

National Water Reform 2024

Interim report

Overview



The Productivity Commission acknowledges the Traditional Owners of Country throughout Australia and their continuing connection to land, waters and community. We pay our respects to their Cultures, Country and Elders past and present.

The Productivity Commission

The Productivity Commission is the Australian Government's independent research and advisory body on a range of economic, social and environmental issues affecting the welfare of Australians. Its role, expressed most simply, is to help governments make better policies, in the long term interest of the Australian community.

The Commission's independence is underpinned by an Act of Parliament. Its processes and outputs are open to public scrutiny and are driven by concern for the wellbeing of the community as a whole.

Further information on the Productivity Commission can be obtained from the Commission's website (www.pc.gov.au).

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Opportunity for comment

The Commission thanks all participants for their contribution to the inquiry and now seeks additional input for the final.

You are invited to examine this interim report and comment on it by making a written submission by Wednesday 24 April 2024. Further inform on how to provide a submission is included on the inquiry website National Water Reform 2024.

The Commission will prepare the final report after further submissions have been received and it will hold further discussions with participants.

Commissioners

For the purposes of this inquiry and draft report, in accordance with section 40 of the *Productivity Commission Act 1998* the powers of the Productivity Commission have been exercised by:

Joanne Chong Commissioner

Anne Poelina Associate Commissioner

Disclosure of interests

The *Productivity Commission Act 1998* specifies that where Commissioners have or acquire interests, pecuniary or otherwise, that could conflict with the proper performance of their functions they must disclose those interests.

Anne Poelina has the following disclosable interests:

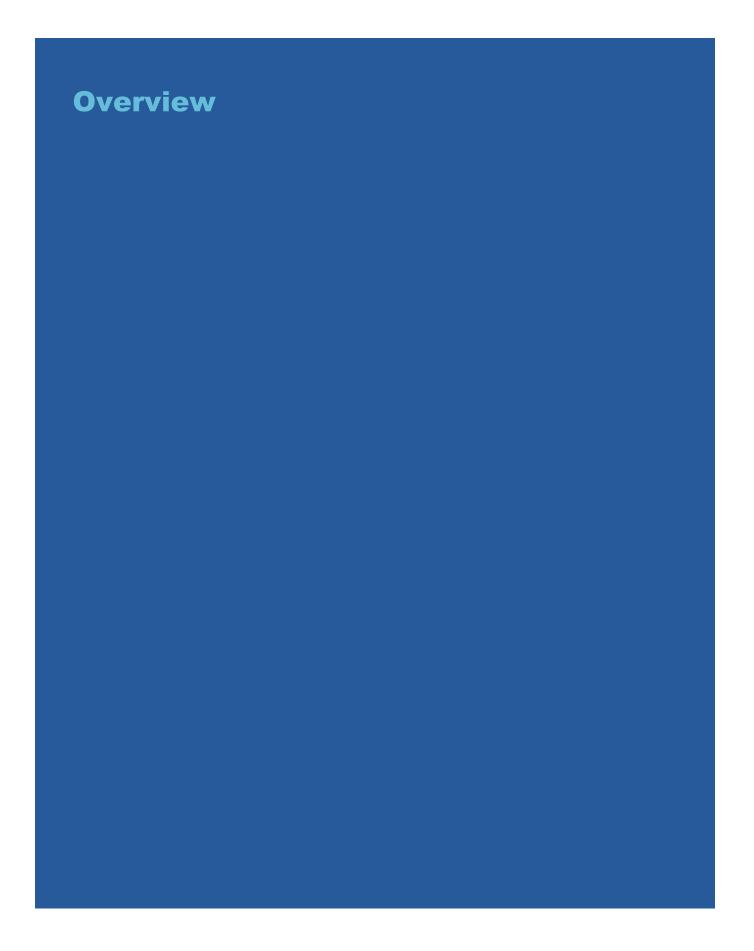
- · Chair, Martuwarra Fitzroy River Council
- Member, Murray-Darling Basin Authority's independent Advisory Committee on Social, Economic and Environmental Sciences
- Member, Interim First Nations Water Working Group

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Key points

- The 2004 National Water Initiative (NWI) has served Australia well as a foundation for water management.

 But a renewed and updated NWI will help governments navigate growing water security challenges:
 - Climate change is making rainfall as a water source increasingly less reliable.
 - · Demand for water is growing and changing.
- Planning for water security should be a greater focus of a renewed NWI, in the face of an increasingly variable and changing climate.
 - Jurisdictions need to plan for threats to water quality and availability from an increased risk of flooding, storms, bushfires and sea level rise, as well as drought.
 - Governments also need to collectively model and plan for the water demands of the transition to net zero emissions.
 - All options need to be on the table and transparently assessed, to ensure water security is achieved at least cost to the Australian community and to sustain the underlying health of water systems.
- A renewed NWI should improve and expand on the existing agreement while retaining its foundations.
 - A recommitment to the core principles of the NWI will provide a consistent authorising environment for jurisdictions to implement and continue to improve on best-practice.
 - The current advice for renewing the NWI is consistent with advice provided in the Productivity Commission's 2021 National Water Reform Inquiry report.
 - A renewed NWI requires modernised and additional objectives that reflect community expectations for effective, efficient and equitable delivery of water services.
- A renewed NWI should include both an objective and a new element, recognising First Nations people's reverence and cultural responsibility for water and the continued involvement and participation of First Nations people in water management.
 - The Committee on Aboriginal and Torres Strait Islander Water Interests should continue to lead the development of this new content in a renewed agreement.
 - · Governments should ensure alignment with their commitments under the National Agreement on Closing the Gap.
- Many of the discrete actions under the NWI are complete, and most jurisdictions continue to make progress implementing their remaining and ongoing 2004 NWI commitments. However, gaps remain.
 - Western Australia and the Northern Territory have not implemented statutory perpetual water rights.
 - Fully independent economic regulation of water utilities has not been adopted by all states and territories. In Western Australia, Queensland and Northern Territory, independent economic regulators do not have the power to set prices.
 - Although jurisdictions have developed various action plans and strategies to include First Nations people in water planning and decision-making processes, actual outcomes still need to be achieved.

About the interim report

This inquiry responds to the Australian Government's request for the Productivity Commission to undertake its third triennial assessment of jurisdictions' progress towards achieving the objectives and outcomes of the 2004 *National Water Initiative* (NWI).

The Commission was asked to make recommendations:

- · on actions that the parties to the NWI might take to better achieve the objectives and outcomes of the NWI
- to support all Australian governments in efforts to progress national water reform in light of current priorities, including water security and the involvement of First Nations communities in water management
- on how the Australian Government can better utilise the Act as a framework for guiding national water reform policy.

Given the short amount of time that the Commission has been given to complete this inquiry (5 months), only items 1 and 2 are covered in this interim report, which contains a high-level overview of our key findings to date.

This interim document is structured as follows: it starts with a brief motivation for and description of the NWI. Then it discusses the case for reform of what is now a 20-year-old agreement, highlighting climate change and population growth. The subsequent sections of the overview, and chapter 1 of the report, outline how the NWI can be improved based on renewal advice the Commission provided in 2021, updated with interim 2024 findings and recommendations.

Improvements to the NWI should include a broader focus on First Nations people's water interests, as well as improvements to water security by taking a long term, integrated approach to water planning and service delivery. The overview covers these topics, and they are discussed in more detail in chapters 2 and 3.

The rest of the report summarises the Commission's interim assessment of progress of jurisdictions against the objectives and outcomes of the 2004 NWI and makes recommendations for how parties might better achieve those objectives.

Conduct of the inquiry

This inquiry commenced on 22 December 2023. The Commission sought information from the Australian, state, and territory governments, and put out a call for submissions on 5 January 2024. The Commission received 55 submissions, 4 brief comments and held 25 formal consultation meetings (9 with jurisdictional water agencies, 16 with other participants including water regulators, water sector peak bodies, academics and First Nations people and organisations). The Commission also met twice with a stakeholder working group, established as required under the *Water Act 2007* (Cth).

The Commission thanks the state and territory governments, and the Australian Government, for their cooperation so far, and extends that thanks to all participants for their contributions to the inquiry to date.

The engagement process to inform this interim report has been constrained by the time available; the Commission seeks further engagement with participants in the coming weeks to continue this process.

The National Water Initiative

Water is essential to the wellbeing of Australian communities, the environment and the economy. It is in the interests of all Australians that water is managed productively, efficiently and sustainably.

The NWI laid strong foundations for water management

Recognising this, and with the challenges of ever-increasing demands on water resources, in 2004, the Council of Australian Governments (COAG) agreed to the NWI¹, in part to build on the principles articulated in COAG's 1994 Water Reform Framework.

The NWI established reform objectives and outcomes with the overall aim of supporting a nationally compatible, market, regulatory and planning based system of managing water resources that optimises economic, social and environmental outcomes. The Parties agreed to implement the NWI in recognition of:

the continuing national imperative to increase the productivity and efficiency of Australia's water use, the need to service rural and urban communities, and to ensure the health of river and groundwater systems by establishing clear pathways to return all systems to environmentally sustainable levels of extraction.²

As the Commission wrote in 2021, most jurisdictions have largely achieved their 2004 NWI commitments. And because of this, national water reforms to improve water resource management and water services delivery, have resulted in material benefits to the Australian people and to the environment (PC 2021b, pp. 1–4).

That said, areas for improvement remain. Our interim assessment is that several key problems identified by the Commission in 2021 remain unaddressed, reflecting that until recently the national water reform process had stalled.

There are compelling reasons to update the NWI now

The 2004 NWI has served Australian water users and water management well. While the NWI's fundamental principles remain sound, the agreement is two decades old and there is a need to modernise it to reflect the contemporary context and its challenges.

Supply (rainfall) is less reliable ...

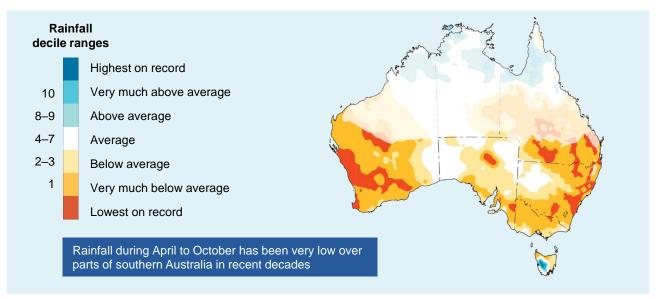
Most of southern Australia has seen a decline in rainfall in the last two decades compared with the long-term trend between 1900 and 2000 (figure 1). Combined with that, the prevalence of extreme weather events – short, and intense, but variable rainfall events, bushfires, drought and heat events – has increased. These trends are driven by climate change and are forecast to accelerate further as the climate continues to warm (BOM 2022b). A warming climate and falling rainfall will impact the availability of water.

¹ Tasmania and Western Australia did not become signatories to the NWI until 2005 and 2006, respectively.

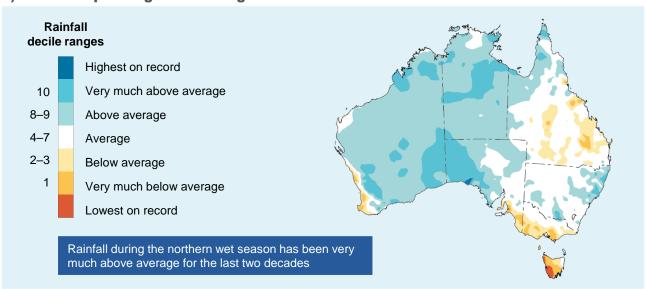
² NWI paragraph 5.

Figure 1 – Australia's long term rainfall pattern is changing

a) April-October long-term^a change



b) October-April long-terma change



a. Rainfall deciles in the period 2000–2022, compared to the long-term average rainfall records for Australia for the period 1900–2000.

Source: (BOM 2022b).

... and demand for water is growing and changing

Australia's population is continuing to grow rapidly (figure 2), particularly in major urban centres, increasing the pressure on water service systems and management.

Furthermore, there is increasing recognition of broader community needs and expectations with regards to water. High quality, secure, and integrated water services are essential to functioning communities.

With all governments signing onto the *National Agreement on Closing the Gap*, including its commitments to priority reforms and explicit water-related targets, the shortcomings in the original NWI are stark, including the lack of recognition of First Nations people's water interests.

Our understanding of water science has improved, and so has our understanding of what best practice water management across Australia should look like.

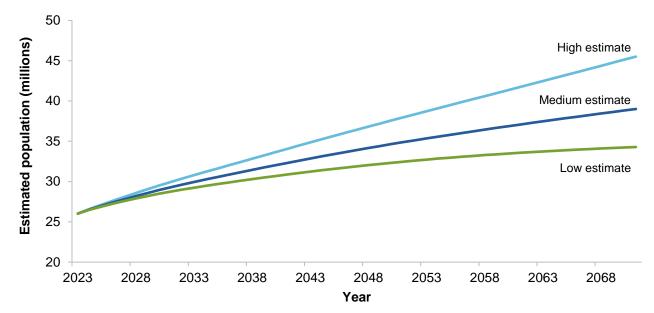


Figure 2 - Projected population growth in Australia, 2022-2071

Source: (ABS 2022).

How should the NWI be renewed?

The Australian, state and territory governments are negotiating a renewed NWI. Chapter 1 of this report discusses this process, including the Commission's views on how a renewed NWI is needed to reinvigorate water reform that benefits the broader Australian community, and to avoid undoing decades of progress in water management. These views are summarised below.

Cooperation benefits everyone

A renewed commitment to water reform, in the form of a renewed NWI should, like the 2004 agreement did, benefit the wider Australian community.

As the Murray-Darling Basin Authority explained:

... the NWI gives all stakeholders a common language to talk about water reform. A key part of a refresh is to ensure that key concepts that underpin water management and planning are contemporary, clear, and readily applicable to the current and future needs of water management. (sub. 36, p. 2)

In 2021, the Commission comprehensively reviewed the NWI and provided detailed advice for a refreshed agreement. Overall, that advice was to build on the foundations of the NWI, rather than start again from scratch. This inquiry has confirmed the continued relevance of that advice, and extended it in some areas.

A renewed commitment to cross-jurisdictional cooperation will increase certainty and help to ensure that the evolution towards sustainable and equitable management of water that the NWI encouraged continues on a national scale. It will promote best practice to be developed and shared, reduce duplication and improve efficiencies and outcomes.

The fundamentals should be retained

The Commission has heard that jurisdictions broadly agree that the new agreement should include new priorities focusing on climate change and First Nations interests, and that there have been constructive cross-jurisdictional discussions about these areas.

However, the Commission has also heard some jurisdictions do not wish to retain some of the core NWI commitments in the new agreement, or wish to retain flexibility to 'select' which principles or objectives they agree to. This is typically because existing, often long-standing policy settings are at odds with these commitments.

There is a resultant risk that, for consensus to be reached between the parties, the new agreement may represent a weaker commitment to some of the fundamentals of water policy than the NWI. This could have negative implications for longer-term water security because an erosion of the authorising environment for implementation could lead to backsliding – a future risk even for those jurisdictions who have already progressed further in meeting their commitments against the NWI.

A comprehensive new agreement would improve and expand on the 2004 NWI

A summary of the Commission's recommendations for a renewed and refreshed NWI follows, with our complete renewal advice at the end of this overview. The 2021 report provides more detail.

Modernised objectives and agreement structure

The NWI is based on 10 objectives, and underneath the objectives, are eight elements that detail actions and commitments for parties to the agreement to implement.

The Commission recommends retaining this broad structure, but with an updated goal and overarching objectives of the agreement to reflect the modern context (renewal advice 3.1 and 3.2).

The current NWI objectives are focussed primarily on water resource management. While this remains important, water service provision is largely overlooked and needs to be prioritised.

The Commission proposes a revised framework of objectives for a renewed and refreshed agreement that elevates water service provision – the outcome of good management – that is 'effective, equitable and efficient'. Within this context, the Commission recommends new objectives for the renewed agreement that cover water quality, supply management, infrastructure, and community expectations (renewal advice 3.3).

Figure 3 illustrates the Commission's proposed renewed NWI structure and objectives.

Figure 3 – A renewed NWI needs to build on the 2004 agreement

The Productivity Commission's proposal for a renewed National Water Initiative

Modernise the goal

by referencing climate change and First Nations

Modernise overarching objective

to reflect both water resource management and water service provision. Refer to cultural outcomes to reflect aspirations of First Nations people.

Revise and add additional **detailed objectives** and group by theme:

Resource management		
New		
Influence for First Nations people Acc	Access	
Major enhancements		
Integrity of water management Integrate plann		
Retain and tweak	Efficie refle	
ransparent statutory-based planning Cos	st-ref	
	Ecolo viable and	
ciency through trading between uses		
opriate responses to adjustment issues	st-pr	

Service provision		
New		
Access to safe and reliable drinking water		
Integrated water supply, wastewater and stormwater planning and management in cities and towns		
Efficient service level, quality and cost, reflective of customer preferences		
Cost-reflective pricing (wherever possible)		
Ecologically sustainable, economically viable and culturally responsive infrastructure		
Best-practice governance and regulation		

Categorise elements (the reform areas composed of agreed outcomes and commitment to specific actions) by theme, adding 2 new elements, while enhancing the original 8 elements.

Resource management		
New		
First Nations' interests		
Major enhancements	Retain and tweak	
Environmental management	Water markets and trading	
System integrity		
Planning frameworks	and entitlements	

Service provision		
New		
Infrastructure development		
Major enhancements		
Urban water services		
Retain and tweak		
Pricing and institutional arrangements		

Supporting arrangements

Community engagement and adjustment

Knowledge and capacity building

Source: Adapted from (PC 2021b, pp. 46, 49–50, 52–53, 55–56).

The Commission also proposed new and revised objectives to cover the shortcomings of the 2004 NWI (renewal advice 3.3).

- Processes for water planning, sharing and management that are focused on adaptation in a world characterised by uncertainty, climate change, and increasing physical scarcity of water.
- Improved recognition of First Nations people's aspirations, desire to participate and engage in water management and their cultural responsibility for rivers and groundwater systems.
- · Better integration of environmental water protections with natural resource management activities.

New and enhanced agreement elements

The objectives of the NWI describe 'what' will be achieved. The elements of the NWI outline 'how' the objectives will be achieved.

The existing NWI elements remain relevant and should be retained in substance, although they should be refreshed to reflect the contemporary context, and added to, to support the new objectives.

Figure 3 also illustrates the Commission's recommendations for new elements for a refreshed NWI, and how they relate to the proposed objectives.

Effective governance arrangements

Australians' trust in governments' commitment to sustainable and equitable water management has been tested over the past decade. Erosion of governance institutions (particularly those specific to the NWI, such as the National Water Commission, which was abolished in 2015), poor water management in the face of drought, fires and floods and de-prioritisation of water reform have all resulted from a lack of nationally coherent policy and planning, in some cases resulting in poor outcomes for Australian communities.

Strengthened governance and institutional arrangements are a necessary condition to reinvigorate reform. The Commission proposes clear and transparent arrangements for governance of a renewed NWI, including:

- Ongoing leadership by ministers through the water ministerial council.
- Rolling three-year action plans to ensure a commitment to continuous improvement and progress.
- · Independent and transparent assessment of progress.
- Clear roles and responsibilities for oversight, management and renewal of the agreement, potentially via a reinvigorated National Water Reform Committee (NWRC) process, and specific responsibilities for the Commonwealth.
- The incorporation of First Nations' interests directly into the governance of the agreement.
- · Greater coordination of joint work in areas of collective interest.

Chapter 1 of this report expands on the Commission's recommended governance arrangements for a renewed NWI. They are also illustrated in figure 4.

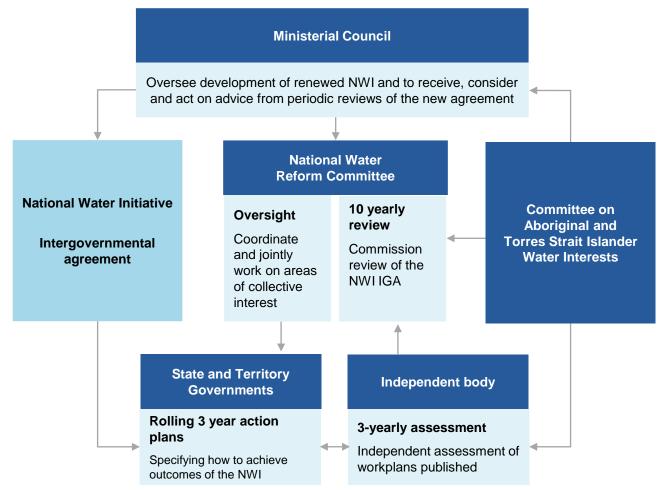


Figure 4 – Renewed NWI governance arrangements

Source: Adapted from (PC 2021b, pp. 59-66).

An enhanced commitment to First Nations' participation in water management

The NWI does not adequately recognise the water interests of First Nations people

The NWI has limited focus on the water interests of First Nations Australians. Element 1 focuses on 'access to water resources' via planning processes for water allocations for narrowly defined 'cultural purposes' only, and for incorporation of social, spiritual and customary objectives – and strategies for achieving them – in water plans, wherever they can be developed³. The NWI does not specifically address the achievement of First Nations' economic objectives through water.

The Commission's 2021 report noted the NWI's shortcomings and pointed out that even with this lack of ambition, 17 years later the NWI actions had not been met (PC 2021a, pp. 42–44). Since 2021, and despite governments signing the National Agreement on Closing the Gap in 2020 and committing to implementing its four priority reforms, including reform one – formal partnerships and shared decision-making – engagement

³ NWI paragraph 52

with First Nations peoples by governments continues to be criticised as a box ticking exercise, characterised by short notice and lack of information which makes meaningful involvement in water planning and management decision-making processes difficult. As the Dharriwaa Elders' Group stated:

Too often, the attitude is that if we can't meet their timeframes and paradigms our solutions are not considered (sub. 47, p. 3).

Engagement is steadily improving, but there is still much to do

That said, all jurisdictions are planning, or are in the process of implementing, initiatives that better identify cultural outcomes in water plans and are taking actions to deliver First Nations' social, spiritual and customary objectives. Some are more progressed than others with implementation, in partnership with First Nations people.

The Commission reiterates its 2021 renewal advice 3.1, 9.1 and 9.2 that First Nations people's interest in water should be elevated to the overarching goal of a renewed NWI and by including a dedicated objective and element.

The Commission supported the establishment of a Committee on Aboriginal and Torres Strait Islander Water Interests (CAWI) in 2020 to guide and advise government on these specific NWI renewal issues. The Commission understands that CAWI is closely involved in negotiations to renew the NWI, including drafting of a renewed objective, and has regular discussions with the Australian and jurisdictional water ministers and the NWRC. Some jurisdictions have commented that drafting of First Nations content for the new agreement has significantly progressed because of CAWI's clear focus and commitment over the past 3 years.

CAWI has published an Insights Paper (CAWI 2023a) outlining its ambition for First Nations' water interests. It continues to build its reputation and profile as a strategic and influential First Nations voice on water issues.

The Commission supports CAWI's continuing involvement in the negotiations to develop a renewed NWI and as part of the ongoing water reform governance architecture (figure 4).

First Nations' water ownership

On the issue of sourcing water for First Nations people, the Commission reiterates its 2021 renewal advice 9.3 that where agreement is reached between state and territory governments and Traditional Owners that consumptive access to water is an effective way to support the economic development of First Nations communities, access is provided by:

- sourcing water within existing water entitlement frameworks;
- ensuring adequate supporting arrangements (such as training and business development) are in place to enable First Nations communities to maximise the value of the resource for their needs and uses; and
- programs designed with First Nations communities.

The Commission recognises that in relation to reissuing this renewal advice, little progress has been made by governments to increase First Nations' water ownership despite policy commitments and (some) increased funding. The Commission also recognises that water can be a driver of economic development through holding water entitlements for consumptive purposes, or to underpin health of Country.

Chapter 2 of this report discusses these various issues in more detail, and also assesses jurisdictions' progress against the First Nations elements of the 2004 NWI.

Water security in a changing climate

Australia is the world's driest inhabited continent, and a changing climate will reduce the reliability of water supply and increase the unpredictability and frequency of extreme weather events (BOM 2022b). In light of these issues, water planners need to take proactive steps to address future water security for Australia. Chapter 3 discusses these issues, which are summarised below:

Addressing water security requires engaging with risk

There is no common definition of water security. Definitions are typically explained as broad goals e.g. referring to achieving reliable access to an adequate quantity and quality of water for a range of purposes (see for example UN Water 2013, p. 1). Whilst aspirational definitions are important to ensure ambitious directions are set, a practical, working definition of water security for planning purposes needs to articulate specific outcomes, and the risks that make achieving those outcomes difficult or costly.

To better incorporate water security within a renewed NWI, jurisdictions should agree a shared understanding or common definition of water security that sets out what achieving water security in Australia looks like (draft recommendation 3.1).

The NWI has many tools to help water planners address water security...

In a drying and heating climate characterised by increasing uncertainty, the trade-offs between different water users are becoming starker. In this situation, adhering to the fundamentals of the NWI is important to help address planning for water security. NWI consistent statutory entitlements and high-quality water allocation plans, based on up-to-date science and effective community engagement, help to ensure these trade-offs and values are clearly understood by all stakeholders (i.e. by communicating the same information, and its relevance, to all parties), and addressed when making water planning decisions. NWI consistent trading rules allow water to be moved to its highest value use. And statutory water protections for the environment and other uses can support long-term intergenerational equity rather than a focus solely on today's water needs.

but it can be further enhanced

The NWI focuses on managing the risks associated with drought and overallocation. This partly reflects that it was negotiated in 2004 in the early stages of the Millennium Drought, which severely affected the southeast and southwest of the country, urban and rural alike. It was also a period where in some jurisdictions, the first tranche of statutory water sharing plans to address overallocation were being negotiated with rural water users.

But despite the focus on drought in the NWI – which was further enhanced in 2017 in the form of a specific climate change and extreme events module – significant management shortcomings exist around the country. This is evidenced by inadequate water plans, compliance failures and incomplete water recoveries, which, during drought, put extreme pressure on landscapes and communities (PC 2021b, p. 33).

The Commission's 2021 renewal advice 3.3 and 3.4 said that water plans should include provisions to deal with water scarcity caused by drought, including priorities for water sharing and clear triggers to deal with extreme drought.

Since 2021, further challenges to water management, and water quality, as a result of a changing climate have been experienced. An increased frequency and higher unpredictability of extreme events (BOM 2022b), including flooding associated with storm weather and cyclones suggests that specific attention is warranted to address risks to water security from flooding, storms and bushfires, in addition to drought.

Jurisdictions should consider all forms of extreme weather events in implementing the Commission's renewal advice (draft recommendation 3.2).

Water for net zero

The transition to net zero carbon emissions will impact water usage across Australia. The United Nations Expert Group on Water and Climate Change presented preliminary figures to COP28 in November 2023, indicating that by 2030 clean energy mitigation measures alone are estimated to require 900 teralitres of fresh water globally per year (UN Water Expert Group on Water and Climate Change 2023, p. 1). For comparison, global freshwater consumptive demand by agriculture, industry and domestic use in 2014 was 4000 Teralitres (Global International Geosphere-Biosphere Programme 2015). However, little attention is currently being paid to this aspect of Australia's climate change response.

A range of zero-emission technologies for energy generation exist with more becoming viable as technology improves. All possible solutions have water demands, some more than others (UN Water Expert Group on Water and Climate Change 2023). These demands are likely to become significant as Australia's energy transitions to new sources. But not all climate change response or mitigation will cost water – some measures to reduce emissions will also save water (chapter 3).

Attention needs to be paid to the water planning and modelling aspect of climate change management to ensure Australia will have sufficient water to achieve its net zero transition (draft recommendation 3.3).

Transparency and openness to consider all options will underpin value for money for water users

Investing in new, climate-resilient water infrastructure is not the only driver of pressure on retail water prices. Communities across Australia will also need to invest, for example, in maintaining and upgrading ageing water infrastructure. Estimates suggest nationwide capital expenditure on water infrastructure is likely to double to over \$10 billion annually by 2027 (WSAA sub 15 p. 3).

This means that efficient investment, informed by rigorous benefit cost analysis, with transparent assessment of costs, benefits and risks under different scenarios, remains important. But where investment decisions in water infrastructure continue to be characterised by a lack of benefit cost analysis, achieving desired outcomes incurs higher than necessary costs. Government subsidies for water infrastructure projects are typically inconsistent with cost recovery principles under the NWI.

State and territory governments have developed water strategies to take a longer-term view to addressing anticipated challenges to water management, including taking an integrated approach to ensuring urban water security. This also requires coordination with broader urban planning to address land use for climate change response such as urban green and blue spaces that also require water. The development of water strategies is important to adapt to climate change and other pressures, and provides an opportunity to identify cost effective options for meeting water security objectives. However, all potential supply and demand options, scales, combinations and sequencing must be considered.

Under future climate scenarios and increased uncertainty that may mean decreased reliability of rainfall-dependent supply measures such as dams and groundwater systems, Australian governments need to consider a diversified portfolio of water supply options. However, policy bans constrain options, potentially resulting in outcomes that are not lowest cost or most efficient. Options that need to be considered, at different scales and combinations, include desalination, potable recycled water, managed aquifer recharge, scarcity pricing, water conservation and rural-urban trade.

The 2024 NWI assessment of progress

A summary of the Commission's assessment of progress by jurisdictions against the objectives, elements and actions of the 2004 NWI follows. A more detailed assessment is contained in the chapters of this report (chapters 2, 4-11, and appendix B contains the assessment framework).

Summary of interim assessment

Jurisdictions are making progress in some areas

Aspects of the NWI against which jurisdictions continue to make gains, improving their practices and better conforming to the objectives of the NWI include:

- Water planning processes and instruments are continuing to be developed and revised. Most jurisdictions
 are incorporating more sophisticated knowledge and are including or developing climate change
 projections into their processes. New South Wales, Victoria and Tasmania are most advanced in this area,
 but work is underway in most other jurisdictions to improve and incorporate climate modelling. Water plans
 in general include more detailed and measurable environmental and public benefit outcomes.
- Engagement of First Nations people in the water planning process is increasing, although the quality of that engagement is variable.
- Data, accounting, monitoring and reporting of water is becoming increasingly more sophisticated and user-friendly (e.g., automated reporting via telemetry), with many new tools, dashboards and reports released that can assist water users users and consumers to make more efficient decisions.
- Some progress has been made in water security planning for a future with more risks to supply. For
 example, some jurisdictions such as New South Wales and Victoria have created comprehensive water
 security plans for regions, guided by detailed climate and demand modelling.
- There has been significant improvement in compliance and enforcement activities, with most jurisdictions now closely aligned with the *National Compliance Framework*.

But key problems identified by the Commission in 2021 remain unaddressed

Some jurisdictions continue to not meet some – often fundamental – objectives of the NWI:

- Statutory, long term, water entitlements in Western Australia and the Northern Territory have not been legislated for. This increases transaction costs, reduces confidence and increases investment risk, threatens environmental outcomes and risks political interference in decision making.
- Victoria does not have a clear, legislatively defined risk assignment framework to guide potential future
 reductions in the availability of water for consumptive use. This negatively affects investor confidence and
 risks inequitable outcomes if the cost of reallocation due to climate change is borne by taxpayers, and not
 water users.
- Queensland continues to allow exemptions from water entitlements for mining and petroleum industries, threatening environmental outcomes and distorting the water market.
- Some jurisdictions have not implemented independent economic regulation of water utilities or full cost recovery practices. In Western Australia, Queensland and Northern Territory, independent economic regulators do not have the power to set prices. Opaque cross subsidies exist where beneficiaries of water use do not bear the costs. Where price signals do not reflect full costs, investment decisions may be distorted towards higher water consumption than would be efficient or ecologically sustainable.
- Access to quality water supplies, in a manner consistent with the *Australian Drinking Water Guidelines* (ADWG) remains problematic in some remote communities both during and outside of drought conditions, particularly as a result of colour and palatability of the water supplied. The ADWG highlights how the

- provision of unpalatable drinking water risks public health outcomes where consumers seek alternative sources, that may not be as safe (NHMRC 2011, p. 104).
- There remains limited coordination of, or investment in, knowledge and capacity building activities to support water planning decisions.
- Monitoring and evaluation of community assistance programs is still lacking. Without this, the
 effectiveness of assistance programs to address social impacts, for example, agricultural areas in which
 voluntary water purchase programs might occur, is difficult to assess for both policy makers and those
 likely to be affected by those policies.

And in other areas there remains more to be done

- First Nations people are under-represented, and not meaningfully engaged by governments, in water
 planning and management decision-making processes. Governments are not meeting their commitments
 made under the *National Agreement on Closing the Gap*. First Nations' access to water, including
 ownership, remains low according to available data.
 - With respect to meaningful engagement, the Commission heard that government agencies are often well intentioned in making their many requests to engage with First Nations groups and people, but often do not coordinate their activities. This can cause duplication and consultation fatigue amongst First Nations people and groups.
- There is limited and inconsistent reporting, monitoring and transparent accounting for environmental water outcomes in most jurisdictions. Where it does occur, reporting often focuses on the amount of water delivered, rather than the environmental outcomes that were sought or achieved (e.g., a wetland inundated to facilitate a bird or fish breeding event).
- Progress in rolling out AS4747 compliant non-urban water metering, which when complete, would facilitate
 accurate measurement of water supply and demand a fundamental requirement of good water
 management is many years behind schedule. Governments' lack of practical implementation planning
 for this meter rollout is eroding trust by water users in water regulators and in other metered users.

Draft recommendations, findings and information requests

Draft recommendations and findings

Water security in a changing climate



Draft recommendation 3.1 Incorporate a shared understanding of water security priorities in the renewed NWI

Parties should develop a shared understanding or common definition of water security that includes setting out what outcomes are to be achieved, recognising the risks to water security will differ between jurisdictions and within jurisdictions – which will be a matter for each party to transparently assess and communicate.



Draft recommendation 3.2 Consider all extreme climate events in water planning

Over the past decade, climate change has been associated with an increase in extreme weather events, which disrupt and damage water supply and infrastructure. Where the NWI Climate Change and Extreme Events Module focused on the risks from drought, greater focus should also be given to other events, such as flooding, storm, and bushfires.

In implementing the Commission's renewal advice 6.2 regarding water planning for climate change (including that historical climate outcomes may not be indicative of future outcomes), governments should adopt the principles set out in the National Water Reform report 2021, focusing on this broader range of events.



Draft recommendation 3.3 Water for net zero

All Australian governments should collectively model and plan for changed water demand as a result of necessary climate change mitigation measures. All solutions will have water demands that need to be estimated and planned for.

Findings should be integrated into both net zero strategies and sustainable water strategies to ensure sufficient water is available to enable Australia's transition to net zero emissions.

Water markets and trading



Draft finding 5.1

Trade registers are improving, but there is still significant potential for further improvement to provide necessary information to market participants

Most state and territory governments have implemented water registers that comply with the NWI outcomes and actions.

Further improvements, such as ensuring that water registers include current entitlement and allocation information, real time (or recent) trade data, and that registers are freely accessible by the public, and ideally, easy to search, would increase the efficacy of registers in supporting trade in water entitlements.

Best practice water pricing and institutional arrangements



Draft finding 6.1

Some governments have moved away from NWI commitments to deliver cost reflective and consumption-based pricing

Some jurisdictions have maintained or strengthened pricing regulation to focus on the long-term interests of end users, such as the Victorian Essential Services Commission's application of the PREMO water pricing framework (performance, risk, engagement, management, outcomes) and the New South Wales Independent Pricing and Regulatory Tribunal adopting a 3C's approach (customers, costs, credibility).

In some other jurisdictions, NWI pricing arrangements have been significantly eroded or remain well short of best practice. Jurisdictions that lacked independent economic regulation in 2021 have not taken steps to improve water pricing regulation. Further, a number of jurisdictions have weakened independent regulation through:

- applying discounts or price caps to independently determined consumption-based prices.
- issuing ministerial directions that affect the decision making processes of independent regulators.
- not using water price monitoring or review powers to determine if greater price regulation is needed.



Draft finding 6.2

Some government decision making for major water infrastructure is not fully compliant with the NWI

The NWI requires governments to be satisfied that infrastructure investments are economically viable and ecologically sustainable. To be consistent with these principles, investments should be rigorously assessed, comparing all options available to meet identified needs. Ideally, this would also involve a transparent, independent assessment of proposals.

This is currently not being achieved by all parties to the NWI, and the commitment to these principles appears to be waning:

- A significant proportion of major infrastructure developments funded by governments since 2021 have not been subjected to a transparent assessment of the costs and benefits of the proposal, or to independent scrutiny.
- Further, a number of successfully funded investment projects including those funded under the Australian Government's National Water Grid program were funded even where the assessed costs of the project outweighed the measured benefits to the community.

Integrated management of water for environmental and other public benefit outcomes



Draft finding 7.1

Environmental and other public benefit outcomes are inconsistently specified

There remain inconsistencies between jurisdictions about how environmental outcomes are defined in water plans, their level of detail and indicators.

Other public benefit outcomes continue to be undefined or defined only at a high level. While the achievement of environmental outcomes can also contribute to other public benefit outcomes, such as recreational opportunities, amenity benefits and public health, the Commission has found no clear long-term performance indicators specified linking these outcomes.



Draft finding 7.2

Reporting on environmental outcomes is overall inadequate, particularly for planned environmental water

Jurisdictions generally report on how much environmental water was delivered, and there is reasonable reporting of outcomes by some environmental water holders. However, there is very little reporting on:

- · what both held and planned environmental water achieved in terms of outcomes
- the counterfactual that is, what would have happened if the water hadn't been delivered, and,
- whether the environmental water allocations are sufficient to achieve environmental outcomes specified in water plans.

In many jurisdictions it remains unclear how reporting arrangements for environmental water subsequently feed back into their water planning process and support adaptive management.



Draft finding 7.3

Independent review of environmental outcomes is absent in many jurisdictions

There is no consistent basis for independent audit of whether environmental and public benefit outcomes from environmental water have been achieved, the adequacy of water provision for these objectives, or the performance of environmental water managers. While most jurisdictions have built-in reviews of their water management plans, these are not always undertaken in a timely manner or by an independent body.

Water resource accounting



Draft finding 8.1

Jurisdictions are not projected to meet their AS4747 metering installation commitments

No states or territories are on track to meet their commitment to have all new and replacement meters AS4747 compliant by July 2025. This undermines the ability of states to conduct proper measurement of watering limits and increases the risk of unreported water use and overextraction.

The private benefits for water users to upgrade their water meters to AS4747 standard are low and therefore not a sufficient incentive to upgrade.



Draft recommendation 8.2 Improving the rollout of AS4747 meters

To better allow water users and the public to benefit from the improved AS4747 standard, jurisdictions should take steps to accelerate their rollouts.

Jurisdictions should:

- Report annually on non-urban water users' compliance with the AS4747 metering standards.
- Actively engage with non-urban water users to improve understanding of their metering compliance requirements.
- Set a higher bar when approving interim standard or grandfathered water meters.
 - For both interim and grandfathered meters, water users should be required to actively prove their meter is accurate to within +-5% of AS4747 meters as is the requirement in Victoria, New South Wales and the Australian Capital Territory.

Urban water reform



Draft finding 9.1

Some regional and remote areas still do not have access to safe drinking water supply

There continues to be drinking water quality issues in some remote areas of Australia caused by exceedances in the chemical health standards outlined in the ADWG. In addition, exceedances of aesthetic parameters such as colour, palatability have led to acceptability issues. This is leading to a loss of confidence in the water supply amongst the community in these areas.



Draft finding 9.2

There continues to be a lack of consistency and transparency in relation to the publication of drinking water quality data

The detail, consistency and availability of drinking water quality reports continues to vary for regional and remote areas.

There have been improvements to the publication of data across all ADWG standards for the regions and communities serviced by Power and Water Corporation in the Northern Territory. Also, from July 2024 service providers with under 10,000 connections will now report on the water quality risk management guidelines used as part of the National Performance Report.

Further development is required to centralise the reporting of drinking water quality indicators, such as percentage of the population where microbiological compliance was achieved, percentage of the population where chemical compliance is met and the number of boil water alerts issued.

Information requests

First Nations' Water Interests



Information request 2.1

What are the policy, administrative or other barriers to First Nations Peoples being able to access and own water, particularly from Strategic Aboriginal Water Reserves in Queensland, Western Australia and the Northern Territory?

Water security in a changing climate



Information request 3.1

What nationally agreed priority outcomes of water security should form part of a renewed NWI? How should these outcomes be treated when considering trade-offs between competing priorities and the management of risk when addressing water security concerns?

Water entitlements and planning



Information request 4.1

How can a renewed NWI assist jurisdictions in establishing a consistent approach to developing climate change triggers and rebalancing processes? How can common principles help manage uncertainty, and jurisdictional and regional differences?

Integrated management of water for environmental and other public benefit outcomes



Information request 7.1

Where water resources have been identified as overallocated outside of the Murray-Darling Basin and options identified to recover water to meet environmental outcomes, the Commission invites further information on:

- · the estimated cost of the options considered
- · reasoning behind the selection of the options implemented if not the most cost-effective
- any programs or measures implemented to mitigate any identified socio-economic impacts with the selected options

Water resource accounting



Information request 8.1

What are the main causes of the low uptake of AS4747 meters by non-urban water users for new and replacement meters, and what targeted interventions would be most cost-effective in addressing this low uptake?

What are the public benefits of metering?

The Commission has heard that there is a shortage of Certified Meter Installers and Duly Qualified Persons. What is causing the shortage, and how can it be overcome?

Community partnerships and adjustment



Information request 11.1

In the past three years, what, if any, improvements have been made by governments to improve community engagement processes?

Where engagement has occurred or feedback provided by community groups, do those groups feel they have a greater understanding of how decisions were taken and what consideration was given to community views?

NWI renewal advice

This section contains the Commission's advice on what should be included in a renewed NWI. It is divided into the Commission's recommended elements of a renewed NWI (figure 3).

Most of this advice is drawn directly from the National Water Reform report 2021 and has not changed because, as this inquiry demonstrates, it remains relevant. The unchanged advice is indicated.

This section also includes new and revised advice from this inquiry. Where advice has been amended in this inquiry, this is indicated in red text.

NWI renewal: a refreshed intent

NWI renewal advice 3.1: A modernised goal

UPDATED IN 2024

The overarching goal of the National Water Initiative remains sound but should be modernised through reference to adaptation to climate change and recognition of the importance of water in the lives of Aboriginal and Torres Strait Islander people. Suggested wording follows:

The Parties commit to this renewed National Water Initiative in recognition of the continuing national imperative to increase the productivity and efficiency of Australia's water use, to service the changing needs of rural, urban and Aboriginal and Torres Strait Islander communities and to ensure the health of river and groundwater systems and their surrounding landscapes whilst adapting to a changing climate.

In committing to this agreement, the parties recognise Aboriginal and Torres Strait Islander people's reverence and ongoing cultural responsibility for rivers and groundwater systems and their desire to participate in all significant processes and decisions informed by this Initiative.

NWI renewal advice 3.2: Modernised overarching objectives

UPDATED IN 2024

The National Water Initiative has a strong focus on water resource management. A renewed agreement should give greater emphasis to water service provision and this should be reflected in the overarching objective. The objective should also include reference to cultural outcomes to recognise the aspirations of Aboriginal and Torres Strait Islander people, where cultural outcomes may be inclusive of economic development outcomes. Suggested wording follows.

The overarching objectives of the Parties in implementing this agreement are to:

- optimise economic, environmental, social and Aboriginal and Torres Strait Islander people's cultural
 outcomes through best practice management of Australia's water resources. In the process, this will
 provide certainty for investment, water users, the environment and Aboriginal and Torres Strait
 Islander people
- enable entitlement holders, communities and the environment to contend with climate variability and adapt to a changing climate
- ensure effective, efficient and equitable provision of water services that meet the needs of customers and communities in a changing climate.

NWI renewal advice 3.3: Modernised objectives

UNCHANGED FROM 2021

Full implementation of this agreement will result in:

A — a nationally consistent planning, market and regulatory based system of **managing surface and groundwater resources** for rural, urban and remote use that:

- · optimises economic, environmental, social and cultural outcomes
- enables entitlement holders, communities and the environment to contend with climate variability and adapt to a changing climate.

by achieving the following:

- 1. clear, nationally consistent statutory systems for secure water access entitlements
- 2. transparent, statutory based water planning that:
 - (a) is risk based, matching the level of management with the level of water extraction and complexity in a system
 - (b) includes all sources of water, recognises connectivity between surface and groundwater and takes into account water quality
 - (c) clearly identifies the agreed environmental, cultural and other public benefit outcomes to be met through the water planning process
 - (d) includes agreed processes for water sharing and management during periods of water scarcity
 - (e) includes clear pathways to an agreed and improved balance between the environment and consumptive water use in overallocated or overused systems

NWI renewal advice 3.3: Modernised objectives

UNCHANGED FROM 2021

- (f) includes clear triggers and processes for reviewing the balance between water for the environment and consumptive use, such as in response to the effects of climate change
- 3. statutory water provisions for the environment which are integrated with complementary natural resource management to achieve agreed environmental outcomes and, where this does not compromise environmental outcomes, managed to also achieve cultural and social benefits
- 4. effective and enduring pathways to enable Aboriginal and Torres Strait Islander people to strengthen their influence in water planning and natural resource management that affect Country and access to water consistent with the 2020 National Agreement on Closing the Gap
- 5. the capacity to trade water between uses to promote efficiency within the physical, ecological and social constraints of water systems in an open, transparent water market with a level of regulation that is proportional to the maturity of market development
- 6. a fit-for-purpose system of water metering, measurement and accounting, coupled with effective compliance, that promotes water user and community confidence in the integrity of water management and water markets
- 7. clarity on the assignment of risk arising from future changes in the availability of water for the consumptive pool and how future adjustment should be managed.
- **B** effective, efficient and equitable **provision of water services** that meets the needs of customers and communities in a changing climate by achieving the following:
- 1. access to safe and reliable drinking water, including in remote communities
- 2. clear objectives for the level and quality of water services which reflect customer preferences
- 3. in cities and towns:
 - (a) integrated planning and management of water supply, wastewater and stormwater services
 - (b) efficient water services that deliver outcomes, including urban amenity and liveability, in line with customer preferences and willingness to pay
- 4. cost-reflective pricing of water services (including water supply, wastewater disposal and stormwater management) wherever possible, with transparent funding support through community service obligation payments targeted at bridging the cost of providing safe and reliable drinking water and service affordability in regional and remote communities
- 5. institutional arrangements that
 - (a) ensure the separation of policy setting, service delivery and regulation with clear roles for each
 - (b) incentivise water service providers to be efficient and innovative, and to deliver services in ways that are cost-effective and in the interests of their customers
- 6. processes that ensure that water infrastructure developments and major refurbishments are ecologically sustainable, economically viable and culturally responsive.

NWI renewal advice 3.4: Overarching principles

UNCHANGED FROM 2021

In achieving the objectives outlined in previous advice, governments should agree to the following principles and seek to apply them across all key areas of water policy, planning and operations.

- 1. Capacity to contend with droughts, floods and shocks, and to adapt to a changing climate, is strong.
- 2. Regulation, governance and management are fit for purpose.
- 3. All decisions are based on the best available evidence and information.
- 4. Innovation and continuous improvement are encouraged and adaptive management is required.
- 5. Communities are engaged effectively before decisions that impact them are made.
- 6. Communities are provided with sufficient information to enable effective engagement.

NWI renewal advice 3.5: Elements of a renewed agreement

UNCHANGED FROM 2021

The goal, objectives and principles should be delivered through the following elements:

Water resource management

- 1. Water access entitlements and planning frameworks
- 2. Water markets and trading
- 3. Environmental management
- 4. Aboriginal and Torres Strait Islander people's interests in water
- 5. System integrity

Water services provision

- 6. Pricing and institutional arrangements
- 7. Urban water services
- 8. Infrastructure development

Supporting arrangements

- 9. Community engagement, and adjustment
- 10. Knowledge, capacity and capability building

NWI renewal advice 3.6: An updated statement of interactions

UNCHANGED FROM 2021

The current paragraph of the National Water Initiative covering interactions with other key initiatives needs to be brought up to date. Suggested wording follows:

Other initiatives with a significant water focus, subject to separate agreements by the Parties, include the *Water Act* 2007 (Cth), the 2012 Murray-Darling Basin Plan, the Murray-Darling Basin Agreement and the 2020 National Agreement on Closing the Gap. These play an important and complementary role in improving the management of water in Australia. Continued linkages to the National Water Quality Management Strategy will also complement achievement of the objectives of this agreement. And the agreement should be the major policy vehicle for pursuing the water-related goals endorsed as part of the United Nations 2030 Agenda for Sustainable Development.

Building in good governance for a renewed NWI

NWI renewal advice 4.1: governance arrangements for a renewed NWI

UPDATED IN 2024

A strengthened governance architecture that transparently reflects the presence of national water policy leadership and ensures confidence in reform effort, needs to be included in a renewed agreement.

To that end, the Commission advises that:

- water ministers should convene periodically to oversee development of a renewed National Water Initiative, and to receive, consider and act upon advice that comes out of any periodic review of the new agreement
- the new agreement should clearly link desired outcomes to its objectives and limit prescriptive actions, instead setting out principles for best practice, and fit-for-purpose policy approaches to achieving outcomes
- each jurisdiction should commit to preparing publicly available three-year rolling work programs action
 plans setting out how they aim to achieve the outcomes set out in the renewed agreement
- there continue to be three-yearly assessment of the adequacy of these work programs action plans, with public reporting on jurisdictional progress against them, their adequacy in implementing the outcomes of the agreement, and the effectiveness of the agreement, as per the functions the Productivity Commission currently performs under the Water Act 2007 (Cth)
- a requirement for a comprehensive review of national water policy every 10 years should be written into the agreement
- the National Water Reform Committee should provide transparent ongoing collective oversight of the agreement, initiating policy advice and guidance, if need arises, and commission the 10 yearly reviews of the agreement.
- the National Water Reform Committee should commission joint projects in each action plan cycle on areas of mutual interest, to share learnings on best practice water management, enhance efficiencies and reduce duplication of effort.

Water resource management – a fit-for-purpose framework

NWI renewal advice 5.1: Fit-for-purpose water resource management

UNCHANGED FROM 2021

Embedding the concept of fit-for-purpose water resource management in a renewed National Water Initiative would support governments in thinking about the level of effort and resources to devote to the different facets of water resource management across different water systems and across time.

Water entitlements and planning

NWI renewal advice 6.1: Managing water use under the entitlements framework

UNCHANGED FROM 2021

In renegotiating the National Water Initiative, jurisdictions should recommit to the key outcomes and actions related to water access entitlements, which have been fundamental to the integrity of water management and a necessary prerequisite for water trading and markets. This includes ensuring that entitlements are statutory-based, that they provide a perpetual or an open-ended share of the consumptive pool, and that they are separate from land.

Entitlements and access rights frameworks should be fit for purpose – acknowledging that fixed-term or other types of entitlements may be appropriate in some relatively undeveloped systems. However, as systems are being developed, fully NWI-consistent entitlements frameworks should be put in place.

To improve on the entitlements and access rights framework, jurisdictions should:

- remove the special provision for minerals and petroleum industries in water access and planning arrangements to support better incorporation of these industries into water access entitlements frameworks that apply to other consumptive users
- establish a process to determine whether alternative water sources (including stormwater and recycled water) can be incorporated into water access entitlements frameworks, and the extent to which current management arrangements for alternative water sources create barriers to investment
- adopt a risk-based approach to managing significant interception activities under water access
 entitlements frameworks with the expectation that these activities would be fully incorporated into
 entitlements frameworks in at least all fully and overallocated systems. In developing systems, a
 risk-based approach would include fit-for-purpose measurement and accounting of interception
 activities, and monitoring of the ongoing efficacy of the use of interim measures.

NWI renewal advice 6.2: Water planning

UPDATED IN 2024

In renegotiating the National Water Initiative (NWI), State and Territory Governments should ensure that water planning provisions are maintained and enhanced.

Priorities to improve water planning are to:

- · better specify measurable and well-informed cultural and environmental outcomes
- and-improve engagement with Traditional Owners and communities, including for governments to
 meet their commitments to priority reforms under the National Agreement on Closing the Gap and to
 develop partnerships for shared decision-making.
- include principles to frame the process for assessing and reflecting the relative values placed by
 communities on environmental, social and economic outcomes to inform the trade-offs that have to be
 made in water planning. This process should be transparent, evidence-based and involve effective
 engagement with stakeholders.
- include principles for independent review of water plans. While the review processes would be determined by jurisdictions, the NWI could set out principles for reviews to promote their need to be robust and fit for purpose, focused on achieving the greatest net benefit and how to apply effective stakeholder engagement involve community participation.
- · better take account of connectivity between systems.

Jurisdictions should continue to have discretion as to whether a plan is necessary and the effort put into its preparation, in accordance with paragraph 38 of the NWI. However, where a plan is not prepared for a water region, a renewed NWI should provide greater guidance on how contingent allocation frameworks are developed to be fit-for-purpose and appropriately manage the risk of overuse. In addition, where a water plan is not prepared, jurisdictions should:

- Publish a transparent justification of why the costs of a plan outweigh the benefits; and
- Set a clear trigger for developing a plan when circumstances change.

Processes to better account for climate change are also required, including that:

- water plans include priorities, actions and rules that cover drought conditions, as well as mechanisms
 for dealing with more extreme scenarios, including clear triggers, roles and responsibilities for actions
 and a hierarchy of uses
- · water quality issues are better incorporated into water planning, particularly in drought scenarios
- water planning processes in relatively undeveloped and developing water systems take climate change into account in ways that manage the risk of less water
- as water plans reach the end of their planning cycle, review processes promote improved water use and system operation to lessen risks in meeting the agreed environmental and consumptive objectives
- a process for rebalancing between environmental and consumptive uses as a result of climate change
 is developed. Rebalancing due to climate change should occur when there is sufficient evidence that
 the expected benefits will outweigh the likely costs. Where this occurs, governments should ensure
 that a water plan review assesses the feasibility of the objectives of the plan, sets new objectives that
 are realistic under climate change (including environmental, cultural and consumptive objectives),
 selects the most cost-effective option for meeting them and agrees a pathway to transition to the new
 balance. The process requires effective community partnerships and engagement, must be informed
 by the best available environmental, social and economic data and should be transparent
- · there are clear provisions for allocating risk, with water access entitlement holders continuing to bear

NWI renewal advice 6.2: Water planning

UPDATED IN 2024

the risks to the consumptive pool arising from climate change and periodic natural events (as reflected in paragraph 48 of the NWI)

climate modelling is undertaken at the system scale, based on the best available data and subject to
on-going reviews and refinements. The models and information should be made publicly available and
be subject to independent peer review or accreditation.

Water trading and markets

NWI renewal advice 7.1: The role and application of water trading and markets

UNCHANGED FROM 2021

A renewed National Water Initiative should emphasise that the purpose of water trading and markets is as a tool within a water resource management framework to increase efficiency.

There is no guaranteed supply of water by location, time and quality. For given users, and trade-offs in the values people place on availability, markets can play an important role in allocating water efficiently.

The diversity of water system hydrology – regulated and unregulated surface water, groundwater and conjunctive (surface and groundwater) systems – coupled with other economic and institutional preconditions mean that the establishment of market arrangements need to suit their context. They need to be fit for purpose.

NWI renewal advice 7.2: Leading practice governance, regulatory and operational arrangements

UNCHANGED FROM 2021

Recommitting to the original National Water Initiative water trading and market principles would support the objective that arrangements facilitate the efficient operation of markets, where system and water supply considerations permit.

Reshaped principles covering governance, regulatory and operational arrangements for water markets and trading would provide stronger foundations for developing markets.

- Roles and responsibilities of key parties involved in governance are clearly defined, and the parties' activities are effectively coordinated.
- Institutional arrangements are monitored and evaluated to ensure they remain in step with the level of a market's development.
- Trade is regulated to maximise overall community benefit (efficiency).

NWI renewal advice 7.2: Leading practice governance, regulatory and operational arrangements

UNCHANGED FROM 2021

- Arrangements protect against negative third-party impacts of water trades on other water users and the environment.
- The boundaries of water markets should be shaped by hydrology; trade between locations or sectors should not be limited by artificial administrative impediments.
- Regulatory consistency and compatibility apply where it is hydrologically feasible for interstate trade to occur.
- Where the changing of trading rules is necessary and well justified, the communication of these changes should be clear, timely and accessible to the market.
- Where broader management and administrative decisions (such as processes for determining seasonal allocations) impact on water availability and therefore market dynamics, these processes should be transparent and their impacts well understood.
- Market access is open to all participants.
 - Development of an appropriate mix of tradeable water products is enabled.
- Water market operations optimise transaction costs, including both monetary (for example, trade approval fees) and non-monetary (for example, from trade approval processing times and regulation of trade related services).
- Jurisdictions could also consider integrating water trade monitoring with system management in highly
 developed systems. Such a role could focus on the long-term operation of the market within the water
 resource management system. In a changing climate, shared resources and connected systems will
 require consideration of the interaction between resource availability, system constraints and water
 trade; and the identification of risks as these interactions change.

NWI renewal advice 7.3: Information to support efficient water markets

UNCHANGED FROM 2021

In efficient water markets:

- registers of all water access entitlements and trades are publicly-accessible, timely and reliable
- basic trade data including on prices (clearly specifying reasons for zero-price trades), volumes, dates, locations and product types – are publicly available
- publicly-provided non-trade information covers market rules and the quality and accessibility of water resources.

Environmental management

NWI renewal advice 8.1: Best-practice environmental objectives and outcomes

UNCHANGED FROM 2021

Environmental objectives and outcomes agreed in water plans should be guided by criteria on the identification of key environmental assets (including dependent downstream estuaries and near-shore marine environments) and the values communities place on those assets.

- Waterways or water-dependent ecosystems should be considered high environmental priority if they have one, or more, of the following characteristics:
 - formally recognised significance (under Australian or State Government legislation)
 - the presence of highly threatened or rare species and ecological communities (under Australian or State Government legislation)
 - high naturalness values (for example, aquatic invertebrate communities or riparian vegetation)
 - vital habitat (for example, drought refuges or important bird habitats and key sites for connectivity).
- Environmental objectives and agreed environmental outcomes should then:
 - be set through a collaborative, stakeholder and community process that considers the relative community value of outcomes
 - be based on good scientific, objective and on-the-ground knowledge
 - clearly identify any risks and potential environmental trade-offs under different climate scenarios (including average and dry years)
 - be transparent, logical and easily understood by stakeholders
 - be specific and defined well, enabling clear long-term performance indicators to be set and monitored.

NWI renewal advice 8.2: Integrated management

UNCHANGED FROM 2021

The management of environmental water should be integrated with complementary waterway management at the local level by ensuring that consistent management objectives govern both the use of environmental water and complementary waterway management activities.

NWI renewal advice 8.3: Waterway oversight

UNCHANGED FROM 2021

Where not in place, State and Territory Governments should establish a formal institutional oversight responsibility for wetland and waterway management that provides an interface between the management of waterways and environmental water.

The roles and functions of a waterway manager should include:

- undertaking collaborative planning processes that result in clearly articulated environmental objectives, targets and priorities
- ongoing collaboration with Traditional Owners
- · ongoing environmental risk assessment
- · providing input to water planning processes on environmental priorities and impacts
- · oversight of natural resource management actions to achieve agreed objectives
- · working with the system manager to achieve agreed environmental outcomes
- · facilitating on-ground delivery of environmental water management
- · monitoring and reporting on environmental outcomes and risk management
- · evaluation where environmental outcomes were not achieved
- providing opportunities for community participation, to facilitate change and awareness of waterway issues
- communicating policy changes to stakeholders.

NWI renewal advice 8.4: Review processes for outcomes

UPDATED IN 2024

Jurisdictions should commit to a long-term, consistent national approach to monitoring environmental outcomes delivered from both planned and held environmental water. Clear processes should be established for reviewing progress on environmental outcomes, understanding their feasibility given climate induced changes in water availability and other factors (such as sea level rise and increased temperatures), ascertaining whether environmental water flows and allocations are sufficient to meet environmental objectives and determining if and when management objectives should be revisited within planning review processes.

To support this, there should be adequate resourcing of long-term monitoring programs that report against well-defined environmental outcomes indicators. These indicators should be determined by the best possible environmental science, including Indigenous Cultural Knowledges.

NWI renewal advice 8.5: Objectives and priority setting for held water

UNCHANGED FROM 2021

The overarching objective for environmental water managers managing held environmental water is to make decisions on where, how and when environmental water should be used (or whether it should be traded or carried over) based on the best use for the environment over the long-term.

Criteria for prioritising environmental watering should be embedded in a renewed National Water Initiative and include the:

- · extent and significance of environmental benefit
- · likelihood of success
- · longer-term benefits
- · urgency of watering needs
- · feasibility of the action
- · environmental or third-party risks
- · cost effectiveness of the watering action
- · efficiency of water use
- · additional cultural, economic, social and Traditional Owner benefits.

Objectives for seasonal environmental watering under different climate scenarios should be embedded in a new National Water Initiative such as:

- avoid critical loss, maintain key refuges and avoid catastrophic loss during drought scenarios
- maintain river functioning and high-priority wetlands and manage dry-spell tolerances during dry scenarios
- improve ecological health and resilience and recruitment opportunities for key species during average-climate scenarios
- restore key floodplain and wetland linkages and enhance recruitment opportunities for key species during wet scenarios.

NWI renewal advice 8.6: Transparent trade strategies

UNCHANGED FROM 2021

Environmental water holders should have in place transparent and publicly reported trading and carryover strategies and reporting statements for entitlements and allocations that show the best use of water to contribute to environmental outcomes as opportunities arise.

Revenue from trading should be held in a dedicated, ring-fenced account with the ability to be carried over and devoted to activities that enable the best use of environmental water over time. And use of this revenue should be publicly reported.

NWI renewal advice 8.7: innovative market approaches

UNCHANGED FROM 2021

Environmental water holders should work with system managers and consumptive entitlement holders to pursue innovative market approaches.

NWI renewal advice 8.8: Capacity to vary entitlement portfolio

UNCHANGED FROM 2021

Environmental water holders should be enabled to vary their entitlement portfolio over time to match ecological requirements in a changing climate.

Environmental water entitlement trading should occur as part of a long-term environmental water portfolio management strategy. Governments should develop clear guidelines on the criteria for trading environmental water entitlements including cost-benefit analysis, consideration of possible consequential adjustments to catchment sustainable diversion limits and environmental provisions in water plans, a formal approvals process and publicly reported trade activity.

NWI renewal advice 8.9: Actively pursue public benefit outcomes

UNCHANGED FROM 2021

Environmental water holders should:

- give explicit consideration to other public benefit outcomes including cultural and social outcomes, where they do not compromise environmental outcomes
- improve collaboration and communication with Traditional Owners on cultural water decision making and outcomes in environmental water planning processes
- report on any instances where specific cultural outcomes were unable to be delivered because they were incompatible with agreed environmental outcomes
- build on their knowledge of the potential for environmental water to achieve shared community benefits under drying climate scenarios.

NWI renewal advice 8.10: Independent managers and auditing

UPDATED IN 2024

Where governments own significant held environmental water that can be actively managed they should ensure that decisions on the use of this water are made by independent bodies at arm's length from government the agencies directly managing environmental water.

Governments with held environmental water entitlements should provide for independent auditing, on a three-yearly basis, of the adequacy and use of environmental water entitlements to achieve the best outcomes.

Jurisdictions should commit to independent auditing, on at least a five-yearly basis, of the achievement of environmental outcomes resulting from both planned and held environmental water, including the adequacy and use of environmental water to achieve outcomes.

Where jurisdictions have independent environment commissioners or agencies with regular state-of-theenvironment reporting, such as Victoria and the ACT, such auditing is ideally placed within the scope of their activities.

NWI renewal advice 8.11: The system manager's role in environmental management

UNCHANGED FROM 2021

Water system managers should be obligated to use their best endeavours, while protecting third-party interests, to achieve agreed outcomes.

State and Territory Governments should report and evaluate system managers' efforts at facilitating the achievement of agreed environmental and other public benefit outcomes.

NWI renewal advice 8.12: Commitment to adaptive management

UNCHANGED FROM 2021

In planned environmental water systems, State and Territory Governments should:

- establish mechanisms to ensure that adaptive management is implemented consistently and explicitly in practice
- ensure adequate monitoring, evaluation and reporting efforts on agreed environmental outcomes, and report openly about instances where these outcomes are not achieved.

Environmental water holders should:

- use the results of monitoring, evaluation and research to improve water use as part of an adaptive management cycle and ensure that this is adequately resourced
- publicly report on environmental water use, the outcomes of watering events, the achievement of ecological outcomes, and monitoring of objectives.

Securing Aboriginal and Torres Strait Islander people's interests in water

NWI renewal advice 9.1: A new co-designed element

UPDATED IN 2024

The renewed National Water Initiative (NWI) should include both an objective and a new element dedicated to Aboriginal and Torres Strait Islander people's access to water and the involvement and participation of Aboriginal and Torres Strait Islander people in water management. The Commission supports the advises that the Committee on Aboriginal and Torres Strait Islander Water Interests should continue to lead to development of the new NWI element.

In developing the new element, the Committee should:

- ensure alignment between commitments under the National Agreement on Closing the Gap and new NWI content
- provide advice to the Coalition of Peaks, particularly regarding the design, implementation and monitoring arrangements for National Agreement on Closing the Gap inland waters target.
- continue to engage with First Nations groups
- · report directly to water ministers.

The NWRC should also support the Committee on Aboriginal and Torres Strait Islander Water Interests to lead the development of a monitoring, evaluation and reporting framework for this new element.

NWI renewal advice 9.2: Improving cultural outcomes using existing frameworks

UPDATED IN 2024

In developing a new National Water Initiative element, the Committee on Aboriginal and Torres Strait Islander Water Interests should consider content that ensures that:

- cultural objectives are explicitly identified and provided for in water plans and progress in achieving those objectives is regularly monitored and reported publicly
- environmental water holders seek to deliver cultural outcomes whenever consistent with their ecological obligations
- natural resource managers incorporate cultural objectives into river and wetland plans and work with Traditional Owners in on-ground management programs to achieve them
- Traditional Owner engagement in water planning, environmental water management and natural resource management is of high quality and fostered through the development of long-term relationships (NWI renewal advice 6.2, 8.3 and 8.9).

NWI renewal advice 9.3: Improving access for economic development

UPDATED IN 2024

In developing a new National Water Initiative element, the Committee on Aboriginal and Torres Strait Islander Water Interests could consider content that ensures that, where agreement is reached between State and Territory Governments and Traditional Owners that consumptive access to water is an effective way to support the economic development of Aboriginal and Torres Strait Islander communities, access is provided by:

- sourcing water within existing water entitlement frameworks, such as by purchasing water on the market or as part of transparent processes for assigning unallocated water
- ensuring adequate supporting arrangements (such as training and business development) and
 information provision (e.g. about the costs of accessing, holding and trading water) are in place to
 enable Aboriginal and Torres Strait Islander communities to access water, and maximise the value of
 the resource for their needs and uses
- · actively involving Aboriginal and Torres Strait Islander communities in program design.

The provision of water by governments to Aboriginal and Torres Strait Islander communities would be supported by:

- specifying and implementing governance arrangements for such water developed in partnership with First Nations groups
- regularly monitoring and publicly reporting on the inland waters target under the National Agreement on Closing the Gap.

Where governments invest in new water infrastructure, particularly in undeveloped areas, governments should consider whether reserving a share of any new water rights for Traditional Owners would be consistent with plans for future community development and assist in meeting targets set under the National Agreement on Closing the Gap.

Ensuring the integrity of water resource management

NWI renewal advice 10.1: Building system Integrity through a renewed element

UNCHANGED FROM 2021

A renewed National Water Initiative would be strengthened by acknowledging that ensuring the integrity of water resource management requires more than robust water accounting. To build integrity into system management, consideration should be given to broadening the water resource accounting element. The provision of credible and reliable information, and robust institutional processes, would provide assurance that:

- entitlement holders are operating in line with their rights and that water use is consistent with established rights and water plans
- · water systems are being managed to best effect for all users.

The provision of information regarding the broader water context is also needed to improve understanding of key water resource challenges and potential risks, enabling entitlement holders, industry and communities to better plan for the future.

NWI renewal advice 10.2: Ensuring the integrity of water use

UNCHANGED FROM 2021

To ensure the integrity of water use, a renewed National Water Initiative would be strengthened by requiring fit-for-purpose:

- · metering and measurement of surface water and groundwater take and reporting on use
- registers that realise their potential benefits for water resource management and support compliance and enforcement systems as well as critical functions in supporting trade
- compliance and enforcement systems, including a focus on proactive regulation to increase entitlement holders' awareness of their obligations.

Inclusion of leading-practice compliance principles would also strengthen the agreement. Compliance framework requirements from the Murray-Darling Basin Compliance Review provide good foundation principles, but consideration should be given to augmenting them with requirements consistent with leading-practice governance.

NWI renewal advice 10.3: Ensuring the integrity of water system management

UNCHANGED FROM 2021

To ensure the integrity of water resource management, a renewed National Water Initiative would need to require water system managers to:

- adopt a risk-based approach to developing and maintaining information and data collections
 necessary for effective water system management. These collections should include information about
 how much water is in a system, where it is, how much is extracted (including by interception activities),
 how much is carryover, and who gets what and when
- ensure that information and data sources are publicly available and information is accessible and
 effectively communicated. Where multiple agencies are responsible for a system's management,
 collaboration is needed to ensure that data and the language used for reporting are consistent and
 that information is accessible from a single online source
- implement quality assurance processes for information and data sources to enhance the credibility of information, including independent audits for fully developed and regulated systems
- ensure information about their decisions, operations and performance is transparent and that public concerns and information requests are responded to expediently.

Stakeholder engagement would improve information provision and help system managers determine if available information adequately demonstrates to the public that water systems are being managed to best effect.

NWI renewal advice 10.4: Ensuring information on the broader water context aligns with users' needs

UNCHANGED FROM 2021

In renegotiating a renewed National Water Initiative, jurisdictions should commit to providing information on the broader water context that meets the needs of system participants (including water planners, managers, users and communities).

The scope of national water accounts should be reviewed. In undertaking these reviews, stakeholders must be engaged to ensure useful and meaningful information is reflected in accounts in the future.

A renewed National Water Initiative should acknowledge the utility of national water accounts and require their regular publication and avoidance of unnecessary duplication of effort in their preparation.

Provision of water services

NWI renewal advice 11.1: Maintain key principles of service delivery

UNCHANGED FROM 2021

Jurisdictions should maintain the core principle of cost-reflective, consumption-based pricing in a renewed National Water Initiative, with cost recovery from users. Jurisdictions should also update and recommit to the *National Water Initiative Pricing Principles* to provide guidance on achieving those pricing requirements, with direct reference to the pricing principles included in a renewed NWI.

Similarly, jurisdictions should maintain institutional separation of water resource management, standard setting and regulatory enforcement from service delivery.

NWI renewal advice 11.2: Principles for best-practice Independent economic regulation

UNCHANGED FROM 2021

The following national best-practice principles would improve the quality and consistency of independent economic regulation of water service providers.

- Regulatory decisions are guided by the objective of promoting the long-term interests of customers.
- Utilities have incentives to innovate and improve their efficiency.
- Regulatory decision-making processes include effective customer and community engagement.
- Prices reflect the full efficient cost of service provision.
- Regulatory decisions consider the long-term financial viability of utilities.
- Regulatory processes facilitate effective competition in potentially contestable parts of the industry.
- · Regulatory processes are transparent to allow scrutiny.
- · Regulatory frameworks are adaptable and flexible.

NWI renewal advice 11.3: Improving pricing and service outcomes

UNCHANGED FROM 2021

The National Water Initiative should include a framework to guide where different models of economic oversight can be applied, based on context. All large providers should be subject to best-practice independent economic regulation, unless a transparent analysis of regulatory costs and benefits shows that economic regulation imposes significant net costs. Where costs do outweigh benefits, jurisdictions should agree to a consistent assessment framework to inform decisions concerning the type of economic regulation to apply, based on the risk (and potential impact) of a provider exercising market power, and the cost of regulation.

Jurisdictions should commit to light touch independent economic oversight for small regional and remote urban water providers.

NWI renewal advice 11.4: Performance monitoring and reporting

UNCHANGED FROM 2021

Water service provider performance monitoring and reporting should be maintained under a future NWI with agreed objectives. Monitoring and reporting should aim to:

- · increase transparency of service delivery
- · enable performance comparisons to support continuous improvement by providers
- · feed into economic oversight
- · contribute to State and Territory government policy decisions and performance oversight
- underpin regular assessments of progress of NWI implementation.

Urban water services

NWI renewal advice 12.1: Best-practice urban water system planning

UNCHANGED FROM 2021

Updating the *National Urban Water Planning Principles* and formally embedding them within the National Water Initiative would establish a standard for best-practice urban water system planning. A renewed National Water Initiative should include the following principles:

- Integrated management of water supply, wastewater and stormwater is embedded in urban water planning and management systems.
- Planning decisions align with system objectives for levels of water security, service quality, the environment and urban amenity.
- System objectives are discovered through a transparent and consultative approach and approved by governments in line with customer and community preferences.
- Urban water planning connects water planning across different scales and with land-use planning.
- All supply options are considered and their relative merits subject to a rigorous, consistent and transparent assessment of costs and benefits.
- Roles and responsibilities in the planning and management process are clearly assigned between relevant governments, utilities and other planning entities.
- Governments enable effective coordination between utilities, regulators, developers and land-use planners.

To support efficient service delivery by smaller providers, jurisdictions should consider developing national guidelines for both long-term system planning and contingency planning for regional and remote water systems.

NWI renewal advice 12.2: Improving pricing and service outcomes

UNCHANGED FROM 2021

In updating the *National Water Initiative Pricing Principles* (NWI renewal advice 11.1), jurisdictions should:

- develop improved, practical guidance on funding stormwater management and incorporating stormwater into pricing frameworks
- · recommit to the principle that developer charges are cost reflective.

NWI renewal advice 12.3: Improving pricing and service outcomes

UNCHANGED FROM 2021

All urban water service providers, including those with fewer than 10,000 connections, should be subject to jurisdictional monitoring and public reporting.

Through the National Water Initiative, jurisdictions should recommit to independent, public and annual reporting of key pricing and service quality indicators at a national level for all major urban water service providers (consistent with the objectives outlined in NWI renewal advice 11.4).

NWI renewal advice 12.4: Ensuring access to a basic level of service

UNCHANGED FROM 2021

A renewed National Water Initiative should include a commitment by State and Territory Governments to each develop a definition of, and to ensure access to, a basic level of water services for all Australians. At a minimum, this would include safe and reliable drinking water. The definition of 'safe' could be nationally consistent, while the definition of 'reliable' will vary according to local circumstances.

Cost-reflective user charges should remain the default arrangement, but some regional and remote services in high-cost areas will require operational subsidies to maintain a basic level of service to all customers. Any subsidies to those areas should be provided as transparent community service obligation payments. Payments to local government-owned providers should be:

- designed to ensure access to a basic level of service in those communities where such service provision would otherwise be unviable
- · adequate to ensure a basic level of service is considered affordable
- based on credible data on efficient service costs, subject to a degree of independent oversight, following State or Territory government involvement in system planning
- · calculated in a predictable fashion to provide a reliable source of funding
- conditional on ongoing operational improvements, such as improvements to utility governance, better service outcomes (based on performance monitoring), compliance with guidelines for system and contingency planning, or for pursuing collaboration.

NWI renewal advice 12.5: Governance of regional and remote services

UNCHANGED FROM 2021

A renewed National Water Initiative should contain agreed principles for governance of regional and remote water services where local governments retain ownership of utilities. Financial separation should be maintained, with utility finances ring-fenced from local government finances. Clear roles for State and Local Governments during extreme events should be defined.

NWI renewal advice 12.6: Monitoring and reporting on regional and remote service quality

UNCHANGED FROM 2021

Monitoring and reporting of water quality and service outcomes in remote Aboriginal and Torres Strait Islander communities should be coordinated with the development of data collection required to measure progress against the community infrastructure target under the National Agreement on Closing the Gap.

Water reform in rural Australia

NWI renewal advice 13.1: Helping communities deal with adjustment pressures

UPDATED IN 2024

Inclusion of guiding principles in a renewed National Water Initiative would clarify how governments can respond to any significant community adjustment pressures resulting from policy-induced reductions in water availability.

- The socioeconomic impacts of any major potential policy change be assessed to identify possible community needs. Effective community partnerships and engagement are critical to understanding the wider context.
- Generally-available measures targeting the welfare and skills of individuals, and regional development planning and initiatives to leverage community capabilities and competitive advantages are usually the most appropriate responses to adjustment pressures.
- In rare circumstances, it may be appropriate to take additional steps to address adjustment issues if
 policy changes that are beneficial to the wider community impose increased risk of permanent
 disadvantage for groups of individuals. Where generally-available measures will be inadequate, more
 support could improve the efficiency of the adjustment process by addressing impediments to change.
- · Where further support is warranted:
 - consideration should be given to how existing regional development programs support the adjustment process and whether policies and regulations not directly related to water unnecessarily impede change
 - assistance programs should be integrated with regional development strategies and frameworks
 - options for further support need to be considered on a case-by-case basis and consider all factors
 affecting a community (not just changing water availability) and the chosen option should be the one
 that delivers the largest benefits relative to costs
 - measures that are likely to build adaptive capacity and secure employment or business opportunities should be the focus, and targeted to the most vulnerable individuals (those at risk of permanent disadvantage)
 - industry assistance and subsidies should be avoided
 - a commitment should be made to public monitoring and evaluation of the effectiveness of any assistance.

Government investment in major water infrastructure

NWI renewal advice 14.1: A New Water Infrastructure element

UNCHANGED FROM 2021

In renegotiating the National Water Initiative, jurisdictions should develop an element to guide investment in water infrastructure.

The new element should restate the high-level requirements for all infrastructure to be assessed as economically viable and ecologically sustainable prior to the commitment of funding, with cost recovery from users as the norm, and add a further requirement that infrastructure development processes are culturally responsive to the interests of Traditional Owners.

The new element should also include:

- an agreed framework to guide government investment in major water infrastructure, incorporating
 project selection and assessment processes and clear roles and responsibilities for governments and
 service providers
- principles for cost sharing (including government subsidies) and allocating water from new developments.

NWI renewal advice 14.2: Assessment criteria for water infrastructure

UPDATED IN 2024

As part of the new infrastructure element, jurisdictions should agree to criteria on how major projects can demonstrate adherence to the NWI requirements for infrastructure.

Economic viability should be demonstrated by a positive benefit–cost ratio determined through a transparent and rigorous cost–benefit assessment, with:

- an assessment of a range of options, including non-infrastructure options where these can meet the investment objective, and selection based on the highest (positive) expected net benefit
- transparency supported by publication of business cases as a matter of course (except where commercially-sensitive data limits publication, in which case the business case should be reviewed by a qualified independent body)
- · use of entitlement pre-sale to limit optimism bias
- · robust estimates of social and distributional impacts.

Ecological sustainability should be demonstrated through environmental and social impact approvals, and compliance with a high-quality and NWI-consistent water plan that:

- establishes the environmental water provisions necessary to meet agreed environmental outcomes under a changing climate
- · sets out the social, economic and cultural outcomes sought from the water plan
- clearly defines the expected reliability of water rights, taking into account the likely impacts of climate change
- is developed with robust community engagement to reflect community values.

Criteria for culturally responsive infrastructure development should be determined through the co-design process led by the national Committee on Aboriginal and Torres Strait Islander Water Interests. At a minimum, culturally responsive infrastructure processes would:

- incorporate deep engagement with the Traditional Owners of affected areas (both at the infrastructure site and downstream) as part of business case development
- comprehensively identify and manage impacts on cultural heritage in affected areas.

Costs should be recovered from users as the norm, with any government funding provided through a transparent subsidy. This should be limited to situations where:

- substantial public benefits associated with water infrastructure impose additional costs that are best borne by governments
- an equity argument exists (for example, to support access to an essential service in high-cost regional town water systems where the cost of supplying a basic level of services is considered unaffordable).

Governments should not subsidise major water infrastructure for strategic objectives, such as regional development, without first demonstrating that the project is the most effective means of addressing that objective. This requires alignment with broader high-quality and long-term strategic regional planning processes.

 Jurisdictions should maintain the principle supporting use of market mechanisms for allocating water, although they should consider allocating a share of new entitlements in undeveloped systems to Traditional Owners.

NWI renewal advice 14.3: Institutional arrangements

UNCHANGED FROM 2021

A new water infrastructure element should clarify relevant institutional roles and responsibilities underpinning government investment in major water infrastructure, if and when it occurs.

- State and Territory Governments should have primary responsibility for proposing (and overseeing) government involvement in major water infrastructure developments in their jurisdictions.
- Any Australian Government funding should not exceed the contribution of the relevant State or Territory Government.
- Independent infrastructure advisory bodies should transparently review the business cases of major projects.

Community engagement

NWI renewal advice 15.1: Community engagement framework

UPDATED IN 2024

Australian governments should recommit to best practice, cost-effective engagement with their communities on all water matters. To achieve this, a renewed National Water Initiative should develop a community engagement framework focused on:

- continuously improving and sustaining government engagement effort across all aspects of water resource management and water service provision
- coordinating engagement actions between all levels of government, particularly in multi-jurisdictional activities
- ensuring that engagement effort and its resourcing are fit-for-purpose taking into account the scale of proposed change or reform, its sensitivities and its impacts
- ensuring that governments are clear about the purpose of their engagement, and the role of communities in decision making, and transparently report on how communities' views have informed decisions
- · improving the effectiveness of community engagement through enhancing:
 - water information accessibility and comprehensibility
 - community water literacy.

This framework should adopt the characteristics of inclusiveness, timeliness, partnership, respect, access to information, transparency, responsiveness and continuous improvement as a best--practice foundation for effective community engagement and information provision practice in water resource management and water service provision.

Knowledge, capacity and capability building

NWI renewal advice 16.1: Effective knowledge generation

UNCHANGED FROM 2021

Commitment to a culture of evidence-based decision making, innovation and continuous improvement will underpin successful implementation of a renewed National Water Initiative. Inclusion of the following principles in a renewed National Water Initiative would bring that to effect.

- Knowledge building priorities are identified through processes that involve all jurisdictions and draw on input from the research community and research users.
- Governments invest in knowledge generation activities that align with identified priorities and serve the public good.
- Investments are streamlined through effective coordination between jurisdictions.
- Utilities are empowered to invest efficiently in knowledge generation.
- Strong, durable partnerships between decision makers and knowledge generators are developed and actively managed.
- Decision makers have the capability and capacity to use knowledge effectively in making evidence--based decisions.
- · Water utility staff have the capacity and capability to discharge their functions.