

Commissioner for the River Murray in South Australia
Mr Richard Beasley SC

Annual Report 2023-24



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Letter to the Deputy Premier

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Dear Deputy Premier

Commissioner for the River Murray in South Australia - Annual Report 2023-24

I am pleased to provide you with my annual report for 2023-24, reporting on the health of the River Murray in South Australia, my key activities in the past year, and priorities for the 2024-25 year.

You might recall that you granted me an extension for my 2022-23 annual report so that I could report on the progress of legislation that was then before Federal Parliament, which was crucial to the river system and to the South Australian environment. As I provided my 2022-23 annual report to you in January 2024, there is some unavoidable overlap between this 2023-24 annual report and the previous.

This reporting period has been marked by some significant strides, including legislative and policy developments aimed at advancing the objectives of the Basin Plan. Notably, the enactment of the *Water Amendment (Restoring our Rivers) Act 2023* has reinstated essential buyback mechanisms to aid in the recovery of the 450 GL environmental water target, an essential element for meeting Basin Plan outcomes. Progress was also made in strengthening transparency and accountability in water management, with new requirements introduced for Basin states to regularly report against Water Resource Plans.

This year also underscored the difficulties associated with Sustainable Diversion Limit Adjustment Mechanism (SDLAM) projects, as delays in key New South Wales and Victorian initiatives continue to hinder progress. The addition of federal authority to remove unviable projects is welcome, but alternative solutions will need to be explored to address the potential non-delivery of SDLAM projects, including additional water recovery.

Throughout this reporting period I have sought to increase awareness of the Basin Plan's environmental, economic and social benefits at various public forums and events, championing the notion that the future of the River Murray and Murray-Darling Basin is a shared responsibility across state lines and community sectors.

Once again, I would like to take this opportunity to express my gratitude to the individuals and organisations that have taken the time to engage with me this past year.

Yours sincerely



Richard Beasley SC

COMMISSIONER FOR THE RIVER MURRAY IN SOUTH AUSTRALIA

29 / 11 / 2024

Executive Summary

The health of the River Murray in South Australia hinges critically on robust implementation of the Basin Plan. The recently finalised *South Australian Evaluation of Environmental Outcomes Under the Basin Plan for the River Murray Water Resource Plan Area 2024 report* highlights both progress and the challenges remaining since the Plan's adoption over a decade ago.

While acknowledging the damage it caused to property, the recent 2022–23 flood was a rare, beneficial natural event for the environment, yet it underscored how much further we have to go in terms of fully realising the environmental outcomes required under the Basin Plan. Only a fraction of the water that crossed into South Australia during this flood was intentionally released as part of the Basin Plan's environmental water provisions. While the flood connected vital parts of the river's ecosystem, the scouring of the Murray Mouth, an intended Basin Plan target, still relied on an extraordinary flood to meet the Basin Plan outcome of ensuring the River Murray mouth is open without the need for dredging in at least 95% of years. This single event does not reflect sustainable, routine outcomes, and the Murray Mouth remains far from the expected 95% years without a dredge.

The river's flow regime has demonstrated improvements, especially in fish populations like Murray cod and golden perch, where we are finally seeing recruitment align with desired outcomes. Yet, fast-flow conditions, crucial for healthy ecosystems, remain rare without the aid of unregulated flows. Without fully implemented water recovery, these essential flows will remain inconsistent.

For the Coorong and Lower Lakes, the Basin Plan's support has driven some positive changes. Vegetation shows signs of recovery, but the ecosystem is fragile. Coorong waterbirds, especially piscivores, are struggling to recover, even in high-flow years. This points to a complex interaction of water quality, salinity, and prey availability that has not been adequately addressed by current water allocations and environmental flows.

The river's future under a changing climate is clear: without securing full water recovery and addressing delivery constraints, the system will remain dependent on inconsistent (and rare), natural flooding events, with declining resilience and uncertain environmental outcomes. The urgency to recover the remaining 450 GL cannot be overstated; it is a critical piece of the Basin Plan that must move forward to ensure long-term health for the River Murray and its dependent ecosystems.

As Commissioner, I must work within the unique limitations of South Australia's downstream position in the Murray-Darling system, which is at the mercy of upstream actions for water supply. My role is to advocate for the health of the Murray and its connected ecosystems. This advocacy stretches across public engagement, media, and direct interactions with stakeholders and policymakers to build the case for shared responsibility across Basin states.

In 2023-24, I took part in critical forums, including the "Life or Death of the Murray-Darling" events and the Federal submission on the *Water Amendment (Restoring our Rivers) Bill*. Throughout, I have underscored the need for collaboration, as effective water delivery and environmental outcomes rely upon more than the actions of one Commissioner or state.

The passing of the Water Amendment Bill was a meaningful step, particularly with the repeal of buyback restrictions. I support this decision, as it re-establishes market freedom, allowing entitlement holders to sell to the government for environmental purposes – a right that was unnecessarily obstructed. Additionally, extending the recovery target deadline to 2027 is positive, though we face an ongoing obstacle in the public and political rhetoric surrounding the socio-economic impacts of buybacks. "Rhetoric" might be too polite. For well over a decade now the recovery of water for the environment under the Basin Plan has been the subject of misinformation and unsubstantiated assertion. Depressingly, the "truth decay" represented in parts of this debate shows no signs of stopping.

Under the amendments made by the Commonwealth Parliament to the Water Act late last year, we have also seen crucial changes to the Sustainable Diversion Limit Adjustment program ("SDLAM"), with extensions to

2026, and an added provision for the Australian Government to remove non-viable projects. These new accountability and enforcement powers, as well as the improvements to transparency, are promising steps. If we are to truly protect this system, the Australian Government must demonstrate its commitment to these reforms.

In my keynote at the Australian Water Association Conference last year, and later in March this year at both the Adelaide Writers' Week and the Australian Water Law Symposium in Sydney, I highlighted the vital economic and environmental benefits derived from a healthier Murray-Darling Basin. The Basin contributes billions of dollars to the national economy annually, and yet there is a prevailing and outdated view that water is "wasted" if left for the environment – a view that fails to recognise the profound, long-term economic benefits of sustainable management.

My priorities for 2024-25 centre on safeguarding the water that South Australia's environment depends upon. The 450 GL recovery target remains a top concern, and I will continue to push for steps to secure this water from the southern Basin. The SDLAM projects are also critical, but delays are hindering meaningful outcomes. It is evident that alternative measures will need consideration. The Constraints Relaxation Implementation Roadmap, which is due to be delivered by the Murray-Darling Basin Authority in December this year, is an important piece of work which will hopefully give an indication of what to expect in the coming years.

The approaching Basin Plan Evaluation for 2025 and the subsequent 2026 Basin Plan Review provide essential platforms to revisit the science underpinning key Basin Plan decisions. I would expect that these evaluations will reflect the requirements of the Water Act, namely for the "environmentally sustainable level of take" to be determined on "the basis of the best available scientific knowledge" – which should include updated and robust climate change data and projections. The current foundations for the 605 GL adjustment volume also remain scientifically weak and questionable and, as such, an independent review of this volume is still warranted.

As we move into 2025, I will be interested to see how the Australian Government manages implementation under the revised Basin Plan arrangements. I will continue to provide strategic guidance to the South Australian Government on implementing the Restoring Our Rivers Act and fulfilling its pledge to address all recommendations from the Murray-Darling Basin Royal Commission, as outlined in the South Australian Government's *Response to the Murray-Darling Basin Royal Commission Report*. Each of these priorities aims to address not only the immediate needs of South Australia but also the broader health and resilience of the Murray-Darling Basin.

Finally I would like to acknowledge the great assistance I have received as Commissioner for the River Murray by public servants within the Department of Environment and Water, including the Chief Executive Ben Bruce, as well as Dan Jordan, Dr Theresa Heneker, and Gabriella Coote.

Health of the River Murray in South Australia

Every five years the South Australian Government is required evaluate and report on environmental outcomes under the Basin Plan at an asset scale. The Department has recently finalised its *South Australian Evaluation of Environmental Outcomes under the Basin Plan for the River Murray Water Resource Plan Area 2024* report (Evaluation Report). This evaluation reports on the health of the River Murray and the Coorong, Lower Lakes and Murray Mouth (CLLMM) as at 2024 and the trajectory toward achieving Basin Plan outcomes. This comes at a critical time in Basin Plan implementation, occurring more than ten years since adoption of the Plan, and in the lead up to the 2026 Basin Plan review.

This section of this report represents my understanding of the health of the River Murray in South Australia for 2023-24, based on an interpretation of some of the content in the Evaluation Report. There are far more statistics and indicators than can be fully addressed in this report, so I have selected a few of significance. However, as the evidence shows: full implementation of the Basin Plan has not yet occurred, and we are not yet seeing the environmental outcomes we hoped for.

Environmental response to the 2022-23 River Murray Flood event

The 2022–23 River Murray flood event delivered flow conditions not seen in South Australia for over 60 years. The environmental benefits were substantial, though there were of course significant impacts on infrastructure and the community. While Basin Plan mechanisms did contribute some environmental water (around 5% of the total flow crossing the South Australian border in 2022-23), the Basin Plan's role in this event was restricted to minimal adjustments before and after the flood.

Flows at the South Australian border peaked at almost 190,000 ML/day in December 2022, and barrage flows reached around 120,000 ML/day by late January 2023. This high water fully reconnected South Australia's river, floodplain, and estuarine environments. The increased scouring of the Murray Mouth restored marine-estuarine connectivity, flushed out salt and nutrients, and—significantly—suspended dredging for the first time since August 2017. Predictably, however, dredging resumed on 27 November 2023. This is worth noting. Such is the level of consumptive use of the water resources of the Murray Darling system, despite flooding at a level not seen since 1956, some ten months after that flood, dredging operations had to be recommenced at the mouth of the Murray. Somehow this is not widely seen as a national embarrassment. It should be.

The additional 450 GL of environmental water set out in section 86AA of the Water Act, Chapter 7 (especially sections 7.09, 7.16 and 7.17), and Schedule 5 of the Basin Plan, is intended to achieve “enhanced environmental outcomes” for the southern Murray, and for the CLLMM. One such outcome includes keeping the Murray Mouth open 95% of the time without dredging. Yet, over a decade after the Basin Plan was adopted, it still took the third largest flood in recorded history to provide sufficient flows to avoid dredging. One event between 2017 and 2023 doesn't come close to meeting a target of “95% of the time”. As long as hydro-denialism (the belief you have more water than you do) continues to be the dominant force in the way we manage our water resources, this target will remain close to a fantasy.

Still, the flood undeniably yielded many positive outcomes for fish, birds, and water quality. Thousands of hectares of stressed floodplain and wetland were inundated to levels well beyond the reach of even the most ambitious constraints relaxation programs. However, as it stands, such floods are rare, natural events, and not a dependable strategy for the river's long-term health.

There were also a handful of negative environmental outcomes resulting from the flood event. The most significant was the massive explosion of carp, which led to water quality problems and poor conditions for native fish. While I am no ecologist, one has to wonder whether the carp explosion might have been less severe had the system's pre-flood conditions been better managed.

River Murray and its floodplain

River velocity and floodplain inundation

The South Australian River Murray and its floodplain is home to two Ramsar-listed Wetlands of International Importance,¹ and two “The Living Murray Icon Sites”.² Ramsar-listed wetlands such as these are recognised internationally for their critical role in biodiversity conservation by providing a habitat for threatened species, migratory birds, and unique flora and fauna. The Living Murray Icon Sites are key to maintaining ecological health and connectivity within the Murray–Darling Basin, by providing essential habitats for fish breeding, floodplain vegetation, and maintaining hydrological processes. All of these areas are indicators of the broader health of the River Murray system. Their status in international convention and interjurisdictional arrangements, places obligations on governments to ensure their protection and sustainable management.

The River Murray Channel and its floodplain may appear in good health, with indicators for ecosystem resilience, floodplain condition, and native fish showing improvements since 2019. However, these gains are primarily the result of high, unregulated flows and the frequency of fast-flowing conditions during these periods. Flow velocity, crucial for water quality, productivity, habitat maintenance, and nutrient transport, remain largely beyond management’s control.

At the South Australian border, flows above 20,000 ML/day create fast-flowing conditions in the South Australian River Murray weir pools, though flows at the border have fluctuated significantly since the Basin Plan’s 2012 inception, evidenced by:

- extreme dry and low flow conditions between 2017–18 and 2019–20
- low flow conditions between 2014–15 and 2015–16
- high flow conditions recorded in 2016–17 and 2021–22 (followed by the 2022–23 flood event).

This variation highlights a system reliant on climatic changes. To support ecosystem health, flows should exceed 0.3 m/s for 60 consecutive days between September and March every two years. The good news is that the occurrence of fast-flowing conditions in the South Australian River Murray weir pools has improved overall. Yet, in over a decade since the Basin Plan’s adoption, these fast-flowing conditions have been met only three times across any single weir pool,³ and only twice across all weir pools.⁴ Thus, this system fails to achieve optimal flow frequencies, falling back on natural ‘unregulated’ flow events rather than intentional water delivery to produce necessary conditions.

While efforts have been made to support brief bursts of fast-flowing conditions and targeted floodplain inundation, these remain minor interventions compared to the impact of unregulated natural flows. Until Basin Plan implementation is complete – particularly addressing water delivery constraints and recovering the 450 GL – such conditions will remain contingent on floods rather than reliable environmental flows.

Fish

Murray cod (*Maccullochella peelii*) is an iconic and nationally threatened native fish species within the Murray–Darling Basin. It is a long-lived (up to 48 years) key predator in the river ecosystem, as well as an important cultural, recreational and economic species, contributing to recreational fishing and tourism. Murray cod are considered an indicator of the overall health of the river environment; changes in their abundance or health can signal broader environmental issues.

Since 2019, Murray cod recruitment in South Australia has exceeded expectations, which suggests that South Australia may meet the Murray cod recruitment targets by 2029 (recruitment in 10 of 17 years).

Golden perch (*Macquaria ambigua*) is a medium to large-bodied native fish species that is widespread across the Murray–Darling Basin and is found throughout the South Australia River Murray and Lower Lakes. They are an important commercial, recreational and cultural fish species. Golden perch are indicators of hydrological

¹ The Riverland Ramsar site and Banrock Station Wetland Complex.

² The River Murray Channel Icon Site and Chowilla Floodplain Icon Site (also part of the Riverland Ramsar site).

³ For the following years: 2016–17, 2021–22 and 2022–23.

⁴ For the following years: 2016–17 and 2022–23.

connectivity and changes in the flow regime. Current analysis shows that, from 2005 to 2023, the age structure of the golden perch population has shown improvement, another testament to better flow conditions.

Yet, these promising outcomes for Murray cod and golden perch are largely thanks to recent wetter climate conditions rather than proactive management. Sustainable outcomes for both species require the full implementation of the Basin Plan, particularly addressing current water delivery constraints, additional recovery of water for the environment (450 GL) and coordinated delivery of water for the environment. Only then will the necessary channel and floodplain connectivity be ensured, rather than left to the whim of seasonal rainfall.

Murray Mouth

An open Murray Mouth connects the freshwater environments of the River Murray and Lakes to the Murray Estuary, Coorong and the Southern Ocean. The Murray Mouth is the only connection of the River Murray to the ocean. This connectivity allows for salt and nutrient flushing, protects water quality in the Murray Estuary and Coorong, and enables native fish to move between these environments. The Department's Evaluation Report assesses the openness of the Murray Mouth using a combination of indicators, including annual flow through the barrages, changes to tide heights over a 24-hour period, and dredging actions.

Since 2012, flows through the barrages have fluctuated significantly, largely driven by natural unregulated flow events rather than a systematic approach to meet environmental needs. Following the Millennium Drought, flows at the barrages peaked in 2012-13 at 12,808 GL, providing some environmental recovery. However, flows then fell below 1,000 GL/year until the high flows in 2016-17. In the four years that followed, barrage flows remained low to moderate, not exceeding 1,500 GL/year. Moderate flows returned in 2021-22, followed by the 2022-23 River Murray flood event, with significant barrage flows of 16,597 GL.

In simple terms, to keep the Murray Mouth open there needs to be enough water flowing out. This means the Murray Mouth is very vulnerable to the impacts of climate dependent water availability (for both regulated and unregulated flows). The Murray-Darling Basin Authority (MDBA) has calculated that a minimum annual flow of 730-1,090 GL/year is needed to keep the Murray Mouth open. Current analysis indicates that since Basin Plan adoption, 82% of years have had flows above 730 GL/year, which should have been enough to keep the Murray Mouth open without dredging. However, the reality is not reflecting this, and dredging has been required 67% of the time. This is well short of the Basin Plan target to avoid dredging 95% of the time but it is likely that annual flows at the upper end of the minimum annual flow range are required.

It is understood that 60,000-70,000 ML/day is necessary for effective Mouth scouring, but flows of this scale have only occurred three times since 2012.⁵ The need for dredging even during high flow years like 2021-22 and then directly following the 2022-23 flood, underscores the system's vulnerability, with sand accumulation outpacing natural scouring. Until Basin Plan commitments are fully realised, the Murray Mouth will remain hostage to large unregulated flow events and emergency dredging solutions.

Coorong and Lower Lakes

One of the Basin Plan's key objectives is the maintenance of the ecological character of Ramsar-listed wetlands, including the Coorong and Lakes Alexandrina and Albert.⁶ In reality, the Coorong remains in a precarious state, with inflows and connectivity that are inconsistent at best. The food web, which should be complex, has been limited by these inconsistent flows, which has created an ecosystem with persistently high salinity levels, and overwhelming nutrient loads. The fact remains: without genuine efforts to recover environmental water, these Ramsar-listed wetlands will struggle to achieve anything close to the ecological outcomes that the Basin Plan requires.

For assessing the health of the Lower Lakes, the Evaluation Report uses several indicators, including vegetation, fish and waterbirds.

⁵ For the years: 2016-17, 2021-22, and 2022-23.

⁶ For example, see section 8.05 of the Basin Plan: "protection and restoration of water-dependent ecosystems".

Vegetation

The latest analysis shows that vegetation in the Lakes has improved since adoption of the Basin Plan and is currently in “good condition”. This is largely attributable to the management of water levels supported by the delivery of water for the environment under the Basin Plan. During the 2022-23 flood, lake levels even exceeded 1m above sea level – which is a milestone not seen in over two decades.

Since Basin Plan adoption in 2012, lake levels have been maintained at 0.4m above sea level, thanks largely to environmental delivery. Without this environmental water, lake levels most likely have dropped to close to sea level during autumn 2020. Additional efforts, such as replanting aquatic vegetation, wetland management actions to reinstate wetting and drying cycles, restoring flow paths to improve connectivity, and managing invasive species such as through carp screens and removal of dense and exotic reeds, have played a role in this improvement.

However, to achieve a genuinely stable and resilient water regime, the current water delivery constraints must be addressed, and the full environmental water recovery as mandated by the Basin Plan must be realised. Only then will we have the flexibility to time water delivery effectively, ensuring high lake levels of 0.85m above sea level through spring and summer, rather than relying on the occasional flood or last-minute interventions.

Fish

Black bream (*Acanthopagrus butcheri*) and greenback flounder (*Rhombolea tapirina*) inhabit the estuarine environments of the Coorong and Murray Estuary and adjacent coastal waters. They are important commercial, recreational and cultural fish species and are food sources for a variety of fish-eating birds, including cormorants and pelicans. Maintaining suitable flow, habitat conditions, and a steady food supply is essential for supporting the overall population condition and recruitment of both species.

Following the Millennium Drought in 2010 both species were in poor condition. Since the return of freshwater flows in 2010-11, overall population conditions have improved and both species are currently “in good condition”. Although black bream took longer to recover than greenback flounder, both species show the same general trend, with improvements in years with higher flows and decline following periods of lower flow, such as in 2018-19.

Another indicator of the health of the Coorong is the health of diadromous⁷ fish species: congolli (*Pseudaphritis urvillii*) and common galaxias (*Galaxias maculatus*). These populations are acutely sensitive to hydrological conditions, particularly barrage flows and salinity conditions in the Murray Estuary and Coorong. Each species has distinct movement and life-cycle habitat requirements and require connectivity via open barrage gates or fishways.

Continuous flow over the barrages and/or through the fishways since the Basin Plan’s adoption in 2012 have led to improved recruitment for both. Yet, despite the efforts for ongoing environmental water deliveries, the anticipated recovery has not fully materialised. In 2024, population conditions for both species remain below expected levels. Complete implementation of the Basin Plan is crucial if these species are to thrive rather than merely survive.

Lakes Waterbirds

The Lakes are part of the Coorong and Lakes Alexandrina and Albert Wetland, a Ramsar wetland of international importance. They support nationally and internationally threatened species and those listed under migratory bird agreements.⁸ Waterbirds are highly sensitive to changes in habitat quality and food availability, making them key indicators of ecosystem health.

Waterbird communities within the Lakes include three guilds, generalists, herbivores and piscivores.⁹ Since the Basin Plan’s adoption in 2012, overall abundance for generalists and herbivores has seen some improvement.

⁷ Meaning: migratory between salt water and fresh water.

⁸ The Bonn Convention (Convention on the Conservation of Migratory Species of Wild Animals), Japan-Australia Migratory Bird Agreement (JAMBA), China-Australia Migratory Bird Agreement (CAMBA), Republic of Korea-Australia Migratory Bird Agreement (ROKAMBA). There are also species listed under Australia’s *Environment Protection and Biodiversity Conservation Act 1999*.

⁹ A carnivorous animal that primarily eats fish.

In contrast, piscivores have declined. Interestingly, abundance targets for all three guilds were met up until 2016, but in recent years have shown a downward trend across all guilds.

The availability and quality of waterbird habitat in the Lakes is driven by freshwater inflows, water levels, and salinity. Despite the higher flows in 2022-23, no piscivore species met target abundances in 2023, with little prospect of meeting the 2029 target. This decline in piscivores, even with favourable flow conditions, is unexpected, and likely tied to changes in prey fish availability and the availability of other wetland habitats in inland Australia due to wetter climate conditions.

Planned Environmental Water (PEW) under the Water Allocation Plan for the River Murray Prescribed Watercourse, along with the delivery of water for the environment under the Basin Plan, has undoubtedly helped improve habitat conditions, allowing for some increases in waterbird abundance in the Lakes. However, if water for the environment had not been delivered as part of South Australia's annual Entitlement flow during 2018-19 and 2019-20, lake levels would likely have fallen dangerously close to sea level, disconnecting fringe vegetation from the waterline and limiting waterbird breeding. This serves as another reminder that without sustained and strategic environmental water delivery, these improvements are merely holding the line against a much steeper decline.

Coorong Waterbirds

Since the Basin Plan's adoption, Coorong waterbirds have seen a troubling decline in abundance, in stark contrast to their counterparts in the Lakes. Since 2002, the abundance of Coorong waterbirds has fluctuated greatly from year to year, with varying trends across different guilds. While all three guilds showed improvement after the Millennium Drought ended, only herbivores have managed to sustain any gains under the Basin Plan. Similar to the Lakes waterbirds, a recent decline in piscivores in the Coorong was also unforeseen. Factors again likely include the highly migratory nature of these birds, alternative wetland habitats in inland Australia due to unusually wet conditions, and shifting conditions in the Coorong, notably the dwindling availability of prey-sized fish.

While overall declines in Coorong waterbird populations were anticipated, the persistence and scale of this trend is alarming, particularly in light of the prolonged impacts of the Millennium Drought, which has significantly affected the ecosystem of the Coorong and the populations of waterbirds. Given the time elapsed since the end of the drought, greater recovery should have been observable by now. A range of environmental factors influence the health of water bird communities. In the Coorong, these include: suitable water levels (with varying requirements between guilds), maintenance of suitable salinity gradients (with salinity increasing southward from the Murray Mouth) and good water quality (which influences the growth of algae).

Water for the environment and high (unregulated) flows have prevented a return to the extreme salinity levels seen during the Millennium Drought. However, inadequate water levels and quality have limited the recovery of key waterbird habitats and food resources, impacting overall abundance of waterbirds in the Coorong. Full implementation of the Basin Plan will support waterbirds in the Coorong. However, due to the migratory nature of these waterbirds, it is important to recognise that there are other factors also influencing these populations.

The River Murray in a changing climate

The results discussed above show that there are mixed results being observed for various indicators of a healthy River Murray in South Australia. Overall, my key message is that the Basin Plan so far is not delivering the outcomes we expected. The Basin Plan we have today is not yet fully implemented. Even if it was, it is very different to the Basin Plan we expected in 2012, so this result does not come as a surprise.

Full implementation of the Basin Plan will provide the best chance to combat further system decline under a changing climate. The Evaluation report tells me that ultimately the health of the system is driven by water availability and the presence of high or unregulated flows and any reduction in either of these factors as result of climate change is likely to have a negative impact on the River Murray.

Achievements and key activities from 2023-24

Being Commissioner

Being downstream means South Australia is largely dependent on the actions of upstream states for its water supply, and this dependency limits South Australia's ability to influence the amount of water it receives. The South Australian Government cannot simply compel upstream states to release more water for environmental purposes. Unfortunately, neither can I.

Effective management of the Murray-Darling Basin requires cooperation among all Basin states. The success of environmental water delivery depends on collaborative efforts rather than the actions of a single state (or Commissioner for that matter).

My role is part of a collective effort to advocate for the health of the Murray River, the Lower Lakes, and the Coorong, which involves engaging with the media, key stakeholders, scientists of various disciplines, water economists, jurisdictional ministers, and the MDBA. This advocacy is essential to raise awareness and garner support for the measures necessary to sustain these vital ecosystems. To me, this advocacy is about underscoring the importance of shared responsibility and coordinated action across state lines. By engaging in public events and the media, I aim to enhance the communication of River Murray-related outcomes and issues, building the case for cooperation amongst the states, stakeholders and the public.

Finally, my role also clearly involves providing strategic advice to the South Australian Government on matters relevant to implementation of the Basin Plan. In advising the South Australian Government, I hope to align South Australia's policies and actions with the overarching goals of the Basin Plan.

Key activities

I note that my previous annual report for 2022-23 covered meetings and other activities that I was engaged in as Commissioner until the end of 2023. As such, for this annual report I will not duplicate what was said in the previous report, aside from noting that within the 2023-24 period I was engaged in the following activities, which have already been reported on:

- Submission, meetings with members of Federal Parliament and their advisors through October-November 2023, and appearing to give evidence in Federal Parliament on 31 October 2023 for the *Water Amendment (Restoring our Rivers) Bill 2023*¹⁰
- Contributions to the South Australian Government's Response to the Murray-Darling Basin Royal Commission Report.¹¹

In the 2023-24 period, I have been actively involved in approximately 69 meetings or events related to my role. These including meetings with the Department, various scientists and scientific and conservation groups, members of the public, and decision makers and legislators.¹² These include:

- Keynote speech at the Australian Water Association Conference in September 2023
- Opening presentation at The Living Murray 20th Anniversary event in February 2024
- Panel presentation at the Australian Water Law Symposium in March 2024
- Panel discussion (with Senator Hanson-Young, Kate McBride and author Margaret Cook) at the Adelaide Writers' Week in March 2024.

¹⁰ Parliament of Australia, [Inquiry into the Water Amendment \(Restoring our Rivers\) Bill 2023](#), accessed on 26 July 2024.

¹¹ South Australia, [Response to the Murray-Darling Basin Royal Commission Report](#), September 2023.

¹² A list can be found under the heading: Meetings and Engagement.

Water Amendment (Restoring our Rivers) Bill 2023

I reported briefly on my activities in relation to the Water Amendment (Restoring Our Rivers) Bill 2023 in my previous annual report for 2022-23. During the 2023-24 period, my focus has been on advocating for the key changes needed to the Water Act and Basin Plan as part of this process and advising the South Australian Government on implementation of the changes.

Given the significance of this legislative change, I propose to briefly note my observations on this amendment since it commenced operation on 7 December 2023. As previously stated, this Bill represents a major step forward for the legality of the Basin Plan, as well as for the environment of the southern Murray, including all of South Australia's key environmental assets.

The following amendments were made, which are of particular significance.

450 target of water for the environment

The 450 GL water recovery target was solidified and certain barriers to recovering it were removed. Firstly, the limit on the Australian Government's ability to purchase water access entitlements (also known as 'buybacks') was repealed. This represents the removal of a significant barrier to recovery against this target.

By restricting the Australian Government's ability to purchase water entitlements from willing sellers for environmental purposes as it previously did, the Water Act effectively restricted a segment of the market and interfered with the free choice of entitlement holders. The active exclusion of the Australian Government from this market was an unnecessary impediment to Basin Plan water recovery. If water entitlements could be sold to the highest bidder or the most suitable buyer, resources are more likely to be used where they can provide the most value. By restricting the government from being one of those buyers, the market system had been prevented from achieving an optimal allocation of resources that benefits broader societal needs, such as environmental conservation, at least overall cost.

Furthermore, individual business persons should have the autonomy to decide to whom they sell their entitlements. This autonomy is a cornerstone of free enterprise, and any undue restriction undermines the fundamental principles of business operations. If entitlement holders wish to sell to the government for environmental purposes, they should be able to do so without legislative impediment. The government often purchases land for conservation or infrastructure projects. Restricting similar purchases only in the water market seems inconsistent and unjustified. Amending the legislation to allow buybacks for environmental purposes means taking another step towards better consistency, fairness, and efficiency in market regulations, reflecting modern principles of sustainable and responsible governance. No one has ever been able to explain to me why a holder of a water entitlement in Australia should not be free to sell all or part of that entitlement to the government for an environmental purpose.

In addition to removing this barrier, the timeline to recover against this target was extended until 31 December 2027, giving renewed hope that we might actually meet this target. This is particularly the case with improvements made to accountability, including new reporting requirements regarding progress towards water recovery targets, and a requirement for the Minister to 'take all reasonable steps' to reach this target before the end of 31 December 2027.

Despite these improvements, one key barrier to recovering the final 450 GL has been strengthened in the Water Act: that being the risk that misinformation and hysteria about the socio-economic impact of buybacks will be used as a reason not to recover against this target. This has, in a way, been enshrined into the Water Act, with the new requirement for the Minister to "consider the social and economic impact of the program on communities in the Murray-Darling Basin." I do not dispute that it is important to monitor the socio and economic impacts of any recovery in the Basin. This should happen, although the work done in this area should be independent, robust, and reliable.

Indeed, in line with the Agreement reached by the Australian Government and governments of New South Wales, South Australia, Queensland and the Australian Capital Territory in 2023, the Australian Government has committed to minimising negative social and economic impacts associated with the purchase of water by providing funding for community adjustment assistance. This has become a key element of the Australian Government's *Restoring Our Rivers: Framework for delivering 450 GL*, which was released by the Australian Government on 4 July 2024 and of which I am supportive. However, there is an underlying risk that this

requirement will serve as a continued barrier to recovering against this target due to the prevalent misinformation that seems to overstate (at least according to the most reputable economic analysis (see Wheeler *et. al.* below at footnote 12, as well as others)) the negative impacts of buybacks.

The extent of this misinformation was the subject of a recent literature review by Sarah Wheeler *et. al.* (University of Adelaide), which found that many studies, especially studies that suggest there are significant costs to rural communities from water recovery, do not disentangle causal impact from correlation. Further, the study also found that the positive impacts of buyback expenditure within the local economy has largely been ignored. An important takeaway from the study is that there is a complex array of factors influencing the socio-economic resilience of local communities, for example: climate change, global commodity prices, and technological advancements and their influence on industries. A more balanced approach recognises buybacks as one of several forces that may influence rural socio-economic health.¹³

Given the prevailing misinformation and past delays, the Australian Government must tread carefully in delivering this commitment, lest the 450 GL not be recovered at all. As Senator Hanson-Young said at Writers' Week: "there are no jobs on a dead river". This statement underscores the critical relationship between environmental and economic health. Economic activities are simply unsustainable if the environment is too degraded. In essence, this should serve as a reminder that environmental conservation is not just about preserving nature for its own sake, but that it is intrinsically linked to human prosperity and economic stability. Protecting and revitalising river ecosystems is vital for sustaining jobs, industries, and communities that depend on these natural resources.

Changes to the SDLAM program

The SDLAM program has also been extended until 31 December 2026, with additional supply and efficiency measures potentially able to contribute to Basin Plan outcomes if they are notified by the MDBA by 30 June 2025. With improvements to transparency and accountability mechanisms, such as annual progress reports on water recovery targets, there is renewed hope that the program will see further success.

However, I remain concerned that there are already numerous projects under this program which are severely delayed, and some which have very little hope of being completed by the new statutory deadline.

One comfort is the new power included in section 7.12(6A) of the Basin Plan for the Australian Government to unilaterally remove a project from the program if it is deemed unviable. Only time will tell whether the Australian Government will utilise this power.

Finally, the new section 7.08A of the Basin Plan now requires the MDBA to prepare a Constraints Relaxation Implementation Roadmap by 31 December 2024. As outlined in my previous publications, lack of progress on constraints projects has been a major concern for Basin Plan implementation for over a decade now, particularly because it seems to have been used as an excuse for a lack of action in relation to the recovery of the 450 GL. The lack of progress on constraints relaxation, along with delays in delivering the final 450 GL of water, is particularly concerning given the modelling shows that a Basin Plan that returns 3200 GL of water on average per year will hit 17 out of 18 key environmental flow indicator markers in circumstances where constraints are addressed.¹⁴

Transparency and accountability

Other improvements to transparency and accountability in the legislation include new requirements for jurisdictions to prepare and report against action plans in relation to Water Resource Plans, and a broadening of the powers of the Inspector General of Water Compliance in relation to enforcing compliance regarding Water Resource Plans.

A final point on improvements to accountability is the new Water Market Intermediaries Code and strengthened information transparency mechanisms, along with new compliance and enforcement powers and civil penalties for insider trading and market manipulation.

¹³ Wheeler, S. A., Xu, Y., Zuo, A., Haensch, J., and Seidl, C. (2022) "[Exploring the economic values of the Murray-Darling Basin and rating the quality assessment of water recovery economic studies](#)", The University of Adelaide.

¹⁴ MDBA, "Hydrologic Modelling of the Relaxation of Operational Constraints in the Southern Connected System: Methods and Results," October 2012.

First Nations

Finally, the amendments have also introduced new requirements to report on spiritual, cultural, environmental, social and economic matters relevant to Indigenous people, which will also be included in upcoming legislative reviews. This addition is long overdue, and is something that I, along with 50 lawyers and academics, called for as part of an open letter signed on 13 November 2023 to the Australian Government seeking acknowledgement and safeguarding of First Nations water rights in the upcoming changes to the Basin Plan.¹⁵

Despite this improvement, the Basin Plan still unfortunately lacks provision for cultural flows, which is disappointing given the importance of cultural flows to First Nations' cultural practices, spiritual beliefs, and connections to the land and water. This also represents a missed opportunity to adopt a holistic approach to ecosystem health in the River Murray.

Australian Water Association Conference: *Water – The Foundation for Sustainable Development*

On 21 September 2023, I was a keynote speaker at the 2023 Australian Water Association Conference held in Adelaide.¹⁶ The theme for the conference was: *Water – The Foundation for Sustainable Development*. The theme was an acknowledgement of the United Nations Sustainable Development Goals, which were adopted by all United Nations Member States in 2015 (including Australia) as a "call for action" for a global partnership towards a sustainable future. Water is an essential foundation across many of those goals, and the Australian Water Association Conference explored their relevance to Australia across themes including:

- Remote community water supplies including First Nations access to safe and secure drinking water
- Water and the future of energy, including hydrogen
- Community engagement, empowerment and participation in and through water, and
- Water and productive and healthy urban communities.

In my keynote speech, I commented on the following points:

- The ongoing failure to determine the Basin Plan environmental water recovery target according to "best available scientific knowledge"
- The continued failure to properly address climate change projections in the water recovery target
- Despite the above, my optimism concerning the 450GL (ultimately reflected in amendments to the Water Act passed by the Commonwealth Parliament in December 2023)
- The ongoing debate about the alleged impacts of water "buybacks"
- The lack of progress on SDLAM and constraints management (referred to above)
- A response to certain inaccurate comments made about me by some members (and now former members) of the South Australian Parliament. For the record, I do not, never have, and never will live on Sydney's "North Shore". For what it is worth, I have also never resided in Mordor.

The Living Murray 20th Anniversary event in Goolwa

The Living Murray (TLM) Program was established in 2002 to improve the health of six designated sites (known as icon sites) that comprise forests, wetlands and lakes along the River Murray. The program is continuing to return water to the environment through infrastructure to help deliver water to 6 icon sites and improve the health of the River Murray.

On 28 February 2024, the TLM program celebrated its 20th anniversary by bringing together some of Australia's top scientists to discuss their studies and findings for the CLLMM region.¹⁷ This region was one of 6 locations across the southern Murray-Darling Basin that was selected as a TLM icon site due to its ecological, cultural and social importance. I attended this event in Goolwa and gave the opening presentation about

¹⁵ Melbourne Law School, [Urgent water-law reform for Murray-Darling Basin First Nations](#), accessed on 16 July 2024.

¹⁶ Australian Water Association, [Water – The Foundation for Sustainable Development](#), accessed on 10 July 2024.

¹⁷ Department for Environment and Water, [The Living Murray celebrates 20 years in the Lower Lakes, Coorong and Murray Mouth](#), accessed on 10 July 2024.

Water for the Environment and the Basin Plan, in which I made the following observations about the Water Act and Basin Plan:

- Firstly, that the constitutional validity of the Water Act is based on its ability to fulfil its international treaty obligations, including the RAMSAR Convention on Wetlands which recognises the Coorong and Lakes Alexandrina and Albert Wetland as a 'Wetland of International Importance', owing to it being one of Australia's most important wetland areas.
- Secondly, that the Basin Plan, and more specifically, the determination of the 'Environmentally Sustainable Level of Take' (ESLT), is required in the legislation to be made on the 'best available science'. In his Royal Commission Report into the Murray-Darling Basin Plan, Commissioner Walker SC cast serious doubts over whether this had occurred, given how the ESLT was eroded due to political compromise.

I then went on to comment on the important changes brought in by the Restoring our Rivers Act:¹⁸

- That it was obvious at the time of drafting the Bill, that something needed to change, given it had taken 12 years to recover 20 GL of the 450 GL target, which would bring positive environmental outcomes to the CLLMM.
- One key positive which came out of these legislative amendments was the further solidification of the requirement to recover 450 GL of water for the environment. While there was no question in my mind before the amendment that this target was required, there were certain actors who saw fit to find any opportunity not to adhere to this requirement. Thanks to the amendments, the Australian Government is now able to use funds from the WESA to purchase water against this target.
- I recognise that some economic impacts may occur from the purchase of water. However, these impacts have been severely inflated by irrigation lobbyists, as explained in Sarah Wheeler's socio-economic analysis with the University of Adelaide.¹⁹
- I expressed my concern for the 36 SDLAM projects, many of which have a questionable scientific basis, and are already showing signs that they are generally not viable projects. One positive change out of the legislative amendments is that the Australian Government now has the power to unilaterally withdraw a project from the SDLAM, if it is deemed unviable. Only time will tell as to whether the government actually utilises this power.
- I expressed another concern about where the water towards the 450 GL target will be recovered from. It is vital that the 450 GL be largely recovered and delivered from within the southern Basin. The package deal to recover 3,200 GL that underpins the volumetric targets of the Basin Plan was informed by hydrological modelling prepared by the MDBA.²⁰ In particular, the scenario to recover 3,200 GL was modelled where 2,800 GL was recovered across the Basin, and 400 GL was specifically recovered from the southern Basin valleys to achieve targeted enhanced environmental outcomes. These enhanced environmental outcomes are beyond those achievable by other components of Basin Plan water recovery. Section 7.09 and Schedule 5 of the Basin Plan, along with section 86AA of the Water Act require these outcomes to be pursued – and recovering the 450 GL of water for the environment from the southern Basin aligns with the location of these enhanced environmental outcomes. Any recovery from the northern Basin would undermine these outcomes, due to the inherent complexity in achieving delivery from the northern Basin. Delivery within the southern Basin becomes even more important when recognising that the 605 GL offset from supply measures has removed real water from the system, further undermining the delivery of the enhanced outcomes.
- Once again, I aired the view that the Australian Government should establish an independent review of the 605 GL water recovery target, to ensure that, in the future, those numbers are based on verifiable science.

¹⁸ YouTube, [Water for the Environment and the Basin Plan](#), accessed on 2 August 2024.

¹⁹ Wheeler, S. A., Xu, Y., Zuo, A., Haensch, J., and Seidl, C. (2022) "[Exploring the economic values of the Murray-Darling Basin and rating the quality assessment of water recovery economic studies](#)", The University of Adelaide.

²⁰ *Hydrologic modelling of the relaxation of operational constraints in the southern connected system: Methods and results*, MDBA 2012.

- Finally, I noted that though some improvements have been made to First Nations recognition in the legislation, we are still without a clear mandate for cultural flows under the Basin Plan. This was an unfortunate missed opportunity.

Ripples and Resilience: Navigating our Rivers (Adelaide Writers' Week)

On 3 April 2024 I joined the following panellists at the Adelaide Writers' Week to explore the challenges and opportunities associated with balancing development and our natural river ecosystems.²¹

- Chair, Natasha Mitchell (a multi-award-winning journalist, radio presenter, podcaster, and documentary maker)
- Dr Margaret Cook (a historian and Research Fellow at the Australian Rivers Institute, Griffith University, and La Trobe University)
- Senator Sarah Hanson-Young (one of Australia's leading voices on women in politics, environment and nature protection, media policy, and human rights), and
- Kate McBride (a farmer, Parliamentary Liaison Officer and prominent advocate for the protection of the Baarka (Darling) River).

The highlights of our conversations included:

- How the water recovery targets in the Water Act and Basin Plan are required to be formed on the 'best available scientific knowledge', including encompassing the implications of climate change, and how the application of this principle has been eroded over time due to political compromise. Further, that the calculation of those target figures has never been a transparent process by the MDBA.
- How the Water Act and Basin Plan were effectively silent on the need to protect the connection that First Nation communities have to the environment. The recent legislative changes provide a better opportunity to give greater recognition to First Nation communities and take steps towards protecting their water interests.
- That local communities bear the brunt of negative environmental impacts to the system. While preserving water for the environment will undoubtedly generate economic impacts, those impacts are generally greatly exaggerated. That exaggeration is a known fact, backed up by peer-reviewed research on the topic.²²
- What is not given enough recognition are the economic benefits that arise out of having a healthy, thriving environment. The Murray Darling Basin supports agriculture, industries, and communities that contribute approximately \$30 billion to the Australian economy every year.²³ Tourism alone is worth over \$15 billion per year.²⁴
- How we have imported a "British way of thinking" about rivers, that they are either an *adversary* (in the context of damage done by floods) or a *resource* (to be exploited for profit). There is a prevailing attitude that water is "wasted" if it is not captured and used in some productive way. In that sense, water for the environment is treated (by some) as having been "wasted".
- Despite the fact that there is still a lot of work to be done on ensuring full implementation of the Basin Plan, the recent legislative amendments nonetheless represent a positive step towards this goal. Further, there is clear evidence that since the implementation of the Basin Plan, environmental flows have brought benefits to the health of the Murray-Darling Basin system.

²¹ Broadcast by ABC Radio, [Ripples, resilience, and rivers – the politics of water](#), accessed on 26 July 2024.

²² Wheeler, S. A., Xu, Y., Zuo, A., Haensch, J., and Seidl, C. (2022) "[Exploring the economic values of the Murray-Darling Basin and rating the quality assessment of water recovery economic studies](#)", The University of Adelaide.

²³ Murray-Darling Basin Authority, [Why the Murray-Darling Basin matters](#), accessed on 26 July 2024.

²⁴ Murray-Darling Basin Authority, [The Basin](#), accessed on 14 November 2024.

Meetings and Engagement

In addition to the below, I spoke at the public hearing on 31 October 2023 for the Inquiry into the *Water Amendment (Restoring our Rivers) Bill 2023*.

Members of Parliament

Minister for the Environment and Water, Australia	The Hon Tanya Plibersek MP
Deputy Premier and Minister for Climate, Environment and Water, South Australia	Dr Susan Close MP
Senator Sarah Hanson-Young (and advisors)	
Senator David Pocock (and advisor)	
Senator Karen Grogan	

Government

Department for Environment and Water, South Australia	Various representatives from the Water and River Murray Division
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Other stakeholders

Conservation Council South Australia and Murray-Darling Conservation Alliance	Mr Craig Wilkins; Ms Charlotte Nitschke; Ms Annabelle Schuttloff
Wentworth Group of Concerned Scientists	Dr Celine Steinfeld (Director); Dr Emma Carmody (Ramsar Secretariat)
Retired irrigator/farmer	Tom Martin
Murray Lower Darling Rivers Indigenous Nations	Grant Rigney
The Nature Conservancy Australia	Rene Woods
Goyder Institute	Alec Rolston
The Australian National University	Professor Jamie Pittock
Journalist from The Australian	Jess Malcolm
Ecologist	Steve Morton

Publications and Media

As author

The Basin Plan relegated climate science to the status of 'hoax', The Advertiser	25 July 2023
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Our river's robbed, and it stinks like rotten fish, The Advertiser	26 July 2023
Up the River, The Advertiser	4 August 2023
Signatory to Open letter to Australian members of Parliament	13 November 2023
Comment	
Radio interview with ABC Adelaide	25 July 2023
Radio interview with ABC Adelaide	26 July 2023
Radio podcast interview with WaterWatch Radio 2DryFM	2 August 2023
Radio interview with 4DDD 89.9FM Daily	12 August 2023
"Renegade state risks millions as SA backs River Murray buybacks" , InDaily	23 August 2023
Radio interviews with ABC Radio Adelaide and FiveAA	23 August 2023
"Politics dressed up as science': SA report lashes Murray-Darling Plan" , InDaily	15 September 2023
Radio interview with ABC North and West Port Pirie	15 September 2023
"Revolution is needed to save the dying River Murray" , John Menadue's Public Policy Journal	20 September 2023
Radio interview with ABC Radio	15 February 2024
Radio interview with ABC Radio National Australia	7 April 2024
Press conferences and other speaking events	
Press conference with Deputy Premier of South Australia for the release of the Response to the Murray-Darling Basin Royal Commission Report	15 September 2023
Keynote speaker at the Australian Water Association Conference on Water – The Foundation for Sustainable Development	21 September 2023
Panel member at The Living Murray 20th Anniversary event in Goolwa	28 February 2024
Panel presentation at the Australian Water Law Symposium	1 March 2024
Panel member at Adelaide Writers Week and broadcasted by ABC Radio National Australia: Big Ideas "Ripples, resilience, and rivers – the politics of water"	3 March 2024

Expenditure

My Services Agreement continues to provide that I am to be paid \$100,000 per annum, inclusive of GST. In accordance with my Services Agreement, where my Agreement term is extended, the payment amount is to be adjusted for the previous financial year by the CPI rate. The CPI percentage change for Adelaide in the 2022-23 financial year was 7.9%. This means for the 2023-24 financial year, I am to be paid up to \$107,900 per annum, inclusive of GST.

In respect of the 2023-24 financial year, I billed the Department for the following expenses in accordance with the Agreement (as per usual, I do not charge a per diem for food, and airfares are economy class).

DESCRIPTION	AMOUNT
Consultancy fees for period 23/07/2023 – 22/08/2023	\$8,333.33
Consultancy fees for the period 23/08/2023 – 22/09/2023	\$8,333.33
Travel and accommodation costs for trip to Adelaide (from Sydney)	\$3,706.52
Consultancy fees for the period 23/09/2023 – 22/10/2023	\$8,333.33
Travel and accommodation costs for trip to Canberra (from Sydney)	\$1,524.23
Consultancy fees for the period 23/10/2023 – 22/11/2023	\$8,333.33
Travel and accommodation costs for trips to Adelaide and Canberra (from Sydney)	\$2,959.27
Consultancy fees for the period 23/11/2023 – 22/12/2023	\$8,333.33
Consultancy fees for the period 23/12/2023 – 22/01/2024	\$8,333.33
Consultancy fees for the period 23/01/2024 – 22/02/2024	\$8,333.33
Consultancy fees for the period 23/02/2024 – 22/03/2024	\$8,333.33
Travel and accommodation costs for trips to Adelaide (from Sydney)	\$5,133.84
Consultancy fees for the period 23/03/2024 – 22/04/2024	\$8,333.33
Consultancy fees for the period 23/04/2024 – 22/05/2024	\$8,333.33
Travel and accommodation costs for trip to Adelaide (from Sydney)	\$1,345.12
Consultancy fees for the period 23/05/2024 – 22/06/2024	\$8,333.33
Travel and accommodation costs for trip to Adelaide (from Sydney)	\$426.05
TOTAL	\$106,761.66

Priorities for 2024-25

Key issues

The following outlines what I see as being the key issues in need of attention for the 2024-25 period. I have already commented on these issues in various forums including interviews with journalists, speaking at events, publications attached to my previous annual report, and in meetings with government officials and members of parliament.

For the 2024-25 year, my priorities will be to advocate for and advise the South Australian Government on the following matters:

The 450 GL of environmental water

I will continue to advocate for recovery of the 450 GL of water for the environment from the southern Basin, including by addressing any impediments to progress against this target, such as prevailing myths and misinformation about buybacks. One key component of this will be the Australian Government's implementation of its *Framework for delivering the 450 GL of additional environmental water*.²⁵ The Framework outlines the intended approach of the Australian Government to recovering the final 450 gigalitres by 31 December 2027, and establishes three new programs to deliver this target:

The Resilient Rivers Water Infrastructure Program

The Resilient Rivers Program Water Infrastructure Program opened to applications on 30 January 2024 and promises \$494 million over four years to fund infrastructure projects to improve the efficiency of water infrastructure. It provides a pathway for Basin states to propose water saving and efficiency measures projects for funding and replaces the Off-farm Efficiency Program.

The Voluntary Water Purchase Program

The Restoring Our Rivers: Trading Strategy 2024-25 was released by the Australian Government on 4 July 2024. The strategy explains the Australian Government's approach to initial water purchasing towards the 450 GL target in 2024-25. Under the trading strategy there is no fixed volume to be recovered from each state, each catchment or each water right type. The Australian Government will seek to purchase water rights from willing sellers that represent the best value for money. Consideration will be given to maintaining a balance between states and within the Commonwealth Environmental Water Holder's portfolio. Purchase activities undertaken in 2024-25 will hopefully concentrate on the southern-connected Basin. In addition to the Trading Strategy, a Selected Catchments Open Tender opened on 15 July 2024 and closed to applications 11 September 2024. The open tender is seeking to purchase up to 70 GL of eligible water rights across the Murrumbidgee and NSW Murray, South Australian Murray, Ovens and Victorian Murray.

On 8 November 2024, Minister Plibersek announced that the Restoring Our Rivers 2024 Selected Catchments Open Tender had received "more than 1,000 responses across the southern Murray-Darling Basin, far exceeding the volume of water required".

The remaining Southern Connected Basin Catchments and Large Portfolios of Water multi-stage Expressions of Interest processes opened on 30 September 2024 and at the time of writing were scheduled to close on 27 November 2024. This process is designed to inform the scope of potential water purchasing in 2025 by gathering information on the willingness of entitlement holders to sell and the potential geographic locations for recovery, including within irrigation trusts in South Australia.

The Sustainable Communities Program

The Sustainable Communities Program was announced on 11 June 2024. This program provides \$300 million to Basin states (with an estimated \$20 million available to South Australia) to help Basin communities adjust to the impacts of water purchase as part of delivering the additional 450 GL of environmental water. The

²⁵ Department for Climate Change, Energy, the Environment and Water, [Framework for delivering the 450 GL](#), accessed on 10 July 2024.

program will deliver community adjustment assistance alongside water recovery programs to proactively enhance community resilience and minimise socio-economic impacts.

The Department of Primary Industries and Regions SA (PIRSA) is currently leading the development of a business case and program arrangements for the delivery of the Sustainable Communities Program and Resilient Rivers Water Infrastructure Program in South Australia in partnership with the Department for Environment and Water. This work is being done in consultation with relevant community representatives through the SA River Murray Regional Strategic Advisory Committee and Irrigation Sector Sub-Committee, with input from a Cross Agency SA River Murray Communities Water Transition Committee.

The SDLAM program, including constraints relaxation

I will investigate options for addressing the lack of progress on key SDLAM projects, and options for addressing the inevitable non-recovery of water against the SDLAM recovery target. For example, the government of New South Wales has already admitted to the severe delays facing its SDLAM Constraints program, which estimates it will not be completed until 2031 at the earliest.²⁶

While nothing concerning Constraints progress and the Basin Plan would give anyone but the deluded much cause for optimism, I nevertheless look forward to seeing whether the Constraints Relaxation Implementation Roadmap lives up to its legislated intent, outlined below:

- Maximising the benefits of the constraint measures to deliver environmental outcomes including but not limited to enhanced environmental outcomes and outcomes identified by the Constraints Management Strategy,
- Providing a common approach across river systems and jurisdictions including:
 - Reporting, transparency and public accountability
 - Program implementation and governance including regulatory approvals
 - Supporting the acceleration of constraints measures by 31 December 2026
 - Managing impacts on third parties.

Upcoming legislative reviews

I will continue to advocate the importance of utilising the “best available scientific knowledge” (as the legislation mandates), which must be reflected during the assessment of progress towards achieving the Basin Plan’s intended environmental outcomes as part of the 2025 Basin Plan Evaluation, and in applying a robust approach for assessing the potential implications of climate change as part of the 2026 Basin Plan Review.

Both the Basin Plan Evaluation and Review present opportunities to advance transparency. This is something that, as Commissioner for the River Murray, I see as being central to my role, and which has been woefully absent since the Basin Plan’s inception in 2012. We cannot claim to be using the “best available” science, if it lacks the transparency needed for other experts to verify it. Transparency, after all, is fundamental to public trust in government.

In this spirit, I will continue to push for a thorough, independent assessment of the 605 GL SDL adjustment under Chapter 7 of the Basin Plan which, as explained in my publications from 2022-23, stands on shaky scientific foundations.

‘Murray’s Mission’

I am pleased to be able to partner with the Department for Environment and Water and the Murray Darling Conservation Alliance in a unique opportunity to combine environmental science with compelling storytelling to engage and educate young minds about the River Murray. The formal agreement for ‘Murray’s Mission’ is currently being finalised and I will provide a detailed outline of the project, outcomes and benefits in my 2024-25 report. However, in summary, ‘Murray’s Mission’ will be an engaging and educational video project

²⁶ Department of Climate Change, Energy, the Environment and Water (New South Wales), [NSW Alternatives to Buybacks Plan](#), accessed on 10 July 2024.

aimed at inspiring young South Australians to appreciate and protect the vital resource of the River Murray. Through a blend of live-action and animated storytelling, children will follow the adventures of Murray, a young boy living in the Riverland, as he discovers the wonders of the River Murray ecosystem. With the guidance of wise animal mentors, Murray will learn about water conservation, the importance of native flora and fauna, and the crucial role the river plays in providing water for drinking and sustaining life. By fostering a deep connection to the river and its inhabitants, Murray's Mission will empower children to become champions of this precious water source and advocates for its preservation for generations to come.

Implementing the Basin Plan in full

Finally, I will continue to advise the South Australian Government on the implications of the *Restoring our Rivers Act 2023* and also on the government's election commitment to address all recommendations of the Murray-Darling Basin Royal Commission which have been set out in the South Australian Government's 2023 Response to the Murray-Darling Basin Royal Commission Report.²⁷

More information

- Website: [South Australia's Commissioner for the River Murray](#)
- Contact:
DEW.RiverMurrayCommissioner@sa.gov.au

www.environment.sa.gov.au

²⁷ South Australia, [Response to the Murray-Darling Basin Royal Commission Report](#), September 2023.

Abbreviations

Term	Definition
GL	Gigalitres
MDBA	Murray-Darling Basin Authority
ML	Megalitre
Water Act	<i>Water Act 2007</i> (Cth)
Basin Plan	Basin Plan 2012
Department	Department for Environment and Water (SA)
SDL	Sustainable Diversion Limit
SDLAM	Sustainable Diversion Limit Adjustment Mechanism
ESLT	Environmentally Sustainable Level of Take: the amount of water that must be recovered from consumptive uses and returned to the environment to prevent long term degradation

List of Annexures

Annexure	Description
Annexure A	Urgent water-law reform for Murray-Darling Basin First Nations

Annexure A

Dear Member of Parliament,

The Murray-Darling Basin (**MDB**) is Australia's largest and most well-known river basin. It is also home to over 40 Aboriginal Nations, all of whom continue to endure the lasting impacts of water dispossession.

While multiple rounds of water reform at both the State and Commonwealth level have sought to limit extractions and provide for 'environmental flows' across the MDB, there has been a persistent and notable failure to acknowledge and safeguard First Nations' rights and interests in water laws and policies.

This has culminated in legal and policy frameworks that almost entirely deprive First Nations peoples of any decision-making power over water management processes that affect their Country, communities, agency and well-being. This includes First Nations peoples routinely being deprived of access to Country and to culturally significant sites of water. It has also resulted in First Nations peoples owning a mere 0.2% of surface water entitlements across the MDB. More generally, declining river health has a negative impact on the ability of First Nations peoples to uphold customary law, meet obligations to their Country, to engage in cultural practices such as fishing, harvesting bush medicine plants, and to meet their cultural obligation to provide clean, flowing water to downstream neighbours.

Significantly, the *Water Act 2007* (Cth) (**Water Act**) does not refer to, or provide for, First Nations rights and interests in its objects; nor does it include substantive provisions capable of delivering any modicum of water justice to First Nations peoples.

This critique extends to the Water Act's subordinate instrument, the Basin Plan. Indeed, the Plan's sole 'concession' to the Basin's Aboriginal Nations is a series of provisions requiring 'consultation' in relation to the development of catchment-specific instruments known as 'water resource plans' (**WRPs**).

The most recent, proposed reform to the Water Act, namely the *Water Amendment (Restoring Our Rivers) Bill 2023* (**Bill**), is entirely silent in relation to First Nations rights and interests. At best, this silence amounts to a tacit endorsement of the abysmal status quo. At worst, it serves to further entrench a water management framework that systematically excludes and discriminates against First Nations peoples. Further to this point, there is no reference to native title holders or their recognised prescribed bodies corporates.

It is our view as legal practitioners and academics that the Water Act and its amending Bill are entirely inconsistent with the United Nations Declaration on the Rights of Indigenous Peoples (**UNDRIP**), which was endorsed by Australia in 2009.

We therefore implore the Australian Parliament to break with the decades-long cycle of discriminatory water reforms and amend the Bill and Act to ensure that it is consistent with the UNDRIP, as well as with the recommendations of relevant non-government self-determined Indigenous organisations, such as the Murray-Lower Darling Rivers Indigenous Nations (**MLDRIN**). This includes amending the Water Act to require:

- the UNDRIP to be added to the list of 'relevant international agreements';
- the Water Act's objects to explicitly provide for Basin Nation's rights and interests, including in relation to customary law;

- the Basin Plan, WRPs and any other subsidiary instruments (and their preparation) to be consistent with the UNDRIP;
- the Basin Plan and WRPs to be developed on the basis of Basin First Nations water knowledge and cultural science;
- the contents of the Basin Plan and WRPs to substantively address and provide for the rights and interests of Basin First Nations, including customary law;
- the Basin-wide long-term annual average extraction limit to be capable of meeting Basin First Nations cultural objectives and watering requirements; and
- WRPs to include a program to deliver cultural flows (as defined in the Echuca Declaration)¹, sufficient to improve the spiritual, cultural, environmental, social and economic conditions of Basin First Nations within the WRP area. Basin Nations must have agency over how this work is conducted, including who is engaged to undertake its delivery without limitations.

We believe that these legislative amendments must be complemented by adequate resourcing across two key areas. This includes proper resourcing of:

- Basin First Nations, including their nominated non-government self-determined representative Indigenous body or bodies to:
 1. employ the necessary operational staff to ensure thriving sustainable businesses that support Nation building; and
 2. to undertake the program of work required to develop Nation-based cultural flows projects.
- The Aboriginal Water Entitlements Program, to ensure that it can provide meaningful pathways towards water entitlements being owned and managed by Basin First Nations.

The Australian Parliament has a critical decision before it which will have tangible and lasting consequences for Basin First Nations. We trust that this decision will be a resounding rejection of the status quo and that Australia will hold itself to a higher standard by, *inter alia*, aligning the Water Act and its subsidiary instruments with UNDRIP.

Yours sincerely,

1. Professor Amanda Kennedy, Deputy Head of School and Director of Engagement. School of Law, Queensland University of Technology
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¹ <https://www.mldr.org.au/wp-content/uploads/2018/07/Echuca-Declaration-Final-PDF.pdf>

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