

Gwydir Valley Irrigators Association Inc.

458 Frome St, PO Box 1451, Moree NSW 2400

Submission to the Murray Darling Basin Authority

on the

Draft Basin-wide Environmental Watering Strategy

Gwydir Valley Irrigators Association Inc

October 2014

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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 to the Murray Darling Basin Authority on their draft Basin-wide environmental watering strategy (“the document”).

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.

This document has also been provided as written support for the NSW Irrigators Council and National Irrigators Council submissions on the topic.

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 2012/13 the levy was paid on in excess of 85% 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.

2.2 Association Contacts

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3 Introduction

The Gwydir Valley Irrigators' Association (GVIA) welcomes the opportunity to provide comment of the Murray Darling Basin Authorities (MDBA) draft Basin-wide environmental watering strategy.

The GVIA welcome the discussion provided by the MDBA on outcomes for the Basin and the improved level of direction provided to the CEWH and environmental water managers as a result of this discussion.

We do however have reservations regarding the development of an isolated document, like this one that reaches beyond the setting outcomes (which is required and welcomed) to attempting to influence the ways in which environmental water managers will achieve these outcomes across the Basin. Not to mention, create additional layers of planning and duplication within the burgeoning industry that is environmental water.

The GVIA believe that this document further complicates and already complex and crowded discipline, when in fact it should have help to rectify many of the shortcomings raised by communities about the Basin Plan and the lack of measurable environmental objectives of the Plan. However, the release of this document exemplifies the high level of duplication that exists in within the environmental watering and planning and management sphere.

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As a result the GVIA believe that the MDBA should concentrate on developing a highly transparent, evidence based set of outcomes to help guide the CEWH and other environmental water managers in their role in implementing the Basin Plan. These outcomes should be attainable through the management of environmental water and therefore, should be designed to be achieved rather than fail as with the current targets.

Following a thorough review of the document and in response to our concerns, the GVIA have developed ten recommendations for consideration by the MDBA, including:

1. The MDBA modify the Basin Plan to include a concise list of transparent, evidence based outcomes to be achieved by environmental water managers.
2. The roles and responsibilities of Commonwealth agencies and the implementation of the Basin Plan are reviewed in consultation with communities.
3. The MDBA focus on communication of outcomes for Basin Plan implementation.
4. The MDBA provide more rigour and evidence against the selection of outcomes for the Basin.
5. The MDBA provide greater reference to the external limitations to success and adjust outcomes accordingly to reduce the likelihood of failure.
6. The MDBA to consider integrated catchment management principles.
7. The MDBA review the riparian connectivity requirement and end of system flows into the Barwon Darling to reflect the limited connectivity that the Gwydir valley has with its surrounding catchments.
8. The MDBA review Figure 7 and amend according to historical end of system flows for the Gwydir Valley.
9. The MDBA consider reviewing and amending the outcome to increase breeding occurrence to “enhance and extend breeding opportunities and successes when they occur”.
10. The MDBA review the fish population and distribution outcomes to consider the limited scope that environmental water and environmental water manager can have on influencing change.

We welcome and will look forward to further discussion on these recommendations and the content of our submission with the MDBA.

4 Recommendations

The following represents a concise list of recommendations outlined within this submission.

1. The MDBA modify the Basin Plan to include a concise list of transparent, evidence based outcomes to be achieved by environmental water managers.
2. The roles and responsibilities of Commonwealth agencies and the implementation of the Basin Plan are reviewed in consultation with communities.
3. The MDBA focus on communication of outcomes for Basin Plan implementation.

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4. The MDBA provide more rigour and evidence against the selection of outcomes for the Basin.
5. The MDBA provide greater reference to the external limitations to success and adjust outcomes accordingly to reduce the likelihood of failure.
6. The MDBA to consider integrated catchment management principles.
7. The MDBA review the riparian connectivity requirement and end of system flows into the Barwon Darling to reflect the limited connectivity that the Gwydir valley has with its surrounding catchments.
8. The MDBA review Figure 7 and amend according to historical end of system flows for the Gwydir Valley.
9. The MDBA consider reviewing and amending the outcome to increase breeding occurrence to “enhance and extend breeding opportunities and successes when they occur”.
10. The MDBA review the fish population and distribution outcomes to consider the limited scope that environmental water and environmental water manager can have on influencing change.

5 General Comments

5.1 Purpose

As outlined in the GVIA’s earlier submissions on the Basin Plan, the GVIA believes that the Basin Plan itself did not provide enough detail on the outcomes being sort for the Basin let alone, valley specific targets as part of the setting of Sustainable Diversion Limits. The fact that hydrological modelling used to inform the SDLs for valleys is not the foundation for setting Basin outcomes highlights our concerns with the design of the Basin Plan, its purpose and now its implementation.

The GVIA therefore welcomes the dialogue on establishing outcomes to measure success against across the Basin. However, we remain concerned with the necessity for the formulation of these in the current draft basin-wide environmental watering strategy and the development of these by the MDBA. The GVIA question the requirement to prepare a supplementary document rather than amending the Basin Plan, which could result in a similar outcome without additional duplication in planning (see 5.2 for further suggestions).

The MDBA should be focused on developing policy (the Basin Plan) and assessing compliance of the implementation of this policy and should not be required to complete environmental watering strategies or plans. The Basin Plan should be amended to provide the CEWH and other environmental water managers with more appropriate direction on Basin Plan objectives and outcomes than currently exists as part of Chapter 8 (of the Basin Plan).

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The MDBA modify the Basin Plan to include a concise list of transparent, evidence based outcomes to be achieved by environmental water managers.

Our major concern is that under the implementation of the Basin Plan, environmental water planning has evolved into its own industry, rife with duplication. Below outlines the organisation and the type of planning they undertake for management of environmental water in the Gwydir only:

1. MDBA – Basin Plan plus, long term (watering strategy) and annual water use plans;
2. Commonwealth Environmental Water Holder (CEWH) – 5-year plan and annual water use strategies;
3. NSW Government – Water Resource Plans with environmental watering plans;
4. Gwydir Environmental Contingency Allowance Operational Advisory Committee (ECAOAC) or local environmental water advisory group – 5 year strategic plan and annual water use strategies.

It is interesting to note, that while all these groups are actively undertaking planning and preparing reports on use and outcomes, only the CEWH and the NSW Government own water and both manage it through existing state arrangements – for the Gwydir this is the Gwydir ECAOAC. The GVIA believe that the responsibility to plan for and use environmental water should rest with those entities that actually have the responsibility for environmental water and this should be centralised to streamline management, reduce duplication and increase transparency and coordination.

As a result, the GVIA believe that there should be broad changes to the current roles and responsibility around the implementation of the Basin Plan. Some of these include:

- The CEWH should have responsibility for all parcels of Commonwealth environmental water (including The Living Murray), which will cover all Basin jurisdictions.
- The CEWH will be responsible for the planning and determining how and why to use water annually and provide five-year strategies with respect to valleys and the Basin, plus report on outcomes and progress towards outcomes as required by the Basin Plan (an amended version with outcomes).
- The CEWH will continue to develop partnerships for the effective delivery of environmental water and improved outcomes.
- The MDBA will provide clear, transparent outcomes to be achieved through environmental water management and assess compliance of environmental water managers against these targets.

The GVIA believe that the CEWH is best placed to achieve basin wide effectiveness with environmental water. It will be the holder of water across all jurisdictions and has a relationship and ability to negotiate regarding the use of other parcels, plus they have the

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skills and understanding of the limitations and opportunities that exist and have relevancy on-the ground to manage resources for a Basin wide perspective.

The roles and responsibilities of Commonwealth agencies and the implementation of the Basin Plan are reviewed in consultation with communities.

5.2 Outcomes versus Strategy

Further to the above considerations, the GVIA suggest that the current document should be re-worked to be a statement of outcomes rather than a strategy per se. The new information should be attached to the Basin Plan rather than being another document for consideration (or regard).

A re-work, will also allow the MDBA to focus on better communicating the desired outcomes from Basin Plan implementation rather than providing additional, superfluous information on how environmental water manager may consider achieving these outcomes (such as the information presented from page 38 onwards).

The MDBA top focus on communication of outcomes for Basin Plan implementation.

The GVIA believe that currently there is a significant amount of information within this document which is not required and should be the focus of the CEWH operations and other managers of environmental water, as part of their role in the planning and management of environmental water.

The MDBA modify the Basin Plan to include a concise list of transparent, evidence based outcomes to be achieved by environmental water managers.

5.3 Evidence based outcomes

The GVIA consider there is a lack of supporting documentation and/or evidence behind the establishment of the outcomes targeted within the document. The GVIA demand that there is more rigour around the establishment of such outcomes and communities are provided the opportunity to review the information and make comment prior to the outcomes being finalised. The current document and engagement strategy, which did not include either a targeted or general information session in the Gwydir region, has not fulfilled this requirement.

As the strategy currently stands, there is a lack of transparency as to why the MDBA have established the outcomes to be targeted. For example, what supporting documentation is provided to suggest that maintenance of 60% of natural flow levels is required for all valleys and what recognition of the base flow provisions in many water sharing plans. Furthermore, why is a 10% increase into the Barwon-Darling considered appropriate, what are these additional flows required to actually achieve and can this be measured accurately.

The MDBA provide more rigour and evidence against the selection of outcomes for the Basin.

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5.4 Constraints – physical and environmental

Environmental water delivery alone will not improve the health and state of the Basin. Whilst this fact is alluded to by the MDBA in the document, it is significantly understated. There are a myriad of threats to environmental condition around the Basin that will undermine the effectiveness of any environmental water strategy or delivery. Such limitations must be more thoroughly addressed and/or articulated prior to amending outcomes to be more realistic of what can be achieved.

With amendments to the current outcomes due to the environmental limitations, there will be a distinct disconnect between what the Basin Plan and its implementation can achieve with what happens on the ground in local catchments.

Our greatest concern is if these other environmental issues are not more broadly addressed and outcome adjusted, the Basin Plan will be destined to fail both the environment and the community's expectations of it.

The MDBA provide greater reference to the external limitations to success and adjust outcomes accordingly to reduce the likelihood of failure.

One way to address these concerns if for the future planning of environmental water delivery to be done so using theories of integrated catchment management to achieve multiple outcomes rather than water based objectives and not in isolation as proposed. For the Gwydir, water availability and frequency are not the main environmental threats to environmental assets but invasive species, weeds and feral animals in addition to land management issues will also need to be addressed before the health of the Gwydir valley is improved. Water by itself will not build and maintain resilience within the Gwydir Valley.

The MDBA to consider integrated catchment management principles.

Further to environmental constraints there are delivery constraints that will continue to limit the effectiveness of the Basin Plan meeting its objectives. These constraints are real and in most cases are people and communities, which cannot be addressed through computer modelling scenarios. The GVIA does not consider the current engagement and discussion on the MDBA's Constraints Management Strategy to be of high enough standard to address these concerns.

This document also understates the significance on physical constraints in meeting outcomes and must be rectified to be a practical strategy for future implementation.

6 Specific Comments for the Gwydir Valley

6.1 Riparian connectivity and end of system flows

The GVIA reject the claim by the MDBA that the Gwydir needs an improvement of 10-20%¹ of riparian connectivity resulting in an increase in end of system flows. The GVIA reject the benefit that such a target will have on a terminal system like the Gwydir based on the following facts and reports.

1. The Gwydir River is an inland terminal river network that is also classified as distributary network² – all water once flowed to the Gwydir wetlands.
2. The Gwydir River under natural conditions would have a very low ability to contribute to surrounding catchment inflows³, flows into the Darling River are between 0% in low water years by a range of 3%⁴ to 12%⁵.
3. The Gwydir River has been channelized resulting in an increase in end of system flows since development³ which is the reverse for most Northern valleys⁶.
4. There remains limited capacity to securely move water through these systems with channel constraints limiting daily flows and increased diversions from the core assets adversely impacts condition⁷.
5. There are not end of system flow targets (as with other regions) already established within the Water Sharing Plan for the Gwydir Regulated River suggesting the natural increase in flows is substantially above target.

More information and background on the hydrological nature of the Gwydir River can be reviewed in Attachment 1: Gwydir System and Wetland Considerations prepared by the GVIA in September 2012.

Considering the information above, the GVIA recommend an immediate review of the riparian connectivity requirement of the Gwydir and in particular the information presented in

¹ Table 1 Summary of environmental outcomes that can be achieved beyond 2019, page viii: Murray Darling Basin Authority (2014): Draft Basin wide environmental watering strategy

² Murray Darling Basin Commission (2004): The Geomorphology of the Barwon-Darling Basin, the Murray-Darling Basin Commission

³ Murray Darling Basin Commission (2007a): The Impacts of Water Regulation and Storage on the Basin's Rivers, Murray Darling Basin Commission

⁴ NSW Office of Water (2010a): NSW Office of Water, Critical water planning for the Murray Valley and Lower Darling.

⁵ Murray Darling Basin Commission (2007b): State of Hydrology Report, Murray-Darling Basin Commission

⁶ Murray Darling Basin Commission (2006): The Shared Water Resources of the Murray-Darling Basin, Murray Darling Basin Commission

⁷ Murray Darling Basin Authority (2011): The Proposed "Environmentally Sustainable Level of Take" for Surface Water of the Murray Darling Basin: Method and Outcomes

Figure 7: Proportion of inflowing water flowing out the end of river catchments across the Basin⁸.

The MDBA review the riparian connectivity requirement and end of system flows into the Barwon Darling to reflect the limited connectivity that the Gwydir valley has with its surrounding catchments.

The MDBA review Figure 7 and amend according to historical end of system flows for the Gwydir Valley.

6.2 Waterbirds

The GVIA reject the target to increase the target of breeding events by 50%¹. Waterbird breeding in the Gwydir valley is triggered by a range of natural occurrences including the availability of suitable habitat which include vegetation condition and water levels, food supplies, seasonality and climate. As a result, the GVIA consider that the target is destined to fail as the influence that environmental water managers can have on increase the percentage (or number of events) is extremely limited. In fact, the role of water managers should be is to recognise the opportunity for breeding and extend breeding opportunities rather than increase numbers.

The GVIA recommend a review of this target to be more reflective of the effectiveness and influence that environmental water and environmental water manager can have on the outcome and hence, the MDBA should consider an outcome that seeks to enhance breeding success and extends breeding opportunities when they occur.

The MDBA consider reviewing and amending the outcome to increase breeding occurrence to “enhance and extend breeding opportunities and successes when they occur”.

6.3 Native fish

The GVIA have concerns with the targets for increasing the population of fish¹ and a doubling of current distributions across the northern basin⁹. As with waterbirds, fish populations are also highly influenced by a range of external factors like in-stream habitat, water quality and temperature as well as predation. Importantly, fish tend to breed following natural occurrences or triggers and fully managed breeding flows have had limited success as with past experiences in the Gwydir.

In the northern basin, distribution is also highly limited due to the highly dynamic nature and seasonality of our region. Lack of pathways for movement due to river geomorphology (like

⁸ Page 12: Murray Darling Basin Authority (2014): Draft Basin wide environmental watering strategy

⁹ Page 35-36: Murray Darling Basin Authority (2014): Draft Basin wide environmental watering strategy

in the Gwydir) and structures will also limit the ability to increase distribution across the northern Basin.

As environmental water managers have a limited scope to address population decline and distribution the outcomes targeted appear too high. As a result, the GVIA recommend a review of the fish outcomes to be more reflective of the ability for environmental water to influence the outcome.

The MDBA review the fish population and distribution outcomes to consider the limited scope that environmental water and environmental water manager can have on influencing change.

7 Conclusion

The GVIA welcomes the opportunity to provide comment to the MDBA on their draft Basin-wide environmental watering strategy.

Following a review of this document, the GVIA have developed ten recommendations for consideration by the MDBA.

We welcome and will look forward to further discussion on these recommendations with the MDBA.

Whilst proving our own submission, we also give our full support to the submission made by the NSW Irrigators Council and National Irrigators Council, of which the GVIA and individual irrigators are also members.

8 Attachment 1: Gwydir System and Wetland Considerations prepared by the GVIA in September 2012

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