah, Rocky Creek, Upper Horton and Lower Horton Water Sources. The GVIA is disappointed by the lack of information available to stakeholders, to allow them to genuinely undertake a review of either Plan, in the timeframes provided.

The GVIA acknowledges that there are two significant constraints; the dissolution of local Catchment Management Authorities in NSW and the Murray Darling Basin Plan which will impact on the NSW Government's willingness to thoroughly review these Plans. As a result the GVIA has provided a series of recommendations for consideration that are prioritised for

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consideration immediately and prior to the alignment of either Plan with the Basin Plan in 2019.

The bulk of this submission is therefore about providing recommendations for further work by the NSW Government, to assist stakeholders to make an assessment of the effectiveness of these plans to meet their objectives. The GVIA considers that with the limited information available to them at this point in time, stakeholders are subsequently required to make assumptions regarding the perceived effectiveness of the plans rather than an objective review of actual outcomes. As a result with anticipation of further information, the GVIA reserves the right to suggest additional rule changes for implementation prior to alignment of the Water Sharing Plans with the Basin Plan.

In providing a concise list of recommendations within this submission, the GVIA is not offering agreement or support for the balance of the rules or conditions within the Water Sharing Plans but rather accepting that these Plans, as they exist and are currently implemented, are considered 'manageable' for our members.

The GVIA will continue to work with the NSW Government and State Water Corporation who implement these Plans, to ensure that they continue to provide irrigators with the appropriate level of protection and access to their water right.

4 General Comments

4.1 Review Constraints

The Gwydir Valley Irrigators Association (GVIA) acknowledges that there are two significant constraints that undermine the effectiveness and timing of the current review; the dissolution of local Catchment Management Authorities in NSW and the Murray Darling Basin Plan.

In the absence of detailed information on the creation of NSW Local Land Services from Catchment Management Authorities, Livestock Health and Pest Authority and the extension delivery component of the NSW Department of Primary Industries, the GVIA assumes that there will be operational implications for the management of aspects of the water sharing plans into the future. Most importantly, the current draft Local Land Services boundaries will render the Catchment Action Plans that Water Sharing Plans should contribute to, as defunct as the plans and organisational boundaries will not align and plans are not consistent across catchment boundaries. There are also implications for environmental water management groups (like the Environmental Contingency Allowance Operational Advisory Committee in the Gwydir), which are currently chaired by Catchment Management Authorities whose representation maybe due for change in a critical phase of implementation and strategy.

The Murray Darling Basin Plan will also influence future water planning practices as Water Sharing Plans will need to be transitioned to Basin Plan requirements by 2019. The

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transition to the Basin Plan will influence the scope in which changes can be made, now and by 2019, as the Basin Plan baseline conditions are established as of 2009 including the current Water Sharing Plan rules and limitations. Furthermore, without knowing what requirements the Murray Darling Basin Authority might have to accredit Water Sharing Plans, the NSW Government may need to remake plans to meet the legislative requirements of the Basin Plan.

As a result, the GVIA urges the NSW Government to carefully consider and balance the administrative resources and costs associated with reviewing and re-issuing these plans whilst there remains uncertainty with the local implementation with Local Land Services and the broader context of the Murray Darling Basin.

4.2 Review Process

The GVIA has welcomed the review of the Water Sharing Plans for the Gwydir Regulated River and the Cobbadah, Rocky Creek, Upper Horton and Lower Horton Water Sources. However, we have found it difficult to develop a constructive review, in light of a lack of information regarding the implementation of the plans and their progress towards achieving each plans desired outcomes over the past ten years. That is, to our knowledge there has been no assessment of the socio-economic outcomes or environmental achievements of these plans. Although we are aware there have been surveys of irrigator perception and behaviour¹, the information from these surveys does not address the environmental or socio-economic key performance indicators of each of the plans. The only other information available is a progress report dated in 2009² that attempted to monitor indicators for some of the plans but not all and it has not be finalised nor repeated. For the Gwydir Regulated River the focus for reporting remained on the limited suite of indicators for the Gwydir Wetlands, without any pre-water sharing plan benchmarking.

Without objective information, stakeholders are subsequently required to assumptions regarding the perceived effectiveness of the plans rather than an objective review of actual outcomes. For a thorough, objective review to occur there needs to be an assessment of how the plans have performed against its objectives³, whether the strategies⁴ were appropriate and how the plan measured against the performance indicators⁵. This information must then be provided to all stakeholders, allowing for comment and recommendations moving forward.

¹ NSW Office of Water, *Monitoring economic and social changes in NSW water sharing plan areas: A comparison of irrigators' survey 2006 and 2010 – covering plans commenced in 2004*. December 2011.

² NSW Office of Water, *The Environmental Flow Response and Socio-economic monitoring progress report for the Gwydir*. 2009. <http://www.water.nsw.gov.au/Water-management/Monitoring/Valley-progress-reports/default.aspx>

³ E.g. Section 10, Water Sharing Plan for the Gwydir Regulated River Water Source (2004)

⁴ E.g. Section 11, Water Sharing Plan for the Gwydir Regulated River Water Source (2004)

⁵ E.g. Section 12, Water Sharing Plan for the Gwydir Regulated River Water Source (2004)

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The review process currently employed does not allow this to happen and as such, the GVIA questions the commitment of the NSW Government to firstly, test the effectiveness of Water Sharing Plans and secondly, to thoroughly review and amend plans in the current timeframe.

While the GVIA appreciates that the NSW Government has many Plans for review this year with more each following year, that resources may be limited and that the legislative context has changed with the release of the Murray Darling Basin Plan. Nonetheless the Government made the commitment to review these plans during their development more than ten years ago and has had this time to prepare. Therefore, the GVIA are disappointed that more information could not be provided to them prior to the opportunity for comment.

In response, our submission focusses on areas where the GVIA believes information should be collated and analysis completed and provided to stakeholders, prior to any recommendations to the Minister on how to proceed with any plan.

4.3 Water Sharing Plan Development

The development of water sharing plans more than ten years ago was a demanding, tiresome task for both the NSW Government and stakeholders. The process was emotionally exhausting for those involved, so much that many do not wish to re-engage with the process again.

Recent dealings during the development of the Gwydir Unregulated and Alluvial Water Sources highlighted that although there were improvements in the transparency of the process, there remains a number of areas of concern with the development process. The GVIA in our submission to the NSW Office of Water for the draft Gwydir Unregulated and Alluvial Water Sources⁶ outlined a number of areas of concern regarding the development process, those applicable to this process include:

- Setting of appropriate timelines for consideration and comment of plans, with timelines reflective of the seasonal demands on stakeholders;
- Greater emphasis on genuine, local community consultation utilising broad ranging strategies to improve awareness of the plan development and implementation; and
- Inclusion of an irrigation industry representative on the interagency regional panels that recommend water sharing plans to:
 - Further balance the social, economic and environmental objectives of water sharing plans; and
 - Ensure that the decision making process is more representative of all stakeholders involved and affected by the process.

The interagency panel structure must be amended to reflect the changed composition of water users in many valleys, with the NSW Office of Environment and Heritage (OEH), in

⁶ Submission to the NSW Office of Water on Draft Water Sharing Plan for the Gwydir Unregulated and Upper Gwydir Alluvial Water Sources, Gwydir Valley Irrigators Association Inc. November 2011.

agreement with the Commonwealth Environmental Water Holder, now also a manager of significant entitlement to achieve environmental outcomes. There is a clear conflict of interest between OEH as a water user and also as an interagency panel representative, with other water users not having the same level of representation during decision making. As such the GVIA recommend that the OEH and the irrigation industry, with other major categories of water users be treated equal and each have the same status on the interagency panel; either full or observer, as a means to acknowledge and manage this conflict of interest.

The GVIA ask that these concerns are again taken into consideration as part of this review process.

5 Terms of Reference

5.1 *Natural Resources Commission*

Delivering better regional outcomes

- Has the implementation of water sharing plans contributed to the regional social, economic, cultural and environmental priorities expressed within the region's catchment action plan?
- Is the role of water in the landscape and links between water sharing plans and landscape function understood by key stakeholders and/or described in the catchment action plan?
- How can regional natural resource management planning be improved to better complement water sharing plans, and vice versa?

Integrated and efficient governance

- Are stakeholders involved in water and natural resource management planning working towards shared goals and objectives (as set out in the catchment action plan or elsewhere)?
- Do the current governance arrangements support ongoing coordination both within government and between government and the community from the local to national scale, or how could they be improved?
- Can water sharing plans be made more accessible, transparent and understandable?
- Is there enough accountability for achieving water sharing plan objectives, or how can this be improved?

Evidence-based decision making

- Is there adequate shared information, including spatial information, available to inform regional prioritisation decisions for both catchment action plans and water sharing plans?

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- How can water sharing plans contribute to collaborative and cost-effective monitoring, evaluation and reporting programs to support improvement in water and catchment management by identifying what works where, why and how much?
- Water sharing plans currently have some flexible provisions that allow for adaptation – are there other provisions where increased flexibility would help either the plans or stakeholders adapt in response to new policy positions, collaborative opportunities, climate variability, previously unidentified risks or changing social, economic, cultural and environmental needs and values?

5.2 NSW Office of Water

The GVIA is of the understanding that the NSW Office of Water's review will focus on whether plan rules are appropriate, practical to implement and if there are any ways to improve the plan outcomes. As such the NSW Office of Water will assess any issues raised through the following criteria:

- Is there any updated information available?
- Has there been a policy change or a change to the way water sharing plans are drafted?
- What rules have not been able to be implemented and why?
- What rules could be written so that they could be implemented more simply?
- What rules should be rewritten to reduce ambiguity?
- Have any rules not had the intended environmental effect and why?
- What new information is available to inform high priority Aboriginal cultural water requirements?
- Are there changes that should occur as a result of an amendment provision specified in the original plan?
- Have any rules had unintended socio-economic impacts?

6 Comments to the Natural Resources Commission

6.1 Delivering better regional outcomes

The Gwydir Valley Irrigators Association (GVIA) is reluctant to provide any submission on whether either the Water Sharing Plan for Gwydir Regulated River Water Source or the Cobbadah, Rocky Creek, Upper and Lower Horton Water Sources have contributed to regional social, economic, cultural and environmental priorities without or analysis on how the Water Sharing Plans have or have not contributed to these.

What both Water Sharing Plans do provide, is a specified framework in which water users can then manage their own individual business risk against, by clearly outlining their access arrangements and account management and trading rules. This principle works also for the environmental water manager striving to achieve hydrology-based environmental outcomes.

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Whether this function of the implementation of each Plan contributes to regional social and economic outcomes is yet to be tested.

However there have been subtle changes in the economic and social fabric of the region since the establishment of both Water Sharing Plans, like the aggregation of farming size⁷ and water entitlement⁸. Indicating that during the Water Sharing Plan's implementation period, many were required to consolidate and to buy more land and water to survive. Many borrowed heavily and hence, farm debt is also said to have increased. But it's important to note that for the majority of the implementation period, the region was in drought with low water availability and therefore, it can be difficult to infer if the changes were drought influenced or policy but most likely a combination of the two.

The GVIA believe that the Water Sharing Plans fall short of clearly linking the water resource and it's sharing with broader landscape functions and natural management outcomes, which in turn make it difficult for the broader community (and the irrigation industry) to clearly identify Water Sharing Planning outcomes. For example the Plan for the Gwydir Regulated River Water Source reserves up to 66% of the long-term average annual flow⁹ to help maintain ecosystem health but the plan doesn't go on to explain the relationship between flows and the ecosystem health or the functions being provided, let alone measure these outcomes. Furthermore, the access restrictions in the Plan for the Cobbadah, Rocky Creek, Upper and Lower Horton Water Sources also are to provide base-flows (although not quantified) but the provisions of these base-flows are not linked to any of the known stream issues like bed erosion and stability, or loss of fish habitat or aquatic diversity nor has there been any monitoring of these flows to the knowledge of the GVIA¹⁰.

There is opportunity to link and integrate the identification of issues and outline actions, both flow related or management based, to improve upon these issues as part of water sharing planning but the opportunity is currently missed. Further integration is needed to ensure that environmental outcomes are measurable and achievable and that perverse environmental outcomes are avoided, especially considering the volumes of water available to environmental water managers. Overarching regional plans that include policy for the

⁷ Median farm size in the Border Rivers/Gwydir/Namoi region increased from 526 Ha to 970 Ha between 2006 and 2010. NSW Office of Water, *Monitoring economic and social changes in NSW water sharing plan areas: A comparison of irrigators' survey 2006 and 2010 – covering plans commenced in 2004*. December 2011

⁸ Median water entitlement owned in the Border Rivers/Gwydir/Namoi region increased from 199 ML to 549 ML between 2006 and 2010. NSW Office of Water, *Monitoring economic and social changes in NSW water sharing plan areas: A comparison of irrigators' survey 2006 and 2010 – covering plans commenced in 2004*. December 2011

⁹ Note to section 14 (b), Water Sharing Plan for the Gwydir Regulated River Water Source (2004)

¹⁰ The Environmental Flow Response and Socio-economic monitoring progress report for the Gwydir, 2009 outlines no monitoring had been undertaken but was proposed for 2010-11 (page 24).

<http://www.water.nsw.gov.au/Water-management/Monitoring/Valley-progress-reports/default.aspx>

management of water, the sharing of water and landscape environmental goals and outcomes would serve to provide the opportunity for greater integration and management.

However, the GVIA acknowledge that is difficult considering that the Murray Darling Basin Plan will focus solely on hydrological outcomes and local catchment action plans are currently already being reviewed.

6.2 Integrated and efficient governance

The GVIA is actively involved in water and natural resource management planning on behalf of our members, as means to ensure that irrigator rights are protected but also to ensure that there is some sharing of goals and outcomes. However, often the terms of reference set by the different organisations developing said plans are set prior to broad stakeholder engagement and hence, limit the influence that stakeholders like ourselves can have in trying to integrate and streamline planning, outcomes and goals. For example the scope and initial implementation of the update to the Border Rivers-Gwydir Catchment Action Plan was decided internally within government prior to stakeholder engagement.

The development, consultation and communication of water sharing plans could be improved to increase community input and broader community understanding. Generally speaking, water users are fully aware of the rules and responsibility of Plans, as its good business to be informed. However, the broader community who can also be affected by the plan's rules are unaware until impacted. This was clear post flooding in the Gwydir in 2012, when non-irrigator landholders were further inundated with water as per the rules of the water sharing plan to deliver supplementary water to the Gwydir Wetlands.

If there was greater communication regarding not only environmental water management but sharing rules, there would have been greater understanding of the situation within the community, acting to minimise the negative media coverage¹¹. Furthermore, if Water Sharing Plans were developed with a broader community involvement issues such as those raised in the Gwydir above, may be avoided by being identified early through improved consultation.

If Water Sharing Plans were to be integrated with landscape issues as suggested above in Section 6.1, the sphere of stakeholders involved in plan development would be widened, for the community and government. This should lead to greater community awareness and coordination in government. Integration of Water Sharing Plans into regional plan would also provide the opportunity to streamline monitoring and evaluation and possibly increase collaboration between agencies.

¹¹ For example, "Farmers Fight" Moree Champion 19.07.2012 <http://www.moreechampion.com.au/story/188972/farmers-fight/> and "Environmental Water Woes" Moree Champion 26.07.2012 <http://www.moreechampion.com.au/story/188994/environmental-water-woes/>

The GVIA also recommends that the transparency and accountability of water sharing plan development is improved through recommending changes to the interagency panel process as stated in Section 4.3 Water Sharing Plan Development.

6.3 Evidence-based Decision Making

While the GVIA is aware that Water Sharing Plans and Catchment Action Plans are built using the best available science and evidence, the evidence and the assumptions and application of these assumptions in planning are often not clearly articulated or transparent.

For example, a major aim of many Water Sharing Plans is to improve base flow conditions in rivers and streams for environmental purposes but the relevant regional science is often not available or cited and the scenario testing of the rules to create these is undertaken in-house, with no consultation with only the draft-determined rules available for review. While not all stakeholders are interested in this level of detail, the information behind why a rule has been included still needs to be provided in an easy to access manner for review.

Adaptive management is being encouraged as a principle to allow for flexibility in management, allowing for new information and changing social, economic, cultural and environmental needs. In Water Sharing Planning, adaptive management increases flexibility for setting and testing rules and therefore, can create uncertainty with users, which contradicts one of the major aims and benefits of water sharing plans. Boundaries for the scale in which change can occur (like a third party impact test) is required to ensure that planning is not consistently influenced and changed at a whim due to external influences but that all stakeholders are aware of scale of flexibility and triggers for adaption.

The GVIA recommends that adaptive management should be used cautiously with defined scope for adaption, as agreed through consultation. Furthermore, adaptive management is only effective if monitoring and evaluation is genuine and this information is used to better inform management (within reason and within scope as explained above). This process must be transparent and well documented and communicated to be truly effective and supported.

7 Comments for NSW Office of Water

7.1 Water Sharing Plan for the Gwydir Regulated River Water Source

The Gwydir Valley Irrigators Association (GVIA) continues to express a number of concerns regarding the rules and implementation of the Water Sharing Plan for the Gwydir Regulated River Water Source and as such, welcomes the opportunity to review this plan. This submission aims to provide a brief overview of these concerns for consideration by NSW Office of Water and the GVIA have prioritised these into two categories; those that can be actioned immediately and others for recommendation for further work prior to aligning this Plan with the Basin Plan in 2019. By categorising issues, in this manner the GVIA is not

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suggesting some issues are of greater importance than others but rather acknowledges that the work being requested is outside the current timeframe provided for this review.

While the GVIA is suggesting only a limited number of changes in the immediate timeframe, we recommend that a more thorough assessment of the achievements is undertaken by the NSW Office of Water and provided to stakeholders for comment (as suggested in Section 4.2 Review Process) in preparation for aligning the Plan with the Basin Plan in 2019. As a result of the provision of this information, the GVIA reserves the right to recommend additional changes to the Plan.

Immediate actions

The GVIA recommends that Supplementary Access Licences must be altered to become separate category licences by clause 8 of the *Water Management (General) Regulation 2004* and therefore should then be perpetual. The current tenure for supplementary licences is unacceptable and cannot be justified with the past ten-years of knowledge that the access granted by these licences has been well within the Plan limit and Murray Darling Basin Ministerial Cap, in fact extraction is often well below the share allowed by the Water Sharing Plan¹². There is therefore, no justification that the licences cannot be issued in perpetuity as with other similar licences like Floodplain Harvesting.

The GVIA does not support altering the current rule set around determining the share of supplementary water. However, during the implementation there have been issues with the process in which supplementary announcements were determined for different streams within the Plan area. Occasionally with large disparity in the three-year rolling average of allocation announcements between river sections. As a result, the GVIA request that there is further consultation on the principles which are utilised to determine supplementary announcements on streams and that these principles are included within the Water Sharing Plan for clarification.

The GVIA has long-held concerns regarding the structure and makeup of the Environmental Contingency Allowance Operation Advisory Committee (ECAOAC) which approves the strategy and implementation of environmental water in the Gwydir Valley. This committee was established to manage the Environmental Contingency Allowance entitlement of 45,000 megalitres (with a maximum account limit of 90,000 megalitres). Now due to water recovery programs by both the NSW Government and Australian Government, the committee have

¹² For example, extraction in 2009/10 was 22% of downstream flows, 2010/11 was 30% and 2011/12 was only 4% see <http://www.statewater.com.au/Water+delivery/Water+balance+reporting>.

been delegated the responsibility of an additional 375 megalitres High Security, 106,617 megalitres General Security and 19,541 megalitres Supplementary entitlement¹³.

The increased volume available to the committee and the local environmental water manager to utilise must be matched with an increased level of responsibility and accountability to the expanded scope of influence that their decisions have. As such the GVIA recommends that there are a number of changes made to the ECAOAC, including:

- Greater local knowledge, including more representation from floodplain landholders (both irrigator and dry land);
- Representatives to meet essential selection criteria for local knowledge and knowledge of Water Sharing Plan;
- Independent chairperson, noting that the GVIA has supported the appointment of a Catchment Management Authority representative as chair but the independence and knowledge of an equivalent Local Land Services representative is unknown;
- Review of the committee's terms of reference to acknowledge the widened scope of influence of the committee in terms of volume of water and environmental outcomes; and
- Establishment of operating rules and governance policy to meet national standards for committees and boards and consideration of the appointment of an executive officer to oversee the implementation of this policy.

Furthermore, with the large volumes of environmental water now held by both the NSW and Australian Government's (which are also above the requirements for the Basin Plan), the GVIA recommends changes to the account management rules of the Environmental Contingency Allowance (ECA). These recommendations aim to rebalance the reliability and security of the ECA to be representative of the licence category in which it was created from. As such, the GVIA recommends that the ECA is granted the same access licence account management rule limits as general security access licences, that being:

- As per Section 33 (a): the maximum volume that may be taken or assigned from a regulated river (general security or Environmental Contingency Allowance) access licence in the water source during any water year shall be equal to 1.25 megalitres multiplied by the number of unit shares specified in the share component of the access licence;
- As per Section 33 (b): the maximum volume that may be taken or assigned from a regulated river (general security or Environmental Contingency Allowance) access licence in the water source during any three consecutive water years, shall be equal

¹³ Combination of Commonwealth Environmental Water holdings <http://www.environment.gov.au/ewater/about/holdings.html> and NSW Environmental Water holdings <http://www.environment.nsw.gov.au/environmentalwater/waterpurchase.htm>.

to 3.0 megalitres multiplied by the number of unit shares specified in the share component of the access licence; and

- As per Section 45 (2) (b): the maximum volume of water to be held in the access licence accounts for a regulated river (general security or Environmental Contingency Allowance) at any time shall be equal to 1.5 megalitres per unit share specified in their access licence share component.

The GVIA request greater clarification within the Water Sharing Plan on the principles to be considered when sharing channel capacity during periods of constraint (high demand). The GVIA recommend that principles should include sharing based on the:

1. Share component specified on water access licences (domestic and stock, local water utility and regulated river (high security)) being delivered and extracted within that section of the stream; then
2. Share component (or deliverable component)¹⁴ specified on water access licences (regulated river (general security) and Environmental Contingency Allowance) being delivered and extracted within that section of the stream; then
3. Share component of the access licence (regulated river (general security) and Environmental Contingency Allowance) that water is being assigned or transferred to an access licence within that section of the stream; then
4. The volume of water being passed through (or shepherded through) that section of the stream.

Noting that both regulated river (general security) and ECA water access licences have the same level of priority for sharing channel capacity, provided that water is being delivered and extracted within the same section of the stream. Shepherded water either through formal or informal means should not have a greater priority than existing water users who are entitled to receive water on that section of stream.

In recognition of the implementation of the NSW Government's Healthy Floodplains program, the GVIA recommend that the Water Sharing Plan is updated to reflect the final Floodplain Harvesting policy.

Medium-term activities

The GVIA was surprised to learn that the Gwydir Integrated Quality and Quantity Model (IQQM) has not been re-calibrated since the finalisation of model runs for the development of the Water Sharing Plan in 2004. Although the GVIA realise that there are climate and usage information is updated, there has also been significant changes in many of the underlying assumptions that the model relies on, like water use behaviour and purpose.

¹⁴ Deliverable components need to be established for the ECA as there are no specified share components and channel capacity limits the volume that can be delivered which is a fraction of the total ECA.

These changes have an inherent ability to impact how accurately the model can be used to test policy outcomes and as such, the GVIA recommend that before major policy re-works of the Water Sharing Plan, further work is undertaken to re-calibrate the Gwydir IQQM.

For this to occur, the NSW Office of Water will need to gather further information regarding the changes in irrigator behaviour and develop a pattern for environmental water use behaviour. Not to mention update the model with more accurate information regarding actual water use and floodplain harvesting licencing.

Following the re-calibration and testing of the model, the GVIA would like to investigate the requirement for a two-tiered account management limit for general security users as per Section 33 of the Water Sharing Plan for the Gwydir Regulated River Water Source. In particular the necessity to have an annual-use limit when access is managed over a three year period. The Water Sharing Plan should aim to allow water users to manage their own risk and therefore, should not place constraints on users like an annual-use limits. However, the GVIA reserves the right to suggest additional rule changes for implementation prior to alignment of the Water Sharing Plan with the Basin Plan.

Furthermore, the GVIA recommend that for mid-term reviews of the Water Sharing Plan to be genuine and effective, recalibrations should also on this regular timeframe.

The Murray Darling Basin Authority (MDBA) has updated hydrological modelling Northern Basin as a requirement for setting the Basin Plan. This modelling indicates that there will be increased flows within the Barwon-Darling and into the Menindee Lakes Storage as a result on the implementation of sustainable diversion limits. With this in mind, the GVIA recommend that the NSW Government updates their own modelling and re-test the rules and requirements for the Interim Unregulated Flow Management Plan for the North West¹⁵.

Furthermore, the GVIA would like the NSW Government to investigate the effectiveness of enacting the embargoes required to meet the requirements of the Interim Unregulated Flow Management Plan for the North West. As the GVIA would like to review evidence of supplementary flows from Gwydir River effluent streams (Mehi and Carole Creek) meeting any of the desired targets without additional inflows into the Barwon-Darling to test our valley's obligations to the Flow Plan.

7.2 Water Sharing Plan for the Cobbadah, Rocky Creek, Upper Horton and Lower Horton Water Sources

The GVIA is recommending minor amendments to the Water Sharing Plan for the Cobbadah, Rocky Creek, Upper Horton and Lower Horton Water Sources. Our submission by no means should indicate to the NSW Office of Water that the Association and our members are in full agreement with the licence provisions and limitations as outlined by this

¹⁵ Outlined in Section 48: Taking of water under supplementary water access licence

Plan but that the Plan, is considered 'manageable' for our members, as it is currently operated.

The GVIA would like to note that there continues to remain under-utilisation of water resources in this system due to the flow class rules imposed and that the reliability of access is believed to have diminished for some users in the system. As such the GVIA suggests that further work should be undertaken to review these rules and the current level of utilisation prior to aligning this Water Sharing Plan with the Basin Plan.

During the process the GVIA also encourages the NSW Office of Water to review the account management rules and considers streamlining these rules with other similar unregulated systems. As such, the GVIA recommends that annual use and the three-year rolling average limits are matched with the most recently gazetted Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources¹⁶.

The GVIA is recommending a longer timeframe for this review to allow for further market development of this system, which would need assessment of the impacts that possible consolidation of licences and increase usage may have on other users.

The GVIA is concerned with the lack of market development with is no know market activity outside the sale of land. Water market development is a fundamental component of Water Sharing Plans designed to address Nation Water Initiative outcomes. The lack of development suggests that water trading rules could be simplified and further explained to encourage market activity and diversity. Members find the sharing rules confusing and on such a small system, the rules appear overly restrictive.

The GVIA acknowledge that the principles behind the rules are to limit third-party impacts but with lack of market activity, some flexibility must be allowed to at least encourage market participation and diversity.

8 Recommendations

8.1 Immediate

1. Amendment of the interagency panel process to ensure all major water users are adequately and fairly represented and increase transparency and accountability.
2. Provision of Supplementary Access Licences in perpetuity in the Gwydir Regulated River Water Source.
3. Amendment of the Environmental Contingency Allowance Operation Advisory Committee structure and role in the Gwydir Regulated River Water Source.

¹⁶ Section 43 *Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources* (2012).

4. Amendment of the Environmental Contingency Allowance account management rules and limits to be consistent with general security entitlement in the Gwydir Regulated River Water Source.
5. Clarification on the principles for channel capacity constraint management in the Gwydir Regulated River Water Source.
6. Review and clarification on the principles for announcing supplementary water allocations in the Gwydir Regulated River Water Source.
7. Updated definition of floodplain harvesting activities as per the finalised NSW Government policy for Floodplain Harvesting in the Gwydir Regulated River Water Source.
8. Simplification and clarification of water trading rules in the Cobbadah, Rocky Creek, Upper Horton and Lower Horton Water Source.

8.2 Medium-term

1. Integration of Water Sharing Plans within broader regional landscape plans to improve outcomes, collaboration, community involvement and awareness.
2. Cautious application of adaptive management principles with agreed scope for change and greater transparency and accountability for decisions.
3. Re-calibration of the Gwydir Integrated Quality and Quantity Model with recognition of changed water use patterns (both irrigator and environmental) and improvement in the regularity that calibration occurs;
4. Review of the requirement for two-tiered account management rules for the Gwydir Regulated River Water Source;
5. Review the requirement to maintain the Interim Unregulated Flow Management Plan for the North West for the Gwydir Regulated River Water Source;
6. Review of flow class rules and account utilisation in the Cobbadah, Rocky Creek, Upper Horton and Lower Horton Water Source.
7. Update of the Cobbadah, Rocky Creek, Upper Horton and Lower Horton Water Source account management rules to be streamlined with other similar unregulated Water Sharing Plans.