SUBMISSION

Submission to the Productivity Commission

Submission to the National Water Reform 2026

24 April 2026

ATSE welcomes the National Water Reform being undertaken at this time to inform holistic national water reform for a more sustainable water service industry. This submission builds on ATSE's previous engagements by emphasising unimplemented recommendations that remain vital – including the establishment of a National Water Commission – alongside new and emerging issues such as the water needs of the data centre industry.

Whilst the Productivity Commission notes that this inquiry will not be reviewing the National Water Agreement (NWA), which is currently subject to signing by the states and territories, ATSE is pleased to see that the new NWA has considered many of the issues raised by ATSE's submissions in previous years, particularly concerning climate change impacts, science and data, Traditional Knowledge, and transparency in governance. To enable effective water reform, it is important that national water policies should be considered in their totality. In this context, ATSE considers there is value in the Productivity Commission's final report engaging with the progress and direction of the new NWA. ATSE makes the following recommendations for the 2026 review of National Water Reform:

Recommendation 1: Re-establish and evolve the National Water Commission.

Recommendation 2: Integrate an Environment | Social | Governance (ESG) framework into National Water Reform.

Recommendation 3: Apply the ESG framework for interjurisdictional integration of land and water management for sustainable and economic outcomes.

Recommendation 4: Require modelling assumptions, methodologies and datasets used in regulatory and planning decisions be made publicly available.

Recommendation 5: Strengthen the focus on urban water management as part of National Water Reform.

Recommendation 6: Work with data centre developers to minimise adverse impacts and costs on municipal water systems and enable an equitable pricing framework.

Recommendation 7: Require lifecycle water analysis to underpin the strategic locations of data centres across the nation, coordinated by a renewed National Water Commission, and founded on an ESG framework.

Re-establishing governance through a National Water Commission

In ATSE's engagements in water reform consultations over preceding years, ATSE has consistently identified the need to develop a fit-for-purpose transparent and independent governance structure, ideally through the re-establishment of a National Water Commission (NWC). The previous NWC was abolished in 2014, leaving a governance gap. Part of the rationale for its abolition was that progress had been made in water reform, yet effective water reform in the decade since has been hampered by its removal. The lack of an NWC was recently highlighted in the O'Kane Review of Water Science and Research, noting that many researchers lament that the knowledge brokering and collaboration role of the NWC has been lost. The importance of an NWC was also recognised by the Australian Government's unfulfilled commitment to re-establish an NWC. Despite this, recent reviews have not resulted in its re-establishment, and lack of transparent and independent governance remains a barrier to progress. Water reform, as well as monitoring and reporting of water resources, has suffered from fragmentation across authorities and jurisdictions.

A renewed NWC would provide a nationally recognised governance structure for progressing water reform and would be a conduit for ensuring decision making is informed by climate science and water science. Establishment of an NWC is critical to the success of implementation of a new National Water Agreement (NWA) and renewed national Water Act and would drive the implementation of findings of numerous water reviews in recent years. The O'Kane review also recommended that the Commonwealth Government establish a Chief or Principal Water Research Scientist or Adviser, supported by a strong user-stakeholder Panel, charged with preparing and maintaining a national water research strategy and a regularly updated set of research priorities aligned to policy and program needs. This would support policy to take account of science and research. This role could be integrated within a new National Water Commission to support its cross-jurisdictional authority.

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Recommendation 1: Re-establish and evolve the National Water Commission.

Developing frameworks to balance stakeholder interests

The inherent challenge in water reform is competing stakeholder demands for water and how these are balanced. ATSE's previous submission to the 2024 National Water Reform consultation advocated an environment, social and governance (ESG) framework as the foundation of the National Water Initiative (NWI). This would modernise the NWI in line with best practices in contemporary corporate governance. An ESG framework would account for the different interests in water including municipal, industrial, agricultural, and cultural. This would also support considerations around fair pricing of water for a system that can meet the water needs of all stakeholders.

As highlighted in the Productivity Commission's consultation paper, there are concerns around equity of water access and standards in regional and remote communities, and Aboriginal and Torres Strait Islander communities. An ESG framework would provide a mechanism to interrogate these issues and balance these requirements with other water demands, including emerging needs such as increased industrial water usage for data centres as outlined later in this submission.

Additionally, there is a persistent gap in the linking of water and land planning and management. This requires leadership and authority that could be provided through a governance structure such as a NWC and complimented by an ESG Framework. An integrated land and water management approach would provide for future-proof adaptive resilient sustainable cities, regions and communities in support of economic productivity. Such a framework could align with state-level initiatives such as the South Australian proposal to integrate gas and water planning under a single state government entity. However, while details are yet to be clarified, the suggested de-corporatisation of the current SA Water Corporation would appear to conflict with the previously accepted 1994 Water Reform agreement, which requires government-owned water utilities to have a commercial focus achieved through corporatisation.

Recommendation 2: Integrate an Environment | Social | Governance (ESG) framework into National Water Reform.

Recommendation 3: Apply the ESG framework for interjurisdictional integration of land and water management for sustainable and economic outcomes.

Underpinning decision-making with science and data

Effective water governance is inseparable from the integrity and transparency of the scientific and data processes that underpin it. Australia's experience with the Murray-Darling Basin over the past two decades offers both cautionary lessons and a path forward. The 2019 South Australian Royal Commission into the Murray-Darling Basin highlighted adverse outcomes when modelling assumptions are not disclosed, when researchers cannot access and verify partner agencies' methods, and when governance arrangements create structural disincentives to open scientific exchange. While the Royal Commission's findings regarding CSIRO's research quality were overwhelmingly positive, the report contended that even high-quality science cannot function as intended when institutional arrangements restrict access to the information needed to make independent assessments credible and comparable. The report also highlighted interference with CSIRO's research as a further failure of science-based Basin policy.

To ensure scientific advice can maintain its integrity, and public trust in water governance can be sustained, we propose that the National Water Initiative embeds the requirement that modelling assumptions, methodologies and datasets used in regulatory and planning decisions be openly accessible to all parties, including researchers, communities, industry, regulators and governments.

ATSE also highlights the need for sufficient funding for water research and development to support these capabilities. The erosion of expertise, including through dismantling structures such as the NWC, places water reform at risk. Uplifting research funding, including for water research, will enable better decision-making for evidence-based water management into the future.

Recommendation 4: Require modelling assumptions, methodologies and datasets used in regulatory and planning decisions be made publicly available.

Integrating urban water reform

As a heavily urbanised nation, urban water reform is central to the broader National Water Reform project. Australia depends on well-functioning urban water systems to support economic productivity, household affordability, housing growth and community resilience. Population growth, infrastructure builds and the impacts of climate change in the coming years will intensify pressures on drinking water supply and stormwater and wastewater systems. This creates a clear basis for treating urban water reform not as a subsidiary planning issue, but as a core national economic and service-system reform question.

Integrated urban water management is a practical reform model for Australian cities and regional towns: coordinating water supply, wastewater, stormwater, flood management and urban cooling across multiple scales to deliver lower long-term run costs and better city-shaping outcomes. Emerging water-intensive industries (such as data centres), if located in cities, further complicate urban water planning while they present opportunities for managing wastewater as a resource in regional towns. This and other initiatives in coupling regional urban and surrounding water intensive or water-sensitive enterprises direct attention to affordability, proactive asset management, contaminants, circularity, net zero and regional equity.

The findings from the 2024 inquiry, as highlighted in the consultation paper, identify urban water management as priorities particularly for Victoria and Queensland. The 2024 inquiry also found issues around drinking water quality data and safe drinking water supplies for regional and remote areas which have not improved. As discussed in ATSE's 2024 report on Closing the Water Gap, limitations of short-term funding cycles and governance have led to poor water quality in sanitation in Aboriginal and Torres Strait Islander communities in particular persisting over decades, and there is a need for fit-for-context water treatment technologies for these communities.

ATSE suggests that urban water planning is central to the current review process and implementation of the new NWA and renewed NWI, with updated national principles that embed integrated planning of water supply, wastewater, stormwater, flood management and urban greening, with explicit alignment to land-use and infrastructure planning. The review has an opportunity to update national water reform settings so they better reflect the realities of contemporary urban and regional service delivery, rather than relying on a framework designed for an earlier era.

Recommendation 5: Strengthen the focus on urban water management as part of National Water Reform.

Planning for the water needs of emerging industries

Since the previous review of National Water Reform in 2024, the rapid growth of generative artificial intelligence and the data centre industry have raised new concerns about water demand for cooling. There is a need to balance this new need for water alongside existing competing needs and increasing water scarcity due to the impacts of climate change. This could become both an urban and a regional water management issue depending on where data centres are placed.

Data centres are of increasing interest to state and federal governments for the potential economic opportunities as well as the benefits of onshore data storage. The NSW Parliament's 2026 inquiry into data centres – to which ATSE provided a submission – is an example of governments considering how to leverage this industry. Australia is a sought-after location for data centres, and there are considerable benefits to hosting this industry including lower response latencies and the privacy and security advantages of having Australian data stored onshore. Planning for and managing the impacts on water supply for data centres is a new challenge intersecting with the National Water Reform work. A nexus approach would best highlight the trade-offs between water and power consumption in the context of data centres. ATSE's submission to the NSW inquiry highlights considerations for the planning stages, including guidelines for consumption, efficiency and recycling. Failing to plan for water consumption (and water disposal) for data centres could result in this industry being a net economic and environmental loss due to the additional costs imposed on municipal water systems.

At the National Water Reform level, data centres may create the opportunity for regional towns to adopt a circular economy approach to water management, especially in relation to wastewater management and discharge to inland waterways. Many regional towns do not have the critical mass of enterprises to support water recycling and associated well-functioning circular economy. There is a need for water pricing to consider how the water needs of data centres can be appropriately charged (and shared) to mitigate this problem. An NWC could provide the leadership, coordination and oversight to do this.

Alternatively, an outcome of the Productivity Commission's work could be to recommend that as part of the new NWA and evolved NWI, state and territory governments work with data centre developers to assess

lifecycle water requirements of emerging water-intensive industries and plan for the strategic locations of data centres to provide their own water sources (e.g. through desalinated water or recycled water), be integrated into regional or local circular economy operational systems or otherwise minimise impacts and costs on the water and energy grids.

Recommendation 6: Work with data centre developers to minimise adverse impacts and costs on municipal water systems and enable an equitable pricing framework.

Recommendation 7: Require lifecycle water analysis to underpin the strategic locations of data centres across the nation, coordinated by a renewed National Water Commission, and founded on an ESG framework.

ATSE thanks the Productivity Commission for the opportunity to respond to the initial call for submissions for National Water Reform 2026. For further information, please contact academypolicyteam@atse.org.au.

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