

WaterNSW's Operating Licence Review 2022-2024

Response to IPART's Issues Paper





Acknowledgement of Country

WaterNSW acknowledges the Traditional Custodians of the land and water on which we work and recognises the continuing cultural and spiritual connections that Aboriginal and Torres Strait Islander People have to Country. We pay our respects to Elders past and present.

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1. Introduction

WaterNSW welcomes the opportunity to provide feedback for the Independent Pricing and Regulatory Tribunal's (IPART's) *WaterNSW Operating Licence Review - Issues Paper* (August 2023). IPART's review of the WaterNSW Operating Licence 2022-2024 provides an opportunity for WaterNSW, as well as other stakeholders, to share their views on WaterNSW's current Operating Licence so that IPART can issue recommendations for the new Operating Licence.

This submission provides an opportunity for WaterNSW to develop and formalise a written position and provide advice on the nine focus areas identified in IPART's Issues Paper. More specifically, it gives WaterNSW the opportunity to respond to the questions and positions provided by IPART in their Issues Paper. This gives WaterNSW an opportunity to highlight the areas which are currently working well, as well as the areas where change or improvement is proposed.

1.1 About WaterNSW

WaterNSW is a State-Owned Corporation (SOC) established under the *Water NSW Act 2014* and is operating under an Operating Licence.

WaterNSW supplies two-thirds of water used in NSW. But we are more than a system operator. We are a catchment protector/manager and water quality experts. We maintain and operate the assets that monitor and supply water to our customers and communities and skilfully manage the system through floods and drought. We administer a comprehensive licensing assessment and approval system for water users.

At WaterNSW our purpose is water, delivered when and where it matters.

1.2 Our Operating Licence

WaterNSW operates under a complicated regulatory regime, consisting of legislation, regulation and instruments which sit under those; one of which is an operating licence granted by the Minister and administered by IPART. The Operating Licence authorises WaterNSW to carry out functions listed in the *Water NSW Act 2014* and those conferred functions from the *Water Management Act 2000*, in accordance with terms and conditions in

the Licence. WaterNSW can only exercise its functions under the authority of, and in accordance with, one or more operating licence.

The licence also imposes reporting obligations on WaterNSW. Each year, IPART audits and reports on WaterNSW's performance against licence provisions. Penalties can be imposed by IPART for non-compliance.

1.3 End-of-term Licence Review

When an Operating Licence reaches the end of its term, IPART conduct an 'end-of-term' review to assess whether the Licence continues to meet its objectives. IPART use the review as an opportunity to investigate any issues that have arisen during the Licence-term, and which may impact the effectiveness of the Licence.

WaterNSW's 2022-2024 Operating Licence is due to expire on 30 June 2024 and IPART will recommend a new operating licence come into effect on 1 July 2024 for WaterNSW.

This review will inform IPART's recommendations for the new Operating Licence.

2. Context of the Review

2.1 Objectives of the Review

With the current Operating Licence due to expire on 30 June 2024, a new Licence must be issued by 1 July 2024 to permit WaterNSW to continue to exercise its functions under the *Water NSW Act 2014*.

Before the expiry of the Operating Licence, IPART conduct an end-of-term review to investigate and assess any issues which arose during the Licence term that may have impacted its effectiveness. IPART also assess whether the Licence continues to meet the objectives set out in section 1.1 of the Licence:

- a. Provide transparent, auditable terms and conditions for WaterNSW to lawfully undertake its activities in accordance with industry good practice
- b. Recognise the interests of stakeholders within its Area of Operations
- c. Impose the minimum regulatory burden on WaterNSW by avoiding duplication or conflict with other regulatory instruments

The aim is for IPART to determine whether these objectives remain fit for purpose and if the current Licence meets these objectives in a way that imposes the lowest possible cost to WaterNSW and its customers. IPART also consider whether the Licence objectives align adequately with those in the *Water NSW Act 2014*.

2.2 IPART's approach and main focus areas

IPART applies five key principles when conducting their review of the WaterNSW Licence:

Principle 1. WaterNSW's Licence should authorise the provision of services in accordance with its objectives.

Principle 2. Licence conditions should be clearly expressed and enforceable so that WaterNSW can be held to account when providing authorised services to customers.

Principle 3. Focus on outcomes for WaterNSW customers, the community and environment. IPART will consider how the Licence compliments other regulatory frameworks and tools, and NSW Government policies to achieve the outcomes.

Principle 4. Set minimum requirements and appropriate minimum protections for customers, noting that these should not unnecessarily increase the financial burden on WaterNSW customers and the people of NSW.

Principle 5. Focus on removing redundancy and streamlining current regulation.

IPART uses these principles to assess a series of questions which are grouped into focus areas. In this Review, there are sixty-five questions grouped into nine focus areas, including:

1. Catchment management
2. Water planning and management
3. Climate risk readiness
4. Performance standards
5. Water quality
6. WaterNSW's obligations to its customers
7. Access to information and data
8. Fostering collaboration with other agencies
9. Management systems

3. Our response to the Review

WaterNSW's response follows IPART's structure to the Review. We have grouped our and organised our responses under the nine main focus areas.

3.1 A principles-based approach

WaterNSW adopts a principle-based response in accordance with the *NSW Government Guide to Better Regulation*. Current NSW Government policy requires the Better Regulation principles be used in the design and development of regulatory proposals.

WaterNSW's application of the Better Regulation principles is consistent with the objectives of our Operating Licence, as well as a best practice approach to policy and regulatory development in NSW.

NSW Government Guide to Better Regulation – Seven Better regulation principles:

Principle 1. The need for government action should be established.

Government action should only occur if it is in the public interest, that is, where the benefits outweigh the costs.

Principle 2. The objective of government action should be clear.

Principle 3. The impact of government action should be properly understood, by considered costs and benefits (using all available data) of a range of options, including non-regulatory options.

Principle 4. Government action should be effective and proportional.

Principle 5. Consultation with business, and the community, should inform regulatory development.

Principle 6. The simplification, repeal, reform, modernisation or consolidation of existing regulation should be considered.

Principle 7. Regulation should be periodically reviewed, and if necessary reformed, to ensure its continued efficiency and effectiveness.

WaterNSW understands the application of the Better Regulation principles to mean that NSW Government agencies will discuss and consult on policy decisions and make those policy

decisions prior to the review of an Operating Licence and not as part of the Operating Licence Review. This approach also facilitates an opportunity for any necessary legislative reform before amendments or changes are considered for the Operating Licence.

WaterNSW also notes the Better Regulation principles require consideration of the cost implications of any proposed amendments to the Operating Licence and the funding source for those costs. Any amendments to the Operating Licence should not be made that do not have adequate funding to support their implementation. These costs should also be outweighed by the benefits of the amendments.

3.2 Summary of key issues in this submission

The issues raised in IPART's Issues Paper are both extensive and broad ranging in scope, with 65 issues identified in total.

Of these 65 issues, WaterNSW would like to draw attention to six key issues of significance. These issues have been flagged by WaterNSW for their potential cost and/or their complexity implications. We do not support making changes in relation to some of these issues. For other issues, whilst they may be aligned with our current strategic direction and could provide a significant opportunity for WaterNSW, if **all** the proposed changes were implemented, it could create significant cost implications for WaterNSW. Unless, of course, a corresponding increase was made by the NSW Government to our revenue, to fund the additional costs needed to address those issues whilst balancing the cost share attributable to water users.

These six particular issues include:

1. Authorisation of flood mitigation activities in the Declared Catchment areas is opposed because it is inconsistent with the current Government's position in relation to raising the Warragamba Dam wall. Furthermore, it would require significant upgrades to our infrastructure and associated additional funding;
2. Reduced prescription in relation to the Customer Advisory Groups and better enablement of WaterNSW to work with our customers and the community to develop the appropriate engagement methodology in line with the 3Cs framework;
3. Increasing WaterNSW's responsibility to manage river health beyond monitoring and reporting would need further clarification, including establishing the appropriate policy direction. We consider that managing river health is beyond WaterNSW's

control in many instances. Additional obligations in the Operating Licence would likely correspond to significantly increased costs, and would require discussion of the appropriate user vs Government cost share;

4. Data collection to meet the purposes of other agencies and the provision of access to and sharing of data or information requires clarification and a better understanding of explicit informed consent and data privacy/protection obligations for WaterNSW as a data custodian. Furthermore, increasing WaterNSW's data requirements such as more onerous data standards, obligations to transform data into information, and data quality improvements, will increase costs, thereby raising the question: who should bear these costs – water users or the Government?
5. Additional requirements to develop and implement a Quality Management System would incur significant, additional costs and require an appropriate transition period. Some components of the business already have a QMS where is it considered necessary. However, obligating WaterNSW to have an agency wide QMS would not be appropriate at this time;
6. Prescriptive obligations in relation to national security clearance requirements for our critical water assets are not appropriate.

WaterNSW sees this Review as an opportunity to align our Operating Licence with our current strategic direction. It is also an opportunity to look for the areas for change or improvement to ensure a best practice approach, currency of standards, and to ensure ongoing improvement to the Operating Licence. Nonetheless, it is important that cost implications for WaterNSW customers forms part of the balancing exercise. Given the limited timeframe WaterNSW had to respond to this Review, we were unable to consult with our customers on the proposals contained within. This means WaterNSW has not been able to provide customers with an understanding of the costs associated with the proposed positions. This is particularly pertinent where the proposed changes are not part of current government policy. Cost-benefit analysis will be crucial to understand the best solutions.

Chapter 4 - WaterNSW's Response to the Operating Licence Review

4.1 Catchment management

4.1.1 WaterNSW supports extending WaterNSW responsibilities in catchment areas to the extent it is within our control

1. Should WaterNSW's obligation to undertake catchment management activities extend to the non-declared catchment? If so, what could WaterNSW do in the non-declared catchment to encourage catchment management practices and source water protection? What are the benefits?

2. Should WaterNSW be required to undertake a program of research in both the declared and the non-declared catchments?

3. Should WaterNSW be required to undertake education programs in the community for both the declared and non-declared catchments?

4. Should the Licence specify what the education programs should include? If so, what should it specify?

WaterNSW **supports** extending WaterNSW's:

- catchment management,
- research; and
- educative role to non-declared catchment areas.

This would make the Operating Licence obligations more aligned to and consistent with the requirements of the *Water NSW Act 2014* in relation to research and education. However, WaterNSW's listed functions do not extend to catchment management or water quality in non-declared areas. Section 7(1)(g) (water quality) and 7(1)(h) (catchment management) are limited to the declared catchment.

WaterNSW considers that extending WaterNSW's functions to catchment management and water quality for non-declared catchments, would require IPART to confer or impose it as a new function under s7(4)(c) "*Water NSW also has such other functions as may be conferred or imposed on it ...(c) by an operating licence.*"

WaterNSW suggests that there are several aspects to consider if our role is extended. These include:

- Obligations to be clearly aligned to the *Water NSW Act 2014* and its objectives.
- Be supported and aligned with current government policy.
- A defined scope, with direct links to our functions, so that WaterNSW avoids taking on other agencies' roles and responsibilities. For example, education in the non-declared catchment areas to focus on the role, functions and related water supply and capture, store, release activities and conferred functions that WaterNSW undertakes in the regions.
- Articulating what the key drivers are. For example, for catchment management and research in declared catchments, it is clearly described.
- A defined area of operations/geographic scope. For instance, is catchment management limited to non-declared land that WaterNSW owns, land that is managed on behalf of Water Administration Ministerial Corporation (WAMC), or is it broader i.e. whole catchments, noting that there are other agencies also involved in this space and avoiding duplication with those, such as Local Land Services (LLS)?
- Aligned to projects and activities that WaterNSW already undertakes in non-declared areas. For example, our research on catchments in non-declared areas could focus on supporting our functions and related water quality/health risks, such as managing cyanobacteria, management and investigation of cold-water pollution, supporting environmental flow management, as well as exhibiting a sense of social responsibility by having regard to the interests of the community in which we operate. Similarly, education programs would be delivered to customers and in communities where major

projects/ upgrades or community engagement is being undertaken in the regions (e.g. previous Wilcannia Weir Replacement Project. Lake Cargelligo embankment upgrade).

- Be supported by adequate funding.

4.1.2 Improving river health is important, but to the extent it is within our control

WaterNSW **considers** that extending WaterNSW's functions to catchment management and water quality for non-declared catchments, would require IPART to confer or impose it as a new function under s7(4)(c) "Water NSW also has such other functions as may be conferred or imposed on it ...(c) by an operating licence."

5. Should WaterNSW be required to manage river health, beyond monitoring and reporting against the catchment health indicators identified in the reporting manual?

WaterNSW **supports** the organisation having a larger and better-defined coordination, data collection and monitoring role. However, WaterNSW suggests that consideration needs to be given to the planning/policy/governance frameworks for managing river health that WaterNSW operates within, and then implements within our area of responsibility. Establishing clear legislative, policy and institutional settings first, would provide the clarity and scope required to identify WaterNSW's role without duplication or overlap with the number of other agencies who have responsibilities in this area.

At this time, WaterNSW considers there are disjointed roles/responsibilities for managing and monitoring river health across the state. WaterNSW implements actions to improve water quality where approved within operating rules (such as environmental allowances) and works with the Department of Planning and Environment (DPE) to undertake the monitoring to assess the effectiveness of these actions. However, there remains no agency accountable

for “managing” water quality, and yet there are multiple agencies responsible for water quality “monitoring”.

Given the above issues, WaterNSW considers it important to clarify what is defined as “managing river health” as opposed to “monitoring river health”, especially if there are to be any operating licence obligations relating to these functions.

WaterNSW understands that DPE is currently preparing a Water Quality Roadmap for NSW and this could be used to inform a future role for WaterNSW that may or may not require some form of regulation through the operating licence. The Roadmap is the next stage after DPE delivered the River Condition Index in January this year as part of their WAMC deliverables. We suggest that clarity is sought from DPE in relation to how these initiatives fit together; as together with the Chief Scientist's Review¹, they are all likely to have implications for managing river health in NSW.

In regard to aspects of river health that are within WaterNSW's influence, WaterNSW has a monitoring role and also provides algal alerts, but other agencies have control of managing environmental water quality events (e.g. Murray-Darling Basin Authority (MDBA), DPE, Environment and Heritage (EHG), and NSW Fisheries). WaterNSW can vary the offtake levels at some dams, but not all, to manage cold-water pollution and dissolved oxygen levels. Addressing this issue requires infrastructure upgrades and, in some instances, there have not yet been viable identified solutions nor the funding available to implement them.

Currently, WaterNSW undertakes some catchment health indicator monitoring in the non-declared catchments (e.g. cyanobacteria and a small suite of water quality parameters) to support our own water quality storage monitoring and WAMC obligations. But we consider this to be more “monitoring” than “managing” river health.

We seek clarity on WaterNSW's role as the provider of water through capture, store and release mechanisms and the potential for both linkages, but also inconsistencies between delivering water for consumptive purposes and maximising river health.

River health is entwined with catchment management and there is potential for WaterNSW to have a larger role if Licence obligations regarding catchment management are also

¹ The Office of the NSW Chief Scientist and Engineer's [Independent Review into the 2023 Mass Fish Deaths in the Darling-Baaka River at Menindee](#)

extended to non-declared areas, especially for land that we own or control which is typically adjacent to our major infrastructure.

4.2 Water planning and management

4.2.1 Long-term water planning should be consistent with current agency functions and obligations

6. Do you agree with removing the Licence conditions requiring WaterNSW to implement actions under the Greater Sydney Water Strategy?

WaterNSW **supports** removing Operating Licence conditions requiring WaterNSW to implement actions under the Greater Sydney Water Strategy (GSWS). We support the outcome of this, which is to apply an adaptive management approach to the GSWS.

Under the current GSWS, WaterNSW has jointly with Sydney Water Corporation (Sydney Water) completed the delivery of the Long-Term Capital and Operating Plan (LTCOP) and the development of the Drought Response Plan (DRP) and is working through the development of an appropriate e-flow monitoring program, in conjunction with DPE-Water. The GSWS will be reviewed and updated every five years, led by DPE-Water. The next review will likely be in 2026.

7. Should the Licence require WaterNSW to implement actions in the Greater Sydney Water Strategy requested by the Minister?

WaterNSW **does not support** the Operating Licence requiring WaterNSW to implement actions in the GSWS requested by the Minister. The Minister has powers to direct WaterNSW at any time and does not need this power through the Operating Licence. Having a requirement in the Operating Licence causes regulatory duplication. Furthermore, it does not align with the adaptive management approach of the GSWS.

8. Should the Licence require WaterNSW to maintain a long-term capital and operating plan, to be approved by the Minister?

WaterNSW **supports** the Operating Licence requiring us to maintain an LTCOP. We suggest that any update to the Operating Licence obligation is also reflected in Sydney Water Corporation's Operating Licence.

9. Should the Licence require WaterNSW to maintain and implement the Greater Sydney Drought Response Plan and participate in any review of the plan?

WaterNSW **supports** the Operating Licence requiring us to maintain and implement the GSDRP and participate in any review. We suggest that firstly, any update to the Operating Licence obligation is to align it with the adaptive management approach of the GSWS, and secondly, is reflected in Sydney Water Corporation's Operating Licence.

10. Are the current Licence requirements to calculate System Yield in the Declared Catchment Areas adequate? If not, what requirements are appropriate?

WaterNSW **considers** the current requirements to calculate System Yield in the Declared Catchment Areas are adequate.

WaterNSW **suggests** that the current requirement in the Operating Licence regarding advising the Minister, (ref: clause 2.5.2 (b)) if Water NSW considers that future demand for Bulk Water may exceed that System Yield and when the exceedance might occur, should be aligned with the related responsibility for supply augmentation. Under current arrangements for example, this communication should be a joint responsibility with Sydney Water given the role of supply augmentation. We suggest that a similar obligation is added to Sydney Water's Operating Licence to reflect this responsibility.

11. Should the Licence require WaterNSW to maintain an agreement, MoU or protocol with Sydney Water to support water supply augmentation?

WaterNSW **supports** in principle to the extent that it meets our role and responsibilities in relation to water supply augmentation. WaterNSW already has working arrangements with Sydney Water, including a memorandum of understanding (MoU) to support the Transfer of the Supply Augmentation Planning Function primarily led by the Raw Water Supply Agreement, as well as other arrangements that sit under this, such as Operating Protocols and a Joint Communication Protocol.

4.2.2 Moving to a water conservation plan could be considered

12. Do you agree with transitioning the existing requirements in the current Licence for WaterNSW to maintain a Water Conservation Plan that is consistent with the NSW Water Efficiency Framework, NSW Water Strategy and the Greater Sydney Water Strategy?

WaterNSW **supports** transitioning the existing requirements to maintain a Water Conservation Plan to be consistent with the NSW Water Efficiency Framework (response to Question 13 refers), NSW Water Strategy and the Greater Sydney Water Strategy. We consider that the Water Conservation Plan is an opportunity to identify efficiencies and limit loss. In transitioning to the new requirements, attention needs to be given to the extent to which the Strategies and the Water Efficiency Framework (response to Question 13 refers), can be applied to the WaterNSW context. Any changes would need to consider the cost and an appropriate timeframe for implementation.

13. Is there anything else that Water NSW's licence should authorise or require in relation to water conservation?

WaterNSW **considers** the NSW Water Efficiency Framework is a best practice guide for a broad range of water suppliers, distributors, customers and consumers, including government, water utilities, councils and large businesses. As a result, consideration to the extent that it can be applied to WaterNSW, in terms of our functions and operations needs to be clearly defined, as well as the Framework's relevance given key components can only be applied in the urban context.

4.2.3 Changing our flood mitigation/management obligations is not appropriate

14. Do you agree that planning and responding to flood emergencies is adequately regulated? If not, should we consider requiring WaterNSW to undertake any additional flood planning and emergency response activities?

WaterNSW considers planning and responding to flood emergencies to be adequately regulated and **does not support** requiring WaterNSW to undertake any additional flood planning and emergency response activities. WaterNSW maintains and implements, when required, flood operation protocols that can be actively operated during floods.

WaterNSW provides and maintains the early warning network for downstream notifications to residents, landholders and customers. WaterNSW works closely with NSW emergency response agencies when planning and responding to flood emergencies. The NSW State Flood Plan (2021) sets out WaterNSW's role and responsibilities. WaterNSW does not have a combat role during flood emergencies. We provide data and notifications to BoM, who issue the flood warnings, and NSW State Emergency Service (SES) who respond to flooding.

WaterNSW maintains Dam Safety Emergency Plans (DSEPs) for all our major dams, which are subject to regular desktop and practical exercising. These exercises are regularly attended by local SES and Police to observe and share information across the emergency agencies.

15. Should the Licence authorise WaterNSW to undertake flood mitigation and management in all parts of NSW including the Sydney catchment area? If so, are there any terms and conditions that are appropriate for this?

WaterNSW opposes the Licence expanding the authorisation for WaterNSW to undertake flood mitigation in the Sydney catchment area.

WaterNSW is regulated by Natural Resources Access Regulator (NRAR) through our Water Supply Work Approval conditions, as well as Dams Safety NSW under the *Dams Safety Act 2015* and the *Dams Safety Regulation 2019*. WaterNSW also manages a Flood Warning Network and provides data to the BoM from this Network under obligations outlined in the *Water Act 2007 (Cth)*, to enable them to communicate and publish flood levels. The SES then use this information as the combat agency to manage the community response to the flooding.

WaterNSW is already authorised to undertake flood mitigation and management in areas of NSW outside the Sydney catchment. In these areas, there are only two storages (Burrendong and Glenbawn Dams) that are also obligated to undertake flood mitigation. This obligation arises from having dedicated Flood Mitigation Zone conditions in their respective Water Supply Work Approvals. This framework provides adequate regulation for flood mitigation outside the Sydney catchment areas. The cost of any changes to these flood mitigation obligations, including Capex to upgrade infrastructure and Opex for ongoing modified systems/processes would need to be considered, should the obligations change for other storages.

The Operating Licence currently does not authorise WaterNSW to undertake flood mitigation and management for the Sydney catchment area. Dams in the Sydney catchment area were designed and built for water supply security only and our current Operating Protocols are designed accordingly.

Operating a dam in the Sydney drinking water catchment for flood mitigation purposes could also reduce the security of water supply. This is because holding the storage at a lower water level to create additional airspace to capture floods or making any pre-releases of water from storage (as is commonly the case for flood mitigation protocols in anticipation of imminent flooding) would reduce the system yield.

A flood mitigation authorisation would be inconsistent with the current Government's position not to raise the Warragamba Dam wall. To enable flood mitigation, not only would the dams need to be upgraded (design and configuration), it would also require considerable resourcing to develop new models, protocols, procedures, operating manuals, and education and training. The GSWS has not provided any policy or strategic planning direction in this regard. WaterNSW also notes that the NSW Reconstruction Authority is in the early stages of developing a Disaster Adaptation Plan for the Hawkesbury-Nepean Valley, which will be an important instrument to guide any holistic whole-of-government response and policy position with respect to flood mitigation in the Hawkesbury-Nepean Valley.

Finally, authorising the dams for flood mitigation is likely to be perceived and potentially create an obligation for these dams to do so, even if the policy and regulatory instruments have not been adopted.

Should the Government determine that it is appropriate for WaterNSW to operate these storages for flood mitigation, then the Operating Licence could be amended after the policy and regulatory settings have been designed and tested, the dams upgraded, and the appropriate systems and procedures developed to enable flood mitigation.

16. How could the advanced notification changes to flow release patterns be strengthened to further warn and protect downstream customers and other stakeholders of water releases from the dams (not for the purpose of flood warning)?

WaterNSW provides and maintains the early warning network for downstream notifications to residents, landholders and customers to notify them of changes to flow release patterns. WaterNSW **considers** that what constitutes additional notification of water releases needs to be defined, and should take into account notification requirements, system functionality and capability, implementation and cost.

Furthermore, one of the reasons that the online platform WaterInsights has been developed is a means to provide transparency around our operations, including Operational Updates that explain our release decisions to our customers and the community. The portal also

provides the ability to establish customisable near real-time alerts for flow and river height thresholds chosen by users, for any WaterNSW operated gauge.

4.3 Climate risk readiness

4.3.1 An obligation for abatement activities could be considered

17. Should the objectives in the Licence be amended to explicitly refer to abatement?

WaterNSW **suggests that we could have** obligations for abatement, in relation to mandating WaterNSW's contribution and reporting on progress towards achieving the state's "net zero by 2050" target.

The recent audit of the catchment health of the Declared Catchment (under s42 of the *Water NSW Act*) also identified that a desired outcome was that "*Greenhouse Gas (GHG) emissions in the catchment are reduced to help meet the NSW Government net zero emissions targets*" and made the following specific recommendations to the Government:

- Recommendation 2: Identify major sources of greenhouse gas emissions from the Catchment;
- Recommendation 3: Demonstrate how major sources of greenhouse gas emissions in the Catchment are being reduced or eliminated;
- Recommendation 4: Demonstrate how potential major sources of greenhouse gas emissions in the Catchment are being avoided or minimised;

GHG emissions can be categorised as follows:

- scope 1 – direct emissions from sources controlled or owned by WaterNSW, such as a vehicle fleet not fuelled by renewables.

- scope 2 – indirect emissions from energy usage sourced from an external provider
- scope 3 – indirect emissions not covered in Scope 1 and 2 emissions such as those created by a supply chain.

WaterNSW **proposes** that any obligation for abatement of GHG emissions should be limited to Scope 1 and 2 emission categories (excluding fugitive emissions) at this time, as the Government's position on Scope 3 is yet to be determined.

4.3.2 An obligation for resilience and adaptation is not necessary

18. Should the objectives in the Licence be amended to explicitly refer to climate change resilience and adaptation?

WaterNSW **does not support** amending the licence to explicitly refer to climate change resilience and adaptation. WaterNSW considers climate resilience and adaptation as actions to reduce the impact of changing climate conditions on our assets, systems and water. The following outlines how WaterNSW plans, manages and assesses climate change risks in key areas of the business, with brief descriptions of the various climate change adaptation and mitigation measures currently being implemented. These high-level measures cover strategic planning, including Environment, Social and Governance Strategy and Long-Term Capital and Operational Plans, long-term and short-term forecasting and supply, research and planning in both declared catchments and rural valleys, as well as the implications for dam safety.

WaterNSW has an Environment, Social and Governance (ESG) Program. It aligns to WaterNSW's Corporate Strategy and our Statement of Expectations. WaterNSW is embarking on a journey to establish a detailed action plan. The goal of the Program is to develop a broad and robust program that commits WaterNSW to being a socially and environmentally responsible organisation. The ESG Program has a number of key focus areas; those that directly relate to climate change are, Net Zero Emissions and Climate Change Adaption. The ESG Program and Action Plan will be consistent with ISO 14091:2021(en) Adaptation to climate change — Guidelines on vulnerability, impacts and risk assessment.

WaterNSW is reviewing our Climate Change Adaptation Plan (CCAP) that is considered a component of the ESG Program of works. WaterNSW is aiming to achieve a unified 'whole of business' approach in relation to the assessment and management of climate related risks. This plan will enable WaterNSW to understand and document its current and proposed approach to managing climate risk and result in the development of a Strategy that can manage WaterNSW risks related to climate change.

The Greater Sydney Water Strategy provides, amongst other things, a framework for the identification, analysis and response to climate change and its implications for the water supply system in terms of growth and drought response, and for asset and other investments to improve system resilience in the face of a changing climate.

The Long-Term Capital and Operational Plans (LTCOPs), together with the Greater Sydney Drought Response Plan (GSDRP), outline how the Greater Sydney Water Strategy (GSWS) will be 'operationalised'. The GSWS addresses drought and water security issues for the Greater Metropolitan Region, but WaterNSW also considers the broader climate change aspects, not just for this Region but for all of NSW.

WaterNSW undertakes long-term supply forecasting and system modelling. For example, a relative difference model is used for the Greater Sydney Declared Catchment and its bulk water supply system to assess future impacts. Climate change can be assessed by adding a ten-year representative changed climate (wetter/drier, hotter/colder) and running it through the scenario model. This can then be compared to the baseline to determine the likely change and impacts.

We are also building and further enhancing climate change forecasts into our regional models to support water delivery and flood operations across NSW.

Under the Portfolio Risk Assessment for WaterNSW dams, we are completing Hydrologic Risk Assessments for the high-risk priority dams (which include assessment of likely climate change impacts on rainfall and river flows) and developing the related models.

All these activities are underpinned by technical studies and collaborative research with leading universities and industry partners, to improve knowledge and reduce uncertainty related to climate change predictions and inform approaches for incorporating them into our models.

In relation to short-term supply operations, WaterNSW has a Water Conservation Strategy and associated five-year water conservation work program. The Strategy is based on consideration of the following key principles:

- Adaptiveness
- Technological changes
- Economic
- Environmental
- Social changes, and
- Catchment specific.

The water conservation work program consists of activities that assist in the sustainable and responsible management of water resources, and actions to minimise losses and reductions in water availability.

For short-term supply and release of water, climate change is an implicit factor in the short-term forecasting (days to weeks) and the seasonal forecasting (up to twelve months) for real-time river and dam operations.

Research on climate change is undertaken in the Declared Catchments as part of our Science Program. Current projects include:

- Understanding the risks of fire to water quality including how we understand the role of fire severity, erosion processes and contaminant transfer into Lake Burragorang with the use of outputs to improve our ability to model and plan for fire events and to potentially incorporate protection of water quality in hazard reduction burn planning.
- A foresighting study on the Declared Catchment to understand the possible future catchment state based on current megatrends and local drivers. This will guide pre-emptive management options and includes assessment of how climate change, green energy and settlement patterns by 2040 and 2060.
- One potential outcome of climate change is increased occurrence of cyanobacteria blooms in our storages. Research into cyanobacteria risk is focusing on understanding drivers and behaviours and improving prediction and monitoring, such as remote sensing and genomic methods of toxicity potential.

- Undertaking detailed water quality trend analysis that is able to separate the effect of extreme events (rainfall and fire events) on water quality trends. This will allow improve accuracy for scenario testing under higher intensity rainfall and fire frequency and consequently, the likely impact on water quality.
- Assessment of GHG emissions from lakes and the potential to mitigate this using green powered aeration, which also has water quality benefits, as well as GHG reduction potential.
- Further research on the long-term impacts of undermined swamps drying out in terms of water storage and fire risk.

Research to understand how water transfers and indirect potable water strategies interact with lake and river water quality to maintain ecosystem function under a potential increase in these strategies of supply augmentation under a more variable rainfall future.

In the rural valleys, WaterNSW is currently developing drought management plans for our regulated rural valleys. The plans will guide our response to future droughts and will document the monitoring tools, planning and preparation measures, response measures and drought recovery actions. The plans will also include the development of a risk-based decision logic framework, which will enable WaterNSW to be better placed to respond to potentially more severe droughts due to climate change.

In addition to this, we are examining Cold Water Pollution mitigation options studies to assess options with renewable energy benefits and the potential to address net zero emissions targets under WaterNSW's Corporate Strategy and ESG Program.

Within the dam safety program, and as part of the ongoing review and update of our risk assessments, WaterNSW undertakes periodic hydrological analyses and reviews to understand the flood performance of our declared dams. The hydrological assessments are a fundamental input into risk assessments completed for our declared dams. These periodic reviews are intended to capture:

- advancements in hydrological estimating methods, keeping up to date with industry standards and practice; and
- current estimates of climate effects and extreme rainfall.

4.3.3 An obligation for climate-related risk management is not necessary

19. Should the objectives in the Licence be amended to explicitly refer to a climate risk management program?

WaterNSW **does not support** the requirement to develop and maintain a climate-related risk management program consistent with the Climate Risk Ready NSW Guide. This would result in regulatory duplication.

WaterNSW is required by NSW Treasury under the *Government Sector Finance Act 2018* to report on climate-related financial disclosures in alignment with the Taskforce on Climate-related Financial Disclosures (TCFD). Reporting for the TCFD will commence 1 July 2025. The government has revised the mandated timing for reporting under the TCFD to 1 July 2025 in recognition of both the very recent issuing of standards for the metrics required, and to allow agencies and SOCs to establish appropriate measurement systems within their organisations.

Given the delay to the commencement of the formal TCFD reporting until 1 July 2025, WaterNSW intends to still report using the framework structure for FY24. We will use this year as a pilot reporting year, and as an opportunity to learn from the experience, refine the reporting and identify any issues to be addressed before the formal reporting requirement the following year FY25.

20. Is there anything further that we should consider when deciding whether WaterNSW should be required to develop and maintain a climate related risk management program consistent with the Guide?

WaterNSW **advises** that it is seeking to be aligned to the Climate Risk Ready NSW Guide to develop and maintain a climate-related risk management program. The Guide aims to ensure government entities undertake a robust approach to climate risk assessment and response and is aligned with Treasury's Risk Management Policy. The TCFD reporting requires an assessment of climate risk and mitigation actions. Application of the Guide allows

government owned entities to have a consistent approach to how climate risk matters are addressed within the disclosure documents.

WaterNSW is currently developing a Climate Risk and Adaptation Plan, which addresses the requirements of the Climate Risk Ready NSW Guide. Consequently, there is no need for further regulation under a new Operating Licence.

21. Should the Licence require WaterNSW to include climate risks in their operations, water quality and asset management risk assessments? If so, should WaterNSW be made to report on its implementation of risk management measures?

WaterNSW **does not support** the requirement to report against the International Sustainability Standards Board's (ISSB) sustainability-related disclosure standards. This would result in regulatory duplication.

The ISSB sustainability-related disclosure standards/metrics are incorporated into the TCFD, which requires WaterNSW to have a climate risk management plan. Requiring separate reporting against the ISSB's sustainability-related disclosure standards under a new Operating Licence would create reporting duplication.

The requirement to undertake a climate-related risk assessment and identify adaptation options also forms a key pillar of WaterNSW's ESG strategy. Furthermore, the WaterNSW's Climate Change Risk Assessment and Adaptation Plan is being developed in line with:

- ISO 31000:2108 – Risk management guidelines
- ISO 14091 – Adaptation to climate change – Guidelines on vulnerability, impacts and risk assessment
- WaterNSW's Corporate Risk Management Plan, which includes climate change
- Recommendations of the Taskforce on Climate-related Financial Disclosures (2017)

22. Should the Licence require WaterNSW to undertake climate change risk assessments consistent with ISO 14091:2021 *Adaptation to climate change – Guidelines on vulnerability, impacts and risk assessment*?

WaterNSW **does not support** the requirement to undertake climate change risk assessments consistent with ISO 14091:2021 Adaptation to climate change — Guidelines on vulnerability, impacts and risk assessment. This would result in regulatory duplication.

ISO 14091 is made redundant by the Climate Risk Ready NSW Guide and creates unnecessary regulatory duplication. Additionally, the EPA is the regulatory authority for monitoring emissions, with the intent that climate change risk assessments will also be regulated by the EPA. WaterNSW has an Environment Protection Licence with the EPA (for the Duckmaloi Water Treatment Plant) and will likely be required to address climate change risk, resilience, and adaptation strategies for that facility in the future as part of EPA licence requirements.

4.3.4 We will report under other processes

23. Should WaterNSW be required to report on its progress to Net Zero?

WaterNSW **does support** as outlined in Issue 17 above, that WaterNSW could have obligations for abatement, in relation to mandating WaterNSW's contribution and reporting on progress towards achieving the state's "net zero by 2050" target.

24. Should the Licence include any other reporting requirements related to abatement, adaptation, resilience or climate risk?

WaterNSW **does not support** including any other reporting requirements. WaterNSW is adequately regulated through the Climate Risk Ready NSW Guide and under the Government Sector Finance Act 2018 to report on climate-related financial disclosures in alignment with the TCFD. In addition, WaterNSW has obligations, including reporting under the *National Greenhouse and Energy Reporting Act 2007*. Some of the information and data collected is also a reporting requirement under WaterNSW's Operating Licence, specifically the National Water Initiative environment indicators, which are reported to the BoM.

4.4 Performance standards

4.4.1 CSR water performance standards and Supplied water performance standards could be reviewed

25. Are the current CSR performance standards still relevant to WaterNSW's operations?

26. Should we explore the inclusion of additional performance standards for CSR water? If so, what types of performance standards (e.g. water delivery or water quality) should we include?

27. What performance standards should apply to water delivery, water quality and service interruptions?

28. Should the Licence prescribe any other performance standards in relation to Supplied Water? i.e. in addition to the required performance standards related to water delivery, water quality and service interruptions, minimum standards could be prescribed for timing of delivery and customer service

WaterNSW **supports** IPART's position to review the current performance standards for water Supplied and CSR Water performance standards, subject to appropriate funding supporting any material changes to deliver and report against new performance standards. WaterNSW suggests that a new set of performance standards is developed, that includes, but is not necessarily limited to water delivery, water quality and service interruptions, as required under the Water NSW Act Section 12(2)(a)(ii). We propose that these performance standards are:

- aligned to our shareholders and Board defined measures of success
- informed by our customer engagement process as part of the 3 CCCs (Customers, Costs and Credibility) approach that will be used to underpin our Pricing Proposal and ultimately the IPART Determination

- output and outcomes focussed
- based on driving business performance that aligns to customer expectations
- fully costed and funded appropriately.

WaterNSW is undertaking customer engagement processes over the coming months, through our CAGs and other mechanisms to inform performance standards and our pricing proposals and we also look forward to participating in workshops hosted by IPART with our various stakeholders to inform the development of performance standards.

4.5 Water quality

4.5.1 We should not have water quality performance targets

29. Is there benefit in maintaining separate licence conditions in the licence for the declared and the non-declared catchments?

WaterNSW **supports** maintaining separate licence conditions for the Water Quality Management Systems (WQMS) in declared and non-declared catchment areas. Management of water quality in these catchments is significantly different in relation to legal and regulatory requirements, catchment characteristics and management, assets and operations, and end-water use.

30. Should WaterNSW be required to define and monitor Water Quality Performance targets in consultation with NSW Health and relevant stakeholders?

WaterNSW **rejects** the proposal to monitor water quality against targets developed in consultation with NSW Health and relevant stakeholders. WaterNSW already has an obligation to meet the requirements of the Australian Water Drinking Guidelines (ADWG), which ensure that WaterNSW provides water of an appropriate quality to its customers. In

addition to this, WaterNSW has individual Customer Supply Agreements, which outline WaterNSW's obligations. Requiring WaterNSW to monitor performance against water quality performance targets goes beyond this would add further complexities and costs for both WaterNSW and our customers.

4.5.2 Water quality at picnic areas should be managed as part of the WQMS, but regulated by NSW Health

31. Is there any reason we should not specifically exclude picnic areas from the WQMS obligations in the licence?

WaterNSW **supports** excluding drinking water in private water supplies (picnic areas and regional sites) from the WQMS obligations in the Operating Licence. WaterNSW manages water quality in accordance with the WQMS. Therefore, any additional requirements in the operating licence would be regulatory duplication. WaterNSW's private water supply sites are regulated under Section 25 of the *Public Health Act 2010* and overseen by NSW Health. Private water supplies have historically been managed as part of our WQMS, but excluded from the annual operational audit because it is regulated by NSW Health.

4.5.3 Fish River Water Supply Scheme should be managed holistically as part of our business

32. Should conditions for FRWSS be separated out in the licence? For example, a separate condition for WQMS and reporting requirements?

WaterNSW **does not support** creating an additional and separate requirement to maintain a WQMS specifically for the FRWSS. The FRWSS is already covered in the WQMS for non-declared catchments and is also regulated under the Public Health Act. Further delineation would create regulatory duplication and unnecessary burden on WaterNSW.

33. Should the FRWSS be excluded from some obligations under the Licence where there is duplication with the WMA? If so, which Licence obligations or activities should be excluded?

WaterNSW **is yet to form a position** on whether the FRWSS related conditions should be modified where there is ambiguity or duplication with the *Water Management Act 2000*.

34. Should the Licence include new conditions in relation to FRWSS?

WaterNSW **does not support** including any new conditions in the Operating Licence. The FRWSS is adequately covered by the WQMS for non-declared catchments.

4.5.4 Local water utilities' notifications could be discussed

35. Is there benefit increasing WaterNSW's responsibilities to monitor and provide information on water source events and the quality of water supplied to LWUs?

36. Should the information request procedure be recast to require WNSW to provide information to the LWU when specified parameters have not been met?

37. How else could WaterNSW be more proactive in notifying LWUs of water source events or sharing of information?

WaterNSW **supports and suggests** that for Local Water Utilities (LWU) a Water Quality Plan is required to inform a whole-of-government approach to water quality monitoring and management. Such a Plan would develop a more coordinated approach to managing this issue and clarify roles and responsibilities for all relevant agencies. It would also provide clarity

on WaterNSW's role and could be used to inform future obligations in the Operating Licence, including a transition period to establish appropriate monitoring and reporting, which would require additional resources.

This Plan would need to integrate with already established requirements, such as our Water Quality Improvement Plan under our WQMS. The Plan would also need to align with and be dependent upon pending recommendations and outcomes from EPA investigations and the NSW Government's consideration of the Chief Scientist's Report (Menindee Fish Deaths), Water Quality Roadmap (DPE), and the work we are doing with LWUs under the Town Water Risk Reduction Program.

As part of developing the Plan, the relevant agencies could investigate and provide recommendations over the next five years, in time for the next Operating Licence Review. It would examine LWUs needs such as water quality parameters, monitoring, data access, timeliness, engagement and communication including the most appropriate method and timeliness for sharing information with LWUs, as well as cost and resources. This would build on a past Operating Licence obligation, which required WaterNSW to undertake a review of its water quality monitoring in relation to CSR water provided to LWUs.

Part of this Plan could also be to develop appropriate performance standards related to water quality monitoring and reporting for LWUs that could be included in our operating licence in the future.

WaterNSW recognises that it is best placed to provide these services to LWUs and understands NSW Health also support WaterNSW having a more active role in this area. However, LWUs also have obligations to their customers. Consequently, clearly defining the roles and responsibilities of all relevant agencies, WaterNSW and LWUs would also be required.

4.6 WaterNSW's obligations to its customers

4.6.1 A family violence policy is appropriate

38. Should WaterNSW be required to have a family violence policy that protects customer privacy and ensures that family violence sufferers can access payment difficulty arrangements? If so, what as a minimum, should the condition include? Would a change to the Code of Practice on Payment Difficulties also be required?

WaterNSW **supports** the requirement to have a family violence policy; recognising that an appropriate timeframe would be necessary to update and implement any changes required to existing systems, policies and procedures.

The family violence policy would be its own living document, which would require training and education of employees as part of the implementation process. Embedding it into WaterNSW's existing systems and related policies and procedures, such as the Code of Practice on Payment Difficulties, would require time to update, and review to ensure that the policies are aligned. WaterNSW would need sufficient time be granted in the Operating Licence to ensure we have time to develop and implement a new family violence policy.

4.6.2 Requirements for consultation with customers should be less prescriptive

39. Should the Licence require WaterNSW to engage with its customers, but allow WaterNSW to determine the best way for engagement?

WaterNSW **supports** more outcomes-focussed engagement requirements with our customers and communities, allowing WaterNSW to determine the best way for engagement.

WaterNSW **does not support** any additional/prescriptive engagement requirements in relation to government agencies, as these are adequately regulated by other mechanisms, such as MoUs, the RRA and DSAs.

An outcomes-focussed process would guide the outcomes being sought from engagement, but not prescribe how it should be done. Thus, allowing WaterNSW to determine, in conjunction with our customers, communities and Government agencies, the best way for engagement. This recognises that different groups may require different consultation approaches. In doing so, consideration needs to be given to alignment with IPART's 3 C's (customers, costs and credibility) framework.

WaterNSW considers that there are four key aspects when engaging with our key advisory groups. These being:

- Opportunity for WaterNSW to provide critical information
- Opportunity for stakeholders to provide feedback to WaterNSW
- Opportunity to determine how they should be engaged with
- Quality of service and value for money to our customers

We **suggest** that a similar clause to clause 29 of the Hunter Water Corporation's Operating Licence could be inserted into WaterNSW's Operating Licence instead of clauses under sections 6.5 and 6.6; and adjusted and adapted to WaterNSW's context in terms of functions, operations and stakeholders. We support developing a Customer and Community Consultation Procedure that outlines how we engage with them.

40. Is there any value in continuing to require WaterNSW to utilise CAGs to engage with different customer groups?

WaterNSW **considers** that the current Operating Licence requirements in relation to CAGs are too prescriptive and do not provide the most optimal way for engagement.

WaterNSW supports continued engagement with customers and communities in a way that works for both parties but considers that the prescription in relation to CAGs is not necessary and could instead be incorporated under our proposal outlined in Issue 39. An outcomes-based approach would allow government agencies (other than licensed environmental water holders) to participate in customer forums in an advisory or information sharing capacity.

4.7 Access to information and data

4.7.1 Access to information could be clarified

41. Do you agree that WaterNSW is responsible for collecting, managing and sharing data and information of water resource data on behalf of the NSW Government? If so, does this obligation extend beyond the data and information it uses for its own purposes.

42. Is the Licence the right instrument to ensure all NSW data and information users can adequately access water resource data for the State?

43. Does the current licence condition to agree to, and comply with, the Roles and Responsibilities agreement adequately obligate WaterNSW to provide access to information and data to all NSW data and information users.

44. Does the Roles and Responsibilities agreement require WaterNSW to provide sufficient access to information for other agencies (such as DPE and NRAR) to undertake their functions/statutory obligations

45. Are there any reasons why an arrangement could not be made with WaterNSW to address the data quality and data access requirements of DPE and NRAR?

46. Do the current conditions provide DPE and NRAR the access to information and systems they need? What, if any changes are required?

47. Should the Licence require WaterNSW to develop, operate and maintain IT systems, and provide support, to allow access to users of NSW water resource information and data? If so, what information and data should the system provide access to?

48. How else could WaterNSW facilitate the sharing of water resource information with the NSW water sector?

The Roles and Responsibilities Agreement (RRA) and the Data Sharing Agreements (DSAs) adequately capture our relationship with DPE and NRAR in relation to data collection and data management principles. Nevertheless, there is merit in further clarification and discussion on potential amendments to these instruments. WaterNSW will continue to discuss this possibility with DPE and NRAR.

In 2021, the RRA placed responsibilities on DPE, NRAR, WaterNSW and WAMC for planning and managing water resources in NSW on behalf of the NSW Government. The RRA operationalises the Deed of Business Transfer for the WAMC agencies to monitor the implementation of the Deed. The Deed gave legal effect to WaterNSW as the Data Custodian for key information systems. Under the RRA, WaterNSW's specific responsibilities are defined, including the management of the majority of water resource information and data for NSW so that datasets conform to appropriate agreed standards.

WaterNSW **agrees** the RRA holds WaterNSW adequately accountable to both DPE and NRAR for the sharing of water resource information and data in its possession. The RRA contains provisions that permit parties to address issues identified within the provisions of the Agreement by way of amendment.

In addition, the Data Sharing Agreements (DSA) with both DPE and NRAR provide an adequate framework for all parties to operate within. As such, WaterNSW considers the relevant DSA or RRA to be the appropriate channel for introducing additional data quality and data access/sharing requirements for DPE and NRAR.

The RRA contains data sharing, collection and management obligations which extend beyond the requirements contained within the current Operating Licence. Notably, the data sharing principles in the RRA align with the *Data Availability and Transparency Act 2022*, the NSW Data and Information Custodian Policy and NSW Government Open Data Policy. Open Data principles means data is 'open by default and protected where required.' The purpose of the DSAs with both DPE and NRAR is to establish protocols that enable WaterNSW to share non-publicly available data to meet the business needs and requirements of DPE and NRAR.

Under the principle of 'open by default and protected where required', external parties can access non-confidential WaterNSW data using the website portals such as WaterInsights. WaterInsights is WaterNSW's central data repository for publicly available data. Using Application Programming Interface (API) technology, publicly available data is made freely

accessible to any interested third party, including the NSW Government and other Government Departments. APIs allow external parties to access, download and use data to perform their own research and analysis, modelling, autogenerated reporting or for any other bespoke data-driven purpose.

The NSW Data and Information Custodian Policy sets out roles and responsibilities for data Custodians, Producers, Aggregators and Users. Producers must fix reported errors, Aggregators liaise with Custodians on data standard requirements, and Users advise Custodians of any errors or omissions in data they receive. WaterNSW applies the same set of policy principles to all data-sharing arrangements and data access at WaterNSW.

The current Operating Licence refers to both the RRA and DSAs, making the obligations and provisions defined within these Agreements a 'requirement' under the Operating Licence.

WaterNSW **considers** the Operating Licence should not apply prescriptive or duplicative measures that are already addressed through the RRA and DSAs or through the application of the NSW Government Open Data Policy. In addition, the obligation required by clause 6.19.4, will lead to agreed standards and metrics for data accuracy, quality, continuity and timeliness of data provision.

i. Clarifying the difference between “data” and “information”

WaterNSW considers “data” (including images) to mean a collection of facts and “information” (including documents) as meaning, putting those facts into context. Data is perhaps best described as raw and disorganised, with data points being individual and sometimes unrelated. On the other hand, information is both organised and contextual. Using these terms interchangeably can affect the application of requirements relating to the collection, management, accessibility and sharing of that material.

ii. Clarifying the difference between “access to” and the “sharing of” information and data

WaterNSW is custodian for a range of data and information types for water in NSW. Defining these data and information types, as well as what is meant by 'water resource and water user data', is critical in order to understand how that data and information should be appropriately captured, stored, accessed and/or shared.

These distinctions are important. When WaterNSW refers to “access to data”, we are referring to publicly available data. When WaterNSW refers to “sharing data” or “sharing information”, we are referring to non-publicly accessible data or information.

Data that is publicly accessible/available at WaterNSW includes:

1. Hydrometrics data - water quality and quantity. This data is publicly available (open source).
2. Share, IDEC and Trading information – some of which is publicly available.
3. Licence information – some of which is publicly available.

Data and/or information that is not publicly available and only shared by agreement includes:

4. Account balance, orders and Trading information – that which is not publicly available.
5. Modelling information – not publicly available (confidential) but also not Personally Identifiable Information (PII).
6. Metering data – we receive most of it via telemetry but are not responsible for the quality or accuracy of the data. This the responsibility of the Customer and Duly Qualified Persons (DQP). This data is not publicly available.
7. Customer Information – PII (confidential).
8. Licence and approval conditions – PII (confidential) – that which is not publicly available.

iii. WaterNSW should be recognised as a data custodian

WaterNSW **supports and recognises** that it is best placed to be the responsible entity for collecting managing and sharing of water resource and water user data on behalf of the NSW Government.

If we are recognised as a data custodian, then:

- We are the authorised single source of truth
- We determine the conditions for appropriate use, sharing and distribution
- Responsible for assessing/assigning accuracy to the data, including metadata

- Remove duplication of effort and clarify roles in collection/storing and maintenance of data
- Clarify roles in access and sharing of data
- Clarify responsibility for security of data

As a data custodian, we would also have an obligation to adopt the "NSW Data & Information Custodianship Policy" instead of any ISO 8000 requirements.

Under the Commonwealth Water Act 2007, WaterNSW is a "Category A Person" (lead water agency) because this includes the organisation that has responsibilities to monitor, collect and report water data. WaterNSW also has a role in assisting the Bureau of Meteorology (BoM) to coordinate the provision of data to enable it to meet its regulatory obligations.

Clarifying that WaterNSW is a data custodian will also ensure our Operating Licence is aligned with the Commonwealth legislation.

iv. Water NSW should enable efficient and appropriate "access to" publicly available data

WaterNSW applies the NSW Government Open Data Policy, which focuses on datasets as an aspect of information defined in the Government Information (Public Access) Act 2009 (NSW) (GIPA Act). This also means most WaterNSW data is already made publicly accessible because of the 'open by default and protected where required' approach to data-sharing.

WaterNSW's current and preferred method when making data publicly available is through an API. For WaterNSW this is via the WaterInsights portal. External parties can use APIs to access publicly available (open source) data to quickly and efficiently extract the data for their intended purpose.

While WaterNSW **supports** the general provision of access to publicly available data, requirements around access to publicly available data should not be included as part of a DSA when these are already guided by the NSW Government Open Data Policy. If, however, WaterNSW build an additional function or functions that facilitate or improve access, to meet the needs of another Government Department or agency, and it is funded by that external agency or Government Department, in that circumstance it is appropriate that those obligations are formalised as part of a DSA

v. Water NSW should facilitate efficient and appropriate “sharing of” data and information

WaterNSW **supports** facilitating data or information sharing under a Data Sharing Agreement for non-publicly available data (i.e. data that is not public due to privacy or confidentiality reasons). WaterNSW currently has DSAs with both DPE and NRAR, providing them with access to shared data, information, and IT platforms under a “self-service” model. A “self-service” model allows for data retrieval in accordance with clause 7 of the RRA.

Under the current model, the best available data is shared but is largely shared as raw or untransformed data or information. WaterNSW do not generally transform master “data” into “information” for support as a decision-making tool or public insights portals unless an alternative arrangement is agreed to with WaterNSW. We generally consider this to be the responsibility of the users of the data once they access it. WaterNSW is willing to offer data-analysis if the costs of performing the data-analysis are borne by the consumer, noting that any such arrangement will be determined on a case-by-case basis and documented as part of a DSA.

Consideration should be given to the resources required to convert data into information. As explained above, information requires putting the facts of data into some kind of organised context. Supplying information where it requires interrogation, manipulation, transformation or reformatting of data to meet external stakeholder requirements or specifications goes beyond the intended responsibility for WaterNSW to act as a data custodian that collects and maintains data.

WaterNSW **does not support** a requirement to perform data analysis, interrogation, interpretation or perform insights on behalf of other agencies unless it is under some sort of Service Level Agreement or other agreement with associated funding to achieve those objectives. In the absence of that, agencies accessing data should conduct their own analysis to achieve their mandated purpose.

WaterNSW ensures that any data- or information-sharing arrangements comply with the NSW *Privacy and Personal Information Protection Act 1998*, NSW *Health Records and Information Privacy Act 2002* and the NSW Digital Information Security Policy. This ensures the agencies with whom WaterNSW shares any non-publicly available information or data, meet the confidentiality, integrity, availability, compliance, and assurance objectives for the management of information. Compliance with the NSW Digital Information Security Policy

means that WaterNSW does not provide front- or back-end access for non-publicly available information or data unless there is first a Data Sharing Agreement in place, and the appropriate data security systems and processes are in place before operationalising that Data Sharing Agreement.

As custodian of the data, WaterNSW must ensure any information and data classified as private (i.e. confidential) is kept secure by WaterNSW and any third parties that WaterNSW shares that data or information with. This means that WaterNSW is responsible for notifying authorities if a data or security breach occurs, even if the security or data breach occurred through the third party with whom the data or information was shared.

It is the responsibility of data custodians to ensure they are authorised by legislation or consent before releasing identifiable data to another integrating authority. Under the *Water Management Act 2000*, unless consent is obtained at the time of data collection, WaterNSW must acquire explicit informed consent (EIC) before WaterNSW can release that identifiable data or information to third parties for a secondary purpose. This means, without authorisation under the legislation, EIC is required before that data can be shared with another organisation. WaterNSW publishes detailed information on our management and protection principles for personally identifiable data such as personal and health information as part of our WaterNSW Privacy Management Plan and in the Terms and Conditions on WaterNSW's online portals.

vi. WaterNSW should be mandated and funded appropriately to collect data and/or information if additional requirements are included in the Operating Licence

If WaterNSW is required to collect additional data or information, for a purpose other than that which is currently mandated (i.e. river and dam operation), consideration must be given towards a new mandate to collect, store, protect and share that data and/or information.

WaterNSW understands for DPE the data and information required is for policy, planning and modelling purposes. For NRAR, it is data and information for compliance purposes, of an evidence grade quality, with customer data and information that is up-to-date, accurate and effective for enabling compliance processes. Ensuring that data and/ or information is fit for these purposes requires an additional mandate, resources, and funding for WaterNSW to achieve that purpose.

It is worth noting that WaterNSW is already developing a technology roadmap for the data-sharing ecosystem. The roadmap seeks to materially improve the quality and completeness (data remediation) of shared data to help better realise business objectives for automated information processing.

4.7.2 Data management – integrity and reliability

49. Do the Data Sharing Agreements adequately address the needs of NRAR and DPE Water in relation to data accuracy, quality, continuity, timeline of data provision?

WaterNSW **supports** the continuing inclusion of the data sharing agreements as part of the requirements of the Operating Licence and is committed to implementing Clause 6.19.4.

WaterNSW **supports** a better definition of data quality at the critical data element level.

WaterNSW currently maintains two bilateral Data Sharing Agreements with DPE and NRAR, as well as a number of supplementary data licensing agreements. WaterNSW also has MoUs with DPE and NRAR which contain 'best endeavour' obligations to share data and information, as well as data quality statements to aid in the secondary use by NRAR and DPE.

Data quality standards are managed in the DSAs under clause 6, 'Quality and responsibility of shared information in the data sharing agreement'. WaterNSW aligns to the NSW Government Standard for Data Quality Reporting as part of the data quality requirements within the DSAs.

The quality of data maintained by WaterNSW within a dataset varies due to challenges with recording and reporting by water users and their agents. The disclosed data quality specifically defined as accuracy or coherence (as described by Data Quality Reporting tool), can fall short of the expectations of secondary Users who are seeking to automate data processing or use the data as evidence in legal proceedings without manual verification.

We also understand DPE and NRAR are seeking improvements to the quality of data stored over many years prior to WaterNSW taking control of the systems of record and data stores holding the data. As noted above, the improvement to data quality (especially when it is historical) is an onerous task and requires resources and funding to complete.

Similarly, WaterNSW collects data from other NSW organisations. As it is not the custodian of the data it collects from third parties, WaterNSW cannot guarantee the quality of that data if it is used by NRAR or the DPE.

50. Should the Licence require WaterNSW to manage data consistently with any standards or guidelines? If do, which standards would you recommend and why? (NSW Government Standard for Data reporting, ISO 8000:1, ISO 9001:2015, or another standard or guideline not listed?)

If WaterNSW is deemed a data custodian, WaterNSW has an obligation to adopt the "NSW Data & Information Custodianship Policy" instead of any ISO 8000 requirements. Additional standards or guidelines may be adopted within Data Sharing Agreements (DPE, NRAR, BoM/GA/MDBA/RDMW), or if mandated by the federal Data Commissioner.

51. Are there any other options to improve data integrity and reliability we have not considered?

WaterNSW **suggests** the Operating Licence could include a new obligation to develop more quantitative "Data Quality Statements" (DQs). DQs assign a qualitative assessment to data as to its quality (which is an umbrella term that includes accuracy, continuity and timeliness). DQs could be applied to both publicly available data and/or information and non-publicly available data and/or information. This could assist data users (e.g. NRAR and DPE) to focus their efforts on data remediation. It would also provide them with a better understanding on the limitations of the supplied data and information so they can determine the usability of it. The obligation would also establish the imperative for WaterNSW to allocate resourcing and focus to both hosting data for the sector and remediating gaps with submissions made by water users.

WaterNSW's technology roadmap is also targeted at improving data quality with data quality measurements forming an integral part of this program.

52. Should we amend the current Licence condition about accounting for water extracted or supplied to account for the needs of other agencies?

53. is there any other data that should be collected, and accuracy confirmed, at a greater frequency than is already required?

WaterNSW **does not support** changing the frequency of determining accuracy of water extracted or supplied. Increasing the frequency is likely to incur additional costs which will ultimately be borne by the customer. Historically, the frequency was once higher, but the cost outweighed the benefit.

99%+ of the meters under the metering regulations are connected to telemetry, so data is received daily into WaterNSW systems. However, there is no certainty of data quality as the accuracy and calibration of the metering equipment is the responsibility of the customer (and the DQPs that the customer engages). WaterNSW is only responsible for receiving and storing this data.

We recognise that imposing a requirement on customers at lower thresholds of take would be a significant imposition of cost, but this needs to be balanced with the needs of DPE and NRAR to undertake their remits. Some potential for lower cost meters could be considered by using a lower standard (e.g. ultrasonic meters). These matters will be considered as part of the Non-Urban Water Metering Policy Review that is currently underway.

WaterNSW recognises there is a need to increase the number of ground-truthing sites and site audits as the move towards telemetry coverage increases.

WaterNSW **suggests** removing the Operating Licence requirement (clause 6.18.2) to download LIDs at least annually, as the numbers required to be downloaded are less than 0.01%. In WaterNSW's experience, the data can be corrupt and is subsequently rendered unusable by any other agency or the customer.

4.8 Fostering collaboration with other agencies

4.8.1 Changes to MoUs with NSW Health, NRAR and the EPA is not needed

54. Should the nature or purpose of the MOUs with NSW Health and EPA change? If so, what should be the revised nature and/or purpose of the MOUs be?

WaterNSW **does not support** any changes to the MoUs with NSW Health and the EPA. Both MoUs are a requirement under section 20 of the Water NSW Act 2014. We consider the MoUs to be fit for purpose and working effectively. Furthermore, we note that for the current MoUs, any changes to the Operating Licence and implications, are to be discussed between the agencies.

55. Should the Licence further specify the contents of the MOU (or similar) between WaterNSW and NRAR? If so, what should the MOU prescribe? Alternatively or additionally, should the Licence directly impose condition on WaterNSW related to NRAR?

WaterNSW **does not support** further specifying the content of the MoU with NRAR. The content and detail of MoUs should be determined in partnership with the other parties. WaterNSW already has an MoU, Roles and Responsibilities Agreement (RRA) that NRAR is a signatory to, and a Data Sharing Agreement with NRAR in place. Schedule 1 of the RRA details the ways of working between WaterNSW and NRAR.

4.8.2 MoUs with other agencies could be explored

56. Are there any other parties that WaterNSW should enter into an MOU (or similar) with? If so, who are these parties and what should the Licence require for each of the parties? Alternatively or additionally, should the Licence directly impose conditions on WaterNSW related to other agencies?

WaterNSW **considers** that there is merit in exploring and improving relationships with other stakeholders where necessary. However, we do not agree that this needs to be prescribed and regulated through the Operating Licence. WaterNSW has in place agreements at various levels for the exchange of data, information and/or services with other key stakeholders such as, DPE, NRAR, Sydney Water, LRS, DPI Fisheries, Fire & Rescue NSW and the BoM.

4.8.3 Relationships with local water utilities are effective and do not require MoUs

57. How effective are the current mechanism in achieving the required relationship and information sharing needs between WaterNSW and LWUs?

WaterNSW **considers** that the current mechanisms for managing WaterNSW's relationship with LWUs is effective. We recognise that continuous improvement is part of any working relationship with our stakeholders, and we welcome comments from LWUs in relation to this. WaterNSW has established pathways of communication and access to data for LWUs.

58. Should WaterNSW be required to manage its relationship with LWUs through an MOU, protocol or policy?

WaterNSW **does not support** further specifying our relationship with LWUs through an MoU or other form of agreement. We consider that any agreement should be determined by the parties involved, and not prescribed and regulated through the Operating Licence. WaterNSW already has agreements and adequate regulations in place to manage these relationships.

WaterNSW suggests that consideration needs to be given to the broader planning/policy/governance framework that WaterNSW operates within. We understand that DPE are developing a Water Quality Roadmap, as well as delivering the River Condition Index in January this year as part of their WAMC deliverables. WaterNSW is also directly involved in the Town Water Risk Reduction Program with LWUs. We suggest that clarity is sought from DPE in relation to these; as together with the Chief Scientist's Review, will have implications for managing our relationships with LWUs.

4.9 Management systems

4.9.1 The current Environmental Management System is fit-for-purpose

59. Should the current Licence conditions relating to an EMAS be changed? If so, what should these changes include?

WaterNSW **does not support** any changes and considers the current licence conditions relating to an Environmental Management System to be appropriate and fit-for-purpose.

4.9.2 An added requirement for a Quality Management System is not supported

60. Would adding a requirement under the licence requiring WaterNSW to develop, maintain and implement a QMS provide benefit to WaterNSW and/or its customers? If so, what are these benefits?

WaterNSW **does not support** adding the requirement for us to have a Quality Management System (QMS). WaterNSW does have a QMS for some components of the business where it is considered it to be necessary. These are, firstly, for the Dam Safety Management System, which is aligned to ISO 9001 as a requirement of the Dams Safety Regulation. And, secondly, for the Water Monitoring Quality Management System, which is certified to ISO 9001 as a requirement of the Roles and Responsibilities Agreement with DPE and NRAR.

In addition, WaterNSW has implemented and maintains standards-based management systems such as a Work Health and Safety Management System (consistent with ISO 45001), Environmental Management System (consistent with ISO 14001), Asset Management System (consistent with ISO 55001), and Water Quality Management System (consistent with the Australian Drinking Water Guidelines).

Furthermore, DPE are coordinating a review under Section 10 of the *Water Management Act*, with the final Report yet to be published by the Minister. We consider that the Operating Licence Review should consider the recommendations of this Report.

When considering all of the above, WaterNSW **considers** we could be on a trajectory towards an agency wide QMS at some point in the future, but obligating at this point in time (i.e. through the operating licence) would not be appropriate.

61. What other mechanisms could be included to improve WaterNSW's corporate record keeping?

WaterNSW **considers** our current corporate record keeping mechanisms are adequate. We maintain a corporate document management system, including controlled document procedures; as well as a dedicated records management function within WaterNSW.

4.9.3 The current Asset Management System obligations are adequate

62. Should the current Licence condition relating to an AMS be changed?

WaterNSW **does not support** changing the current Licence conditions relating to an Asset Management System. We consider the current Licence conditions to be appropriate. WaterNSW achieved re-certification in late 2022, which is granted for a three-year period. WaterNSW considers that for the purposes of the Licence, the implementation of an AMS that is consistent with the requirements of ISO 55001, but not certified is adequate.

63. Should WaterNSW be required to comply with the latest version of ISO 550031?

WaterNSW **supports** being consistent with the requirements of the latest version of ISO 55001. We suggest that when the new standard has been finalised and published, that an agreed transition period is granted. WaterNSW would require time to undertake a review of the new standard and develop a change management plan to address any potential gaps in meeting the new requirements. The change management plan would set out a reasonable timeframe and costs to achieve full alignment.

4.9.4 There should be no additional Critical Infrastructure obligations

64. Do you agree the Licence should impose national security clearance requirements on executive level employees responsible for operational technology security, network operations security, personnel security operations; and at least two board members?

WaterNSW **does not support** the Licence imposing additional national security clearance requirements. WaterNSW recognises the need for specific staff to hold Negative Vetting Level 1 (NV1) clearance given the nature of our business and the importance of critical infrastructure security. WaterNSW is already moving towards having select staff hold the most appropriate level of security vetting.

WaterNSW is required to comply with the *Security of Critical Infrastructure Act 2018* (SOCI Act). To meet these obligations, we must obtain an annual attestation of our Risk Management Plan, which identifies and includes reference to critical staff. WaterNSW has developed appropriate processes to address our obligations under the Act. We consider that an Operating Licence requirement adds no additional or beneficial elements to the SOCI Act.

Furthermore, the security vetting process for staff is costly, onerous and highly invasive, it involves investigating up to the last ten years of their life, as it covers all aspects, both public and private, and past to present. Staff must be willing and able to acquire NV1 clearance.

The number of people/positions that is proposed in IPART's Issues Paper is excessive. We recognise that we need to have alternatives and redundancies within the business.

However, NV1 clearance allows the staff member access to highly confidential and classified government information. All staff with NV1 clearance would be provided with access to the same content.

We do not agree with the prescription of stipulating in the Licence the number of staff and positions requiring national security clearance. We suggest that WaterNSW should determine who and how many staff. Imposing this from a regulatory perspective adds potentially unnecessary cost, significant impact to staff and is not proportionate to the risk.

If IPART considers that prescription in the Licence is appropriate, then the number of staff should be minimised to no more than 2 – 3 key positions and the appropriate ones should be discussed with WaterNSW. For security reasons, we also consider that this is not a matter for the public domain, which is also part of the reason why it should not be prescribed in the Licence.

WaterNSW **does not support** Board members being required by the Operating Licence to have NV1 security clearance.

4.10 Administration

65. Do you have any other issues or concerns you would like to raise relating to WaterNSW's Licence?

WaterNSW looks forward to the opportunity to discuss some minor errors and inconsistencies within the Licence and associated Reporting Manual with IPART.