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Productivity Commission

National Water Reform 2020

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

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Findings, recommendations and renewal advice

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

3 NWI renewal: a refreshed intent

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 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 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

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 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

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
 - (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

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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

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

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

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

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.

4 Building in good governance for a renewed NWI

FINDING 4.1

Governance arrangements established for the National Water Initiative have been significantly eroded. 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.

RECOMMENDATION 4.1: ROLE OF WATER MINISTERS

Water ministers should come together 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.

NWI RENEWAL ADVICE 4.1: GOVERNANCE ARRANGEMENTS FOR A RENEWED NWI

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 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 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.

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

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

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 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

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 the greatest net benefit 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 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 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.

7 Water trading and markets

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 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 pre-conditions mean that the establishment of market arrangements need to suit their context. They need to be fit for purpose.

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.

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.

- 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.

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NWI RENEWAL ADVICE 7.2: (continued)

- 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.
 - 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

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

NWI RENEWAL ADVICE 8.1: BEST-PRACTICE ENVIRONMENTAL OBJECTIVES AND OUTCOMES

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

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.

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.

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.

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.

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 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

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

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

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

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

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.

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.

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

FINDING 9.1

Much more needs to be done to include Aboriginal and Torres Strait Islander people's 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 recognition of Aboriginal and Torres Strait Islander people's interests in water in the overarching goal of a renewed National Water Initiative, and inclusion of both a dedicated objective and new element

NWI RENEWAL ADVICE 9.1: A NEW CO-DESIGNED ELEMENT

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 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.

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 (NWI renewal advice 6.2, 8.3 and 8.9).

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 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) 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.

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
- 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

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. 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

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

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

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.

11 Provision of water services

NWI RENEWAL ADVICE 11.1: MAINTAIN KEY PRINCIPLES OF SERVICE DELIVERY

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

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

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

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.

12 Urban water services

NWI RENEWAL ADVICE 12.1: 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.
- 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

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.

FINDING 12.1

The National Performance Report is not fit for purpose in reporting 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 National Performance Report Indicator Review is well placed to address these inadequacies.

RECOMMENDATION 12.1: REPORT AN NWI-CONSISTENT FINANCIAL RETURN METRIC

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*.

NWI RENEWAL ADVICE 12.3: 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 (consistent with the objectives outlined in NWI renewal advice 11.4).

NWI RENEWAL ADVICE 12.4: ENSURING ACCESS TO A BASIC LEVEL OF SERVICE

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

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

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.

13 Water reform in rural Australia

NWI RENEWAL ADVICE 13.1: 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, 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.

14 Government investment in major water infrastructure

NWI RENEWAL ADVICE 14.1: 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 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

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.

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NWI RENEWAL ADVICE 14.2: (continued)

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 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.

RECOMMENDATION 14.1: BROADEN THE REMIT OF THE NWGA'S INVESTMENT POLICY

Australian Government investment in major water infrastructure, where it occurs, 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 in regional and remote communities.

NWI RENEWAL ADVICE 14.3: INSTITUTIONAL ARRANGEMENTS

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.

15 Community engagement

NWI RENEWAL ADVICE 15.1: 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
- 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
- ensuring that all stakeholders have the opportunity to meaningfully input to the engagement process, and are proactively encouraged to do so
- 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.

16 Knowledge, capacity and capability building

NWI RENEWAL ADVICE 16.1: 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.