

23 February 2024

Joanne Chong
Commissioner
Productivity Commission
4 National Circuit
BARTON ACT

Dear Commissioner Chong,

RE: WaterNSW's submission to the 2024 inquiry into Urban Water Reform

Thank you for providing WaterNSW the opportunity to comment on the 2024 inquiry to Urban Water Reform and the National Water Initiative (NWI).

WaterNSW welcome the Australian Government's commitment to renew the NWI. We agree that the NWI's current objectives to result in a nationally compatible, market, regulatory and planning based system of managing surface and groundwater resources for rural and urban use that optimises economic, social and environmental outcomes is reasonable. Substantial progress has been made in this regard. But we also agree there is merit in reviewing and refreshing these objectives and that the Productivity Commission's 2021 recommendations provide a strong and comprehensive basis for reform.

WaterNSW has provided data and information to the NSW Department of Climate Change, Energy, the Environment, and Water (DCCEEW) for inclusion in the NSW Whole of Government NWI submission. Additionally, WaterNSW is submitting this standalone submission containing supplementary information.

Our submission focusses on areas where the 2021 recommendations can be strengthened.

To address new pressures on water management, and areas where we consider that practical action by governments can improve the implementation of the NWI. WaterNSW's submission focusses on the following areas:

- Climate change, extreme weather events including drought and flooding being considered within regulatory frameworks;

- Water pricing principles and institutional arrangements including cost recovery for additional planning and management obligations and how to address recommendations and findings from the Commission's 2020 inquiry;
- Urban water supply policies or initiatives;
- Climate change and population change in both urban and regional water supply planning;
- Water quality monitoring and management in regional areas of New South Wales;
- Incorporating First Nations knowledge and protecting Indigenous Cultural and Intellectual Property;
- Stakeholder feedback in water reform and planning processes.

Despite the challenges our sector faces, we embrace the opportunity of collaborating with all stakeholders and all levels of government to deliver water services commensurate with a standard of living all Australian's can expect, irrespective of where they live. We look forward to participating in the next steps of national water reform. Please contact Rob O'Neill, Manager Regulatory Strategy (rob.oneill@waternsw.com.au) if you would like to further discuss any of the issues raised in our submission.

Yours sincerely,

A handwritten signature in blue ink, consisting of several overlapping loops and a long horizontal stroke extending to the left.

Andrew George

Chief Executive Officer

Who is WaterNSW?

Introduction

Purpose: *Water delivered when and where it matters.*

Vision: *To support the resilience of NSW communities through our leadership in delivering water services, for generations to come.*

WaterNSW is the utility responsible for operating NSW's major water supply dams and rivers. WaterNSW delivers untreated water and services required by local communities, industries, and primary producers to help them grow and thrive. We also supply treated drinking water to some customers in NSW. Our core functions are summarised below:



Source water protection

Protection of the Greater Sydney drinking water catchment to ensure safe water is supplied to Sydney Water, local councils and other distributors for treatment and distribution to their customers.



Bulk water supply

Supplying water from storage dams to customers in the Greater Sydney drinking water catchment and in NSW's regulated rivers.



System operator

Efficient management of the state's surface and groundwater resources to maximise reliability for users through the operation of the state's river systems and bulk water supply systems, in collaboration with the Murray-Darling Basin Authority which directs operations of the River Murray system and the Border Rivers Commission (crossing the Qld border). To support this function, we own, operate and maintain Australia's largest hydrometrics network.



Infrastructure planning, delivery, and operation

Meet customer-defined levels of service consistent with NSW Government policy and relevant customer supply agreements, which include priorities to increase the security and reliability of water supplies to customers and communities of NSW.



Customer water transaction and information services

Providing efficient and timely services to customers for water licensing and approvals, water trades and billing, and to meet their water resource information needs for surface and groundwater quantity and quality.

WaterNSW recommendations to NWI

Climate change, extreme weather events including drought and flooding being considered within all regulatory instruments.

Climate projections point to hotter, drier, and more extreme weather, likely meaning material reductions in water availability and an increase in the frequency and severity of droughts and floods across the nation. And it will accelerate change in irrigated crop production. The droughts and water scarcity experienced during the past 20 years are likely to increase, suggesting a concerted effort by policy makers is required through changes to the NWI. We therefore agree with this proposed Focus Area.

These changes include requiring businesses to develop, and regulators to support, climate change adaptation plans and to deal with droughts, floods, and shocks and to adapt to a changing climate. We support more stringent asset and water management planning requirements that take into account more frequent and severe weather events (e.g. rarer than 1 in 100-year AEP events).

We also support promoting conjunctive use of surface and groundwater resources in a more efficient and effective manner as part of a drought resilience strategy.

The NWI could also mandate the establishment of frameworks dedicated to assessing and setting a consistent approach to establishing Government's "drought risk appetite", and facilitating comprehensive planning processes that support this risk appetite (or in other words, the appetite for a community running out of water and how to deal with such a situation). Such frameworks would empower communities to engage in effective drought preparedness and planning, enabling governments to transparently navigate the complexities of drought management and equitably distribute water resources during periods of scarcity.

By way of example, in NSW there are a number of different and inconsistent policy documents that define the level of drought security. Notably for Greater Sydney, this is defined in the "design criteria" that are the responsibility of WaterNSW to model and report under our Operating Licence set by IPART. Those 'design criteria' effectively establish that the Government accepts the risk a global city like Sydney has a 1 in 100,000 chance of running out of Water. These probabilities are complicated with increasing sources of supply from climate independent sources (such as desalination and purified recycled water) and increasing demands (such as population and industry growth and increased requirements for environmental releases from dams). The water supply/demand balance is not static.

Regardless, recent droughts have shown that the reality is Governments do not have an appetite for a town running out of water regardless of size, from small communities to the largest cities. So, the planning and policy settings that set a basis of water supply planning imply a level of risk appetite that is not aligned with the risk appetite of Governments. This, we would suggest, is where the NWI could provide national leadership and guidance for all governments.

The consequence of retaining the status quo, is that 'unplanned' capital investment or changes to negotiated and established operational rules are often required at short notice to avoid a city running out of water. There are linkages to our comments below on the Economic Regulation of water, which currently sets policy outcomes that do not recognise this incongruence, nor the limited capacity of drought affected communities (and water utilities) to fund those often-significant infrastructure costs, under an Impactor Pays policy setting. Further, last minute changes to operational rules can give stakeholders the impression of "policy on the run" which is not necessarily well considered, nor well consulted on.

Water pricing and institutional arrangements including cost recovery for planning and management and how to address recommendations and findings from the Commission's 2020 inquiry.

Cost Shares: The NWI suggests that funding and financing arrangements, including any government subsidies, should only be determined once a project has met all other criteria through the development of a business case; any government subsidies for infrastructure must be provided transparently; and all subsidies should have a clearly expressed policy rationale. We support these principles.

The NWI, however, provides little guidance on the principles for sharing costs between government and users, leading to uncertainty and the perception by customers of inequity. The NWI recommends avoiding monopoly rents, but this is ill-defined and provides little guidance to price regulators about how to implement such guidance.

Broader concerns arise regarding the cost implications associated with existing water management practices. The principles outlined in the NWI lack adequate emphasis on matters of cost allocation, specifically concerning the delineation between those who impose impacts and those who benefit from activities, such as through impactor versus beneficiary pays models. This ambiguity leaves room for broad and inconsistent interpretation by jurisdictions, and may result in unintended consequences, particularly in terms of affordability for end use customers in the water sector.

To the extent the NWI could provide better guidance to policy makers and regulators on cost sharing, WaterNSW suggest that the NWI assess, as a minimum, whether a “beneficiary” rather than an “impactor” pays approach to cost sharing is the more equitable funding model, especially in relation to additional 21st Century requirements and expectations for:

- water quality monitoring, management and communication;
- managing environmental flows;
- mitigating and managing long-term and incident based environmental impacts (eg fish death events, algal blooms, cold water pollution);
- enabling fish passage through and around major infrastructure;
- data/information management, sharing and protection between agencies and communication/insights with the public;
- increasing regulatory burden and reporting.

Affordability: The NWI should require the undertaking of a more thorough examination of the escalating costs associated with delivering water services within a progressively intricate environment, encompassing factors such as climate variability, regulatory frameworks, and evolving community expectations. It is imperative to carefully deliberate upon how these heightened costs impact affordability and to determine the appropriate allocation of these costs among stakeholders and customers.

As a result of this examination, the NWI should provide guidance to regulators and policy makers surrounding the risk of increasing regulatory asset bases and increasing expectations for the activities and services provided by many water utilities and the impact this will have on future bills and affordability for customers. This issue arises due to utilities following the NWI principle of ‘upper bound pricing’ (i.e. cost reflectivity) combined with increasing infrastructure investment and the replacement of legacy assets with artificially low valuations prior to the start of the NWI (including written down and ‘line in the sand’ asset valuations). As these assets are replaced the cost of the new infrastructure is higher, leading to upward pressure on prices and affordability. This issue is likely to face most water utilities over the next few decades, if it hasn’t already.

The NWI pricing principles should also recognise that there is an emerging two speed economy. Whilst large cities continue to grow and populations increase (which bring their own funding and pricing challenges), regional areas are in many instances seeing population declines, or in the case of the Murray-Darling Basin, a decline in usage of water due to the overlay of both climate change and Commonwealth water policy (including the rapid

emergence of the Environmental Water Holder being the largest licensed water holder but which has a fundamentally different water usage behaviour).

A potential future shrinking of the customer base in the Murray-Darling Basin, exposed to an economic framework that implies the 'impactor' (i.e. almost always interpreted as the irrigator/farmer by pricing regulators) should pay for the cost of water services, is an unsustainable pricing model in the long term.

This framework also marginalises the most remote communities, who neither have access to safe and clean water, but also cannot afford to fund the cost of the necessary infrastructure under an impactor pays regulatory model.

This growing affordability issue, combined with an incongruous approach to drought risk appetite and Infrastructure planning (mentioned earlier), are culminating in a policy and regulatory framework that is no longer fit-for-purpose, and increasingly resulting in Governments having to step outside of the regulatory frameworks to find (and fund) solutions.

Urban water supply policies or initiatives

WaterNSW is supportive of the shift to investing more into rainfall independent water supplies, particularly to address growth. In relation to using purified recycled water to augment urban water supplies, we consider that all impacts associated with discharging this water into bulk water storages (or the protected catchments/rivers upstream of them) should be investigated and understood as part of the business case and Environmental Impact Assessments (EIA) for such projects.

Climate change and population change in urban water supply planning

Large capital expenditure is typically required to ensure the long-term balancing of water supply and demand projections. Therefore, we recommend long-term horizons be used in this process and these be used to feed into the typically shorter-term horizons associated with price determinations.

In addition, to the comments made under '**Affordability**', WaterNSW considers that there are complex challenges for regionalised urban water utilities and recommend a more strategic and holistic approach to ensuring these utilities meet the relevant water quality and dam safety standards, and the limited future potential for Government funding to support these initiatives. There are strong linkages to this issue and affordability. WaterNSW for example has recently updated its dam safety risk assessments for Warragamba Dam, one of the largest urban water supply dams in the world. The greatest (and rarest) risk to the safety of the dam is

driven by climate change. The investment required to eliminate this risk is extremely large. The risk however is extremely low. Like drought risk, WaterNSW finds itself needing to have complex and challenging discussions with Government about risk appetite and getting the balance right between costs, benefits and risks.

Smaller water utilities are unlikely to have the resources (human or financial) to undertake the advanced studies that WaterNSW has in this instance, nor the financial resources to eliminate extreme climate risks.

It's these climate extremes that dam owners are used to planning for, but which are not necessarily in focus when considering how climate change may impact an urban or regional water business.

WaterNSW consider that, as with drought risk appetite, there is an opportunity for the NWI to provide national guidance to all jurisdictions on climate change risk, especially risk appetite, which is holistic and including floods, drought, and fire.

Water quality monitoring and management in regional areas of New South Wales

Water monitoring, accounting and data/information sharing and communication is a complex process that spans having the right instrumentation, with the right coverage, collecting the right information, to the right quality and making data and insights available to the right end-users in a timely manner and that is fit-for-purpose.

It is important that this process is not fragmented among different agencies within any one jurisdiction and that the critical mass of skills and expertise is not also fragmented. There are advantages in there being a single source of truth of data.

The right systems and processes need to be used that are, to the best extent possible, digitised and automated to improve accuracy of data/information and the timeliness of sharing that data/information and, once it is shared, the ongoing security and integrity of that data/information.

Cost recovery of these functions should also recognise the intended purpose of this data/information and the cost burden of running such networks should not be entirely placed on the customers of water businesses.

Water quality monitoring in regional and remote NSW is decentralised with several agencies collecting and storing differing types of data, for different purposes, and in a manner that is not coordinated. Efforts to identify opportunities to improve this were recommended in the

NSW Government's Town Water Risk Reduction Program, with WaterNSW now funded to undertake some pilot studies to explore ways the government can leverage WaterNSW water quality science skills and capabilities to better support regional and remote communities.

There are also potential improvements to be made in monitoring groundwater levels and quality and automating and remotely accessing this information to the extent that it is practical, efficient, and effective to do so.

Incorporating First Nations knowledge and protecting Indigenous Cultural and Intellectual Property

WaterNSW supports Aboriginal and Torres Strait Islander people's growing aspirations for greater access to, and control over, water resources. The importance of water to Aboriginal and Torres Strait Islander people has been recognised and commitments to respond to these aspirations have recently been made to close the gap.

However, more can be done, and we support inserting a new element to the NWI to reflect the interests of Aboriginal and Torres Strait Islander people in water resource management. Specifically, all water utilities and water agencies could commit to implementing Reconciliation Action Plans (RAPs).

Whilst cultural water is a policy matter that is developing, as a system operator we're yet to fully learn how we can take the policy concepts and apply (or deliver) this cultural water in a manner that meets the cultural needs of First Nations people. That ultimately requires a joined-up conversation and a learning mindset from policy makers, planners, operators, environmental water holders and First Nations communities.

As we have seen in recent years, this policy outcome to ensure cultural water is enlivened and delivered, will be tested when we are in flood and perhaps more intensely, when in drought. The policy and water sharing frameworks arguably do not currently contemplate these extremes, nor how cultural water should be prioritised in those circumstances. In addition, cultural water is unlikely just about volume, but there will also be a need to consider timing and water quality in meeting cultural water outcomes.

There may be an opportunity for the NWI to provide nationally consistent guidance on the practical implementation of the policy reforms, and to help ensure cultural water is distinguished from water for the environmental.

Stakeholder feedback in water reform and planning processes

At WaterNSW, we are not a policy agency and do not 'set the rules'. We do however engage extensively with our customers and stakeholders. In these processes, we receive feedback that there are some other key issues that should be considered, especially in the policy domain. We often find ourselves as a conduit to the policy agencies, by virtue of being a front-line operational business with direct relationships with customers and the community.

Customer Engagement: Effective and well-informed community engagement is needed to support reform in all aspects of water resource management and water services provision. This need will increase as we continue to experience a more variable climate of extremes. Given this, a commitment for the policy and rule makers (not just the water utilities) to conduct regular, effective, and well-informed community engagement should be enhanced in a renewed agreement with additional guidance on what constitutes effective engagement. Guidance could also be provided to regulators regarding how the outcomes from effective consultation processes are to be included in regulatory pricing determinations and in setting water policy, in an effort to harmonise expectations and guidance across regulatory processes and jurisdictions.