

SUBMISSION ON BARWON-DARLING WATER RESOURCES PLAN

Brian (Barney) Stevens

Former Secretary Darling River Action Group

My submission addresses the issues discussed in the Proposed Amendments Fact Sheet dated September 2019, in addition to the overall issue which is not addressed in the fact sheet.

The Overall Issue For The Barwon-Darling

The Barwon and Darling Rivers depend almost entirely on water entering from tributaries, and as we have seen all too graphically in recent years, extraction from the tributaries is leaving the Barwon-Darling without flow in all but flood years. What is the point of having a Water Sharing Plan when there is no water?

The WRPs for each of the tributaries needs to be re-written with an allocation of water for the end of system, i.e. an allocation for the Barwon-Darling. If this is not done, there should be no broad-acre irrigation permitted on the Barwon-Darling.

The management of water for the Barwon-Darling has been nothing short of disastrous and must be completely overturned.

Issues Raised in Proposed Amendments Fact Sheet

The proposed amendments are mostly positive, but they are just re-arranging the deck chairs on the Titanic.

Revision of commence and cease to pump rules

Raising the commence to pump thresholds on A class licences is supported, but is irrelevant when the Barwon-Darling is getting no water.

Proposed removal of imminent flow provisions

This is supported. Pumping out the remnants before a flow must be just disastrous for fish and other aquatic life forms. I note the NRC comment: "environmental and social outcomes under the Plan have generally been poor". And that is an understatement.

Individual daily extraction limits

The imposition of IDELs is supported.

Trade of IDELs

There is no definition of a "river section". Without a definition it is difficult to comment.

Resumption of flow rule

The first flow needs to be protected, but more detail is needed. The leading edge of the first flow down the Barwon-Darling is generally very salty, as the flow picks up the remnant evaporated pools and salt from the banks and dry river bed. No-one wants that part of the flow and it is detrimental to the environment. The following part of the first flow with its cleaner water needs to be protected and allowed to flush the salt.

Active Management

Water designated as environmental water needs to be legally protected from pumping on a permanent basis, not just at the Minister's discretion as happens now.

Comments from Kate Boyd on the
Active Management draft Policy
October 2019

This policy has been much needed for a very long time. When water shepherding was proposed it was dropped. Protection of water for instream use has had far too little attention. Some irrigators have benefitted at the expense of the environment, other irrigators and public purses – Queensland and NSW as well as the Commonwealth.

I am therefore very pleased to see this draft policy, and that it appears to have been carefully designed so is likely to work.

I look forward to implementation as soon as possible. It is not acceptable to wait until the end of 2020 for implementation. It should be in place by May 2020, preferably in all identified streams and the intersecting streams, but at least in the Barwon-Darling.

I wrote the following comments before looking at the risk assessment for the Barwon-Darling WRP. This formally records a horrific situation: even with the proposed changes to water management in the Barwon Darling and its tributary water sources, including Active Management, most of the risk assessment ratings for nearly all rated reaches are predicted to still be in the “Not tolerable” range.

I wonder whether it wouldn't be better to just stop allowing irrigation from the Barwon-Darling, in which case there would be no need to implement this policy there. The resources involved in managing that irrigation could be better directed to improve environmental, social and economic outcomes in other ways.

The policy is needed in other locations so here are my comments on the proposed policy.

Policy Objectives:

I strongly support the primary objective of the policy and the first two secondary objectives, however protection of such PEW as is not fully protected by other parts of the relevant WSPs and fully used by the environment of the source valley should also be part of the primary objective.

I am concerned by the secondary objective regarding “maximise economic opportunity while meeting the primary objective”, because there is no mention of social opportunities and economic opportunity tends to be interpreted narrowly, ignoring the public costs of managing the Barwon-Darling for a small number of irrigation businesses. The number of businesses affected in the other streams where this is proposed to apply is also small. These are the businesses that have been benefitting from previous failures to introduce a policy such as is now proposed. While they may have benefitted legally, this policy should not involve have an objective of continuing to “maximise” their opportunities for profit.

Maximising economic opportunity has driven too much water management in the past, without sufficient head to the over-riding requirement to meet other objectives, as stipulated in the Water Management Act – hence the need for the MDB Plan, and the painful difficulties of planning and implementing better water sharing. The socio-economic costs of maximising economic opportunities tend to be underweighted.

I suggest this be re-worded to:

“Allowing for water-related economic and social activities while meeting the primary objective”

As noted below, there are places in the draft policy where the attempt to continue maximising economic opportunity has had too much influence on what is otherwise a good proposal.

Defining active environmental water

1. What are your views on what water will be defined as *active environmental water* and managed through an unregulated water source? (see page 10)

Definition is confusing: how can Active EW be “limited to flows “arising from” instream flows etc when it needs to be defined and protected before the flow occurs?

A sixth type of active EW, volunteered AEW, should be added to the five types listed: as stated on p16:

Note that these account debiting rules can apply to any unregulated river access licence where the licence holder wants to use their water in-stream as active environmental water, not just HEW licences.

Any HEW or PEW that could reach Menindee Lakes must be actively managed and protected for downstream environments regardless of whether it was previously or is agreed in future to be part of EW for the lower Darling and Murray. This Policy has an essential role in providing proper connectivity from the Barwon-Darling’s tributaries to the Lower Darling.

Active Management should cover PEW from the 3 Gwydir unregulated tributaries that usually go to Gwydir wetlands but have, on at least one occasion (in early 2007), been directed to Barwon instead. The option of occasionally doing so again should be retained by the Gwydir WRP and achieved by AM provisions in downstream WRPs. Embargoes on pumping enabled this water to combine with flows from the Macintyre and Moonie from the same rain event to fill drying pools in the Barwon and refill the Bourke weirpool. If a similar situation occurred again the proposed resumption-of-flow rule in the Barwon-Darling WSP would protect some, but not necessarily all, of the flow. All environmental water should always be fully protected.

If d) or e) on p 10 do not cover this an extra category of EW to apply AM to is needed.

I support inclusion of the two categories of PEW releases from dams that are referred to on p11.

The tiny amount of PEW from dams in the Border Rivers Catchment should be protected all the way to the end of that system and into the Barwon. It should then also be subject to Active Management through the Barwon.

The same should apply to PEW in the Namoi and Macquarie if the water has not all been absorbed by the environment of that valley. These occasions might be infrequent but should be

provided for. This may sometimes reduce water available for irrigation, but that is what the environment needs. Most tax payers would be appalled that it gets re-allocated to irrigators.

All HEW must be protected for the environment, both in its originating stream and downstream. The policy should apply more broadly wherever this is the most efficient way to achieve protection. Until you work out how to apply Active Management of HEW in all unregulated streams, such as that in the Warrego, there should be a Government commitment, included in the final policy, that it will be protected by Ministerial order.

Implementation of this policy will enable the bulk of EW to be protected so it actually flows through and to the environment. It will hopefully be a turning point in building both community trust in our public water managers and support for limiting consumptive use so the environment gets the shares it needs, without needing more \$billions to buy back more water or precise rules for every eventuality.

2. Do you support inclusion and protection by active management of planned environmental water releases from upstream water sources that are additional to the inflows that were considered when the Barwon-Darling plan commenced (see page 10).

Yes. All EW should be protected as far as it can flow regardless of the artificial boundaries adopted for water management and of plan commencement dates. Page 10 does not make it clear which Barwon-Darling plan's commencement date you are referring to - a past or future date, and there is no glossary.

Areas where active management will apply

3. Do you support the criteria for where active management is to be applied? (see page 13)

Yes: these priority areas are important to actively manage now. EW in and from the Intersecting Streams must also be given priority.

The policy should apply in the Barwon Darling all the way to Menindee Lakes. It should be easy to extend it to there now while there are no licenced users below Wilcannia. Stopping it at Wilcannia might encourage someone to try to move a licence downstream to enable them to suck out EW that passes the last gauge.

Managing active environmental water in-stream

4. What are your views on how accounts will be managed for in-stream use of unregulated held environmental water licences? (see page 15)

The procedure proposed appears appropriate. It is great to see it envisages providing an opportunity for licence holders to volunteer to occasionally forgo extracting some of their allocation and have it protected for the environment instead. This will need to be provided for in the procedures manual.

5. Do you support assigning river transmission losses proportionally to active environmental water? (see page 16)

I request that the "socialise losses" method be applied because it is simplest, enabling departmental staff to concentrate on implementing other aspects of the policy well, and it will do a tiny bit to help ecosystems attempt to recover from all the years that irrigators have been allowed to take water that was bought for or allocated to the environment.

I agree that movement of water into the bed and banks of a stream and use of water by plants, animals and evaporative cooling are important essential consumptive uses of water, currently all allocated to “transmission losses”, and that it would be reasonable to subtract the net increase in these associated with active management from the AEW if they could be correctly calculated, and if the part of this flow that could benefit basic rights holders or users of underground alluvial water could be subtracted. However that is not possible. Only the “incremental” method would in theory do this, but knowledge of how much more water will be consumed by the bed or banks and evaporation in different antecedent conditions with each small rise in water level during different shaped events is far too limited to apply such a method and it is not worth attempting.

The proportional method will tend to subtract more from AEW than the incremental amount due to it (unless AEW is much larger than the volume of water that would be going down stream without active management), and therefore be unfair, yet again, to the environment and its water holders.

Access for unregulated river access licences

6. What are your views on concept of adjusting commence to pump/cease to pump thresholds to protect active environmental water from extraction? (see page 18)

This will be essential in the Barwon-Darling. In some other situations it may be simplest and best to just not allow pumping while EW passes.

It is important to ensure that the “hydrographic shape” of flows through and to the environment has maximum environmental benefit and least environmental risk, for example by being similar to natural events with tails and without sudden falls due to big pumps being turned on suddenly in the same part of the flow.

It is also important that the system of limiting and providing for access fairly regulates and meets the needs of small users who have limited technical and financial resources as well as big users who have greatest potential to impact on flows.

To achieve these and other environmental and social outcomes concurrently with the policy objectives, apply the policy’s principles when developing and reviewing the procedures for each water source.

The proposed default position is unacceptable because it again favours extractive users at the expense of HEW and PEW holders: it is contrary to the primary objective of this policy. Please work out a workable system that always gives the primary objective priority.

7. What are your views on proposed amendments to water sharing plan access rules to protect active environmental water in each of the water sources where active management is proposed? (see proposed water sharing plan amendments for the Barwon-Darling, unregulated Macquarie and unregulated Gwydir)

I’ve looked at Barwon-Darling and Gwydir proposals. These both appeared generally good. The simple ‘socialise losses’ approach to changes in environmental consumptive use should apply.

8. Do you support distributing the available volume between licence holders in the Barwon-Darling based on Individual Daily Extraction Limits? (see page 19-20)

I support use of IDELS as well as TDELS in the Barwon Darling.

I strongly urge the Department to implement the following in determining these IDELS and TDELS

- much more weight is given to protecting much more flow as EW in all years when inflows are below the natural average annual inflow (most years), instead of expecting ecosystems to just survive on a trickle between monster floods. The “Not Tolerable” level of risk to the environment with the proposed draft revised WSP (draft WRP risk assessment section 4) shows that more drastic change is needed. While change is needed to further reduce diversions from upstream water sources, the simplest way to achieve some improvement in the Barwon and Darling rivers is to reduce diversions from this water source. It is the irrigation industry share, not the environment’s share, that should be quite small in all below average years (none in very dry years). Perhaps no irrigation diversions should be permitted unless a substantial target volume has reached Menindee Lakes in the last few months. Only in the infrequent above average years should diversion of the volumes that used to be regarded as normal or median be permitted. The Department should work out a truly ecologically sustainable diversion limit and means of distributing it between years before TDELS are set. The SDL and the way of keeping within it over time should be nothing like the LTAAEL which, as the NRC review stated, is not suitable for the Barwon-Darling;
- The SDL, TDELS and IDELS are worked out using a long-term inflow assessment that uses all available rainfall and flow data up to the present, or at least to July 2019, that gives due weight to the lack of runoff in recent years and considers all current dams and use from the tributaries (old rainfall>inflow relationships may no longer be valid);
- TDELS and IDELS are set and applied in such a way that they really do assist in enabling environmental flows to get past pumps and enable fairer access well within the limits that are supposed to be part of the MDB Plan.

IDELS should not be transferable as this adds yet another complication. Transferability of licences enabled concentration of most licences in two sections of the river at the expense of other communities. Transferability of IDELS could also be at a social cost.

9. Do you support distributing the available volume between licence holders in the Barwon-Darling to individuals who have expressed an interest based on Individual Daily Extraction Limits? (see page 19-20)

No. I am concerned that this may make management unnecessarily complicated for a new policy. The circumstances in which licensees may not wish to use a flow may not occur for some time. If someone skips one pumping opportunity the water will benefit the environment until it gets to the next management zone with licensees eager to use it: it won’t go to waste and never has. Just getting IDELS working will be a good start. Better to consider adding this after a few years of policy operation if it seems desirable and necessary then.

10. Do you support access being announced? What issues need to be considered in making announcements? (see page 20)

Yes. Announcements should enable transparency. The means of announcements may depend in part on the reliability of technology so this should be worked out using the experience and

preferences of local communities and all local licence holders. What to do if technology goes off-line should be considered.

Forecasting flows and managing uncertainty

11. What are your views on how loss estimates will be forecast and how operational uncertainty is proposed to be managed? (see page 22)

I appreciate the difficulties and importance of forecasting, that much useful information has been gathered and that experience of people who have been managing the particular or similar rivers for many years is needed. The data and experience available for forecasting in some unregulated streams may be less than ideal so commitment of resources to gather and improve forecasting abilities is essential to both success of the policy and survival of our ecosystems.

These difficulties are exacerbated by climate change: there may often have been no comparable event from which sufficient relevant information was gained to make a reasonable prediction of volumes needed to fill pools and for used in bed and bank absorption (evaporation at higher temperatures should be predictable). While climate change could increase floods, we know from the current situation that it is contributing to more frequent and longer or deeper droughts. If the policy applied today there would have been no truly comparable events from which to generate “average losses for comparable historical events”. If the resumption-of-flow rule applies in the B-D, if there is any AEW immediately following that resumption or in the next event, the problem may be predicting how much water is absorbed by an environment that is still half parched.

Warming alone means that more water is likely to be used to replace water that has evaporated from pools or evaporates when hotter surfaces are wetted.

Changes in stream channels after floods or over time may make some historical records less useful.

When there have not been at least 4 comparable historical events, loss estimates should be based on the upper bound of losses for comparable events and, particularly where there are few if any comparable events, professional judgement. Such judgement can be informed by local knowledge as well as computed data.

This may sometimes disadvantage some irrigators but for too long it has been the environment that is disadvantaged. Some people may have bought or moved licences close to the heads of unregulated reaches to take advantage of flows as soon as the water leaves a regulated reach, only to find that they would be at greater risk from the ‘upper bound’ approach. They are the ones who have taken water before it benefited much of the unregulated river on route to irrigation use and who benefitted most often from the Government's previous failure to protect environmental water, so they may miss out on their former locational advantage when AEW is present – so be it.

I trust the department's senior professional staff to make the best judgement possible so long as they have significant experience in the Barwon-Darling catchment's floodplain rivers and effluent streams.

The options of using the lower bound or modelled long-term transmission losses are totally unacceptable.

Adaptive adjustment of ongoing loss forecasts as proposed is supported.

12. What other options should be considered?

For the reasons stated above, I support providing initial conservative announcements whenever there are not at least 4 truly comparable events to use in forecasting.

What is needed is

- more accumulation of local experience and observation (from careful local observers and professionals) and
- development and use of professional judgement based but not totally reliant on historical data (hydrographic and observations).

I agree that the two “other options to manage mismatches” (p24) should not be further considered.

Improved metering and compliance are needed to ensure natural instream consumptive use data can be gathered to improve future predictions.

Adaptive management

13. What information do you consider is important to document and consider in order to continuously improve active management? (page 26)

All as proposed.

Metering of pumped diversions for Basic Landholder Rights and stock watering should be seriously considered to aid management of water for all users, including distinguishing this use from consumption by the environment. Perhaps quarterly return of meter readings plus returns on request, could be required.

Review of the policy's implementation could benefit from a process similar to one previously used by the Department of Water Resources in a parallel situation. When the Interim North West Unregulated Flow Management Plan (INWUFMP) was introduced in 1992, a working group was established with representatives of irrigators or other water user groups from each main valley affected (2 each I think), and 2 environmental interest groups, Queensland's water manager, Border Rivers Commission and relevant NSW agencies. 2 Aboriginal reps were invited. This group considered annual reports of that plan's implementation, reports on key issues and proposed adjustments for implementation in the following year. This appeared to me as a participant and from comments by others to be an effective component of the review process, enabling more informed discussion with other interest group representatives as well as with departmental officers than the usual consultations. Such a model may be useful in this case. I can easily provide scans of the member list and a couple of meeting agendas. For the current policy the interest groups would overlap but also include environmental water holders and some different water user groups.

INWUFMP, a complex new process, was developed and implemented much more quickly than the current policy. It worked well, was improved by review and adaptation for a few years, and some elements are still in use (including one element now misunderstood and long overdue for review). So you should be able to start implementing the current policy, if in an interim way, much sooner than your proposed 'end of 2020' timeframe.

Additional issues or information

14. What risks need further consideration?

That whole ecosystems, not just the fish, will continue to decline until and unless the **highest** priority is given to supporting them with all possible flows as soon as there is a flow anywhere in the Northern Basin.

The lack of current processes to protect environmental water will mean that, if there is enough rain to produce environmental water before this policy is implemented, irrigators will again to benefit at the expense of the environment and the public interest.

An interim procedure must be put in place and publicised now so it is ready to apply as soon as there is good rain. This should involve more than an embargo on pumping until a trickle reaches Wilcannia for town water. It should include, but not be limited to, using a Ministerial order to protect all available PEW and HEW so that they can have environmental benefits on top of other flows that meet all town water and basic rights holder needs. The HEW holders who have never been able to see their water properly used for its intended purpose, should be given priority access to water – for instream use.

15. What additional issues should be considered in actively managing flows?

None

Thank you for the work you are putting into this policy.

Kate Boyd
Armidale NSW

**Submission from Kate Boyd on
Barwon Darling draft Water Resource Plan
28/10/2019**

The risk assessment for this draft WRP formally records a horrific situation: even with the proposed changes to water management in the Barwon Darling and its tributary water sources, most of the risk assessment ratings for nearly all rated reaches are predicted to still be in the “**Not tolerable**” range. These include, risks for basic rights holders and risks to the environment of insufficient water due to various aspects of water management, and risks of bad water quality.

Before I can consider answering the specific questions regarding the draft WRP on which answers are requested, I have to say that this draft plan, along with the draft WRPs for tributary water sources, is plainly grossly inadequate. The species and ecosystems were adapted to the natural variations in flow as well as to the hot climate – far less variation and much closer to continuous flow than is experienced now. Upstream diversions are a major risk factor in relation to the quantities, qualities and temporal properties of flows and pooled water. I appreciate that the current appalling condition of the river is associated with severe drought but it this comes on top of the decades on declining environmental condition and inability of ecosystems to cope with the level of diversions that has supposedly been capped for 25 years. While ecosystems are collapsing, the current Government response is to tinker with some edges of the problem: much more substantial change is needed.

A truly ecologically sustainable diversion limit is needed that is designed to meet the temporal volumetric and water quality needs of the Barwon and Darling Rivers. The means by which LTAAEL is intended to be met is quite inappropriate for these rivers, as the NRC final report stated. Long term flow modeling should only be one element in working the SDL out and that modeling should use all available rainfall and flow data up to the present, or at least to July 2019, that gives due weight to the lack of runoff past farm dams and diversion banks in recent years. Ecosystems will not survive when kept waiting for most of their share until dams and irrigators have had all of theirs. While change is needed to further reduce diversions from upstream water sources, the simplest way to achieve some improvement in the Barwon and Darling rivers is to reduce diversions from this water source.

Much more flow should be protected as Environmental Water (EW) in all years when inflows to the Barwon-Darling water source are below its natural average annual inflow (most years), instead of expecting ecosystems to just survive on a trickle between monster floods. It is the irrigation industry share, not the environment’s share, that should be quite small in all below average years (none in very dry years). Perhaps no irrigation diversions should be permitted unless a substantial target volume has reached Menindee Lakes in the last few months – connectivity with the Lower Darling should be greatly increased. Only in the infrequent above average years should diversion of the volumes that used to be regarded as normal or median be permitted from the Barwon-Darling. If irrigation is to continue it should be re-conceived in a way that fits with environmental needs and the needs of the local people who depend on and live with their environment, including the Aboriginal communities.

The long pause in irrigation demanded by the current drought (with empty dams that will artificially extend the Barwon-Darling’s drought) makes this the right time to change direction.

This change in direction needs to include many more changes to the WSP than are currently proposed. Rules such as the allowable take of 450% could be changed to 100%. However, this may still just be fiddling at edges when a radically different approach is needed. In case you are unable to take a radically different approach now, I will provide some comments on the current proposals.

Individual Daily Extraction Limits

These are needed.

TDEs and IDEs should be set and applied in such a way that they really do assist in enabling environmental flows to get past pumps and enable fairer access well within the limits of the MDB Plan.

I do not support temporary or permanent trading of IDEs. This adds another unnecessary layer of complexity when there are more important changes to get right. Transferability of licences enabled concentration of most licences in two sections of the river at the expense of other communities. Transferability of IDEs could also be at a social cost.

Resumption of flow rules

Rules to ensure that the environment gets substantial flows as soon as possible after a dry period are essential. The present disastrous state of the Barwon, Darling and Lower Darling means that a special rule or process is needed to give the ecosystems a chance to start recovering before any irrigation access is permitted. The proposed rule is better than none but not adequate in this circumstance. Unfortunately, climate change is expected to result in more extreme dry periods after this one.

A rule that provides prolonged connection to, and substantial flow into, the Lower Darling is needed. Licensed diversions and floodplain harvesting should not be permitted unless and until targets for flows into Menindee Lakes have been met. The longer the period since there has been substantial through-flow, the larger or more prolonged the target should be. Advice from fish ecologists, other scientists, the people of the Darling and Lower Darling and Murray Darling Basin Authority should be sought and headed in working out appropriate targets. The pipeline to Broken Hill increases the need for targets with an ecological as well as social basis, since meeting Broken Hill's TWS needs is no longer the default. The need for both the southern and northern basins to fairly contribute flows to the South Australian part of the system is also important.

Targets for water quality need to be added. A rule aimed at suppressing growth of blue-green algae was included in the the Interim North West Unregulated Flow Management Plan (INWUFMP) in 1992:

Algal Suppression Flow

Access to unregulated flows will be managed to achieve a flow of at least 2000 ML/d for 5 days at Wilcannia in the period October to April inclusive, unless a flow of at least this size has occurred within the preceding 3 months.

Normal pumping will be permitted unless it is assessed that pumping will reduce flows below this target. To achieve this target it may then be necessary to restrict off-allocation access in the tributaries and the operation of B and C class licenses on the Barwon-Darling.

It may be necessary to restrict pumping on the tributaries prior to 3 months of below algal suppression flows at Wilcannia to allow for the time it takes for flow to travel from the tributaries to the lower Barwon-Darling.

The first paragraph of this appears in the WSP as a note to clause 45A saying the Minister can restrict access in this circumstance, so it hasn't been lost, but I hear nothing of its implementation – does it still get implemented? If so, how long ago? If not, why not? Perhaps it is a well-accepted rule and therefore implemented without people making enough fuss for me to hear of it. Or do upstream dams, diversions and climate change now impact on flows so often that the rule can never be applied? I argued when the rule was proposed that a rule which could apply more frequently was needed to increase the chance of suppressing algae, but this was ignored presumably because my suggestion was likely to double the cost to irrigation. Modelling suggested the rule would only significantly impact on irrigation infrequently.

The requirement in the resumption of flows rule for a 'No Flow Class announcement' refers in part to flows less than 200 ML/day at Wilcannia for 90 consecutive days – a far lower bar than that of the algal rule. I appreciate that this is part of a set of rules that work a different way to the Algal rule. I support having a rule that applies in all seasons as well as the summer algal rule, but the flow rates in these targets should be significantly higher and the gap permitted shorter. The proposed rules do not sufficiently reduce the risk to town water supply let alone enable ecosystem recovery.

It is good that rules for different locations are proposed.

Please consider adding other rules and strengthening the proposed rules to better protect as many aspects of water quality as possible.

A Class thresholds and pump sizes

These should be as proposed in the NRC final report. I trust the scientific assessments that they were based on.

The size of pump permitted to be used for A class licences should revert to the original smaller size.

The 'Access to imminent flows' rule should be removed.

Active Management

Please see my attached comments on the draft policy.

How the NSW Government can improve the consultation process undertaken?

It is unacceptable that consultation with Aboriginal nations has not been finalised. Their views should have been considered before this draft was published and submissions should not close until after their consultation is finalised.

Risk Assessment

As stated above, the results of this assessment show the proposed WRP is not tolerable.

Sending people out in a few years or periodically to make measurements of how appallingly unhealthy the river is will not solve the problem or stop the disaster deepening. The ecosystem and local communities should not have to wait for more proof before there is more thinking about more tinkering with the WSP.

A change in direction is needed now.

Kate Boyd
Armidale

SUBMISSION TO THE NSW DEPARTMENT OF PLANNING, INDUSTRY & ENVIRONMENT

Response to the NSW Government Response to the NRC Final Report Recommendations and the Vertessy Report

I appreciate the opportunity to provide comments on the NSW Government's response to:

- the Natural Resource Commission's *Review of the Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources 2012* report (the "NRC Report"), and
- the *Independent Assessment of the 2018-19 Fish Deaths in the Lower Darling* report (the "Vertessy Report").

Seeking greater recognition of the crisis facing the Barwon-Darling

The opening statement in the NRC Report is clear, concise and unambiguous – it states that "the Barwon-Darling is an ecosystem in crisis."¹

The NSW Government's response has not adequately acknowledged the crisis facing the Barwon-Darling.

This submission will address 3 important matters that have not been adequately addressed in the NSW Government's response that should be addressed as a matter of urgency – specifically, the urgent need to:

- protect first flushes,
- guide the community in making its response to the NRC Report, and
- address a statement in the recent MDBA Communiqué.

Urgent Matter 1: The need to protect first flushes

The Vertessy Report ranked the protection of the first flush as one of the highest priorities.²

Whilst this submission understands the need to listen to the community, there is a need for the government to confront the crisis and strongly commit to maintaining the Cease-to-Pump rule now in place until such time as flows are achieved at agreed volumes at monitoring sites such as at Wilcannia and the Darling below Pooncarie. Menindee lakes should also receive an agreed volume of water.

Urgent Matter 2: The need to guide the community in making its response to the NRC Report

The NRC Report provided in Tables 1 and 2 a list of Recommendations and Suggested Actions respectively.³

Whilst this submission recognises and supports the importance of consulting with and listening to the community, the NSW Government should provide an itemised response to each of the Recommendations and Suggested Actions listed in Tables 1 and 2.

The itemised response should address those Recommendations and Suggested Actions that will be:

1. accepted in full by the NSW Government and the process by which the government will monitor and report on progress;
2. rejected in full or part and the reasons why; and
3. the arrangements that the NSW Government will put in place to monitor, analyse and report on the technical matters that are fundamental to Water Sharing Plans; that are imperative to reversing the crisis in the Barwon-Darling.

Urgent Matter 3: The need to address a statement in the recent MDBA Communique

The MDBA stated⁴ that *“The Authority reaffirmed its expectation that these critical reforms will be brought forward within the water resource plans that are to be submitted to the Authority by the end of the year. The Authority will not recommend water resource plans to the Minister for accreditation unless the commitments are fulfilled.”*

Whilst this submission recognises that these are matters largely between the NSW Government and the MDBA, the NSW Government should make clear to the community those matters of substance that must be resolved between NSW and the MDBA, bearing in mind the seriousness of the matters raised in the NRC Report that have brought the collegiate approach to water management in the Basin, the MDBA, and the Basin Plan into disrespect.

The urgent matters raised in this submission relate directly to the purpose of the Basin Plan⁵, in particular:

- Section 20 (d): the use and management of the Basin water resources in a way that optimises economic, social and environmental outcomes; and
- Section 20 (g): improved water security for all uses of Basin water resources.

Conclusion

The NRC Report comprehensively demonstrates that the 2012 Barwon-Darling Water Sharing Plan does not align with the objects and intent of the relevant NSW Water Acts; and unless addressed, it is highly unlikely that the subsequent Water Resource Plans will be able to be accredited under the Basin Plan.

In making this submission I recognise the extent and seriousness of the present drought. Given the long-term commitment to the Basin Plan, the NSW Government must take the necessary action to address the urgent matters raised in this submission, to the extent necessary to achieve accreditation under the Basin Plan.

Barrie MacMillan

29 October 2019

About the Author

My interest in the topic relates to achieving sustainable rivers for all stakeholders in the community.

My former employment roles centred on processing irrigated food products, with Mildura Co-operative Fruit Co. Ltd for 31 years and with dried fruit marketing as a Board member of Australian Dried Fruit Sales P/L (later known as Sunbeam Foods) for 26 years. Dried fruit was marketed in bulk and consumer packs in both domestic and export markets.

Since retirement, I have served as a Board member on statutory regional state catchment management authorities and rural and urban water authorities.

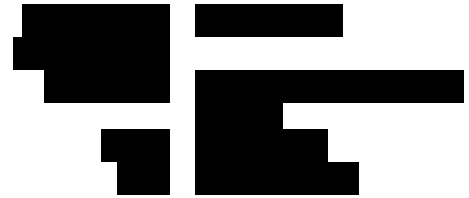
¹ Natural Resource Commission's Review of the Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources 2012 Final Report September 2019, Executive Summary, paragraph 1

² Independent Assessment of the 2018-19 Fish Deaths in the Lower Darling, 29 March 2019, p.75 & p.79

³ Natural Resource Commission's Review of the Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources 2012 Final Report September 2019, p.9-14

⁴ Murray-Darling Basin Authority Communique, 11 September 2019, paragraph 6

⁵ Water Act (2017) (Australia), Section 20 *Purpose of Basin Plan*



Department of Planning, Industry and Environment
Water Group
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Dear Sir

Submission - Barwon-Darling Watercourse Water Resource Plan

Thank you for providing an opportunity to comment on the 2012 Barwon-Darling Watercourse Water Resource Plan (BD WRP).

The Problem

The number and protracted length of cease to flow events in the lower Darling has increased since the introduction of the amended-post-public-consultation Barwon Darling Water Sharing Plan (BD WSP) in 2012, to the detriment of downstream communities, businesses and individuals, not to mention the biodiversity and ecosystems. There have been several mass fish deaths and water quality issues.

For the fifth time in seven years, the Darling river is not connected to the Murray river.

The BD WSP must address the following key points to prevent further social, economic, cultural and environmental damage occurring to the river and its Aboriginal and non-Aboriginal communities:

1. Connectivity of the Murray and Darling rivers and Protection of Low Flows
2. Protection of community owned Environmental Water
3. Connection to upstream and downstream water planning areas so end-of-system flow targets are achieved.
4. Ensure floodplain harvesting does not adversely impact floodplain and in-channel ecosystems as well as floodplain grazing and opportunity cropping.
5. Native Title Rights and cultural flows
6. Recognition of basic riparian rights, stock and domestic needs, essential human needs, town water needs and the needs of the natural environment above the need of irrigation as per the NSW Water Act 2002 and the federal Water Act 2007.

Natural Resources Commissioner recently released a draft report for comment, the obvious shared goal stated as:

"...the benefits of a healthy river system are enjoyed by the whole community".¹

¹ Draft Water Sharing Plan Review – Barwon-Darling Unregulated & Alluvial Water Sources 2012 – Prepared by Natural Resources Commission July 2019



In the Executive Summary, the problem is articulated

“The Water Management Act 2000 (The Act) clearly prioritises protection of the water source and dependent ecosystems, followed by basic landholder rights including native title, and then other extractive uses. The current Plan has not effectively achieved this prioritisation.”²

The Government has failed to meet seven of its ten objectives in the BD WSP, only meeting objectives relating to water trading and connectivity between surface and groundwater. They failed on environment, Aboriginal rights, equity, adaptive management, landholder rights and water quality.³

The Productivity Commission has accurately captured community concern:

“Deficiencies in the way that Governments have approached implementation of the Plan have caused considerable concern in many Basin communities. This has left a legacy of community distrust, which the Commission considers is a risk to effectively implementing the next phase of the Plan.”⁴

Two Technical Reports, produced by the Murray Darling Basin Authority in March 2018 provide some important conclusions.

A History Lesson

The 2013 cease-to-flow was directly linked to the introduction of the NSW Water Sharing Plans impacting the amount of water able to flow past Bourke and the 2016 event, which lasted 520 days, was protracted due to a series of actions upstream by large scale irrigators, which we are now beginning to understand better, combined with inaction by the Minister to impose cease to pump rules or an embargo on much needed low flows.

In 2012, common sense rules pertaining to size, number and capacity of pumps, as well as depth of same in the river were removed, further eroding the ability to quantify and monitor extraction.

MDBA technical report “Ecological needs of low flows in the Barwon-Darling” lists issues with the 2012 amendments to the WSP, including the limited, targeted consultation and how it linked with the timing of the introduction of the Murray Darling Basin Plan.

More specifically, and of major concern:

“...There were changes between the draft plan and what was included (in) the final Water Sharing Plan that were not shared publically prior to commencement.”⁵

It goes on to list additions and changes which have had the most devastating impact on flows and which have ultimately made flow connectivity through to the confluence (of the Darling and Murray rivers) particularly depleted, which is also causing water degradation issues, including:

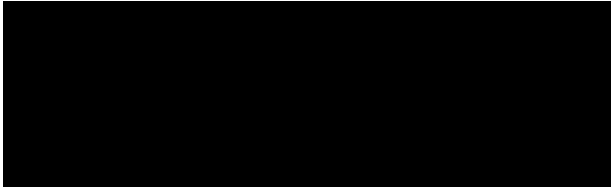
“The final Water Sharing Plan (2012) removed the Total Daily Extraction Limits that were proposed in the draft plan, provided no ability for the Minister to impose restrictions on Class A Licence extractions for public interest purposes, provided unlimited carryover of account water at the end of each water year, provided power for the Minister to grant pumping exemptions for A and B Class licences when flows are imminent, provided opportunity for extraction of up to 300% of access entitlements, provided no detailed

² ibid

³ See: Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources 2012 – NSW Legislation 10. Objectives

⁴ Murray-Darling Basin Plan: Five-Year Assessment – Productivity Commission Inquiry Report – December 2018

⁵ Ecological needs of low flows in the Barwon-Darling Technical Report – Murray Darling Basin Authority March 2018



requirement for the protection of environmental water, introduced water trading arrangements and defined the commence to pump rules (as per the rules previously in place).

“The most contentious aspect of the Water Sharing Plan was that the changes to the extraction rules meant that there was increased opportunities to legally extract water at low flows. Other potential implications of the rules under the Water Sharing Plan that were raised included: while the Minister has the power to impose extraction restrictions this is a discretionary power; if unchecked, the provisions for unlimited carryover and 300% take in any year could lead to breaching of the Cap/SDL; and as a result of enabling trade in the region there has been a concentration of licences.”

The Department’s Status and Issues Paper 2017 lists objectives of the Basin Plan to be implemented by Water Resource Plans at a regional level, including environmental, economic, social and cultural aspects, noting that *“NSW WRPs will meet the minimum requirements of the Commonwealth Water Act 2007 and Basin Plan.”*⁶

Also, that *“WSPs made under the NSW Water Management Act 2000 will remain the mechanism for articulating water sharing in NSW. WSPs will be a key component of each WRP.”*

In listing the Beneficial uses of the water resources, the Issues paper identifies *“Aboriginal Traditional Owner groups within the Barwon-Darling Watercourse WRP area include(ing);*

Barkindji (sic), Murrawarri, Ngemba and Ngiyampaa.” Further, it asserts that *“Aboriginal knowledge of the environment can contribute to water management plans. The WRP process will continue to identify opportunities to better address the needs and aspirations of the Aboriginal Traditional Owner groups and communities in terms of equitable access to water for social, cultural, spiritual and economic use of water, including the views of Aboriginal peoples with regard to cultural flows.”*

Water for towns and essential human needs is also identified under the heading of Beneficial uses of the water resources: *“The Water Management Act 2000 also requires WSPs protect water for basic landholder rights, which are made up of domestic and stock rights, harvestable rights and native title rights.”*

It goes on to list Recreational water uses: *“...tourism, is one of the largest contributors to the region’s economy and the Barwon and Darling rivers provide significant recreational opportunities for the community in the form of boating, swimming and fishing....*

“The value of recreational fishing in the Barwon-Darling area of the Murray Darling Basin has been estimated at \$1,994,867 per annum (DAE 2012).”

Under the heading stream flows, the following: *“At the Darling River at Menindee, inflowing tributary contributions to the long-term average flow were the Border Rivers 35%, Namoi River 25% and the Condamine-Culgoa rivers 20% (NSW Office of Water 2012).”*

Under the heading Water quality *“Degraded water quality can put stress on a range of aquatic organisms, impact on Aboriginal cultural and spiritual uses of water, increase the cost of drinking water treatment, contribute to public health risks and decrease the suitability of water for irrigation.”*

The paper has two appendices, which list objectives and strategies, objectives identified by Aboriginal peoples through consultation and additional issues identified by Aboriginal communities.

Wentworth Shire Council submits that none of the Issues, Objectives or strategies identified in this paper have been met, that the NSW government has been deficient in it’s requirements under the Water Act

⁶ Barwon-Darling Watercourse Water Resource Plan (Surface Water) Status and Issues Paper – Department of Primary Industries - 17 February 2017

Our Reference: DOC/19/21777
Your Reference:
Prepared By: Executive Assistant General
Manager
Phone: 03 5027 5027
Date: 28 October 2019

2007 (Cth), Water Management Act 2000 (NSW) and the Basin Plan in general. Council has had to provide first potable, now raw water as well and has been left unsupported with little consultation, assistance or advice, especially in relation to drought rating upgrades and actions under Extreme Events policy.

Academy of Science report released this year in response to the Menindee Fish Kills says:

“The root cause of the fish kills is that there is not enough water in the Darling system to avoid catastrophic decline of condition through dry periods. This is despite a substantial body of scientific research that points to the need for appropriate flow regimes. Similarly, engagement with local residents, Indigenous and non-Indigenous, has been cursory at best, resulting in insufficient use of their knowledge and engagement around how the system is best managed.”⁷

Indeed, Wentworth Shire Council is aware that previously, local management of Menindee Lakes has yielded results including a decrease of evaporation from the lakes by 23%.

“The panel strongly supports the objectives of the Water Act 2007 and the framework of the Murray-Darling Basin Plan (2012), which were developed with bipartisan political support and intended to increase water for the environment. However, the findings.....point to serious deficiencies in governance and management, which collectively have eroded the intent of the Water Act 2007 and implementation of the Murray- Darling Basin Plan (2012) framework.

The freshwater systems of the Darling are already listed as endangered... and include multiple fish species listed as threatened by the Commonwealth. Failure to act resolutely and quickly on the fundamental cause—insufficient flows—threatens the viability of the Darling, the fish, and the communities that depend on it for their livelihoods and wellbeing including the traditional owners, who have recognised rights and responsibilities.”⁸

Additionally the Productivity Commission says NSW must be given more time to properly prepare WRPs “given the number of outstanding WRPs and the magnitude of proposed changes in some plans, including rules to protect environmental water in the Barwon-Darling and provisions to meet critical human water needs and address water quality issues in the Lower Darling.”⁹

While the importance of getting it right is understood and Council supports protection of environmental water, credit for return flows and other pre-requisite policy measures, it is concerned that further delays to unwinding the most contentious amendments as described, especially in light of seven years’ worth of data and the number of reports outlining the known impacts of these changes, may continue to contribute to even more decimation of native fish stocks, poor health of communities and irretrievable economic downturn.

The new BD WRP can address this pressing issue by conforming with section 5(3) of the NSW Water Management Act (2002), section 9 of the Commonwealth Water Act (2007) and the Basin Plan (2012) which identify that environmental needs take priority over irrigation needs.

There is nothing in the Commonwealth Water Act or the Basin Plan which would require that the priority order established under the NSW Water Management Act be altered.

The approach which must be taken to prioritising rights to water in drafting a water sharing plan is that the environment has first priority; second priority is basic landholder rights, followed by rights under WALs.

⁷ Investigation of the causes of mass fish kills in the Menindee Region NSW over the summer of 2018-2019 – Australian Academy of Science – February 2019

⁸ ibid

⁹ Murray-Darling Basin Plan: Five-Year Assessment – Productivity Commission Inquiry Report – December 2018

Our Reference: DOC/19/21777
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Manager
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“While the economic and social benefits of the utilisation of water as a resource are among the objectives of the Act, that is not a licence to disregard the environmental protections and basic landholder rights also contained in the Act or to treat economic benefits as the overriding consideration in any decisions under the Act.”

Ensuring Connectivity with other WRPs

The BD WSP must accommodate the environmental requirements of downstream planning areas and in turn must have its needs met by upstream water management planning areas.

The Water Act (2007) provides the head of power for making water resource plans, but is not particularly prescriptive about contents. However, s55 provides that the WRP must be consistent with the Basin Plan.

“At a very basic level, the Basin Plan should create a degree of coordination between water resource plans due to the requirements for such plans to accord with matters set in the Basin Plan (such as the SDLs for each WRP area).”

“Section 10.05 of the Basin Plan 2012 and s18(2) of the Water Management Act 2000 (NSW) will require water resource plans which incorporate water sharing plans under the NSW Act, to be prepared having regard to water resources with significant hydrological connection. Coordination for environmental watering purposes is also required by s10.27 and 10.19 of the Basin Plan, as well as by s10.17 and the long term watering plans which sit under the Environmental Watering Plan.”

“The Basin Plan does require WRPs to have regard to the way in which other water resources with ‘significant hydrological connection’ are being managed and used. This would include upstream and downstream areas of a watercourse, as well as groundwater systems with significant connection to the watercourse.”

It has long been suggested by the Strategic Advisory Panels of the Murray-Lower Darling and the Barwon-Darling that a joint meeting to discuss where these WRP’s and their WSP’s intersect and how they can be strengthened in line with the legislative requirements.

Significant errors of law have been identified in the draft NSW Murray and Lower Darling Surface Water Resource Plan, especially Schedule D Risk Assessment in relation to section 10.17 and 10.41 – 10.43 of the Basin Plan 2012.

Until both of these WRPs align in an effective way to manage identified risks and most particularly in line with the Water Act and the Basin Plan, there is no point commenting piecemeal on what is patently not legal and obviously not working.

Utilising a mix of mechanisms that will protect low flows, community owned environmental water and cultural water, such as:

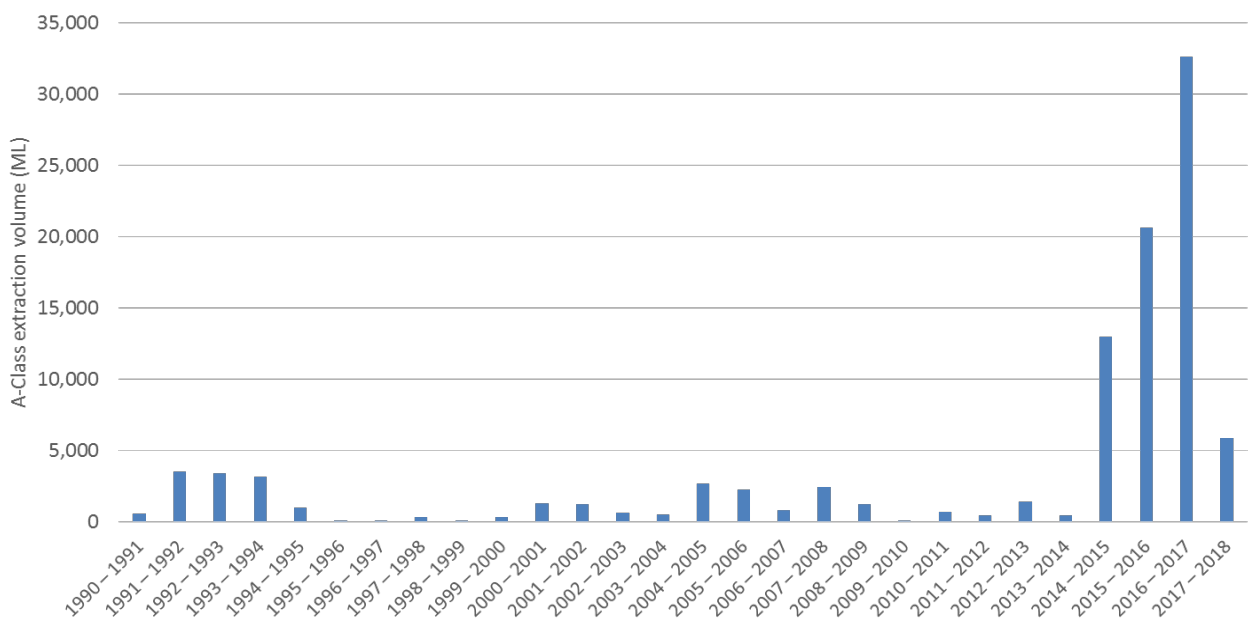
- (a) Individual Daily Extraction Limits and their Restricted Trading
- (b) The return of A class licences to their original purpose i.e. irrigation of permanent plantings.
- (c) Pump size requirements be reinstated as 150mm upper limit.
- (d) Pumping heights to be lifted to a level which will protect low flows e.g. no pumping of “A” class water below a flow of 500ML/day at Bourke and no pumping of “B” class water unless the flow at Bourke is 1850ML/day.
- (e) Riparian rights to be reinstated and supported as per the second principle of the NSW Water Management Act which states that riparian rights to stock and domestic water has a higher priority than water for irrigation.

- (f) The removal of the 300% of access entitlement being extracted each year to a maximum of 450% being extracted over three Years.
- (g) The reversing of the unlimited carry over provisions to prevent huge river debts occurring.
- (h) first-flush rules to protect flows following a no-flow period. Sixty days should be considered a no-flow period.
- (i) Total-daily-extraction limits
- (j) Initiating a government buyback of all “A” Class water in the Barwon-Darling and Intersecting Stream water management areas except from those who are willing to retain and use 150mm pumps.

This will provide some level of reinstatement of health to the river and surety of supply to communities along the river. If significant changes are not made to the 2012 Barwon Darling Water Sharing Plan the river and its communities will continue to suffer a slow but sure human-induced social, cultural, economic and ecological death.

The implementation of an appropriate mix of these protection measures will eliminate excessive extraction of low flows which has occurred since the introduction of the current 2012 BD WSP (see the below graph).

Annual A-class extractions-Barwon-Darling (source: MDBA presentation by Russell James at Bourke Western Shires meeting 2019 - Data Source: NSW DPI (pre 2012) ; NSW Water Register (post 2012))



This graph clearly shows a vast increase in extraction by A Class licence holders in the Barwon-Darling, which Natural Resources Commission correctly identified as resulting in more frequent and longer cease to flow periods, because of “...an increased allowance for extractive uses at lower flow classes that are

critical to the environment..” which has “...pushed the river below Bourke into hydrological drought three years earlier than the upstream sections of the river.”¹⁰

The rules grossly favour upstream irrigators at the expense of communities, Aboriginal nations, the environment and downstream irrigators.

Wentworth Shire is overlaid by Native Title Determination number 8, the Barkandji nation recognised as traditional owners and along with other aboriginal nations, have been here for at least 45,000 years.

“Inadequate recognition of native title determinations is common across most water sharing plans in the region, which serves to undermine stated priorities for Aboriginal outcomes.”¹¹

In summary

Wentworth Shire Council has endorsed and strongly supports the community agreement that the Barwon-Darling and Lower Darling Rivers be considered as one river for the purposes of addressing the environmental health and providing water for the high priority water needs of the communities dependent upon it.

Council has submitted motions passed with strong support at ALGA and Murray Darling Association conferences calling on “...the Prime Minister, Leader of the Opposition and Water Minister, to recognise concerns from Indigenous groups, traditional owners and custodians that:

- a) they are unable to continue cultural practices, due to lack of cultural flows;
- b) there is an increased financial impost on high indigenous population towns for drinking water, where same is unavailable, or of poor quality;
- c) a lack of genuine, integrated and informed consultation has been the norm in matters of water management and projects which directly affect native title holders, traditional owners and Land Council groups and individuals, combined with a lack of feedback or Minutes from meetings with Government representatives and agencies; and
- d) local First Nations people hold knowledge from greater timelines than current records about flows, floods, movement and interplay of the entire riverine ecology, yet there is a resistance to engaging with that knowledge, utilising the skills and management practices used for many centuries (45,000 years in our region), despite clear desire from most groups to assist and play a more active role in water and land management.

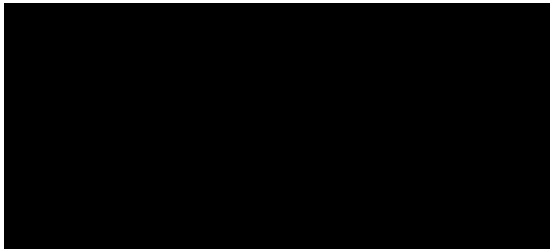
In support of this, it is Council’s wish to have the following statements and objectives implemented in the development of all of the Water Sharing and Water Resource Plans:

“Community representatives of the Murray-Lower Darling SAP submit to the NSW Government and Murray Darling Basin Authority, that the NSW Water Sharing Plans and Resource Management Plans for the Barwon-Darling, Murray-Lower Darling and Northern Basin Rivers must include minimum river flow and storage levels that will protect the health of the Barwon-Darling and Lower Darling River from the Queensland border to the Murray River.

Minimum flows at sites along the Barwon-Darling and Lower Darling River, in particular at Wilcannia, and water storage volumes in the Menindee Lakes must be reached before extraction of water for irrigation is allowed. This will help to ensure that the environmental needs of native fish, town water supply and the domestic stock watering needs of riparian landowners, along the length of the river are provided for, as a

¹⁰ Draft Water Sharing Plan Review – Barwon-Darling Unregulated & Alluvial Water Sources 2012 – Prepared by Natural Resources Commission July 2019

¹¹ *ibid*



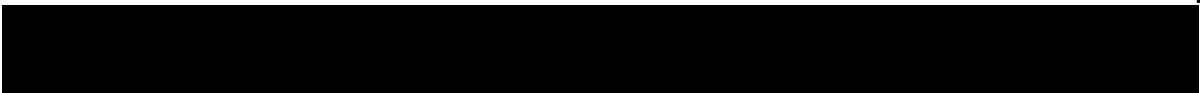
priority, during extended dry periods.”¹²

In the development and implementation of the respective plans, the protection of low flows during drought and first flows following extended dry periods in the Barwon-Darling and Lower Darling River will ensure the connectivity of the river from its upper reaches to the Murray River is given the priority required to protect native fish, the river environment and provide for the communities that depend on a healthy river system.

Yours sincerely

**JANE MACALLISTER
COUNCILLOR**

¹² Letters from Wentworth Shire Council to NSW Water Minister, Melinda Pavey and CEO MDBA, Phillip Glyde





Submission in relation to Barwon-Darling Watercourse Water Resource Plan

prepared by

**EDO NSW
29 October 2019**

About EDO NSW

EDO NSW is a community legal centre specialising in public interest environmental law. We help people who want to protect the environment through law. Our reputation is built on:

Successful environmental outcomes using the law. With over 25 years' experience in environmental law, EDO NSW has a proven track record in achieving positive environmental outcomes for the community.

Broad environmental expertise. EDO NSW is the acknowledged expert when it comes to the law and how it applies to the environment. We help the community to solve environmental issues by providing legal and scientific advice, community legal education and proposals for better laws.

Independent and accessible services. As a non-government and not-for-profit legal centre, our services are provided without fear or favour. Anyone can contact us to get free initial legal advice about an environmental problem, with many of our services targeted at rural and regional communities.

EDO NSW is part of a national network of centres that help to protect the environment through law in their states.

Submitted to:

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Contents

Introduction	4
NRC report - Reconciliation and transparency	7
WRP Section 1.3: Objectives and guiding principles	9
SMART objectives	11
Prioritisation of objectives	13
WRP Section 1.4: Relationship with Long-Term watering plan	14
WRP Section 3: Risks to water resources - Risk assessment	16
Development of strategies to address High and Medium Risks	17
Outcomes of Risk Assessment	22
WRP Section 3.3 Strategies for addressing risks	24
WRP section 4.1: 'Non-statutory environmental water'	27
WRP section 4.5: No net reduction in the protection of PEW	28
WRP section 4.2: Rules to meet the environmental watering requirements of PEAs and PEFs	30
WRP section 6: Water Quality Management	32
Draft Water Sharing Plan	33

Introduction

Water resource plans (**WRPs**) (and the water sharing plans (**WSPs**) they incorporate) are a key tool to deliver the outcomes sought by the Water Act 2007 and *Basin Plan 2012*. In that regard, it is very disappointing that the NSW Government has not, in the seven years that have elapsed since the Basin Plan commenced, developed a plan for the Barwon-Darling that complies with the requirements of the *Water Act 2007 (Cth)* and *Basin Plan 2012*.

EDO NSW is a community legal center specialising in public interest environmental law. We have many years' experience engaging with water law and policy processes at both the State and Commonwealth levels. We also have experience advising a broad range of clients including irrigators, community groups and peak conservation organisations in relation to the *Water Act 2007 (Cth)*, *Basin Plan 2012* and related policies.

Our expert legal analysis has identified legal flaws in the preparation of the *Barwon-Darling Watercourse Water Resource Plan*, particularly in the key area of meeting the environmental watering requirements of the Barwon-Darling's priority environmental assets and ecosystem functions. The flaws are fundamental and so we do not recommend individual amendments to remedy them. Instead, our key recommendation is that the second stage of the risk assessment, being the identification of strategies to mitigate risks, be repeated to identify strategies (including new rules under the water sharing plan) that will actually meet environmental watering requirements and comply with sections 10.17 and 10.43 of the *Basin Plan 2012*.

Our other key recommendation is that the NSW Government prepare, and publish, a report outlining the extent to which the draft WRP implements the recommendations of the recent reports of the Natural Resources Commission and of the Independent Inquiry into the 2018/19 fish kills. The failure to provide this type of basic information (beyond a brief and unilluminating 4 page document) is quite an extraordinary failure of the consultation process, particularly given that any member of the public trying to engage with that process would need to make their way through the almost 900 pages that make up the draft WRP and its Appendices and Schedules to try to understand for themselves whether the NSW Government has accepted the recommendations of these independent experts.

Our remaining recommendations are highlighted in bold throughout this report and include the need for SMART objectives that comply with the prioritisation requirements of the *Water Management Act 2000 (NSW)*, strategies to actually address the impacts of climate change (which are already being felt in the Barwon-Darling) and the release of an analysis of the protection afforded to Planned Environmental Water under the draft plan as compared to the assumptions incorporated into the modelling behind the Sustainable Diversion Limit.

Summary of Recommendations

Recommendation:

- **The NSW Government should provide a report which, for each relevant recommendation of the NRC report and Vertessy et al (2019):**
 - **Identifies whether the recommendation has been adopted, adopted in part or not adopted;**
 - **For recommendations adopted and adopted in part, identify the relevant provisions of the WRP/WSP that implement the recommendation; and**
 - **For recommendations that have not been adopted or have been adopted only in part, explain the rationale for the decision not to adopt (or to only partially adopt) the relevant recommendation.**
- **An independent agency should be engaged to provide a, publicly released, peer review of the NSW Government's report.**
- **The NSW Government must adopt, as standard practice, the release of such reports each time a water sharing plan is made or amended.**

Recommendation:

- **The environmental objectives in the draft WSP and WRP must be amended to reflect the requirements of both s5(3) of the Water Management Act 2000 (NSW) and the objectives of the Commonwealth Water Act 2007 and Basin Plan 2012. This should be achieved by, at the very least, replacing the language of "protect and, where possible, enhance" with "protect and restore".**

Recommendation:

- **The draft WSP and WRP should implement recommendation 4 of the NRC report by replacing the current vague objectives with SMART objectives. In the case of environmental objectives, this may involve adopting objectives set in the LTWP and should include specific flow targets that the plan is aiming to achieve (as recommended by the NRC).**

Recommendation:

- **The draft WSP be amended to identify prioritisation among the environmental, social and economic objectives which is consistent with the prioritisation required by sections 5(3) and 9 of the Water Management Act 2000 (NSW).**

Recommendations:

- **Figure 1-1 should be amended to remove the misleading suggestion that the relationship between the LTWP and the WRP is indirect only.**
- **A number of other provisions of the draft WRP will need to be amended to ensure that the LTWP and the broader Environmental Watering Plan are properly integrated into the WRP (this is discussed further below).**

Recommendation:

- **The decisions under section 10.43 of the Basin Plan, as outlined in the Risk Assessment, must be put aside and decisions about how to respond to each risk must be re-made in a way that accords with s10.43(1) and (3) of the Basin Plan 2012.**

Recommendations:

- **The Risk Assessment must be re-done in a lawful manner to identify strategies to manage to environmental watering requirements, with a view to seeking to reduce all High and Medium risks to a rating of Low.**
- **The resulting strategies must be implemented through amendments to the draft WSP and WRP.**

Recommendation:

- **All risk mitigation strategies need to be re-visited and new mechanisms developed which actually address and mitigate the identified risks, particularly in relation to climate change.**

Recommendation:

- **The text on page 20 of the draft WRP should be amended to clarify that the 'non-statutory' environmental water is, in fact, held environmental water (HEW).**

Recommendation:

- **The NSW Government should prepare and publicly release analysis comparing the level of protection of PEW under the amended WSP with the level of protection built into the modelling used to inform the development of the SDL and the Basin Plan 2012.**

Recommendation:

- **The draft WRP and WSP must be amended to include rules to avoid compromising environmental watering requirements. This will involve rules to reduce risk ratings for risks to EWRs from High or Medium to Low.**

Recommendation:

- **The NSW Government must repeat the risk assessment for water quality issues with a view to mitigating at least those risks to water quality that can be addressed through flow management.**

Recommendation:

- **The draft WSP be amended to remedy issues identified in this submission relating to account carry over rules, the protection of active environmental water, A class licence thresholds and other matters.**

NRC report - Reconciliation and transparency

The current *Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources 2012 (BD WSP)* was reviewed by the Natural Resources Commission (**NRC**) earlier this year, with the final report issued in September 2019.¹ The report included 17 detailed recommendations and 14 suggested actions, some of which were for immediate implementation and some of which were for implementation in 2023.

The Independent Inquiry into the fish kills which occurred over the summer of 2018/19² (**Vertessy et al, 2019**) also contained a number of recommendations relevant to improving the effectiveness of the BD WSP.

The findings of both reports should have been a valuable input into the production of a WRP and associated amendments to the water sharing plan. We acknowledge that some improvements appear to have been made in the draft amendments to the BD WSP (in particular the implementation of IDELS and, to a degree, the amended rules for take under A class licences – although more needs to be done to materially improve outcomes³). However, the extent to which the recommendations have been otherwise implemented remains unclear.

The sole NSW Government response to both reports⁴ is a brief (4 page) and high-level plan with actions across three stages (with only the first stage relevant to the current draft WRP and the third stage to occur in 2023). The plan does not specifically address:

- Which recommendations have been adopted and which have not been adopted (or adopted only in part);
- A response and rationale for those recommendations which have not been adopted (or adopted only in part); or
- A clear discussion of the extent to which, and process through which, the adopted recommendations have been implemented.

This is quite an extraordinary lack of transparency. The purpose of independent inquiries should be not only to provide the government with recommendations but also to ensure that the recommendations, and the extent to which they have been delivered, forms part of the public conversation when laws and policies are changed or implemented. As it stands, there is little to no information available to inform the public about the extent to which the NSW Government has implemented these reviews.

We are informed by the Department that it is not its practice to provide a reconciliation of amendments to water sharing plans against recommendations from the NRC. This practice must change if the NSW Government is to restore public trust in its ability to manage this community-owned resource (the loss of which being, coincidentally, one of the issues discussed in the NRC's report).

¹ Available at: <https://www.nrc.nsw.gov.au>

² Available at: <https://www.mdba.gov.au/managing-water/drought-murray-darling-basin/fish-deaths-lower-darling/independent-assessment-fish>

³ Amended rules may still be inadequate to address increasingly long periods of low and no flows downstream of Bourke (as measured at Wilcannia gauge, for example), and improvements are needed ensure more accurate modelling of low flows. See: <https://www.mdba.gov.au/sites/default/files/pubs/ecological-needs-low-flows-barwon-darling.pdf>

⁴ Available at: https://www.industry.nsw.gov.au/_data/assets/pdf_file/0008/279080/NSW-Government-response-to-NRC-report.pdf

Key recommendation:

- ***The NSW Government should provide a report which, for each relevant recommendation of the NRC report and Vertessy et al (2019):***
 - ***Identifies whether the recommendation has been adopted, adopted in part or not adopted;***
 - ***For recommendations adopted and adopted in part, identify the relevant provisions of the WRP/WSP that implement the recommendation; and***
 - ***For recommendations that have not been adopted or have been adopted only in part, explain the rationale for the decision not to adopt (or to only partially adopt) the relevant recommendation.***
- ***An independent agency should be engaged to provide a, publicly released, peer review of the NSW Government's report.***
- ***The NSW Government must adopt, as standard practice, the release of such reports each time a water sharing plan is made or amended.***

WRP Section 1.3: Objectives and guiding principles

Section 1.3.1 of the draft WRP states that the Objectives of the water sharing plans (**WSP**) incorporated into the draft WRP “are guided by” sections 3 and 5 and Part 3 of the *Water Management Act 2000 (NSW)*. This mis-states the effect of the relevant provisions - an error which may be related to the defects in the WSP objectives discussed below.

Sections 5(3) and 9 of the Act have the effect that, in preparing a water sharing plan, the Minister is required to exercise their functions in accordance with the water management principles in section 5 of the Act and, in relation to the principles for water sharing set out in section 5(3) of the Act, to give effect to those principles in the following order of priority:

- a) sharing of water from a water source must protect the water source and its dependent ecosystems; and
- b) Sharing of water from a water source must protect basic landholder rights; and
- c) Sharing or extraction of water under any other right must not prejudice the principles set out in paragraphs (a) and (b).

The Natural Resources Commission summarised the effect of these provisions by saying, in its report on the current WSP for the Barwon-Darling, that “*the Act explicitly prioritises the protection of the environment and basic landholder rights over extractive use in the making of the plan..... - the needs of the river must come first.*” The NRC went on to conclude that this prioritisation is not achieved by the current WSP and to make recommendations to try to bring the WSP into compliance with this **requirement** of the Act.⁵

The suggestion in the WRPs that this provision is guidance only is misleading and wrong at law and should be removed.

However, it would appear that this error of law has flowed into the setting of environmental objectives in the amended draft WSP for the Barwon-Darling.

The objectives identified in the amended WSP are to “*protect and, where possible, enhance the ecological condition of the water source and its dependent ecosystems*”.⁶

Our concern is firstly that protecting ecosystems in their current degraded condition is unlikely to be adequate to ensure the long-term health of the system and, more importantly, that the language of ‘where possible’ appears to be a tacit acknowledgement that the environmental health of the system is being traded off for the benefit of extractive users.

In that regard, **we do not believe that the objectives of the draft amended WSP are consistent with the requirements of the *Water Management Act 2000 (NSW)*.**

The objectives of the draft WSP are similarly inconsistent with the Objectives of the Commonwealth *Water Act 2007* and *Basin Plan 2012*, despite section 1.3 of the draft WRP claiming that the objectives and outcomes of the *Basin Plan 2012* are ‘refined for the Barwon-Darling’ in clauses 9 - 12 of the amended WSP.

The **overall objectives** of the *Water Act 2007 (Cth)* include, in section 3(d):

⁵ See section 4, from page 52.

⁶ Draft *Water Sharing Plan for the Barwon-Darling Unregulated River Water Sources 2012*, ss10(1) (Broad environmental objective) and 10(2)(a) and (b).

*“to **protect, restore** and provide for the ecological values and ecosystem services of the Murray-Darling Basin (taking into account, in particular, the impact that the taking of water has on the watercourses, lakes, wetlands, ground water and water-dependent ecosystems that are part of the Basin water resources and on associated biodiversity).”*

This overall objective is reflected in section 21 of the Act, which sets out the general basis upon which the Basin Plan is to be prepared:

*“promote the sustainable use of the Basin water resources to **protect and restore** the ecosystems, natural habitats and species that are reliant on the Basin water resources and to conserve biodiversity.”*

These objectives then cascade down into the environmental objectives and outcomes for the Basin set out in section 5.03 of the *Basin Plan 2012* which include **‘protecting and restoring’ water-dependent ecosystems and ecosystem function**.

By contrast to these clear statutory objectives to **both protect and restore** the Basin’s natural environment, the draft WSP uses the language of *“protect and, where possible, enhance”* in relation to both its broad environmental objective and its targeted environmental objectives.

The language of *‘enhance’* in the draft WSP is certainly a lower level of ambition than the language of the Act and the *Basin Plan 2012* which have the objective of *‘restoring’* ecosystems and ecological function.

The language of *‘where possible’* is more troubling, including because it misleadingly suggests that it may not be *‘possible’* to enhance the health of the water dependent ecosystems and ecosystem functions of the Barwon-Darling. There is no doubt that it is *possible* to enhance the ecological health and functioning of the Barwon-Darling’s ecosystems. The barrier to this is the willingness of governments to set limits on the water being taken for consumptive use and to manage the flows of the rivers in a way that supports ecological functioning, both of which can be achieved with an appropriately drafted WSP.

This **drafting is misleading and inconsistent with the objectives of both the Acts and Basin Plan** and appears designed to disguise the fact that any failures by these plans to restore the ecological health of the Basin will be the result of a discretionary choice by government not to do so.

Recommendation:

- ***The environmental objectives in the draft WSP and WRP must be amended to reflect the requirements of both s5(3) of the Water Management Act 2000 (NSW) and the objectives of the Commonwealth Water Act 2007 and Basin Plan 2012. This should be achieved by, at the very least, replacing the language of “protect and, where possible, enhance” with “protect and restore”.***

SMART objectives

This section of the draft WRP incorporates objectives from the draft WSP into the draft WRP.

Recommendation 4 of the NRC report (which was identified in recommendation 1 as an action for immediate implementation) was for the revised WSP to implement ‘*clearly linked objectives, outcomes and performance indicators that meet the SMART criteria (specific, measurable, achievable, realistic, time-bound) and are tracked to ensure progress*’. SMART objectives are also an essential component of the adaptive management approach of the *Basin Plan 2012*.⁷

Our concern, in addition to the concerns above and elsewhere in the submission, is that the objectives and performance indicators in the amended WSP fall down at the first hurdle through the lack of specificity and measurability.

This recommendation should have been implemented, in the case of environmental objectives, through:

- objectives and performance indicators in the draft WSP (which reflect the EWRs identified in the LTWP); and
- a monitoring regime in the Monitoring, Evaluation and Reporting Plan (**MER plan**) contained in schedule D of the draft WRP.

As discussed above, the ‘broad environmental objective’ in s10(1) of the draft WSP is to protect and, where possible, enhance the ecological condition of the water source and its water dependent ecosystems (such as instream riparian and floodplain ecosystems).

The ‘targeted environmental objectives’⁸ for the above broad environmental objective include, for example, s10(2)(a):

“(a) to protect and, where possible, enhance the following over the term of this plan:
(i) the recorded distribution or extent, and the population structure of, **target ecological populations** including native fish, native vegetation and low flow macro invertebrate communities.”

The notes to section 10(2)(a)(i) of the draft WSP identify some species of which **may** be included as ‘target ecological populations’, but no definite list.

‘Target ecological populations’ is defined in the Dictionary of the draft WSP to mean “*communities or one or more species that are monitored to evaluate the success of target objectives for the environment.*” This, rather circular and unilluminating definition provides no information about which populations will be ‘target ecological populations’ or which document might shed further light on the populations to be monitored for the purposes of this objective.

⁷ The objectives for the Basin as a whole set out in section 5.02 include the establishment of a sustainable, long-term adaptive management framework for Basin water resources. The elements of adaptive management, which include setting clear objectives, are set out in section 1.07 of the *Basin Plan 2012*.

⁸ Note that ‘target objectives’ is defined in the Dictionary of the draft WSP as “*specific outcomes that can be achieved by the strategies in the plan, and can be directly measured so that the success or failure to achieve the objectives can be quantified.....are used to evaluate progress towards achieving the broad objectives of this Plan.*”

This target environmental objective is similarly silent as to:

- The baseline against which progress will be assessed; and
- A measurable target to be monitored to identify whether progress is being made against the objective.

The MER plan similarly fails to shed any light on the issue.

The performance indicators to be used to measure the success in achieving the targeted environmental objectives are identified in s10(5) as “*changes or trends in ecological condition during the term of this plan, including the recorded range or extent of target ecological populations, the recorded condition of target ecological populations.....*”. Once again, the specific “changes or trends” are not defined and the degree of change sought is not stated. These performance indicators are poorly defined and lacking in specificity and would seem to enable a regulator to pick and choose from among the available evidence to select a convenient indicator and ignore inconvenient data.

To take the example of Native Fish:

- The Basin-wide Environmental Watering Strategy (**BWEWS**) and Long-term watering plan (**LTWP**) (discussed further below) contain objectives for native fish, most of which are specific, measurable and time bound, with clear baselines against which to measure progress. By contrast, this objective of the WSP contains a vague goal of protecting and, where possible enhancing the condition of unidentified ‘target ecological populations’ of native fish which may (or may not) include the golden perch, silver perch, eel-tailed catfish, Murray cod or olive perchlet. The WSP objective is similarly silent as to whether progress should be measured against the current degraded state of many of these species, against the conditions which existed when the LTWP was prepared or against pre-2007 conditions (ie. prior to major losses from extreme drought) which is a measure used for some objectives in the BWEWS;
- The MER plan monitoring activities in relation to fish in Table 3 don’t shed any additional light on the particular indicators to be monitored and, in any event, don’t seem to extend beyond 2020;
- The exercise in Appendix A of the MER plan of aligning the Basin Plan, LTWP and WRP objectives appears to misleadingly suggest that this target environmental objective from the draft WSP aligns with the more detailed, specific and measurable objectives for native fish identified as NF1 - NF6 in the LTWP.

The other targeted environmental objectives in s10 of the draft amended WSP are similarly deficient.

Overall, it is not at all clear why the operational document which will actually control the critical flows in this part of the system (ie. the WRP/WSP) has identified its own vague and unmeasurable objective instead of adopting the specific and measurable objectives set out in the LTWP. Such an approach is not consistent with the NRC report, which recommended (at page 58) that a revised suite of objectives be developed for the WSP to fully align with the objectives of the LTWP.

In the absence of clearly defined SMART objectives which can be consistently monitored to allow the performance of the plan to be evaluated, it will be almost impossible to identify whether the plan is having its intended effect.

The NSW Government should ensure that its draft WRP and WSP contains targets that:

- allow the community to easily understand the environmental outcomes they are trying to achieve; and
- can be consistently monitored to inform discussions on whether amendments are required to the plan to enable it to achieve its own objectives.

Recommendation:

- ***The draft WSP and WRP should implement recommendation 4 of the NRC report by replacing the current vague objectives with SMART objectives. In the case of environmental objectives, this may involve adopting objectives set in the LTWP and should include specific flow targets that the plan is aiming to achieve (as recommended by the NRC).***

Prioritisation of objectives

Recommendation 2 of the NRC's report was to ensure that the plan rules, objectives and outcomes fully recognise and are consistent with the prioritisation specified in the *Water Management Act 2000 (NSW)*. That means, as outlined above, that the sharing of water prioritise water for the environment first, followed by water for basic landholder rights, with any remaining water to be made available for sharing under water access licences.

Section 5 of the NRC's report further explains the intent of this recommendation in relation to objectives by explaining that the objectives of the plan should, among other things, address the prioritisation of environmental, social and economic outcomes.

The current provisions of the draft amended WSP do not establish any prioritisation among the environmental, social and economic objectives in sections 10 - 12A of the draft WSP. Such an omission would seem to tacitly authorise environmental outcomes to be traded-off for short term economic gains in an unauthorised 'balancing' exercise.

Recommendation:

- ***The draft WSP be amended to identify prioritisation among the environmental, social and economic objectives which is consistent with the prioritisation required by sections 5(3) and 9 of the Water Management Act 2000 (NSW).***

WRP Section 1.4: Relationship with Long-Term watering plan

We agree with the statement in section 1.4 of the draft WRP that water resource management in NSW is complex - it is indeed difficult to navigate the interrelationships between the various plans which exist under the State and Commonwealth Acts.

While we commend the attempt to visually represent some of these relationships in Figure 1-1, the resulting figure is highly misleading to the extent that it suggests that there is only an indirect relationship between the Long-term watering plan (**LTWP**) and the WRP (and WSP).

To put this discussion in context, the plans relevant to environmental watering under the Commonwealth *Water Act 2007* are as follows:

- Section 22 of the Act provides that the mandatory content of the Basin Plan includes an environmental watering plan that complies with the content requirements of section 28;
- Chapter 8 of the *Basin Plan 2012* is the environmental watering plan (**EWP**) required by ss22 and 28 of the primary Act. The EWP sets the overall environmental objectives for the Basin Plan and provides for them to be given effect by a Basin-Wide Environmental Watering strategy⁹ (**BWEWS**) (to be prepared by the MDBA) and Long-Term watering plans (to be prepared by the relevant state government);
- The BWEWS sets the high-level framework for environmental watering, including of regionally significant priority environmental assets (**PEAs**) and priority ecosystem functions (**PEFs**);
- Long-term watering plans are then prepared by the states for each WRP area to identify PEAs and PEFs for the area, the objectives and targets for the management of those PEAs and PEFs and the environmental watering requirements for meeting those objectives.

The key things to note about this cascade of plans are that:

- They are intended to coordinate the management of both Held Environmental Water (**HEW**) (ie. entitlements held for environmental purposes, including those acquired by government to achieve the sustainable diversion limit (**SDL**)) and Planned Environmental Water (**PEW**) (rules-based environmental water which is created by, and governed by, State water plans) (s28(1)(c) *Water Act 2007 (Cth)*); and
- They set the detailed environmental objectives which need to be met in order to achieve the higher level environmental objectives of the Act and the *Basin Plan 2012*; and
- Given that WRPs are the key operational documents which establish PEW and manage the flow regimes of the rivers, they are a key and essential tool for achieving the objectives of the LTWP, the EWP, the *Basin Plan 2012* and the Act itself.

As a consequence, there are a number of provisions of the *Basin Plan 2012* (including sections 10.17 and 10.26)¹⁰ that require water resource plans to be consistent with and reflect the environmental watering plans, particularly the LTWP, and to meet the environmental watering requirements of PEAs and PEFs.

⁹ *Basin Plan 2012*, ss8.13 - 8.17.

¹⁰ See also s10.01(2)(e), 10.27, 10.41(2)(a).

We will return to this point in discussing subsequent sections of the WRP, however, it is clear that this **mistaken interpretation of the role of LTWP has infected, and created legal error in, other provisions of the draft WRP.**

Recommendations:

- ***Figure 1-1 should be amended to remove the misleading suggestion that the relationship between the LTWP and the WRP is indirect only.***
- ***A number of other provisions of the draft WRP will need to be amended to ensure that the LTWP and the broader Environmental Watering Plan are properly integrated into the WRP (this is discussed further below).***

WRP Section 3: Risks to water resources - Risk assessment

This section of the draft WRP purports to deliver the requirements of ss10.41 - 10.43 of the *Basin Plan 2012*.

Section 10.41 of the *Basin Plan 2012* provides that WRPs must be prepared having regard to current and future risks to the condition and continued availability of the water resource, including the risks to the capacity to meet **environmental watering requirements**. Each risk must be assessed as low, medium or high (or another category, if appropriate).

“Environmental watering requirements” is defined to mean the environmental watering requirements of a **priority environmental asset (PEA)** or **priority ecosystem function (PEF)**.¹¹ PEAs and PEFs (and their environmental watering requirements) are identified in the Basin-wide Environmental Watering Strategy¹² and the relevant LTWP¹³ (see discussion above).

Section 10.43 goes on to require that, if a risk is assessed as medium or higher, then the WRP must either:

- a) describe a strategy for the management of the water resources of the water resource plan area to address the risk in a manner commensurate with the level of risk; or
- b) explain why the risk cannot be addressed by the water resource plan in a manner commensurate with the level of risk.

Section 10.43(3) goes on to provide that a WRP must be prepared having regard to the strategies listed in section 4.03(3). The strategies in section 4.03(3) include implementing key elements of the Basin Plan including the EWP (which, as outlined above, encompasses the BWEWS and LTWPs¹⁴).

The strategies listed in section 4.03(3) will be relevant considerations in developing strategies under s10.43(1) to manage risks to environmental watering requirements identified in the risk assessment under s10.41.

The overall effect of these provisions is that, in preparing the draft WRP, the NSW Government is required to undertake a risk assessment which includes risks to meeting the environmental watering requirements identified in the BWEWS and LTWP and risks to water quality. In respect of any risks which are assessed to be medium or higher, the NSW Government must (having regard to the strategies in s4.03(3)) either:

- a) develop strategies to manage the water resources to address the risk in a manner commensurate with the level of risk; or
- b) explain why the risk **cannot** be addressed by the WRP in a manner commensurate with the level of risk.

It is important to note that the second option is available in circumstances where the risk ‘cannot’ be addressed in a suitable manner - this option is not available merely because the NSW Government would prefer not to address the risk.

¹¹ *Basin Plan 2012*, s1.07.

¹² Section 8.14(2)(a)(i).

¹³ Section 8.19.

¹⁴ The requirements for the BWEWS and LTWPs are in Divisions 2 and 3 of Chapter 8 (which is the Environmental Watering Plan).

The draft WRP incorporates the Risk Assessment in schedule D, which addresses risks to environmental watering requirements (s4.3.3), risks from climate change to meeting environmental watering requirements (s4.6.4), risks to water-dependent ecosystems from poor water quality (s5), and risks from climate change to other water uses (s7.3).

Section 8 and Table 1 of the Risk Assessment is incorporated by reference into the draft WRP to address the requirements of section 10.43(1) (ie. developing strategies to manage High and Medium risks or explaining why they cannot be addressed).

In this section we discuss:

- the legal flaws in the approach the NSW Government has taken to decisions under s10.43 of the Basin Plan 2012, particularly in relation to developing strategies to address the identified risks or deciding that a risk cannot be addressed; and
- the outcomes of the risk assessment which demonstrate the results of the above flawed process in the failure to reduce the initial risk rating of risks across the four categories relevant to the environmental health of the system and climate change.

Development of strategies to address High and Medium Risks

Section 8.3 and Figure 8-1 of the Risk Assessment outline the approach the NSW Government has chosen to take for addressing risks given an initial rating of High or Medium.

There are two steps in the process outlined in Figure 8-1 which demonstrate that errors of law were incorporated into the process the NSW Government implemented in purported compliance with section 10.43.

The discussion in section 8.3 reveals that multiple errors of law were made and several irrelevant considerations were taken into account in identifying strategies to manage risks for the purposes of section 10.43.

Figure 8-1

Figure 8-1 is a flow chart showing the decision-making process used to purportedly meet the requirements of section 10.43 of the *Basin Plan 2012*. There are two elements of this flow chart that could lead the NSW Government into legal error.

Figure 8-1 identifies a step (called 'Element 3') during which an assessment is undertaken of whether the identified strategy (ie. risk mitigation measure) is assessed to determine if the strategy affects another risk or 'results in a third party impact'¹⁵ (which we take to mean an impact on a consumptive water user). In such cases, the figure appears to allow the NSW Government to decide that the economic, social or cultural 'trade-offs' of a strategy are not acceptable and to return to a point in the decision-making process at which a decision can be made that mitigation of the risk is not possible.

This means that decision-making process would, for example, allow the NSW Government to elect not to meet environmental watering requirements established in the BWEWS or LTWP on the basis that impacts on third parties were not considered 'acceptable' (it is not clear what criteria were used to judge whether such impacts would be acceptable). **We do not believe that this complies with the requirements of section 10.43.**

¹⁵ See s8.2.3 Risk Assessment on page 74.

The second element of concern is ‘Element 2’, which asks whether the outcome of a risk mitigation strategy is to reduce the level of risk to a ‘tolerable’ level and, if not, to prepare an explanation of why the risk cannot be mitigated. Our key concern with this element is that it does not appear to require additional attempts to mitigate a risk through alternative means in the event the first solution is not successful. **This seems to be a quite limited approach to generating mitigation solutions and one that does not seem to provide a sufficient basis for a conclusion that a risk ‘cannot’ be mitigated for the purposes of section 10.43.**

Section 8.3

Section 8.3 of the Risk Assessment outlines the approach taken to addressing risks for which mitigation is considered possible.

This section of the Risk Assessment goes on to state that there are a number of “*overarching principles which guide the development of WRPs in NSW*” and states that those principles have been considered in the development of strategies to address the identified risks. This indicates that these ‘*overarching principles*’ were considerations that the NSW Government believed to be ‘relevant considerations’ for administrative law purposes.

The ‘*overarching principles*’, which are identified in table 8-3, demonstrate that, in approaching the mitigation of risks, the NSW Government has:

- failed to have regard to relevant considerations;
- had regard to irrelevant considerations; and
- misdirected itself as to the law in its interpretation of both the *Basin Plan 2012* and the *Water Management Act 2000 (NSW)*.

Commonwealth *Water Act 2007*

Table 8-3 of the Risk Assessment identifies the following as the relevant principles from the Commonwealth *Water Act 2007*:

- there will be no net reduction in the protection of planned environmental water;
- the Commonwealth is responsible for funding the gap between existing limits and the Sustainable Diversion Limit (**SDL**);
- WRPs will meet the requirements set out in the Basin Plan.

This list is not incorrect, as far as it goes, though the second bullet point is largely irrelevant for the purposes of drafting a WRP.

However, the list **fails to have regard to the objectives of the *Water Act 2007* and *Basin Plan 2012*** which should be used to guide and interpret the other obligations, in particular in undertaking the difficult task of preparing a WRP.

Basin Plan 2012

The sole principle identified as drawn from *the Basin Plan 2012* is:

“Nothing in the Basin Plan requires a change in the reliability of water allocations of a kind that would trigger Subdivision B of Division 4 of Part 2 of the Act (s 6.14).”

This not only **neglects all of the objectives of the *Basin Plan 2012*, it also identifies a provision that has no current function and applies an interpretation of that provision that is incorrect at law.**

The NSW Government appears to have assumed that section 6.14 of the *Basin Plan 2012* means that it can not (or need not) alter any rules in the WSPs that may affect the reliability of supply under Water Access Licences (**WALs**). This is wrong at law. When a WSP is made or amended or a WRP (incorporating a WSP) is made, it may well be appropriate to make new rules that affect the reliability of WALs if, for example, the previous rules were not achieving the outcomes required by the primary legislation.

Section 6.14 of the *Basin Plan 2012* must be read in the context of the relevant provisions of the Primary Act. Subdivision B of Division 4 of Part 2 of the *Water Act 2007 (Cth)* has the following general effect:

- It applies where there is a “change to the Basin Plan”.¹⁶ That means it does not apply to the original Basin Plan - only to subsequent changes. Section 6.14 merely has the effect of recording that there have not yet been any changes to the Basin Plan that trigger the operation of this subdivision.
- If a change to the Basin Plan results in a change to the reliability of a water allocation, then there may be a right to claim compensation from the Commonwealth if “*the change is reasonably attributable to the Commonwealth’s share of the change in reliability*”¹⁷;
- If the Basin Plan contains a relevant change, then it must specify the extent to which the changed reliability is attributable to changes in Commonwealth Government Policy (the ‘Commonwealth Government Policy Component’) and the extent to which the changed reliability is “*attributable to improvements in knowledge about the environmentally sustainable level of take for the water resources of the water resource plan area*” (this is the ‘new knowledge component’)¹⁸;
- The ‘Commonwealth’s share’ of the change in reliability is then calculated using the method in the National Water Initiative and the Regulations (if any).¹⁹

The key points to be taken from these provisions are that:

- Neither the *Water Act 2007* nor the *Basin Plan 2012* (or indeed state laws) prevent WRPs (or WSPs) from changing the reliability of WALs - in fact some changes to reliability may be necessary to meet the requirements of the *Basin Plan 2012* and the *Water Management Act 2000 (NSW)* through the ordinary application of good policy processes (given the very poor outcomes of the current WSP);
- The Basin Plan has not been subject to a change which engages the operation of section 6.14. As a consequence, that section has no relevance to the current process; and
- The relevant provisions of the *Water Act 2007 (Cth)* are about allocating compensation risk between the States and the Commonwealth - they do not constrain the content of a WRP.

¹⁶ See *Water Act 2007*, s80(2) and 81(1) and (2).

¹⁷ *Ibid* s80(4).

¹⁸ *Ibid* s81(3).

¹⁹ *Ibid* s81(4).

Overall this means that:

- **To the extent that the NSW Government has assumed that, in preparing its WRP and addressing the risks identified in the risk assessment, it cannot lawfully change the reliability of WALs - it has erred at law;**
- The assessment of how to respond to the identified risks must be undertaken anew on a lawful basis and without the assumption that reliability cannot be affected;
- The assessment of how to respond to the identified risks should be undertaken having proper regard to the Objectives of the Basin Plan and the state's obligations under s10.43;
- If this error of law has infected the NSW Government's approach to other elements of the WRP and WSPs, they should similarly be revisited and drafted in accordance with the law.

NSW Water Management Act 2000

Table 8-4 of the Risk Assessment identifies the following as a principle of the *Water Management Act 2000 (NSW)*:

"WSPs are required to balance social, cultural, economic and environmental needs of the community and catchments (this is a fundamental objective of water management in NSW and is described in the objects of the Act)."

This is wrong at law. The *Water Management Act 2000 (NSW)* does not, in any sense, authorise or require the environmental health of the system to be traded-off for economic or social objectives in some sort of 'balancing' exercise - in fact quite the opposite.

Section 3 of the *Water Management Act 2000 (NSW)* includes environmental, economic and social Objectives, however, it does not require or authorise those Objectives to be weighted equally. When read in the context of the balance of the Act (which is a fundamental requirement of statutory interpretation), it is clear that the Act recognises that the environmental health of the system must be protected in order to achieve its social and economic objectives (this is a pragmatic recognition of, among other things, the fact that the agricultural productivity of Basin is dependent upon healthy and functional natural systems and processes which provide services vital to water quality and availability).

This can be seen particularly in sections 5(3) and 9 of the Act which place a duty on decision-makers under the Act to give effect to the following priority order in making decisions about water sharing:

1. sharing of water from a water source must protect the water source and its dependent ecosystems, and
2. sharing of water from a water source must protect basic landholder rights, and
3. sharing or extraction of water under any other right must not prejudice the principles set out in paragraphs (a) and (b).

These provisions make it clear that, in preparing a water sharing plan, both the volumes of water allowed to be taken and the flow regimes created must firstly protect the water source and its dependent ecosystems, then ensure that basic landholder rights can be satisfied. Only after that process has been undertaken can any remaining water be made available for sharing under a bulk access regime (ie. under WALs).

These prioritisation requirements have been considered by the Court of Appeal²⁰ and, more recently by the Natural Resources Commission²¹.

The *Water Management Act 2000 (NSW)* does not require any system of ‘balancing’ environmental, economic and social needs. To the extent the NSW Government has assumed that it does in responding to identified risks, it has erred at law and the resulting decisions may be invalid.

Non-statutory considerations

Table 8-4 of the Risk Assessment also identifies the following principles from a document called 'Delivering WRP Plans for NSW Roadmap 2016-2019':

- *“WRPs are cost neutral for NSW licence holders,”and*
- *“Development of WRPs minimises change to NSW WSPs within their initial ten year terms.”*

These are not considerations which are relevant under the framework of either the *Water Act 2007 (Cth)* or the *Water Management Act 2000 (NSW)*.

While it may be lawful for the NSW Government to use these concepts as guidance in choosing between options which have been developed in a lawful way (ie. in accordance with s10.43 of the Basin Plan and having regard to relevant considerations only), they cannot be primary considerations and certainly ca not be used to avoid taking steps required by the statutory framework or to override other obligations under either state or Commonwealth legislation.

Recommendation:

- ***The decisions under section 10.43 of the Basin Plan, as outlined in the Risk Assessment, must be put aside and decisions about how to respond to each risk must be re-made in a way that accords with s10.43(1) and (3) of the Basin Plan 2012.***

²⁰ *Tubbo Pty Ltd v Minister Administering the Water Management Act 2000; Harvey v Minister Administering the Water Management Act 2000* [2008] NSWCA 356 per Spigelman CJ at [31].

²¹ See section 4.1 of *Natural Resources Commission, 2019, Final Report: Review of the Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources 2012*.

Outcomes of Risk Assessment

Table 1 of the Risk Assessment summarises the outcomes of the process undertaken in section 8, in purported compliance with section 10.43 of the *Basin Plan 2012*.

As outlined above, section 10.43 of the *Basin Plan 2012* requires the NSW Government, in relation to risks with an initial rating of High or Medium to:

- a) describe a strategy for the management of the water resources of the water resource plan area to address the risk in a manner commensurate with the level of risk;
- b) explain why the risk cannot be addressed by the water resource plan in a manner commensurate with the level of risk

The outcomes of this process, in relation to risks relevant to environmental watering requirements, ecosystem health and climate change, can be summarised as follows, based on our analysis of Table 1:

Risk type	Total risks	Total risks with initial rating of High or Medium	Total risks mitigated to a lower risk rating
Risks to water available for the environment and capacity to meet environmental watering requirements	31	High: 12 Medium: 16	High: 0 Medium: 0 Note that all High and Medium risks retain the same rating which is identified in the Table as 'Not tolerable'
Risks to water available for the environment due to climate change	3	High: 2 Medium: 1	High: 0 Medium: 0 Note that Table 1 appears to define the 'Tolerable' risk level as the same as the existing risk rating in each case
Risks to the health of water dependent ecosystems from poor water quality	37	High: 12 Medium: 14	High: 0 Medium: 0 Note that Table 1 appears to define the 'Tolerable' risk level as the same as the existing risk rating in each case
Risks to water available for other uses due to climate change	3	High: 0 Medium: 1	High: 0 Medium: 0

Of all of the risks identified in the Risk Assessment across these four categories, **not one single risk was mitigated down to a lower risk rating.**

In the case of the latter three categories, the Risk Assessment appears to suggest that the initial risk rating is 'tolerable'. This appears to amount to the NSW Government purporting to argue in each case that the implementation of strategies which fail to reduce the risk is 'commensurate with the level of risk' for the purposes of section 10.43(1)(a). We have serious doubts that this is lawful, particularly when applied to such a large proportion of the identified risks.

In the case of the risks to water for the environment and capacity to meet environmental watering requirements, the Risk Assessment doesn't even purport to argue that the identified risks are tolerable. The part of Table 1 which appears intended for explanation of either the level of risk identified as tolerable or the reason the risk cannot be addressed, instead contains the following text in each case:

"Risks are intolerable (Not tolerable). The hydrologic (likelihood) model for the Barwon-Darling is based on surveyed use of water (not full development). Therefore the impacts on the hydrograph are not potential impacts, but reasonable estimates of real impacts. This suggests that Key Ecosystem Assets and Functions are likely to be impacted by medium and high simulated changes, which are reflected in the risks associated with the flow metric." (our emphasis)

We think this makes it clear that **the NSW Government has not complied with section 10.43(1) of the Basin Plan, in that it has neither implemented a strategy to mitigate any of the High or Medium risks to environmental watering requirements nor identified that the risks cannot be addressed.**

Recommendations:

- ***The Risk Assessment must be re-done in a lawful manner to identify strategies to manage to environmental watering requirements, with a view to seeking to reduce all High and Medium risks to a rating of Low.***
- ***The resulting strategies must be implemented through amendments to the draft WSP and WRP.***

WRP Section 3.3 Strategies for addressing risks

Section 3.3 of the draft WRP sets out a list of the strategies that have been implemented pursuant to section 10.43 (noting, from the discussion above, that these strategies do not appear to be effective in addressing the identified risks).

Table 3-1 of the draft WRP contains a list of 15 strategies which have purportedly been developed pursuant to section 10.43 of the *Basin Plan 2012*. The strategies are stated quite briefly and, in order to understand the actions which make up each strategy, it is necessary to go to table 8-6 of the Risk Assessment.

Our concerns with this aspect of the draft WRP are that certain of the strategies appear to be misleading and either inadequate or ineffective.

Strategy 4: Environmental Watering Requirements

Strategy 4 in table 3-1 of the draft WRP is to:

“Manage environmental water to meet Environmental Water Requirements specified in the Barwon-Darling LTWP.”

The analysis set out above indicates that the Risk Assessment is actually predicting that many of the environmental watering requirements will not be met.

Some of the actions identified in table 8-6 of the Risk Assessment as making up this strategy are certainly positive steps for the Barwon-Darling (eg. IDELS, TDELS and new commence/cease to pump rules). However, **the fact that the Risk Assessment appears to demonstrate that they are insufficient to meet environmental watering requirements, means that including a statement like this in draft WRP is misleading.**

We also note that the actions making up this strategy include “strategic use of held environmental water” which, when viewed in the context of the failure of these strategies to reduce risks, demonstrates that even the deployment of HEW by the Commonwealth Environmental Water Holder and NSW Government is inadequate to protect the environmental assets and ecosystem functions of the Barwon-Darling.

Strategy 11: climate change

Strategy 11 in table 3-1 of the draft WRP is to:

“Protect the environment and water users from changes in flow attributable to climate change.”

The mechanisms that make up this strategy are:

- A. Reserving water above the long-term average annual extraction limit (**LTADEL**) as planned environmental water;
- B. Available water determinations (**AWDs**) which adjust extractive use according to water availability;
- C. The Sustainable Diversion Limit;
- D. Protection of HEW through proposed new water take restrictions;
- E. Strategic use of HEW guided by the LTWP.

None of these measures are actually directed towards addressing the impacts of climate change.

The LTAAEL (which essentially allocates water to the environment above a defined extraction limit) is an existing approach based on the average of *historical* extractions and is not a strategy for addressing the risks of lower water availability and a hotter, drier climate under climate change affected conditions. It is also a misleading indicator of the amount of water actually available for the environment, in that it is an average over many years. This has the result that the large amounts of water available in flood years disguises the fact that inadequate amounts of water may be available in normal to dry years.²²

Available Water Determinations (**AWDs**) are an existing tool under which licence holders are given access to a proportion of the nominal volume or shares available under their licence, depending upon the relative availability of water in the particular year. It is an existing mechanism used to address climate *variability*; it is not a mechanism to address the long-term changes we can expect to experience (and are already experiencing²³) as a result of climate change.

The Sustainable Diversion Limit under the Commonwealth *Water Act 2007* was expressly based on *historical* record and does not incorporate climate change projections.²⁴ It is not a tool that addresses climate change risk.

Held Environmental Water (**HEW**) is water available under an entitlement that held is for the purposes of achieving environmental outcomes.²⁵ While the NSW Government has some HEW available in the Barwon-Darling system²⁶, the majority of HEW available for this system is held by the Commonwealth Environmental Water Holder²⁷ and was acquired through programs aimed at achieving the SDL. Given that the SDL was calculated in a way that did not address climate change, it is misleading to suggest that the availability of HEW (the volume of which is largely a function of the SDL) is a climate change measure.

In our view, it is misleading to suggest that protection of HEW from consumptive take is a climate change measure. Such provisions merely ensure that the rules contained in the WSP/WRP don't permit holders of water access licences to extract HEW (which has been bought and paid for by the taxpayer to achieve environmental benefits) for consumptive purposes such as irrigation. This merely corrects a rather extraordinary defect in the current WSP which has the effect that releases of HEW can actually increase flows to the point of triggering commence-to-pump rules. While the correction of this flaw is welcome (and overdue), it is certainly not a climate change measure.

As a consequence, the discussion above of the failure of this strategy to effectively mitigate climate change related risks is perhaps unsurprising.

The inclusion of this strategy in the WRP is misleading in that it suggests that there are mechanisms in place to specifically address climate change risks, when clearly there are not.

²² See discussion on pages 4 and 53 of: Natural Resource Commission, 2019, Final Report: Review of the *Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources 2012*.

²³ See Findings 8 - 10 of Vertessy et al (2019).

²⁴ See Young WJ, Bond N, Brookes J, Gawes B & Jones GJ, 2011, Science Review of the estimation of an environmentally sustainable level of take for the Murray-Darling Basin: final report to the MDBA, CSIRO

²⁵ *Water Act 2007 (Cth)*, s4.

²⁶ See: <https://www.environment.nsw.gov.au/topics/water/water-for-the-environment/about-water-for-the-environment/current-water-holdings>

²⁷ See: <https://www.environment.gov.au/water/cewo/about/water-holdings>

The findings of the recent independent inquiry into the fish kills that occurred over the summer of 2018/19²⁸ included:

- Finding 8: the fish death events in the lower Darling were preceded and affected by **exceptional climatic conditions, unparalleled in the observed climate record**;
- Finding 9: the recent hot-dry weather events in the northern Basin have been **amplified by climate change**. Future changes in the global climate system are likely to have an **even more profound impact on the hydrology and ecology** of the Murray-Darling and increase the risk of fish deaths in the future; and
- Finding 10: Runoff responses to rainfall in the northern Basin appear to have been more severely reduced during recent droughts when compared to previous droughts, compounding the impacts of drought on downstream long-term water availability.

The final report of the NRC similarly found that reduced inflows due to factors including climate change were already affecting flow patterns in the Barwon-Darling²⁹ and documented that the recent fish kills were also accompanied by similarly devastating, though less visible, kills of river mussels and river snails.³⁰

Given that climate change is already being felt in the Barwon-Darling and that further fish kills are expected this summer, it is extraordinary that the NSW Government has used the seven years which have elapsed since the *Basin Plan 2012* commenced to prepare a plan which relies upon tools based on the historical record. This is a disservice both to the already degraded biodiversity of the Barwon-Darling but also to water users who will, no doubt, need to adjust to further changes to water rules when these rules are shown (as predicted in the Risk Assessment) to be ineffective to protect the biodiversity and natural processes upon which agriculture in the Basin depends.

Recommendation:

- **All risk mitigation strategies need to be re-visited and new mechanisms developed which actually address and mitigate the identified risks, particularly in relation to climate change.**

²⁸ Vertessy et al, 2019, Final Report of the Independent Assessment of the 2018-19 fish deaths in the Lower Darling.

²⁹ See page 64.

³⁰ See pages 73 – 74.

WRP section 4.1: ‘Non-statutory environmental water’

The introductory text of section 4.1 is followed by explicit discussions of Planned Environmental Water (**PEW**) in section 4.1.1 and Held Environmental Water (**HEW**) in section 4.1.2.

The introductory text includes the following discussion of water access licences held for ‘non-statutory’ environmental purposes:

“In addition to environmental water defined under section 8 of the WM Act 2000, the NSW Department of Planning, Industry and Environment recognises that a significant number of water access licences are purchased and/or held for environmental purposes. This type of licensed environmental water is described as having a ‘non-statutory’ environmental purpose. A licence is classified as having a non-statutory environmental purpose by agreement between the NSW Department of Planning, Industry and Environment and the holder of the licence.”

When read in the context of the section of the WRP (which is a document made under the Commonwealth *Water Act 2007*), this text suggests that there is a third category of environmental water beyond the PEW (which is a creation of NSW statute) and HEW (which is a key concept under the *Water Act 2007* and *Basin Plan 2012* and includes the portfolio established under the Commonwealth statute).

Given that HEW is, in large part, a portfolio of water established under the *Water Act 2007 (Cth)* and that this draft WRP is prepared under the same statute, it is inaccurate to describe HEW as ‘non-statutory’.

However, our search of the Environmental Water Register for ‘non-statutory’ water access licences in this plan area revealed 14 water access licences in this category, all of which were held by the Commonwealth Environmental Water Holder, the NSW Department of Planning, Industry and Environment or one of those agencies jointly with NSW National Parks and Wildlife. These licences have a cumulative share of 28,871, which (together with one licence for ‘adaptive environmental water’ with a share of 1488) is the precise number of shares discussed in section 4.1.2 as the total volume of HEW available in the system.

This would appear to indicate that **the ‘non-statutory’ environmental water discussed in the above excerpt is, in fact, HEW.**

Recommendation:

- **The text on page 20 of the draft WRP should be amended to clarify that the ‘non-statutory’ environmental water is, in fact, held environmental water (HEW).**

WRP section 4.5: No net reduction in the protection of PEW

Section 21(5) of the *Water Act 2007 (Cth)* provides as follows:

“The Basin Plan must ensure that there is no net reduction in the protection of planned environmental water from the protection provided for under the State water management law of a Basin State immediately before the Basin Plan first takes effect.”

This is reflected in the requirements for WRPs set out in section 10.28 of the *Basin Plan 2012*:

“A water resource plan must ensure that there is no net reduction in the protection of planned environmental water from the protection provided for under State water management law immediately before the commencement of the Basin Plan.”

This requirement is reflected in section 4.5 of the draft WRP and explained further in the report in Appendix C.

The intent of this requirement is explained in the report in Appendix C in the following way:

“This is because the environmental outcomes of the Basin Plan are based on modelling that incorporates the planned environmental water (PEW) rules that existed as at 23 November 2012. Any change to PEW rules, or rules that were designed for an environmental purpose, could potentially undermine the environmental outcomes that the Basin Plan is seeking to achieve. The Basin Plan requirement (s10.28) for no net reduction in the protection of PEW ensures this doesn't occur.”

As this excerpt conceded, the intent behind the rule in sections 21(5) of the Act and 10.28 of the *Basin Plan 2012* is that a minimum level of protection of PEW be maintained on the assumption that this is the level of protection that was modelled as existing when the key settings of the *Basin Plan 2012* (including the Sustainable Diversion Limit (**SDL**)) were established.

However, this is not the case for the Barwon-Darling.

The modelling that sits behind the SDL, and the amendments made to it following the Northern Basin Review, both incorporate the level of development and rules which were in effect in the Barwon-Darling in 2007/2008 and not on the rules which came into effect in the current *Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources 2012*³¹.

This means that the exercise set out in Appendix C compares the level of protection of PEW under the draft WSP not with the level of protection included in the modelling for the Basin Plan 2012, but with the reduced levels of protection in effect under the current water sharing plan.

³¹ Murray-Darling Basin Authority, 2016, Hydraulic Modelling for the Northern Basin Review, at pages 21 - 22, found here: https://www.mdba.gov.au/sites/default/files/pubs/NB-modelling-report_0.pdf
See also the discussion on pages 438 - 439 of the South Australian Murray-Darling Basin Royal Commission Final report, found here: <https://www.mdbrc.sa.gov.au/sites/default/files/murray-darling-basin-royal-commission-report.pdf?v=1548898371>

As a consequence, while the exercise that has been undertaken in Appendix C of the draft WRP may demonstrate compliance with the **legal** requirement, it is of no **practical** relevance in that it does not assess whether the assumptions about protection of PEW incorporated into the modelling for the *Basin Plan 2012* have remained the same (or improved).

In that regard, the report does not inform the public or the Murray-Darling Basin Authority about whether the proposed level of protection for PEW will, as the report itself explains, “*potentially undermine the environmental outcomes that the Basin Plan is seeking to achieve.*”

The overall effect is, therefore, that the report in **Appendix C, while complying with the letter of the law, is both misleading and fails to accord with the purpose of the law.** The assessment in that report has nothing to say about whether the level of protection of PEW is the same as that which was modelled in the development of the *Basin Plan 2012*.

In light of this failing, and to ensure transparency, the NSW Government must:

- acknowledge that the intended practical effect of s10.28 of the *Basin Plan 2012* is not met by the exercise Appendix C; and
- provide additional analysis comparing the level of protection of PEW under the amended WSP with the level of protection in effect in the 2007/2008 (ie. assumed in the modelling that sits behind the SDL).

We also note that the report in Appendix C relies heavily on achieving the Long-Term Average Annual Extraction Limit (**LTADEL**) as a measure of protection of PEW. This is despite the fact that the NRC found the LTADEL to be a highly misleading indicator to use as a measure of environmental outcomes, particularly in such a highly variable system as the Barwon-Darling.

Recommendation:

- ***The NSW Government should prepare and publicly release analysis comparing the level of protection of PEW under the amended WSP with the level of protection built into the modelling used to inform the development of the SDL and the Basin Plan 2012.***

WRP section 4.2: rules to meet the environmental watering requirements of PEAs and PEFs

This section of the draft WRP purports to respond to section 10.17 of the *Basin Plan 2012*. This is a key section because it ensures that the high level objectives of the *Water Act 2007 (Cth)* in relation to restoring the ecological health of the system (which are fleshed out in the BWEWS and LTWP) are integrated into WRPs (as the operational documents that actually govern the flows in the rivers).

A failure to comply with this requirement could seriously compromise capacity to achieve the overall objectives of the *Water Act 2007 (Cth)*.

Section 10.17 of the *Basin Plan 2012* requires the NSW Government, in preparing the WRP, to have regard to:

“whether it is necessary for it to include rules which ensure that the operation of the plan does not compromise the meeting of environmental watering requirements of priority environmental assets and priority ecosystem functions”

If the outcome of that assessment is that such rules are necessary, they **must** be included in the WRP (s10.17(3)).

As discussed above, PEAs and PEFs, and their respective environmental watering requirements, are defined in the BWEWS and LTWPs.

The draft WRP doesn't contain a document setting out a separate assessment to meet the requirements of section 10.17. It instead relies upon the Risk Assessment to comply with that obligation.

As discussed above:

- The Risk Assessment predicts that a significant number of the environmental watering requirements will not be met; and
- Does not include rules (ie. the strategies discussed above) which are effective to mitigate such risks.

The Risk Assessment is probably adequate to comply with the first step of section 10.17 (that being to assess whether it is necessary to include rules which ensure that the operation of the plan does not compromise meeting environmental watering requirements).

However, **we do not believe that the second step of section 10.17 has been complied with**. In our view, the High and Medium risk ratings across many of the environmental watering requirements identified in the LTWP strongly suggest that rules are required to avoid compromising environmental watering requirements. That means **the NSW Government is under an express obligation under s10.17(3) to include rules to avoid compromising environmental watering requirements. It has not done so.**

Our conclusions in this section appear to be reinforced by the following excerpt from Appendix C of the draft WRP, which discusses the level of protection of PEW:

*“Proposals to change water sharing plan rules have been developed in close consultation with the Department of Planning, Industry and Environment Biodiversity and Conservation (DPIE B&C) and NSW Department of Primary Industries—Fisheries (DPI F) consistent with WSP objectives **and where***

possible using environmental water requirements (EWR) in the draft LTWPs to ensure the best environmental outcomes.” (our emphasis)

The report doesn't elaborate on the criteria used to identify what is 'possible' in this context, however, it does appear to:

- demonstrate the NSW Government's awareness that the objectives of the draft WSP are not consistent with the environmental watering requirements of the LTWP; and
- indicate that the decision-making process leading to the WSP water sharing rules was not consistent with s10.17 of the *Basin Plan 2012*.

Recommendation:

- ***The draft WRP and WSP must be amended to include rules to avoid compromising environmental watering requirements. This will involve rules to reduce risk ratings for risks to EWRs from High or Medium to Low.***

WRP section 6: Water Quality Management

The key provisions of the *Basin Plan 2012* in relation to water quality for surface water are sections 10.29 - 10.35, which require each WRP to include a water quality management plan. Sections 10.41 and 10.43 (discussed above) also require the risk assessment to include “risks arising from elevated levels of salinity or other types of water quality degradation”³², while s10.31 links the risk assessment to the water quality management plan.

Water quality is significant (as discussed in the Risk Assessment) to both the ecological health of the system and its ability to provide water suitable for domestic, stock watering, cropping and other uses.

We acknowledge that some water quality issues (such as the effects of flow management on water quality) are susceptible to management under water-related legislation, while others - in the absence of legislation implementing integrated catchment management – are not (such as deforestation and other land use issues). Others still are being addressed in part through related tools (such as the salt interception schemes and Basin Salinity Management Plan 2030, which partially address the issue of salinity in the Basin). In that regard, we acknowledge that not all risks to water quality can be addressed through the WSP/WRP alone. However, flow management is critically important to addressing some water quality issues (in particular providing for connectivity and blue-green algae suppression), with the consequence that the flow regime created by the WSP is a key tool in managing water quality issues.

The fact that the Risk Assessment appears to define the ‘tolerable’ risk level as the same as the initial risk rating for each water quality-related risk would seem to suggest that **there has not been a legitimate attempt to mitigate any of the risks.**

Recommendation:

- ***The NSW Government must repeat the risk assessment for water quality issues with a view to mitigating at least those risks to water quality that can be addressed through flow management.***

³² See 10.41(2)(d).

Draft Water Sharing Plan

We also raise the following issues in relation to the particular provisions of the draft WSP:

- The **account carry-over rules** in effect under the current WSP³³ were found by both *Vertessy et. al. (2019)*³⁴ and the Natural Resources Commission³⁵ to have contributed to excessive take under A class licences, particularly during ecologically important low flows and to have extended cease-to-flow events. The rules in section 42 of the draft WSP would appear to allow this situation to persist (subject to some mitigation by IDELS), despite the recommendations of these independent reports. In our view, the protection of the critically important low flow events warrants reductions in permissible carry-over.
- Section 42A of the draft WSP implements an Individual Daily Extraction Component (**IDEC**) which limits the water that can be taken under a water access licence on any day. Section 42A(4) provides the Minister with a *discretion* to reduce the IDEC on any day to protect '**Active Environmental Water**' (which is water, such as HEW, that is to be protected from consumptive take to facilitate environmental outcomes). The difficulty with this provision is that there is no certainty that this discretion will be exercised, and therefore no certainty that HEW (purchased with public funds for environmental purposes) will be allowed to have its intended effect. This discretion must be replaced by clear rules to ensure that Active Environmental Water is protected from consumptive take.
- **Section 49(3)** of the draft WSP, which is intended to facilitate the protection of Active Environmental Water through the adjustment of flow classes, is similarly reliant upon the Minister exercising a discretion and therefore provides uncertain protection for Active Environmental Water.
- The **Note to section 45A** appears to be inconsistent with recommendation 13 of the NRC report, in that it continues to rely on the exercise of Ministerial discretion under section 324 of the *Water Management Act 2000 (NSW)*. The qualifications in section 84(1)(h) of the types of changes that can be made in response to updates to the *Interim Unregulated Flow Management Plan for the North-West* appear to be inconsistent with recommendation 13 and suggested action G(a) of the NRC report.
- The Minister's note on page 48 - 49 of the draft WSP is troubling for two reasons. Firstly, because it outlines a decision not to accept a recommendation of the NRC, in relation to **A Class licence thresholds**, that was aimed at protecting low flows which are important ecologically, for connectivity and for water quality. Secondly, the inclusion of a note to justify departure from one recommendation implies that the other recommendations have been adopted, which is not the case.

Recommendation:

- ***The draft WSP be amended to remedy each of the above issues.***

³³ Which were among the controversial changes inserted into the WSP after the last publicly available draft WSP.

³⁴ See Finding 16 on page 65 and recommendation 1 on page 72.

³⁵ See section 8.4 and recommendation 10.

1 November 2019

Water Planners (various) for Darling River Water Resource Areas
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Water Resource Plans for the Darling River

To whom it may concern,

The NSW Irrigators' Council (NSWIC) is the peak body representing irrigation farmers and the irrigation industry in NSW. This letter is in support of our Member Organisations who have provided submissions on the relevant Water Resource Plans (WRPs) for the Darling River, and also presents the views of NSWIC in regards to critical matters for WRPs across the state.

NSWIC supports the local irrigation farmers in the relevant WRP areas, who are represented by two of our Member Organisation: Barwon-Darling Water and South Western Water Users. Where matters are specific to the local area, NSWIC refers to our relevant Member Organisations for their expertise and valuable local knowledge through a long history of involvement in local water management.

Whilst overall, NSWIC supports the development of WRPs as critical to implementation of the Murray-Darling Basin Plan, given Sustainable Diversion Limits (SDL) are now in place, water users feel there remains fundamental errors across WRPs that require immediate resolution prior to accreditation, as well as new and improved process for public consultation.

Consumptive water usage

Consideration must occur of how management rules can be improved to ensure that the level of take is at or near the SDL (rather than on average being significantly less than the Diversion

Limit, as has occurred to date – allowing for a significant ‘cap credit’ to develop across the state).

Action. NSWIC seeks for all NSW WRPs to include a review trigger to respond if a trend of under-utilisation occurs to allow for the timely investigation of the cause of underuse and whether there may be a need to amend the WRP. An SDL credit mechanism or process would be highly appropriate to outline a clear and transparent process for if a trend of underusage does occur, in a similar manner to the mechanisms in place to respond if a trend of over-usage against the SDLs occurs.

Given stakeholder concerns arising from the significant accumulation of cap credits under the previous system, believed to have arisen from a combination of factors (but mostly restrictive WSP rules), a review of the utilization of consumptive water at present, including the causes of underuse in previous WSPs, would be beneficial to stakeholder confidence and improved water management. A review with the objective of optimisation of water usage within the consumptive share of water available to agriculture, including investigation of options to optimise usage up to the SDL, would be beneficial to social and economic objectives, as well as stakeholder confidence.

Thus, NSWIC seeks an insertion into all NSW WRPs that amendments to the WRP will be provided by NSW following further investigations and consultation on proposed rule changes. This would optimise water usage up to the SDL in each valley and ensure WRPs do not further impact on water use below the SDL.

Public Consultation

Public consultation processes have been described as fundamentally flawed. New models of participatory policy development are needed given stakeholders have lost confidence in existing processes which have proved to be ineffective and highly disappointing.

NSWIC are concerned that as part of the SAP process water users have reported that there was neither opportunity nor appetite to change rules for improved conditions for productive water use - despite proposed rule changes being legally valid, remaining within the ‘productive water bucket’, and independently assessed as complying with Basin Plan requirements. Water users have reported concerns of a number of outstanding issues which remain unresolved, and

seemingly unattended to, as well as changes which have occurred without adequate stakeholder consultation.

Action. NSWIC seeks that WRPs include a clause for each unresolved grievance, or rule change that was inappropriately not progressed by the SAP, to be subject to review and further consideration by the SAP with amendments to the WRP (and WSP where required) to be provided by July 2020. NSWIC Members are able to provide specific examples of grievances where a resolution clause is needed.

NSWIC also seeks that the final WRP documents (and subsequent WSP changes) be made publicly available prior to finalisation / progression to the MDBA for accreditation.

Plan Limits and Planned Environmental Water

Water users have become concerned that underused consumptive water will become Planned Environmental Water (PEW) by default, following from legal advice. Simplification of PEW rules would aid in clarifying this matter.

Action. NSWIC seeks specification in NSW WRPs that PEW does not include water in the consumptive water share. For example, the Queensland definition offers this certainty:

“The WRP defines planned environmental water (PEW) as the remaining share of the water resource that is not in the consumptive water share (i.e. permitted to be taken under the Act and water plan) and sets out rules and arrangements within the relevant legislative instrument for its management.”

Ensuring property rights of water licence holders are recognised

Any reduction in consumptive water - whether intended, or simply, in effect due to restricting access, availability, duration, timing, utility or reliability of water - must be either avoided, or at least accounted for, transparent, clearly communicated to those impacted, and justly compensated.

Given river communities are typically irrigation-dependent, in terms of their reliance on secure water access for agriculture as the dominant economic activity, compensation must be for individual licences holders, but also to communities through measures to alleviate the social and economic damages by supporting communities through these times.

Social and Economic objectives are also critically important

Social and economic objectives must genuinely be given equal value with measures to drive the irrigated agricultural sector and communities forward to best prosper within water management arrangements. Whilst there is a great deal of focus on achieving environmental objectives, measures to see communities and the agricultural sector flourish are minimal. The current drought shows the devastation caused when communities can't access water, including the impacts on the very survival of the town, employment (and thus welfare dependency and crime rates), business closures, school attendance as well as mental health. NSWIC wishes to see clear strategies developed and pursued to actually achieve social and economic objectives for river communities.

Other matters

For specific components of the various WRPs, NSWIC refers to the submissions which have been provided by our Member Organisations, and urges you to utmost consider and value the local knowledge, and lengthy history of experience these organisations have had through their involvement in water management for their communities and river environment. NSWIC Members are willing to further assist government through constructive and informed advice.

Conclusion

The crux of our suggested actions is to find ways to best manage consumptive water within the allowable share of water for agriculture, and to allow stakeholders appropriate channels to contribute constructively for this purpose. The most effective use of allowable water for agriculture would ensure that we, as a state, can produce the most food and fiber from the amount of water which is permitted to be sustainably diverted for agriculture.

NSWIC strongly supports our two Member Organisations impacted by these Darling River WRPs, and we note that it is critical that local water users and these representative bodies are utilised and respected as a valuable knowledge source.

Yours sincerely,



Luke Simpkins
Chief Executive Officer

Draft Barwon-Darling Water Resource Plan – Submission

Bill Johnson

The Barwon-Darling WRP is a better plan than it would have been without the various reports into water management in the Basin since 2017, especially the Matthews Report (2017) and NRC Report (2019). The NSW government can be congratulated for this, with special mention of the agency staff who have worked hard to bring it about. Three elements especially are worth noting;

- Active management in unregulated rivers,
- Managing resumption of flow,
- The undertaking to implement individual and total daily extraction limits.

A strong Environmental Water Advisory Group will be vital for effective active management, including managing resumption of flow and helping coordinate inflows to the Barwon-Darling from its tributaries.

The Draft Barwon-Darling Water Resource Plan is an improvement on the 2012 Water Sharing Plan. However, I cannot see how it will enable full achievement of the objectives of the *Water Management Act 2000* and the *Water Act 2007*, or NSW's obligations under the Murray–Darling Basin Plan (section 1.1), and the objectives and outcomes of the Water Resource Plan (Box 1.1). The broader water management context of the Barwon-Darling Basin plan places major barriers to achieving these obligations, objectives and outcomes. These include;

- Modelling,
- The NSW floodplain harvesting policy, and the relationship between the SDL and the BDL,
- The recommendation from MDBA's Northern Basin Review,
- Lateral and longitudinal connectivity and end of system flows,
- the WaterNSW 20-year infrastructure strategy,
- Implementation of the principles of the NSW Water Management Act 2000,
- Appropriate recognition and planning for global warming, including available water determinations, and allocation of water to extraction.

There are parallel and opposing processes operating in NSW, and the Basin generally. On one hand commitments to restore the river are explicit in State and Commonwealth legislation and plans. On the other are inadequate steps to achieve them. The most egregious example is the WaterNSW 20-year infrastructure strategy and active steps to build more dams and weirs. It is likely that the BD WRP and other NSW WRPs, especially in the Barwon-Darling Basin, will be overwhelmed by these countervailing pressures. They appear outside the scope of planning for Water Resource Plan areas, yet are likely to have a greater effect on the condition of the river than the WRP.

Modelling

The hydrological modelling for the Northern Basin in general and the Barwon-Darling in particular is acknowledged to be inadequate for management. There have been many assurances, including during consultation for floodplain harvesting, that in future models and explanations of them will be improve. These improvements will take time, and while the models remain inadequate their shortcomings impede good planning and management.

The NSW floodplain harvesting policy, and the relationship between the SDL and the BDL

Concerns about floodplain harvesting have been expressed in many forums and submissions. There has been no acknowledgement from the NSW or Australian governments that implementation of the policy will seal the degradation of the rivers of the northern Basin, and reduce the likelihood of achieving the objects of the *Water Management Act 2000* and the *Water Act 2007* from remote to impossible. The associated rationalisation of the relationship between the SDL and the BDL (that the SDL will rise as the BDL rises), is utterly unconvincing. I am persuaded that this proposal is incorrect and unlawful. An explanation by the MDBA in recent Senate Estimates did nothing to change this view.

MDBA's Northern Basin Review

My concerns about the outcome of the Northern Basin Review are expressed elsewhere. The outcome, reducing recovery in the Barwon-Darling Basin by 70 gigalitres, makes it harder to achieve the aims of the WRP.

Lateral and longitudinal connectivity and end of system flows

The Barwon-Darling Basin is one system and the planning process does not recognise this adequately. A major reason for the damage to the river is administrative and management fragmentation, meaning that it is managed piecemeal, with little capacity for downstream areas to influence management upstream. The Barwon-Darling Basin is a connected system. The first objective and primary aim of management should be an end of system flow target at Wentworth.

The Lower Darling and the Barwon-Darling should be one planning area. In addition, all Northern Basin WRPs should guarantee connectivity with the Barwon-Darling before any extraction occurs. Specific end of system flow targets for the tributaries of the Barwon-Darling are necessary.

Floodplain harvesting has an unacknowledged although catastrophic effect on the floodplains and rivers of the Barwon-Darling Basin. The rivers must be allowed adequate connection with their floodplains.

WaterNSW 20-year infrastructure strategy,

The WaterNSW 20-year infrastructure strategy (2018) is a resuscitated version of the plans of the 1970s and earlier. It is based on unrealistic projections of water availability and wilful blindness to the realities of the river system and the climate. I acknowledge that it has little to do with other NSW government departments. However, at least some of the proposals are being actively considered or even stated to be built by the NSW Government. The strategy demonstrates the parallel, seemingly unconnected, processes at play in NSW.

Appropriate recognition and planning for global warming, including available water determinations, and allocation of water to extraction.

For the objects of the *Water Management Act 2000* and the *Water Act 2007* to be achieved changes must be made to the way water is allocated to extraction.¹ This includes recognition of droughts of record on regulated rivers and changes to the carryover provisions on unregulated rivers. Allowing carryover of the right to take water from a river that had no water to take shows no recognition of environmental or downstream community needs and is in fundamental opposition to good river management. Planning for extractions remain based on long-term averages, and appears to still represent the view that climatic conditions in the Northern Basin will remain as they have been. The plan does not plan adequately for climate change.

Implementation of the principles of the NSW Water Management Act 2000

The Draft Water Resource Plan does not address the problems of the Barwon-Darling adequately, and so cannot be consistent with the requirements of the *Water Management Act 2000*. The 2019 report by the NSW Natural Resources Commission into the Barwon-Darling Water Sharing Plan states;

Priorities under the [Water Management] Act are clear

The Act makes it clear that water sharing is not about balancing uses and values, it is about firstly providing for the environment and secondly recognising basic landholder rights above other uses. The relevant water sharing principles are found in section 5(3) of the Act (water sharing principles), and are part of a broader set of water management principles. The Act specifies that:

“a) sharing of water from a water source must protect the water source and its dependent ecosystems, and

b) sharing of water from a water source must protect basic landholder rights, and

c) sharing or extraction of water under any other right must not prejudice the

¹ Slattery, M. Johnson, W. Campbell, R. 2019. *Owing down the river; mortgaging the future flows of the Barwon-Darling/Barka River*. Discussion paper. The Australia Institute, Canberra.

principles set out in paragraphs (a) and (b)."

Further, section 9(1) of the Act provides that "It is the duty of all persons exercising functions under this Act:

a) to take all reasonable steps to do so in accordance with, and so as to promote, the water management principles of this Act, and

b) as between the principles for water sharing set out in section 5(3), to give priority to those principles in the order in which they are set out in that subsection." ²

Conclusion

The language of the WRP shows that the NSW Government sees rivers primarily as sources of water for consumptive use. Environmental needs remain residual considerations for management. This is demonstrated by the 101 times that the words 'loss' or 'losses' appear in the Active Management document alone. These words are applied to water that replenishes groundwater and soil moisture, fills waterholes and distributary streams, waters wetlands, supports plants and animals, and provides connectivity and end of systems flows for rivers, streams and other watercourses. This water is not lost. It is vital to achieve the principle of the *Water Management Act 2000* and the *Water Act 2007*, to protect rivers, wetlands and their dependent ecosystems. This language shows that the mental models and perspectives guiding water management in the NSW Government remain dominated by extractive use and irrigation, marginalising or excluding other perspectives. Language shapes thinking and must be inclusive.

The state of the Barwon-Darling River has been brought about in large measure by the way NSW operates its rivers and allocates and distributes water, made worse by unprecedented dry times. The management system is based on flawed assumptions and is not adapted to the climate of the Basin.

There is little that can be done in the short-term to restore adequate flows to the Barwon-Darling River. Steps towards it include ensuring that all rivers have end-of-system flows before water is allocated to irrigation, acknowledging record low inflows and changing the way water is allocated.

In 1987 the NSW Department of Environment and Planning released a report that stated;

In this session of Parliament, (Budget 1986) the Water Resources Commission will be abolished, as approved by Cabinet following its review of the Water Administration Audit. The Audit found the WRC was ineffective in management of the State's water resources, having difficulty in moving beyond its former role of rural supply authority.

² NSW Natural Resources Commission. 2019. *Final report, Review of the Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources 2012*. NSW Government, Sydney.

*Broad water needs of the whole community, including the needs of the natural environment, were residual considerations to irrigation development and operations...The new Department of Water will be required to address cultural, scientific and aesthetic values as legitimate community needs in terms of water management.*³

This aim is as relevant today as it was in 1987.

³ Department of Environment and Planning. 1987. *Regional Environmental Plan for the Macquarie Marshes, Department's Minute: 17 November 1987.*

SUBMISSION: BARWON-DARLING WATERCOURSE WATER RESOURCE PLAN

Context

The Commonwealth Environmental Water Holder (CEWH) appreciates the opportunity to provide a submission on the draft Barwon-Darling Water Resource Plan (draft Barwon-Darling WRP) and accompanying documents.

This submission is made in the context of potential risks to the CEWH's statutory responsibilities, and proposes strategies to mitigate residual risks, consistent with the risk-based approach embedded within the Basin Plan (Chapter 10, Part 9). The CEWH's statutory responsibilities regarded in formulating this submission include:

- the *Water Act 2007* and Basin Plan 2012, to protect and restore priority environmental assets and ecosystem functions of the Murray-Darling Basin;
- the *Public Governance, Performance and Accountability Act 2013* (PGPA Act), to ensure the efficient and effective use of Commonwealth resources (held environmental water); and
- advice with regard to Matters of National Environmental Significance protected under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), including, listed threatened species and endangered ecological communities and species of migratory waterbirds protected under international agreements.

The majority of matters raised in this submission have been discussed through the Stakeholder Advisory Panel and through the interagency working group for the 'better management of environmental flows' as part of the Water Resource Plan (WRP) and the NSW Water Reform Action Plan (WRAP) processes. In most cases, good progress has been made by the NSW Department of Planning, Industry and Environment (Department), but some matters raised have not been finalised or fully resolved.

Some matters proposed to be addressed after this consultation period (e.g. Active Management Procedures Manual for the Barwon Darling), will directly impact the effective management and protection of water for the environment. To ensure pending measures are developed in a transparent and inclusive way, the Department is encouraged to continue meaningful consultation with environmental water managers through a group such as the Inter-agency Working Group and guided by a structured plan of work.

Structure of the submission

Part A: Catchment specific issues

1. Individual and Total Daily Extraction Limits (IDELs & TDELs)
2. Active management of held environmental water
3. Planned environmental water
4. Operational strategies and transparency
5. Other matters

Part B: State-wide issues

6. Extreme events
7. SDL Compliance
8. Monitoring, reporting and accounting
9. Water Quality Management Plan
10. Consultation and refinement of matters not resolved

Appendices

- A. The CEWH's submission on the NSW draft policy paper for *Active Management in Unregulated Rivers*

PART A: CATCHMENT SPECIFIC ISSUES

1. Individual and Total Daily Extraction Limits (IDELs & TDELs)

Individual Daily Extraction Limits (IDELs) are an important tool in the sharing of flows between users across the Barwon-Darling river system. Depending on their configuration, IDELs may also assist in protecting low flows and freshes as well as the first flow after a dry period.

IDELs based on a combination of pump capacities and agreed pumping rates have been proposed within the amended Water Sharing Plan for the Barwon-Darling Unregulated River Water Source 2012 (draft Barwon-Darling WSP). The amendments also propose that IDELs will be distributed within each licence class and across the whole water source based on the licence holders' access licence share components.

The Natural Resources Commission's (NRC) final report on the review of the Barwon Darling Water Sharing Plan contains several key recommendations regarding the development of IDELs and TDELs within the Barwon Darling system¹. The CEWH strongly supports these recommendations.

While the IDELs proposed as part of the package of changes to the Barwon-Darling WSP are a positive step forward, they do not appear to be fully consistent with recommendations made by the NRC in their review of the Barwon-Darling WSP.

The NRC's Review¹ recommends implementing daily extraction limits based on the extraction rates authorised and in place before the introduction of the Barwon-Darling WSP in 2012. The NRC's recommendation seeks to restrict A Class licence extraction equivalent to 150mm pump capacity. The daily extraction limits proposed as amendments in the draft Barwon-Darling WSP are based on the maximum of the sum of authorised pump capacities or the sum of agreed pumping rates for any installed pumps on commencement of the 2012 WSP.

¹ Natural Resource Commission Review of the Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources 2012 – Recommendation 8

The CEWH considers that implementing daily extraction limits based exclusively on actual pump capacities for installed works existing prior to the making of the Barwon-Darling WSP in 2012 as being fundamental to ensuring the equitable sharing of flows across entitlement holders in each licence class. It is also likely that daily extraction limits based on actual pump capacities for installed works existing prior to the making of the 2012 Barwon-Darling WSP will assist in maintaining the duration of ecologically significant flows for achieving the outcomes characterised within the relevant long term watering plans (LTWP); with regard to the Barwon-Darling system and the hydrologically connected Lower Darling River.

Consistent with the NRC's recommendation, the CEWH supports establishing Total Daily Extraction Limits (TDELs) within a river reach to ensure daily extraction at a reach scale is within agreed limits to minimise adverse impacts on environmental watering requirements and the critical requirements of downstream water users. The TDELs for each river reach are proposed within the draft Barwon-Darling WSP to be based on the sum of the IDELs within that reach. Analysis of whether this approach will support the priority assets and functions within the Barwon-Darling or the connected Lower Darling River, consistent with Basin Plan requirements², does not appear to have been undertaken.

To ensure TDELs form an effective mechanism to constrain daily extraction within an environmentally sustainable level of take and ensure equitable access between water users within a reach, it is recommended that IDELs are distributed based on licence share components, across each licence class, within each management zone. The CEWH agrees with the NRC's recommendations³ that a 2023 review of the Barwon Darling Water Sharing Plan should include a particular focus on further refinement of TDELs to:

- better consider system connectivity; and
- meet the environmental water requirements of priority ecosystem functions and environmental assets identified in the Barwon-Darling LTWP.

² Basin Plan – s10.17, 10.27

³ Natural Resource Commission Review of the Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources 2012 – Recommendation 8(b)

Recommendations are provided below to support the development and implementation of water access rules within the Barwon-Darling water resource area. Further information relating to the CEWH's position on using IDELs as a basis for distributing available volume between licence holders along the Barwon-Darling is discussed further in the CEWH's submission on the NSW draft policy paper for *Active Management in Unregulated Rivers* (draft Active Management policy), provided at [Appendix A](#).

We request that IDELs and TDELs are developed and implemented in the Barwon-Darling water resource area consistent with the recommendations outlined within the NRC's report on the review of the Barwon-Darling WSP 2012.

Specifically, we request that:

- IDELs are based exclusively on actual pump capacities for installed works existing prior to the making of the Barwon-Darling WSP in 2012; and
- the Barwon-Darling WRP includes accredited text at section 4.1.1 that notes a commitment to the further refinement of TDELs such that they provide for the environmental watering requirements of the LTWP, and that these refinements will be a part of the review and remake of the Barwon-Darling WSP in 2023.

2. Active Management of held environmental water

The CEWH acknowledges the positive work of the Department in progressing the Water Reform Action Plan and commends the Department on the draft Active Management policy. The Action Plan and draft policy proposes practical measures for creating an operating environment intended to support the protection of held environmental water (HEW) through active management across unregulated water sources areas; our response on the draft Active Management policy is provided at [Appendix A](#).

Water access licences recovered for the environment provide additional flow in the river that would not have been previously available for downstream extractive use. Protecting HEW between river systems ensures that the benefits from the use of environmental water can be maximised throughout the northern Basin without reducing the water available for other water licence holders.

Amendments to the Barwon-Darling WSP⁴ establish rules intended to support the protection of environmental water through active management. Successful implementation of the NSW Active Management framework will allow for water recovered for the environment to contribute to improved river health within the Barwon-Darling river system and, subject to implementation of the Menindee Lakes Sustainable Diversion Limit (SDL) supply measure project, the hydrologically connected Lower Darling River, consistent with LTWPs.

⁴ Draft Barwon-Darling Unregulated WSP - Clause 43, Clause 52B, Clause 78(j)

The proposed amendments to implement active management require the Department to develop an Active Management Procedures Manual (Procedures Manual). Developing procedures for the active management of environmental water provides certainty in the operational arrangements for environmental watering and for extractive water access, and is supported by the CEWH. The documentation of procedures also reduces reliance on individual discretion and the use of temporary water restrictions (embargoes) under the NSW Water Management Act (s324). Communicating the timeframes for developing and consulting with water users and the broader community on the Procedures Manual will be important for providing certainty in process and building public confidence in the implementation of active management.

A cross-jurisdictional working group has been established between the NSW Department, the Queensland Department of Natural Resources, Mines and Energy (DNRME) and Commonwealth agencies to develop cross-border arrangements to support active management of environmental watering between connected water resources⁵. This group is tasked with the development of a robust and transparent accounting method for recognising and protecting HEW flowing across the border from Queensland to NSW, and through the intersecting streams, consistent with the Basin Plan Commitments Package⁶.

Recommendations are provided below to support the implementation of active management arrangements within the Barwon-Darling WRP area, and with broader relevance for other NSW catchments. The establishment of a multi-agency working group, including environmental water holders, to develop operational procedures and to implement active management arrangements within and between NSW water resource areas is supported by the CEWH.

We request that:

- text is included in section 4.4.1 of the Barwon-Darling WRP that outlines a program of work to develop the Active Management Procedures Manual, including timeframes for development, the engagement process involving environmental water holders and other water users and approach for supporting on-going refinement, to provide certainty in process and public transparency.

We encourage the continued commitment of NSW, Queensland and Commonwealth agencies to work together to develop appropriate accounting arrangements that recognises and protects HEW across the Queensland-NSW border and through the intersecting streams.

⁵ Basin Plan – s10.27

⁶ Basin Plan Commitments Package – Clause 2(d)

3. Planned environmental water

Planned environmental water (PEW) provisions within the draft Barwon-Darling WSP⁷ identifies this form of environmental water as the water that remains in the river resulting from the access rules for water take by licenced entitlement holders and basic landholder rights users. PEW is broadly managed within the draft Barwon-Darling WSP via two mechanisms:

- compliance with the Long-Term Average Annual Extraction Limit (LTAAEL)/SDL; and
- rules for managing access licences.

The draft Barwon-Darling WSP⁸ contains rule amendments for managing access licences that aim to enhance the nature and volume of PEW in order to re-establish a sustainable level of take for improving river health. The CEWH recognises the importance of these package rule changes for enhancing ecologically significant flow components, such as low flows and freshes, and is supportive of these amendments.

In addition to making recommendations relating to immediate amendments to rules for managing access licences throughout the Barwon-Darling water resource area, the NRC's Review makes further recommendations relating to the review and potential amendment of access rules as part of remaking the plan in 2023⁹. To provide public certainty in process, it is important that the Department outline the timeframes for reviewing and consulting on future amendments to water access rules within the Barwon-Darling WSP.

Managing Resumption of Flows

The draft Barwon-Darling WSP contains a new rule to manage access to the first flow of water after a dry period¹⁰ (Resumption of flows). The rule is triggered when a flow event occurs after a continuous period of dry or low flow conditions, and prevents water users from accessing the first flow for a period of time.

The combination of the new rule and the accompanying Minister's Note are well aligned to a key recommendations by the NRC in their review of the Barwon-Darling WSP 2012¹¹. The CEWH supports both the inclusion of the resumption of flows rule and the ability to amend the rule¹² based on an evaluation of the rule following actual events and in order to support the environmental water requirements of the Barwon-Darling LTWP.

⁷ Draft Barwon-Darling Unregulated WSP – Clause 17(1)

⁸ Draft Barwon-Darling Unregulated WSP – Part 8

⁹ Natural Resource Commission Review of the Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources 2012 – Recommendation 7(c), 7(d), 9(b), 10(b) & 10(c)

¹⁰ Draft Barwon-Darling Unregulated WSP – Clause 50

¹¹ Natural Resource Commission Review of the Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources 2012 – Recommendation 9(a) & 9(b)

¹² Draft Barwon-Darling Unregulated WSP – Clause 78

Managing access to the first flow of water after a dry period is critical to protecting environmentally and socially significant flows as well as improving downstream water quality following low and no flow periods.

Revision of Flow Class Thresholds

A, B and C Class Access Licence categories along the Barwon-Darling system can only access river flows when a specific trigger is reached. These triggers are also known as flow class or commence/cease to pump thresholds.

In review of the Barwon-Darling WSP 2012, the NRC recommended amending cease to pump thresholds for A Class access licences to better provide for low flows throughout the system¹³. Recommendations¹⁰ were also made by the NRC to guide a more fulsome remake of the Barwon-Darling WSP in 2023, including further refinement of pump thresholds for all access classes¹¹.

Amendments included within the draft Barwon-Darling WSP¹⁴ are well aligned with the NRC's recommendation for raising the cease to pump levels for A Class licences¹⁰. The draft Barwon-Darling WSP retains provisions that enable pump thresholds for all access classes to be reviewed and updated¹¹, as required, to provide a sustainable level of take and support environmental water requirements.

The CEWH supports the inclusion of amendments which raise the cease to pump levels for A Class licences as well as the retention of rules which enable pump thresholds for all access classes to be reviewed and updated.

Imminent Flow Provisions

A rule set within the current Barwon-Darling WSP allows the Minister to provide access (through the imminent flow rule) to low and no-flows for up to three weeks before an anticipated flow event for A or B Class licences¹⁵. This rule impacts low flows by allowing increased access to the lowest flow bands.

The NRC Review acknowledges the impact of this rule set and has recommended amendments be made to remove these provisions from the Barwon-Darling WSP¹⁶. Consistent with this recommendation, the imminent flow provisions have been removed from the draft Barwon-Darling WSP. The CEWH strongly supports this amendment.

¹³ Natural Resource Commission Review of the Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources 2012 – Recommendation 7

¹⁴ Draft Barwon-Darling Unregulated WSP – Table B

¹⁵ Barwon-Darling Unregulated and Alluvial Water Sources WSP 2012 – Clause 48, Clause 49

¹⁶ Natural Resource Commission Review of the Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources 2012 – Recommendation 10(a)

Carryover and Maximum Annual Take Provisions

The current Barwon-Darling WSP includes rules that set annual extraction limits for A, B and C Class licences at 300 percent of their share component, plus net allocation trade. The rules also allow for unlimited carryover of unused water from one year to the next. This rule set has been retained in the draft Barwon-Darling WSP¹⁷.

Water sharing arrangements within the Barwon-Darling should enable a degree of flexibility that allow water users to manage their operational risks that inherently stem from the highly variable nature of river flows in the Barwon-Darling system. However, it is important these arrangements still provide adequate protection for ecologically significant flows.

As best summarised in the assessment of the 2018-19 fish deaths in the Lower Darling¹⁸:

The capacity to “carry-forward” A Class licence unused opportunity allocation to lower flow years means that licence holders can maximise their water extraction at low flows if (a) the preceding years were exceptionally dry and they could not access flows within the A Class band, or (b) the preceding years were wet, and all their allocation came from B and C Class licences. This latter strategy has led to a behavioural change in the use of A Class licences that has meant that since 2012, an increased proportion of flows in the A Class band in the Barwon–Darling have been extracted.

The combination of rules introduced into the existing Barwon-Darling WSP 2012, including the unlimited carryover of unused water from one year to the next, has been unequivocally linked to increased extraction from low flows within the system and a critical decline in river health. While other amendments to water access provisions noted throughout this submission have been positive, a holistic assessment of the new combination of rules is not evident, that would demonstrate how the Department have ensured the operation of the WRP and WSP does not compromise the environmental water requirements of priority assets and functions¹⁹ or the provision of water to downstream communities. The CEWH sees this absence of key information and the outcomes of the Vertessy report as providing a compelling case for the inclusion of precautionary rules in the form of amendments to the current carryover and maximum annual take provisions as a risk mitigation, and that a more

¹⁷ Draft Barwon-Darling WSP – Clause 42

¹⁸ Vertessy et al. 2019 Assessment of the 2018-19 fish deaths in the Lower Darling – Section 5.3.2.4 https://www.mdba.gov.au/sites/default/files/pubs/Final-Report-Independent-Panel-fish-deaths-lower%20Darling_4.pdf

¹⁹ Basin Plan – s10.17

comprehensive review is conducted that would support a substantive remake of the Barwon-Darling WSP in 2023.

We request that:

As a precautionary amendment, the CEWH would support the NRC recommendation¹ to replace the 300 per cent take rule and unlimited carryover, with an interim rule that limits take to 450 per cent use over three years. This interim rule should be subject to further assessment being undertaken on the combined impact of water access rules on river ecology and water availability for critical human water needs.

The CEWH supports the inclusion of these recommended amendments as interim rules on the basis that they form part of a work program with a view towards a substantive remake in 2023.

4. Operational strategies and transparency

Connectivity between water resource plan areas

The upstream tributaries and the Barwon-Darling water resource plan areas bear particular importance for allowing environmental, social and cultural objectives to be met downstream in the Lower Darling, and for the broader River Murray system. The decline in hydrological connectivity between northern and southern water resource areas is evident²⁰, and the criticality for re-establishing hydrological connectivity is epitomised by the recent fish kills²¹, critical water quality events and the inability to supply critical human water needs for downstream communities.

The NRC's *Review of the Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources 2012* identified a range of recommendations to improve the management of connectivity²² across water resource plan areas in the northern Basin which is fundamental to meeting the objectives of the Basin Plan²³.

The CEWH fully supports the recommendations of the NRC and acknowledges the positive work by the Department in developing improved operating rules and arrangements aimed at protecting HEW and PEW within the northern Basin. The development of effective operating arrangements will need on-going development and refinement, however a key measure of

²⁰ Carlile, P. 2017 Hydrological impacts of water management arrangements on low flows in the Barwon Darling system - <http://www.environment.gov.au/water/cewo/publications/hydrological-impacts-water-management-arrangements-low-flows-barwon-darling-river-system>

²¹ Vertessy et al. 2019 Assessment of the 2018-19 fish deaths in the Lower Darling - https://www.mdba.gov.au/sites/default/files/pubs/Final-Report-Independent-Panel-fish-deaths-lower%20Darling_4.pdf

²² Natural Resource Commission Review of the Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources 2012 – Recommendation: 8(b), 13(a)(b), G(a)(b)(c)

²³ Basin Plan – s10.27

success to these new water resource management arrangements will be the reoccurrence and volume of end-of-system flows measured as inflow into the Menindee Lakes system and increased security of supply for flows in the Lower Darling downstream of Weir 32. We encourage the Department to set out outcomes based targets that are Specific, Measurable, Attainable, Realistic and Timely (SMART) within the Barwon-Darling unregulated WSP that would guide the development, and later evaluation, of upstream water planning instruments. Targets should aim to provide shepherding of environmental flows to provide hydrological connectivity between the unregulated Barwon-Darling and the Lower Darling River water resource areas.

The draft WRP Risk Assessment appropriately identifies the need to protect a portion of low and medium flows in the Barwon-Darling²⁴. The CEWH suggests that this could be further strengthened by including explicit references to: protection of HEW; and the protection of a low-medium flows (PEW) specific to the minimum flow targets noted above and in alignment with the Murray and Lower Darling LTWP.

We ask the Department to:

- establish outcomes based SMART targets within the Barwon-Darling unregulated WSP to facilitate improved hydrological connectivity and security of supply for flows in the Barwon-Darling and the Lower Darling rivers;
- include explicit references to: protection of HEW; and the protection of a low-medium flows (PEW) with specific minimum flow targets to be included in the WRP/WSP.

5. Other matters

Aboriginal cultural access licence

The CEWH supports improving water access and outcomes for Indigenous people and addressing the social and economic impacts of the Murray Darling Basin, in accordance with the Basin Plan Commitments Package²⁵.

As agreed by Basin government in the Basin Plan Commitments Package, the CEWH encourages further consideration of the opportunities through the WSP to improve water access and outcomes for Indigenous communities in the Murray-Darling Basin.

²⁴ Draft Barwon-Darling WRP Risk Assessment – p. 5-6

²⁵ Basin Plan Commitments Package – Clause 3

PART B: STATE-WIDE ISSUES

6. Extreme events - Incident Response Guide

The draft Incident Response Guide (IRG) includes measures in response to extreme events for the purposes of meeting s10.51 of the Basin Plan. Though the “environment” has been identified as a high priority during extreme events, measures that outline the management responses have only been outlined for critical human water needs²⁶.

We believe that the critical environmental needs that would be supported by operational procedures during critical dry periods are not sufficiently defined to guide water resource priorities relevant to each critical stage and to enable an assessment of residual risk from operational decisions.

The Barwon-Darling LTWP could support the implementation of the IRG by defining the critical environmental needs and by including explicit cross references between both documents. Further, including a reference to how PEW would be treated during periods of water shortage and WSP suspension would create certainty as to how critical environmental needs are met during critical dry periods.

Operational measures under extreme conditions are necessary to maintain security of supply however these may have undesirable environmental consequences by reducing hydrological connectivity and water quality within refuge habitat. Procedures for the management of operational measures would benefit from being documented within a procedure’s manual, in association with strategies for mitigating potential environmental risks under extreme events.

The following inclusions are suggested to strengthen the Barwon-Darling IRG and implementation of the NSW Extreme Events Policy:

- outline the management response measures for the environment (extreme ecological water quality events);
- explicit reference to the LTWP during critical periods, particularly critical environmental watering requirements; and
- outline the process for documenting operational procedures and the assessment of risk associated with water resource management during extreme events.

To provide increased clarity in the management of extreme events, we would also suggest detailed information is included in the IRG that outlines the process for reinstating resource allocations as conditions improve and criticality decreases.

²⁶ Draft Barwon-Darling WRP – Table 5-3

7. Make good actions in response to SDL non-compliance

The draft Barwon-Darling WSP²⁷ specifies that the take of environmental water through licences managed by the CEWH are not to be included in the assessment of Annual Permitted Take (SDL).

The draft Barwon-Darling WSP²⁸ also specifies the actions to be taken following the non-compliance with either the 'long-term average annual extraction limit' or the 'long-term average Sustainable Diversion Limit'. The restorative actions specified in the draft Barwon-Darling WSP²⁹ provides the Minister with the authority to restrict the available water determinations of particular entitlement classes following breach of extraction limits. The CEWO notes that the application of restorative actions for SDL compliance that restrict allocation against HEW may not be effective in bringing extractive take back into compliance with the SDL. Rather, it may constrain the ability of the CEWH to access water and mitigate the environmental impacts from any growth in water extraction. As a principle we believe restorative actions should target the source of SDL non-compliance. Treatments applied to address non-compliance should be demonstrated to be effective in returning take under the SDL back into compliance.

We request that the Department consider whether the restorative actions specified in Clause 36 of the draft Barwon-Darling WSP should be revised to explicitly refer to entitlements within the SDL.

8. Monitoring, Reporting and Accounting

The Basin Plan requires monitoring and formal reporting on the use of environmental water, relating to both PEW and HEW³⁰. This responsibility for reporting water accounting information extends to both state governments and environmental water holders.

The CEWH notes that the Transition Period Water Take report 2017-18 has identified 'inaccuracies in environmental data', issues with environmental water accounting and supports further work towards building a best practice in environmental water accounting³¹.

The methods used for environmental water accounting reflect the type and scale of operations for the management of environmental water delivery. Environmental water extracted from the river and pumped into a wetland is metered in the same manner as irrigation water take. Environmental water delivered through irrigation channels is accounted to the same standard as required by irrigation water delivery. The accounting of environmental flows through the river system are reliant on the same services and standards

²⁷ Draft Barwon-Darling Unregulated WSP – Clause 35B, Note 1

²⁸ Draft Barwon-Darling Unregulated WSP – Clause 36(2)

²⁹ Draft Barwon-Darling Unregulated WSP – Clause 36

³⁰ Basin Plan – s10.46, Schedule 12, s13.14

³¹ MDBA Transition Period Water Take Report 2017-18, p. 163-164

as applied to bulk water management. Environmental water accounting, irrespective of the method used, is reliant on the services provided by external parties and the oversight provided by the Department as the state regulatory authority.

As with all forms of water take, we encourage on-going improvement in the accuracy, reliability and credibility of environmental water accounting information. We look forward to continuing to collaborate with the Department on these matters.

We request that the Barwon-Darling WRP refers to a process for continuous improvement in environmental water accounting through the development of operational procedures to give effect to State and Commonwealth reporting obligation under the Basin Plan (s10.46, 13.14, Schedule 12).

It is requested that text within the Barwon-Darling WRP (with respect to Basin Plan s10.46) is included that outlines a commitment by the Department to the on-going improvement in the methods and practices underpinning environmental water accounting, to provide public accountability in the management of all water resources.

9. Water Quality Management Plan

The Water Quality Management Plan (WQMP) aims to provide a framework to protect, enhance and restore surface water quality, supporting the Barwon-Darling WRP and Barwon-Darling LTWP.

The CEWH notes that due to insufficient information³² risk assessments have not been undertaken for several types of water quality degradation outlined in the Basin Plan³³ including hypoxic low flow and blackwater events, bottom release/or overturn from stratified water storages, water temperature outside of natural ranges, elevated pathogen counts, and elevated levels of pesticides and other contaminants. These risks have the potential to negatively impact environmental outcomes and should be assessed to provide assurance that the mitigation strategies in the WQMP will meet the requirements of the Basin Plan (Chapter 10, Part 7). We encourage the Department to consider including within the WRP a requirement for periodic reassessment of water quality risk as a key mitigation strategy.

The following changes would strengthen the WQMP for supporting the water quality and river health objectives:

- include a mechanism for the periodic review of emerging and existing risks to provide for the effective treatment of risks, and the basis for considering the need for new operating rules; and

³² Draft Barwon-Darling Water Quality Management Plan – Table 3-1, Table 4-3

³³ Basin Plan 2012 – Chapter 9, s9.02

- include explicit links between the WQMP and other WRP documents, i.e. the IRG and LTWP.

10. Consultation and refinement for matters not resolved

A number of matters are proposed to be addressed after the end of the consultation period (e.g. Barwon-Darling Procedures Manual), which have critical impacts on CEWH statutory responsibilities, as well as Basin Plan requirements. It is critical that the Department ensures meaningful and inclusive consultation on all on-going refinements and that an independent review (e.g. through the NRC) is undertaken to ensure the matters raised above are resolved, with public confidence restored.

SUBMISSION: ACTIVE MANAGEMENT IN UNREGULATED RIVERS POLICY PAPER

Context

The Commonwealth Environmental Water Holder (CEWH) strongly supports active management and commends NSW for the release of the draft *Active Management in Unregulated Rivers policy* (draft policy) under its Water Reform Action Plan.

Following the release of the reports of the Independent investigation into NSW water management and compliance, conducted by Ken Matthews AO, in late 2017 the NSW Government has committed to a process of water reform, leading to the development of the NSW Water Reform Action Plan. Together with measures to significantly enhance compliance with water regulation, a cross jurisdictional working group was established to consider measures to ensure the effective management, coordination and protection of environmental water flows.

The Commonwealth Environmental Water Office (CEWO) has engaged as part of the Interagency Working Group for Better Managing Environmental Water over the past two years, and supports the broader measures which have been put forward in this paper, and those which have been developed and put forward through a number of draft water resource plans, including particularly that for the Barwon-Darling. The measures put forward are the result of robust interrogation across a broad range of policy, regulatory, environmental, fisheries and science agencies, sound science and modelling, the articulation of ecological needs, and are feasible in the context of the NSW water management framework.

The development of an Active Management framework is the central platform through which the NSW Government will, into the future, provide assurance of the protection of environmental flows along the length of river systems and beyond the boundaries of water resource management areas. Apart from the use of measures such as temporary water orders (embargos) under the NSW Water Management Act (s324), it will be the only way that held environmental water (HEW) from Commonwealth accounts is protected so that it provides benefits for the health of river systems and wetlands in unregulated catchments, and is not available for legal extraction on crossing water resource management area boundaries.

Active management will be a significant improvement from the use of applying temporary orders to protect flows for environmental purposes. Active management involves having skilled river operators applying standard transparent procedures and making adjustments to the sharing of water on a daily basis. This policy and the subsequent procedures represents an enduring framework versus the need for embargoes on individual flow events where the first part of an event can be unprotected while the administrative process for placing the embargo occurs. This, with improved compliance and metering, will give greater assurance to the community and entitlement holders.

The Active Management framework is also critical in complementing the commitments of the NSW Government through the Intergovernmental Agreement on Implementing Water Reform in the Murray Darling Basin, including measures to support the implementation of the Compliance Compact and the Northern Basin 'toolkit measures', which include the protection of environmental water; event-based environmental water delivery; and improved management and coordination.

Implementation of active management will provide certainty and assurance to all water users, and confidence to irrigators who have made it clear they don't want to be taking water for the environment. The process of implementation, like many water management issues, will be complex but it is necessary.

Importantly, the draft policy progresses some of the broader platform for the protection of environmental water within NSW; but specific to the catchments of northern Basin. The pre-requisite policy measures provide another component of this platform to protect environmental water in the southern Basin. It is the CEWH's view that the NSW Government should commit to the extension of active management to incorporate both regulated and unregulated water resources across the NSW section of the northern Basin to provide confidence and certainty to all water users. This would provide a more complete policy platform which takes account of, and protects, additional HEW in the river that flows:

- along regulated and unregulated water sources;
- from regulated water sources to unregulated water sources (such as from the Gwydir or Lower Namoi into the Barwon-Darling);
- from regulated water sources to regulated water sources (e.g. Peel to Namoi, Murrumbidgee to Murray);
- from unregulated water sources to unregulated water sources (e.g. Queensland unregulated tributaries to the Barwon-Darling); and
- from unregulated water sources to regulated water sources (potentially the Barwon-Darling to the Lower Darling in the future, having regard to the Murray-Darling Basin Agreement).

Active management offers improved confidence for all water users and the community more broadly through documented procedures and increased communications that increases the oversight and transparency of contemporary river operations. This will support the NSW Natural Resource Access Regulator (NRAR) in implementing their compliance regime.

The principles for implementing active management are discussed below. The principle of adaptive management and on-going refinement of the operational procedures and policy are consistent with the NSW Department's approach on pre-requisite policy measures in the southern Basin, and are supported. Similarly to the on-going implementation of pre-requisite policy measures, providing public confidence in the implementation of the Active Management policy would be supported by a detailed work plan with commitment to timeframes, consultation process and resourcing.

Additionally, the CEWH supports the objectives and principles within the draft policy paper, including that material impacts are mitigated or offset, and unintended gains are avoided. This means that additional flows in the river are protected to a reasonable degree for in-stream benefit.

Details relating to the draft policy's implementation within specific water resource areas are provided in the CEWH's submission on the following Water Resource Plans and Water Sharing Plans:

- Namoi Water Resource Plan and associated Water Sharing Plans
- Macquarie Bogan Unregulated Water Sharing Plan
- Gwydir Unregulated Water Sharing Plan
- Barwon-Darling Water Resource Plan and Unregulated Water Sharing Plan

Responses to consultation questions

Consultation question	Response
<p>1. What are your views on what water will be defined as <i>active environmental water</i> and managed through an unregulated water source?</p>	<p>The draft policy sets up active management for flows of ‘active environmental water’ from regulated water sources to unregulated water sources. The draft policy also protects unregulated water within the unregulated Barwon-Darling water source.</p> <p>For the purpose of defining a full scope of work for the northern Basin now, we request that the definition of ‘active environmental water’ is broadened to include HEW licences in regulated river water sources when account water is released from an upstream regulated storage to flow through to downstream regulated water source.</p> <p>Active management, or some form of protection like that associated with ‘return flows’ in some regulated southern valleys, should apply to all additional environmental flows between regulated water sources. For example, environmental water from Commonwealth water accounts released into the Peel River should be actively managed (or otherwise protected) along the Lower Namoi for as far as it flows. While this may be a small volume in relative terms, it is a matter of principle that the additional water would not have been in the river without the environmental flow and so should not be available for take. If protections are not put in place, water released for the environment may be pumped resulting in an unintended gain by consumptive users, and would not deliver the intended downstream environmental benefit. Introduction of arrangements for fuller protection of environmental water may be in several tranches.</p> <p>The draft policy focusses on environmental water flowing from regulated water sources to unregulated water sources. Active management could include water managed for other uses. The CEWH would support, for example, protection of flows under active management from a regulated water source to an unregulated water source for consumptive purposes. Such a transfer of water allocations by an irrigator from a regulated water source downstream to an unregulated water source should also be permitted, subject to the rules of active management applying. Any such transfer of consumptive water is likely to have an incidental environmental benefit by improving connectivity. Whilst irrigators may not choose to use active management, it is fair that they have the option to do so.</p> <p><u>Possible application in the Lower Darling:</u> if there is additional water in the river flowing into Menindee Lakes which is active environmental water, in due course, environmental managers should have the option of calling that water down the Darling rather</p>

	<p>than into the Menindee Lakes, so as to provide connectivity. The water would ideally also be protected along the Lower Darling. This would be a flow of additional water as a result of water recovery from an unregulated water source into a regulated water source. The CEWH acknowledges that this would need to be made possible in the context of the Murray-Darling Basin Agreement, and may take some time. Whether the protection is provided by active management or some other arrangement (possibly in the Murray Lower Darling water sharing plan or the Menindee Lakes Sustainable Diversion Limits proposal) would need to be determined by NSW.</p>
<p>2. Do you support inclusion and protection by active management of planned environmental water releases from upstream water sources that are additional to the inflows that were considered when the Barwon-Darling plan commenced?</p>	<p>Yes. The CEWH supports the inclusion of planned environmental water (PEW) within the scope of the active management policy on the basis that:</p> <ul style="list-style-type: none"> • PEW underpins the effective and efficient use of HEW; • managed PEW is providing additional flow in rivers for environmental purposes that would not have otherwise been available for extraction; • managed PEW was part of two past flow events (the Northern Connectivity Event in 2018 and the Northern Fish Flow in 2019) from regulated water sources into the Barwon-Darling unregulated water source. This PEW was protected using the same means as HEW (a section 324 order); and • the strategic use of PEW provisions has been identified in water resource plans as providing treatments for high and medium risks to water quality and for meeting environmental water requirements of connected water resource area – an erosion of PEW limits the effectiveness of these risk treatments. <p>As an example, the Gwydir regulated water sharing plan now provides the NSW environmental manager with the discretion to divert some of a supplementary event into streams that flow to the Barwon-Darling. This is additional water to the Barwon-Darling and this water should be protected by active management in the Barwon-Darling. It therefore is important that the Active Management Procedures Manual (Procedures Manual) reflects that <u>additional</u> inflows to downstream unregulated water sources are protected through the Active Management framework.</p> <p>A second example of water that should be protected under active management is the recently announced voluntary contribution of water by Cubbie station³⁴. This will increase water flowing from Queensland to NSW along the Culgoa River in some flow events, and may even contribute to flows to the Barwon-Darling that may</p>

³⁴ <https://www.macquarie.com/us/about/newsroom/2019/macquarie-agriculture-and-shandong-ruyi-enter-joint-agreement-for-ownership-of-queenslands-cubbie-station>

	<p>reach Bourke in some flow events. The Procedures Manual should allow these flows to be protected through the Active Management framework. Implementation would follow Queensland and NSW developing a cross border water accounting arrangement as under the <i>Intergovernmental Agreement on Implementing Water Reform in the Murray-Darling Basin</i>³⁵.</p>
<p>3. Do you support the criteria for where active management is to be applied?</p>	<p>The establishment of active management for some of the northern Basin is important progress. The spatial extent of active management (or the protection of environmental flows as part of a broader platform) in the draft policy should however <u>also be applied to other northern water sources in the near future</u>, including the Intersecting Streams, Border Rivers and Lower Namoi. This may not be possible in the first tranche, but a commitment towards ongoing extension of the framework, consistent with good adaptive management principles to build a consistency of management arrangements across all Northern Basin river systems would provide certainty and assurance to all water users.</p> <p>The draft policy paper notes that ‘<i>There are many unregulated water sources across NSW where active environmental water may be delivered or used in-stream within the water source</i>’. It is important that procedures are developed for each specific water source to enable active management to occur. To meet community expectations, in the final policy, NSW should publish a program outlining timeframes for developing the Procedures Manual across all northern Basin water sources that includes consultation.</p> <p>The draft policy highlights the need for flows arising from HEW licences in Queensland to be estimated and protected through active management. NSW has agreed to a timeframe for developing the accounting process supported by protocols and procedures for determining and actively managing these flows.</p> <p>This is an important measure which supports the commitment of NSW to enable effective cross-border management of water, including environmental flows, and supports measures being implemented in Queensland to support environmental flow management.</p>
<p>4. What are your views on how accounts will be managed for in-stream use of unregulated held</p>	<p>The CEWH strongly supports the principles outlined within the draft policy, and the implementation of a fair active management system that includes: use of best available data; application of processes that are regularly reviewed and improved as needed; and the transparent management of water.</p>

³⁵ <https://www.coag.gov.au/sites/default/files/agreements/iga-on-implementing-water-reform-mbd-9-august-2019.pdf>

<p>environmental water licences?</p>	<p>The CEWH agrees that tracking of ‘parcels of water’ is not required and is not practical. It is important that water accounting information used is quality assured and checked, to the extent possible, against the reality of actual conditions experienced during the environmental flow events. This will improve accounting, provide an increased sophistication in the calculation of river transmission losses and support greater confidence.</p> <p>The following ‘fallback’ arrangement from the draft policy is, however, <u>not supported</u>:</p> <p><i>“If active environmental water is not the only source of water in-stream and the volume of active environmental water cannot be determined the current access conditions will apply. This may be necessary in active management rivers where current infrastructure is insufficient to determine the volume of active environmental water present or in the event of upstream gauging station failures.”</i></p> <p>This measure appears to undermine a fundamental basis of the Active Management policy which is to protect environmental flows between regulated and unregulated catchments as one part of the flow regime through modified pumping thresholds/active announcement systems. “Current access conditions” seems to imply that held water released from storage could still be legally extracted on crossing water resource management area boundaries. If so this is contrary to the CEWH’s understanding of the NSW Government’s commitment to this policy and broader commitment to water reform.</p> <p>A commitment to ensuring sufficient gauging and metering infrastructure, particularly in unregulated catchments, and to the maintenance and regular calibration of it, is critical to the implementation of this policy.</p> <p>When there is a low certainty in the accounting information for environmental water, the development of quality assurance procedures should be fast-tracked. These would include review and adjustment processes, and appropriately revised provisions regarding quality assurance arrangements in the final policy and the Procedures Manual.</p>
<p>5. Do you support assigning river transmission losses proportionally to active environmental water?</p>	<p>Yes. The CEWH is supportive of assigning river transmission losses proportionally. With the existing uncertainty in the measurement and accounting of river flows within unregulated systems, this approach is pragmatic and reasonable, and consistent with the principle that material impacts are mitigated or offset, and unintended gains are avoided.</p> <p>During community consultation, a point of view expressed was that HEW flowing in the Barwon-Darling should be debited to meet all river losses. This is inconsistent with the principles of active</p>

	<p>management and is <u>not supported</u> by the CEWH. All water users should proportionately share losses which can occur from evaporation as well as seepage, and absorption into riparian habitat. Without an environmental flow component, the river would still have incurred losses, and the proposal that all losses are only environmental would lead to an unintended gain for other water users. The settings for the Basin Plan assume that environmental water will <i>supplement</i> unregulated flow and any substitution with standard operational losses will only diminish the effectiveness of the actively managed environmental water.</p> <p>Demonstrating that the proposed approach for assigning losses to active environmental water is equitable for all water users will be important to provide a high level of public assurance. The CEWH supports the establishment of procedures for reviewing loss forecasts and adjustment to attributed losses during a flow event.</p>
<p>6. What are your views on concept of adjusting commence to pump/cease to pump thresholds to protect active environmental water from extraction?</p>	<p>The CEWH supports this concept. Water users are used to working with arrangements that include commence-to-pump/cease-to-pump thresholds. There are commence-to-pump/cease-to-pump thresholds that apply to the Commonwealth's licences in the Barwon-Darling that will also be adjusted, and the CEWO will need to take account of this when planning 'take' against these licences to achieve in-stream environmental outcomes.</p>
<p>7. What are your views on proposed amendments to water sharing plan access rules to protect active environmental water in each of the water sources where active management is proposed?</p>	<p>It is critical that protections through active management are operationalised through water sharing plans, but without further detail on the final policy and in the Procedures Manual, it isn't possible to provide a fully informed view on this matter.</p> <p>There is some detail in the draft unregulated water resource plans for the unregulated Macquarie and Gwydir water sources – but specific comment will need further supporting information on the final policy measures.</p> <p>An important principle of active management when developing these amendments to water sharing plans will be that third party impacts are mitigated and that there are no unintended gains by licence holders through the pumping of environmental water.</p>
<p>8. Do you support distributing the available volume between licence holders in the Barwon- Darling based on Individual Daily Extraction Limits?</p>	<p>The CEWH supports the distribution of the volume available among unregulated river access licences based on Individual Daily Extraction Limits (IDELs) <u>if</u> the IDELs are based on a proportion of the total licence volume (shares) in a management zone. That is, if an entitlement holder has 10% of a B class licence in a management zone, then that entitlement holder should have access to 10% of the water available over the B class commence to pump threshold on a particular day. If some entitlement holders choose <u>not</u> to 'take' on a particular day, then the river operator could make available more water to each entitlement holder that</p>

	<p>chooses to 'take' subject to the daily limits. This is a similar approach to that used for supplementary licences in regulated systems. IDELs should be governed by a sustainable Total Daily Extraction Limit (TDEL) that should not be exceeded.</p> <p>If IDELs are based on the <u>authorised</u> pumping capacities, the CEWH would support IDELs for distributing the available volume on the basis that they reflect the capacity of works in place prior to the making of the Barwon-Darling water sharing Plan in 2012. Doing this will ensure the equitable sharing of flows between entitlement holders in each licence class. It is also likely that IDELs based on <u>authorised</u> pumping capacities will assist in maintaining the duration of ecologically significant flows.</p> <ul style="list-style-type: none"> • A report commissioned by the CEWO suggests that a distribution of access based on pump capacity would be significantly lower for A class licences if it were based on actual installed pumping prior to the making to the Barwon-Darling water sharing plan rather than based on authorised pumping capacity³⁶. The corresponding reduction IDELs for some A class users would enhance the duration of low flows. • The Natural Resources Commission (NRC) recommended the implementation of IDELs based on the extraction rates authorised and in place before removal of restriction on pump sizes for certain licence classes (i.e. not authorised pumping capacity). <p>During recent community consultation, some entitlement holders expressed interest in distributing water on a day by rostering amongst themselves so that pumps were not turned on for a few hours. In the future, temporary trade may provide the basis of this re-distribution. Active management would provide a basis for entitlement holders to re-distribute water in a way that could satisfy compliance regime implemented by the NRAR.</p> <p>Sharing of access to events based on shares (licences) within a management zone is consistent with NSW practice for supplementary events in regulated systems, is likely to accord with the community expectation, and is equitable.</p>
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³⁶ Paul Simpson, Barwon-Darling: low flow environmental watering impediments and opportunities, report prepared for the CEWO, October 2017, <https://www.environment.gov.au/system/files/resources/df3666cb-16ed-483c-b73c-a49e63f6df6e/files/barwon-darling-low-flow-environmental-watering-impediments-opportunities.pdf>

<p>9. Do you support distributing the available volume between licence holders in the Barwon- Darling to individuals who have expressed an interest based on Individual Daily Extraction Limits?</p>	<p>To ensure equity and transparency, the CEWH supports distributing the available volume between licence holders in the Barwon- Darling to individuals who have expressed an interest based on IDELs (if the IDELs are based on a share of TDELs or the recommendation of the NRC – please refer to the response for question 8). The expression of interest process could be ‘opt in’ or ‘opt out’. The river operator running the distribution system that would have an active presence during flow and with improved reporting would give confidence to entitlement holders and the community that the water sharing arrangements are being adhered to.</p> <p>NSW could develop the system based on an expression of interest process in other catchments for supplementary access, for example. A form of informal rostering system has been implemented in the past in the Barwon-Darling amongst some entitlement holders. This means that licence holders have supported a sharing arrangement suggesting there has been benefit to them from it, and so a more formalised, professional and transparent system should also be supported.</p>
<p>10. Do you support access being announced? What issues need to be considered in making announcements?</p>	<p>Yes. Announcements provide transparency and confidence, and are a fundamental element of the Active Management framework. Announcements would provide clarity and certainty for all water users about the timing and conditions of authorised take against licence, as well as providing a clear basis for review by the NRAR.</p> <p>Issues that need to be considered are:</p> <ul style="list-style-type: none"> • Communications, particularly as mobile phone coverage in remote areas is patchy. The onus should be on the entitlement holder to provide a communication channel for interacting with the river operator. • Decisions may be required on weekends. Given the value of the resource and the opportunistic nature of access, river operators and licence holders should put in place arrangements for management of unregulated events at all times when needed. • The draft policy identifies the potential for risk to active environmental water as a result of take under licence categories other than unregulated river access licenses need to be evaluated. The CEWH has included in several submissions that the development of ‘guidelines for reasonable use’ under the NSW Water Reform Action Plan is a fundamental step in such an evaluation. These guidelines are necessary for the NRAR to do its essential job of monitoring take and ensuring compliance. These guidelines are also essential in managing the expectations of those who have access to water under basic landholder rights.

	<ul style="list-style-type: none"> • The CEWH requests that NSW develop the guidelines as a priority. <p>To support the announcement process in the Barwon-Darling, there is likely to be a need for a river operations advisory committee, as there is for flow events in the lower Balonne. The membership may change as the flow moves through management zones. The group could meet by teleconference from when it becomes highly likely that a flow event is to be shared in the Barwon-Darling.</p> <p>(References in the draft policy to notifying ‘the Minister’ are assumed to be the Ministers delegate, who is the river operator. This could be clarified in the final policy).</p>
<p>11. What are your views on how loss estimates will be forecast and how operational uncertainty is proposed to be managed?</p>	<p>The CEWH supports development of a practical procedure for the treatment of losses.</p> <p>The CEWH agrees that the process for estimating <i>initial</i> losses based on comparable historical events is a reasonable and fair approach. The initial losses proposed to be applied and the basis for selection should be reported to all entitlement holders prior to the event, as a matter of good process, possibly through a river operations advisory committee including the CEWO and other licence holders. The basis for the initial loss and on-going adjustments to these estimates should be discussed during the flow event and reported post-event. The method for determining initial losses should be subject to annual evaluation and review.</p> <p>The procedure for applying <i>on-going</i> losses to environmental water during the watering event should involve a transparent process of adjusting loss forecasts based on actual conditions, and then adjusting access based on any significant cumulative mismatch between forecast losses and unaccounted differences during a flow event. Adjustments to on-going losses should take into account the initial losses applied. The process of on-going forecasting and adjustments should be reported during the event and subject to review post-watering event.</p> <p>If an irrigator uses less water than the allocated amount on a day, environmental managers should not be deemed to have taken more water.</p> <p>To test the procedure, the river operator could run a simulated flow event where announcements are made, and licence holders respond, applying the method for forecasting and adjusting losses to be applied to environmental watering events. This simulated flow event could be as real as possible – without ‘foresight’ of flows in coming days. CEWO officers would welcome the opportunity to participate.</p> <p>The draft policy says ‘<i>Adaptively adjusting ongoing loss forecasts based on observed losses (i.e. unaccounted differences between</i></p>

	<p><i>flow at upstream and downstream gauges) provides an opportunity to address (at least partially) any mismatch between forecast and actual flows ensuring mismatches arising from uncertainty in ongoing loss forecasts don't compound as the event proceeds. This option therefore has potential to minimise risks to the active environmental water and licence holders'.</i></p> <p>Increasing sophistication in forecasting of losses, supported by adaptive review of actual losses, is critical to providing transparency to all water users and assurance that the processes are equitable and will sustain robust interrogation.</p>
<p>12. What other options should be considered?</p>	<p>No other options are suggested.</p>
<p>13. What information do you consider is important to document and consider in order to continuously improve active management?</p>	<p>To provide the community and licence holders with assurance and confidence, regular and comprehensive reporting is essential. The annual report proposed in the draft policy would be a useful contribution.</p> <p>Short reports following discrete flow events, as are used in some regions (e.g. Queensland lower Balonne), are particularly useful and would provide a timely set of information to support informed engagement with watering events and build confidence in active management.</p> <p>Specific event reporting should also occur in the Barwon-Darling in periods when the flow events are discrete, and in the periods between when an event is being actively managed. There is an opportunity to review past flow events and to continuously improve practices and procedures in cease-to-flow periods when flows are not being actively managed. It will be of particular importance for building water user confidence that the allowance for initial losses (based on historic events) and on-going adjustments based on actual losses is transparently reported and reviewed. It would also be important to report on system performance – such as whether any gauges were thought to be inaccurate and steps in place to recalibrate etc. The chronology of announcements and responses would also be useful information to report.</p> <p>The regular review of procedure manuals is appropriate and consistent with the principles in the draft policy regarding continuous improvement based on evidence. Independent review is important, and is used in other particularly important river systems. For the River Murray System there is an annual independent review of river operations. The annual review of the active management system should involve at least one experienced</p>

	<p>independent river operator, who should provide a public report for transparency and a demonstration of continuous improvement.</p>
<p>14. What risks need further consideration?</p>	<p>1. The ‘fallback’ issue [reversion to current access conditions] discussed under the response to Question 4 represents a risk, if it is adopted, that the policy fails to adequately protect environmental flows, and could lead to water for the environment being used to meet system shortfalls, providing an unintended gain to other water users.</p> <p>The CEWH supports equitable and fair arrangements for the sharing of the water resource and for bearing a reasonable apportionment of losses, and urges NSW to undertake the work required to ensure that policy, technical and modelling work, and infrastructure to support accurate measurement and reporting is put in place to ensure the success of the Active Management framework without such a fallback being required.</p> <p>2. Reasonable use for basic landholder rights need to be clarified and articulated as soon as possible. This would avert the risk of excessive take under these provisions, and provide clarity to landholders and the regulator.</p> <p>3. Daily management of flow. Responses by river operators if there is over-use (which may be inadvertent) by a licence holder on a particular day need further consideration. Corrections could be made on subsequent days, with the NRAR becoming involved if the over-use persists.</p>
<p>15. What additional issues should be considered in actively managing flows?</p>	<p>Communications and advice to water users. Improved and updated information on flow management and access arrangements would be enhanced by website access, which could also provide updated information derived in real time from river operators.</p> <p>Accounting procedures associated with flows in the Warrego River through Toorale National Park to the Darling, and how these flows are reflected in the Active Management framework.</p> <p>Governance arrangements and process for involvement of environmental water holders/managers as well as other licence holders in implementing the method for determining initial losses and on-going adjustments, and on-going refinement of the overall operational procedures.</p>

Email address	[REDACTED]
Name of respondent	Michael O'Brien
Address	[REDACTED]
Contact phone number	[REDACTED]
Are you an individual or representing an organisation?	Individual
How did you hear about the Public Exhibition of this plan?	
Please let us know how you heard about the opportunity to make a submission?	Social media
Additional Information	
Please tick the relevant boxes	I do not consent to my submission and any emailed attachments being published

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FW: Active Management in Unregulated Rivers.

2 messages

Michael & Marg [redacted] >
To: barwondarling.sw.wrp@dpi.nsw.gov.au

Sat, Oct 19, 2019 at 5:41 PM

From: Michael & Marg [mailto:[redacted]]
Sent: Saturday, October 19, 2019 5:40 PM
To: 'barwondarling.sw.wrp@dpi-nsw.gov.au'
Subject: Active Management in Unregulated Rivers.**Submission Re Active Management in Unregulated Rivers.**

1/ I totally agree that active water be protected from extraction and remain in stream for environmental purposes. I believe it should not be allocated to irrigators AT ALL! For example, not under the Water Minister's discretion!

2/ I support total protection by active management of planned environmental water releases therefore not to be used for any other purpose than stock & domestic and environmental purposes. No irrigation EVER is my real belief as irrigators cannot be trusted!

3/ No I don't support that criteria for active management to be applied without protection. Particularly protection against irrigators taking additional flows.

4/ I don't want instream use of unregulated water held in environmental licences at all. I don't believe these licences should be "held" as the users are never made accountable and are not policed.

5/ The only losses I support are instream evaporation , the use by plants & trees and seepage into the ground.

6/ I do not support the sharing of water with irrigators in low flow situations only environmental & stock & domestic. I do want the licence holders and the public to be accountable for when water can be taken and I want consequences for breaches.

7/ As for (6).

8/ I really want NO distribution of water.

9/ NO. Same as above.

10/ I would like it on a daily basis with more gauges along the water flow area.

11/ Same as number (5).

12/ No options.

13/ Evaluate and access compliance regularly.

14/ Loopholes in irrigator's individual licences. Act on breeches severely!

15/ Gauges, more inspections and accountability of irrigators in reference to the NSW Water Act. Section 5(3) of the act (water sharing principles).

N.B. I feel very strongly about the Marthaguy Creek & know first hand what it's like to have environmental water stolen. I am a stock & domestic licence holder and last October, during a release from Burrendong Dam, the flow was considerably reduced. This water should have made it to the Bourke Weir pool via Carinda & Brewarrina & it did not even make it to Carinda. It was for the town & community usage in these locations???? It was taken by a cotton irrigator about 10kms below the Marebone Break on the Marthaguy Creek. He claimed he was using a loophole in his licence. I see it as a total thieving breach.

Michael O'Brien.

[REDACTED]

[REDACTED]

BarwonDarling SW WRP <barwondarling.sw.wrp@dpi.nsw.gov.au>

Sat, Oct 19, 2019 at 5:41 PM

To: [REDACTED]

Thank you for your email. We will respond to your email enquiry as soon as possible.

The Barwon-Darling Surface Water Resource Plan is on public exhibition until Tuesday the 29th of Oct. We welcome submissions until that time.



28 October 2019

Mr Peter Hyde
Director
Director, Inland Water Planning
Policy, Planning & Sciences Division,
Department of Planning, Industry and Environment

Email: [REDACTED]

Email: barwondarling.sw.wrp@dpi.nsw.gov.au

Draft Barwon-Darling Watercourse Water Resource Plan and proposed changes to water sharing plan for the Barwon Darling

Dear Mr Hyde

Thanks for the opportunity to provide our comments on the draft Barwon-Darling Watercourse Plan, and the = proposed amendments to the Barwon-Darling Unregulated Water Sharing Plan.

Calibration of meters on the Barwon-Darling

Before we discuss the draft report and the proposed amendments, we wish to put on record our concern that the volumetric conversion of instream water licences on the Barwon-Darling has not been completed as promised by government under the cap management Ministerial Heads of Agreement in 2007, and that this lingering issue affects most licence holders along the Barwon-Darling.

This issue basically involves the licensing of historic take on the Barwon-Darling and is something that was meant to happen during the Barwon-Darling Water Sharing Plan 2012.

We believe that the cart is being put before the horse, and that the final volumetric conversion and calibration of Barwon-Darling A, B and C class licences should be completed before the Barwon-Darling component of the Floodplain Harvesting project.

[REDACTED]

Until this is done, stakeholders will have concerns in the Barwon-Darling that the true historic take directly from the river, plus accurate valley cap and historical production levels have never been properly identified, producing business uncertainty.

In its draft publication “Uncertainty in Modelling of Floodplain Harvesting – Causes and future work October 2019” the NSW DPIE notes on page 3 that accuracy of river diversions provides a high significance of uncertainty for FPH assessment, and says that “this uncertainty would be reduced by further meter testing and validation data...”

With the current uncertainty of the time & event meter calibrations on the Barwon-Darling, it will be impossible for any Barwon-Darling irrigator that supplements unregulated take with floodplain harvesting to provide an accurate water balance for the FPH modellers.

Given that the Time & Event meters are no longer the meter of record on the Barwon-Darling, this matter should be completed as a matter of urgency.

There is uncertainty when and how this will be done, but we believe it should be done prior to establishing FPH volumes.

The issue has been outstanding since 2007 although successive efforts have been made by Barwon-Darling Water Inc to communicate with various iterations of the water department in New South Wales, and even though it is critical to complete the Barwon-Darling cap model.

We asked for this issue to be included in SAP consideration for this planning process and also asked for it to be raised in the report by the Natural Resources Commission, but the issue seems to have been set aside for another day. There is a degree of unfairness when the NSW Department sets aside a Heads of Agreement that is signed with multiple parties by a Minister of the Crown.

We would like to have this matter resolved by DPIE well before it becomes a matter for a court to resolve.

Proposed changes to Water Sharing Plan

We understand that DPIE is proposing changes to this WSP where the current rules are inconsistent with the Basin Plan 2012, and where a rule is not implementable or has had unforeseen consequences on the environment or water users.

We understand that there is a need to remove references and rules relating to the alluvial ground water sources and transfer them to the Water Sharing Plan for the Darling Alluvial Groundwater Sources 2020.

We also agree with some of the proposed changes regarding Individual Daily Extraction Limits, resumption of Flows and Active Management (for further details on this please see each section of this submission).

However, we object to the fact that plans have been made to change some rules, even after DPIE declared during the SAP process that they would not be changed, and where it has been clearly found that these changes are not even needed or desirable.

Here we are especially referring to proposed rules changes to revise commence and cease to pump (CTP) rules, proposed removal of the imminent flow provision and elements of the managing the resumption of flows.

We are especially concerned about the proposed rule changes that were not brought before the Barwon-Darling Stakeholder Advisory Group (SAP) over the past three years, and which have been added as proposed changes without adequate stakeholder consultation or community discussion.

Revision of commence and cease to pump (CTP) rules

We object to raising the of the A class thresholds as it was never contemplated by the SAP process, DPIE modelling has always found that there are no good reasons to lift the thresholds, and the idea was rejected by the original Status & Issues Paper.

Furthermore, the current CtPs were set by detailed consultation and scientific review through the Barwon-Darling River Management Committee. There has been no consultative procedure to unravel all this good work done comprehensive group of stakeholders.

We understand that some of the reason for this action is contained in the NRC Report which has been found to include faulty science and has been rejected by the hydrologist from the Vertessy Report Panel. Further, details and modelling of the raising of the various A Class thresholds as suggested was never brought before the Stakeholder Advisory Panel for consideration, except to show that A Class use in the Barwon-Darling has an insignificant impact on downstream flows.

It appears to DPIE has failed in its stated objective of protecting the property rights of A class entitlement holders on the Barwon-Darling and is asking Ministers of NSW to sign off on what amounts to confiscation of a legal property right.

Overlaying all this is the fact that, when considering issues, the Water Sharing Plan for the unregulated Barwon Darling River must have regard to certain principles, including the principles outlined in the Basin Plan and the principles set by the NSW government for this water resource planning exercise.

The Basin Plan principles state that:

- *There will be no adverse impacts on water available to a water access licence holder; and*
- *There will be no reduction in the protection of planned environmental water.*

Licence holders on the Barwon-Darling have no problem with ensuring the protection of planned environmental water, but we see these changes to pumping thresholds, without adequate compensation, as an attempt to take more environmental water at the expense of our businesses.

The guiding principle for the Murray-Darling Basin Plan and the National Water Initiative is that where more environmental water is needed, it will be bought back on just terms from the owner, not confiscated by bureaucratic planning exercises.

The NSW Government principles for water resource planning also state that “*water resource plans will be cost neutral for NSW license holders*”

The members of Barwon-Darling Water expect that these access rights, if changed, will be properly compensated by those responsible for the changes at a cost to be negotiated between the parties. The NSW Government should not attempt to flout the principles of the Basin Plan and its own water planning principles.

Proposed removal of imminent flow provision

This is another DPIE proposed change to the Barwon Darling unregulated Water Sharing Plan that has not been brought before the Barwon-Darling Stakeholder Advisory Panel for detailed consideration of impacts.

And this is another case whereby the Natural Resources Commission (NRC) has intervened outside the SAP process to recommend changes not contemplated by the SAP process – this time to recommend that the “imminent flow rules” be removed from the BDWSP.

Barwon-Darling Water believes that this remnant of the old “notwithstanding” provisions should be retained for the purposes of saving *small, permanent crops* during critical dry times. These rules have worked in the past and can be of enormous value to small communities along the river into the future.

The imminent flow rules (clauses 48 and 49 of the current WSP) enable the taking of water when a flow event is expected with certainty within a management zone. To extract water before a flow event has triggered the CTPs, a licence holder must request the Minister for Water to approve extraction under the rule. Under the current WSP, there are certain issues the Minister must consider, and several conditions that must be placed on extraction, before the Minister can approve the taking of water under these rules.

The current plan has a requirement that the Minister may not permit the taking of water if the Minister is of the opinion that *granting access is likely to cause unacceptable downstream or local impacts on the environment or on other users*.

The NRC is of the opinion that *applications under the imminent flow rules are unlikely to meet this requirement*, and therefore the imminent flow rules should be scrapped, and this appears to be the total NRC argument against these rules.

However, there is good historical evidence to the contrary. For example:

- The rules have been utilised, and agreed to by the Minister, twice in the life of the current water sharing plan for the Barwon-Darling; and

- Prior to the present BDWSP similar, more generous rules were used on many occasions, particularly to save permanent, high value horticultural crops during the millennium drought.

The NRC does not give any evidence on its opinion, except to say the Minister is unlikely to approve an application – even when applications have been approved in the past.

Our view is to the contrary and is further strengthened by the argument that the Minister has the power to refuse an application based on *unacceptable downstream or local impacts on the environment or on other users*, where these conditions exist.

Individual Daily Extraction Limits (IDELs)

The implantation of Individual Daily Extractions Limits (IDELs) is not a proposed amendment to the revised Barwon Darling Water Sharing Plan – as these IDELs were already agreed to by all stakeholders in the making of the Barwon Darling Water Sharing Plan of 2012.

Rather, this time around, DPIE has indicated it will proceed with the implementation of IDELs as already agreed by stakeholders. The DPIE has previously explained at public forums that, back in 2012, it did not have the appetite or resources to implement IDELs as proposed in the 2012 Plan.

Our members agreed at that time that IDELs would be the daily volume of water that can be extracted under an individual water access licence, after commence-to-pump thresholds have been reached. The individual IDEL volume were allocated to each water access licence according to an agreed daily pumping amount.

The agreed 2012 IDELs are a part of the extraction components on a licence. The DPIE now says that it is ready to implement the daily extraction limits for the three classes of unregulated river access licences across the Barwon-Darling water source, and that “this will limit the impacts of pumping and achieve both local and downstream social, cultural and environmental benefits”.

The problem we have been presented with is how to distribute and implement the IDELs without creating inequity between licensees now that trade has taken place for the last 5 years of the original plan – without recognition of trading IDELs too.

The Barwon-Darling Water Sharing Plan 2012 anticipated that “*Total daily extraction limits would be calculated by summing the IDELs for each class in the four river sections*”. It was also intended that “*Total daily extraction limits be created at the commencement of the 2012 plan and IDELs established when management systems were in place*”. Although the Department did not follow through with this, it is still possible to put the original plan into place with provision for trading that has taken place in the meantime.

Total daily extraction limits should be implemented as planned – as a simple summing of the IDELs in the 4 river sections. To do anything less would be to create unacceptable impacts on licensed entitlement holders.

Similarly, the IDELs need to be established in a transparent way as intended by the plan (as outlined on page 54 of the “Background Document” to the Plan:

6.2.6.1 Establishing individual daily extraction limits in the Barwon-Darling:

In the Barwon-Darling Unregulated River water source, individual daily extraction limits (IDELs) are intended to provide a mechanism to limit extraction rates to those currently permitted through authorised pumps, thereby allowing a free and open trading regime whilst limiting:

- *third party, and*
- *environmental impacts.*

The administrative and management systems required to successfully implement IDELs are not currently in place, however it is expected that they will be in place within the first few years of this plan’s term.

6.2.6.1.1 Defining extraction rates of authorised pumps

WA 1912 licensed entitlements in the Barwon-Darling do not specify the pumping rates of the authorised pumps attached to the licence, rather their maximum size. Further, there are significant variations in the ‘true’ pumping rate of two identically sized pumps at different locations on the Barwon-Darling, primarily due to head differences (difference in elevation between the water surface and the pump discharge), but also the age and design of the respective pumps. Notwithstanding this, ‘average’ pump capacities are recorded for various sizes and types of pumps in the NSW Office of Water Licensing Administration System and these rates were historically used for assessing environmental impacts for new licence applications. Unique to the Barwon-Darling, all active metered pumps have an ‘agreed pumping rate’ with State Water Corporation as a consequence of time and event metering.

Within the water source, the number of installed pumps is less than the number of authorised pumps and so the IRP intended from the outset that individual daily extraction limits could be established within the Barwon-Darling in a manner which did not impinge on the rate of extraction from current pumps.

Providing that IDELs, and TDELs, are implemented in this way, the members of Barwon-Darling Water have no issue.

Trade of Individual Daily Extraction Limits (IDELs)

With the implementation of IDELs already included in the WSP, there is a need for rules to allow dealings (or trading) of these IDELs.

In its publication online DPIE anticipates that the BDWSP rules will allow:

- permanent dealings of a licence holder's IDEL within a river section, but not between river sections. (A permanent dealing will result in a change to the extraction component on a water access licence).
- Temporary dealings of an IDEL will not be enabled now, but may be considered in the future.

DPIE then says that *“for more information on this, please see the fact sheet Individual daily extraction limits (IDELs)”*.

However, there is no more rationale at all for these trade restrictions in the online paperwork, and no further information or commentary was provided at the public consultation held in Bourke (and we assume other towns along the Barwon-Darling), besides the suspicion that someone may wish to “chase an event down the river by purchasing IDELs”.

If this were a foreseeable problem (unlikely) then rules could be put in place to prevent this.

The original IDELs of the 2012 WSP anticipated free trade of IDELs on a permanent and temporary basis, not restricted within river sections, which is consistent with Basin Plan principles and the principles of the NSW Water Management Act 2000.

Unless there are very good reasons for these anticipated restrictions; good reasons that are articulated and accepted by stakeholders, Barwon Darling Water supports to free trade of IDELs within the Barwon-Darling River system, on a permanent and temporary basis.

Managing the resumption of flows

The DPIE discussion paper on “Managing resumption of flow” is based on the false premise that the current plan does not account for environmental flows in the system when the river runs again after an extended dry period.

Members of Barwon-Darling Water agree with the DPIE statement *“that the first flow of water after a dry period has important social, cultural and environmental outcomes”*.

And we also assume that the DPIE also agrees with Barwon-Darling Water that the first flow of water after a dry period also has important employment and economic outcomes that flow through to important social and cultural outcomes.

We can also agree that, on most occasions, the first flow of water after a dry period in the Barwon-Darling is big enough to produce many of these social, economic, cultural and environmental outcomes without restricting access beyond the current Barwon Darling WSP

restrictions. A good drought is often followed by a good flood or good flow in the system of extreme variability.

The proposed rule is meant to reflect the need for the river, not regulated by large dams in the headwaters, to resume flowing and to protect the first flows after an extended dry period.

There are all sorts of benefits provided by these first flows and cited by DPIE – cultural benefits to Aboriginal communities who have an association with the river, basic water needs of local communities for town water supplies, stock & domestic use, recreational and social opportunities, and environmental benefits for aquatic biota that have been stressed by low flows and low water quality, and are surviving in refuges and weirs pools.

The key DPIE aim of the resumption of flow rule is to protect the critical first flows after an extended low flow or dry period. The rule is triggered when a flow event occurs after a continuous period of dry or low flow conditions and prevents water users from accessing the first flow for a period. Normal access conditions then apply after the flow has reached the required target flows.

All of this seems to assume that there are no protections of environmental flows in the system already, and it also seems to assume that all water that would provide relieving flows for the benefits described above is taken by irrigators – much like the graphics provided in the online paper describing the impacts of the IDELs. This is demonstrably not the case.

Maybe the current long drought has everyone thinking that all water is taken by irrigators on the Barwon-Darling – but the reverse is true. The irrigation take on the Barwon-Darling is lighter than any other developed river in the Basin, and this is especially so during drought breaking flows that occur with regularity in this Barwon-Darling system.

We must be very careful that in providing *further* protections for the first flows, that we do not further diminish the social and economic opportunities that these drought breaking flows provide to our drought-stricken communities.

At a time when our leaders are promising more water conservation measures and measures to enable farmers to bounce back from drought, we should not be unnecessarily restricting access to these large drought-breaking flows that mean so much to the economic prosperity of our small, irrigation-dependent communities along the Barwon-Darling.

The original commence-to-pump and cease-to-pump thresholds (CTP's) were set up as “Environmental Flow Rules” (EFRs) to make sure that when the river flowed at each section or management zone, the environment was taken care of first.

These thresholds are not simply “*reference points equal to or less than the flow rate specified for each category of water access licence in each water management zone*” – they were all set up with environmental flow targets in mind.

All water outside of these thresholds and above the volumetric limit applying in each year is called “*planned environmental water*” and it is by far the largest volume of water in the river.

This “*planned environmental water*” ensures that there is a flush through the system before access by irrigators at the various thresholds

Additionally, each irrigator has a volumetric limit – daily and annually – that limits the amount of water that can be taken from flows. All the extra water beyond these limits is again planned environmental water (PEW) that guarantees water flows down the river on resumption of flows. This water ensures the social, economic, cultural and environmental outcomes spoken about in the DPIE paper.

So, both the Barwon-Darling Environmental Flow Rules (EFRs) and the volumetric limits both cover off on this problem of “resumption of flows”.

Our members would also like to see an assessment of the current environmental flow rules and volumetric limits against the thresholds and total AVL limits that existed before the EFR’s and cap limits came into effect on the Barwon-Darling. An assessment was done just before the current BD Water Sharing Plan was put in place by the NSW Interagency Group, and this needs to be updated with current science. That will give a true historical picture of how the current plan is working to improve flows down the system.

We should also look at the added benefit of the 32.6GL that has been bought back within the Barwon-Darling so far, and how that water, plus other HEW entering from the tributaries, is improving flow outcomes already. The added benefit of some extra 320GL of HEW running through the Northern Basin, with much entering the Barwon-Darling, will have significant benefits above and beyond the current protections.

The current plan also provides for IDELs and it would be useful to see what difference would have been made if DOI Water had implemented these limits supported by all stakeholders during the making of the BD Water Sharing Plan 2012.

Additionally, DPIE also has access to the provisions of the “*Interim unregulated flow management plan for the North-West*” that provides flow targets for any issues relating to fish flows and blue-green algae outbreaks.

The changes contemplated beyond these first flush rules in the Barwon-Darling Water Sharing Plan have a financial and economic impact on Barwon Darling irrigators and Barwon-Darling communities.

If further changes are made that have a “material” impact on irrigators or irrigation-dependent communities, there must be a correspondent action that:

- Compensates the irrigators that have had their volumes or reliability reduced, and
- Compensates communities with social, economic and population impacts.

Or maybe there is a trade-off at other times when water is available, that irrigators can take more than usual to make up for losses under a rule that impacts their reliability or volumes.

Barwon-Darling irrigators are not seeking to have any negative effect on current planned environmental water (PEW) or held environmental water (HEW) and we ask that DPIE hold to its original commitment that “the new plan will have no impact on HEW and PEW, and no negative impact on water held by irrigation licensees – either in volume or reliability”.

Given the picture painted above, members of Barwon-Darling Water oppose the current plan to introduce “Managing resumption of flow” anticipated by DPIE, as there are already enough provisions and safeguards in the plan to guarantee the protection of these first flows.

We are also very concerned about the final report of the Natural Resources Commission into the Barwon-Darling Water Sharing Plan that recommends that the flow values used in the design of the resumption of flow rule align with the Environmental Water Requirements of the Barwon-Darling Long-Term Water Plan (LTWP). We note that there is a Minister’s note to this effect in the revised Plan

This is a left-field recommendation that has not been evaluated by DPIE, and the impacts have not been modelled and shared with affected communities. It is grossly unfair to impose economic impacts on entitlement holders who believed that this process would be open, transparent and collaborative.

In the original Barwon-Darling Stakeholder Advisory Panel (SAP) “Issues Assessment Paper”, the Department told SAP members that:

“Basin Plan principles state that there will be no adverse impacts on water available to a water access licence holder”, and that “The NSW Government will not be progressing issues that are likely to have a third-party impact, unless an offset is possible.”

In looking at this, and all proposed amendments to the Water Sharing Plan for the Barwon Darling, we trust that the NSW Government will be true to its word in this regard.

Active Management

The NSW Government says it is committed to improving the way it manages water for the environment in the northern Murray–Darling Basin to maximise environmental outcomes that improve the health of the Basin.

It is true that the NSW and Commonwealth Governments have made significant investments to recover water for the environment across the northern Murray–Darling Basin.

Water held under these recovered licences is referred to as ‘held environmental water’ (HEW). Water sharing plans do not currently protect this water from extraction in unregulated rivers if it is used in-stream for environmental purposes. For example, the WSP does not protect held environmental water released from storages in the Gwydir River system when it flows into the Barwon-Darling Unregulated River Water Source.

DPIE says that “temporary water restrictions under section 324 of the Act are currently the only regulatory tool to control take by unregulated river access licences if commence to pump thresholds have been met”.

This is not the case as most extraction on the Barwon-Darling takes place when there is enough flow in the river to account for all held environmental water (HEW), all planned environmental water (PEW) and water that can be extracted under the various water entitlements on the river.

Again, it is the regulatory tools of the CtP thresholds and the daily and annual pumping limits, acting in concert with the large flows comparative to small extractions, that are the real regulatory tools that control take by unregulated river access licences on the Barwon-Darling.

Again, maybe the current long drought has everyone thinking that all water is taken by irrigators on the Barwon-Darling – but the reverse is true. The irrigation take on the Barwon-Darling is lighter than any other developed river in the Basin, and this is especially so during the large flows that occur with regularity in this Barwon-Darling system.

However there are limited times, during flows when this is not the case, and DPIE says that *“Active Management is a new operational tool that ensures that water released for the environment will remain in-stream for its intended environmental purpose”* and that *“Clause 78 (j) of the WSP allows access rules to be amended to implement active management”* and that: *“the public are seeking certainty that water recovered for the environment remains in-stream for its intended environmental purpose. Active management is the operational tool to provide for this”*.

Barwon-Darling Water supports active management as proposed by DPIE at these limited times when there is competition for water at low flows, which is the only time that active management is needed.

The members of Barwon-Darling Water have discussed this issue in detail, and providing there is recognition that when we are protecting environmental water, the environmental water owners receiving the benefit of protection bear the costs, and that sharing of water and pumping allocation is based on 24 hour pumping windows for each irrigator, similar to Barwon-Darling pumping rosters used in the past.

Our stance is that Barwon-Darling Water:

- Understands that there is value in active management, but that active management should apply when there is limited water to share and/or when there is held environmental water present in a river reach that requires protection;
- supports the concept of Active Management to protect held environmental water (HEW). In past years we have co-operated with shepherding trials and we are anxious to ensure that there is no risk of our members ever being accused of pumping HEW. In the same way, we trust that the NSW Government will protect the water held by water licensees on the Barwon-Darling;
- Barwon Darling Water supports the implementation of Active Management in a way that protects the reliability of supply for water users, and to the extent that costs are not onerous to water users.
- Barwon Darling Water sees value in the option for the river operator (WaterNSW) to share flows between all water users when sharing is necessary and announce the volume of water that can be taken by each water user. The key outcome for water users would be for WaterNSW to be responsible for deciding when water can be taken, and that water users have a simple and clear direction about the timing of take and (when flows are shared), the volume of water available each day.

- It is understood that there may be some variability (overs and unders) in terms of access to water, and this is considered acceptable if water users can have confidence that variability can be maintained within reasonable limits, and that there is a robust review process in which water users can participate.

Barwon-Darling Water

Members of Barwon-Darling Water Inc have been involved in the water reform process, especially in relation to the unregulated Barwon-Darling River, for many years.

Barwon-Darling Water is an independent, apolitical body funded by its members. It was set up to provide advice on the Barwon-Darling River to members and decision-makers, to assist with policy development, and to advocate on behalf of the interests of its members.

Our membership is made up of local water user groups – including local government, irrigators and riparian users. We seek to represent all licence holders and water users on the Barwon-Darling – from Mungindi on the Queensland border to the Menindee Lakes.

Barwon-Darling Water has been deeply involved in water management activities and water reforms on the Barwon-Darling River over the past few decades. This work has included:

1. Co-operating with other stakeholders to create a set of environmental flow rules for the Barwon-Darling (through the first Barwon-Darling River Management Committee)
2. Assisting in development of the Barwon-Darling Cap Management Strategy of 2007;
3. Representation in development of the Barwon-Darling Water Sharing Plan 2012;
4. Working with DoI Water on development of the Floodplain Harvesting Strategy; and
5. Working as part of the Stakeholder Advisory Panel on development of the Barwon-Darling Water Resource Plan 2019.

We have also been involved in discussions regarding the Murray-Darling Basin Plan since the plan was launched in early 2007.

Barwon-Darling Water is a member of NSW Irrigators Council and the National Irrigators Council and has strong connections with other valley and industry groups including the Northern Irrigators Group and Cotton Australia.

I trust that you will take into account the views of Barwon-Darling Water.

Yours sincerely



for Joe Robinson
Chairman
Barwon-Darling Water Inc.

Email address	[REDACTED]
Name of respondent	Cathy Merchant
Address	[REDACTED]
Contact phone number	[REDACTED]
Are you an individual or representing an organisation?	Individual
Proposed changes to the Water Sharing Plan for the Barwon Darling Unregulated and Alluvial Water Sources 2012	
Do you have any comments on the distribution of IDELs?	Implement Individual Daily Extraction Limits (IDELs) based on the allowable extraction rates that existed before removal of restriction on pump sizes for certain licence classes and implement Total Daily Extraction Limits (TDELs) for each river reach
Do you have any comments on permanent trade of IDELs?	Implement trade rules that limit trade of IDELs to maintain river reach TDEL. As a precaution, initially restrict trade to at least within river reach, with an allowance in the Plan to expand trade if no unacceptable or unintended negative impacts are identified from greater trade of IDELs.
Do you have any comments on Resumption of flows using a multi-sectional approach?	Protect resumption of flows to be consistent with the baseflows defined in the draft Long Term Water Plan.
Do you have any comments on the flow values used for the resumption of flow triggers and releases?	Baseflows should reflect the draft Long Term Water Plan and incorporate best available evidence.
Do you have any other comments on Resumption of flow rule?	Meeting the LTAAEL is insufficient to meet environmental objectives in the Barwon-Darling where flows are highly variable. It does not protect ecologically important events such as resumption of flows.
	Fully support but should go further. This is the first audit undertaken of the WSP in operation since 2012 with gazetted 2013. Significant changes seem to have

Do you have any comments on the proposed changes to the A Class Flow Class Thresholds in response to the recommendation by the Natural Resource Commission?

been made post exhibition for access licence account management rules. These need to change back to 450% share component A, B and C class licences over three years with proper independent assessment of ecological impact. DPI modelling has proven very poor and outdated. There does seem better modelling data available.

Do you have any comments on the methodology used to develop the A Class Flow Class Thresholds?

Check with the MDBPA they seem to have good data based on robust methodology.

Do you have any comments on the removal of the access to imminent flows rules in response to the recommendation by the Natural Resource Commission?

Fully support immediate introduction. It seems these rules were added after exhibition without detailed analysis of ecological impact. Flows must be protected under new provisions with full acknowledgement of native title rights in the new WSP.

Active management

What are your views on what water will be defined as active environmental water and managed through an unregulated water source? (see page 10)

Environmental water should be properly identified in the accredited WRP - this will capture water for active management so does not need to be identified in the Active Management Plan. This duplicates and weakens the intent of WRP to sustainably manage basin water under the MDBP. The adequate protection of environmental water seems undermined constantly by government need to protect the irrigation industry.

Do you support inclusion and protection by active management of planned environmental water releases from upstream water sources that are additional to the inflows that were considered when the Barwon-Darling plan commenced? (see page 10 and 11)

The language of the Active Management policy is too difficult to understand and pages 10-11 do not clarify. Given the history of mismanagement in the Barwon-Darling it must be asked is this deliberate? Environmental water has a legislated "right of passage" through the whole basin under Commonwealth and State regimes. As mentioned above DPI shouldn't be making such decisions until they are working from best accurate data not estimates of water. Environmental water upstream should not be available for irrigation downstream. The definition of shepherding in the WSP needs to remove this possibility.

Active management should be applied to all flow classes and at all time after the

<p>Do you support the criteria for where active management is to be applied? (see page 13 and 14)</p>	<p>necessary installation of the metering, gauging and information technology systems to make it work. Any adaptive management by river operators must be based on real time flows.</p>
<p>What are your views on how accounts will be managed for in-stream use of unregulated held environmental water licences? (see page 15 and 16)</p>	<p>There is insufficient information as the procedures manual is not provided - it provides the volumes. Accounting will only be as good as the accuracy of your inputs.</p>
<p>Do you support assigning river transmission losses proportionally to active environmental water? (see page 16 and 17)</p>	<p>DPI needs to collaborate with the MDBA to improve understanding of river hydrology. Given the extent of interception by farm dams and floodplain harvesting activities it may be water meant for the environment in the WRP doesn't reach the river so DPI's calculation of losses may not be fair to the river's needs.</p>
<p>What are your views on concept of adjusting commence to pump/cease to pump thresholds to protect Active Environmental Water from extraction?</p>	<p>Needs to happen as current thresholds based on outdated information and do not protect low flows. The needs of the environment must come first.</p>
<p>What are your views on proposed amendments to water sharing plan access rules to protect active environmental water in each of the water sources where active management is proposed? (see proposed amendments to the Barwon-Darling River water sharing plan: https://www.industry.nsw.gov.au/water/plans-programs/water-resource-plans/drafts/barwon-darling/components/schedules-and-appendices/draft-amended-wsp-barwon-darling-unregulated-river-water-source-2012.pdf)</p>	<p>Any changes to the WSP must meet the requirements of accreditation of WRPs and be based on accurate measurement and accounting. The recent check of where NSW was up to in meeting accreditation suggested NSW remains very behind in meeting its promises under the MDBP.</p>
<p>Do you support distributing the available volume between licence holders in the Barwon–Darling based on Individual Daily Extraction Limits? (see page 19 and 20)</p>	<p>IDELs help improve ecological health. Any sharing must be on the basis of reduced diversion rates to those previously permitted esp. reduce A Class licence extraction and incorporate daily extraction limits on A, B and C Class licences that apply all the time</p>
<p>Do you support distributing the available volume between licence holders in the Barwon–Darling to individuals who have expressed an interest based on Individual Daily Extraction Limits?</p>	<p>IDELs should be implemented as part of a package of rules for first flush and active management based on accurate modelling.</p>

<p>Do you support access being announced? What issues need to be considered in making announcements? (see page 20 and 21)</p>	<p>Very suspicious of effectiveness of announcements. Presume these are daily which means a lot of water could be extracted below the pumping threshold before the next announcement. Surely with technology there is a better way of managing - remote monitoring of pumps should start and stop them as required under the cease to pump regime of the WSP</p>
<p>What are your views on how loss estimates will be forecast and how operational uncertainty is proposed to be managed? (see pages 22-25)</p>	<p>the recent MDBP review of first flush events demonstrated the capacity for improved hydrological monitoring of floodplain drainage and interception patterns. This sort of information would assist DPI on loss estimates and operational uncertainty.</p>
<p>What other options should be considered?</p>	<p>A changing climate poses the most significant uncertainty but it is not clear that the WSP have sufficiently identified emerging risk and mitigated them through strong rules. DPI needs help with improved understanding and better modelling.</p>
<p>What information do you consider is important to document and consider in order to continuously improve active management? (see page 26)</p>	<p>DPI needs to make informed decisions based on up to date data - work in collaboration with MDBP and other States would be helpful.</p>
<p>What risks need further consideration?</p>	<p>All basin connectivity has not been managed well by WSP such as the Barwon-darling. The risk to Aboriginal uses and values completely unaccounted for in WSPs and the results traumatising for Aboriginal people throughout the basin. Risks to groundwater is something that is not always fully captured especially as use has increased with drought. Water availability is predicted to reduce with a changing climate do demands on groundwater may increase even more.</p>
<p>What additional issues should be considered in actively managing flows?</p>	<p>Improved ecological health benefits everyone and should be paramount in the intent of active management.</p>
<p>Response per WRP chapter</p>	
	<p>There are too many important documents on exhibition at the same</p>

Do you have any comments on how the NSW Government can improve the consultation process undertaken?

time. This seems because NSW has not prioritised natural resource management, in particular commitments under the MDBP for the last eight years. Very disappointing.

Response to chapter 2: Water resource plan area and other matters

Do you have any comments on Chapter 2 or Appendix A?

I did not feel that there has been adequate and rigorous identification of environmental water. The interconnectivity between water sources within the Barwon-Darling and its critical downstream connectivity is not effectively managed by strong rules in the WSPs. Protection of groundwater is very important as this deep aquifer can take 1,000s of years to recharge.

Response to Chapter 3: Risks to water resources

Do you have any comments on Chapter 3 or Schedule D?

The risk assessment identifies a number of high and medium risks and can find no critical new mechanisms to reduce the risks from Not Tolerable. This is unsatisfactory. Reliance on the LTAAEL is not appropriate for ensuring that the WSP has met its environmental and social objectives. Available water determinations are not reflective of the current drought and the LTAAEL average is skewed by a couple of extreme flood events. The MDBA has sophisticated methodology to identify. The loss of environmental water through interception must be better managed. The impacts of a changing climate on water availability must be fully captured in the WRP.

Response to chapter 4: Environmental water, cultural flows and sustainable management

Do you have any comments on the protection of environmental water?

Environmental water is poorly protected in the WSP which should be completely rewritten to meet the accreditation requirements of the MDBP. The NRC has provided advice on this and the recent approach by the MDBA for its review of first flush should be utilised to manage the risk posed by farm dams and landscape modification of floodplains. The LTWP must be better integrated into the WSP to define ecological targets and provide effective monitoring.

Do you have any comments on cultural connections to surface water and the protection of Indigenous values and uses?

It is appalling that Aboriginal communities have been deprived cultural flows due to the greed of irrigators and their monopoly over government policy in water management. Even the heritage listed Brewarrina fish traps have been damaged by this mismanagement.

Do you have any other comments on Chapter 4, Schedule E or Appendix C?

"Thuggish" irrigator behaviour and weak objectives in water management have meant the environment and cultural flows have been sidelined in government policy for many years. The MDBP was to turn things around but NSW persistence that it can't affect water licences in water planning has undermined the implementation of the plan. Climate change will mean there is less water available and reliance on historic over extraction for water planning is ludicrous and unfair.

Response to chapter 5: Take for consumptive use

Do you have any comments on Chapter 5 or Schedule F?

NSW has not meet its responsibilities to implement the MDBP. Whether this is resourcing or an attitude problem is no excuse. Even the recent agreement with the MDBA from February NSW did not see agreed actions met satisfactorily. Relying on the Commonwealth government which has also wasted \$6 billion of taxpayers money for cover in agreements that maintain economic water use as the priority is not consistent with Commonwealth or State legislative water management regimes.

Do you have any comments on the Incident Response Guide (Schedule G)?

The environment must always be a priority for IRG. Reduced water quality and quantity is a consequence of ecosystem collapse - water for human consumption will also be healthier and more abundant if the environment is prioritised in management policy and plans. It is unsatisfactory that regional communities are dependent on salty groundwater and algal ponds.

Response to chapter 6: Water Quality Management

Do you have any comments on Chapter 6 or

The WQP is weak in the protection of water quality in the basin. It fails to address the fundamental need to reduce

the Water Quality Management Plan (Schedule H)?

extractive water use to maintain connectivity even during droughts. WSPs could be strategic documents in ensuring connectivity if rules were tightened when the river is at low flow.

Response to chapter 7: Measuring and monitoring

Do you have any comments on Chapter 7?

It is ludicrous to be developing this WRP when it is clear that the government has not completed its agreed actions to improve understanding of the real water flowing and used within the basin. Without this underpinning the WRP will be weak and unable to be accredited. DPI needs to work collaboratively with MDBA to develop rigorous accounting and measurement processes to ensure compliance with the MDBP.

Do you have any comments on the proposed monitoring, reporting and evaluation plan (Schedule J)?

For some reason this document present as a stand alone document to the WRP when it like the LTWP should be embedded in it.

Response to chapter 8: Information used to prepare the WRP

Do you have any comments on Chapter 8 or Schedule I?

The DPI information system on which the WRP is based must be the most current available. It is unclear whether the new SOURCE information system is being used across the whole basin but this is critical in achieving improved strategies to managed the critical connectivity necessary for the ecological health of the basin. DPI must work in collaboration with all basin partners on this.

Additional Responses to Schedules

Do you have any additional comments on the Schedules?

After all the publicity of water theft, floodplain harvesting extraction, mismanagement of funds the promised new approach does not seem to have eventuated in this WRP and the active management policy which is very disappointing.

Additional Responses to Appendices

This document must be embedded in the WSP and WRP - it provide measurable targets and priorities to effect real

Do you have any additional comments on the Appendices A, C or D?

ecological improvement in the basin which is what the community wants. Governments seem to think dams provide some sought of future proofing and fail to think outside the dam box. Governments are going to have to rethink management of the basin or they will inevitably have to deal with massive relocations of whole communities. History shows us this has happened previously but if you have the science it's about time to use it in the public interest.

How did you hear about the Public Exhibition of this plan?

Please let us know how you heard about the opportunity to make a submission?

Department of Industry website

Additional Information

Please tick the relevant boxes

I consent to my "submission" being published on the department's website and my name will be included with my suburb or town in a list of submitters with a link to my submission. Please note that any attachments you may have provided and any personal information that has been included in the submission will be published.

[REDACTED]
27 October 2019

Water in NSW
[REDACTED]
Parramatta NSW 2124.

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Re: Active Management in Unregulated Rivers - Draft Policy for consultation

Dear Sir/Madam,

According to the Department of Planning, Industry and Environment - Water in NSW website, the *Active Management in Unregulated Rivers - Draft Policy for consultation* (draft policy) is on exhibition concurrently with two other exhibitions of amendment to Water Sharing Plans (WSP).

This important document is buried in the flurry of documents on exhibition as NSW scrambles to meet its responsibilities to commitments made under the Murray Darling Basin Plan (MDBP) eight years ago.

Like many others in the community it has been very concerning to see basin water mismanaged by the NSW government with water crucial for downstream environment and communities being diverted for an expanding irrigation industry. The use and value of Aboriginal cultural water has also been seriously affected by water theft and mismanagement.

It is unclear why this important draft policy is not identified for exhibition via a separate process to the amendment of the two WSPs. The management of unregulated flows is critically important to the ecological health of the basin river system. Unlike the environmental water released from regulated waters, the unregulated system provides flows which mirror the natural flow conditions of the basin.

Good management of unregulated flows facilitates improved ecological health across all waterways of the basin at surface and ground level.

Since there is nowhere I can find to send my "submission" I am forwarding it directly to the "Water in NSW" with a cc to the Gwydir and Macquarie-Bogan WSPs. I am including a cc to the Barwon-Darling WRP since presumably it is the NRC's scathing review that has prompted the draft policy as a response, though this is not clearly stated.

MY CONCERNS:

The language in this draft policy is cryptic and confusing for the community which was promised increased transparency and accountability in water management policy in NSW.

Its policy context is limited. It presents with bizarre disengagement from the Water Resource Plan accreditation process required under the MDBP. It is unclear why it is necessary to define “active environmental water” in the draft policy when the WRPs should be doing this underpinned by evidence based knowledge.

The WRPs are required to identify environmental water which should be protected via strong rules in the WSPs which support them. The draft policy should be consistent with these requirements under the MDBP. There is a lack of clarity in the draft policy to determine if this is the case or not. How its underpinning principles are derived is not stated in the draft policy.

It is also unclear where it “fits” as a policy response to various independent reviews of water management in NSW. The recent MDBP review of first flush flows, amongst other matters, demonstrated the effectiveness of satellite and gauge technology in tracking flows and improved understanding of basin hydrology. Yet the opportunity this technology provides is not referenced in the draft policy which purports to improve management of unregulated rivers.

The scathing NRC Review of the Barwon-Darling recommended a suite of immediate and future amendments to that WSP. These recommendations could be applied in other WSPs so as to meet the accreditation requirements of the WRPs. It is unclear how this draft policy has adequately absorbed these recommendations into meaningful protection of environmental water.

A strong set of rules in WSPs improves transparency and clarifies where ministerial action is appropriate. It also reduces the need for resource intensive temporary restrictions in water management policy.

The draft policy proposes areas for ministerial intervention that do not seem consistent with the recommendations of these independent reviews. For instance:

- The Minister will determine and announce the flow class, CtP thresholds and/or volumetric limits that apply;
- The Minister becomes the contact when licence holders want to leave some or all of their water for environmental purposes;
- The Minister will announce if access is permitted whether there is active environmental water present or not.

Nor is this approach consistent with promised transparency by government in water management. It is not likely to allay community fears that the basin is really dying because government is not genuine in its policy settings to protect environmental water.

The draft policy is not exhibited with the proposed procedures manual or a meaningful demonstration of how this manual links with amendments to the WSPs. Information about the procedures manual is mostly descriptive. As the document that “...will set out the operational details for implementing active management to manage active environmental water used in-stream and to **share flows**” it is a critical supporting document to this policy.

The draft policy sets out three options for how volume will be distributed amongst licences but does not address the important issue of Total Daily Extraction Limits to meet flow rates that actually improve the environmental health of the basin. Active management is meaningless if there is insufficient water kept in the unregulated rivers.

It is unclear why the policy relies on “forecasting and estimating” flows. Under the MDBP, NSW is required to develop accredited WRPs based on accurate water measurement and accounting methods. The MDBA review of first flush has demonstrated clearly that this is possible.

The MDBP review demonstrated to the community the power of technology in informing water policy and enforcement that the government has thus far avoided. It is unclear whether NSW is working collaboratively with the MDBA to improve understanding of “real” water use and monitoring in the basin. A recent MDBP review of NSW performance in implementing the MDBP suggests NSW is well behind on its agreed milestones.

It is disappointing once again that a NSW government policy document fails to properly address the impact of a changing climate.

Finally, it is arguable as to whether the draft policy genuinely meets NSW commitments made in the Intergovernmental Agreement as stated in the introduction of the draft policy. If I have identified the correct document it states “The Parties agree to establish mechanisms to coordinate planning, delivery and monitoring of environmental water.”

The draft policy fails dismally in this regard I feel. It is also unclear where it aligns with the intent of that agreement to develop accredited WRPs by December 2019.

I am not convinced that this draft policy is genuine in the protection of environmental water consistent with that required in the MDBP. Like much of NSW water policy it remains skewed towards the continued protection of existing water allocations and an emphasis on economic use of water over environmental needs and Aboriginal cultural use and values.

Yours sincerely

Cathy Merchant



Healthy Rivers Dubbo

E-mail: [REDACTED]

Submission to Barwon-Darling Water Resource Plan

To: NSW Government

Department of Industry

By e-mail: barwondarling.sw.wrp@dpi.nsw.gov.au

Introduction

Healthy Rivers Dubbo is a community grass roots group dedicated to providing a strong voice for our local rivers, aquifers, wetlands, and for the Murray-Darling Basin as a whole. As ambassadors for healthy rivers, wetlands and groundwater, we have been active in our community calling for transparency and accountability in all aspects of water management.

Healthy Rivers Dubbo pays our respects to the Traditional Owners, past, present and future, of the land we live in. We acknowledge that the land in which we live was never ceded.

Healthy Rivers Dubbo (HRD) welcomes the opportunity to make a submission to the draft Barwon-Darling Water Resource Plan (WRP).

Responses to questions

- **Do you have any comments on the distribution of IDELs?**
- **Do you have any comments on permanent trade of IDELs?**
- **Do you have any comments on restriction of temporary trade of IDELs?**
- **Do you have any comments on Resumption of flows using a multi-sectional approach?**

- **Do you have any comments on the flow values used for the resumption of flow triggers and releases?**
- **Do you have any other comments on Resumption of flow rule?**
- **Do you have any comments on the proposed changes to the A Class Flow Class Thresholds in response to the recommendation by the Natural Resource Commission?**
- **Do you have any comments on the methodology used to develop the A Class Flow Class Thresholds?**
- **Do you have any comments on the removal of the access to imminent flows rules in response to the recommendation by the Natural Resource Commission?**
- **What are your views on what water will be defined as active environmental water and managed through an unregulated water source?**
- **Do you support inclusion and protection by active management of planned environmental water releases from upstream water sources that are additional to the inflows that were considered when the Barwon-Darling plan commenced? (see page 10 and 11)**
- **Do support the criteria for where active management is to be applied?**
- **What are your views on how accounts will be managed for in-stream use of unregulated held environmental water licences?**

In general, HRD is supportive of all new and amended rules in this WRP that favour the environment, and have come through as recommendations of the Final Natural Resource Commission review of the Barwon Darling Water Sharing Plan (WSP).

While we are supportive of all new rules that favour the environment, this document itself offers us no hope that the environment will actually improve.

Looking first at the risk assessment for the WRP, we were able to ascertain that even with the implementation of new resumption of flow rules, and new changes to A Class flow thresholds, the currently Not Tolerable environmental risks that are currently in the Barwon Darling, will remain Not Tolerable.

Under the Basin Plan, the environment must come first. The only change that HRD can see actually having a chance of improving the environment is for all large scale irrigation on the Barwon Darling to be drastically reduced in volume. It is not lightly that we have reached this conclusion.

Therefore HRD is supportive of commence to pump and A class flow thresholds being increased even further, so that large extraction is not possible in most normal flow years.

Do you support assigning river transmission losses proportionally to active environmental water?

No.

Firstly: Healthy Rivers Dubbo is constantly offended by the free and multiple use of the word 'losses'. While occasionally, water is genuinely lost (i.e. seepage from the Albert Priest channel, or overbank flow from the Barmah Choke), most of the time when NSW water agencies use the word losses they are referring to the many complex and interrelated natural behaviours of water in the environment.

By constantly referring to any water that is not consumed as 'losses', departments are re-iterating that their perspective is the same as the perspective of the irrigation industry. The use of the word 'losses' is a relic of former times, when the department was simply a water supply authority. It is a vague, catch all term.

Secondly: water that seeps into the river bank, naturally evaporates or is used by flora and fauna on its journey along the river should be socialised.

Thirdly: much of the water that is accounted for by the government in the general sundry account of 'losses' is actually taken as floodplain harvested water (for free and for profit).

What are your views on concept of adjusting commence to pump/cease to pump thresholds to protect Active Environmental Water from extraction?

All steps to protect active environmental water must be taken, which does include adjusting commence and cease to pump thresholds from where they currently are. The needs of the environment must come before consideration of extractors.

What are your views on proposed amendments to water sharing plan access rules to protect active environmental water in each of the water sources where active management is proposed?

Support changes to the WSP that allow reference to Active Management policy.

Our concerns about the Active Management policy are:

1. Environmental water in the Barwon-Darling should be protected to Menindee Lakes
2. Transmission losses must be socialised
3. Total Daily Extraction Limits (TDELs) and Individual Daily Extraction Limits (IDELs) should be implemented in Barwon-Darling immediately with no tradable rights attached to IDELs
4. Flow gauges need to be installed at all necessary locations as a high priority. Other new technology should also be used to forecast flows.

5. Water Sharing Plans should provide basic rights, stock & domestic and town water supply, this is not the purpose of environmental water
6. Environmental water arriving from Queensland must be immediately protected
7. First flush flows should be protected throughout inland rivers when the drought breaks
8. Do not support bias towards protecting water users.

What information do you consider is important to document and consider in order to continuously improve active management?

- Metering of Basic Landholder Rights and Stock & Domestic take. You can't manage what you don't measure.
- Better understanding of the risks of climate change on the river. Department of Primary Industries Office of Water produced a draft report in 2013 Assuring Future Urban Water Security¹. This report details how areas in Western NSW can expect to have access to between 30% - 50% less potable water by 2030, and that's without diversions. This report should be finalised, published, and the findings used to inform water management rule development.

Do you have any comments on how the NSW Government can improve the consultation process undertaken?

Consultation with the Barkandji and Murrawarri Nations has not been finalised. This draft WRP should not be on public submission until all First Nation consultation is complete.

Do you have any comments on Chapter 3 or Schedule D (Risk Assessment)?

Yes.

According to this document, once new critical mechanisms are implemented, the residual risks of rating for all river reaches at all flow or extraction characteristics of there being enough water available for environmental requirements, and risks to ecosystems from poor water quality, remain unchanged – almost all of them in the Not-Tolerable range.

We can take from this that regardless of the new rules being implemented, the health of the Barwon Darling will not improve.

The impacts of that fact are catastrophic for the environment and all human life and endeavour on the Barwon Darling.

¹ http://www.water.nsw.gov.au/_data/assets/pdf_file/0005/665609/assuring-future-urban-water-security-draft.pdf

SECTION 4.3 RISKS TO WATER AVAILABLE FOR THE ENVIRONMENT & CAPACITY TO MEET EWRS E(W)] - UNREGULATED WATER SOURCE

Long Term Annual Average Extraction Limits are currently used to reduce risks. They do not work, as explained in the NRC review of the WSP:

*"Use of this statistic as an indicator of environmental outcomes is highly misleading as this percentage is based on an average taken over more than 100 years and includes major floods that significantly skew the average. While the LTAAEL has a function in assessing long-term compliance with extraction limits, adherence to the LTAAEL is not appropriate for assessing whether the Plan has met its environmental and social objectives, particularly for such a highly variable system. When and where the water is taken is critically important in this system, not just volume extracted over many years."*²

If the SDLs are similar to the LTAAELs, then no risk will be mitigated. A fact this document reflects.

This document says Available Water Determinations (AWD) could have been adjusted according to water availability. They could not have been. Using AWDs to adjust extractive use according to water availability is not currently possible in NSW. The 2014 amendment to the Water Sharing Plans via the Water Management Act disallows inflow data from the most recent drought of record to be used when calculating the Available Water Determination for each valley.

SECTION 4.4 RISKS TO WATER AVAILABLE FOR THE ENVIRONMENT FROM EXTRACTION UNDER BLR [E(BLR)] - UNREGULATED WATER SOURCES ONLY

This document considers the risks of the environment not having enough water due to Basic Landholder Rights extraction in these sections as Not-Tolerable:

- Mungindi to Walgett
- Brewarrina to Bourke

Other areas, it is reported there is no data available:

- Walgett to Brewarrina
- Bourke to Louth
- Louth to Wilcannia

Where there is data, the risk is Not-Tolerable, underpinning the critical need for data in the 3 sections with no available data.

² <file:///C:/Users/MGray/AppData/Local/Temp/Barwon-Darling+Water+Sharing+Plan+review+-+Final+Report+v2.pdf>

The new critical mechanism proposed to deal with these Not-Tolerable risks is adherence to the SDL. If the SDL is similar to the LTAAEL, then this new strategy will not reduce the residual risk rating to Tolerable, as claimed in this risk assessment.

A case for metering and reducing BLR extraction on the Barwon Darling would be a strong one. If risks are Not-Tolerable, they should not be tolerated.

SECTION 4.5 RISKS TO WATER AVAILABLE FOR THE ENVIRONMENT FROM INTERCEPTION ACTIVITIES [E(I-FD)]

Current risks in the flowing sections are currently considered Not-Tolerable:

- Mungindi to Walgett
- Brewarrina to Bourke

To the following sections, the risks are considered low (I'm not sure why):

- Walgett to Brewarrina
- Bourke to Louth
- Louth to Wilcannia

Nothing is currently in the plan to deal with or measure rainfall runoff harvesting. Strategies moving forward are to licence take that exceeds the 10% runoff right, and reduce this take to meet the SDL. Of course, the plan is to increase the SDL to cover most of the take.

This document claims the risk treatment options in the 2 sections mentioned will then become A (no new strategies required or possible).

SECTION 4.5.4 RISKS TO WATER AVAILABLE FOR THE ENVIRONMENT FROM INTERCEPTION ACTIVITIES [E(I-FH)]

Currently the risk to environmental water availability in the entire water source due to floodplain harvesting (FPH) is Not-Tolerable.

Nothing is currently in the plan to deal with or measure the impact of FPH. Strategy moving forward is to implement the FPH and Healthy Floodplains Project. This document claims this will reduce the risk to tolerable.

Of course, the plan is to increase the SDL to cover most of the take. On paper the risk appears to be reduced, however in reality, there needs to be assessment of the cumulative environmental impact of FPH on downstream environment for improvement to be measured. On ground reality implies that the impact the Floodplain Harvesting of water is having on the Lower Darling has to date been significant.

SECTION 4.6 RISKS TO WATER AVAILABLE FOR THE ENVIRONMENT DUE TO CLIMATE CHANGE [E(CC)]

Currently the risks of climate change impacting available water for the environment is Not-Tolerable at the weir at Bourke on the Darling River.

Impacts to sections downstream of the Bourke weir aren't addressed.

The current method of dealing with this risk is adherence to the LTAAEL and adjusting AWDs. Both methods have been shown to be inadequate, as the environment in the Lower Darling would attest.

The strategy and new critical mechanisms moving forward are using Sustainable Diversion Limits (SDLs), Strategic use of held environmental water (HEW), and protection of HEW with Active Management.

The SDLs have come under fire for not addressing climate change. If the new SDL is similar to the LTAAEL, that's not going to reduce the risk to tolerable, as this document claims it will.

SECTION 5.4, 5.5 RISKS TO THE HEALTH OF WATER DEPENDENT ECOSYSTEMS FROM POOR WATER QUALITY [E(WQ), (E(WQ-CWP)]

The Not-Tolerable risks are:

- Barwon at Collarenebri – turbidity
- Barwon at Collarenebri – total phosphorous
- Barwon at Collarenebri – total nitrogen
- Barwon at Collarenebri – pH
- Barwon at Collarenebri – Dissolved oxygen
- Barwon at Dangar Bridge Walgett – total nitrogen
- Barwon at Brewarrina – turbidity
- Barwon at Brewarrina – total phosphorus
- Barwon at Brewarrina – total nitrogen
- Barwon at Brewarrina – pH
- Barwon at Brewarrina – dissolved oxygen
- Darling at Bourke – Turbidity
- Darling at Bourke – total phosphorous
- Darling at Bourke – total nitrogen
- Darling at Bourke – pH
- Darling at Bourke – dissolved oxygen
- Darling at Louth – Turbidity
- Darling at Louth – total phosphorous

- Darling at Louth – total nitrogen
- Darling at Wilcannia – turbidity
- Darling at Wilcannia – total phosphorus
- Darling at Wilcannia – total nitrogen
- Darling at Wilcannia – pH
- Darling at Wilcannia – dissolved oxygen
- Darling at Wilcannia – salinity

Strategies and new critical mechanisms offered in this plan, and referred to in the WQM plan, offer nothing that might reduce these Not-Tolerable risks.

The future for the environment and the humans of the Barwon Darling is assured to include water of unacceptable quality. Regions associated with the Barwon-Darling should probably be reclassified as third world.

Do you have any comments on cultural connections to surface water and the protection of Indigenous values and uses?

“Cultural Flows” are water entitlements that are legally and beneficially owned by the Nations of a sufficient and adequate quantity and quality to improve the spiritual, cultural, natural, environmental, social and economic conditions of those Nations. These are our inherent rights.”

-MLDRIN [Echuca Declaration, 2007](#)

“Today, MLDRIN is working to make sure Cultural Flows are recognised by Australian governments. We have achieved some success: the [Murray Darling Basin Plan](#) requires Basin governments to take account of First Nations’ views about cultural flows. State and Commonwealth governments are beginning to take steps to support First Nations to acquire water that we can own and manage.”³

HRD stands besides MLDRIN and supports the hard work they have been doing to regain some control over some of their cultural right to water.

³ <http://www.mldrin.org.au/what-we-do/cultural-flows/>

Conclusion

Healthy Rivers Dubbo acknowledges that regardless of the improvement to the rules on offer in this draft WRP, the risk assessment lays out clearly that risks to the environment will be just as high as they are now, which in most cases is Not Tolerable.

When something is classified as Not Tolerable, it should not be tolerated.

HRD is of the opinion that the rules presented in this WRP, while an improvement (thanks to the Natural Resource Commission review of the WSP), will not satisfy the requirements of the Basin Plan.

The Basin Plan and the Commonwealth Water Act 2007 dictate that the needs of the environment must come before users. Logically, we find ourselves in the extraordinary and unprecedented circumstance of recommending that large scale extraction in the Barwon Darling Unregulated Water Source be significantly reduced, to give the environment any chance at all.

██████████

Convenor

Healthy Rivers Dubbo

██

12th October 2019

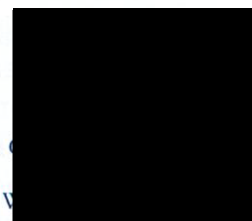
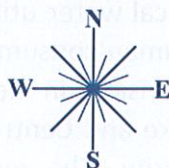
CENTRAL DARLING SHIRE COUNCIL

CONSTITUTED 1 MAY 1959

ABN: 65 061 502 439

E-mail: [REDACTED]
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PLEASE ADDRESS ALL
CORRESPONDENCE TO:
THE GENERAL MANAGER
P. O. BOX 165
WILCANNIA NSW 2836



SUBMISSION -DARLING / BARWON WATER SHARING PLAN

Thank you for the opportunity to provide comment on the Murray Darling Water Sharing Plan.

The ongoing drought has highlighted the need for an urgent review of the Water Sharing Plan and the policies impacting on water extraction from the river system. It is agreed that the Barwon Darling is a highly variable flow system and the river in its natural state does experience periods of low to nil flow. The impact of extraction and water policy has contributed significantly to the current state of the river noting that the catchment has experienced record low rainfall and runoff.

There is a critical need for an active and flexible whole of catchment management approach for extraction of surface and underground water particularly to manage dry times. For example, water should not be taken for irrigation following resumptive flows after non flow or low flow periods along the length of the Barwon/Darling at least through to the Menindee Lakes to permit wetting the system. First flush protection against irrigation extraction is required. Furthermore, leading into extreme dry periods, future policy development should include the thresholds that ensures the appropriate reserve of water is retained in the river system for critical human consumption and that all other water extractions to cease.

Central Darling Shire, given its location in the lower reaches of the catchment, sees the need to have a connected river along the system including providing water to the Menindee Lakes given their important cultural, social environmental and recreational value to the region.

The Central Darling Council has recognized the importance of the lakes ecosystem and is sponsoring a proposal to have the Lakes listed as a Ramsar site. Support has been obtained from the Western Division of Councils, The Far West Joint Organisation of Councils, Regional Development Australia Far West NSW, Murray Darling Association and Local Government Association NSW.

The River System has long held important spiritual and cultural values to the aboriginal populations along the river and this needs to be recognized in the Water Sharing Plan. This

sector of the community needs to be engaged in the development of the plan and the ongoing active management of the system.

Local Councils along the river system are local water utilities and depend on a connected healthy flowing river to extract water for human consumption for urban settlements, thus we have a strong interest in management decisions in the operation of the river.

The Councils of Walgett, Brewarrina, Bourke and Central Darling recently met in Sydney and considered the issue of Water Security. The meeting agreed that the drought conditions and water shortages being experienced along the system should not be repeated and actions should be taken as far as possible to mitigate any chance of recurrence.

It was noted that the current situation is causing significant financial, emotional, and social stress to those living along the Darling /Barwon River system.

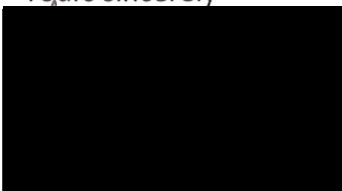
Representatives agreed that:

- That solutions will require a bipartisan and cooperative approach at all levels of government and pledged to work alongside the other tiers of government.
- That there is an urgent need to finalise the Western Weirs Plan and clearly articulate the plan to all communities along the river system.
- There is a need to utilise the weir strategy including the existing storages to ensure that each community reliant on the system as their primary water source has access to a minimum (2) year's supply of water with such water held in storages quarantined accordingly for that purpose.
- that new weirs that are constructed and designed to allow for the periodic flushing of storages as the opportunity rises
- That provision is made for the construction and equipping of groundwater bores to all urban supplies that can supplement the increased urban weirs storage and further enhance town water security during dry or low flow periods.
- That recognition be given to the importance of the social, and recreational benefits to be derived from a permanent water supply including the cultural benefits derived by the aboriginal community.

Council representatives were extremely strong on the need for local government to be part of the ongoing discussions and the need for a cooperative and collaborative approach to be adopted if a long-term solution is able to be determined and adopted.

We thank you for the opportunity to lodge this submission.

Yours sincerely



Administrator

Some comments on the proposed amendments to the Water Resource Plan for the Barwon-Darling Unregulated and Alluvial Water Sources

Section 1 Introduction

This plan states it "*acknowledges Aboriginal peoples, and endeavours to apply the values and uses which they have expressed throughout the consultation process. They have the inherent right to maintain cultural values including links with Country*" Yet consultation with the Barkandji, Murrawarri has not been undertaken.

It is a poor reflection on the plan no extra effort has been undertaken to include that vulnerable and marginalised groups in the consultation process (see [Vanclay 2003](#)). I would suggest that having voice should not be simply tokenism, but is an important in terms overall justice. Therefore, given the current state of consultation, Box 1.5 should be revised to include new additional knowledge or advice from the Indigenous communities yet to be consulted.

Removal of alluvial groundwater sources

The problem with the removal of this groundwater for the Darling is that public exhibition of the Darling Alluvium Water Resource Plan is closed. This means the action has removed the opportunity for public scrutiny of this decision. In particular:

- the broader context/logic of the Darling Alluvium plan- such as the links the objectives, strategies and performance indicators.
- the Darling Alluvium plan proposed to decrease the long-term annual extraction limits for the Upper Darling Alluvial, Paroo Alluvial and Warrego Alluvial groundwater sources so that more environmental water will be retained in these systems in the future- will the addition of this new Alluvium water resource effectively counteract that decrease?

Revision of commence and cease to pump rules

The Barwon-Darling River is an unregulated system in which the flow is event-based and is dependent on inflows from rivers and tributaries in connected WRPAs and to a much lesser degree local rainfall. Unfortunately tributary landholders are taking the opportunity to increase extraction by undertaking works that capture water outside current 'recognise' accounting processes. Upstream diversions are now a major risk factor in relation to the quantities, qualities and temporal properties of flows and pooled water. This is leaving the Barwon-Darling without flow in all but flood years. Indeed the 2012 plan for the region has effectively resulted in a hydrological drought. This has had significant impact on:

- local people's way of life – that is, how they live, work, play and interact with one another on a day-to-day basis;
- their culture – that is, their shared be customs beliefs and values;
- the sense of community – its cohesion, stability, character, services and facilities
- local people's health and wellbeing – their complete physical, mental, social and spiritual wellbeing
- a feeling of injustice about held personal and property rights – particularly when people have economically affected, or experience personal disadvantage which may include a violation of their civil liberties;

- downstream riparian landholder's fears and aspirations – their perceptions about their safety, their fears about the future of their community, and their aspirations for their future and the future of their children.

To reduce the perverse outcomes stemming from water accounting practices and the flow on disbenefits on local communities, end of system flows for each of the tributaries needs to be created the Barwon-Darling is provided with a minimum allocation.

It seems there are monitoring stations within each of the major river sections in the plan. Each section (except the headwaters where multiple tributaries coalesce) has a monitoring station and could be used

Section 3 Risks

The plan would display improved logical if the risks were connected to the three outcomes of the plan stated in section 1. This approach would also help in ongoing adaptive management and evaluation.

LTAEL

The NRC final report stated that the use of LTAEL is inappropriate for these rivers- where flows are highly variable. Indeed some of the most variable in the world. A determination of the SDL should be achieved by triangulation including: a) modeling all available rainfall and flow data up to the present; and b) incorporating the increased lack of runoff from new farm dams and diversion banks in recent years

Proposed removal of imminent flow provisions

This is supported. Pumping out the remnants before a flow must be just disastrous for fish and other aquatic life forms. I note the NRC comment: “environmental and social outcomes under the Plan have generally been poor”.

Individual daily extraction limits

The imposition of IDELs seems a sensible action to achieve targeted environmental objectives. Developing Total Daily Extraction Limits needs to be based on consideration of system connectivity and best available evidence

Trade of IDELs

The WSP will allow permanent dealings of a licence holder's IDEL within a river section, but not between river sections. I do not support temporary or permanent trading of IDELs. Transferability of licences enables the concentration of most licences in a few sections of the river. This creates an uneven drain on the flow coming from the various tributaries - which in turn can lead to perverse social and environmental outcomes.

A more sophisticated approach to TDELs and IDELs would consider shepparding so as to allow them to be set and applied in such a way that assist in enabling environmental flows to get past pumps.

Chapter 7 Measuring and Monitoring

Each plan should have clearly linked objectives, outcomes and performance indicators that are specific and measurable. Unfortunately box 1.1 of the plan, the risk assessment and Schedule j for monitoring are not consistent

Section 4 Environmental Water

There need to be increased flows of Environmental Water (EW) in all years), instead of expecting ecosystems to just survive on a trickle between monster floods. It is the irrigation industry share, not the environment's share that should be quite small in all below average years

Thus the need for end of system flows, as well as reviewing the carryover provision and replacing the unlimited carryover provisions; and reducing the allowable annual take to a rolling average of 450 percent over 3 years;

It has been suggested by others that perhaps no irrigation diversions should be permitted unless a substantial target volume has reached Menindee Lakes in the last few months – I would agree with that. Only in the infrequent above average years should diversion of the volumes that used to be regarded as normal or median be permitted. If irrigation is to continue it should be re-conceived in a way that is compatible with the systems natural variability so that environmental needs and the needs of the local people who depend on and live with their environment are not neglected.

Dr J L Howard





Western Lands Advisory Committee

[REDACTED]
[REDACTED]

29 October 2019

HAVE YOUR SAY BARWON DARLING WATER RESOURCE PLAN

TO WHOM IT MAY CONCERN

At the 44th Meeting of Western Lands Advisory Committee held on 11th September 2019, a resolution delegated responsibility to Geoff Wise, Chair, and Doug McKay, Alternate Chair, to make submissions as appropriate relating to the Barwon Darling River System.

We hereby provide the following Submission.

We thank appropriate authorities for allowing us to have our say into the development of the Barwon Darling Watercourse Water Resource Plan (referred to as WRP).

Submitted by:

Geoff Wise
Chair- Western Lands Advisory Committee

[REDACTED]
[REDACTED]

Doug McKay
Alternate Chair- Western Lands Advisory Committee

[REDACTED]
[REDACTED]

Table of Contents for this Submission

A.	SUMMARY of SUBMISSION RECOMMENDATIONS and RESPONSES	Page 3
	Overarching Actions NSW Recommendations 1, 13, 14	
	Interim Actions NSW Recommendations and responses 2-12	
	Recommended Actions MDBA Recommendations 15-19	
B.	FAILURE TO PROTECT ENVIRONMENTAL WATER FROM EXTRACTIONS	Page 4
	Submission Statement	
	Supporting Contributions	
	Interim Actions Recommendations and responses 1-5	
C.	FAILURE TO AVOID EXCESSIVE EXTRACTIONS OF A CLASS WATER	Page 6
	Submission Statement	
	Supporting Contributions	
	Interim Actions Recommendations and responses 6-7	
D.	REVIEW OF RULES FOR B AND C CLASS LICENCES	Page 8
	Submission Statement	
	Supporting Contributions	
	Interim Actions Recommendations and responses 8-9	
E.	INTRODUCTION OF ACTIVE MANAGEMENT	Page 9
	Submission Statement	
	Supporting Contributions	
	Interim Actions Recommendations and responses 10-12	
F.	MANAGING RESUMPTION OF FLOW	Page 10
	Submission Statement	
	Overarching Action/Response Recommendation 13	
G.	FAILURE TO SUPPORT AND WORK WITH THE COMMONWEALTH FOR BUY-OUT OF ALL A CLASS LICENCES	Page 10
	Submission Statement	
	Supporting Contributions	
	Overarching Actions Recommendation 14	
H.	RESPONSIBILITIES FOR MDBA ASSOCIATED WITH WSP ACCREDITATION	Page 11
	Submission Statement	
	Recommended Actions MDBA Recommendations 15-19	
ATTACHMENT		Page 13
	Graph released my MDBA	

A. SUMMARY of SUBMISSION RECOMMENDATIONS AND RESPONSES

Overarching Action NSW

1. NSW should not submit WRPs to the MDBA unless NSW is totally confident that the WRPs are “fit for purpose” in achieving critical outcomes to deliver healthier and sustainable rivers in the Basin.

Interim Actions NSW

2. We support the proposed changes as interim measures to progress implementing responsible management of environmental water within NSW Government’s easy control.
3. The Barwon Darling and Intersecting Streams Water Resource Plans must include “a *method of determining the volume of HEW arriving at the NSW-Qld border which is agreed by NSW*”, with negotiations between Qld and NSW facilitated by MDBA, with deadlines for achieving this determination and subsequent introduction of managing protection of environmental water.
4. Both Barwon Darling and Intersecting Streams WRPs must include commitments to apply Active Management rules for managing environmental flows arising from Qld.
5. Barwon Darling WRP include a commitment to use section 324 order under the Water Management Act 2000 to allow protection of environmental water that can not be protected by other means.
6. We support changes to be introduced associated with the WRP of raising commence/cease to pump thresholds and for the introduction IDELs and TDELs provided there is an absolute commitment given that these changes will be introduced simultaneously with the introduction of the WRP.
7. Immediately introduce a 100% limit on annual extraction relative to annual entitlement for A Class licences within the WRP.
8. Immediately introduce the NRC Review recommendation that, “*the allowable annual take should be reduced to a rolling average of 450 percent over three consecutive years*” for B and C Class licences within the WRP.
9. Improved analyses should be undertaken relating to extraction rules for B and C Class licences, including due consideration to the categories of water held by CEWH, with provisions in the 2023 remake of the Plan.
10. We endorse the principles and broad details provided for the introduction of active management in the Unregulated Barwon Darling.
11. A River Management Consultative Committee (by whatever name) should be formally constituted to work with the River Operator.
12. The Government should commit to a definitive process and timeline to incorporate active management of all environmental water that is otherwise not protected, with a deadline for implementation no later than the end of the current WSP.

Overarching Actions NSW

13. We strongly support the entirety of the proposed amendments to the WSP to manage the resumption of flows, with introduction to commence immediately the WSP is introduced.
14. NSW proactively and cooperatively work with Commonwealth Ministers and Departments together to implement a strategy for buy-out of all A Class licences along the Barwon Darling River system.

Recommended Actions MDBA

15. Through the process of finalisation and accreditation of the BD WRP, and all other WSPs, MDBA should thoroughly evaluate whether the proposed plans are “fit for purpose” in achieving critical outcomes to deliver healthier and sustainable rivers in the Basin.
16. MDBA should refuse to recommend accreditation of both the Barwon Darling and Intersecting Streams Water Resource Plans “*until a method of determining the volume of HEW arriving at the NSW-Qld border is agreed by NSW*”, with negotiations between Qld and NSW facilitated by MDBA.
16. MDBA should refuse to recommend accreditation of Barwon Darling WRP for accreditation unless the MDBA is absolutely confident that raising commence/cease to pump thresholds and introduction of IDELs and TDELs will commence simultaneously with the introduction of the WRP.
18. MDBA should refuse to recommend accreditation of the Barwon Darling WRP until being absolutely certain that every proposed action has a definitive and acceptable timeline for implementation, and mechanisms for appropriate monitoring and assessment.
19. MDBA should proactively and cooperatively work with all appropriate agencies to implement a strategy for buy-out of all A Class licences along the Barwon Darling River system as announced by Minister Littleproud in April 2019.

B. FAILURE TO PROTECT ENVIRONMENTAL WATER FROM EXTRACTIONS

Submission statement

- Water Resource Plans must be “fit for purpose” to meet requirements set out by the Commonwealth legislation, linked to the “*Murray–Darling Basin Plan, developed to manage the Basin as a whole connected system. The aim of the Murray–Darling Basin Plan is to bring the Basin back to a healthier and sustainable level, while continuing to support farming and other industries for the benefit of the Australian community.*”
- A major commitment given to justify the 2018 Amendment to the Northern Basin Recovery Target from 390 GL to 320 GL was that through the Northern Basin Review, recommendations were accepted that “*the reduced reduction target would be offset by a more targeted approach, through the introduction of a range of measures*”, generally referred to as “*toolkit measures*”.
 - The most significant measure highlighted was “*arrangements to protect environmental water*”.
 - Hence the amended recovery targets in the Basin Plan place enhanced responsibilities for WRPs to protect environmental water to a far greater and more targeted extent than what as expected from the original Basin Plan.
- In complementing and enhancing Basin Plan outcomes, WRPs therefore must give credence to actual water acquired through the Basin Plan process and now held by the Commonwealth Environmental Water holder (CEWH).
 - Of water currently held by CEWH in the Northern Basin, WRPs provide the only mechanisms for 55% of the total volumes held to be effectively used for environmental purposes, and a further 5% of total volumes held have only minor discretionary control by CEWH.

- Within the Barwon Darling WSP area, only 0.25% (73 ML) of all water held by CEWH is A Class, being the most critical class of water needed to address the greatest needs for river health and sustainability.
- We have grave concerns that even with all the proposed changes to the Barwon Darling Water Sharing Plan, the combined responsibilities and commitments of the Commonwealth, Queensland and NSW Governments to effectively manage environmental water will not be achieved.
- Hence the primary purpose for the existence of the Basin Plan will not be effectively achieved across the Northern Basin in any foreseeable future.
- We acknowledge that the NSW Government is proposing to make significant progress in implementing responsible management of environmental water within its easy control.
 - We support these proposed changes as interim measures.
- However, there remain significant volumes of held environmental water (HEW) for which there is no commitment to manage at this stage, at least within NSW and possibly in Qld.
 - HEW with no current commitments to manage in NSW includes HEW arising from all of the Qld basin catchments other than the Regulated Border Rivers system, being 35% of the total environmental water recovery target of the entire Northern Basin, plus all HEW originating from NSW unregulated systems connected to the Barwon Darling.
- We understand that all the WRPs in Queensland have now been recommended for accreditation by the MDBA, yet there does not appear, from a community perspective, that the draft WRPs in Qld and in NSW have been prepared and progressed with effective cross border consultation, despite this being specified in the Commonwealth Water Act 2007 as a requirement.
- In view of the historic political and managerial issues that have been associated with the Condamine Balonne and Barwon Darling planning areas, it would be naive to use an excuse that these two areas are technically not adjacent, and therefore do not require preparation of their respective draft WRPs in consultation.

Supporting Contributions

Analysis of accessible data and associated commentary

- Initial and amended Basin Plan Recovery targets from Qld, excluding Border Rivers
 - Originally, in 2012
 - 109 GL Local recovery plus 44 GL Shared Recovery
 - This 153 GL represents 39% of the original whole of Northern Basin target of 390 GL
 - Amended, in 2018
 - 109 GL Local Recovery plus 2 GL Shared recovery
 - This 111 GL represents 35% of the original whole of Northern Basin target of 320 GL
- Where do Queensland river flows, other than the Border Rivers, enter the Barwon?
 - The Condamine Balonne, which contributes 100 GL, being 31% of the total recovery target for the Northern Basin, enters the upstream portion of section 3 of the Barwon Darling, predominantly through the Culgoa River.
- In the proposed Barwon Darling WRP, what are proposed extraction opportunities and limits from the Barwon Darling downstream of the junction from the Culgoa?
 - Proposed IDELs for section 3 of the Barwon Darling are 326.9 ML for A Class, and 5,177.4 ML for B Class, being 64% and 47% respectively of all IDELs for the whole of the Barwon Darling.
 - Proposed IDELs for section 4 of the Barwon Darling are 72.7 ML for A Class, and 1043 ML for B Class, being 14% and 13% respectively of all IDELs for the whole of the Barwon Darling.

- **What are the consequences of HEW arising from the Condamine Balonne WSP area not being protected from extractions?**
 - **35% of the total environmental water recovery target of the entire Northern Basin, that should be expected to be protected from extraction to justify the Commonwealth's 2018 amended (reduced) recovery target, will be accessible for extractions once it reaches the Barwon Darling, in a region of the Darling River where 78% of A Class IDELs and 60% of B Class IDELs will allow extraction without use of proposed "Active Management strategies".**
 - The proposal for the BD WSP to lift by six centimetres A Class commence/cease to pump thresholds from 350 ML/day (4.095 metres) to 605 ML/day (4.155 metres) at Bourke may provide some indirect limitations on when this unprotected environmental water may be extracted from the Darling River, but not necessarily on the total volume able to be extracted.

Overarching Action

1. NSW should not submit WRPs to the MDBA unless NSW is totally confident that the WRPs are "fit for purpose" in achieving critical outcomes to deliver healthier and sustainable rivers in the Basin."

Interim Actions

2. We support the proposed changes as interim measures to progress implementing responsible management of environmental water within NSW Government's easy control.
3. The Barwon Darling and Intersecting Streams Water Resource Plans must include "*a method of determining the volume of HEW arriving at the NSW-Qld border which is agreed by NSW*", with negotiations between Qld and NSW facilitated by MDBA, with deadlines for achieving this determination and subsequent introduction of managing protection of environmental water.
4. Both Barwon Darling and Intersecting Streams WRPs must include commitments to apply Active Management rules for managing environmental flows arising from Qld.
5. Barwon Darling WRP include a commitment to use section 324 order under the Water Management Act 2000 to allow protection of environmental water that can not be protected by other means.

C. FAILURE TO AVOID EXCESSIVE EXTRACTIONS OF A CLASS WATER

Submission statement

- Proposed changes to be introduced associated with the WRP of raising commence/cease to pump thresholds for A Class and introducing IDELs and TDELs are commendable in having some impact on addressing flow connectivity and the environmental benefits of protecting small flow pulses along the river system.
- These changes must be introduced immediately, unlike the glib promises conveyed in 2012, with a definitive commitment for their immediate introduction.
- However these proposed changes do not directly address any of the major changes introduced into the WSP in 2012 that have so significantly impacted on low flow connectivity and pulses.
- Large volumes of annual A Class extractions (up to nearly 30 GL) will still potentially occur, depleting opportunities for small flows being able to augment storages at Menindee.
 - Significantly, the most likely years that these large volumes can be expected to be extracted will be when there are no extended high flows in the river system, hence being the time that augmentation of storages at Menindee is most critical to minimise the risks or reduce the impact of what has been witnessed last summer.
- High proportions of small pulses in the A Class flow bandwidth will still be able to be extracted, effectively "flattening the flow crest" down the entire length of the unregulated Darling River to approximate the commence to pump levels, thereby extinguishing any environmental benefits of pulse flows.

Supporting contributions

- The Barwon Darling Water Sharing Plan (WSP) introduced in 2012 created opportunities for huge increases on total volumes of A class extractions compared to previous practice. The major contributing changes were:
 - Removal of pump size limits
 - Introduction of a 300% annual access relative to entitlement
 - Introduction of unlimited carry-over provisions
 - Introduction of trading
 - The consequences of these changes are most simply highlighted in the attached graph released by MDBA.
 - Outcomes from the introduction of these changes include:
 - Previously historically inactive licences have been traded, aggregated and activated.
 - A Class water is now routinely pumped into storages when accessible, and stored for future use, particularly to annual crops, compared to previously only being pumped directly to plantings, invariably permanent plantings.
 - The changes created opportunities for virtually the whole “band width” of access to A Class extractions to be extracted from any flow on a daily basis (eg the whole of the range at Bourke from 350ML/day to 1250 ML/day, being 900 ML range), compared to historically there was possibly no more than about 50 ML/day extracted daily.
 - As highlighted in the graph, total annual extractions of A Class increased dramatically, from a pre-2012 annual A Class maximum extraction of much less than 5,000 ML to post 2012 an annual maximum of over 30,000 ML.
 - Current wording relating to introduction of IDELs and TDELs give no greater certainty of commencement time for introduction than the wording used in 2012 to justify offsetting the contributory changes mentioned above.
 - The Background Document to the Barwon Darling Water Sharing Plan, August 2012, included:
 - Page 55 *“It was still proposed that TDELs be created at the commencement of the (BDWS) plan and IDELs established when management systems were in place.”*
 - Page 54 *“The administrative and management systems required to successfully implement IDELs are not currently in place, however it is expected that they will be in place within the first few years of this (BDWS) plan’s term.”*
 - The Barwon Darling Water Sharing Plan, October 2012 included:
 - Clause 52(3) footnote: *“During the life of this Plan, it is intended that IDELs will be issued...”*
 - Proposed changes to be introduced associated with the WRP do not directly address any of the major impacting contributing changes introduced into the WSP in 2012 referenced above.
 - Introduction of increased commence/cease to pump thresholds for A class will obviously provide increased protection to the lower flows.
 - This recommendation is strongly supported.
 - Introduction of increased commence/cease to pump thresholds for A class will narrow the “bandwidth” for extraction.
 - For example, at Bourke, the current bandwidth is 900 ML/day (in range from 350 to 1250 ML/day), compared to a proposed bandwidth of 645 ML/day (605 to 1250 ML/day)
 - Currently, licencing rules allow the potential for up to the entire 900 ML/day to be extracted.
 - Whilst this narrowing will provide one reduced ceiling on daily extractions, it does not necessarily limit total annual extractions of A Class.
 - Introduction of TDELs and IDELs will significantly reduce the maximum daily extractions from current opportunities.
 - These recommendations are strongly supported.
 - Introduction of TDELs and IDELs will allow far greater daily extractions than those that occurred pre 2012.
 - Proposed TDELs for A Class are 513 ML/day
 - We understand that pre 2012, there was possibly no more than about 50 ML/day extracted daily.
 - Hence even with the introduction of TDELs, there will be potential for an approximate 1,000% increase in daily extraction rates compared to pre 2012 practice.
-

- Introduction of TDELs and IDELs will still allow for a significant proportion of the proposed new A Class bandwidth to be extracted daily.
 - As stated above, the proposed bandwidth for Bourke will be 645 ML/day, and the proposed TDEL for A Class at Bourke (River section 3) is 326.9 ML/day.
 - Hence over 50% of any daily flow in the A Class bandwidth for Section 3 of the Barwon Darling will be eligible for extraction.
 - Additionally, in the immediate downstream section 4, a further 72.7 ML/day TDEL is proposed.
 - If the maximum TDELs for River Sections 3 and 4 are extracted from the same flow pulse, over 60% of the bandwidth centred on Bourke will be extracted.
 - It is feasible that further upstream, up to 113 ML of A Class may have been extracted daily from the same flow pulse, thereby further depleting the total flow within the A Class bandwidth.
- Recommendation 10 in the Final NRC Report, Review of the Water Sharing Plan for the Barwon Darling Unregulated and Alluvial water sources 2012 (the NRC Review) included:
 - *“Revise Plan rules ... including: ^{“[1]”}_{“[SEP]”} “[1]”*
 - *Analysing an appropriate limit on the carryover provision and replacing the unlimited carryover provision with a capped carryover provision in the 2023 remake of the Plan.*
 - *Analysing an appropriate limit on annual take to replace the 300 percent provision in the 2023 remake of the Plan.*
 - *As a starting point, the allowable annual take should be reduced to a rolling average of 450 percent over three consecutive years. The potential ecological impacts of this and impacts on water users should be further assessed, and the provision should be consistent with the prioritisation required under the Act. ^{“[1]”}_{“[SEP]”}*
- The WRP has failed to act on the essential starting point commitment within the NRC Review recommendations that, *“the allowable annual take should be reduced to a rolling average of 450 percent over three consecutive years”*.
- With due respects to the NRC, we consider there is already substantial available evidence to support an immediate introduction of a 100% limit on annual extraction relative to annual entitlement for A Class licences.
 - Such a limit would therefore allow annual A Class take of approximately 10 GL, being:
 - More that double the maximum ever extracted annually pre 2012
 - Approximately one third of the maximum extracted annually since 2012, and
 - Approximately one third of the maximum able to be extracted annually under the proposed amendments.

Interim Actions

1. We support changes to be introduced associated with the WRP of raising commence/cease to pump thresholds and for the introduction IDELs and TDELs, and we require an absolute commitment to be given that these changes will be introduced simultaneously with the introduction of the WRP.
2. Immediately introduce a 100% limit on annual extraction relative to annual entitlement for A Class licences within the WRP.

D. REVIEW OF RULES FOR B AND C CLASS LICENCES

Submission Statement

- In supporting the NRC Review recommendation, as referenced in Section C above, it is essential for further analyses to be undertaken to address the inadequate scientific information available to determine the most appropriate policy actions relating to extraction rules for B and C Class licences.
- The WRP must include provisions to be modified based on improved science.

- The WRP must provide appropriate rules to manage environmental water flowing through the Barwon Darling River system, taking into account that as a direct consequence of the Basin Plan, the Commonwealth Environmental Holder, (CEWH):
 - Is totally dependent on WRPs to assist in managing the 55% of the total environmental water they hold across the Northern Basin over which they have no discretionary control
 - Is largely dependent on WRPs to assist in managing the 5% of the total environmental water they hold across the Northern Basin over which they have only limited discretionary control
 - Is totally dependent on the Barwon Darling WRP to assist in managing the 16,060 ML B Class water entitlement they hold, being 56.3% of the total environmental water they hold attributed to the Barwon Darling, and over which they have no discretionary control
 - Is totally dependent on the Barwon Darling WRP to assist in managing the 12,498 ML C Class water entitlement they hold, being 43.6% of the total environmental water they hold attributed to the Barwon Darling, and over which they have no discretionary control.

Supporting contributions

- We support the NRC Review recommendation that, *“the allowable annual take should be reduced to a rolling average of 450 percent over three consecutive years”* should be immediately introduced for the WRP for B and C Class licences .
- We support the NRC Review recommendations for B and C Class licences that the State Government should commit to undertake the following:
 - *Analysing an appropriate limit on the carryover provision and replacing the unlimited carryover provision with a capped carryover provision in the 2023 remake of the Plan.*^[17]
 - *Analysing an appropriate limit on annual take to replace the 300 percent provision in the 2023 remake of the Plan*

Interim Actions

1. Immediately introduce the NRC Review recommendation that, *“the allowable annual take should be reduced to a rolling average of 450 percent over three consecutive years”* for B and C Class licences within the WRP.
2. Improved analyses should be undertaken relating to extraction rules for B and C Class licences, including due consideration to the categories of water held by CEWH, with provision in the 2023 remake of the Plan.

E. INTRODUCTION OF ACTIVE MANAGEMENT

Submission statement

- The introduction of effective and practical active management in the Unregulated Barwon Darling is an essential new policy strategy that must be incorporated through the WRP.
- We endorse the principles and broad details provided for the introduction of active management in the Unregulated Barwon Darling.
- We have concerns in relation to the practicality of some of the proposed processes to allow effect policy management and implementation. Examples include:
 - The ability for the Minister or River Operator to gain adequate information to make timely decisions affecting the top end of the river system, particularly for both forecast and actual low flows considerations.
 - The practical effectiveness of announcements on a 24 hourly basis.
- We have concerns regarding the degree of administrative input that will be required associated with each flow pulse across the length of the river system. The most significant is likely to be associated with A Class thresholds.
- We have concerns regarding the level of uncertainty for licence holders that will be introduced associated with each flow pulse.
- A River Management Consultative Committee (by whatever name) should be formally constituted to work with the River Operator.
 - Potential roles should include, but not necessarily be limited to:
 - Advising and guiding the River Operator, particularly relating to the more subjective decisions, such as forecasting anticipated flows.
 - Developing and proposing implementation strategies to protect environmental water that is otherwise not currently protected from extractions.

- Creating enhanced agency/community engagement.
- Allowing enhanced opportunities for dissemination of information to all people along the river.
- Potential makeup of the group should include:
 - An irrigator representative from each of the 4 river sections
 - Two non-irrigator water user representatives from upstream of Bourke
 - Two non-irrigator water user representatives from downstream of Bourke
 - A representative from each Local Government along the river
 - Appropriate Agency and Aboriginal representatives.
- The Active Management policy is failing by not including active management as a means of protecting all environmental water, including water for the environment held by both the Commonwealth and by States. This includes:
 - Flows from Queensland as referred to above
 - Flows arising from upstream NSW unregulated tributaries.

Supporting contributions

- Cooperative rosters have been implemented in sections along the Barwon Darling in previous periods as an effective means of practically distributing daily access to limited volumes between participating licence holders. This option should be considered again for the future.

Interim Actions

1. We endorse the principles and broad details provided for the introduction of active management in the Unregulated Barwon Darling.
2. A River Management Consultative Committee (by whatever name) should be formally constituted to work with the River Operator.
3. The Government should commit to a definitive process and timeline to incorporate active management of all environmental water that is otherwise not protected, with a deadline for implementation no later than the end of the current WSP.

F. MANAGING RESUMPTION OF FLOW

Submission statement

- Introduction of stringent rules to prevent extractions from first flushes (“first flush rule”) along the length of the Unregulated Barwon Darling is an essential initiative to partially offset the impacts of massive increases in frequencies of zero flows at the lower end of the river system that have occurred since the expansion in growth of extractions upstream over the last few decades.
- Preventing extractions from first flushes recognises the legally defined priorities of water use.
- The initiative and development of the first flush rule through the Stakeholder Advisory Panel is to be commended and strongly supported.

Overarching Action/Response

1. We strongly support the entirety of the proposed amendments to the WSP to manage the resumption of flows, with introduction to commence immediately the WSP is introduced.

G. FAILURE TO SUPPORT AND WORK WITH THE COMMONWEALTH FOR BUY-OUT OF ALL A CLASS LICENCES

Submission statement

- Through the development of the WRP, it is evident that NSW at both Government and Agency levels, have shown no commitment to work with the Commonwealth to bring into effect the announcement by Minister Littleproud, Minister for Water, in April 2019, that A Class licences are to be bought out.
- The removal of all A Class licences from the Barwon Darling system, by whatever means, is a logical and practical strategy that will address virtually all the otherwise critical, difficult, cumbersome, or unaddressed water management issues relating to the WRP. A number of these uncertainties are identified in the various factsheets prepared for this WSP process.

- These particularly include:
 - Simplifying protection of all environmental water in the lower flow ranges (ie below B Class commence to pump), including much of the anticipated environmental water to flow from Qld and from NSW regulated and unregulated tributaries.
 - Totally addressing the complex policy issues relating to access provisions for A Class extraction, thereby enhancing both flow connectivity and flow pulse variations for lower flows along the entire river length
 - Significant reduction in daily river operations management input associated with application of Active Management policies, and providing more confident outcomes.
 - Removing the increased uncertainty of daily access to licence holders.
 - Provides an acceptable exit strategy for A Class licence holders who have been progressively influenced by changing water policies over the last decade or more.
 - Narrows down the amount of detailed management policies and their implementation relating to the remaining B and C Class licences.

Supporting contributions

- For three years, the Western Lands Advisory Council has been communicating with the NSW Minister for Water advocating for A Class Licences along the Barwon Darling River system to be bought out, as a practical and pragmatic means of addressing the diverse issues confronting policy makers, policy managers and water users.

Overarching Action

1. NSW proactively and cooperatively work with Commonwealth Ministers and Departments together to implement a strategy for buy-out of all A Class licences along the Barwon Darling River system.

H. RESPONSIBILITIES FOR MDBA ASSOCIATED WITH WSP ACCREDITATION

Submission Statement

- The MDBA must fulfil its governance responsibilities in assessing and reviewing WRPs in the process of determining whether to recommend that the WRPs are suitable for accreditation.
- WRPs must be “fit for purpose” to meet requirements set out by the Commonwealth legislation, linked to the *“Murray–Darling Basin Plan, developed to manage the Basin as a whole connected system. The aim of the Murray–Darling Basin Plan is to bring the Basin back to a healthier and sustainable level, while continuing to support farming and other industries for the benefit of the Australian community.”*
- A major commitment given to justify the 2018 Amendment to the Northern Basin Recovery Target from 390 GL to 320 GL was that through the Northern Basin Review, recommendations were accepted that *“the reduced reduction target would be offset by a more targeted approach, through the introduction of a range of measures”*, generally referred to as “*toolkit measures*”.
 - The most significant measure highlighted was *“arrangements to protect environmental water”*.
 - Hence the amended recovery targets in the Basin Plan place enhanced responsibilities for WRPs to protect environmental water to a far greater and more targeted extent than what as expected from the original Basin Plan.
- In complementing and enhancing Basin Plan outcomes, WRPs therefore must give credence to actual water acquired through the Basin Plan process and now held by the Commonwealth Environmental Water holder (CEWH).
 - Of water currently held by CEWH in the Northern Basin, WRPs provide the only mechanisms for 55% of the total volumes held to be effectively used for environmental purposes, and a further 5% of total volumes held have only minor discretionary control by CEWH.
 - Within the Barwon Darling WSP area, only 0.25% (73 ML) of all water held by CEWH is A Class, being the most critical class of water needed to address the greatest needs for river health and sustainability.

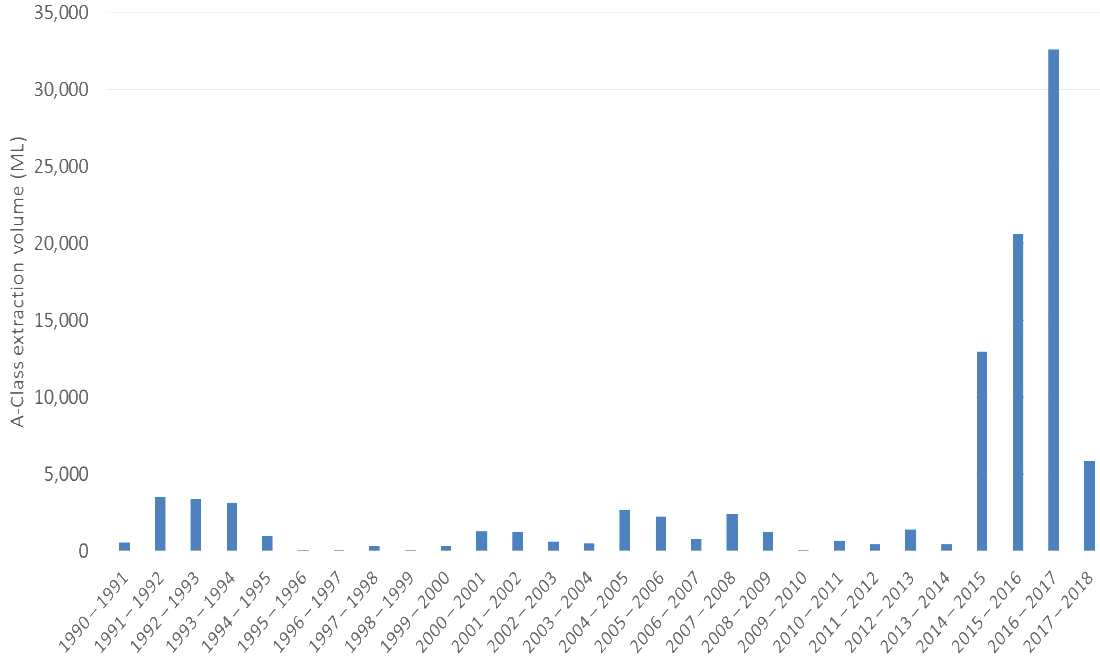
- We have grave concerns that even with all the proposed changes to the Barwon Darling Water Sharing Plan, the combined responsibilities and commitments of the Commonwealth, Queensland and NSW Governments to effectively manage environmental water will not be achieved.
- Hence the primary purpose for the existence of the Basin Plan will not be effectively achieved across the Northern Basin in any foreseeable future.
- Within the limitations available to the BD WRP to contribute to the overall legislative requirements associated with the Basin Plan, the MDBA must critically review every component of the draft WRP to maximise due diligence, minimise risks and optimise planning rules to deliver priority water access and legislated outcomes.
- The experience over the last seven years of NSW committing in 2012 to introduce IDELs and TDELs, and MDBA accrediting the 2012 WSP on this basis, but NSW not following through, should never be allowed occur again.
- From a community perspective, it appears that the Commonwealth Water Act 2007 under the heading “Accrediting water resource plans prepared by Basin States” has not been followed through consultation between Qld and NSW in the process of preparing WRPs on adjacent sides of the border.
 - Qld WRPs have already been accredited, yet the Intersecting Streams draft WRP remains in early stages.
 - The fact that “*a method of determining the volume of HEW arriving at the NSW-Qld border*” has not yet been agreed by NSW reinforces community perception that the adjacent cross border draft WSPs have not been developed through cross border consultation.
 - This perception does not engender strong community confidence that the MDBA is fulfilling its governance responsibilities.

Recommended Actions MDBA

1. Through the process of finalisation and accreditation of the BD WRP, and all other WSPs, MDBA should thoroughly evaluate whether the proposed plans are “fit for purpose” in achieving critical outcomes to deliver healthier and sustainable rivers in the Basin.
2. MDBA should refuse to recommend accreditation of both the Barwon Darling and Intersecting Streams Water Resource Plans “*until a method of determining the volume of HEW arriving at the NSW-Qld border is agreed by NSW*”, with negotiations between Qld and NSW facilitated by MDBA.
3. MDBA should refuse to recommend accreditation of Barwon Darling WRP for accreditation unless the MDBA is absolutely confident that raising commence/cease to pump thresholds and introduction of IDELs and TDELs will commence simultaneously with the introduction of the WRP.
4. MDBA should refuse to recommend accreditation of the Barwon Darling WRP until being absolutely certain that every proposed action has a definitive and acceptable timeline for implementation, and mechanisms for appropriate monitoring and assessment.
5. MDBA should proactively and cooperatively work with all appropriate agencies to implement a strategy for buy-out of all A Class licences along the Barwon Darling River system as announced by Minister Littleproud in April 2019.

End of Submission

Annual A-class extractions - Barwon-Darling



Source: NSW DPI (pre 2012) and NSW Water Register (post 2012)

Email address	[REDACTED]
Name of respondent	Colin Gordon
Address	[REDACTED]
Contact phone number	[REDACTED]
Are you an individual or representing an organisation?	Individual
Proposed changes to the Water Sharing Plan for the Barwon Darling Unregulated and Alluvial Water Sources 2012	
Do you have any comments on the distribution of IDELs?	What happens if every licence holder along the length of the river takes their maximum daily extraction on consecutive days? What is the cumulative impact on the flow in the river
Do you have any comments on permanent trade of IDELs?	If the aim of the plan is to ensure protection of low flows there should be no trading of IDELs. If the licence holder does not require the water flowing past their extraction point it should be treated as a bonus to the environment
Do you have any comments on restriction of temporary trade of IDELs?	As above
Do you have any other comments on IDELs?	If individual daily extraction occurs for consecutive days upstream occurs upstream by the majority or all upstream licence holders until they reach their extraction allocation for the season what impacts are calculated to occur to those downstream? What are the impacts of extraction during spawning cues for native fish species? What mitigation will be implemented to stop larval or juvenile species which are unable to avoid pump velocities from impingement or entrainment
Do you have any comments on Resumption of flows using a multi-sectional approach?	Resumption of flows should always be treated as a matter of high importance & as shown or described don't always extend as far as the water is needed because the magnitude of each resumption of flow may differ
	Are the flow values dependent on the

Do you have any comments on the flow values used for the resumption of flow triggers and releases?

origin of the resumption such as a rain event that may start a flow below a storage being different from a regulated release from a storage to provide an environmental flow compared to a flow that occurs when a storage spills sending a natural pulse down the river. A flow triggered higher upstream for extraction may well prevent the continuation of the flow downstream

Do you have any other comments on Resumption of flow rule?

It would depend on the timing of the flows & the water temperatures that may trigger spawning cues. If scientific research has indicated that certain species benefit from different flow at certain times of the year for instance a spring flow that triggers a spawning response from angling species, a summer flow or pulse that trigger the same response for smaller species or a winter flow that benefits juvenile species that have benefited from the previous spring or summer flows all benefit from different types of flows in varying degrees of magnitude & duration. so if consideration is given to benefit the water dependent species then each of the flow values relating to resumption of flows will be different depending on the seasonality of their occurrence. An extraction trigger may deliver a negative impact dependent on the duration of the resumption of flow

Do you have any comments on the proposed changes to the A Class Flow Class Thresholds in response to the recommendation by the Natural Resource Commission?

As experienced in recent years extraction of class A flows has possibly led to lower flow levels being reached sooner & cumulative impacts that would result from extraction during class A flows when conditions are drying contributing to catastrophic events that impact water dependent species. Class A flow extraction needs to be reassessed to allow for sustainability for the health of our rivers. The current class A pumping threshold is not adequate to protect river productivity, water should not be treated as a currency and the value of river health and native fish species needs to be recognised & treated equally to the money paid for extraction licences

If the aim of developing cease to pump thresholds is to provide genuine base

Do you have any comments on the methodology used to develop the A Class Flow Class Thresholds?

flows to allow maximum protection for river health & protection of water dependent species & plants then the current thresholds need to be raised to allow for sustainability of the riverine environment

Do you have any comments on the removal of the access to imminent flows rules in response to the recommendation by the Natural Resource Commission?

I agree that the access to extraction of water from the rivers relating to imminent flows should be removed. Water taken from base flows prior to a flow arriving is detrimental to water dependent species & results in added stress to already stressed condition of species fighting to survive in the base flow or refuge pools. Access to water should be assessed with the priority to maintain or improve conditions for species until flows allow species to migrate longitudinally & flows maintain extraction thresholds consistent with resumption of flow recommendations

Active management

What are your views on what water will be defined as active environmental water and managed through an unregulated water source? (see page 10)

If water is declared or defined as environmental water whether it is described as held water or planned water then it should be managed as defined & not used for any extraction purpose

Do you support inclusion and protection by active management of planned environmental water releases from upstream water sources that are additional to the inflows that were considered when the Barwon-Darling plan commenced? (see page 10 and 11)

Water for protection of environment , planned releases, are described & assessed as environmental water & are important to maintain flows to enable spawning & longitudinal movement of native fish species & complimentary to additional inflows to achieve tangible outcomes for native fish species by maintaining continuity of inflows

Do you support the criteria for where active management is to be applied? (see page 13 and 14)

It has been proved, (River flows for our fish DPI publication) that providing a conduit for connectivity has proved beneficial to native fish species. This water should not be allocated to allow extraction during environmental flows

What are your views on how accounts will be managed for in-stream use of unregulated held environmental water licences? (see page 15 and 16)

Extraction sites should be metered with times extraction occurred to account when water is extracted, date ,time, amount. It would assist to determine a baseline for information regarding volume of water reaching a determined

	point & assist with determining transmission losses
Do you support assigning river transmission losses proportionally to active environmental water? (see page 16 and 17)	Yes
What are your views on concept of adjusting commence to pump/cease to pump thresholds to protect Active Environmental Water from extraction?	if the aim is to provide a healthy river system for the future complimentary measures need to be considered and all water defined as beneficial to the environment. Screening of pumps to prevent impingement/entrainment of eggs, larvae & juvenile species. Higher commence to pump thresholds (than cease to pump levels) to allow recruitment to occur on flow pulses & commence to pump after levels are at least maintained for a determined period before pumping commences & prevention of active environmental water extraction. Cease to pump levels of class A flows should also be raised if objectives of maintaining a healthy river system are to be met with extra precaution when forecast conditions predict drier conditions
What are your views on proposed amendments to water sharing plan access rules to protect active environmental water in each of the water sources where active management is proposed? (see proposed amendments to the Barwon-Darling River water sharing plan: https://www.industry.nsw.gov.au/water/plans-programs/water-resource-plans/drafts/barwon-darling/components/schedules-and-appendices/draft-amended-wsp-barwon-darling-unregulated-river-water-source-2012.pdf)	see answer above
Do you support distributing the available volume between licence holders in the Barwon–Darling based on Individual Daily Extraction Limits? (see page 19 and 20)	Even distribution to allow all licence holders to access their individual daily extraction limits seems fair & would allow licence holders at the lower end to access the same as those higher in the system
Do you support distributing the available volume between licence holders in the Barwon–Darling to individuals who have expressed an interest based on Individual Daily Extraction Limits?	If that is agreed upon by licence holders & no bias occurs with the distribution of volume

**Do you support access being announced?
What issues need to be considered in making
announcements? (see page 20 and 21)**

Announcement may provide clarity on the availability to share the water & ensure

What are your views on how loss estimates will be forecast and how operational uncertainty is proposed to be managed? (see pages 22-25)

There appears to be historical data that is beneficial to predicting assumed loss complimented with actual gauge height /flow readings should provide an acceptable level of certainty. As any dealings with forecasts, modelling, estimates are not entirely accurate measurements some degree of inaccuracy should be expected

What information do you consider is important to document and consider in order to continuously improve active management? (see page 26)

That question should explain itself. Collection of data provides a determination for a baseline & ongoing improvement of active management can be supported by recording actual conditions which help forecasts of future events

Do you have any other comments on the proposed amendments to the Water Sharing

The health of river systems need to be prioritised above extraction for farming practices. I am sure most farmers or licence holders would rather a healthy river than a polluted drain. The reality is only a certain amount of rain falls & the occurrence of distribution to where it falls is variable. Water that used to flow freely down rivers is displaced by the addition of storage dams & weirs, the creation of irrigation channels & large on farm storages designed to add value to income as well as supply reliability to towns for human occupation. Native species, the environment, has historically adapted to the variability but somehow we expect to be able to operate on a business as usual program when variable conditions occur. Native fish have provided both a source of food & social/ recreation requirements and are indicators of change in water quality. When not that far back in time thousands of recreational anglers would travel hundreds of miles & spend money in small western towns making a measurable contribution to the economies of towns on the rivers, often staying for a week or two fishing & relaxing along the lengths of inland rivers, timing their trips to coincide on a rise in the river because they understood the fish would be on the move & on the bite.

Plan for the Barwon Darling Unregulated and Alluvial Water Sources 2012?

The thing that has changed is through mismanagement the flows are diverted out into areas that only ever received rainfall. Changes in natural flows, barriers to fish passage prevented recruitment opportunities for native fish species, fragmenting populations & contributed to sending native fish populations into decline. Ask any long term resident along a western river or business owner in towns how many recreational anglers NOW travel out west to go fishing.
NO WATER = NO FISH
NO FISH = NO FISHERS
NO FISHERS = NO MONEY SPENT IN TOWN
NO PEOPLE IN THE GOVERNMENT LISTEN TO WHAT LOCAL PEOPLE SAY
WHEN THEY ARE WARNING OTHERS OF THE IMPACTS THEY SEE
There have been numerous papers recording data containing scientifically verified facts that explain what the impacts are & what needs to be addressed to bring about positive change to maintain & improve our waterways. We don't have to redesign anything. It simply needs to be managed in a sustainable way starting from worst case scenario as a minimum requirement

Response to chapter 4: Environmental water, cultural flows and sustainable management

Do you have any comments on the protection of environmental water?

I think previous answers cover this question

Do you have any comments on cultural connections to surface water and the protection of Indigenous values and uses?

Listen to what stakeholders say

Response to chapter 5: Take for consumptive use

Do you have any comments on Chapter 5 or Schedule F?

If water was managed appropriately using sustainable guidelines starting from worst case scenario there would be less likelihood of critical extremes in water availability

Response to chapter 6: Water Quality Management

Do you have any comments on Chapter 6 or

There is plenty of information by

<p>the Water Quality Management Plan (Schedule H)?</p>	<p>accredited people to address this question</p>
<p>How did you hear about the Public Exhibition of this plan?</p>	
<p>Please let us know how you heard about the opportunity to make a submission?</p>	<p>Social media Communication from peak body</p>
<p>Additional Information</p>	
<p>Please tick the relevant boxes</p>	<p>I consent to my “submission” being published on the department’s website and my name will be included with my suburb or town in a list of submitters with a link to my submission. Please note that any attachments you may have provided and any personal information that has been included in the submission will be published.</p>

29 October 2019

Barwon-Darling Water Resource Plan

To Whom it may Concern

OzFish Unlimited is a national organisation with a mission to protect and restore fish populations and support recreational fishers in this activity. Our members have provided input to develop this response. In the first instance we have seen devastating situation for our native fish in a number of rivers particularly the Darling and this is having a devastating impact on recreational fishing which is a major social and economic contributor to the Basin.

The planned changes in the Barwon-Darling WSP are likely to increase low flows because of changes to A-class operation. Hence, OzFish fully supports the increase in CTPs for A-Class; the removal of *imminent flow provisions*; and the introduction of IDELs and TDELs. We also fully support changes to *the resumption of flow rule* and proposed *active management of flows*; because these will provide important flows for fish.

What has been overlooked in these recommendations relates to floodplain harvesting, which occurs at high overbank flows. This reduces the peak of flows downstream and reduce the magnitude of productive floods that are major fish breeding events. Floodplain harvesting needs to be quantified and if its going to be taken then it should be regulated and this plan does not address this critical issue. Importantly the quantification, licensing and allocation of floodplain flows could allow dramatic improvements in the provision of in channel flows of all classes for the environment.

In addition, we want to see environmental flow targets developed for fish in the Darling River with environmental flows from upstream dams rather than at the end of the individual catchments. In this way the full value of environmental water releases can be achieved.

If you have any questions on this statement, please contact me on [REDACTED]

Yours sincerely,



Craig Copeland
Chief Executive Officer
OzFish Unlimited

29 October 2019

NSW Department of Planning, Industry and Environment
GPO Box 5477
Sydney NSW 2001

RE: Submission regarding the Draft Barwon Darling Watercourse Water Resource Plan

To whom it may concern

Thank you for the opportunity to comment on the Draft Barwon Darling Watercourse Water Resource Plan (WRP).

Our family have been landholders on the Lower Darling since the 1880's. Six generations of our family have lived on the Lower Darling and been able to rely on regular water flow to sustainably run a successful grazing enterprise. We believe this gives us a rare insight into this important part of the Darling river system. Our family company currently owns and operates 5 livestock properties in the Western Division, 3 of these properties rely on fresh water being supplied from Menindee Lakes to the Lower Darling and a 4th one relies on the Menindee - Broken Hill pipeline.

The properties on the LD are situated approximately 60 km south of Menindee. We can go through family history for 5 generations without seeing any water quality problems like we have seen in the last 15 or so years. In 2005 we had to put down a bore for stock & domestic water. Prior to this (from 1880 to 2005) there was never any need to have a bore for stock & domestic consumption as there had previously always been enough supply of good quality water for property use from the Lower Darling River.

Since 2002 we have seen around 5 extended cease to flows which cause high salinity and blue green algae issues. The blue green algae issue then renders the water unusable for our stock and domestic purposes. The current cease to flow (starting here in Jan 2019 when flows stopped over Weir 32) also has the added pollution of numerous dead fish that have been dying randomly since June 2019.

In 2016 we attempted to put down 2 more bores so that each property on the Lower Darling had its own secure supply but only 1 of these bores had a viable water supply. So far it has cost us in excess of \$50 000 to drill and equip the 2 working bores. We have no idea how long these bores can be sustainable without constant flows in the river to replenish the ground water. We are already in uncharted territory with regard to no flow in the Darling River stream to recharge the aquifer

I note with a degree of dissatisfaction, that in the Barwon Darling water sharing plan any water lost to irrigators under changes in the new plan is given a dollar amount and counted as lost production for the area. I would add that the combined cost to many businesses from Tilpa to Wentworth (since the 2012 changes to A class water that benefited so few people) far outweighs the cost of any changes in returning to pre 2012 conditions for A class water.

Since 2012 there has been a significant increase in the length of cease to flow events. These cease to flows are directly related to flawed changes that were made to the Barwon Darling Water Sharing plan in 2012. These changes saw A Class water users given access to low river flows in the Barwon Darling, the ability to pump and store A Class water with B and C class pumps and an unlimited carry over with the option to use 300% of their allocation during a season. These alterations have had a detrimental effect on the ability of smaller flows to reach the Menindee Lakes storages.

A significant change that has been added to MLDSWRP would see a 60GL “bucket” of water stored at Menindee to enable the restart of the Lower Darling. While this is a good thing, unfortunately it would seem there is no allowance to get water into the bucket from the Barwon Darling WSP. The BDWSP states under new first flush rules that 30 GL will be allowed to pass Bourke, then pumping can resume. It is claimed this should reach Willcania, possibly even Menindee, yet there is no attempt to get any water into the “bucket” to restart the Lower Darling. There is no plan to have connectivity of the river top to bottom but this is crucial on a number of fronts. To have water diverted above Bourke for opportunistic cropping (before Towns, Stock and Domestic, Environment and other High Security water users downstream have been fulfilled) blatantly goes against the water act. Could this be illegal?

The property that we hold on the Menindee - Broken Hill pipeline has been severely affected by the uncertainty of not knowing if a replacement pipeline is going to be built or who will pay for it. There has been a serious lack of communication between stakeholders and the water departments. DPIE did not even realise that there were around 70 stakeholder water meters on the Broken Hill-Menindee pipeline until they announced the decommissioning of the pipeline. The NSW government refusal for a number of years to release the business case for the Wentworth - Broken Hill pipeline only added extra uncertainty around the future supply of water to the Menindee - Broken Hill pipeline water users. The added stress comes from the belief that the Wentworth - Broken Hill line was only built to enable the decommissioning of the Menindee Lakes. Upon the release of the Business case we can see that the only real beneficiaries of this pipeline are the irrigators in the Northern Basin as a key benefit of the pipeline will be less embargoes put on their pumping. Less embargoes however means that (under current rules) that less water will now get to Menindee, there will be longer cease to flow events, terrible water quality in the Lower Darling and possibly times when there won't be water available to pump to users on Menindee - Broken Hill line.

This will mean a very sad and slow end to our family farming operation. It will also mean a similar fate for Indigenous culture, towns, native fish species, native animals, ancient native trees and all things in the Riverine Environment that rely on fresh regular flows

The Barwon-Darling Water Sharing Plan should include provision to get water to the Murray Junction, under the first flush rule. By only attempting to get some small flows to Willcania before extractions resume is insanity from DPIE. It really leads me to ask just how much consideration is being given to Towns, Stock and Domestic, Cultural, High Security Water Licences, Wildlife, Fish and the Riverine environment downstream of the Barwon-Darling WSP. Your current proposal suggest that no consideration is given.

An ICAC investigation has been conducted around the flawed process of the 2012 BDWSP and some of the people involved. Though the report was meant to be released around the end of September, suspiciously it still has not been seen publicly. It is expected that this report could further highlight the flawed process to implement the 2012 plan. The current draft plan has barely attempted to right the wrongs of the 2012 plan and return the plan to pre-2012 rules.

The ability to store A class water should be removed.

Alternatively the A class water licenses could be purchased by government (as mentioned in the Vertessy Report) and the water kept in the river as Cultural and environmental flows. At the very least removing the A class water licences would allow water to flow through the system at higher levels and more likely to reach further downstream.

The unlimited carry over rule is not featured anywhere in the Southern Basin and as such is basically a scam.

Also, why allow a 300% take of annual allocation, the department seems to be missing a very important point in that if the river catchments have been dry long enough to activate the 300% rule then the river downstream of these irrigators will also be suffering the serious effects of low inflows. However, under these rules only 30GL needs to pass through Bourke then pumping can

commence with irrigators able to access up to 300% of their annual take. The door is now open to pump the Barwon Darling irrigator allocation of 190GL x 300% = 470GL without any consideration as to whether water will get through to the Murray confluence and replenish needs along the way. There is not even consideration to get 60GL of water to Menindee to allow for a restart of the 500km section of Lower Darling river to Wentworth.

I saw a large part of the reason there is no proposal for connectivity of the Barwon to the Darling River on display at the combined BD-MLD WSP meeting in Menindee on 18th October 2019. Peter Hyde was asked a number of times why there has never been a formal meeting to discuss options between the 2 plans, his responses included shrugging his shoulders, there wasn't enough time, or just plain ignored the question. He kept running a line that any water past Bourke contributed "major losses" to the plan. To sit in a meeting and listen to this departmental staffer label any water that could be of benefit to water users downstream as a "loss" leaves me lost for words, and very disillusioned for the the future of the Lower Darling as a secure water supply.

I would also add the proposed Menindee Lakes Water Saving Scheme (which was also denied to be in existence for a number of years) as more proof the NSW Government were planning to decommission Menindee Lakes as a secure water supply for the 500 km section of the Lower Darling. The main feature of this proposal is to be able to drain Menindee Lakes faster than ever before, to a new low storage figure of 80 GL. We saw most recently in November 2018 the Menindee Lakes reach this 80 GL figure, and within 2 months the worst fish kills ever recorded took place. In its current form this scheme is unworkable.

Why did Menindee Lakes fall this low?

There would appear to be number of reasons for Menindee to fall so low.

Firstly, the rule changes in 2012 that allowed A class water to be pumped and stored with B and C class pumps. The consequence of this change meant pump size was no longer a restriction on individual daily extraction limits within A class, thus reducing inflows at Menindee in low flow years to virtually nothing.

Secondly, the desire of NSW Government ministers to be able to justify the abomination that is the half billion dollar pipeline from the Murray to Broken hill. This meant that if the lakes were not drained dry then the pipeline would look like a huge waste of money. There is no other logical explanation for emptying Menindee Lakes into an already flooded Murray.

Perhaps one could say the Wentworth-Broken Hill pipeline was built only to reduce embargoes on Northern Basin Irrigators, and to appease lobby groups like Cotton Australia, who even claimed the pipeline as policy win. Upon the release of the business case it seems the later were definitely a huge influence on the then ministers decision.

Finally, these documents are called Water Sharing Plans, it seems some departmental staff maybe overlooking the "Sharing" word and just putting together Water Plans, with no thought to connectivity between Valleys!

Kind Regards

Wayne Smith

[REDACTED]

[REDACTED]

Inland Rivers Network submission to draft WRP

2 messages

Inland Rivers Network <[REDACTED]>
To: barwondarling.sw.wrp@dpi.nsw.gov.au

Tue, Oct 29, 2019 at 4:15 PM

Please find attached a submission to the draft Barwon-Darling WRP.

An acknowledgement of receipt would be appreciated

Thank you

Bev Smiles
Inland Rivers Network

**Inland Rivers Network submission to draft Barwon-Darling WRP.pdf**
235K

BarwonDarling SW WRP <barwondarling.sw.wrp@dpi.nsw.gov.au>
To: [REDACTED]

Tue, Oct 29, 2019 at 4:16 PM

Thank you for your email. We will respond to your email enquiry as soon as possible.

The Barwon-Darling Surface Water Resource Plan is on public exhibition until Tuesday the 29th of Oct. We welcome submissions until that time.

A brief submission in response to the *Draft Barwon-Darling Watercourse and Namoi Water Resource Plans (“WRPs”)*

To: Department of Planning, Industry and Environment
Delivered by email to barwondarling.sw.wrp@dpi.nsw.gov.au
29 October 2019.



Above: A blue coffin for the death of the river was left in the Namoi River after a community mourning ceremony and protest was held in Walgett, March 2019. The town's drinking and other water supply is usually extracted from the Namoi River 500m downstream of where this photo was taken from the Marjorie Phyllis Walford Bridge.

About Walgett's Dharriwaa Elders Group

The Dharriwaa Elders Group¹ (DEG) takes a leading interest in the protection and maintenance of Aboriginal Cultural Values ("ACVs") in Walgett landscapes. DEG was born 20 November 2000 after Elders had worked together on projects since 1998. The Group took its name from one of its sacred sites – the RAMSAR-listed Narran Lakes - Dharriwaa (common meeting place) and its full members are Aboriginal people over 60 who live in Walgett. With the aid of partners, governments, donors and volunteers, the organisation has worked to support Aboriginal Elders to resume leadership roles in the community; keep active and healthy; promote local Aboriginal cultural knowledge and identity; and develop the Walgett Aboriginal community.

An important activity has been to protect and manage the ACVs of the Walgett area. This activity involves supporting those who hold the knowledge that provides Aboriginal Cultural Values, understanding and documenting Elders' knowledge and mapping significance in the landscape. It also involves:

- supporting Elders and others as resources permit, to reconnect with this knowledge in recognition of the importance of ACV knowledge to wellbeing
- conducting education activities including exhibitions, magazine production, schools programs, community induction for government and community education programs
- advocacy, negotiation and relationship building with landholders and governments which has sometimes enabled DEG to protect culturally significant places from destruction
- maintaining knowledge and productivity infrastructure
- continually training and mentoring local Aboriginal staff (thereby providing ongoing local economic development) at levels determined by scarce resources.

The Dharriwaa Elders Group values its relationships and collaborations with scientists and other researchers so that together, we can assist governments and the Australian nation to better understand and manage valuable natural and knowledge assets. In order to maximise our under-resourced efforts DEG works using evidence-based approaches and to build in-disputable evidence to strengthen confidence in local solutions for our town's future.

Thank you for the opportunity to make this submission.

Dharriwaa Elders Group members and community are not resourced to be providing you with detailed comment on the very detailed and hard-to-understand Draft Water Resource Plans produced by Department of Planning, Industry and Environment ("NSW DPIE") over many months. The limited (and poor) community engagement offered by the department has not improved that situation. This is compounded by the limited time given the public to respond which we assume is because NSW DPIE took so long to produce these drafts and the deadline looms. DEG appreciates the opportunity to provide the following written response which sets out our main concerns that we ask you to address using the many resources at the Department's disposal.

DEG hopes that you listen to this - one of the few submissions provided by an Aboriginal community organisation affected by the management of the Namoi and Barwon Darling Rivers.

¹ a charitable incorporated Association with deductible gift recipient status.

The wellbeing of the Barwon Darling and Namoi Rivers are our prime concern.

Restored wellbeing will provide the communities that rely on these rivers with quality drinking water, safe foods and other livelihoods.

Our town has been deprived of healthy rivers because water flows have stopped at Walgett.

We have recently witnessed the death of the Namoi and Barwon Rivers at Walgett and the ecosystems that rely on them.

Our concerns extend to the communities downstream of Walgett weirs also.

Significant work is now required to rehabilitate our rivers from the **water management disaster** we are suffering. The Water Resource Plans and Murray Darling Basin Plan must ensure this does not occur again.

Water Sharing Plans' Vision and Objectives undermined.

There is a widespread belief that Walgett's current situation is due to mismanagement.

We witness that the vision² and objectives of the Water Sharing Plans for the Barwon-Darling Unregulated and Alluvial Water Sources 2012's ("WSPB-DU&AWS2012") and the Namoi Unregulated and Alluvial Water Sources 2012 (WSPNU&AWS2012") appear to us to have been ignored and in many cases actively undermined.

1. The river flow-dependent ecosystems have not been protected and have been allowed to die³
2. The Aboriginal values of the water sources have not been protected⁴ and have been seriously threatened. The impacts on sacred Aboriginal Cultural groundwaters from increased extractions must be measured, acknowledged and reversed.
3. The inequitable use of water upstream of Walgett has been permitted.⁵ Walgett's water supply from the river was stopped when pumps were still active upstream providing water to industries that were prioritized over the environment and our town.
4. Water quality has deteriorated at Walgett⁶ to the point where recently Walgett was on a boil water alert due to the unsafe weir pool. An evidence base and testing regime must be resourced to vigilantly manage water quality. The recent introduction of monthly water quality testing by NSW Health is applauded and we request that these results are made publicly available. We request that the public health implications on our community's health and wellbeing of algae, chlorine bi-products, herbicides and pesticides in the water are understood and addressed by evidence-based research.
5. There has been no work to identify and protect the connectivity of groundwaters and surface waters in the Walgett area⁷. Our knowledge is required for this task and we have not been asked for it. Recently we applied to NSW Environmental Trust to fund a project to do this which was rejected. We have not found any other resourcing for this activity.

² "The vision of this Plan is to provide for healthy and enhanced water sources and water dependent ecosystems and for equitable water sharing among users in these water sources" (Part 2, Clause 9).

³ "(a) protect, preserve, maintain and enhance the important river flow dependent and high priority groundwater dependent ecosystems of these water sources" (Part 2, Clause 10)

⁴ "(b) protect, preserve, maintain and enhance the Aboriginal, cultural and heritage values of these water sources" (Part 2, Clause 10)

⁵ "(d) manage these water sources to ensure equitable sharing between users" (Part 2, Clause 10)

⁶ "(g) contribute to the maintenance of water quality" (Part 2, Clause 10)

⁷ "(h) provide recognition of the connectivity between surface water and groundwater" (Part 2, Clause 10)

6. Inappropriate water trading⁸ that has conflicted with, and been unfairly preferenced over the environmental and other public benefit outcomes from healthy flowing Barwon and Namoi Rivers at Walgett, has occurred. Irrigators and miners are allowed to use far too much water, and at the wrong times. We also worry that these activities risk the quality of artesian and alluvial waters.

The findings of the ABC Four Corners “Pumped” exposé, and Mathews, NSW Ombudsman’s, Vertessy and Natural Resource Commission reports indicate many shortcomings in the management of water in the Namoi and Barwon Darling Rivers. These investigations have confirmed our community’s disquiet and strengthened our lack of confidence in the NSW Government’s ability to manage our critical natural water resources.

The town of Walgett might not have needed to extract its town water supplies for the last 18 months from the Great Artesian Basin⁹ if the WSPs were effective and managed well.

Community confidence in water management must be restored by immediate and active measures from the NSW Government. **The Walgett Aboriginal community recently joined calls for a Royal Commission into management of water in the Murray Darling Basin.**

Food

We can no longer feed our families on the Yuul (Food) from the rivers; such as Dhagaay (Yellowbelly), Gudu (Cod), Yingaa (Crayfish), and Dhangal (Mussel). This has impacted the diet of local peoples as we require healthy rivers with suitable habitat for one of our most important sources of food. The carrying out of cultural and family activities involved with the collection of food in and around the water have also been severely affected by the poor condition of the rivers. These practices have always been an essential part of life living on the rivers, which Aboriginal people have been doing here for tens of thousands of years.

Dams are not the answer for water security

We believe that evidence shows that the wellbeing of rivers requires that waters need to be flowing and not held up. We require that river flows are managed to improve the distances and volumes of water to be regularly flowing between existing dams and weirs. If this means reducing the volume of water diverted out of the system to water licence holders, then we require that. If this means modifying existing dams and weirs then we require that. This will mean that flows need to be restored first to understand and identify the factors for maintaining river health before sustainable Individual Daily Extraction Limits (IDELs) and water licences are determined. The scientific work must be undertaken first to understand how to fulfil the objectives of the WSPs and we are informed that this work has not yet been undertaken.

At Walgett the work has not been done to accurately model river heights if the Barwon Weir is raised, if a new higher weir is built further downstream nor if the Namoi Weir is removed. These current ill-informed proposals are promoted by some of our community leaders today and must not be appeased before studies have been done.

Regular evaluation must be undertaken of the implementation of the WRPs and WSPs

⁸ “(j) contribute to the “environmental and other public benefit outcomes” identified under the “Water Access Entitlements and Planning Framework” in the Intergovernmental Agreement on a National Water Initiative (2004) (hereafter the NWI).” (Part 2, Clause 10)

⁹ Excluding approx.2 months when Commonwealth Environmental Water combined with NSW Water releases to send temporary water down the dry Barwon and Namoi riverbeds to Walgett (resulting eventually in the recent Walgett boil water alert because so many dead animals and other harmful materials ended up in Walgett’s weir pool)

We are not aware of any evaluation of outcomes against the performance indicators of the WSPs, and we are not aware of any project established to evaluate or use the performance indicators in the WSPs in the Walgett area. The Water Resource Plans must oversee a regime to ensure evaluation.

As an active stakeholder in Aboriginal Cultural Heritage and Environmental matters in the Walgett region, Dharriwaa Elders Group (“DEG”) expects to be actively engaged in relevant water studies and evaluation – not merely invited to “community engagement” opportunities which are provided for NSW Government employees to tell our community what they are doing. So far no realistic plans have been made with DEG to establish how evaluation would be achieved or successful in our community’s view. Dharriwaa Elders Group and its **Aboriginal Water Rangers** could be actively involved in the evaluation task at Walgett.

Compliance and management efforts needed on the ground

DEG requests that serious consideration, resources and authority be given to **Aboriginal Water Rangers** to support water use compliance and water quality improvement tasks, hand in hand with DEG’s scientific partners within Yuwaya Ngarra-li¹⁰ and specially-trained **Environmental Police** who could operate from an Environmental Policing Institute to be established in Walgett’s new \$16million police station.

While the Aboriginal Water Rangers would contribute to the compliance and evaluation tasks, they would also undertake river reparations tasks including

- Removing dead fish, carp and invasive pests from the rivers
- Restoring riverine vegetation, addressing riverbank erosion and other hydrology
- Removing rubbish from the rivers and undertaking innovative pollution and waste reduction projects
- Educating landholders regarding the environmental and ACH values of the rivers
- Identifying the connectivity between surface and groundwaters
- Undertaking other works proven to enhance water quality, river and dependent ecosystem wellbeing

Active Management regime

The proposed new Active Management regime will provide communications from the Minister and Department on a 24 hour basis to water licensees to notify when they can appropriately extract water. Dharriwaa Elders Group requests receipt of these notifications so we can be actively engaged in the water management process and understand what we are witnessing at Walgett and along the rivers. It has been traumatizing to receive Facebook and community reports of water extraction upstream when we are deprived of water. We need to know the official news so that we can assist our community to understand the management of the rivers.

Aboriginal people must be enabled in legislation to access rivers anywhere anytime

Today in Walgett western lands leaseholders have been allowed to modify their leases to block access to our community to tracks and roads leading to the rivers. Freehold titleholders have blocked access to the rivers, and one notorious local landholder has locked gates on crown roads leading to the Barwon River, enabled by NSW Crown Lands despite years of legal requests from Dharriwaa Elders Group. **Dharriwaa Elders Group requires that the Water Resource Plans**

¹⁰ A partnership led by Dharriwaa Elders Group with multi faculties of the University of NSW including the Global Water Institute of Engineering Faculty, and water law experts in the Law Faculty

ensure that Aboriginal people have free access to the rivers and springs. This will be an important action necessary for the enabling of the WRPs' Aboriginal Cultural water provisions. It will also reduce needless conflict between landholders and Aboriginal communities.

Aboriginal communities require water for socio-economic development

Most Aboriginal communities do not have the access to capital in order to purchase water licenses for business development. DEG requests water allocations for Aboriginal communities to use in order to produce local socio-economic outcomes. Walgett has a number of enterprises currently in development that require water. They will provide jobs and food security for our community and we argue that special water allocations should be included in an equitable water management regime.

Supplementary water (Aboriginal Environmental) access licenses and Aboriginal Cultural water licenses

NSW employees involved in Active Management will need to work closely with DEG because cultural protocols require trusted long term relationships with Elders before knowledge of Aboriginal Cultural and Aboriginal Environmental water requirements is shared.

Supplementary water (Aboriginal Environmental) access licenses and Aboriginal Cultural water licenses are offered by the WSPs, however they have not been accessed to our knowledge by anyone in the Walgett Aboriginal community. Serious planning must be undertaken with Dharriwaa Elders Group ("DEG") and other relevant Aboriginal stakeholders, to understand what this instrument could involve, include and support, and how Aboriginal individuals and communities are to be supported to access these provisions. DEG offers advice to assist this process.

Dharriwaa Elders Group has identified Aboriginal cultural and environmental places that require water. We require funded programs which will resource DEG to work with trusted groundwater, surface water and ecology scientists of our choosing, to undertake co-designed knowledge-sharing projects so that the volumes of water required can be defined and requested. These studies cannot be undertaken by staff of the NSW Government. The community's knowledge may be shared as our organisation determines and negotiates. This requirement will provide trust and engagement where neither of these, nor relationships, currently exist with NSW Water or NSW DPIE.

No native title claims have been determined yet for Walgett, but when they are, the relevant Water Sharing Plans must respond and incorporate their requirements, which will include surface and groundwater entitlements. Similarly, lands granted under NSW Aboriginal Land Rights Act, or managed under Indigenous Land Use Agreements, must be accommodated by the relevant Water Sharing Plans.

Evidence base is required to understand surface and groundwater connectivity; water management impacts on dependent ecosystems and Aboriginal cultural values and to determine sustainable levels of groundwater and surface water allocations and use.

Another task of Aboriginal Water Ranger enterprises to be located in suitably-capable Aboriginal communities along the Barwon Darling and Namoi Rivers is to work with ground and surface water and ecosystem experts to define the impacts of water management regimes on dependent ecosystems, and then implement on-the-ground ongoing management work. This work has not

begun, yet our council has no choice but to extract Great Artesian Basin water for our town's drinking water. There is no evidence-base to indicate what sustainable levels of groundwater extraction are.

There is no evidence base to understand the interaction between groundwater and the Barwon and Namoi Rivers near Walgett, or what happens to those levels of groundwater inflows into the river, and the water table, once large constant extractions of groundwater are occurring. There is no evidence base regarding the impacts of this increasing groundwater extraction on dependent ecosystems. NSW Government is busy encouraging towns, landowners and miners to drill new bores as the rivers run dry, before knowing the implications and impacts of these actions. The contributions from groundwaters to surface waters are unknown.

DEG has been told by NSW DPIE Water that they can only "hope" that Walgett Namoi River water allocations arrive in Walgett because evaporation and the sunken water table from groundwater extractions upstream render predictions guesswork only. This lack of knowledge also applies to water releases along the Barwon River. It was not known by NSW Water how far the recent environmental releases of Held Environmental water by the Commonwealth Water Holder combined with a NSW Water Environmental water release would reach. This uncertainty constrains any responsible determinations of sustainable water extractions. The modelling and science has not been undertaken to enable those determinations to be made accurately.

The contributions of floods and surface waters to our alluvial reservoirs are unknown. Very little is known about the quality of water in the Walgett alluvial reservoir, yet our community will need to draw on that water in times of future water scarcity. If these waters are not replenished because of the impacts of floodwater harvesting and river extractions upstream, then our community will have lost another valuable natural resource from mismanagement.

DEG is keen to begin this work with its partners in the UNSW Global Water Institute.

Need for Climate Change planning

The WSPs' objectives and visions for equitable use of water are challenged by over-allocation, a poor evidence base (as described above) and the absence of planning for climate change. Water-saving measures must be introduced in Walgett and other towns up-stream, so that Environmental water and water for Aboriginal Cultural and Environmental and Supplementary license allocations are available. Also most importantly so that the healthy flows and dependent ecosystems of the rivers and groundwaters are maintained. The lack of climate change planning and preparedness by local, NSW and Commonwealth governments is contributing to inequity in water management. The reliance of the Water Resource Plans on old data produced before NSW Government has acknowledged Climate Change is also concerning.

Work is required to understand how to bring back to life our dead rivers and ecosystems, and to protect the vulnerable recovering surface waters from weed and pest threats.

DEG recently lodged an expression of interest with the NSW Environmental Trust with the UNSW Global Water Institute, so that work could be undertaken in our area of knowledge and custodianship to understand how to restore wellbeing to our rivers and ecosystems, and manage ongoing wellbeing with DEG's proposed Aboriginal Water Rangers. It was not successful. Similar projects are needed to be undertaken by scientists working in community-led approaches along the Barwon Darling Watercourse and Namoi Rivers. This work must be undertaken to implement the objectives of the WSPs. Resources must be devoted to understanding how to maintain healthy river flows and maintaining healthy flows of the rivers at Walgett.

DEG urges the Department to ensure that the WRPs support implementation of objectives of the Water Act 2007 (Cth), including to apply the principles of ecologically sustainable development, in order to encourage best practice in the management and use of surface and groundwaters.

29 October 2019



Department of Primary Industries

NSW Government

barwondarling.sw.wrp@dpi.nsw.gov.au

TOLARNO STATION 1851 Pty Ltd

via Wentworth, NSW, 2648

www.tolarnostation.com.au

RE: Submission regarding the draft Barwon-Darling Watercourse Water Resource Plan

Thank you for the opportunity to comment on the Draft Barwon-Darling Watercourse Surface Water Resource Plan (WRP). This submission relates to the aspects of the WRP relevant to its connectivity to the Lower Darling.

I own three properties totalling 500,000 acres on the Lower Darling, approximately 50 km south of the Menindee Lakes. Tolarno Station sits on the Darling River with basic landholder rights, and all three properties depend on the Darling for livestock and domestic purposes. The properties have a rich history spanning 160 years, and today run merino sheep, cattle and rangeland goats.

In developing WRPs it is important to reflect on the aim of the Murray-Darling Basin Plan (MDBP), which is to

“... ensure water is shared between all users, including the environment, in a sustainable way. It does this by managing the basin as one system.”(MDBA)

I recognise the role of WRPs in the implementation of the MDBP at a regional level. However, it is critical that the WRPs are interconnected and support the common aim. It must also be recognised that environmental, social and economic risks identified within one WRP area are impacted by the water sharing plans (WSPs) and WRPs of other areas.

It is unacceptable that this WRP does not adequately achieve connectivity between WRPs for the purpose of the ecosystems and communities which depend on healthy ecosystems.

Dependence of the Lower Darling WRP area on upstream WRP areas

The Lower Darling catchment has minimal runoff and is entirely dependent on inflows from the Barwon-Darling, of which 99% of flows are generated in upstream tributaries (MDBA). The Lower Darling is the only connection between the Barwon-Darling and the Murray Rivers.

Comments regarding modelling assumptions

I do not support that decision that water allocations are made using the worst drought before 2004. This is a high risk approach to water management given the severity of recent droughts and fails to consider climate change scenarios. It is therefore critical that water modelling and decision-making include the most recent drought of record.

The Natural Resources Commission's Review of the Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources 2012

The Natural Resources Commission has undertaken a review into the Barwon Darling Water Sharing Plan, clearly articulating the key failings of the Water Sharing Plan. In particular, the Report found that the Barwon-Darling Water Sharing Plan:

- has resulted in a greater number of, and extended period of low and cease to flow periods in the Darling River below Bourke.
- was not based on current evidence.
- was gazetted under questionable circumstances, with significant changes from the draft version available for consultation.
- fails to protect basic landholder rights including those of stock and domestic licenses, on the Darling river downstream of Bourke.
- exceeds the Sustainable Diversion Limit of the Murray Darling Basin Plan.
- is contrary to the Water Management Act 2000.
- has had a significant detrimental impact on communities and the environment because it resulted in a premature hydrological drought.

Whilst the Commissioner has successfully identified the issues, his recommendations fall far short of what is required. In particular, there are a number of recommendations which do not come into effect until 2023. This allows over-extraction to continue and continues to contravene the Water Act and fail to meet the requirements of the Murray Darling Basin Plan. It is critical that the Water Resource Plan be amended prior to submission to the MDBA to include:

- protect basic landholder rights in low flow events.
- review of the thresholds for cease to pump for Class B and C licenses.
- introduce Total Daily Extraction Limits which demonstrate connectivity and are based on the best current evidence.
- replace the unlimited carryover provisions.
- reduce the allowable annual take.

Access rules to protect active environmental water

It is critical that there be active management of environmental water, and we support in principle these rules. However, they must be expanded to: protect environmental water flows to the Menindee Lakes, and; immediately install flow gauges at all necessary locations to enable appropriate monitoring.

Consultation with Aboriginal nations

The draft WRP states the consultation with Barkandji and Murrawarri nations has not been completed. The NSW Government should not consulting on or submitting this WRP until this work has been completed and made available for consultation. When this work has been completed, the revised Draft should be made public for consultation again, for adequate inclusion of this important knowledge.

The proposed Lower Darling Restart Allowance

It is critical that there be a Lower Darling River Flow Restart Allowance. However, the Barwon-Darling WRP will not enable the Restart Allowance to occur. It is unlikely there would be sufficient water to enable the restart. The proposed first flush rules under this WRP will only allow 30GL to flow past Burke before Class A extraction is allowed to commence. It is highly improbable that there will be the adequate quantity of water to reach Menindee Lakes to enable the Flow Restart to occur. This is a clear demonstration where Barwon-Darling WRP fails to demonstrate connectivity with the Lower Darling WRP.

It is noted that this restart allowance is to be made up by future inflows. In addition to a flow trigger at Wilcannia in the Barwon-Darling WRP, there should be a flow trigger on the Lower Darling within the Barwon-Darling WRP. There should also be a minimum storage target of 160,000 ML set for Menindee Lakes. These triggers should be met before Class A extraction is allowed to occur on the Barwon-Darling.

Risks to water available for the environment and Basic Landholder Rights

Schedule D documents that with the implementation of the proposed changes to the WRP, there will continue to be significant risks to basic landholder rights and the environment.

There are not-tolerable risks to Basic Landholder Rights between Mungindi to Walgett, and Brewarrina to Bourke, and insufficient data available for Walgett to Brewarrina, Bourke to Louth, and Louth to Wilcannia. If Basic Landholder Rights cannot be achieved in these regions, there will also be an inability to ensure delivery of Basic Landholder Rights on the Lower Darling.

A number of not-tolerable risks exist to water available to the environment and water-dependent ecosystems at numerous locations along the Barwon-Darling, including at Wilcannia. If these ecosystems cannot be adequately protected, it can be assumed that ecosystems on the Lower Darling are also at significant risk.

Connectivity between WRPs and compliance with the Water Management Act

Section 58(1) of the Water Management Act 2000 states that: "For the purposes of this Act, the following priorities are to be observed in relation to access licences: (a) local water utility access licences, major utility access licences and domestic and stock access licences have priority over all other access licences,".

In recent years, there have been cases where extraction of irrigation licenses in the Barwon-Darling has occurred in accordance with the BDWSP when there has been a failure to i) protect the water source and its eco-systems, and ii) provide water for local water utilities and stock and domestic licenses. Just one such example was extraction in the Barwon-Darling during the 2015-2016 period of cease to flow in the Lower Darling.

Extraction of water under irrigation licenses in the Barwon-Darling when the Lower Darling has ceased to flow and/or there is no provision of water for townships or stock and domestic users is in clear

opposition of the Water Management Act 2000. This must be addressed in the WRPs, through ensuring connectivity between the Plans. This is not demonstrated in this WRP.

Responding to extreme events in the Lower Darling within the Barwon-Darling

The experience on the Lower Darling in 2017-2019 has demonstrated a failure to supply critical water supply to communities. This has been caused by a lack of action by the NSW Government to take effective action of over-allocation of water in the Barwon-Darling and upstream tributaries which has limited small and medium flows making it to the Lower Darling WRP area.

In the occurrence of an extreme event, it is critical there is connectivity across WRPs to the end of the Lower Darling and into the Murray. It is therefore critical that in the event of a Stage 3 and 4 event, that there be a total cease on extractions in upstream rivers. This is regardless of whether flows are expected to reach the Lower Darling. Experience in early 2016 demonstrated that if small flows are not extracted, this is important in wetting in river bed and enables future flows to travel further. There should not be conditions placed on protection of these flows.

Concluding comments

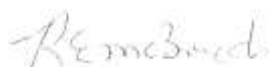
In conclusion, there has been a failure of the Barwon-Darling WRP to seriously address ecological outcomes. When these ecological outcomes are not achieved, there is a real and serious impact on individuals, families, communities and businesses.

There is a serious failure by the NSW Government to adequately address the concerns regarding over-extraction in the Barwon-Darling.

In its current state, this WRP will does not prioritise the river environment, and the environmental, social and economic disaster which is occurring at present will be repeated in the future. The community seeks appropriate, sustainable long-term management of the Barwon-Darling. We recognise that the MDBP and WRPs are critical, and bitterly disappointed that this WRP does not achieve this.

All NRC recommendations (including those proposed by the Commissioner to occur in the future) should be implemented immediately before this WRP is submitted to the MDBA. There should also be an introduction of a flow target at the Lower Darling, and a storage target of 160GL for the Menindee Lakes as a minimum. These targets should trigger cease to pump of Class A extraction below these levels. The annual allowable take should also be reduce to 100% from 450% over three years (rolling).

Regards,



Rob McBride
Tolarno Station



29 October 2019



Department of Primary Industries

NSW Government

barwondarling.sw.wrp@dpi.nsw.gov.au

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The draft WRP states the consultation with Barkandji and Murrawarri nations has not been completed. The NSW Government should not consulting on or submitting this WRP until this work has been completed and made available for consultation. When this work has been completed, the revised Draft should be made public for consultation again, for adequate inclusion of this important knowledge.

The proposed Lower Darling Restart Allowance

It is critical that there be a Lower Darling River Flow Restart Allowance. However, the Barwon-Darling WRP will not enable the Restart Allowance to occur. It is unlikely there would be sufficient water to enable the restart. The proposed first flush rules under this WRP will only allow 30GL to flow past Burke before Class A extraction is allowed to commence. It is highly improbable that there will be the adequate quantity of water to reach Menindee Lakes to enable the Flow Restart to occur. This is a clear demonstration where Barwon-Darling WRP fails to demonstrate connectivity with the Lower Darling WRP.

It is noted that this restart allowance is to be made up by future inflows. In addition to a flow trigger at Wilcannia in the Barwon-Darling WRP, there should be a flow trigger on the Lower Darling within the Barwon-Darling WRP. There should also be a minimum storage target of 160,000 ML set for Menindee Lakes. These triggers should be met before Class A extraction is allowed to occur on the Barwon-Darling.

Risks to water available for the environment and Basic Landholder Rights

Schedule D documents that with the implementation of the proposed changes to the WRP, there will continue to be significant risks to basic landholder rights and the environment.

There are not-tolerable risks to Basic Landholder Rights between Mungindi to Walgett, and Brewarrina to Bourke, and insufficient data available for Walgett to Brewarrina, Bourke to Louth, and Louth to Wilcannia. If Basic Landholder Rights cannot be achieved in these regions, there will also be an inability to ensure delivery of Basic Landholder Rights on the Lower Darling.

A number of not-tolerable risks exist to water available to the environment and water-dependent ecosystems at numerous locations along the Barwon-Darling, including at Wilcannia. If these ecosystems cannot be adequately protected, it can be assumed that ecosystems on the Lower Darling are also at significant risk.

Connectivity between WRPs and compliance with the Water Management Act

Section 58(1) of the Water Management Act 2000 states that: "For the purposes of this Act, the following priorities are to be observed in relation to access licences: (a) local water utility access licences, major utility access licences and domestic and stock access licences have priority over all other access licences,".

In recent years, there have been cases where extraction of irrigation licenses in the Barwon-Darling has occurred in accordance with the BDWSP when there has been a failure to i) protect the water source and its eco-systems, and ii) provide water for local water utilities and stock and domestic licenses. Just one such example was extraction in the Barwon-Darling during the 2015-2016 period of cease to flow in the Lower Darling.

Extraction of water under irrigation licenses in the Barwon-Darling when the Lower Darling has ceased to flow and/or there is no provision of water for townships or stock and domestic users is in clear

opposition of the Water Management Act 2000. This must be addressed in the WRPs, through ensuring connectivity between the Plans. This is not demonstrated in this WRP.

Responding to extreme events in the Lower Darling within the Barwon-Darling

The experience on the Lower Darling in 2017-2019 has demonstrated a failure to supply critical water supply to communities. This has been caused by a lack of action by the NSW Government to take effective action of over-allocation of water in the Barwon-Darling and upstream tributaries which has limited small and medium flows making it to the Lower Darling WRP area.

In the occurrence of an extreme event, it is critical there is connectivity across WRPs to the end of the Lower Darling and into the Murray. It is therefore critical that in the event of a Stage 3 and 4 event, that there be a total cease on extractions in upstream rivers. This is regardless of whether flows are expected to reach the Lower Darling. Experience in early 2016 demonstrated that if small flows are not extracted, this is important in wetting in river bed and enables future flows to travel further. There should not be conditions placed on protection of these flows.

Concluding comments

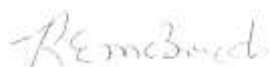
In conclusion, there has been a failure of the Barwon-Darling WRP to seriously address ecological outcomes. When these ecological outcomes are not achieved, there is a real and serious impact on individuals, families, communities and businesses.

There is a serious failure by the NSW Government to adequately address the concerns regarding over-extraction in the Barwon-Darling.

In its current state, this WRP will does not prioritise the river environment, and the environmental, social and economic disaster which is occurring at present will be repeated in the future. The community seeks appropriate, sustainable long-term management of the Barwon-Darling. We recognise that the MDBP and WRPs are critical, and bitterly disappointed that this WRP does not achieve this.

All NRC recommendations (including those proposed by the Commissioner to occur in the future) should be implemented immediately before this WRP is submitted to the MDBA. There should also be an introduction of a flow target at the Lower Darling, and a storage target of 160GL for the Menindee Lakes as a minimum. These targets should trigger cease to pump of Class A extraction below these levels. The annual allowable take should also be reduce to 100% from 450% over three years (rolling).

Regards,



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Tuesday 29 October 2019

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Submission to Draft Policy on Active Management in Unregulated Rivers

The Inland Rivers Network (IRN) is a coalition of environment groups and individuals concerned about the degradation of the rivers, wetlands and groundwaters of the Murray-Darling Basin. It has been advocating for the conservation of rivers, wetlands and groundwater in the Murray-Darling Basin since 1991.

IRN appreciates the opportunity to comment on the draft Policy on Active Management in Unregulated Rivers (the draft policy).

Background

IRN notes that the NSW Government is signatory to an Intergovernmental Agreement on Implementing Water Reform in the Murray-Darling Basin (the IGA) that includes a commitment to establish a mechanism to protect environmental flows in the water resource plans submitted for accreditation by 31 December 2019, and is to be in place and operating by end 2020.

We also note that the protection of environmental water is a toolkit measure agreed to under the Northern Basin Review.

IRN wishes to raise the impost on community stakeholders of having draft major policy and draft Water Resource Plans (WRPs) on exhibition at the same time with a tight deadline.

The NSW Government has had 7 years since the gazettal of the Basin Plan in 2012 to prepare for its implementation through the development of WRPs and associated policy. The failure to have this work completed on time by June 2019 and then rush everything past the community with limited consultation is an indictment on the NSW Government commitment to the Basin Plan.

Introduction

1. Active Management Objectives

IRN supports the primary objective of the policy and the first two secondary objectives.

The third secondary objective should be altered to:

Provide for economic, social and cultural opportunities while meeting the primary objective.

An objective to maximise economic activity is counter to the principles of water sharing and sustainable use of a scarce resource.

2. Active Management Procedures Manual

The procedures manual contains all the detail for the implementation of active management in the priority catchments. It is critical that this document is developed in a transparent and consultative manner, particularly for the policy implementation in the Barwon-Darling.

Active management of environmental water is a critical tool identified in the risk assessment and water quality management plan in the Barwon-Darling WRP. The development and application of the procedures manual is an important process that must be undertaken as soon as possible.

3. Protection of first flush flow

The implementation of the Active Management Policy is expected to commence by the end of next year. Hopefully the Northern Basin will have received drought breaking rainfall before that time.

It is critical that section 324 orders be maintained to protect first flush flows and environmental water through the Barwon-Darling if they occur before the Active Management procedures manual is finalised. This should also be the case if flows occur in the tributaries of the Barwon-Darling prior to WRPs being accredited and turned on in July 2020.

Response to consultation questions:

Defining active environmental water

1. What are your views on what water will be defined as *active environmental water* and managed through an unregulated water source?

IRN supports the definition of active environmental water as defined in the policy.

We note that all the Queensland WRPs have been accredited. It is imperative that HEW reporting across the border be protected within the Barwon-Darling water sources.

We strongly object to this water not being protected until the end of 2020. The development of accounting methods supported by protocols and procedures must be given high priority so the Barwon-Darling water source receives the environmental benefit of this water.

HEW in Queensland was not purchased with public money to provide additional water access for extraction in the Barwon-Darling.

Similarly with HEW purchased in the Intersecting Streams. This water must be protected within the Barwon-Darling. A method of accounting for this volume of water must be given high priority and implemented at the commencement of the policy.

It is imperative that all HEW is protected from extraction to meet the objectives of Water Sharing Plans (WSPs), WRPs, the Basin Plan, NSW *Water Management Act 2000* and the Federal *Water Act 2007*.

2. Do you support inclusion and protection by active management of planned environmental water releases from upstream water sources that are additional to the inflows that were considered when the Barwon-Darling plan commenced?

It is critical that all water purchased with public money or provided as PEW through upstream WSPs is protected from extraction within the Barwon-Darling water source.

The NSW Natural Resources Commission has described this river system as being in ecosystem collapse. All HEW and PEW from upstream tributaries and regulated water sources, including from across state borders, must be protected from extraction.

To fail to do so will be a failure on the part of the NSW Government to address the real issues of an ecological crisis in the Barwon-Darling water source.

We note that the draft policy states ‘... also considered the unique characteristics of the Barwon-Darling as the key conduit for the northern Basin, making it a high priority to protect HEW so that it can be used to achieve northern Basin connectivity outcomes’.¹

Connectivity across the Northern Basin and to the Southern Basin is critical for meeting the objectives of the Basin Plan.

IRN objects strongly to the emphasis on protecting downstream water users reliability. Water access purchased upstream and instream as HEW would have been extracted in the past and not be available for access by downstream users. The presence of HEW serves to increase water users reliability if it is not properly protected from extraction.

PEW arising from upstream water sources that is discretionary in nature must be considered as additional inflows and protected from extraction.

The presence of this water instream is a result of decision-making to meet environmental objectives.

The bias of the NSW Government to protect water user rights over and above the meeting of environmental objectives to restore river health and ecosystem function will cause a failure to meet statutory requirements.

Areas where active management will apply

3. Do you support the criteria for where active management is to be applied?

¹ Draft policy p 13

IRN supports the criteria.

IRN does not support that the priority area for the Barwon-Darling is to the last flow gauge at Wilcannia. HEW flows must be protected so that they can enter the Menindee Lakes system if not attenuated before that reach.

We do not support that the *‘Recognition of a volume of active environmental water that may flow into the Lower Darling water source would be dependent on future management decision for Menindee Lakes, amendments to the Murray – Darling Basin Agreement and a method agreed by NSW for determining the volume of active environmental water that flows into Lake Wetherell.’*²

The connectivity of the Barwon-Darling to the Lower Darling is a critical issue. The rule in the draft Murray-Lower Darling River for a 60GL first flush flow will be better met by protection of HEW inflows into the Menindee Lakes.

The Intersecting Streams water source must also be included as a priority area. HEW purchased in these streams is an important additional flow to the Barwon-Darling that must be protected.

Amendments to the Intersecting Streams WSP must be included within the policy adoption.

Managing active environmental water in-stream

4. What are your views on how accounts will be managed for in-stream use of unregulated held environmental water licences?

IRN supports the proposed management of unregulated HEW licences.

5. Do you support assigning river transmission losses proportionally to active environmental water?

IRN does not support the proportional assignment of transmission losses to active environmental water. This is because extraction of basic rights is currently assessed as a transmission loss. *‘Unmetered use where metering is not required such as access for basic landholder rights is generally captured in the estimates for river transmission losses’*.³

Losses to alluvial aquifers can also be extracted by groundwater licence holders.

The draft policy also notes that *‘Access under licence categories other than unregulated river access licences (for example, local water utilities and domestic and stock licences), will not be changed by implementation of active management unless evaluations demonstrate a significant risk to active environmental water from extraction under these licences and there has been assessment of effects, risks, feasibility and cost effectiveness of amending access.’*⁴

HEW and PEW do not have an objective to supply basic landholder rights, domestic and stock licences and town water supply. This water take should be supplied through rules in WSP.

² Ibid p 14

³ Ibid Appendix 2 p 29

⁴ Ibid p 21

The socialisation of transmission losses will allow for the social benefits of the above extraction that is part of the calculation of the Long-term Average Annual Extraction Limit (LTAAEL) in water sources where active management is proposed.

The definition of PEW within WSPs includes all water outside the LTAAEL.

The environmental benefit of HEW and PEW is already compromised by extractions that are not proposed to be managed under the active management process.

The socialisation of transmission losses will go some way to offset the use of environmental flows for other purposes.

Access for unregulated river access licences

6. What are your views on concept of adjusting commence to pump/cease to pump thresholds to protect active environmental water from extraction?

IRN supports that an adjusted flow class or CtP threshold and/or individual volumetric limits will be announced so that HEW and PEW water remains instream to meet environmental objectives.

IRN strongly objects to the proposed default position that if there is a mix of water instream and the volume of active environmental water cannot be determined the current access conditions will apply. This does not provide protection for environmental water and sets a poor precedent in a policy developed to protect HEW and PEW under various agreements and statutory requirements.

It is imperative that priority be given to installing necessary infrastructure in all water sources where active management will be necessary. If gauging stations fail, it is inappropriate that extraction is prioritised over environmental objectives.

The default position in the circumstance of a failed gauge while HEW or PEW is instream should be a water sharing arrangement or a cease to pump announcement.

IRN is unclear whether the proposed default position is intended to appear in the Active Management Procedures Manual and the implications this may have in the application of the Barwon-Darling WSP rules in Cl 49 (4), (5) and (6)

7. What are your views on proposed amendments to water sharing plan access rules to protect active environmental water in each of the water sources where active management is proposed?

IRN supports the proposed amendments to the WSP for the Macquarie Bogan unregulated water source and the WSP for the Gwydir unregulated water source.

We also support the proposed amendments to the Barwon-Darling WSP where the implementation of this policy is a major critical mechanism towards meeting objectives of the Basin Plan.

8. Do you support distributing the available volume between licence holders in the Barwon-Darling based on Individual Daily Extraction Limits?

The amended Barwon-Darling WSP appears to have renamed provisions for the implementation of Individual Daily Extraction Limits (IDELs) as an Individual Daily Extraction Component (IDEC). We see this renaming as an unnecessary confusion and wish to understand the difference between a 'limit' and a 'component'

There is provision in the WSP for Total Daily Extraction Limits (TDELs) that has not been implemented. The management of extractions on daily and on an individual limit is paramount for the restoration of river health in this highly damaged water source.

IRN supports the provision of IDELs and TDELs in the Barwon-Darling WSP. Both these management tools need to be activated to better manage extraction in all river reaches.

IRN does not support the granting of a new property right in the form of IDELs for trading purposes. IDELs should only be used as a management tool to ensure that the TDEL is met and that PEW and HEW within the Barwon-Darling is protected. Likewise in the Gwydir and Lower Macquarie.

9. Do you support distributing the available volume between licence holders in the Barwon-Darling to individuals who have expressed an interest based on Individual Daily Extraction Limits?

As stated above IRN does not support a trading mechanism for IDELs. This will further complicate water management and create a new market. Problems with the water trading market are being highlighted by water users and are now subject to an ACCC review.

The expression of interest process is complex, costly and will distract river managers from their current operational responsibilities. IRN does not support the proposed amendment to the Barwon-Darling WSP under cl 84 (8) to allow for the implementation of an expression of interest process as part of alternate arrangements to protect Active Environmental Water.

The announcement of TDELs and IDELs is sufficient and water users can make their own decisions about accessing the available water.

10. Do you support access being announced? What issues need to be considered in making announcements?

IRN agrees that under active management the Minister will announce what flow class applies or the CtP threshold for any particular day and any volumetric limits that may apply.

These announcements need to be timely so that the full benefit of environmental flows are met.

The draft policy states that '*active management will manage take of water so that an equivalent volume to that defined as active environmental water remains in-stream for environmental purposes*'.

Also that *'The closer this can be done in time to a volume of environmental water flowing past a given licence holder, the more closely active management will be able to approximate the protection of an actual environmental volume of water'*.⁵

New satellite imagery and telemetry have now provided more sophisticated and accurate methods of forecasting flows.

If forecasting inflows becomes too difficult for a timely Ministerial announcement of active management then a 324 order should be announced to place an embargo on water take. This method of protecting environmental water has been successful with the recent Northern Basin connectivity flows.

Forecasting flows and managing uncertainty

11. What are your views on how loss estimates will be forecast and how operational uncertainty is proposed to be managed?

We note that forecasting is considered the primary operational risk in implementing active management.

The experience of managing two connectivity flows into the Barwon-Darling has increased knowledge and operational response to the protection of environmental water.

As mentioned above new available technology is helping to improve flow forecasting. IRN supports that an increase in measurement points, including rainfall measurement will reduce flow forecasting uncertainty. This will also reduce costs in the longer term by reducing the level of resourcing for each event.

IRN supports that the losses be estimated based on average losses from previous similar events and as stated above, that these losses are socialised.

12. What other options should be considered?

N/A

Adaptive management

13. What information do you consider is important to document and consider in order to continuously improve active management?

Antecedent conditions, hydrographic shape of environmental flow, reinstatement of more natural flow curves, purpose of environmental order (eg fish connectivity flow), tools used to forecast flow event, calculation of first flush losses and impact on predicted flow rate, extraction volumes for basic rights, stock & domestic, town water supply, attenuation of flow, number of announcements needed to protect flow.

Additional issues or information

14. What risks need further consideration?

Climate change impacts on water availability, declining water quality, growth in basic rights

⁵ Ibid p 15

15. What additional issues should be considered in actively managing flows?

It is important to ensure that the “hydrographic shape” of flows through and to the environment has maximum environmental benefit and least environmental risk, for example by being similar to natural events with tails and without sudden falls due to big pumps being turned on suddenly in the same part of the flow.

For more information in regard to this submission please contact:

Bev Smiles
President
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AUSTRALIAN FLOODPLAIN ASSOCIATION

Healthy Rivers - Healthy Communities

Sarah Moles,
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To: barwondarling.sw.wrp@dpi.nsw.gov.au

The Australian Floodplain Association (AFA) is a non-government organisation, established in 2006. It represents floodplain and wetland landowners and their communities who depend on healthy rivers, floodplains and wetlands. Its membership resides predominantly within the Northern Murray-Darling Basin and includes floodplain graziers, community groups and shire councils.

AFA welcomes the opportunity to comment on the draft Barwon-Darling Water Resource Plan.

Our submission has been informed by members' attendance at community consultation and SAP meetings as well as scrutiny of the factsheets and draft WRP documents uploaded by DPI.

On first reading the revised WRP as currently written appears to capture many of the issues that we have raised since the *Barwon-Darling Water Sharing Plan 2012* was gazetted. Our opposition to the inappropriate and unsustainable changes made to the Draft after lobbying by vested interests is a matter of public record.

The figures for flows at various points are consistent between the fact sheets and the revised Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Source 2012. Our members who attended SAP meetings advise these figures are consistent with the recommendations made by the Natural Resources Commission (NRC).

With the exception of trading, most of the changes we've been seeking with regard to IDELs appear to have at least been considered. With regard to trading, AFA only supports permanent trading, whether of entitlements or of IDELs within their specific river reaches. We will not support temporary trades until the

efficacy of the new Plan rules have been tested by implementation, rigorous monitoring and positive impacts on downstream users including the environment have been demonstrated.

Recommendation: That permanent trades be restricted to trade specific river reaches and temporary trades not considered at least until the Plan is remade in 2023.

The introduction of TDEs and IDEs will significantly reduce the maximum daily extractions from current opportunities. However, if open accounts and the 300% annual access provision are to remain, we have no confidence that IDEs and TDEs will be effective controlling mechanisms. Their introduction will still allow far greater daily extractions than those that occurred prior to the introduction of the *Barwon-Darling Water Sharing Plan 2012*.

The retention of the 300% annual access provision will continue to be detrimental to the health of the river. AFA concurs with the NRC recommendation that

“DPIE-Water analyse an appropriate limit on annual take to replace the 300 percent provision in the 2023 remake of the Plan. As a starting point, the allowable annual take should be reduced to a rolling average of 450 percent over three consecutive years. The potential ecological impacts and impacts on water users should be further assessed, and the provision should be consistent with the prioritisation required under the Act”.

Recommendations:

- (a) That the 300% 'access to entitlement' provision be omitted from the Plan as per the NRC recommendation.
- (b) That a 100% limit on annual extraction relative to annual entitlement for A Class licences within the WRP be introduced immediately
- (c) That the NRC Review recommendation that, *“the allowable annual take should be reduced to a rolling average of 450 percent over three consecutive years”* for B and C Class licences within the WRP be immediately introduced.

AFA notes government concern about the disadvantage to irrigators by implementing some of the proposed new rules. No such government concern has ever been articulated for all other water users who were seriously disadvantaged by changes to the consultation draft Barwon-Darling Water Sharing Plan and the Government's failure to implement IDEs and TDEs in the gazetted *Barwon-Darling Water Sharing Plan 2012*. Compensation to these stakeholders has never been considered by government. The stated concerns regarding impacts on irrigators suggests to us that, even after the implementation of the proposed new rules, annual crops at the top of the catchment are more highly regarded than any downstream uses including the environment.

We note that the median cost to irrigated agriculture in the Plan area of implementing IDELS is \$54,000 over 10 years. Given the scale of the ecological crisis affecting most of the river, and the dire conditions facing river communities, traditional owners and riparian landholders, this is a trifling amount. Much deeper cuts to extraction levels are required to give the river any chance of real recovery. In AFA's view, A Class licences need to be recovered from willing sellers as a matter of urgency and managed as cultural water with First Nations people central to decision-making regarding its use.

Recommendation: That A Class licences be purchased and managed with First Nations people as cultural water.

While we welcome the increase in commence and cease to pump levels downstream of the Culgoa confluence, we regard the forecast levels of improvement as very modest given the critical state of river health.

We understand that the proposed IDELS for this section 3 of the Barwon-Darling are 327 ML for A Class, and 5177 ML for B Class. These figures represent 64% and 47% respectively of all IDELS for the whole of the Barwon-Darling.

The proposed IDELS for section 4 of the Barwon-Darling are 73 ML for A Class, and 1043 ML for B Class. This equates to 14% and 13% respectively of all IDELS for the whole of the Barwon-Darling.

AFA understands that the sum of the IDELS for A Class are 513 ML/day and that prior to the introduction of the *Barwon-Darling Water Sharing Plan 2012*, there was a total daily extraction of approximately 50 ML/day. Therefore, the introduction of IDELS, could potentially increase total daily extraction rates by a factor of more than 10 over the 2012 conditions. In our view this remains unacceptably high and should not be countenanced. We would have greater confidence of achieving more substantial downstream benefits if guarantees were made that IDELS (and indeed TDELS, the introduction of which we are strongly supportive) would be strictly adhered to and rigorously policed through proper metering and telemetry.

We note that TDELS are absent from the current draft and strongly support their inclusion.

Recommendation: That the Plan include IDELS and TDELS and ensure their immediate implementation to significantly decrease extractions.

AFA remains concerned that in spite of proposed changes to the commence and cease to pump thresholds together with the introduction of IDELS and TDELS these measures will not directly address any of the major changes made to the consultation Draft Barwon-Darling WSP 2012 that have brought the river to the brink of collapse.

AFA notes that the overarching fact sheet does not mention the critical issue of connectivity under the “other changes” described in the factsheets, but reference is made to it in Section 2.2 of the [Draft Barwon-Darling Watercourse Water Resource Plan](#) by referring to relevant sections of the revised *Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Source 2012*. However, despite this there is obviously no firm commitment by government to view the Northern Basin as a connected system with the aim of achieving an end of system flow target at Wentworth. This is a major design fault in water management of the Northern Basin.

On this issue, AFA reiterates its position regarding connectivity in the system. The Department needs to be aware that there is a tangible sense of despair among local stakeholders that their opposition to the omission of the Lower Darling from the Barwon-Darling Water Resource Plan area continues to be ignored. AFA strongly advocates for the Menindee – Wentworth reach to be brought into a single Barwon-Darling Water Resource Plan as the most logical, appropriate and effective means of ensuring connectivity is achieved along the full length of the system (ie from Mungindi to Wentworth). We see no reason why the detail for operating the Menindee Lakes System cannot be included as an annex to a 'whole of river' Plan. Furthermore, we reiterate that it is essential that the full suite of Northern Basin Water Resource Plans ensure connectivity of all the northern tributaries with the Barwon-Darling system. This especially applies to the management of environmental flows. Unless there are specific end of system flow targets for all these rivers there is no guarantee of adequate *inflows* being restored to the Barwon-Darling.

Also regarding connectivity, AFA reiterates that we strongly opposes the licensing of floodplain harvesting developments in the Northern Basin tributaries since the commencement of the so-called Healthy Floodplains process in 2008. It was obvious even then that the ecological health of the Barwon-Darling was in decline. The river must be allowed to connect laterally with its floodplain and in our view increases in the SDL cannot possibly be justified given the current state of the river and its communities. Furthermore, taxpayers should not be expected to pay yet more compensation to irrigators through the creation of a new, compensable right.

Recommendations:

- (a) The Barwon Darling and Intersecting Streams Water Resource Plans must determine a method whereby the volume of HEW arriving at the NSW-Qld border is agreed by NSW, with negotiations between Qld and NSW facilitated by MDBA.
- (b) That the Barwon Darling and Intersecting Streams WRPs include commitments to apply Active Management rules for managing environmental flows arising from Qld.
- (c) That the Barwon Darling WRP include a commitment to use the section 324 order under the *Water Management Act 2000* to allow protection of environmental water that can not be protected by other means.
- (d) That a process be put in place with the long-term aim of bringing the Menindee – Wentworth reach into a single, whole of system Barwon-Darling Water Resource Plan as the most logical, appropriate and

effective means of ensuring connectivity is achieved along the full length of the system (ie from Mungindi to Wentworth).

The Resumption of Flows (or first flush) rule is something AFA has long advocated and we welcome this inclusion. We note that the NSW Murray and Lower Darling Water Resource Plan includes a 60GL first flush allowance for the Lower Darling with this volume to be stored in a bucket in Lake Wetherall and used to restart the river. However, if Menindee is empty there will obviously be no water in this bucket. In our view, the 30GL trigger in the Barwon-Darling WRP that opens irrigation access at Bourke should be significantly increased (we suggest by 100GL at Bourke and/or 10,000ML/day for 5 days at Wilcannia to accommodate the substantial 'losses' incurred in restarting more than 1,000km of dry river) so that enough water will actually reach Menindee to fill the 60GL bucket. Use of this water to restart the Lower Darling would only apply when Menindee is under NSW control and the river is at low levels.

In AFA's view, management that permits the river to dry out is economically and ecologically inefficient due to the substantial losses involved in re-starting it. It is also totally unacceptable on social, cultural and moral grounds.

Recommendation: That A Class extraction or any other extraction should only commence when there is confidence that fresh water can be delivered to Wentworth. In practice, this would mean that the 60 GL restart bucket in the Menindee system would exist and be functional.

The impact of the proposed Resumption of Flow Rule on licence holders appears to be very modest – a combined total diversion of -0.5% (A Class -0.7%, B Class -0.1% and C Class -1.6%) costing irrigated agriculture a total of \$774,000 over 10 years. This is a very small impact on the irrigation industry and if accurate should be embraced rather than opposed by the industry. Whilst welcome, this will have only a small benefit to other water users in the system relative to the volumes that have been lost since 2012.

AFA notes that the Flow Outcomes of the Change in A Class Flow Thresholds below Bourke “ *will include a visible improvement in low flows at Wilcannia.*” Given the massive reduction in low flows together with the dramatic increase in periods of no-flow at Wilcannia since the introduction of the *Barwon-Darling Water Sharing 2012* the “... *estimated increase of 4.2% for flows in the range of 30-350ML/day and an increase of 0.5% for flows in the range of 350-1400ML/day*” is, in AFA's view, manifestly inadequate to reverse the appalling inequity Wilcannia's residents and those of the Lower Darling have endured.

One of the most significant elements of the Northern Basin Toolkit was the Prerequisite Policy Measure to protect or shepherd held environmental water (HEW) as it moves through the system. AFA's view is that the proposal to lift the A Class commence and cease to pump thresholds by six centimetres at Bourke (ie from 350 ML/day or 4.095 metres to 605 ML/day or 4.155 metres) may provide some level of protection as to when water may be extracted from the Darling River, but this will not necessarily limit the total volume

that could be taken. As mentioned above, AFA advocates the immediate introduction of TDELS in the Plan to address this.

Analysis by our members indicates that 35% of the total environmental water recovery target for the Northern Basin, that we and taxpayers expect to be protected from extraction downstream, will still be available for extraction on reaching the Barwon-Darling unless the proposed Active Management strategies are introduced. Without these strategies 78% of A Class IDELS and 60% of B Class IDELS could be legally extracted.

The present draft provides the minister with discretionary powers in relation to the application of IDELS. This discretionary power must be removed and replaced by the immediate introduction of IDELS and TDELS, along with clear rules to ensure that active environmental water is protected from consumptive take.

Similarly, significant proportions of small flow pulses in the A Class flow window will still be able to be extracted, effectively reducing flow rates along most of the downstream river to the commence and cease to pump threshold. In our view this is inappropriate as the river needs to pulse. AFA contends that the opportunity to restore the substantial environmental and cultural benefits of these flow pulse events will be lost.

Recommendations:

- (a) That every litre of community owned water (environmental water) be fully protected from physical extraction other than that approved by its manager.
- (b) That the discretionary power of the minister to protect active environmental water be replaced by clear rules to protect this community owned water.

The Active Management fact sheet outlines the proposed changes to the water sharing plan rules stating *“the proposed amendments allow the minister to determine and announce the flow class (for example, A, B or C class) that applies in each management zone. The announcement will apply for 24 hours.”* AFA members seek much greater clarity regarding the background and/or purpose of the 24 hour duration of such announcements.

The Active Management paper seeks feedback from stakeholders on how best to distribute the different flow classes among unregulated river access licences (proportion of the IDEL or a combination of the IDEL and an expression of interest EOI). A proportion of the IDEL makes sense but we do not understand how expressions of interest can be managed transparently, equitably and in a timely manner. A detailed and fully accountable process needs to be agreed, made public and implemented.

Recommendation: That a transparent, equitable and timely EOI process be established to share access to flows among different licence classes and made publicly available.

AFA notes that water quality is conspicuously absent from the draft Plan. Water quality, particularly at low flows, is intimately related to water quantity and of enormous concern and interest to river communities and stock and domestic users. Indeed it was the water quality issues associated with the 1990's algal blooms that sparked major reform of water management in the Barwon-Darling system. This should not be forgotten. AFA asks where and when will this be satisfactorily addressed?

Recommendation: That water quality targets for the Barwon Darling system be integrated into the Barwon Darling Water Resource Plan.

The hierarchy of water management principles set out in s5(3) of the *Water Management Act 2000* clearly states:

"In relation to water sharing:

(a) sharing of water from a water source must protect the water source and its dependent ecosystems

(b) sharing of water from a water source must protect basic landholder rights, and

(c) sharing or extraction of water under any other right must not prejudice the principles set out in paragraphs (a) and (b)."

The NRC report on the *Barwon-Darling Water Sharing Plan 2012* reiterates that

"the Act explicitly prioritises the protection of the environment and basic landholder rights over extractive use in the making of the plan.....- the needs of the river must come first."

and goes on to recommend that appropriate amendments be made to the current and revised WSP. In spite of the improvements set out in the Draft Water Resource Plan, AFA is of the view that the new rules still do not adequately address the considerable problems on the Barwon-Darling and are therefore inconsistent with the requirements of the *Water Management Act 2000*. The objectives identified in the amended WSP are to *"protect and, where possible*, enhance the ecological condition of the water source and its dependent ecosystems"*¹ (*AFA emphasis). This suggests that no real effort is being made to protect the river and that the environment and river communities are being traded off against extractive use. The draft Plan needs amending to make it compliant with the *Water Management Act 2000*.

Recommendation: That the Draft Plan be fully consistent with the Water Management Act 2000 principles stated in s5(3) as per the NRC report.

In summary, AFA recommends the following amendments to the Draft Plan:

¹ Draft *Water Sharing Plan for the Barwon-Darling Unregulated River Water Sources 2012*, ss10(1) (Broad environmental objective) and 10(2)(a) and (b)

1. That the 300% 'access to entitlement' provision be omitted from the Plan as per the NRC recommendation.
2. That a 100% limit on annual extraction relative to annual entitlement for A Class licences within the WRP be introduced immediately
3. That the NRC Review recommendation that, *“the allowable annual take should be reduced to a rolling average of 450 percent over three consecutive years”* for B and C Class licences within the WRP be introduced immediately.
4. That permanent trades be restricted to trades within specific river reaches and temporary trades not considered at least until the Plan is remade in 2023.
5. That A Class licences be purchased and managed with First Nations people as cultural water.
6. That the Plan include IDELs and TDELs and ensure their implementation result in significantly decreased daily extractions.
7. The Barwon Darling and Intersecting Streams Water Resource Plans must determine a method whereby the volume of HEW arriving at the NSW-Qld border is agreed by NSW, with negotiations between Qld and NSW facilitated by MDBA.
8. That the Barwon Darling and Intersecting Streams WRPs include commitments to apply Active Management rules for managing environmental flows arising from Qld.
9. That the Barwon Darling WRP include a commitment to use the section 324 order under the *Water Management Act 2000* to allow protection of environmental water that can not be protected by other means.
10. That a process be put in place with long-term aim of bringing the Menindee – Wentworth reach into a single, whole of system Barwon-Darling Water Resource Plan as the most logical, appropriate and effective means of ensuring connectivity is achieved along the full length of the system (ie from Mungindi to Wentworth).
11. That A Class extraction or any other extraction should only commence when there is confidence that fresh water can be delivered to Wentworth. In practice, this would mean that the 60 GL restart bucket in the Menindee system would exist and be functional.
12. That every litre of community owned water (environmental water) be fully protected from physical extraction other than that approved by its manager.
13. That the discretionary power of the minister to protect active environmental water be replaced by clear rules to protect this community owned water.
14. That a transparent, equitable and timely EOI process be established to share access to flows among different licence classes and made publicly available.
15. That water quality targets for the Barwon Darling system be integrated into the Barwon Darling Water Resource Plan.

16. That the new Plan be fully consistent with the Water Management Act 2000 principles stated in s5(3) as per the NRC report.

Finally, AFA has great confidence in the EDONSW's understanding of the relevant legal and policy frameworks as well as the current circumstances and how they came to be. We endorse the specific, detailed amendments to the Draft Barwon-Darling Water Resource Plan that EDONSW is recommending in their own submission.

Thank you for the opportunity to comment and the extension of time to submit it.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Sarah Moles', written over a horizontal line.

Sarah Moles

Secretary

1 November 2019



SUBMISSION

BY

BOURKE SHIRE COUNCIL

IN RELATION THE

BARWON / DARLING WATER SHARING PLAN

Contact Ross Earl General Manager [REDACTED]

BARWON / DARLING WATER SHARING PLAN

Thank you for the opportunity to provide comment on the proposed revision of the Barwon Darling Water Sharing Plan.

The current and ongoing drought has served to highlight the fragility of the river system and also highlighted the need for a review of the Water Sharing Plan and the policies impacting on the river system with the intent that it provides for both an increased availability of water and the equitable distribution of that water.

It is agreed that the Barwon Darling experiences huge variability in its flow and the river in its natural state experiences extended periods of low to nil flow.

While there are a number of factors that have been deemed to have impacted on the lack of a flow in the river, the overarching issue has been a lack of any substantive inflows, with such inflows being at record or near record lows.

There is a need for a greater degree of reliability of the flow in the river plus an increase in the availability of water.

Local Councils along the river system are in the main, local water utilities, and dependant on a healthy flowing river to extract water to meet the critical human needs of the various communities located along the river and as such, have a strong interest in management decisions in the operation of the river.

The Darling River at Bourke has ceased to flow over the Bourke Weir for around fifteen (15) months and that period would have been substantially higher had it not been for an environment flow made available in April of 2018 through the collective efforts and cooperation of both State and Federal agencies.

The now critical water supply situation faced by Bourke has resulted in a system of bores being constructed which will provide water for critical human needs but will **not provide** the amount of water required to support and protect the long established parks and gardens which are dying at an alarming rate.

These facilities are an essential element of the social, cultural and environmental needs of the community.

Additionally, a sustainable recreational area is an important fact in the mental health of communities in all age groups.

The Councils of Walgett, Brewarrina, Bourke and Central Darling recently met in Sydney and considered the issue of Water Security.

The meeting agreed that the drought conditions and water shortages being experienced along the system should not be repeated and actions should be taken as far as possible to mitigate any chance of recurrence.

It was noted that the current situation is causing significant financial, emotional, and social stress to those living along the Darling /Barwon River system.

Representatives agreed that:

- That solutions will require a bipartisan and cooperative approach at all levels of government and pledged to work alongside the other tiers of government.
- That there is an urgent need to finalise the Western Weirs Strategy and clearly articulate the plan to all communities along the river system.
- There is a need to utilise the weir strategy including the existing storages to ensure that each community reliant on the system as their primary water source has access to a minimum (2) year's supply of water with such water held in storages quarantined accordingly for that purpose.
- That new weirs that are constructed and designed to allow for the periodic flushing of storages as the opportunity arises
- That provision is made for the construction and equipping of groundwater bores to all urban supplies that can supplement the increased urban weirs storage and further enhance town water security during dry or low flow periods.
- That recognition be given to the importance of the social, and recreational benefits to be derived from a permanent water supply including the cultural benefits derived by Aboriginal communities.

The provision of a reliable water supply will also provide significant economic benefits not the least being a positive impact on employment.

Council representatives were extremely strong on the need for local government to be part of the ongoing discussions and the need for a cooperative and collaborative approach to be adopted if a long-term solution is able to be determined and adopted.

The position adopted by the Councils is similar to a motion passed at the 2019 Annual Conference of Local Government New South Wales held at Warwick Farm recently

4 LGNSW Board – Water Security

That Local Government NSW calls on the NSW Government to develop, in consultation with local government and Aboriginal custodial communities:

- 1. A comprehensive, integrated and funded emergency plan to address the immediate water supply crisis afflicting NSW towns and communities and a disaster recovery plan for when the drought breaks. These plans should: a) provide greater flexibility, such as allowing*

temporary transfer of water, where the water does not have current allocations/licensing and it is within the same water source;

b) ensure that town water supplies will be secured and maintained; and

c) ensure that appropriate consultation is undertaken, when issuing bore licences and other relief measures.

2. Long term (30-40 year) water supply strategies for catchments throughout the State that mitigate the risks from future droughts and the predicted impact of climate change to help ensure population and economic growth targets can be achieved and supported. These strategies should not exclude ambitious infrastructure projects of the scale of the Snowy Mountain Scheme, while storm water harvesting, reuse and recycling and demand management initiatives should feature as key elements of those plans.

This issue was also raised by Bourke Shire, Tamworth Regional, Cabonne Shire, Bellingen Shire, Lachlan Shire, Federation, Orange City, Parkes Shire, Greater Hume Shire, Narrromine Shire and Warrumbungle Shire Councils –

The issues faced by the communities and landowners along the Barwon Darling River has seen a considerable amount of discussion take place in an attempt to try and overcome the situation and in turn has seen a great deal of press coverage seeking to apportion blame to certain sectors of the community and also successive governments.

None of this “blame game “provides any substantive solution to the problems and has only served to politicize the matter.

The only real solution to many of the problems is additional rainfall and/or increased storage in the catchment.

The proposed Water Sharing Plan for the Barwon Darling System has seen some changes suggested that may not be totally palatable in everyone’s view but the plan is aimed at identifying and addressing the contemporary issues in relation to water utilisation along the Barwon Darling River System which flows the length of New South Wales.

One of the proposed outcomes is an increased level and consistency of flows.

It is of course important the views of all users and groups are sought and respected and this is the essence of the consultation phase.

Plans of any type have a finite life and need to be reviewed to ensure that the contemporary needs and conditions are considered and addressed.

Critical to the revised plan is the need to ensure that the river has the ability to meet the critical human needs of all communities along the river and that the flow in the river is such that the environmental health of the river is able to be protected.

If the plan is able, as is planned, to produce a greater reliability of flow, increased level of flow and be able to meet the needs of water users along the river it would have been deemed to achieve its objective.

As detailed in the summary of outcomes from the meetings of the Councils in Sydney, consideration should also be given to the allocation of water in the various up stream storages that can be released and utilised to supplement the river supply in periods of extended drought and thus supplement and support the aims of the proposed plan.

We thank you for the opportunity to lodge this submission.