



Australian Government
Productivity Commission

National Water Reform 2020

Productivity Commission
Draft Report
*Findings, recommendations
and renewal advice*

February 2021

This is a draft report prepared for further public consultation and input. The Commission will finalise its report after these processes have taken place.

© Commonwealth of Australia 2021



Except for the Commonwealth Coat of Arms and content supplied by third parties, this copyright work is licensed under a Creative Commons Attribution 3.0 Australia licence. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/3.0/au>. In essence, you are free to copy, communicate and adapt the work, as long as you attribute the work to the Productivity Commission (but not in any way that suggests the Commission endorses you or your use) and abide by the other licence terms.

Use of the Commonwealth Coat of Arms

Terms of use for the Coat of Arms are available from the Department of the Prime Minister and Cabinet's website: <https://www.pmc.gov.au/government/commonwealth-coat-arms>

Third party copyright

Wherever a third party holds copyright in this material, the copyright remains with that party. Their permission may be required to use the material, please contact them directly.

Attribution

This work should be attributed as follows, *Source: Productivity Commission, National Water Reform 2020, Draft Report.*

If you have adapted, modified or transformed this work in anyway, please use the following, *Source: based on Productivity Commission data, National Water Reform 2020, Draft Report.*

An appropriate reference for this publication is:

Productivity Commission 2021, *National Water Reform 2020: Findings, recommendations and renewal advice*, Draft Report, Canberra.

Publications enquiries

Media, Publications and Web, phone: (03) 9653 2244 or email: mpw@pc.gov.au

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).

Findings, recommendations and renewal advice

This document is a compilation of the Commission's advice.

3 NWI renewal: a refreshed intent

DRAFT NWI RENEWAL ADVICE 3.1: A MODERNISED GOAL

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 remote communities and to ensure the health of river and groundwater systems and their surrounding landscapes whilst adapting to a changing climate. In continuing to implement this agreement, the Parties also acknowledge the importance of water to the lives of Aboriginal and Torres Strait Islander people.

DRAFT NWI RENEWAL ADVICE 3.2: MODERNISED OVERARCHING OBJECTIVES

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. Suggested wording follows.

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

- optimise economic, environmental, social and cultural outcomes through best-practice management of Australia's water resources. In the process, this will provide certainty for investment, water users and the environment
- 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.

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 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
 - (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. processes to enable Aboriginal and Torres Strait Islander people to have ongoing 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 to promote its highest value use 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 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.

(continued next page)

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 wherever possible, with transparent subsidies to high-cost regional and remote community services
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 new water developments are ecologically sustainable, economically viable and culturally responsive.

DRAFT NWI RENEWAL ADVICE 3.4: OVERARCHING PRINCIPLES

In achieving the objectives outlined in previous advice, governments agree to the following principles and seek to apply them across all key areas of water resource management and water service provision:

1. Capacity to contend with droughts, floods and shocks, and to adapt to a changing climate, is strong.
2. Management effort and regulation are fit for purpose.
3. Decisions are based on the best available information.
4. Innovation and continuous improvement are encouraged and adaptive management is required.
5. Communities are engaged effectively in all aspects of water resource management and water service provision.
6. Communities have sufficient water literacy to engage effectively.

DRAFT NWI RENEWAL ADVICE 3.5: ELEMENTS OF A RENEWED AGREEMENT

The overall goal, objectives and principles will 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. New infrastructure development

Supporting arrangements

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

DRAFT NWI RENEWAL ADVICE 3.6: AN UPDATED STATEMENT OF INTERACTIONS

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.

4 Building in good governance for a renewed NWI

DRAFT FINDING 4.1

Governance arrangements established for the National Water Initiative have been significantly eroded over recent years. A strengthened governance architecture that reflects the presence of national water policy leadership and ensures confidence in reform effort needs to be included in a renewed agreement.

DRAFT RECOMMENDATION 4.1

Water ministers should come together periodically to oversee development of a renewed NWI, and to receive, consider and act upon advice that comes out of any periodic review of the new agreement.

DRAFT NWI RENEWAL ADVICE 4.1: GOVERNANCE ARRANGEMENTS FOR A RENEWED NWI

A strengthened governance architecture that 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 objectives and limit prescriptive actions, instead setting out principles for best practice, and fit-for-purpose approaches to achieving outcomes
- each jurisdiction should commit to preparing three-year rolling work programs 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, with public reporting on jurisdictional progress against them, and the effectiveness of the agreement, as per the functions the Productivity Commission currently performs under the *Water Act 2007* (Cth)
- a requirement for comprehensive policy review every 10 years should be written into the agreement
- the National Water Reform Committee should provide on-going collective oversight of the agreement, initiating policy advice and guidance, if need arises, and commission the 10 yearly reviews of the agreement.

5 Water resource management — a fit-for-purpose framework

DRAFT NWI RENEWAL ADVICE 5.1: FIT-FOR-PURPOSE WATER RESOURCE MANAGEMENT

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.

6 Water entitlements and planning

DRAFT NWI RENEWAL ADVICE 6.1: MANAGING WATER USE UNDER THE ENTITLEMENTS FRAMEWORK

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 markets and trading. 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.

To improve on the entitlements framework, jurisdictions should:

- remove exemptions for mineral and petroleum industries from water access entitlement and planning arrangements, so that these industries are subject to the same water access entitlements framework that applies to other consumptive users
- establish a process to determine whether alternative water sources (including stormwater and recycled water) can be incorporated into water access entitlement 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 entitlement frameworks (including fit-for-purpose measurement and accounting of interception activities, and monitoring of the ongoing efficacy of the use of interim measures) and fixed term or other types of entitlements.

INFORMATION REQUEST 6.1

The Commission seeks feedback on suitable triggers for rebalancing environmental and consumptive shares in the context of climate change.

What are the advantages and disadvantages of the different approaches?

How could continuous adjustment be implemented in practice?

Are there any other potential triggers that could be used?

DRAFT NWI RENEWAL ADVICE 6.2: WATER PLANNING

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
- 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 net benefits and to involve community participation.

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 reassesses the objectives of the plan (including environmental and consumptive objectives), leads to selection of the most cost-effective option for meeting them and agrees a pathway to transition to the new balance
- there are clear provisions for allocating risk, with water access entitlement holders continuing to bear the risks to the consumptive pool arising from climate change and periodic natural events (as reflected in paragraph 48 of the NWI).

7 Water trading and markets

DRAFT NWI RENEWAL ADVICE 7.1: THE ROLE AND APPLICATION OF WATER TRADING AND MARKETS

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, quality, and for given users, and given the 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 pre conditions mean that the establishment of market arrangements need to suit their context. They need to be fit for purpose.

DRAFT FINDING 7.1:

The Murray-Darling Basin demonstrates that, in highly developed systems, water trade monitoring ought to be integrated into system-level resource management. By taking a broader and longer-term system-level view of water trade and operational risk within the water resource management context, jurisdictions can more proactively anticipate and identify emerging issues and be advised on regulatory responses where warranted.

DRAFT NWI RENEWAL ADVICE 7.2: LEADING PRACTICE GOVERNANCE, REGULATORY AND OPERATIONAL ARRANGEMENTS

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. Suggested principles include that:

- 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).
 - 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.
- 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.

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.

8 Environmental management

Environmental objectives and outcomes agreed in water plans should be guided by criteria on the identification of key environmental assets 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.

DRAFT NWI RENEWAL ADVICE 8.2: INTEGRATED MANAGEMENT

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.

DRAFT RECOMMENDATION 8.1: NATURAL RESOURCE MANAGEMENT

Natural resource management (NRM) programs should give priority to the key environmental assets identified in water planning processes, provide funding and undertake the required works to protect those assets.

During periods of water scarcity, NRM should focus on the protection of reserves and refuges and making sure that their regenerative capacity is protected.

DRAFT NWI RENEWAL ADVICE 8.3: WATERWAY OVERSIGHT

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.

DRAFT NWI RENEWAL ADVICE 8.4: REVIEW PROCESSES FOR OUTCOMES

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), and determining if and when management objectives should be revisited within planning review processes.

DRAFT NWI RENEWAL ADVICE 8.5: OBJECTIVES AND PRIORITY SETTING FOR HELD WATER

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 new 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.

DRAFT NWI RENEWAL ADVICE 8.6: TRANSPARENT TRADE STRATEGIES

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.

DRAFT NWI RENEWAL ADVICE 8.7: INNOVATIVE MARKET APPROACHES

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

DRAFT NWI RENEWAL ADVICE 8.8: CAPACITY TO VARY ENTITLEMENT PORTFOLIO

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

Governments should develop clear guidelines on the criteria for selling 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.

DRAFT NWI RENEWAL ADVICE 8.9: ACTIVELY PURSUE PUBLIC BENEFIT OUTCOMES

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.

DRAFT NWI RENEWAL ADVICE 8.10: INDEPENDENT MANAGERS AND AUDITING

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.

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.

DRAFT NWI RENEWAL ADVICE 8.11: THE SYSTEM MANAGER'S ROLE IN ENVIRONMENTAL MANAGEMENT

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.

DRAFT NWI RENEWAL ADVICE 8.12: COMMITMENT TO ADAPTIVE MANAGEMENT

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.

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

DRAFT FINDING 9.1

Much more needs to be done to include Traditional Owners' interests in water in jurisdictional planning and the management of water. Slow progress against commitments made in the 2004 National Water Initiative, coupled with the contemporary context including the National Agreement on Closing the Gap and wide support for action, warrants inclusion of both a dedicated objective and new element in a renewed National Water Initiative.

DRAFT NWI RENEWAL ADVICE 9.1: A NEW CO-DESIGNED ELEMENT

The renewed National Water Initiative (NWI) should include both an objective and 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 establishment of the Committee on Aboriginal Water Interests to develop 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
- have a terms of reference that allows for an advisory role to the Coalition of Peaks
- report directly to water ministers.

DRAFT NWI RENEWAL ADVICE 9.2: IMPROVING CULTURAL OUTCOMES USING EXISTING FRAMEWORKS

In developing a new National Water Initiative element, the Committee on Aboriginal 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 (Draft NWI renewal advice 6.2, 8.3 and 8.9).

DRAFT NWI RENEWAL ADVICE 9.3: IMPROVING ACCESS FOR ECONOMIC DEVELOPMENT

In developing a new National Water Initiative element, the Committee on Aboriginal Water Interests could consider content that ensures that, where State and Territory Governments have decided that providing 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) are in place to enable Aboriginal and Torres Strait Islander communities to maximise the value of the resource for their needs and uses
- actively involving Aboriginal and Torres Strait Islander communities in program design.

This would be supported by:

- specifying and implementing governance arrangements for such water
- 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.

10 Ensuring the integrity of water resource management

DRAFT NWI RENEWAL ADVICE 10.1: BUILDING SYSTEM INTEGRITY THROUGH A RENEWED ELEMENT

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 to ensure that the provision of credible and reliable information and robust institutional processes 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.

DRAFT NWI RENEWAL ADVICE 10.2: ENSURING THE INTEGRITY OF WATER USE

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
- registers and reporting on use that reflect the related benefits for water resource management and support compliance and enforcement systems
- 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.

DRAFT NWI RENEWAL ADVICE 10.3: ENSURING THE INTEGRITY OF WATER SYSTEM MANAGEMENT

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 language are consistent and 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 highly 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.

DRAFT NWI RENEWAL ADVICE 10.4: ENSURING INFORMATION ON THE BROADER WATER CONTEXT ALIGNS WITH USERS' NEEDS

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).

National and system water accounts should be reviewed. In undertaking these reviews, system participants 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.

11 Urban water services

DRAFT NWI RENEWAL ADVICE 11.1: BEST PRACTICE URBAN WATER SYSTEM PLANNING

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.
- Utilities, governments, regulators, developers and land-use planners collaborate effectively in planning.

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.

DRAFT NWI RENEWAL ADVICE 11.2: PRINCIPLES FOR BEST PRACTICE INDEPENDENT ECONOMIC REGULATION

The following national best-practice principles would improve the quality and consistency of independent economic regulation in the urban water sector.

- Decisions are guided by the objective of promoting the long-term interests of customers.
- Utilities have incentives to innovate and improve their efficiency.
- Regulatory decisions 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.

DRAFT NWI RENEWAL ADVICE 11.3: IMPROVING PRICING AND SERVICE OUTCOMES

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 utility exploiting market power, and the cost of regulation.

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

DRAFT NWI RENEWAL ADVICE 11.4: IMPROVING PRICING AND SERVICE OUTCOMES

Jurisdictions should maintain the core principle of cost-reflective pricing and update the *National Water Initiative Pricing Principles*. In doing so, they 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.

Jurisdictions should maintain institutional separation of water resource management, standard setting and regulatory enforcement from service delivery, including where local governments are owners.

DRAFT FINDING 11.1

The National Performance Report is not fit for purpose in benchmarking service quality, as envisioned under the National Water Initiative (NWI), nor is it adequate to assess progress against NWI commitments. The only measure for cost recovery, the economic real rate of return, is inconsistent with the NWI and the *NWI Pricing Principles*. The current review of the National Performance Report indicators is well-placed to address these inadequacies.

DRAFT RECOMMENDATION 11.1

State and Territory Governments, through the National Performance Report, should require urban water service providers to report a financial return metric consistent with the *National Water Initiative Pricing Principles*, alongside the existing economic real rate of return metric. This should include:

- an income measure that excludes developer charges and contributed assets
- an asset base measure determined by a methodology consistent with the *National Water Initiative Pricing Principles*.

DRAFT NWI RENEWAL ADVICE 11.5: IMPROVING PRICING AND SERVICE OUTCOMES

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. Monitoring and reporting should be designed to:

- increase transparency of service delivery
- feed into economic oversight, including by promoting competition by comparison through benchmarking, and by highlighting where performance improvements are required
- contribute to State and Territory government policy decisions
- underpin regular assessments of progress of National Water Initiative implementation.

DRAFT NWI RENEWAL ADVICE 11.6: ENSURING ACCESS TO A BASIC LEVEL OF SERVICE

A renewed National Water Initiative should include a commitment to ensure access to at least a basic level of safe and reliable drinking water to all Australians. State and Territory Governments could each develop a definition of, and commit to ensure access to, a basic level of service for each community in their jurisdiction.

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 benchmarking), compliance with guidelines for system and contingency planning, or for pursuing collaboration.

DRAFT NWI RENEWAL ADVICE 11.7: GOVERNANCE OF REGIONAL AND REMOTE SERVICES

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.

DRAFT NWI RENEWAL ADVICE 11.8: MONITORING AND REPORTING ON REGIONAL AND REMOTE SERVICE QUALITY

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.

12 Water reform in rural Australia

DRAFT NWI RENEWAL ADVICE 12.1: HELPING COMMUNITIES DEAL WITH ADJUSTMENT PRESSURES

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 — particularly if 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.
 - 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.

13 Government investment in major water infrastructure

DRAFT NWI RENEWAL ADVICE 13.1: A NEW WATER INFRASTRUCTURE ELEMENT

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 principle that all infrastructure is to be assessed as economically viable and environmentally sustainable prior to the commitment of funding, with cost recovery from users as the norm. Jurisdictions should agree to criteria on how adherence with the principle can be demonstrated.

The new element should also include an agreed framework to guide government investment in major water infrastructure.

INFORMATION REQUEST 13.1

How could a refreshed National Water Initiative ensure that major water infrastructure investments most effectively promote the aspirations of Traditional Owners and protect Aboriginal and Torres Strait Islander people's heritage and cultural values? Should the principle guiding new infrastructure be amended to ensure that planning processes for developments are culturally responsive (in addition to those developments being environmentally sustainable and economically viable)?

DRAFT NWI RENEWAL ADVICE 13.2: ASSESSMENT CRITERIA FOR WATER INFRASTRUCTURE

As part of the new infrastructure element, jurisdictions should agree to criteria on how projects can demonstrate adherence with the National Water Initiative (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.

Environmental sustainability should be demonstrated through environmental, social, and Aboriginal and Torres Strait Islander people's cultural heritage 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.

Costs should be recovered from users as the norm, except where government funding is 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 to support access to an essential service (for example, 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, unless they demonstrate 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. However, they should consider allocating entitlements in undeveloped systems to Traditional Owners, and ensure that project assessment processes are culturally responsive.

DRAFT RECOMMENDATION 13.1

Australian Government investment in major water infrastructure should neither prioritise a particular sector or class of water user, nor be limited to providing water for primary industry. The National Water Grid Authority should broaden its *Investment Policy Framework* to allow funding for all projects where government involvement may be warranted, including supporting access to essential town water supplies.

DRAFT NWI RENEWAL ADVICE 13.3: INSTITUTIONAL ARRANGEMENTS

A new water infrastructure element should clarify relevant institutional roles and responsibilities underpinning the framework for government investment.

- State and Territory Governments should have primary responsibility for proposing (and overseeing) major water infrastructure developments in their jurisdictions.
- 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.

14 Community engagement

DRAFT NWI RENEWAL ADVICE 14.1: COMMUNITY ENGAGEMENT FRAMEWORK

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
- 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, and that governments are clear about the purpose of their engagement and the role of communities in decision-making
- improving the effectiveness of community engagement through enhancing:
 - water information accessibility and comprehensibility
 - community water literacy.

The characteristics of inclusiveness, timeliness, partnership, respect, access to information, transparency, responsiveness and continuous improvement represent a best practice foundation for guidance on effective community engagement and information provision practice in water resource management and water service provision.

15 Knowledge, capacity and capability building

DRAFT NWI RENEWAL ADVICE 15.1: EFFECTIVE KNOWLEDGE GENERATION

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.