Introduction

Namoi Water welcomes this opportunity to provide a formal submission in response to the Productivity Commission Murray-Darling Basin Plan 10-Year Implementation Review.

Namoi Water is a widely recognised and highly regarded peak industry group which represents water entitlement holders across the Peel, Upper Namoi and Lower Namoi valleys in the Northwest of New South Wales.

Namoi Water has a proud history of providing strong, positive contributions towards the management of water, and as an apolitical, not-for-profit organisation we advocate for and support proactive, sustainable water policy and legislation that provides positive outcomes for our members whilst also meeting the environmental, economic, cultural, and social requirements of the local communities throughout the catchment. Namoi Water is funded by a voluntary nominal levy on a cents per megalitre basis by water entitlement holders.

This submission is made on behalf of all members, but individuals reserve the right to make their own submission. Each member of Namoi Water is also a member of the NSW Irrigators Council (NSWIC) and therefore we endorse their submission unless specifically stated.

Executive Summary

The Murray-Darling Basin Plan (the Plan) has recovered more than 2100 gigalitres (GL) of water from the consumptive pool (Over 4 Sydney Harbors), for the environment.

To put this into perspective, this has removed one in three litres of irrigation water. (When combined with the 875 GL recovered in pre-Basin Plan water reforms). As a result, total diversions for irrigation, towns and industry have reduced to just 28% of inflows.

This is well within globally accepted standards for water diversions. The 5-yearly Productivity Commission Review (2018) provided a sound and evidence-based roadmap to future implementation of the Plan. However, the lack of political willingness to implement these recommendations means that while many remain relevant, implementation is now hindered by timeframe restraints.

The primary focus of this submission is to highlight that the Plan's centerpiece – to implement Sustainable Diversion Limits (SDLs) – has now been achieved.

This is not to diminish the importance of other elements of the Plan being completed (i.e., supply and constraints measures) to optimise the outcomes from the water already recovered.

However, it does provide a case that — with SDLs in effect - there is now time to do these other elements right (i.e., to work collaboratively with Basin communities on new and improved projects), rather than risk worthwhile projects not progressing; suboptimal or faulted projects progressing; or resorting to further water recovery that cannot be delivered or optimised at this point in time, and that comes with substantial negative socio-economic and water market impacts.

The Plan must be about delivering outcomes. This is more important than arbitrary timeframes, or modelled water recovery targets that are more than a decade old. The priority must shift to Integrated Water Resource Management, through a strategic, coordinated

complementary measures package to address key degradation drivers that water alone cannot fix (i.e., invasive species, habitat restoration, cold water pollution, barriers to fish passage, and fish screening).

Until such a package is delivered, further water recovery efforts are only tinkering at the edges of environmental management.

Namoi Water sees the greatest opportunity lying in a shift towards collaborative, partnership, and co-design models that have enormous potential, and that are already occurring on the ground.

KEY QUESTIONS

1. What needs to change to ensure water recovery targets are met and that supply and efficiency measures are delivered? What lessons can be learnt from past experiences?

The Murray-Darling Basin Plan's primary objective is to set and implement SDLs. Therefore, the core of any review of the effectiveness of the implementation of the Basin Plan must be the achievement of SDL implementation and compliance.

In 2020-2021 the Account Register of Take demonstrated all but one 1 of the 109 water areas as compliant. This level of compliance demonstrates there is no "gap to be bridged" to meet SDL targets. Water recovery is only one mechanism available in a suite of options for achievement of the Basin Plan, and SDL compliance should result in no further water recovery for the sake of political point scoring.

During the development of the Basin Plan, water recovery volumes were estimated from modelling to close the gap from pre-Basin Plan diversion limits (Baseline Diversion Levels or BDLs) to post-Basin Plan levels (SDLs, or Sustainable Diversion Limits). This water recovery program was known as "Bridging the Gap".

As stated, SDL compliance across the Basin clearly demonstrates the gap has been bridged. Similarly in the Namoi valley, water use in 2019-20 was 39.7 GL under the SDL, or 8%. In 2020-21, water use in the Namoi valley was 44.2 GL under the SDL, or 9%. It is hard to see how an additional 9.5 GL water recovery can be justified, when the Namoi is already more than meeting its SDL.

There is, simply, no gap to bridge to meet the Namoi SDL.

Currently NSW does not have a full complement of Water Resource Plans submitted for accreditation by the Murray Darling Basin Authority (MDBA).

Until such time as this occurs, and the WRPs are accredited key technical work cannot be finalised. Only then will over and/or under recovery figures be accurate.

Until this occurs the size of the gap to bridge, if any is an unknown quantity.

Not only does over recovery squander taxpayer funds, the lost water from our communities creates dire socio-economic impacts. Less water results in less food and fibre – the cost of family grocery bills has risen faster than the growth of the Consumer Price Index (CPI), and this will only be further exacerbated by every megalitre of water removed unnecessarily from the productive pool.

It is recommended that:

- To ensure due diligence, halt "Bridging the Gap" water recovery until technical work is completed to identify the actual extent of the gap remaining (if any) to achieve SDL compliance.
- Department of Climate Change, Energy, Environment and Water (DCCEW) / Murray Darling Basin Authority (MDBA) to undertake a comparative assessment of SDL compliance under two scenarios:
 - i. current water recovery levels;
 - ii. proposed further water recovery levels (i.e., additional 49.2 GL) to determine if any further water recovery is even needed to meet SDLs.
- Further Bridging-The-Gap water recovery should only proceed if assessment indicates an actual risk of SDL non-compliance, requiring further water recovery. There is currently no evidence to suggest there is a gap; to the contrary, evidence suggest that SDL compliance is already achieved.

- Federal Government to commit that any further water recovery will not result in any valley becoming over-recovered against its new targets (i.e., that if a gap to bridge is technically identified, water recovery will only go to, and not beyond, that amount), nor recovered without clear evidence of an SDL-compliance issue. For transparency, a risk assessment should be published identifying the procedures being used to mitigate the over-recovery risk (particularly given the uncertainty about the size of the actual gap), or chronic trends of usage being unable to reach SDLs (i.e., chronic underusage).
- The recently announced round of "Strategic Water Purchasing" be referred to the Australian National Audit Office for a comprehensive audit and assurance report, to ensure due diligence and proper process on the expenditure of public funds for this program.
- The Federal Government should announce at the earliest opportunity plans for Basin Plan flexibility (i.e., legislative amendments) to aid community consultation on renewed pathways (e.g., to overcome communities feeling frustrated their ideas are not feasible with current Basin Plan rigidity)
- Clearly communicate that renewed pathways will be key –
 particularly the necessity of this approach and the
 environmental opportunities, as well as risks of the status quo to mitigate as best as possible the politicisation of this issue.
 This must include communicating that the supply and
 constraints projects are not substitutable by further water
 recovery, but are necessary projects for environmental water
 delivery and optimal management.

- 2. Are the current arrangements for implementing the Murray-Darling Basin Plan operating effectively? How could the arrangements be improved? The Commission is particularly interested in the effectiveness of the arrangements for:
 - developing, accrediting and reporting on water resource plans
 - water quality
 - critical human water needs
 - environmental water planning and management.

DEVELOPING, ACCREDITING AND REPORTING ON WATER RESOURCE PLANS

Water Resource Plans (WRPs) have proven challenging as a key component of the Basin Plan. Despite NSW still not having accredited WRPs, the state still operates under the parameters as if they were in effect due to state regulatory and legal frameworks in place. For example, SDLs are in legal effect due to bilateral agreements between the state and federal governments.

Whilst the unaccredited WRPs are a source of frustration, it is important the hindrances to their progression be considered.

Under the Basin Plan, identifying Planned Environmental Water (PEW) 'PEW' (Commonwealth) is intended to identify a baseline against which to implement the Basin Plan, to ensure no backwards steps in net environmental condition. This makes sense and is not disputed.

NSW has long had a term 'PEW' in the state water management framework, well prior to the same term being adopted by the Commonwealth for the purposes of the Basin Plan. Whilst the same term, they have a different meaning, referring to different things. In NSW, PEW has long referred to all water above extraction limits.

This is the most significant share of the water resource and is used for both environmental and non-environmental purposes such as recreation (swimming, boating, fishing), cultural purposes, and transmission losses from water delivery to name a few.

The Commonwealth later adopted a term 'PEW' in its Water Act and the Basin Plan, but with a different meaning, and for a different purpose - in this case water that has a specified environmental purpose and is protected from other types of use. Specifically — Commonwealth PEW is "water that is committed or preserved for environmental purposes, and which cannot, to the extent to which it is committed or preserved for those purposes, "be taken or used for any other purpose".

What the Commonwealth legislation refers to as PEW, and what NSW legislation refers to as PEW, are different things. It is like having two people in a room called Tanya, but that does not make them the same person.

This has become a challenge when the Basin Plan requires, through the WRP, to identify PEW.

However, in NSW, rather than undergoing this same due process of identifying PEW (Commonwealth) in NSW for Basin Plan purposes, the MDBA has confused the terminology, and tried to simply claim all water above extractions limits (i.e., what is called PEW in NSW law) as PEW for Basin Plan purposes (i.e., what is called PEW in Commonwealth law).

This confusion risks all water above extraction limits in NSW (PEW in NSW) being identified as PEW (Commonwealth) under the Basin Plan, so that additional water may be locked into Basin Plan provisions and requirements (such as no net reduction, and the effectiveness test), well beyond what the Basin Plan intended, and States agreed to in signing the Plan.

WATER QUALITY

Much of the energy and focus of the Basin Plan centres on the quantity of water, and rarely is quality considered. European Carp are degrading water quality across the entire Basin, despite increases in the quantity of water flowing through the Basin rivers.

Water quality improvement is unlikely to occur until such time as complementary measures such as carp control are prioritised as part of the Basin Plan.

CRITICAL HUMAN NEEDS

Due to underfunding of water infrastructure and service delivery in rural and remote areas, many towns during the most recent reached or approached what is termed 'day zero', which means running out of water.

There is a poorly conceived mindset that this can be remedied by implementing rule changes or purchasing water entitlements. The consequence of this would be a reduction in food and fibre production in communities yet does not result in any further water being available in dry times.

This is due to the way the Water Management Act 2000 specifies how AWDs are made, and the allocation of water in extreme events (drought) is done in order of priority from critical human needs, the environment, stock and domestic, high security and finally general security and supplementary licences.

ENVIRONMENTAL WATER PLANNING & MANAGEMENT

The reform using the Murray Darling Basin Plan has seen over 4 Sydney Harbours (over 2,100GL) of water recovered from irrigators for environmental use. This is 1 in 3 litres of irrigation water removed. A third. The total diversions are now at 28%, which is a significant drop and is well within global standards accepted for water diversions.

There is no disputing there have been significant environmental improvements achieved by water recovery. However, there cannot be a mindset of more water means more outcomes, without a ceiling to this. Current environmental issues for the Basin are:

- Invasive species (i.e., carp now make up 90% of fish biomass in some areas, damaging habitat and riverbanks, and causing poor water quality);
- Habitat degradation for native species;
- Barriers to fish passage (such as weirs);
- lack of fish screens on pumps;
- Poor water quality (i.e., blackwater events) and cold-water pollution; and,
- Lack of cultural knowledge reflected in water management.

Integrated Water Catchment Management (IWCM) is where environmental water management needs to shift to. This allows land, water and biodiversity to be considered as interconnected, and will result in improved overall environmental outcomes, not just higher water volumes. Complementary measures such as Carp herpes virus, fish screens, addressing cold water pollution, reestablishing threatened species, enhancing breeding areas, addressing salinity and enhancing fish passageways are all examples of complementary measures which must be utilised.

There must be a strategic, co-ordinated program of complementary measures put in place as a matter of priority, in place of further water recovery.

3. <u>Have the governance and institutional arrangements for the Plan – including the arrangements for compliance and monitoring, evaluation and reporting – proved effective? What changes would you recommend?</u>

The key areas where governance and institutional arrangements should be improved:

- Reporting against actual environmental outcomes is needed, not just progress towards water recovery targets.
- The SDL registers of take are published a very long time after the completion of the water year – this process should be streamlined so the data is more promptly available.
- The role of the Inspector General of Water Compliance is questionable, with concerns that is duplicating the role of state authorities (i.e., NRAR in NSW) for individual-level compliance. There are concerns the role has become politicised, such as where the most recent SDL compliance report had NSW greyed out to suggest the data was not available, when the data was available (and showed compliance); the report was then used as a stunt to make a political point about NSW WRP accreditation.
- Recommendations from official reviews and inquiries are rarely implemented by Governments, including the recommendations from the 2018 PC 5-yearly review. This has meant that important, evidence-based recommendations have not been adopted, and led to agencies and Basin Governments persisting with a rigid and non-adaptive Plan.
- Pervasive misinformation on Basin water management remains rife, and authorities are not taking a lead role in countering misinformation. Authorities must be more active in this space. Simply putting fact sheets on websites does not go far enough – there needs to be an active effort by authorities to monitor media (mainstream and social) and provide corrections as required.

- There has been significant investment and resourcing into updating the science for environmental assessment / reporting (which is positive), but this has not been met with equal attention in socio-economic or water market impact assessments. This has increased community concerns leading up to the 2026 review.
- There has been concerns that the 2026 review (and other evaluation and reporting processes) will only consider socioeconomic and other changes since the Plan was legislated (i.e., in 2012). This, however, excludes consideration of the buybacks which occurred prior to the Plan itself being legislated (which entails a significant amount of the impacts), thereby risking understating the impacts.

CHANGES TO BE MADE

- a) Reporting on actual environmental outcomes is required, not just recovery targets or flow volumes as a proxy.
- b) SDL Registers of Take / Compliance Report should be published in a timelier manner.
- c) Agencies must take a more active role in addressing misinformation.
- d) Further investment into socio-economic and water market impacts is required.
- e) Evaluation and reporting must consider the full breadth of the Plan's impacts, not just from the legislation commencing.

4. <u>How well is the Plan responding to a changing climate? How</u> should this be improved?

During the 16-year period of the Basin Plan development and implementation there have been both intense periods of both dry and wet cycles, including severe droughts and floods. These events have demonstrated the extreme variability of climate, and served as a reminder that despite unprecedented levels of research and funding accurate forecasting remains irregular at best.

There is a trend of "worst case scenario" climate data being used for modelling purposes. This is concerning, as it leads quickly to alarmist responses of justifying additional water recovery. The AWD process allocates water accordingly during droughts, and the water which would be recovered will not deliver more water. It will only serve to push water prices higher, and make communities and industries suffer further during drought, and lengthen the recovery period post drought.

To improve response to climate change, there must be:

Continued investment in accurate modelling, using actual data where available in preference to modelled data.

Modelling must include model runs of 'best', 'average' and 'worst' case scenario climate data.

Equal consideration for both flooding and drought periods, rather than just drought cycles.

5. How well is the Plan addressing the interests of Aboriginal people?

Namoi Water recognises the significance of water to First Nations peoples for spiritual, cultural, environmental, and social purposes. Input from First Nations peoples towards water management, policy and legislation is welcomed.

6. <u>How well has community consultation and engagement been conducted? How can this be improved?</u>

Community consultation has been poor. Communities and stakeholder groups feel they are provided information downloads, that is to say, interactions have been a one-way flow of information and very few opportunities to respond, question or query.

Consultation is sporadic, and often done too late to have adequate time to respond or participate in the subject matter. There is a strongly held perception that departments and agencies have a predetermined outcome, and the views of communities and stakeholders are irrelevant by the time there is consultation.

The only way this will change is to reverse the current methodology of top-down consultation, to a bottom-up approach. This will build trust, demonstrate transparency, allow communities and stakeholder groups to feel valued and considered. Ownership of the Basin Plan is something everyone should feel a part of, not a select few bureaucrats and politicians.

7. What lessons should be learned from programs aimed at helping communities adjust to the Plan?

To not ensure the socio-economic impacts of any further Basin Plan are widely and carefully consulted on and assessed would be catastrophic to many communities throughout the Basin. Our ability to feed and the clothe the nation must be paramount to all decisions.

8. <u>Does the implementation of the Plan reflect a commitment to the best available scientific knowledge? How well is this knowledge communicated? What improvements should be made?</u>

No. At this point that would an aspirational statement. The recent announcement of timeframe extensions beyond 2024 are encouraging, and lead towards recognition of science, but to date the Basin Plan has been viewed as much a political football as a scientifically accurate reform.

The knowledge is communicated, but the validation and justification are not always communicated, nor easy to source. There needs to be simpler, more direct communication.

CONCLUSION

This 10-year review of the implementation of the Basin Plan allows the opportunity to carefully consider what has been learnt from the reform so far to date, and how to progress the next steps in the Basin Plan.

It is hoped the recently announced extension of timeframes beyond 2024 will see adaptive management and accurate scientific data used for improved delivery of the Plan.

All communities, stakeholders, government departments and organisations must work harmoniously and genuinely together to achieve a sustainable and productive Basin landscape that will continue to feed and clothe people, and ensure our nation continues to be a world leader in water management.

We are willing and keen to participate in further consultation.