Hunters Hill 2110. 30 April 2022

Natural Resources Commission GPO Box 5341, Sydney, NSW 2001 nrc@nrc.nsw.gov.au

Dear Commissioner Durrant-White,

Thank you for an opportunity to comment on the Water Sharing Plan for Lachlan Unregulated River Water Sources 2012 (the plan) which is under review by your commission.

I have serious concern about the adequacy of the plan to protect its water source and its dependent ecosystems as required under water laws; also that this water source is shared equitably to ensure local communities have access to adequate amounts of clean water as inland NSW faces the impacts of a changing climate.

I urge the NRC to make a strong review report to government so that the plan is rewritten to fully implement the principles that underpin water use and management in NSW under law. The plan also needs to achieve consistency with the intent of the Murray Darling Basin Plan to bring the extraction of all basin waters into sustainable limits. NSW has a stated commitment to the Basin Plan.

INTRODUCTION

The background document dated 2016 provides little information about the various iterations of the original Lachlan Unregulated and Alluvial Water Sources WSP that commenced 14 September 2012, renamed the Lachlan Unregulated WSP at a non specified date and the subject of the NRC review.

It is difficult to follow the changes to the original WSP via any transparent and accessible public process. Perhaps easier to list my concerns at the lack of due process surrounding changes to this plan as a series of questions:

- Where is the NRC Report that formed the basis of the Minister's decision to replace the Mandagery Creek WSP 2004?¹ It is not included in the References section of the background document. Possibly the Minister has relied on the NRC Review (2013) of the 31 WSPs that commenced in 2004.
- How were the cease-to-pump rules in the Mandagery WSP 2004 that protected low flows in the unregulated Mandagery Creek carried forward into the amended Lachlan Unregulated and Alluvial Water Sources WSP? The 2013 NRC review considered these rules may have contributed towards the Lachlan CAP's river and wetland targets and improved Mandagery Creek instream values.

¹ Refers to page 7 of background document 2016

- The background document justified the incorporation of water sources for unregulated rivers and alluvial aquifers into one plan on the basis of the connectivity of these resources and the benefit of linked and equitable rules across these resources. Why were they separated out via ministerial order in 2020?
- When did the renamed Lachlan Unregulated Water Sources WSP have an effective start date given it managed two alluvial aquifer water sources until 2020?
- Why are the 23 unregulated water sources managed collectively? The background document fails to properly justify this except to state the use of outdated estimates and averages.

While it is pleasing this critical inland WSP is being reviewed by the NRC it is difficult to follow its review and audit history. There would seem a strong public interest to improve the transparency around any amendments, consolidation or replacement of water sharing plans generally.

A Section 44 Audit Panel was established by the Water Minister to undertake overdue audits of 25 WSPSs, including the WSP for the Lachlan Unregulated and Alluvial Water Sources 2012. Alluvium and Vista Advisory were engaged as consultants to report to the audit panel and their Audit Report has been made publicly available.

It would seem there is no requirements for the activities of the Audit Panel to be made publicly available. It is also unclear what iteration of the WSP was audited as the background document reference is to a 2013 rather than a 2016 document that is stated to provide the background information for this review.

The audit examined selected provisions of the plan. The audit states that "Broadly the WSP provisions have been selected based on materiality and impact to ensure the focus is on areas of possible poor performance and high impact."² The scope of the audit did not include considerations such as the compliance of water holders, whether the plan was compliant with water laws, whether it achieved the intent of the plan or recommended solutions for all areas where inadequacies were found.

Whether the final Audit Report fully reflects the consultant's findings is unclear: actions to amend parts were requested by DPIE-Water Group to all 25 WSP audits undertaken by Alluvium in its somewhat generic response dated 1 October 2019.

² Alluvium and Vista Advisory (2019). Audit of the Water Sharing Plan for the Belubula Regulated River Water Source 2012. Report 1 by Alluvium Consulting Australia (Canberra and Melbourne) and Vista Advisory (Canberra) for the NSW Department of Planning, Industry and Environment.

The covering letter to the government response states ".....while the results were to some degree expected, we have already made substantial progress towards addressing many of the fundamental issues that have been raised." (Appendix 3 page 1).

The results of the audit were particularly damning for the Lachlan unregulated water sources managed as one extraction management unit. No compliance with the LTAAEL was demonstrated; lack of metering; no evidence of monitoring and reporting of performance indicators; lack of resources and commitment. These all contributed to a very high risk ranking that the plan was not meeting its intended objectives.

This clearly suggests that water meant for the environment may not be staying in the various watercourses as intended under the plan. Given the audit found no evidence of monitoring and reporting of performance indicators there is no way of "ground truthing" the adequacy of the water "left" for the environment to meet environmental watering targets.

The government response to the audit (dated October 2019) provided material to the NRC outlining how monitoring of performance indicators would occur but suggested implementation would start in 2019. Given the date of the response letter this probably was more likely 2020, which is around eight years into the plan.

This tardiness is most unsatisfactory and contrary to the public interest in seeing healthy inland waterways.

Further, the Lachlan alluvial water sources under the original WSP 2012 were shifted to a new Lachlan Alluvial Water Sources WSP 2020. According to the government WSP replacement manual all Murray Darling Basin groundwater plans were replaced as consolidated plans in 2021 so presumably all are not due for audit until 2026 and review in 2031.

The Alluvium audit did identify some risks associated with Lachlan alluvial water sources under the original WSP 2012 but it is unclear whether these have been addressed in the Lachlan Alluvial WSP 2020. The individual share components within the three consolidated water sources carried across in the remake of the new alluvial WSP 2020 appear different to the original WSP 2012. It is very difficult for someone like myself to understand these changes and be confident that NSW has effective WSPs that genuinely deliver improved environmental health of inland waterways and ensure fair access to water sources.

In the public interest I feel matters related to the assessment and compliance of alluvial water take from the Lachlan catchment should be within the scope of this NRC review of unregulated Lachlan water sources; especially since a NRC review of the WSP for the regulated Belubula River is also underway.

Such a comprehensive review can then genuinely consider the robustness and effectiveness of the various WSPs covering the interconnected water sources in meeting the intent of water laws and government commitment to the Basin Plan.

Response to questions:

1. To what extent do you feel the plan has contributed to environmental outcomes?

I have no confidence that the plan has contributed to improved environmental outcomes for the Lachlan catchment: no evidence is available to demonstrate this for the whole catchment. It is unclear whether PEW is protected within the plan and can safely flow across the whole Lachlan catchment.

The Risk Assessment Schedule of the Lachlan Surface Water Resource Plan identified high and medium risks to the capacity to meet environmental watering requirements at a range of flow levels in a number of unregulated water sources: Belubula River, Bogandillon and Manna Creeks, Boorowa River and Hovells Creek, Burrangong Creek, Crookwell River, Crowther Creek, Goobang and Billabong Creeks, Goonigal and Kanga Rooby Creeks, Lachlan River, Mandagery Creek, Mid Lachlan unregulated, Ooma Creek and tributaries, Tyagong Creek, Unregulated effluent Creeks, Waugoola Creek, Western Bland Creek.

The WRP Risk Assessment also identified a medium risk to two nationally significant wetlands (Booligal Wetlands and Great Cumbung Swamp) from reduced water availability due to drying landscape conditions associated with a changing climate. It is unclear what risk assessment of future climate change impacts has occurred for the other six nationally listed wetlands within the Lachlan catchment.

Medium and high risks were identified to the health of water-dependent ecosystems from poor water quality in two unregulated water sources: Lachlan River at Reids Flat and Boorora River at Prossers Crossing.

Also numerous high and medium risks were identified within the Lachlan and Belubula regulated systems. I feel that the cumulative impact on water quality of unregulated inflows into the regulated Lachlan River needs consideration in risk assessment of the impacts of poor water quality within the whole Lachlan catchment.

For the regulated Belubula River below Carcoar Dam high and medium risks were identified from poor water quality. 90% of inflow into the Belubula downstream of Carcoar dam is from unregulated tributaries. A revised unregulated WSP with better rules to manage interconnectivity of the regulated and unregulated water sources is needed to improve environmental outcomes.

The current plan fails to take proper account of the impacts arising from cumulative impacts from various point sources of high pollution. The current plan also fails to take account of the reduced future availability of water associated with a changing climate and how this will impact water quality.

2. To what extent do you feel the plan has contributed to social outcomes?

The Lachlan Water Strategy has identified that water security in a future of greater climate variability and climate change will be more challenging for those towns and villages that rely particularly on unregulated rivers and creeks. Annual average rainfall could decline 10-15%; evapotranspiration increase 5%; a rise in long-term temperature of 1.8* to 2.7* with more hot days over 35* expected.

The consequent transmission losses associated with the delivery of regulated water to meet downstream basic needs, is counter productive during drier periods. The proposal to construct a pipe from Lake Rowlands to Carcoar Dam also seems counter productive; it will shift unregulated water into a regulated system with potentially adverse impact on the ecological health of the affected unregulated water sources.

Various risks to water quality have been identified in the Lachlan WRP across all water sources. Seven locations out of 15 assessed locations were assessed as at medium or high risk. Risks included raised suspended sediment, raised salinity, elevated nutrient levels, dissolved oxygen and pH outside natural range, thermal pollution, elevated cyanobacteria counts, pesticide levels and pathogen counts. Disturbingly, a number of knowledge gaps were identified in the water quality management plan including for monitoring of pesticides and contaminants that include from mining activity.

It is unclear how the WQMP has been implemented. The quantity and quality of Lachlan water sources for the various regional towns and smaller communities within the catchment is a critical consideration that must be considered within the plans covering these water sources.

A new plan, based on a rigorous and robust review of the current plan, must be genuinely effective in providing adequate clean water to all communities during future dry times and with capacity to fairly manage the excessive demands of unsustainable landuse activity. A revised plan must fully reflect the priorities under water laws for WSPs to meet the needs of the environment and local communities and it must be properly monitored to ensure it is consistent with these priorities.

The needs of First Nation peoples needs particular consideration to ensure the plan makes provision to meet the spiritual, social customary and economic needs of the various Aboriginal communities within the Lachlan catchment.

3. To what extent do you feel the plan has contributed to economic outcomes?

Unfortunately the plan prioritises irrigation landuse activity and compromises opportunities for diverse economic activity that is more sustainable and longer lasting. Tourism and fishing opportunities create jobs and grow local towns and services to create more jobs and opportunities for improved health and training activity. The plan has not effectively shared water access to stimulate other types of economic activity but rather, I feel, unfairly prioritised irrigation to the detriment of the environmental health of the whole Lachlan catchment. It fails to consider the benefits of more sustainable and diverse economic activities especially as the communities within the Lachlan face the predicted consequences of a changing climate.

4. To what extent do you feel the plan has contributed to meeting its objectives?

For the reasons above I do not feel the plan has met its objectives: it has not demonstrated where it has enhanced river flow dependent ecosystems, protected basic landholder rights, ensured equitable sharing, provided opportunities for enhanced market based trading, maintained water quality, provided a public benefit etc.

Given the poor environmental condition of the Lachlan catchment, especially in its upper and mid catchment areas it is unclear how the plan has protected the importance of rivers and groundwater for Aboriginal people.

The lack of robust monitoring of performance indicators to verify the plan has met its objectives is a major failure assuring the effectiveness of the plan.

5. What changes do you feel are needed to the water sharing plan to improve outcomes?

I feel the plan needs to be replaced with a WSP that is consistent with the intent of State and Commonwealth water laws and the Murray Darling Basin Plan to use and manage connected water sources sustainably.

Fundamental to improved outcomes is prescribed management of the various sub catchments within the unregulated extraction management unit. This management approach is consistent with the basic principles of total catchment management that should underpin water use and management to ensure sustainable outcomes.

Cease to pump rules should be clearly stated in the revised WSP for all 23 water sources within the EMU and cover a range of flow and climate scenarios. All 23 water sources should be gauged and monitored to ensure that over extraction does not occur to cause disconnection between the various water sources.

Thank you for an opportunity to comment,

Yours sincerely, Cathy Merchant