Developing a new national water agreement

Submission by the Murray-Darling Conservation Alliance: Environment Victoria, Nature Conservation Council of NSW, Conservation Council of South Australia and Queensland Conservation Council.

The Murray-Darling Conservation Alliance is a national voice for the rivers, wetlands and wildlife of the Murray-Darling. Our members include conservation groups in every Basin state, representing half a million people in rural communities and east coast cities. Each group has been advocating for the environment at the state level for more than 50 years. Together we have a shared vision for healthy inland rivers.

Building upon the current National Water Initiative (**NWI**) – and reinstating a National Water Commission (**NWC**) – will be essential for retaining commitment and bolstering momentum to deliver reforms as we enter a hotter, drier, more variable climate.

At the centre must be the recognition that Australia's water resources are precious, finite and limited. A new National Water Agreement must set realistic expectations: not every existing consumptive use can be guaranteed.

At the same time, it must be clear that this is does not have to mean austerity. We must begin by securing water for the most essential requirements: guaranteeing connected, living rivers and providing for critical human needs. Once we have recognised biophysical limits and provided for basic needs, we can approach the question of how to allocate surplus water. This means developing strategies that provide for a good life (including food, housing, health care and education) with the resources available. The alternative – which the discussion paper proposes – is to guarantee water for all ***existing*** uses. This is unrealistic and fails to prepare society for future challenges. In many river systems, the level of water extraction is already unsustainable.

Underpinning this process, there must be a constant ambition to respect First Nations sovereignty and the material requirements (including water rights) necessary for First Nations to exercise moral obligations to care for Country. The settler state inherently fragments Country.[1] Some reforms will require guaranteeing settler state water rights for Traditional Owners while others will require constraining the extent of settler state water laws so they do not undermine the rights of First Nations peoples.

This submission includes comments on the proposed objectives, outcomes and principles as well as elements of the 2004 National Water Initiative.

[1] O'Donnell et al, 'Submission to the Yoorook Commission,' 15

Recommendations

1. Objective 1 should aim to identify the diverse material needs that depend on water (from food to housing) and the necessary strategies to provide them – ensuring they respect ecological constraints.

2. Objective 2 should aim to respect First Nations sovereignty and guarantee water rights required for the exercise of moral obligations to care for Country.

3. Objective 3 should emphasize the necessity of an environmentally sustainable level of take that considers the projected impacts of climate change as the basis for water planning, ensuring environmental needs are replicated across the hydrograph. This should preclude trade-offs of critical ecological requirements with socio-economic preferences.

4. Outcomes in Objective 4 should aim toward the adoption of a standard of evidence for research. They should also address the policy settings which prevent research from being used effectively: providing effective incentives and disincentives while considering the role for a refreshed National Water Commission for facilitation, learning and feedback.

5. Outcomes in Objective 5 should ensure a diversity of projects are pursued and provide for ongoing robust options assessment. This includes challenging policy bans which constrain options; promoting strategy development that addresses motivating factors maintaining ineffectual policy settings in water agencies; and heightening scrutiny to preclude experimental and disproven infrastructure proposals.

6. Support trust and confidence by including outcomes which ensure the development of a single source of data truth and regular cycles of reporting on system interventions, conditions and responses. Improve compliance functions with new, independent institutions with the power to issue penalties and fines against all noncompliant and complicit actors.

7. Market reforms have exacerbated environmental and third-party impacts while undermining the viability of other reform pathways. Water reform should aim toward delivering community and ecological outcomes, considering how demand-side management measures may support or undermine other reforms. Further, restricting the issue of new extractive licences while recognising that Traditional Owners have never ceded rights to land and waters.

8. Require additional project plans to fast track commitments on interception activities in the 2004 National Water Initiative.

Proposed objectives and desired outcomes

Objective 1: Securing water for all uses

This objective sets unrealistic expectations. It would be improved by emphasising the imperative to contend with ecological and water supply crises by reducing demand for water.

In its current form, the objective foreshadows the others proposed. For example, several outcomes focus on meeting critical human water needs in a hotter, drier, more-variable climate. The objective summary also highlights the challenge of providing adequate water supplies while 'balancing competing demands.' This foreshadows the need for a transparent hierarchy of uses discussed in Objective 3. The aim of 'exploring opportunities available for all water supply options' hints toward the infrastructure required to guarantee a reliable water supply, discussed in Objective 5. Similarly, the principle of water pricing to manage use across sectors prefigures demand management outcomes in Objective 7.

Sitting above and outside of these more descriptive objectives, Objective 1 seems to imply a supply-side strategy often referred to as 'substitution': the ambition of augmenting supply and swapping one source of water for another that is fit-for-purpose (e.g., recycled water, treated stormwater or desalinated water). While this strategy aims to develop new climate-independent sources of water, it does not seriously contend with existing ecological and water availability crises.

The final proposed outcome, requiring policies that address linkages across all sectors 'including energy, food security, health and regional planning,' provides a useful pathway forward. This objective should emphasise the diverse material outcomes that depend on water – and the strategies necessary to ensure they respect ecological constraints.

Objective 3 clarifies biophysical limits with an environmentally sustainable level of take and a transparent hierarchy prioritising critical human water needs and critical environmental requirements. The task of Objective 1 then seems most suited to address the allocation of surplus water. This means identifying the necessary strategies to provide for a good life (including food, housing, health care and education) and ensuring they respect ecological limits and the water resources available.

This approach would effectively reverse the direction of the current objective: rather than aiming to secure water for all uses, the National Water Agreement should aim to secure water for the most essential requirements. Rather than bringing new supply options online to guarantee existing uses, it should aim to develop interdependent strategies to provide for essential material outcomes.

Recommendation 1: Objective 1 should aim to identify the diverse material needs that depend on water (from food to housing) and the necessary strategies to provide them – ensuring they respect ecological constraints.

Objective 2: Supporting Aboriginal and Torres Strait Islander Peoples' water interests and values

The aims of this objective to recognise human rights principles included in the UN Declaration on the Rights of Indigenous Peoples (**UNDRIP**) are long overdue. This includes improving First Nations' recognition, procedural and substantive rights as well as importing the legal standard of free, prior and informed consent in decision-making frameworks.

It should be recognised however, that UNDRIP sets out global rights and standards for the realisation and protection of self-determination. Self-determination includes the right to autonomy or self-government, as well as the free pursuit of economic, social and cultural development. It is critical to recognise these imperatives – autonomy, sovereignty, self-determination and stewardship – because they reject uniform incorporation of Indigenous nations into the cultural and legal paradigms of the colonial nation-state. In other words, Indigenous nations retain a right to exercise sovereignty and political practices, structures and institutions based on Indigenous ontologies – ways of understanding the world – which are often incommensurable with settler ontologies.[2] This sovereignty can be expressed apart from or within settler governance structures.

Consequently, Objective 2 must be more ambitious than just improving engagement practices. It should aim to accurately conceptualise First Nations sovereignty – which is more complex than Western territorial sovereignty – to ensure that sovereignty is not undermined. Rather than 'protecting' First Nations interests and values, the Agreement would 'respect' First Nations sovereignty and the material requirements (including water rights) to exercise moral obligations to care for Country. Critically, this should affirm commitments to the foundational reforms that can only be achieved through a transformative process, such as Treaty – enabling all First Nations to pursue their own aspirations in relation to water access, use and ownership.[3]

Recommendation 2: Objective 2 should aim to respect First Nations sovereignty and guarantee water rights required for the exercise of moral obligations to care for Country.

Objective 3: Climate resilient water management

A scientifically-defensible limit on the water that can be taken from rivers should be the basis for all water planning. But the concept of an environmentally sustainable level of take (**ESLT**) can be improved upon from existing applications.

For example, the development of an ESLT in the *Basin Plan 2012* (Cth) (**Basin Plan**) was not scientifically defensible: it failed to incorporate available climate data.[4] It also relied on

[2] Moreton-Robinson, 'Incommensurable sovereignties, 259
[3] MLDRIN et al, 'A Pathway to Cultural Flows in Australia,' 13
[4] Young et al, 'Scientific Review of the Estimation of an Environmentally Sustainable Level of Take,' 28

interlocking rules that were not held constant. For example, water assumed to be available for environmental uses was not properly shepherded across trading zones. This was exemplified in the 2012 Barwon-Darling Water Sharing Plan, which removed pumping restrictions and allowed individuals to take 300% of their allocation in any year, effectively accumulating debt from the river.

Using a precautionary approach, a suitable ESLT would aim to deliver lateral (overbank), longitudinal (end-of-system flows) and vertical (groundwater interaction) connectivity in a range of climate scenarios. In other words, it would aim to replicate environmental needs across the hydrograph: protecting first flushes to invigorate vegetation; providing regular overbank flows to control leaf litter build-up and blackwater risks; as well as ensuring periods of low, slow flows necessary for juvenile fish and platypus to hunt and survive to adulthood.

While sustainable diversion limits (**SDL**) in the Basin currently aim to reflect the level beyond which key ecosystem assets and functions are compromised, these instruments could be made fit-for-purpose by ensuring the delivery of cultural flows sufficient to improve the spiritual, cultural, environmental, social and economic conditions of First Nations.

As discussed in Objective 1, these critical environmental requirements are not trivial or fungible in a triple-bottom-line approach: there are real ecological limits that must be respected. Any hierarchy of uses should prioritise critical human water needs and critical environmental requirements. Further, it should acknowledge the limited authority of settler law, respecting First Nations rights to water access, use and ownership.

Consequently, the water management outcome which aims to account 'for the relative values placed by communities on environmental, social and economic outcomes to inform any necessary trade-offs transparently' appears frivolous and irresponsible. Recognising ecological limits demands rigorous science and expertise – it is not a question that can be effectively solved by community opinion or stakeholder priorities. Social research, community engagement and deliberative processes are suited to questions of how we organise and run society (for example, the strategies discussed above in Objective 1). It is not appropriate for triaging ecosystem functions that carry severe consequences if they are compromised.

If an ESLT is properly set and First Nations sovereignty (including water rights and territorial integrity) is respected, then the space for social prioritisation can be set responsibly. Rather than trading off essential requirements, it would extend democratic, social control over how we allocate water that is surplus to essential requirements.

Recommendation 3: Objective 3 should emphasise the necessity of an environmentally sustainable level of take that considers the projected impacts of climate change as the basis for water planning, ensuring environmental needs are replicated across the hydrograph. This should preclude trade-offs of critical ecological requirements with short-term socio-economic preferences.

Objective 4: Ensuring evidence-based decision making

The generation and sharing of accurate data is an essential aim. However, a persistent issue in water resource management is that the best available knowledge and evidence is not properly used.

For example, it is well-established that in determining the Basin-wide ESLT, the Murray-Darling Basin Authority (**MDBA**) 'failed to act on the best available scientific knowledge'.[5] The limit, and consequently the target for water recovery, was readily acknowledged as being insufficient to maintain key environmental assets and ecosystem functions that should characterise an ESLT.

Similarly, water recovery targets in the Basin have become increasingly convoluted and reduced in what has been characterised as a 'step-down effect,' the 'steady reduction in the volume of water to be returned from irrigators to the environment'.[6] This is a result, in part, of the reliance of Basin governments on dubious socio-economic analysis which peer-reviewed research has found to be 'low quality and unreliable to be used in policy advice'.[7]

One step may be to adopt a standard for research evidence, 'thereby gaining more assurance from peer-reviewed studies that sufficiently address causality issues with creditable methods'.[8]

Another may be to address the settings that keep water policy 'locked in' to inadequate approaches, constraining policy implementation and prolonging the 'high cost and contested nature of Australia's water reforms'.[9] This means addressing the motivating factors maintaining entrenched, ineffectual policy settings, including the insistence upon maintaining existing levels of use (see Objective 1), rent-seeking for upgrades which infrastructure operators had previously accepted responsibility (see Objective 5) and the promise of funds for continuing employment within divisions of state water agencies.[10]

The previous regime of COAG water reforms had utilised a system of financial incentives – tranche payments which were conditional on implementation of water commitments.[11] While these payments stimulated state water reform, they were largely considered unsuccessful.[12] With a lack of independent intermediaries – institutions suited to withhold funding – the approach was constrained by the same intergovernmental politics. This may imply a role for the Inspector-General of Water Compliance (**Inspector-General**), allowing for periodic audits.

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[5] Walker, 'Royal Commission Report,' 54
[6] Lyons et al, 'Towards a scientific evaluation of environmental water offsetting,' 265
[7] Wheeler et al, 'Identifying the water-related economic values of the Murray-Darling,' 88
[8] Ibid., 95
[9] Marshall and Alexandra, 'Institutional Path Dependence,' 698
[10] Ibid., 690
[11] Heinmiller, 'Multilevel governance and the politics of environmental water recoveries,' 68
[12] Ibid.

Finally, this challenge provides an opportunity for a refreshed National Water Commission (**NWC**). Effective water governance requires reforms toward 'a conducive setting within which institutions, comprising norms, rules, codified arrangements and procedures, operate so as to enable rather than constrain practices with a focus on learning (and acting) from feedback'.[13] This means developing the NWC toward on-going deliberative inquiry: treating 'all policies as experiments which in their continued use demand feedback and learning'.[14] At the same time, it demands conditions that facilitate the more-effective operation of the many players involved: from catchment management authorities to working groups.

Recommendation 4: Outcomes in Objective 4 should aim toward the adoption of a standard of evidence for research. They should also address the policy settings which prevent research from being used effectively: providing effective incentives and disincentives while considering the role for a refreshed National Water Commission for facilitation, learning and feedback.

Objective 5: Transparent, strategic water infrastructure investment

The Productivity Commission's interim report on National Water Reform identifies a central tension relevant to this objective:

> When extreme weather situations occur which have not been adequately planned for, governments face "crisis situation" pressures from communities and businesses to respond urgently. Decisions made in these situations are not always subject to established institutional processes for considering effectiveness, or the short- or long-term costs – or who bears them. For example, the Millennium Drought [...] prompted state governments to invest heavily in building large-scale infrastructure, committing upfront to expensive projects that were not the most cost-effective at the time of investment.[15]

It is inevitable that governments will face these crisis situations. While the principles and outcomes of Objective 5 provide strong principles for considered investment, they do not adequately speak to the pressures on governments in crisis situations.

Large-scale investment decisions made under pressure may not only be discordant with long-term strategic regional planning processes – they may actively undermine those processes. For example, following Victoria's Sustainable Water Strategy in 2006, the Brumby government promoted the Victorian Desalination Project as their guaranteed solution to Melbourne's pending water crisis. While this decision provided a non-rainfall dependent source of supply, it undercut motivation to progress many other essential commitments at different scales and combinations.

[13] Ison et al, 'Dramaturgies for Re-imagining Murray-Darling Basin governing,' 355
[14] Ibid., 349
[15] Productivity Commission, 'National Water Reform 2024, Interim Report,' 100

Objective 5 requires additional outcomes to ensure a diversity of projects are pursued, while ensuring ongoing robust options assessment. This could include several pathways.

First, challenging policy bans which constrain options. For example, the Victorian government has consistently rejected potable use of recycled water and purchasing water rights from willing sellers – designating these options as 'unviable'.[16] The fact that the rationale is often based on research of 'low quality and unreliable to be used in policy advice' notwithstanding, the Productivity Commission notes that these policy bans result in 'outcomes that are not lowest cost or most efficient. They are almost never justified on economic ground'.[17]

Second, it is essential to address motivating factors maintaining ineffectual policy settings. As described above, these include an insistence upon maintaining existing levels of use; rent-seeking for infrastructure upgrades; and the promise of funds and continuing employment within divisions of state water agencies.[18] Financial incentives dependent on the implementation of commitments such as those discussed above (Objective 4) should include outcomes on the development of a viable long-term strategy and progress on this strategy.

Third, it will be important to heighten scrutiny on the various strategies which perpetuate ineffectual policy settings. For example, an aversion to reducing the consumptive pool in the Basin Plan resulted in the Sustainable Diversion Limit Adjustment Mechanism (**SDLAM**), which is implicitly an offsetting program. Rather than aiming to amplify the benefits of water recovery, these projects treat low water recovery targets as a ceiling, locking in failure. The program seems to be the only kind in existence. It 'remains untested, lacks on-ground validation and is based on ecological modelling that relies on generalised and hypothetical assumptions'.[19]

Investment should tend toward strategies with proven capabilities: reducing water use, regenerating wetlands, implementing highly treated wastewater, recycled treated wastewater, reused treated surface stormwater, roof water harvesting, and integrated water management. Ensuring heightened scrutiny around experimental approaches may require amendments to assessment processes, which currently consider alternatives 'for' projects (e.g., alteration of its component parts) rather than alternatives 'to' projects (i.e., whether a different project would be preferable). It may also demand transparency standards: making business cases available to the public and strengthening penalties for withholding details on major projects.

Recommendation 5: Outcomes in Objective 5 should ensure a diversity of projects are pursued and provide for ongoing robust options assessment. This includes challenging policy bans which constrain options; promoting strategy development that addresses

[16] DELWP, 'Central and Gippsland Regional Sustainable Water Strategy,' 39
[17] Productivity Commission, 'National Water Reform 2024, Interim Report,' 99
[18] Marshall and Alexandra, 'Institutional Path Dependence,' 690
[19] Lyons et al, 'Towards a scientific evaluation of water offsetting,' 267

motivating factors maintaining ineffectual policy settings in water agencies; and heightening scrutiny to preclude experimental and disproven infrastructure proposals.

Objective 6: Sustained community trust and confidence in government, water agencies, water managers and users

Access to information improves water literacy, builds public trust and provides a foundation for useful consultation and effective decision-making. While these are useful outcomes, Objective 6 must define specific deliverables to be effective. This should include the definition and development of a single source of truth. For example, including outcomes which:

> Prioritise the development and implementation of water monitoring using digital technologies to provide timely and consistent volumetric water quantity and water quality monitoring data across Basin states, stakeholders and institutions. Monitor and measure groundwater:surface water connectivity. A single source of data truth that is publicly available.[20]

Beyond these measures, it may also be beneficial to break down the building blocks of an ESLT for regular reporting. For example, the basic conceptual framework of the ESLT in the Murray-Darling Basin included the identification of key environmental assets and functions; ecological targets for those assets and functions; and hydrologic targets at indicator sites.[21] While the CSIRO noted that this conceptual ecological model was inconsistent, a revised model could provide clear targets at a range of timescales. Progress could be communicated with regular reporting cycles, such as monthly reports on system interventions, conditions and responses. This would provide thorough, centralised documentation of trends in different river systems.

Equally important for delivering sustained community trust and confidence is compliance. This is discussed in the outcome describing 'compliance and enforcement systems that focus on proactive regulation and water user accountability.' This might be achieved through new institutions. For example, bringing the activities of the Natural Resource Access Regulator in NSW – 'combining both satellite imagery for potential detection of offenses with on-ground investigation' – into a reinstated National Water Commission.[22] Equally important is ensuring the independence of these institutions, including through the provision of reliable resources. Finally, increasing the power to issue penalties and fines – for individuals, agencies and governments.

The management of unregulated water sources in NSW provides an illustrative example. The Barwon-Darling is the only unregulated water source in NSW that is assessed for compliance with a long-term average annual extraction limit (**LTAAEL**). Yet even on the

[20] Radcliffe et al, 'A thriving Murray-Darling Basin in 50 years,' 17
[21] Young et al, 'Scientific Review of the Estimation of an ESLT,' 1
[22] Radcliffe et al, 'A thriving Murray-Darling Basin in 50 years,' 240

Barwon-Darling, there is inadequate gauging, environmental conditions are not monitored, and metering requirements do not apply to a vast number of surface water pumps. Beyond these limitations of monitoring, measurement and regulation, the LTAAEL is opaque – in part because it is not expressed numerically.[23] Management of unregulated water sources in NSW would require a significant overhaul, ensuring the state is accountable for not meeting the requirements of Objective 6.

Recommendation 6: Support trust and confidence by including outcomes which ensure the development of a single source of data truth and regular cycles of reporting on system interventions, conditions and responses. Improve compliance functions with new, independent institutions with the power to issue penalties and fines against all noncompliant and complicit actors.

Objective 7: The efficient use of water

Water markets are one of many avenues for dealing with water scarcity risk and reallocation. Market approaches sit among demand-side management measures like education, regulation (water-sharing plans and restrictions), economic incentives (pricing, subsidies and property right changes). Supply-side management (augmentation and substitution) also opens opportunities when there is a driver for reducing consumption.

It is unclear why the outcomes to meet this objective overwhelmingly promote the development of markets 'free of restrictions.' If there is a single dominant consequence which has emerged from the unbundling and financialisation of water rights following the last round of water reform, it is expressed by the remarkable expansion of horticulture in the Victorian and NSW Sunraysia and SA Riverland regions.[24] As these plantings mature (increasing demand) and dry conditions become more frequent (decreasing supply), 'there will not be enough water available to support existing permanent horticulture, even if no water is used for other irrigation purposes'.[25]

These competitive conditions have not only placed price pressures on farmers throughout the southern connected Murray-Darling Basin, but have been seized upon by institutional investors. One prominent investor business model is to accumulate permanent entitlements and carryover with the aim of extracting monopoly rents. In the words of one chairman of Duxton Water, 'this is the perfect storm'.[26]

These institutional investors are providing liquidity while earning 'substantial returns arbitraging the water market'.[27] There has not been clear evidence that this is, on the whole, beneficial. It is often assumed that commodification of water into a tradeable asset mobilised irrigation and accelerated production. But at the same time, the scale and

[23] NRC, 'Need to set numeric extraction limits and assess compliance,' 1
[24] Aither, 'Water supply and demand in the southern Murray-Darling Basin,' 4
[25] Aither, 'Water supply and demand in the southern Murray-Darling Basin – Fact Sheet,' 1
[26] Waldman, 'The Water Trade is Booming – and Sucking Australia Dry'
[27] Ibid.

character of primary production has changed dramatically. These institutional investors and industries with longer supply chains have effectively transferred wealth out of the region and the country.

It is also crucial to recognise that these market reforms significantly undermined the viability of other reform pathways. Changing patterns of use have driven local changes, while drought and climate change in combination with decreased commodity prices has driven farm exits.[28] Because these changes have been developed concurrently, there have been serious issues of false attribution, blaming water recovery for a wide range of community impacts.

Economists have recognised that because 'water is only one minor contributor to regional economies, designing proper structural adjustment programs based on evidence about what really drives regional economies is of key importance'.[29] If a free market approach undermines other reform pathways, it may result in worse outcomes for rivers and communities.

Finally, it is essential that previous errors are not replicated in other rivers systems – most prominently, the 'activation of previously unused or rarely used water entitlements, known as 'sleeper' or 'dozer' rights' allowing 'diversions to increase in the short run and reducing the security of other users' water entitlements'.[30] Similar precaution should be given in decision-making on 'unallocated' water – restricting the issue of new licences while recognising that Traditional Owners have never ceded rights to land and waters. Releasing new settler state water rights interferes with Traditional Owner aspirations for water justice.

Recommendation 7: Market reforms have exacerbated environmental and third-party impacts while undermining the viability of other reform pathways. Water reform should aim toward delivering community and ecological outcomes, considering how demand-side management measures may support or undermine other reforms. Further, restricting the issue of new extractive licences while recognising that Traditional Owners have never ceded rights to land and waters.

[28] Wheeler et al, 'Modelling the climate, water and socio-economic drivers of farmer exit,' 551
[29] Wheeler et al, 'Identifying water-related economic values,' 14
[30] Productivity Commission, 'Market Mechanisms for Water Recovery,' 36

Including elements of the 2004 National Water Initiative

The National Water Initiative required the Parties to licence all water use – farm dams, bores and the interception of overland flows – while bringing these uses under a catchment cap.[31]

These efforts are notably behind schedule. The licencing process of floodplain harvesting in NSW has been of particular concern, as on-farm storage capacity has increased 2.5 times since the introduction of the Cap on diversions.[32]

Recommendation 8: Require additional project plans to fast track commitments on interception activities in the 2004 National Water Initiative.

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[31] Commonwealth, 'Intergovernmental Agreement on a National Water Initiative,' cl. 55-57
[32] Brown et al, 'An unsustainable level of take,' 43

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