

# Submission to WaterNSW Operating Licence Review Issues Paper

NSW GOVERNMENT SUBMISSION

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# Submission to WaterNSW Operating Licence Review Issues Paper

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## Strategic Context

The NSW Government welcomes this opportunity to comment on the Independent Pricing and Regulatory Tribunal's (IPART) *Review of the WaterNSW Operating Licence – Issues Paper 2023*. This submission includes contributions from the Department of Planning and Environment (DPE), NSW Health, the Environment Protection Authority (EPA), the Department of Regional NSW (DRNSW), the Natural Resources Access Regulator (NRAR) and the NSW Reconstruction Authority (NSWRA). This submission has been provided to assist IPART in drafting licence conditions which support the NSW Government's goals and objectives.

WaterNSW's 2017-2022 operating licence expired in June 2022 and was granted a short-term operating licence on similar terms and conditions until 2024. Since the establishment of the 2017-2022 and 2022-2024 WaterNSW licences, significant reforms to water management across NSW have occurred through publication of the NSW Water Strategy, Greater Sydney Water Strategy (GSWS), and many Regional Water Strategies. These changes look to improve the security, reliability, quality, and resilience of water resources. These long-term strategies respond to growing pressures on our water supplies from climate change and population growth. WaterNSW has a key role in managing water supplies in this context.

WaterNSW's primary role is as a bulk water supplier and catchment manager. The NSW Government's recommended changes to the Operating Licence seeks to ensure WaterNSW is equipped to perform these functions as a modern public service provider while carrying out its principal and other objectives under the WaterNSW Act 2014.

The NSW Government also seeks to ensure that WaterNSW is equipped to discharge its function as catchment manager and supplier of two thirds of water used in NSW. Achieving this balance of objectives is critical especially in the context of climate change, population increase and the immediate context of an El Nino declaration, which will likely bring additional water management challenges through hotter and drier weather.

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## Submission Overview

The submission includes 34 recommendations in response to the IPART Issues paper. The recommendations are supported by information which has been structured to align with the issues paper. Each response has been informed by the NSW Government's close working relationship with WaterNSW and the objective of equipping it with the ability to respond to both existing and emerging water management challenges. NRAR has provided its independent Board approved submission attached at Appendix A.

## Catchment management

### Key Recommendations:

1. **Retain** existing licence conditions on catchment management in the declared catchment.
2. **Amend** Clause 2.2 of the licence to enhance WaterNSW's catchment management responsibilities in land defined as Water Administration Ministerial Corporation (WAMC) owned foreshore land.
3. **Amend** clause 2.7.1 to require WaterNSW to undertake a program of research across declared and non-declared catchments.
4. **Amend** clause 6.11 to require WaterNSW to undertake community education campaigns across declared and non-declared catchments.

## Expanding catchment management

### **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?**

The NSW Government recognises the importance of strong catchment management, and is delivering three key actions (Action 3.2, 4.4, 6.9) under the NSW Water Strategy to improve catchment management on a state-wide basis. Catchment management is currently the responsibility of several government agencies. We acknowledge the findings of the 2019-2022 audit of Sydney drinking water catchment<sup>1</sup> that climate-driven events and cumulative impacts have had a negative influence on Catchment health. However, we do not support WaterNSW being responsible for catchment management on a state-wide basis, as these key actions are not yet complete and require whole-of-Government consideration and decisions. The NSW Government's current position is for WaterNSW to have this responsibility for declared catchments and WAMC owned foreshore land, at this time.

## Water Quality Management in Catchment Areas

### **2, 3. Should WaterNSW be required to undertake education and research programs in both declared and the non-declared catchments?**

DPE Water supports recognising this function of WaterNSW in the Operating Licence and applying the function in both declared and non-declared catchments. This aligns with WaterNSW's function to undertake research on catchments generally that is listed in Section 7(1)(j) of the *WaterNSW Act*

<sup>1</sup> Eco Logical Australia 2023. *Sydney Drinking Water Catchment Audit 2019-22*. Prepared for the Minister for Water.

2014. Research and monitoring are essential to protect water sources, their health and integrity (which is critical for consumers) and ensuring WaterNSW activities do not harm threatened species and ecosystems. DPE Water recommends strengthening this obligation by including a requirement to collaborate, as much as reasonably practicable, with other Government programs to ensure research programs across government are complementary.

Requiring education programs in both declared and non-declared catchments will:

- improve understanding and meet information needs in non-declared catchments
- reduce confusion around WaterNSW's role
- contribute to state-wide water literacy
- assist in improving landholder practices within catchment areas that have a direct impact on water quality and the sustainability of catchment processes.

#### **4. Should the licence specify what the education programs should include? If so, what should it specify?**

The operating licence should be an outcomes-focused regulatory instrument that allows WaterNSW the flexibility to innovatively deliver programs that meet intended outcomes under relevant legislation, policy and strategy including the NSW Water Strategy.

Licence requirements should ensure that WaterNSW collaborates across other agencies including Local Councils, DPE Water, the EPA and DRNSW on their education programs to ensure complementarity.

### **Improving river health**

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

The management of riverine infrastructure and operational decisions regarding water delivery have a material impact on the environment, and as such WaterNSW should be an active participant in efforts to manage the health of the State's waterways. However, the question of expanding WaterNSW's river health management responsibilities requires wider policy consideration and may fall out of the scope of operating licence amendments.

Monitoring and reporting on and improving water quality and river health in NSW is a shared responsibility between water authorities and environmental regulators at state and federal levels. The NSW Government sees benefit in water quality and river health management (including monitoring and reporting) being coordinated among these groups, including the sharing of information and results. No single body currently has this responsibility, and it would be a significant additional task for a single organisation such as WaterNSW. As noted in response to question 1, under the NSW Water Strategy DPE Water is working to identify governance and reform pathways to improve water quality and waterway health management.



## Water planning and management

### Long-term water planning – Greater Sydney Water Strategy (GSWS)

#### Key Recommendations:

5. **Remove** clause 2.8.6(a) to remove licence conditions requiring WaterNSW to implement GSWS actions.
6. **Retain** clause 2.8.6(b) which requires WaterNSW to implement actions in the GSWS as directed by the Minister. **Amend** clause 2.8.6(b) to reference Regional Water Strategies in addition to the GSWS.
7. **Amend** clause 2.8.1 to add additional requirements to ensure:
  - a. Reasonable efforts are made by all parties to collaborate in developing the long-term capital and operating plan
  - b. That, over a reasonable timeframe, the plan addresses planning for all WaterNSW assets across NSW.
8. **Amend** the Operating Licence to recognise *Water Management Act 2000* requirements (and requirements under the relevant regulation) that are specific to the Fish River Water Supply Scheme.
9. **Amend** the Operating Licence to include an additional clause requiring WaterNSW to participate in review of the Greater Sydney Drought Response Plan.
10. **Amend** the Operating Licence to require WaterNSW to establish a Relationship Management Framework with Sydney Water.
11. **Amend** clause 2.6 to require WaterNSW to develop and implement a 5-year water conservation plan and require WaterNSW to consider environmental impacts for water conservation.
12. **Amend** the Operating Licence to extend advanced notification of changes to flow release patterns to the transfer of water from the Shoalhaven to Sydney down the Upper Nepean and Wingecarribee/Wollondilly rivers.
13. **Amend** the operating licence to consolidate what is currently two DPE Water data agreements referred to under Clauses 2.8.8 and 6.19.1 by having a single clause requiring a data sharing agreement between DPE Water and Water NSW (which would cover a range of data sharing matters including data to support development and review of the GSWS).

#### 6. Do you agree with not removing licence conditions requiring WaterNSW to implement actions under the Greater Sydney Water Strategy (GSWS)?

DPE Water supports the removal of Operating Licence clauses requiring WaterNSW to implement actions under the GSWS. This is consistent with our recommendation to remove the condition from the Sydney Water Operating Licence, and reflects our intention to support adaptive management.

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

DPE Water considers it appropriate to require WaterNSW to implement specific actions in the GSWS as directed by the Minister and supports retaining this clause.

DPE Water supports expanding reference to the water strategies program in general, including requiring WaterNSW to participate in development, review, and implementation of Regional Water Strategies. Currently, only the GSWS is specifically referenced in the Operating Licence. Given the importance of the strategies program in setting the direction for water management across NSW, it is advisable that this is reflected more clearly in the Operating Licence.

## **Long term capital and operational plan**

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

We note the current operating licence requires WaterNSW to develop and submit a Long-Term Capital and Operational Plan (LTCOP) to the Minister, with best endeavours to develop the plan cooperatively with Sydney Water. DPE Water, the EPA, NSWRA and DRNSW support the proposal to retain and update this clause, particularly, to require Minister approval and cooperation between parties.

DPE Water is interested in a collaborative approach to long-term planning. To facilitate this, the LTCOP should be updated and reviewed every 5 years, with a draft provided to DPE Water for comment and sufficient opportunity to review prior to it being finalised and provided to the Minister. Further, the Operating Licence should continue to require a data sharing agreement between WaterNSW and DPE Water to assist with implementation and review of the State policy objectives in NSW water strategies and plans (including GSWS, Regional Water Strategies, NSW Water Strategy and water sharing plans). The data sharing agreement should also require WaterNSW to provide a copy of any report related to water supply resilience/augmentation and supply planning requested by DPE Water. As previously noted, there is an opportunity to consolidate the existing data sharing agreements between DPE Water and WaterNSW under this licence – for example, clause 2.8.8 could be merged with clause 6.19.1.

DPE Water and DRNSW support expanding the current licensing condition to ensure that long term capital planning is extended to all WaterNSW assets including those beyond greater Sydney to ensure Government has visibility about the long-term pressures and opportunities, consistent with the Government's policy direction for all State Owned Corporations (SOCs). It is recommended that a summary of the LTCOP should be made publicly available and easily accessible. Where they relate to Greater Sydney operations, LTCOP provisions should align with mirror provisions in Sydney Water's licence.

WaterNSW owns and operates 40 fishways, all of which are integrated into assets subject to the conditions of the Operating Licence. Department of Primary Industries – Fisheries (DPI Fisheries) conducted fishway audits in 2017 and 2023 and noted some WaterNSW fishways don't have the necessary level of Operations and Maintenance Plans (O&M). DPI Fisheries recommends working



collaboratively with WaterNSW under an MOU to develop a management plan for WaterNSW-owned fishways.

### **Fish River Water Supply Scheme (FRWSS)– Strategic planning requirements**

WaterNSW operates the FRWSS which is a water supply authority and local water utility under the *Water Management Act 2000*. Under the *Water Management (General) Regulation 2018*,<sup>2</sup> FRWSS is required to submit to the Minister by 1 July 2024 its planning and management documents. The planning documents referenced in the Regulation have been superseded by the DPE Regulatory Assurance Framework (RAF) for local water utilities. Section 3 of the RAF is the new relevant Strategic Planning framework for local water utilities.

Compliance with the Regulation would mean FRWSS strategic planning meets the 12 RAF strategic planning outcomes, which include maintaining and implementing appropriate capital and operating planning.

In reviewing the Operating Licence conditions, IPART should recognise these requirements that are specific to the Fish River Scheme under the *Water Management Act*.

## **Drought Response Planning**

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

DPE Water agree with IPART that the licence should require WaterNSW to maintain the Greater Sydney Drought Response Plan. WaterNSW should work with Sydney Water to revise the drought response plan annually, or on an as needs basis, in response to emerging drivers or changing needs and submit to DPE Water for review and comment prior to finalisation and DPE Water endorsement.

DPE Water does not consider the Operating Licence should include a requirement to implement the Greater Sydney Drought Response Plan. There is a need to ensure that drought response is prioritised and implemented, however, a condition in the Operating Licence may create the unintended outcome of not facilitating changes in approach as part of adaptive management.

Where they relate to Greater Sydney operations, Drought Response provisions should align with provisions in Sydney Water's licence.

DPE Water and DRNSW support consideration of expanding the role of WaterNSW in drought planning beyond Greater Sydney. WaterNSW could contribute to drought and emergency/incident management planning:

- by local water utilities for the town water supply schemes extracting from regulated river systems
- in Regional Drought Resilience planning and implementation of the developed plans e.g. through the NSW Government Regional Drought Resilience Planning Program.

Further discussions are needed prior to establishing any licence amendments on an expanded role.

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<sup>2</sup> Clause 121B Water Management (General) Regulation 2018

## Water quantity management (system yield)

### **10. Are the current licence requirements to calculate System Yield in the declared catchment adequate? If not, what requirements are appropriate?**

DPE Water and DRNSW support IPART's preliminary position that the current system yield calculations are fit-for-purpose as one of multiple indicators about security and resilience of the system and should remain in the Licence. DPE Water and WaterNSW will consider the most appropriate approach for non-declared catchments.

WaterNSW should be required to recalculate yield in the declared catchment after droughts or changes to the operating rules and advise the Minister of any changes to the system yield. It should also be required to recalculate yield if requested by DPE Water (based on Level of Service Criteria established by DPE Water). Any recalculation of yield should be explicit in how climate change was incorporated and reflect any guidance provided by DPE Water.

## Water supply augmentation

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

Coordinated planning and cooperation between WaterNSW and Sydney Water is critical to support effective shared augmentation planning and drought response planning. DPE Water supports the use of MOUs between parties to create clear and transparent roles, responsibilities and expectations that assist with the delivery of services. The Licence should require WaterNSW to maintain a Relationship Management Framework with Sydney Water to deliver these outcomes. Such a Framework could encompass Water NSW's Raw Water Supply Agreement with Sydney Water, an MOU and a Data Sharing Agreement. Equivalent provisions should be included in Sydney Water's licence.

The Ministerial letter issued to Sydney Water and WaterNSW on 22 January 2021 transferred some water supply augmentation planning functions to Sydney Water and created the requirement for an MOU. DPE Water notes the current intention is for this planning function to continue being shared and not completed in isolation, as WaterNSW manages and operates dams within the Sydney catchment as well as being responsible for protecting the health of Sydney's drinking water catchments.

If an MOU is a requirement of the Operating Licences, complying with the MOU is already implied, but the addition of a requirement to comply with MOUs would clarify this. This being said, it is noted there are currently a number of MOUs and Data Sharing Agreements under WaterNSW's Operating Licence, and consideration should be given to consolidating them to be clearer to all parties.

## Water conservation

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

DPE Water, DRNSW and NSWRA support IPART's preliminary position that the Operating Licence should require WaterNSW to develop and implement a new 5-year water conservation plan that:

- includes details of any water conservation work programs and projects over the life of the plan, including costs, volumes of water lost and saved
- considers a range of measures, including but not limited to storage, transmission, leakage, and system operations
- considers the NSW Water Efficiency Framework, including the need for robust economic assessment of options
- considers the strategic context provided by the NSW Water Strategy and the GSWS
- extends to all WaterNSW assets across declared and non-declared catchments
- is submitted to DPE and IPART for review annually.

### **13. Is there anything else that WaterNSW's Licence should authorise or require in relation to Water Conservation?**

DPE Water and DRNSW support expanding the Operating Licence to support WaterNSW play a greater role in water conservation planning and information sharing.

In the context of WaterNSW's functions, water conservation generally refers to water efficiency measures in storage, transmission, and system operations. Greater information on how losses/surpluses are identified and managed would benefit interrelated NSW Government department programs, especially those relating to the efficient and effective use of water for the environment. Quantitative information about volumes of water saved (predicted and actual) through the measures and initiatives identified by WaterNSW would be of interest to all stakeholders via changes to the reporting manual.

Measures in the operating licence relating to water conservation, should reflect consideration of the environment, including current arrangements under Water Sharing Plans or licensed environmental water. As per performance standards, it is important to ensure WaterNSW maintains all assets in a fit-for-purpose state for suitable operation and water conservation.

There have been several improvements in environmental water management updated in both policy and reflected in water sharing plans. WaterNSW has implemented the modelling and communication for active management of environmental water, particularly in the Barwon Darling. This requirement is currently not captured in the Operating Licence. No position has yet been established on active management (including publication of daily 'cease to take' notices) in other areas of the state and determine the appropriate regulatory instrument for it.

## Flood management

### **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's role in relation to flood planning and emergency response activities is required to be coordinated with whole of government responsibilities for emergency preparedness, response, and recovery, including the role of NSW RA and DPE Water.

There is an ongoing need to improve and exercise flood planning and emergency response activities with the Bureau of Meteorology (BoM), State Emergency Service (SES), Councils, and other stakeholders, particularly with the impacts of climate change on flood risk. WaterNSW's existing role in managing water release from storage facilities ahead of potential flood events needs to be closely coordinated with flood planning led by other 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?**

No. As yet, no decision has been made by the NSW Government on WaterNSW's role in flood mitigation and management in the Sydney Catchment area. WaterNSW will be a key stakeholder in Disaster Adaptation Planning led by NSWRA.

### **16. How could the advanced notification of 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)?**

DPE Water considers the notification of changes to flow release patterns could extend to the transfer of water from the Shoalhaven to Sydney down the Upper Nepean and Wingecarribee / Wollondilly rivers. This should be done with adequate notice to all landholders along those rivers.

NSW Health supports the advanced notification of releases to downstream drinking water suppliers, including changes to offtake levels to allow LWUs to be prepared to manage water treatment for town water supplies. Changes to offtakes should consider water quality and the impact to downstream customers. NSW Health understands that changes to the offtake level at Glenbawn Dam in 2020 resulted in the release of higher turbidity water and impacted the ability of Upper Hunter Shire Council to provide safe drinking water. This contributed to boil water alerts. Please see also response to questions 35 – 37.

DRNSW suggests including current inflows, expected inflows predicted out to the next 24-36 hrs, predicted flow volume and heights at gauges downstream be better communicated. This requires coordination with the BoM and other relevant agencies to avoid confusion.

## Climate risk readiness

### Key Recommendations:

14. **Amend** the objectives clause of the licence to explicitly refer to climate change.
15. **Amend** the reporting manual to require WaterNSW to report its progress towards Net Zero.
16. **Amend** the Operating Licence to require WaterNSW establish a climate risk management process that addresses climate related risks.

DPE Water and EPA support including an explicit reference to climate change in the licence objectives, as it would remove any doubt on the need for WaterNSW to incorporate appropriate climate change mitigation and adaptation measures into its operations. Such a change is consistent with the 'principal' and 'other' objectives in the *WaterNSW Act 2014* to protect public health and the environment and to be a successful business, including by having regard to the interest of its customers and the community. The NSW Government supports IPART's preliminary view that there could be benefit in requiring WaterNSW to:

- develop and maintain a climate-related risk management program consistent with the NSW Climate Risk Ready Guide. This would require WaterNSW to be consistent with ISO 14091:2021, aligned with principles in the NSW Climate Change Adaptation Strategy and informed by guidance as it is updated via the Government's AdaptNSW program
- publish its progress towards Net Zero.

To prepare for climate change risks, including changing water quantity and quality, WaterNSW should be required to build in climate forecasts and plans into their policies and programs. There are currently no specific conditions about climate change in WaterNSW's Operating Licence, despite the interplay between WaterNSW's operations and climate risk readiness. At a minimum, conditions should be consistent with those in Hunter Water and Sydney Water Operating Licences.

The EPA notes that conditions within the Operating Licence are aligned with the EPA's Climate Change Policy and Action Plan 2023-26.

## Abatement, Resilience, Adaptation

### **17, 18. Should the objectives in the Licence be amended to explicitly refer to abatement, climate change resilience and adaptation?**

DPE Water welcomes further consideration of the potential inclusion of licence conditions concerning abatement, resilience and adaptation, in support of the NSW Government's commitment to achieve net-zero by 2050.

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

DPE Water believes that licence objectives should not refer to a climate risk management program but should refer to climate risk generally. DPE Water and DRNSW support the need for a licence



requirement for WaterNSW to establish a climate risk management process that addresses climate-related risks specifically, including identifying priority risks, and implementing adaptation and mitigation actions for their operations and assets. This should form part of a wider program to lift WaterNSW's climate change maturity.

A climate change risk management process should be consistent with the Climate Risk Ready NSW Guide and informed by guidance as it is updated via Government's AdaptNSW program. Such a system should be developed, maintained, and regularly updated given the significant impacts of droughts, floods, and fires on water infrastructure management and riverine health. We support climate risk being integrated into existing risk management systems.

We support IPART auditing WaterNSW's compliance and providing assurance that climate-related risks are being identified, prioritised, and managed.

## **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?**

DPE-Water recommend that IPART and the community have visibility of how WaterNSW's organisational climate change maturity is improving over time. To encourage continuous improvement, the Climate Risk Ready NSW Guide provides a Climate Risk Maturity Health Check Tool and options to increase organisational climate change risk maturity. Climate risk maturity is a key determinant of how successful an organisation will be in adapting to climate change. The guide recommends that NSW Government organisations seek to meet a Systematic level of climate risk management maturity. At an enterprise level, Systematic maturity is distinguished by standard, consistent processes.

## **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?**

DPE Water and DRNSW agree that WaterNSW should assess climate risk for the assets they own and operate, and the services they provide as a State-Owned Corporation, including operations, water quality and asset management. As WaterNSW increases its understanding of climate risks for individual aspects of water management, it would be beneficial to understand the relationship between these using a systems approach e.g., the relationship between the physical, natural, socio-economic, and institutional sub-systems. The recent audit of Sydney drinking water catchment<sup>3</sup> highlighted the risk of climate change and the inter-relationship between these sub-systems. The Audit 2019-2022 found climate-driven events and cumulative impacts have had a negative influence on Catchment health. Examples included:

- Reduced availability of suitable raw water due to severe drought, bushfires, and subsequent heavy rainfall.
- Deteriorating wetlands due to the combined effects of bushfire and longwall mining.

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<sup>3</sup> Eco Logical Australia 2023. *Sydney Drinking Water Catchment Audit 2019-22*. Prepared for the Minister for Water

- Declining macroinvertebrate communities due to instream and riparian habitat degradation associated with changes to water flows, water quality and vegetation.

With reference to question 19, the requirement for a comprehensive climate risk assessment should be captured if WaterNSW is required to assess and manage climate risks consistent with the Climate Risk Ready NSW Guide. The Guide refers to physical risks resulting from direct impacts, transition risks or opportunities from moving to lower-carbon economies and liability risks.

## **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?**

DPE Water and DRNSW support the Operating Licence requiring WaterNSW to undertake climate change risk assessments consistent with ISO 14091:2021. The Climate Risk Ready Guide NSW is aligned to the general process and considerations contained in ISO 31000:2108 – Risk management guidelines and ISO 14091 – Adaptation to climate change – Guidelines on vulnerability, impacts and risk assessment. If WaterNSW is not required to undertake climate risk assessments consistent with The Climate Risk Ready NSW Guide, then the Licence should require WaterNSW to undertake climate change risk assessments consistent with ISO 14091:2021.

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

DPE Water, NSWRA and DRNSW support WaterNSW publicly reporting on its progress to Net Zero through the reporting manual. We acknowledge there may not be benefit in WaterNSW publicly publishing its emissions data from specific systems or facilities; however, this information should be made available if required by IPART or Government for the purposes of audit and transparency on how progress toward net zero is being calculated and tracked.

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

The Climate Risk Ready NSW Guide recommends the development and implementation of an adaptation plan including actions to improve climate risk maturity. DPE Water would support the publishing of a climate adaptation or action plan. DRNSW note that WaterNSW should provide clear evidence about how they are managing water infrastructure and water resources effectively to address risk from a climate ready context.

As we anticipate a compounding and cascading impact of climate change, there will be a need to improve the integration of climate impacts in long term planning, drought and incident management and the integration between them. As individual strategies and plans are published it will be important to see how they relate to each other and the governance that supports them.

DPE Water acknowledges there is multiple and increasing climate change related reporting requirements from regulators of WaterNSW and NSW water utilities, including and beyond the focus on water. DPE Water would like to work with IPART and wider Government (State and Federal) to minimise the reporting burden on water utilities, improve the consistency of the information gathered and increase the insights captured from the reporting.

Climate risk readiness provisions should be standardised across all water State Owned Corporations.

## Performance standards

Key Recommendations:

17. **Retain** the current CSR performance standards.
18. **Amend** the Operating Licence to include a requirement for WaterNSW to consider and consult on timing of works where water delivery (including planned environmental water requirements under a water sharing plan) will be impacted.

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

DPE Water and DRNSW deem the current CSR performance standards still relevant to WaterNSW operations and support maintaining these.

In general, DPE supports a set of outcomes-based performance standards that will ensure a minimum level service, but that also allow WaterNSW the flexibility and innovation to improve their performance in line with customer expectations and willingness to pay.

### 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?

No. This would need to be informed by further discussions and policy. DRNSW support this being explored further with relevant agencies in terms of water quality standards within reservoirs and for downstream water releases in declared and non-declared catchments.

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

DPE Water, DRNSW and NSW Health support performance standards for water delivery, water quality service interruptions, and expanding these standards to consider environmental impacts. Where appropriate, performance standards for water quality should follow established industry guidelines including the Australian Drinking Water Guidelines and Australian and New Zealand Environment and Conservation Council (ANZECC) and Agriculture and Resource Management Council of Australia and New Zealand (ARMCANZ).

Regarding water quality, NSW Health supports the requirements of clause 2.1 for a water quality management system for all water supplied by WaterNSW (for both declared and non-declared catchment areas – excluding CSR water). The Australian Drinking Water Guidelines note that catchment management and source water protection provide the first barrier for the protection of drinking water quality. Most importantly the Australian Drinking Water Guidelines Framework (the

Framework) for the Management of Drinking Water Quality must be implemented, and this is a requirement of clause 2.1 of the existing Operating Licence.

The Framework requires consideration and control of risks to water quality. In relation to raw water, this should include monitoring quality and managing the supply to provide the best quality water within WaterNSW capabilities (recognising WaterNSW has limited ability to protect all catchments in regional areas), for treatment. The Framework also requires incident management, for example where incidents or events lead to poorer quality raw water being supplied for treatment, the downstream utility must be notified. It is not appropriate or feasible to impose water quality standards on raw water as changes to raw water quality may be outside of WaterNSW's control, for example the impact of bushfires, extreme weather events or upstream inputs.

NSW Health considers a safe drinking water supply essential for public health and notes that loss of service for extended periods may have health impacts. If system performance standards were set based on customers' willingness to pay, there is potential that different standards may be applied for different areas. IPART should carefully consider the rationale for this approach, particularly if the outcomes are health related. NSW Health considers that there may be a risk if the current health standards are diminished.

Concerning the environment, DRNSW recommends consideration of expanding the WaterNSW Operating Licence to require specific standards relating to water temperature and deviation for expected thresholds downstream of major water storages. In terms of water temperature and cold water pollution, it may suffice to reflect the standard set in the *Water Management Act 2000* S100(3) and Schedule 5 of the *Protection of Environment Operations Act (General Regulation)*, which require releases to be within 2 degrees of the water into which it is discharged. This would help measure and report on impacts to environmental water quality and outcomes for environmental assets.

DPE Water supports exploring opportunities, through the Operating Licence review, to include a requirement for WaterNSW to consider and consult with other agencies (such as DPE Water, DPE Environment and Heritage Group) on the timing of works where water delivery (including planned environmental water requirements under a water sharing plan) will be impacted. Historically, maintenance works on WaterNSW infrastructure has been timed over winter when irrigation demand is typically low. However, this can impact on winter flows critical for environment reasons. An addition to the MOU or similar tool may be the suitable place to capture this.

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## Water Quality

### Key Recommendations:

19. **Consider** options through the Operating Licence to include a requirement for WNSW to develop a water quality incident monitoring plan for the Menindee / Lower Darling, and the Murray, to clarify WaterNSW's role in mitigating and responding to water quality events, so that these incidents can be properly managed, and minimise the risk of large-scale fish deaths.



20. **Consider** options through the Operating Licence to include water quality performance targets.
21. **Amend** the Operating Licence to include separate conditions for the Fish River Water Supply Scheme.
22. **Amend** the licence to include a condition relating to the Fish River Water Supply Scheme (FRWSS) that requires reporting to DPE as per the DPE's performance reporting framework for local water utilities.
23. **Amend** the Operating Licence to include an additional subclause under 2.1 to refer to the Fish River Water Supply Scheme and require WaterNSW to maintain a Water Quality Management System with the same conditions as 2.2.1.
24. **Amend** the Operating Licence to increase WaterNSW's responsibilities to monitor and proactively provide information on water source events and the quality of raw water supplied to local water utilities. There is significant benefit in WaterNSW monitoring and proactively providing this information to local water utilities to allow them to manage water quality risks effectively.
25. **Retain** other clauses/ aspects of this section – separate water quality licence conditions for declared and non-declared catchments, exclusion of picnic areas from IPART auditing of the Water Quality Management System (as this is already audited by NSW Health).

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

DPE Water and NSW Health support maintaining the existing requirements as set out under clause 2.1 in the current Operating Licence, including separate clauses for the declared (2.1.1) and non-declared catchments (2.2.2) requiring a water quality management system for all water supplied by WaterNSW (for both declared and non-declared catchment areas). The separation of declared and non-declared catchments reflects the level of control WaterNSW has in various catchments and the differences in management.

Separate licence conditions may be appropriate depending on the drivers, outcomes and level of control for water quality monitoring in the declared and non-declared catchments. It is noted that differences in water quality standards depending on geographical location may create a need for separate conditions.

## **Water quality performance targets**

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

WaterNSW is required by the current clause 2.1 to maintain a Water Quality Management System (WQMS) consistent with the Australian Drinking Water Guidelines (ADWG) and to implement the system to the satisfaction of NSW Health. Under the Framework for the Management of Drinking Water Quality, water quality monitoring is an essential requirement of a management system.



DPE Water supports evidence-based approaches to evaluation of programs and decision making. The use of performance targets, especially for prescribed drinking water standards, will reflect on how well programs such as catchment management are achieving outcomes, and support adaptive management.

WaterNSW have water quality performance targets for routine monitoring, but also targets for incident-based water quality monitoring, where additional monitoring is required to manage the incident. The current Roles and Responsibilities Agreement with WaterNSW and DPE Water specifies routine monitoring and requires WaterNSW do additional monitoring (at DPE Water's expense) for additional water quality incident monitoring. Interagency discussion is required to improve negotiations when additional monitoring work is required. This year (in particular) and the previous three years we have required additional monitoring for hypoxic blackwater management to respond to major fish deaths and minimise future events.

DPE Water recommends consideration of a water quality incident monitoring plan being required in the licence for the Menindee / Lower Darling, and the Murray, to make clear what WaterNSW is required to do, so that these incidents can be properly managed, and minimise the risk of large-scale fish deaths. This should ensure that there is adequate resourcing when an increase in monitoring is required. However, we note the Government's Response to the Independent Review into the 2023 Mass Fish Deaths in the Darling-Baaka River at Menindee has yet to be released, and may influence what the most appropriate response is in WaterNSW's licence.

NSW Health notes some raw water quality characteristics are unlikely to change significantly through the water treatment process, while others can significantly impact the ability to treat water. Looking to the future, these characteristics could be used to establish bulk water standards or water quality performance targets that could be complied with under the Operating Licence, although WaterNSW's ability to influence water quality may be limited and variable depending on the level of catchment control. Defining any such standards would be a longer-term piece of work, which would require consulting existing guidelines and respective Government agencies with carriage of setting and monitoring outcomes related to human and environmental health: NSW Health, the EPA, DPE Water, WaterNSW, Sydney Water, DPE Environment and Heritage Group and DPI Fisheries.

Water quality data, sampling scope and reporting on the public WaterInsights page should be adjusted as necessary if targets are introduced, for transparency with customers.

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

NSW Health supports the exclusion of picnic areas from the Water Quality Management System obligations in the licence as these supplies are subject to regulation under the *Public Health Act 2010*, and this is the most appropriate mechanism. WaterNSW currently include management of the water quality at these sites within their Water Quality Management System, though it is regulated separately by Health.

To support the existing regulation under the Public Health Act, DPE Water suggest including as a footnote in the Operating Licence a reference to relevant standards and obligations that apply to picnic areas. This would clarify expectations without creating overly prescriptive licence conditions.

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

DPE Water support separate conditions for the FRWSS. Separating the obligations for FRWSS from the current obligation could help FRWSS customers better distinguish and understand the services they receive from WaterNSW. DPE Water's Performance Reporting framework is currently being reviewed to further streamline and make consistent with the National Performance reporting framework for urban water utilities. NSW Health suggests the inclusion of an additional subclause under 2.1 to refer to the FRWSS and require WaterNSW to maintain a Water Quality Management System with the same conditions as 2.2.1.

**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?**

See response to Question 8.

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

Regarding clause 121B see response to Question 8.

Regarding clause 121A of the Regulation - Annual performance reporting, DPE Water suggests conditions in the licence reflect that FRWSS is required to report to DPE Water as per DPE's performance reporting framework for local water utilities. This will enable DPE Water to report FRWSS data (along with other local water utilities data) to the BoM for publication in the National Performance report for urban water utilities, which will avoid duplication of FRWSS reporting.

NSW Health supports the addition of obligations relating to fluoridation in the Operating Licence for FRWSS. NSW Health notes that these obligations are included in the Sydney Water Operating Licence. NSW Health considers the Licence to be the most appropriate mechanism to set out key Government requirements of public interest in a succinct and accessible form.

## Local Water Utilities

### LWU Information Request Procedure

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

DPE Water, NSW Health and DRNSW support consideration of increasing WaterNSW's responsibilities as there is significant benefit in WaterNSW monitoring and proactively providing this information to LWUs. This information should also be made available to DPE Water and NSW Health to allow for proactive risk management.

LWUs often do not have adequate resilience and/or capability in their storage and treatment infrastructure to deal with (sudden or significant) changes in raw water quality, flow, or delivery, including from WaterNSW operated river systems.

NSW Health considers that there may be benefit in formalising WaterNSW's responsibility to monitor and provide information on bulk water quality released to downstream water utilities. This can be addressed through an obligation/responsibility for WaterNSW to provide timely and adequate information (upfront and unprompted) to LWUs when WaterNSW identifies significant changes in water parameters, including water quality and water delivery reliability/security. With appropriate monitoring and sufficient warning, downstream utilities can take action to control risks (e.g. not draw raw water, maximise storage of good quality treated water, optimise treatment processes, commence activated carbon dosing).

Further discussion is required around reservoir stratification and cost burden to LWUs of treating poor quality water (low dissolved oxygen, high metals, high nutrients) given where (at what distance) LWUs extract water from the storage.

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

DPE Water supports recasting the information request procedure, as per the response to question 35 above.

NSW Health considers that the Operating Licence is the most appropriate place to set out requirements in relation water quality for downstream utilities. The effective monitoring and communication of potential risks to public health is in the best interests of the community. The information that WaterNSW is best placed to collect (i.e., physical, and chemical quality, and cyanobacteria in storages), could usefully inform a LWU's drinking water quality assurance program. NSW Health does not expect there will be significant costs associated with the monitoring and reporting of basic water quality characteristics. Any monitoring data collected by WaterNSW may be relevant to inform a utility's quality assurance program, not just health related data.

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

NSW Health supports proactive reporting of water quality data to downstream water utilities. NSW Health considers that the Australian Drinking Water Guidelines provide comprehensive guidance on water quality management in relation to raw water supplied for treatment.

Most importantly the Guidelines Framework for the Management of Drinking Water Quality must be implemented, and this is a requirement of clause 2.1 of the current Operating Licence. The Framework requires consideration and control of risks to water quality. In relation to raw water, this should include monitoring quality and managing the supply to provide the best quality water for treatment. The Framework also requires incident management, for example where incidents or events lead to poorer quality raw water being supplied for treatment, the downstream utility must be notified.

## WaterNSW's obligations to its customers

### Key Recommendations:

26. **Amend** the Operating Licence to require WaterNSW to have a family violence policy that protects customer privacy and ensures that family violence sufferers can access payment difficulty arrangements.
27. **Amend** the Operating Licence to ensure that WaterNSW consults and engages effectively and collaboratively with its customers, specifically with reference to Aboriginal stakeholders to ensure that engagement activities accord with NSW Government strategies such as the Department of Customer Service's Aboriginal Customer Engagement Strategy
28. **Update** clause 6.5.4 to reflect that Customer Advisory Group membership includes representatives of NSW and Commonwealth environmental water holders.

### Payment difficulties and family violence

#### 38. Should WaterNSW be required to have a family violence policy?

The NSW Government supports WaterNSW being required to have a family violence policy that protects customer privacy and ensures that family violence sufferers can access payment difficulty arrangements. The condition should include minimum policy standards that are to be considered in the Family Violence policy.

### Consultation with customers

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

The NSW Government supports operating licence amendments to require WaterNSW to take a customer perspective (from all people, companies and agencies that receive products, services, data, information, support from WaterNSW) of engagement, by ensuring that:

- all relevant Government agencies are invited to participate in discussions on NSW waterways and water management,
- customers (and other stakeholders – even if not direct customers) can be engaged on matters that are important to them in the most efficient and effective way.

WaterNSW customers should be consulted on their preferred manner of engagement, noting that the environment (through held environmental water licences) is the largest customer of WaterNSW. Additionally, WaterNSW activities impact beyond its customers by also affecting downstream receiving riverine environments and associated regional communities that depend upon good quality water.



DPE Water supports flexibility for WaterNSW to determine the best way to engage with their customers, while also providing a space for input from the community, DPE and other interested stakeholders. IPART could provide an independent public forum to which customers and the NSW public can comment on current engagement approaches and facilitating suggestions on improvements as proposed in IPART's revised framework.

The NSW government also supports changes to the Operating Licence to support culturally appropriate engagement of Aboriginal stakeholders. This should be informed by Aboriginal people and include the opportunity for representation on Customer Advisory Groups as well as separate and dedicated Aboriginal Engagement programs. WaterNSW should ensure engagement activities accord with NSW Government strategies such as the Department of Customer Service's Aboriginal Customer Engagement Strategy, which seeks to ensure Aboriginal customers receive services and support in culturally safe and respectful ways. We acknowledge WaterNSW are endeavouring to do this as referenced in their Reconciliation Action Plan.

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

CAGs (or similar) provide a valuable consultation mechanism to keep water customers and regulatory agencies abreast of valley specific issues, while also providing a forum for discussion and recommendations for WaterNSW consideration. Current requirements are that CAGs include at least one customer representing 'environmental water users' (among the other categories). Current membership includes representatives from NSW and Commonwealth environmental water holders. Clause 6.5.4 could be updated to reflect this. As per the response to question 39 above, CAGs should also ensure continued engagement across Aboriginal water users. Interagency discussions will explore effective forums for regulatory bodies that oversee the management of NSW waterways (including NRAR, DPE Water, DPE Environment and Heritage Group and DPI Fisheries) to collaborate.



## Access to information and data

### Key Recommendation:

29. **Amend** the Operating Licence to require WaterNSW to establish a Data Sharing Agreement between the Department of Primary Industries and Water NSW to assist with timely information sharing of water resource data.

### **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.**

DPE Water, DRNSW and NSWRA agree that WaterNSW can be responsible for collecting, managing, providing access to open source data and, where appropriate, sharing data and information that is not open source under streamlined Data Sharing Agreements. WaterNSW plays an essential role managing water resources on behalf of the NSW Government and there is scope to explore through further consultation whether elements should be defined as state data assets and specify the standard to which they should be maintained and made available. It is important that sharing arrangements enable NSW Government agencies to self-serve access to the open source data at any time, and not be dependent on WaterNSW to provide data extracts when requested. It is also important that access to historic data is maintained, and visibility on reports, assumptions and modelling underpinning the data is provided.

DRNSW supports the establishment of an operating licence requirement for a Data Sharing Agreement being developed between DPI and WaterNSW. This will assist with identifying the data and information needed, together with the timeliness and mode of delivery between the two organisations. The Agreement may include data areas related to water quality management, cold water pollution management, and water delivery and pump extraction data.

### **42. Is the licence the right instrument to ensure all NSW data and information users can adequately access water resource data for the state?**

The Operating Licence is an appropriate instrument to set out requirements for data sharing agreements and information that should be shared publicly, complemented by other instruments like the Roles and Responsibilities Agreement. DRNSW notes the value of WaterNSW moving towards providing all water resource data to interested NSW Government parties via a central database repository that is easy to navigate, easy to interrogate, and that facilitates the delivery of real-time data via automated reports across multiple sites within respective catchments. DPE Water, NRAR and WaterNSW are currently working to develop a Joint Technology Roadmap, with the aim of improving the technology environment over the longer term and aligning the direction to meet various organisational needs.

#### **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?**

NSW Government agencies support exploring opportunities for improved data access and information sharing to support their ability to perform their functions. This could be achieved through a range of mechanisms, including increased interagency collaboration, amendments to strengthen existing Data Sharing Agreements and the Roles and Responsibilities Agreement between WNSW, DPE Water and NRAR, and changes to operating licence conditions. It's noted that many agencies including DRNSW and DPI rely on Water NSW data and information. Data needs are often specific to each agency, and their experiences of timeliness and the quality of data received from Water NSW differs.

In the past, DPI has approached Water NSW with project specific agreements for data access and information sharing. This has taken time and resources to establish and did not allow for the timely provision of data to inform related functions. A dedicated Data Sharing Agreement between DPI and WaterNSW is recommended, to ensure that in particular, DPI Fisheries can discharge its legislative obligations related to conserving fish stocks and key fish habitats, threatened species, populations, and ecological communities and, to promote ecologically sustainable development. The Operating Licence should not prescribe the content of the Data Sharing Agreement, but the following is provided as context on the kinds of information sharing that would support DPI Fisheries:

- asset management database for fishway/weir operation that could block fish passage – WaterNSW should provide regular reporting on how their fishways/weirs are being operated and maintained to facilitate safe and effective fish passage
- any temperature depth profiles for WaterNSW reservoirs
- any temperature data/assessments for water discharged downstream of WaterNSW assets that is aligned with flow data
- any water quality data for the reservoirs through the water column
- any information on the operation of existing multi-level offtake towers
- any information on existing bubble plume systems at WaterNSW impoundments (including data on the size of the compressor, design/installation notes for the piping/diffuser, annual energy usage, and maintenance considerations)
- data related to determining pumping volumes extracted at individual work sites (including aspects related to work approvals, management zones, share components, and usage).

NRAR has commented separately on its data requirements through an independent, Board approved submission.

#### **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?**

“Access” is not currently defined in the Roles and Responsibilities Agreement, and what WaterNSW considers sufficient and timely may differ to what DPE and NRAR considers sufficient and timely.

The Roles and Responsibilities Act specifies that data ownership resides with the system owner. This means data ownership transitioned with systems at the time of business transfer. Defining 'ownership' acting on behalf of NSW Government could be considered.

The Joint Technology Roadmap with DPE Water, Water NSW and NRAR may address some of these issues, including Cyber Security issues preventing backend access to data.

**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?**

See responses to questions 43 and 44.

## **Portal and IT platforms**

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

As above, there is room for improvement. Current development on the WAVE/WMS program suggests that future access may be limited if formal requirements are not put in place. Relevant agencies may also benefit from accessing telemetered data through a central data repository for relevant agencies. This should be easily interrogated across multiple sites within a catchment. It's acknowledged that Water NSW cannot share non-public information without appropriate data sharing agreements in place, and that a range of open source data is already available through WaterInsights.

**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?**

DPE Water support requiring WaterNSW to develop, operate and maintain IT systems, and provide support, to allow access to users of NSW water resource information and data. As noted above, a Joint Technology Roadmap has been developed between DPE Water, Water NSW and NRAR. The licence could require WaterNSW to co-design any new systems with relevant NSW government agencies to ensure functionality. In addition, NSWRA support enhancing the ability to download historical data without reduced timesteps.

DRNSW suggests expanding information and data sharing to ensure that DPI Fisheries can discharge its legislative obligations as indicated in the response to question 43.

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

Nil comment.

## Data management – integrity and reliability

### Data Sharing Agreements

#### Timeliness of data

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

Introducing service levels to monitor and maintain performance could be considered. This includes frequency, format, access and quality levels. The current Roles and Responsibilities Agreement and licence do not have any agreed Service Levels to monitor and maintain performance.

DPE Water is currently reviewing its Data Sharing Agreement with Water NSW and will make any improvements through that process underway.

#### **50. Should the Licence require WaterNSW to manage data consistently with any standards or guidelines?**

DPE Water recommend that agreed quality levels could be considered, these could be defined by agreed standards.

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

DPE Water would like agreed service and performance levels to be considered along with quality levels, these could be defined by standards.

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

DPE Water notes that Schedule 1 of the Roles and Responsibilities Agreement lists reporting requirements for environmental water. The accounting and provision of information (including accounting information) to environmental water holders is different to that of other water users and the operating licence could be amended to include the specific requirements needed to meet NSW water reforms and commitments made under the Basin Plan, particularly in the southern Basin, to require monthly reporting of environmental water use and return flows by licence holders.

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

Requiring WaterNSW to include daily environmental flow release data from storages managed by WaterNSW into the notification system would support implementation of the water sharing plans. Agreement should be reached between Sydney Water, Water NSW and DPE to ensure the accurate and timely sharing of environmental flow data.

DPE Water notes that the environmental water accounting information collected by WaterNSW is needed on a regular basis by environmental water holders for their portfolio management. There is



also regular operational reporting that WaterNSW are required to provide to the Murray Darling Basin Authority.

Through the Aboriginal Water Program (AWP), DPE Water is working with Aboriginal communities across NSW. The lack of telemetry enabled gauging stations across NSW unregulated rivers is a significant concern to Traditional owners and Native Title holders and they would like to see a solution. Aboriginal stakeholders have suggested return to surveyed in gauge plates in water sources which need to be manually read and reported (a predecessor of automatic telemetry). The AWP is considering funding the installation of a pilot program with Manly Hydraulics Laboratory and local Aboriginal Ranger Groups, Local Aboriginal Land Councils or Registered Native Title Body Corporates (RNTBC). There is an opportunity for WaterNSW to work with these local Aboriginal groups on the ground to develop a process where manual gauge readings can be reported or uploaded to WaterNSW records database for agency and public access.

The AWP has heard repeated concern from Aboriginal stakeholders that there are no records or data on pumping levels in most unregulated rivers or groundwater sources. Aboriginal stakeholders are concerned that even with the introduction of compulsory metering on pump diameters of 200mm and 100mm, significant volumes of water taken are not being measured.

Further discussions between all impacted agencies and stakeholders are required to progress solutions to the issues noted above.

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## Fostering collaboration with other agencies

### Key Recommendations:

- 30. **Retain** clause 6.13 to require WaterNSW to retain the MOU with NSW Health.
- 31. **Amend** the operating Licence to include a requirement for WaterNSW to proactively provide operational parameters on water quality, water delivery, reliability and security, and advise as needed, if services are outside of such parameters. This amendment shall require WaterNSW to provide adequate information to LWUs to enable better management of water treatment and supply, and improved urban water outcomes.

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

#### MOU with the EPA

The EPA has previously expressed the view to IPART that it considers the EPA – WaterNSW MOU is no longer required considering the maturity of the relationship and enduring cooperation on matters of common interest. However, this MOU is required by legislation (*WaterNSW Act 2014 21(1)*). So, while the requirement could be removed from the Operating Licence (reducing regulatory duplication), the requirement for an MOU would remain until legislation is amended.

The EPA and WaterNSW meet regularly at executive and operational levels and discuss matters of mutual interest and concern to maintain and improve water quality. The current MOU was signed in



2022. The EPA is satisfied with the content and functioning of the MOU and acknowledges that legislative change is required to remove the requirement for an MOU. In these circumstances, the EPA is satisfied to continue with the MOU arrangements as they currently exist.

## MOU with NSW Health

NSW Health supports retaining the obligation to maintain and comply with an MOU with NSW Health. The MOU outlines the basis for the cooperative relationship between the organisations and has been revised as required over time. The MOU review is aligned to the operating licence review, which provides an opportunity to revise any relevant clauses.

## Promoting collaborative relationships with other regulators

**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 conditions on WaterNSW related to NRAR?**

Nil comment.

**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?**

A relationship management arrangement (potentially comprising MOU and Data and Information Sharing Agreement) is recommended between DRNSW (DPI Fisheries) and WaterNSW. The AWP, as part of DPE Water, support this and recommend arrangements are put in place with the NSW Aboriginal Land Council (representing all local Aboriginal Land Councils) and the Native Title Service Provider Corporation (NTSCORP) (representing all registered native title bodies corporate (RNTBCs)). The purpose of these MOUs would be to clearly articulate the roles and responsibilities of parties in forming cooperative and collaborative relationships for related actions.

**57, 58. How effective are the current mechanisms in achieving the required relationship and information sharing needs between WaterNSW and LWUs? Should WaterNSW be required to manage its relationships with LWUs through an MOU, protocol, or policy?**

NSW Health notes that many utilities may be unaware of the existing procedure to obtain information from WaterNSW and supports policy to improve how WaterNSW proactively shares information with LWUs. NSW Health is aware of instances where releases from WaterNSW storages have negatively affected drinking water supplies. Some LWUs have been unaware of releases, or if aware, did not have the treatment capacity to adequately treat poorer water quality due to releases from offtake changes or cyanobacterial blooms, leading to community complaints and boil water alerts.

NSW Health considers that the Australian Drinking Water Guidelines provide comprehensive guidance on water quality in relation to raw water quality parameters that may impact on treatment.

NSW Health does not support individual MOUs with 83 LWUs, as this would require significant resourcing by WaterNSW and LWUs to develop and maintain. NSW Health supports a policy approach and is willing to work with IPART, WaterNSW and LWUs to develop a policy.

DPE Water support consideration of operating licence amendments to formally recognise the role of the customer in guiding the work of LWUs and WaterNSW. Whilst DPE Water acknowledge there are already key customer commitments in the WaterNSW operating licence, DPE Water want to ensure that there are no barriers to WaterNSW lending support to LWUs in the licence.

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## Management systems

Key recommendations:

- 32. **Amend** the Operating Licence to require WaterNSW to develop, maintain and implement a quality management system consistent with the Quality Management Framework DPE is developing.
- 33. **Amend** clause 5.1 to note that the asset management systems also apply to the Fish River Water Supply Scheme (FRWSS is included and does not require a separate AMS).
- 34. **Amend** amending the Operating Licence to reflect FRWSS legislative obligations under the WM Act.

### Environmental management system (EMS)

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

Nil comment.

### Quality Management System (QMS)

**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?**

DPE Water support adding a requirement under the licence requiring a quality management system. A QMS would be beneficial to WaterNSW and its customers by providing improved assurance in system operations decision making and is a requirement in the Hunter Water Operating Licence. The Department has also agreed to develop a Quality Management Framework (QMF) in response to recommendations from the Water Management Act section 10 Review. A QMF would improve WaterNSW's capability to demonstrate decisions are being made in alignment with water management principles as described in the *Water Management Act 2000*.

**61. What other mechanisms could be included in the licence to improve WaterNSW's corporate record keeping.**

Nil comment.

## Asset Management System (AMS)

### **62. Should the current Licence conditions relating to an AMS be changed?**

With respect to Fish River Water Supply Scheme (FRWSS) and as per the response to question 8, DPE Water notes that the current Licence requires WaterNSW to maintain an AMS consistent with relevant ISO standards. The AMS includes the FRWSS and the licence should reflect that the AMS applies to the FRWSS and a separate AMS is not required for the FRWSS. The AMS to the relevant ISO standard will assist FRWSS obtaining 'assurance' for strategic planning under the department's Regulatory and Assurance framework (RAF) for local water utilities.

DRNSW note asset management is limited for environmental infrastructure including fishways and multi-level outlets (MLOs) that mitigate cold water pollution. Audits in 2017 and 2023 indicate improvements needed to support fishway operation and maintenance and native fish migration.

Additionally, WaterNSW owns and operated several MLOs to mitigate cold water pollution. Despite operational plans being developed in Stage 2 of the Cold-Water Pollution Strategy, information on the compliance of MLO operation relative to the operating plans is not readily available.

### **63. Should WaterNSW be required to comply with the latest version of ISO 55001?**

Nil comment.

## Critical Infrastructure

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

Nil comment.

## Appendix A - NRAR Submission

### Issues Paper - WaterNSW operating licence review

#### NRAR's Contextual Remarks

NRAR was established under the *Natural Resources Access Regulator Act 2017* following independent investigations of water management practices in New South Wales. NRAR's objectives specified by the NRAR Act 2017 are to ensure the public can have confidence in the efficient, effective, accountable and transparent enforcement of water laws in NSW.

NRAR has made great progress against these objectives and in restoring community confidence in the framework, having undertaken over 1900 enforcement actions since our commencement in April 2018, including commencement or completion of 37 prosecutions through the Courts for serious breaches of law, issuing over 500 penalty notices and close on 800 warnings and cautions for less serious breaches.

However, NRAR's activity and progress since 2018 is also leading to water sector data, information and systems being scrutinised and tested more intensely than it had previously by NRAR, the Courts, defendants and stakeholders. This scrutiny is revealing systemic issues in the water sector's data, information and systems management, which not only compromise NRAR's ability to meet its NRAR Act 2017 objectives to be effective and efficient, but represent a substantial reputational risk to water sector agencies and government and highlight the cost transfers that result between the water agencies.

The impacts of data, information and system issues on NRAR's compliance and enforcement activities are highlighted by, but not limited to:

- several court cases where NRAR withdrew the case or some of the charges after considering information management issues, and also a recent case where hydrometric data was discovered to be inaccurate after the commencement of proceedings. We emphasise that NRAR can still enforce water law offences, although we need to gather different and additional information from the field and modify our investigation and enforcement tactics to minimise reliance on data held in WaterNSW systems.
- NRAR's experience in tranche 1 (T1) meter reform implementation for the largest water users in the state which showed:
  - 30 to 50 percent of approval holder details in the water licensing system were not complete or current, preventing NRAR contacting these water users from desktop about NRAR's expectations for meter installation, and
  - 53 percent of T1 works in the water licensing system were, upon field visits by NRAR, found to be inactive or under the approved size and therefore below the Regulation thresholds to require a meter under T1 reforms.
- approximately 35 current investigations require information from WaterNSW about notifications of meter failure from water users. These notifications are a manual process which cause delays to NRAR's investigations, and present inherent chain of custody issues that prevent desktop compliance assessment.

These data, information and systems issues also clearly transfer significant additional costs to NRAR. Examples of cost impacts on NRAR include:

- IPARTs 2021 price determination which foreshadowed expectations for substantial compliance efficiencies in the order of \$10million per annum based on assumptions that metered data would enable desktop compliance assurance and enforcement of water take offences by NRAR, whereas the data acquisition system inherited by WaterNSW is not fit for this evidentiary level purpose and therefore in current condition will not support this cost saving
- NRAR's experience in T1 meter reform implementation, where higher accuracy and currency of licence and approval information in the water licensing system could have saved an estimated 65% of compliance costs incurred by NRAR during tranche 1 compliance programs
- investigation of an average 590 water take allegations per annum, which should mostly be able to be assessed from desktop, but which require manual follow up, many with the high cost and inefficiency of field verification across the expanse of NSW.

WaterNSW owns and administers much of the data, systems, information and records required by NRAR to design and implement compliance programs, to build intelligence capability and enable this compliance assurance and enforcement. NRAR is concerned that many of the data points and information held in systems used to enforce water take offences are proving, after 5 years of NRAR experience, to not be fit for this purpose.

NRAR's Board considers this matter to be so serious that it has met with the WaterNSW Board in September 2022 to raise the matter. As a result the NRAR and WaterNSW Boards have formed a joint sub-committee to oversight the development of a data remediation plan. NRAR is grateful for this Board interest and that WaterNSW has committed business executive time to the data remediation measures in this plan. While the data remediation plan is a welcome start to immediate data needs of NRAR, it is not a systemic panacea to the breadth of data, information and system issues faced by NRAR.

In essence, NRAR needs data and information and systems management that meets evidentiary standards of "beyond all reasonable doubt" required in criminal law enforcement, and for access to reliable, current and accurate data and information to support efficient deployment of limited compliance and enforcement resource to the highest risks to water management in NSW. This type of data should be readily available to NRAR from desktop.

NRAR therefore seeks intervention by the regulator, being IPART in this case, to set standards for data, information and systems in the WaterNSW operating licence that supports NRAR to undertake its compliance and enforcement function in an efficient and effective manner required by the NRAR Act 2017.

The imposition of standards in a binding legal instrument provides higher certainty to all parties, and enables a clear pathway for cost recovery. We recognise that such obligations comes with cost, and would welcome a cost benefit analysis to understand the cost distribution between WaterNSW and NRAR of various standards options, to ensure standards are set at a level that minimises total costs and that cost distribution is transparent.

We look forward to working with IPART, WaterNSW and any other interested stakeholders to ensure there are appropriate data, information and systems standards to ensure NRAR can undertake efficient and effective compliance and enforcement, and ensure community confidence is maintained in the water management framework.



**Question 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.**

**NRAR agrees that, under the current water sector governance arrangements, WaterNSW is responsible for collecting, managing, and sharing data and information of water resource data on behalf of the NSW Government**

NRAR considers that WaterNSW has a responsibility to collect, manage and provide access to all water resource data on behalf of the NSW government. This responsibility should include providing NRAR with free and unfettered access to data and information to design and implement compliance programs, to build intelligence and enable compliance assurance and enforcement to the criminal law standard of beyond all reasonable doubt where possible.

Alternatively, there is a legitimate argument that the data and systems to administer the Water Management Act should be owned and administered by the government Department (DPE Water), not WNSW. However, NRAR acknowledges under the current governance model (DPE make the rules, WNSW implement the rules, NRAR enforce the rules) it is appropriate for WNSW to be responsible for collecting, managing and sharing data and information.

**Question 42 - Is the licence the right instrument to ensure all NSW data and information users can adequately access water resource data for the state?**

NRAR's experience over the past five years is that the current negotiated arrangements have not reliably delivered data, systems and information to enable NRAR to deliver fully on its statutory objectives under the NRAR Act to efficiently and effectively enforce water laws in NSW. The ongoing issues with data currency and accuracy have directly impacted NRAR's enforcement of the Water Management Act, as the court system requires a standard of 'beyond all reasonable doubt'. Therefore, it is imperative that a standard which can achieve this outcome is mandated.

NRAR's ability to deliver further improvements and efficiencies is closely related to the ability to build intelligence capability and assess compliance remotely. This ensures our resources are deployed efficiently to the highest risk matters, or enable design of compliance campaigns that will have the highest impact for the least cost.

The operating licence is the appropriate instrument as it could be used to mandate the data, information and systems standards, avoiding negotiated outcomes that have inevitably led to compromise or deferral of negotiations to other negotiated, non-legally binding agreements such as MoUs, Roles and Responsibility Agreement (RRA) or schedules to the RRA, or separate Data Sharing Agreements.

Other alternative pathways, such as imposing obligations through the WaterNSW Act are limited to a legal obligation only, and do not impose the performance expectations, and monitoring of these expectations by an independent regulator, that would be delivered through placing the obligations in the operating licence.

Having clear standards imposed by the regulator (IPART) is more likely to deliver higher certainty and efficiency to NRAR, and higher confidence in water management across the water sector and community, than the current negotiated agreements.

**Question 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?**

NRAR considers that the current Roles and Responsibility Agreement condition does not adequately obligate WaterNSW to provide access to information and data to all NSW data and information users including NRAR. As previously described, to ensure outcomes are not compromised by financial or resource impediments, it is essential that this requirement is mandated.

**Question 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?**

The Roles and Responsibilities agreement does not require WaterNSW to provide sufficient access to information for NRAR to undertake its functions to meet statutory obligations for efficiency and effectiveness under the NRAR Act 2017.

The obligations established in the operating licence should enable NRAR free and unfettered access to information and data required across the full remit of NRARs functions, and require data and systems to meet standard required for compliance and enforcement of the Water Management Act.

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

### **WaterNSW data availability and data access remain an issue for NRAR**

NRARs experience over the past five years is that negotiated arrangements are not consistently delivering data and information to standards required to efficiently and effectively enforce the water laws., as stated in our introductory remarks.

Without a legally binding requirement, WaterNSW is likely to set work programs and priorities accordingly, constrained by resourcing and funding below that required to meet the necessary standards required to enforce the laws.

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

NRAR considers that the current conditions do not provide NRAR the information and systems needed to consistently be able to effectively and efficiently enforce the law.

Clauses 6.17 and 6.19 of the existing Operating Licence relate solely to non-urban metering. While these conditions have assisted, NRARs remit extends beyond non-urban metering, requiring enforcement of the Water Management Act and associated regulations including in relation to waterfront land offences, failure to comply with approval or licence conditions etc. The conditions

should be revised to remove ambiguity and specify measurable outcomes. For example, current conditions reference 'best endeavours'.

The Operating Licence conditions should obligate WNSW to ensure all data and systems required for compliance and enforcement of the Water Management Act and associated regulations, are at standards needed to enforce the law and that NRAR has free and unfettered access to this data and information i.e. the Operating Licence conditions should not be constrained to metering related data.

**Question 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?**

NRAR considers that WaterNSW should be required by the Operating Licence to develop, operate, and maintain IT systems, and provide support to NRAR for access to water resource information and data.

NRAR requires direct and unfettered access to data, systems and records to enable :

1. Water Licencing, Approvals and Works Data
1. Customer Metered Usage Data (non-aggregated)
2. Customer Estimated Usage Data
3. IDEC/Active Management Compliance Data
4. All DAS Data (event logs)
5. Metering/Duly Qualified Person Data
6. Faulty Metering Equipment Submission Data
7. Geospatial Data (location of approved take, works and usage)
8. Customer Name, Address and Contact Data
9. Hydrometric data and associated metadata; and
10. Data for Manually read meters/stand alone meter logger records/ grandfathered meter readings

NRAR currently accesses data and information through the following systems, user interfaces, and portal/ICT systems:

- A. Water Licensing System (WLS) & Water Account System (WAS)
- B. Duly Qualified Person (DQP) Portal, including stored files (Sharepoint) such as photos, validation and calibration reports, commissioning reports, rating tables
- C. Enterprise Data Base Production (EDBP) system and its metered Data
- D. Non-metered Reports (PowerBI or equivalent)
- E. EagleiO data acquisition service; and
- F. DAS Amazon S3 bucket.

NRAR notes that systems and ICT platforms change over time, so would suggest that the operating licence avoid this level of prescription.

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

NRAR considers that WaterNSW should be required by the Operating Licence to develop, operate, and maintain IT systems, and provide support to NRAR for access to water resource information and data.

**Question 49 - Does the Data Sharing Agreement adequately address the needs of NRAR and DPE Water in relation to data accuracy, quality, continuity, and timeliness of data provision?**

The Data Sharing Agreement (DSA) does not adequately address data accuracy, quality, continuity, and timeliness of data provision. Attachment A provides further details of these issues. These issues should be addressed through Operating Licence conditions.

NRAR requires data and information, and systems used to manage the data and information, that can:

- Be used down to individual case level: ensure effective enforcement to evidentiary standards of beyond reasonable doubt, and so demonstrably deliver:
  - accurate and reliable data and
  - meet chain of custody standards, and
- At scale, up to statewide/bulk level to enable NRAR to operate efficiently, so should:
  - be accessible, integrated data and information, in a form which NRAR can arrange and analyse for our needs at any point in time including building strategic intelligence for priority setting, tactical intelligence for compliance program design and integration of information for fieldwork.
  - reduce or remove the need for field collection of data or evidence that is otherwise available in WaterNSW systems
  - confidence about efficient deployment of staff and design of programs ie we are working on the most important compliance risks.

These issues should be addressed through conditions of the Operating Licence.

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

The Operating Licence should specify standards for accuracy, quality, continuity, currency and timeliness of data and data provision. There is likely a need for more than one standard in parallel to comprehensively address these needs, or a combination of standards with additional clauses where there is no suitable standard. For example, records and data should comply with State Records Authority of NSW requirements (Eg Functional Retention and Disposal Authority: FA256), while ISO 9001:2015 Quality Management Systems requirements could improve WaterNSW data reporting and record keeping, particularly in relation to currency of regulatory instruments,



licensing and approval records, authorities and records relating to authorised officers etc. The NSW Government Standards for Data reporting add value by providing guidance on describing and evaluating the characteristics of data.

In the event that standards cannot be specified to address all aspects of accuracy, quality, continuity and currency, NRAR would expect that such data or information provided to NRAR is accompanied by a data quality statement clearly documenting the specific limitations of the data or information.

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

The requirement for WNSW to improve data integrity and reliability should be imposed as a mandatory obligation.

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

Yes. There should be a single source of truth to ensure community confidence of water management in NSW about regulating and accounting for water take from water sources in NSW. The dataset should be able to be used as the single point of truth for administration, water management and compliance and enforcement. This information is essential for compliance purposes, which WaterNSW provides to NRAR at various frequencies depending on the source of data and method of abstraction.

**Question 53 - Is there other data that should be collected, and accuracy confirmed, at a greater frequency than is already required?**

NRAR requires free and unfettered access at all times to data that enables us to carry out our statutory functions. NRAR requires evidence grade data for the breadth of enforcement matters under the Water Management Act and associated regulations. This extends to data and information that may not be necessary for WaterNSW to carry out its functions. For example, licence holder contact phone numbers may not be necessary for WaterNSW to bill customers, but timely access to this information enables NRAR to efficiently contact licence holders to confirm details to assess compliance, arrange site inspections and ensure safety of staff in the field.

**Question 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 conditions on WaterNSW related to NRAR?**

As noted in earlier sections, the Operating Licence should be used to impose legally binding obligations such as data and information standards. MOUs should be limited to addressing matters that are by mutual agreement, not legally binding requirements.



It would be useful for the Operating Licence to prescribe broad categories or types of matters that should be addressed by an MoU, noting that this should be done once a decision on inclusion of data standards in the Operating Licence has been made by IPART.