

PART Independent Pricing and Regulatory Tribunal | NSW

Water NSW operating licence review

CBA report on draft

Acknowledgment of Country

IPART acknowledges the Traditional Custodians of the lands where we work and live. We pay respect to Elders both past and present.

We recognise the unique cultural and spiritual relationship and celebrate the contributions of First Nations peoples.

Tribunal Members

The Tribunal members for this review are:

Carmel Donnelly PSM, Chair

Jonathan Coppel

Enquiries regarding this document should be directed to a staff member:

Jonathan Hopson	(02) 9019 1915
Maria Morahan	(02) 9113 7752
Leonie Huxedurp	(02) 9019 1928

Invitation for submissions

IPART invites comment on this document and encourages all interested parties to provide submissions addressing the matters discussed.

Submissions are due by Friday, 8 March 2024

We prefer to receive them electronically via our online submission form.

You can also send comments by mail to: WaterNSW Operating Licence Review Independent Pricing and Regulatory Tribunal PO Box K35

Haymarket Post Shop, Sydney NSW 1240

If you require assistance to make a submission (for example, if you would like to make a verbal submission) please contact one of the staff members listed above.

Late submissions may not be accepted at the discretion of the Tribunal. Our normal practice is to make submissions publicly available on our website as soon as possible after the closing date for submissions. If you wish to view copies of submissions but do not have access to the website, you can make alternative arrangements by telephoning one of the staff members listed above.

We may decide not to publish a submission, for example, if we consider it contains offensive or potentially defamatory information. We generally do not publish sensitive information. If your submission contains information that you do not wish to be publicly disclosed, please let us know when you make the submission. However, it could be disclosed under the *Government Information (Public Access) Act 2009* (NSW) or the *Independent Pricing and Regulatory Tribunal Act 1992* (NSW), or where otherwise required by law.

If you would like further information on making a submission, IPART's submission policy is available on our website.

The Independent Pricing and Regulatory Tribunal

IPART's independence is underpinned by an Act of Parliament. Further information on IPART can be obtained from IPART's website.

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Chapter 1 💙

Our review of the WaterNSW operating licence

We have performed a CBA on our draft recommendations to improve WaterNSW's operating licence.



1.1 We want to know what you think about Water NSW's operating licence

In December 2023, we published a draft licence and a discussion paper with draft recommendations for how the operating licence should change to better meet its objectives and resolve issues that have arisen during the term of the current licence that may impact its effectiveness.

1.1.1 Cost-benefit analysis

We have now undertaken a preliminary cost-benefit analysis (CBA) of the options proposed in our discussion paper. The CBA considers the costs and benefits of the draft licence conditions.

The preliminary CBA identifies positive, negative and some marginal benefits to the proposed licence conditions. In some cases, there is considerable uncertainty in the estimation of costs and/or benefits. In these cases, we will seek more information from stakeholders on the proposed licence obligations, to inform the Tribunal's decisions. The Tribunal will also consider the broader public interest in making a final determination on the matters covered by the CBA. We welcome submissions on this approach.

We will update the CBA with the feedback provided through this consultation process and consider the outcomes of the CBA when finalising our recommendations for the new Licence. This preliminary CBA report includes whether and how our draft licence recommendations are impacted and how the draft licence may change based on the outcomes of the CBA.

1.1.2 This report is to be read in conjunction with the discussion paper

This CBA report is best read in conjunction with the discussion paper published in December 2023. For brevity, this report does not seek to replicate material presented in the discussion paper unless it is directly relevant. This report has the same structure as the discussion paper but focusses solely on the outcomes from the CBA.

1.1.3 We have assessed the conditions against alternatives

When assessing the costs and benefits of our draft recommendations, we have set out the intent of the condition, which we may call the 'factual'. We then compare this to what we expect would occur if the licence did not have this condition or had a different condition, which we may refer to as the 'counterfactual'.

1.1.4 We sought costings and estimates from WaterNSW and other stakeholders

We requested information from WaterNSW regarding the costs and benefits related to the draft licence conditions. Where available WaterNSW provided estimates and forecasts for many of the licence conditions. These figures were an input to the preliminary CBA.

To quantify the benefits, we requested information from WaterNSW, used publicly available information and requested input from numerous stakeholders.

We have made assumptions where data was not available for both costs and benefits. We invite stakeholders to provide any relevant data that would assist in refining the cost-benefit analysis.

The CBA considers the costs and benefits over a 10-year period. While this shows costs and benefits over an extended period of time, it does not consider long term, intergenerational costs and benefits.

1.2 We seek your views on our draft recommendations

We welcome your feedback on our draft recommendations for the operating licence discussed in both our discussion paper and the assumptions and preliminary findings in this CBA.

We want to recommend terms and conditions for the operating licence that reflect customers' preferences and needs. This is particularly important for customers of monopoly suppliers such as WaterNSW where customers cannot change their provider. Your feedback is important to secure a customer-focused approach to the Review. This is necessary to improve outcomes and ensure we have the right customer protections in the recommended operating licence.

Our CBA has found that most conditions of the draft licence provide a net benefit. This means that over time the expected benefits are greater than the expected costs. However, for some of the recommended conditions in the draft licence, we have found that the expected benefits may not be as high as the expected costs. We refer to these conditions as providing a net 'disbenefit'.

We acknowledge that there is uncertainty around the costs and benefits for some of the draft licence conditions and we are seeking more information on them. We seek your views on whether you consider the benefits and costs identified in this CBA are either over or underestimated and welcome identification of additional costs or benefits that have been omitted from this CBA. This feedback will input into the final CBA, that is part of the Licence recommendation package.

The following conditions have been found on a preliminary basis to provide a net disbenefit:

- Research on catchments and river health (non-declared) (clause 32(2)) see section 6.2 of this report.
- Community education (clause 33) see section 6.3 of this report.
- Water conservation plan (clause 35) see section 7.2 of this report.
- Water sector information hub (clause 42) see section 8.4 of this report.

We were unable to determine if consultation with customers and the community (clause 25) would result in a net benefit, due to insufficient information – see section 5.4 of this report. We seek your input based on the information in this report and will seek additional information from WaterNSW prior to finalising the CBA and making a recommendation to the Minister.

1.3 We invite your feedback on our proposed recommendations

We invite all interested people to make submissions in response to the Discussion Paper and this CBA report by **8 March 2024**.

We seek input from stakeholders on this preliminary CBA, regarding:

- the costs and benefits identified in this preliminary CBA
- the assumptions made in this preliminary CBA
- the identification of any costs or benefits not considered by this preliminary CBA

We look forward to receiving your submission. For more information on how to make a submission and our submission policy, and how to manage confidential or commercially sensitive information in your submission, please see page ii at the front of this paper.

Your input is valuable to our review process. N

You can be involved by making a submission in response to this Discussion Paper or attending a public hearing.

Make a submission »

1.4 Next steps

Have your say

We intend to provide our recommended new Operating Licence to the Minister in May 2024. This will allow a new operating licence to come into effect by 1 July 2024. We will complete the Review according to the timeline below:



Chapter 2 እ

Organisational management systems

Management systems help to ensure a consistent and predictable response (Part 3 of the draft Licence).



2.1 Water quality management systems (WQMS)

Draft recommendations

- Retain the requirement to maintain and undertake activities in accordance with a WQMS and to comply with it (clause 8).
- Exclude drinking water in areas with services already regulated by the *Public Health Act 2010*, section 25 (picnic areas and regional sites) from the scope of the WQMS.

Our proposed condition requires WaterNSW to maintain and comply with a Water Quality Management System (WQMS) which aligns with the Australian Drinking Water Guidelines (ADWG).

We consider a WQMS benefits water users by helping WaterNSW to manage the risk of unsafe water being supplied or released. We expect this condition aids in the external review of water quality management decisions by IPART and others. We understand that even if the licence did not require it, WaterNSW would still have a WQMS, although it may not always comply with the ADWG.

WaterNSW already has a WQMS, therefore establishment costs are generally already incurred. Incremental costs of maintaining the system are likely small. Therefore, there is little cost difference between the condition to have a WQMS in accordance with the ADWG and the absence of this condition.

Without this requirement, the WQMS might provide less relevant information to external scrutineers. WaterNSW may not be held to account for failing to act in accordance with the WQMS or maintain the WQMS in accordance with suitable guidelines. Overall, water quality may suffer if WaterNSW chooses not to maintain and implement a WQMS in accordance with suitable guidelines.

We consider that this condition has likely positive net benefits. The costs are small, but the benefits are likely to be significant.

Our preliminary position is that the CBA supports the draft recommendation.

2.2 Asset management system (AMS)

Draft recommendations

- 3. Modify the requirement for WaterNSW to maintain and comply with its Asset Management System to bring it in line with the ISO 55001:2024 during the Licence term (**clause g(1)**).
 - Modify the obligation to clarify the links between the AMS and catchment infrastructure works management (clause g(2)) and the construction, maintenance and operation of works (clause g(3)).

Our proposed conditions require WaterNSW to maintain and comply with an Asset Management System (AMS). Importantly, this condition requires the AMS to be generally in accordance with the international standard (ISO 55001:2024 *Asset management – management systems – requirements*, as amended).

We consider that an AMS provides a risk management approach to ensure the efficient allocation of capital and operational expenditure on the commissioning, maintenance, replacement and operation of assets. The benefit of retaining the operating licence condition for asset management is that it minimises any risk that WaterNSW could cease to maintain the AMS due to commercial incentives if there are cost increases or changes to approach at WaterNSW in the future. The draft licence condition is enforceable and auditable and recognises the criticality of maintaining the AMS, supporting WaterNSW to deliver its functions and meet the performance standards.

WaterNSW already has an AMS. We understand that even if the licence did not require it, WaterNSW would still have an AMS, although it may not always comply with the international standard. The establishment costs are generally already incurred. Incremental costs of maintaining the system and compliance related costs are likely modest. Therefore, we consider that there is little cost difference between the condition to have an AMS in accordance with the international standard and the absence of this condition.

Without this condition, the AMS might provide less relevant information to external scrutineers. WaterNSW might not be held to account for failing to act in accordance with the AMS. Overall, asset condition and performance may suffer if WaterNSW finds itself under financial pressure.

We conclude that there are likely net benefits to recommending the operating licence condition for an AMS. The costs are small, but the benefits are potentially significant. Further, it will ensure that asset management continues to be prioritised if there is a change to future management and strategic priorities at WaterNSW.

We came to a similar conclusion in the 2022 review of the Hunter Water operating licence.

Our preliminary position is that the CBA supports the draft recommendation.

2.3 Environmental management system (EMS)

Draft recommendation

5. Retain the requirement to maintain and comply with an EMS in line with AS/NZS ISO 14001:2016 (**clause 10**).

This proposed condition requires WaterNSW to maintain and comply with an Environmental Management System (EMS). This condition requires the EMS to be generally in accordance with the international standard (AS/NZS ISO 14001:2016: *Environmental management systems – requirements with guidance for use*).

We consider an EMS helps WaterNSW to efficiently manage the risk of an environmental incident from occurring. The benefit of retaining the licence condition for environmental management is that it minimises the risk that WaterNSW could cease to maintain the EMS due to commercial incentives if there are cost increases or changes to approach at WaterNSW in the future. The licence condition is enforceable and auditable. It recognises the criticality of maintaining the EMS for WaterNSW to deliver on its functions and meet the performance standards.

WaterNSW already has an EMS. Even if the licence did not require it, WaterNSW would probably still have an EMS, although it may not always comply with the Australian standard. The establishment costs are generally already incurred. Incremental costs of maintaining the system and compliance-related costs are likely modest. Therefore, we consider that there is little cost difference between the condition to have an EMS in accordance with the Australian standard and the absence of this condition.

Without this condition, the EMS might provide less relevant information to external scrutineers. WaterNSW might not be held to account for failing to act in accordance with the EMS. Overall, the risk of an environmental incident may increase if WaterNSW finds itself under financial pressure.

We conclude that there are likely net benefits to recommending the operating licence condition for an EMS. The costs are small, but the benefits are potentially significant. Further, it will ensure that environmental management of WaterNSW's operations continues to be prioritised if there is a change to future management and strategic priorities at WaterNSW.

We came to a similar conclusion in the 2022 review of the Hunter Water operating licence.

Our preliminary position is that the CBA supports the draft recommendation.

2.4 Quality management system (QMS)

Draft recommendation

6. Include an obligation requiring WaterNSW to develop, maintain and implement a Quality Management System in line with AS/NZS ISO 9001:2016 (**clause 11**).

This proposed condition requires WaterNSW to develop, maintain and implement a Quality Management System (QMS) in line with AS/NZS ISO 9001:2016.

A QMS aims to implement the best practice processes in an organisation that performs multiple functions (e.g. Greater Sydney, rural bulk water supply and Water Administration Ministerial Corporation (WAMC). This is expected to avoid duplication of resources and responsibilities, streamline service delivery and achieve continual improvement. Some of the potential benefits of a QMS include better documentation, better customer service and increased operational efficiency.

Without this licence condition, WaterNSW is expected to maintain the current required management systems (drinking water, dam safety, EMS, AMS) without a business-wide QMS. In this regard, we note that the Dam Safety Management System is aligned to ISO 9001 (as a requirement of the Dams Safety Regulation) and the Water Monitoring Quality Management System is certified to ISO 9001 (as a requirement of the Roles and Responsibilities Agreement with Department of Planning and Environment (DPE)^a and Natural Resource Access Regulator (NRAR)). We also note the current digital transformation project should also be instrumental in keeping the costs of the business wide QMS down.

We expect the benefits from the QMS will be incremental. The greatest benefits are attributed to performing WAMC's functions and other areas where roles and responsibilities are yet to be clearly defined. We consider benefits accrue in the following key categories:

- WaterNSW's internal efficiency improvement of \$0.3m per annum, due to the assurance that its key business processes are integrated, enabling staff to carry out their work in an efficient manner, and the reduction in duplication of some processes across systems.
- Increased quality of service customer benefits of \$0.1m per annum, due to the reduction in the number of customer complaints.
- Increased efficiency of enforcement by the NRAR of \$0.1m per annum, due to the time savings by the enforcement agency in its investigations.

We calculate the present value of benefits at \$3.5m.

In addition to the benefits quantified, we also expect there to be unquantified benefits. These include:

- improved risk management
- more reliable information provided to IPART and other regulators
- reputational gains.

We consider the primary costs of establishing a QMS to be driven by its initial establishment (\$0.8m) and then the ongoing maintenance of the system (\$0.4m per year). Over a 10-year horizon, we calculate the present value of the costs at \$3.2m.

Overall, the proposed QMS is expected to have a net benefit of \$0.2m (Benefit Cost Ratio (BCR) of 1.1).

^a On 1 January 2024, DPE was split into 2 entities including the Department of Climate Change, Energy, the Environment and Water (DCCEEW)

Our preliminary position is that the CBA is more likely to support than not support the draft

recommendation. However, given the BCR is marginal, we will seek more information before finalising the CBA and recommendation. We welcome any submissions that address the costs and benefits of this condition in the draft licence, including the changes of behaviour this condition is expected to drive and why those changes are beneficial to stakeholders.

Chapter 3 义

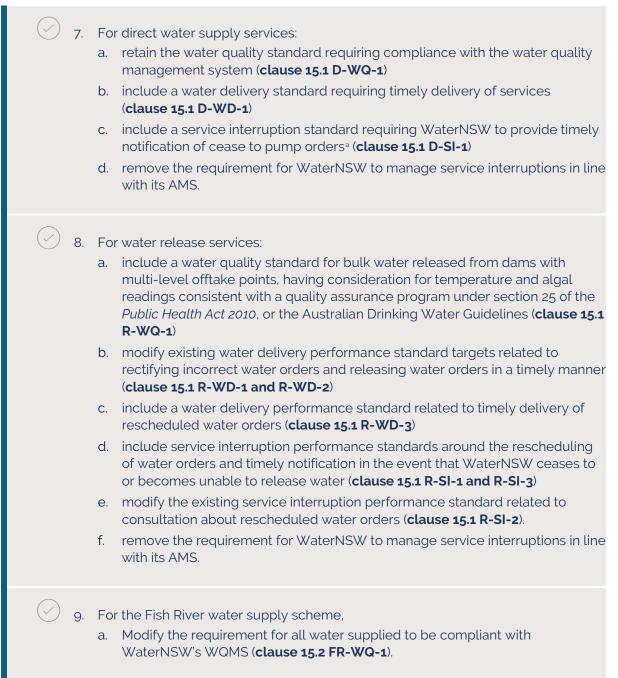
Clarifying the level of service WaterNSW must provide

Performance standards impact the level and quality of service that customers receive (Part 4 of the draft Licence).

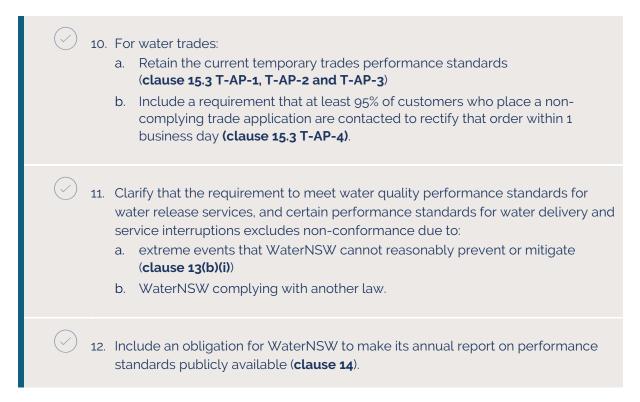


3.1 Performance standards

Draft recommendations



^a Cease-to-pump events occur when licenced water users must stop taking water from a river system (namely, when it falls below a predetermined level as defined in the relevant water sharing plan). Cease-to-pump events last for as long as flows within the river system remain below that level.



We have identified proposed performance standards that WaterNSW is required to meet and report on annually. The performance standards in the draft licence aim to:

- protect customers
- improve transparency (for customer's expectations) and stakeholder relationships by clarifying service expectations
- set minimum standards for water quality and the protection of public health
- set minimum standards for system and service reliability.

We understand that WaterNSW is currently meeting these performance requirements in its current licence most of the time. WaterNSW has also implemented systems to enable this level of performance. Therefore, we consider that reduced targets would not result in significant cost savings as the cost of establishing most of these systems is already incurred. A more demanding performance standard would not be achievable without significantly increasing costs. There is no evidence that customers are dissatisfied with current performance relative to these standards.

Performance monitoring and reporting, including auditing, is a necessary tool to ensure that licence conditions that create net economic benefits are complied with in practice. It is compliance with these clauses that delivers the expected net benefits.

Performance monitoring and reporting activities will therefore deliver net benefits wherever the cost of these activities is less than the net economic benefit generated by the licence conditions that they apply to (and compliance is dependent on effective monitoring and reporting).

Our preliminary position is that the CBA supports the draft recommendation.

Chapter 4 🕻

Bulk water quality for drinking water suppliers

Drinking water suppliers rely on water information from WaterNSW (Part 5 of the draft Licence).



4.1 Bulk water quality policy and service commitments for drinking water suppliers

Draft recommendation

-) 13. We propose to replace the requirement for WaterNSW to have a register and an information request procedure for Local Water Utilities (LWUs), with new requirements for WaterNSW to:
 - a. develop and publish a policy regarding water quality for drinking water suppliers that specifies roles and responsibilities of parties including WaterNSW's role in improving the quality of water, the monitoring of it, identifying and reducing hazards and risks and educating drinking water suppliers on accessing and understanding water quality data (clause 16(1)(a))
 - b. develop the policy in consultation with NSW Health and the relevant drinking water suppliers (**clause 16(2)**)
 - c. maintain current contact details for each drinking water supplier (clause 16(1)(b)(iii))
 - d. include processes for determining water quality monitoring parameters, engaging with drinking water suppliers and data provision (**clause 17**)
 - e. determine the water quantity and water quality parameters consistent with the processes set out in the policy (**clause 17**)
 - f. publish a summary of its service commitments to drinking water suppliers (**clause 19**).

This proposed condition replaces a condition in the current licence requiring WaterNSW to maintain a register of contact details, known as the LWU Register, and implement a procedure for providing information to Local Water Utilities, known as the LWU Information Request Procedure^a. The current request procedure is a reactive process which has not been widely used by LWUs during the current and previous licence terms.

The condition requires WaterNSW to have agreed water quality parameters with their drinking water supplier customers and to have a proactive notification protocol when those parameters are not met.

This condition is expected to ensure that parties are clear on their roles and responsibilities including educating drinking water suppliers on accessing and understanding water quality data.

This condition goes part way to replacing the current Licence's reactive information request procedure. If this condition were not in the licence (the counterfactual), we expect WaterNSW would continue to maintain a register and have an information request procedure in place.

We expect the cost difference of these conditions are immaterial when compared to the counterfactual.

^a Clause 3.4 of the current Licence.

Potential benefits of these conditions include:

- Drinking water suppliers such as Local Water Utilities (LWUs) rely on information provided by WaterNSW to ensure continuity and quality of supply. Timely access to water quality information allows LWUs to make better decisions about water source and treatment and can assist in the diagnosis of problems before they arise.
- Health-related monitoring and real time data provisions include savings in avoided additional treatment costs, fewer customer complaints and other customer benefits including avoidance of boil water events.
- Identification of locations where monitoring equipment needs to be installed, replaced or relocated.
- Information on WaterNSW's bulk water quality and water source events is used to inform the LWUs' drinking water quality assurance programs or management systems, which includes the LWUs' water treatment processes.
- Increased enforceability of the licence package.

We expect this condition to have non-zero benefits and near-zero costs. We therefore consider this condition to have positive net benefits.

Our preliminary position is that the CBA supports the draft recommendation.

4.2 Water quality monitoring enhancements program

Draft recommendation

- 14. We propose to add a requirement increasing WaterNSW's responsibilities to monitor and provide information on water source events and the quality of raw water provided to drinking water suppliers, including:
 - a. requiring WaterNSW to maintain an ongoing water quality monitoring enhancements program which takes into account the Water Quality Roadmap published by the Department in October 2021 and the activities already undertaken by WaterNSW under the Town Water Risk Reduction Program
 - b. requiring WaterNSW to annually report to IPART on the water quality monitoring enhancements program (**clause 20**).

Our proposed condition adds a requirement increasing WaterNSW's responsibilities to monitor and provide information on water source events and the quality of raw water to drinking water suppliers.

If the proposed licence condition were not in force, we expect there would be no change to the water quality monitoring systems already in place. This would mean LWUs continue to lack timely and suitable water quality data on sudden or significant changes in bulk water quality, flow, or delivery, including from WaterNSW operated river systems.

We consider that the water quality information and timely access to it beneficially allows drinking water suppliers to make better decisions about water source and treatment and can assist diagnose problems before they arise. Other benefits of health-related monitoring and real time data provisions include savings in avoided additional treatment costs, fewer customer complaints and other customer benefits including avoidance of boil water events. The program will also identify locations where monitoring equipment needs to be installed, replaced or relocated.

We consider the net present value of benefits to be significant, driven by:

- annual efficiency improvement for LWU chemical treatment costs due to the introduction of the Water Quality enhanced monitoring system (\$3.1m per year).
- overall operating expenditure efficiency improvement by LWUs (\$1m per year).
- reduction in WaterNSW customer complaints (\$0.1m per year).
- reduction in LWU customer complaints (\$0.1m per year).
- boil water alert events averted due to the introduction of the WQ enhanced monitoring system (\$0.9m per year).

We calculate this condition to have a present value of benefits at \$30.7m over a 10-year horizon.

We expect the cost of this condition is primarily driven by capital expenditure and ongoing maintenance of installing additional water quality monitoring stations. We calculate this condition to have a present value of costs at \$29.8m over a 10-year horizon. We note that we have considered a medium cost scenario when calculating this amount. We did not consider an alternate high cost scenario would be likely.

We have found that the proposed condition is supported by an estimated net benefit of \$0.8m (BCR of 1.03).

Our preliminary position is that the CBA is more likely to support than not support the draft recommendation. However, given the BCR is marginal, we will seek more information before finalising the CBA and recommendation. We welcome any submissions that address the costs and benefits of this condition in the draft licence, including the changes of behaviour this condition is expected to drive and why those changes are beneficial to stakeholders.

4.3 Early warning system

Draft recommendation

15. Modify the requirements of the advance notification system to address information gaps in water quality data and flood risk (**clause 18**).

This proposed condition imposes a new obligation on WaterNSW to modify the requirements of the advance notification system to address information gaps in water quality data and flood risk.

This condition is expected to better equip downstream users including local water utilities by providing more effective and timely responses to adverse water quality or quantity events. In turn, this will enhance timeliness of warnings to communities, allowing preparations to be made to mitigate risks to property and people.

If this condition is not required (the counterfactual), the current requirement to maintain a system to provide advance notification of any significant changes to flow release patterns to any registered users is expected to remain. Customers will continue to rely on the information provided via WaterInsights within the current reporting timeframes. There will be no obligation to share information to those that are not registered users and for local water utilities. Information sharing will remain a less timely and reactive procedure, rather than a proactive procedure.

The cost of this provision is primarily driven by capital costs to upgrade IT systems and upfront and ongoing labour costs. We expect these costs to range from \$0.7m to \$1.5m for upfront costs and \$0.3m per year and \$0.8m per year for ongoing costs. We calculate the present value of costs at \$2.7m under the lower cost scenario and \$6.8m under the higher cost scenario.

The benefits that arise are from saving lives and property with early warning and more time to evacuate. The assumption made is that WaterNSW early warning system delivers 3% of the benefits of the advanced flood warning system that increases warning time from 2 hours to 12 hours. We calculate the present value of benefits at \$7.7m over a 10-year horizon.

We estimate the net benefits of this proposed condition will range from a net benefit of \$5.0m (BCR 2.85) to a net benefit of \$0.9m (BCR 1.12).

Our preliminary position is that the CBA supports the draft recommendation.

Chapter 5 እ

WaterNSW's obligation to its customers

Protecting customers' rights and clarifying WaterNSW's requirements for consultation with its customers (Parts 6 and 7 of the draft Licence).



5.1 Customer supply agreements for direct water services

Draft recommendation

¹16. Retain the requirement for WaterNSW to establish and maintain customer supply agreements with customers to which it provides direct water supply services (**clause 21**).

We have not performed a CBA for this proposed condition. We consider that contracting costs are relatively minor. Consequences of incomplete contracting problems are potentially severe (including the inability to control water take).

Our preliminary position is to not change the draft recommendation.

5.2 Water allocation accounts

Draft recommendation

17. Retain the requirement for WaterNSW to maintain a water allocation account for customers with licences issued under the *Water Act 1912* or the *Water Management Act 2000* (**clause 22**).

We have not performed a CBA for this proposed condition. We consider that a failure to maintain customer-specific accounts for water allocation would lead to an unsustainable situation: customers could not be billed, and potentially WaterNSW would lose control over water take.

Our preliminary position is to not change the draft recommendation.

5.3 Measuring water supplied, released and extracted

Draft recommendation

18. Retain and clarify the requirement for WaterNSW to determine the volume of water supplied to direct water supply customers and extracted by customers receiving water release services on an annual basis (**clause 23**).

This proposed condition requires WaterNSW to determine the volume of water taken by customers at least once a year, while not limiting the purpose of collection and use of this data to billing and reporting. Strong metering discipline ensures that customers can be billed for usage, and entitlement restrictions can be enforced to avoid over-extraction.

We consider that WaterNSW has an incentive to measure water usage even if this condition was removed from the licence. However, if metering involved high costs WaterNSW may be incentivised to advocate for entitlement-only charges. We consider that metering reforms will cost \$47.8m over the 2021-25 period (\$9.6m per year). This involves once-only transitional capital expenditure, so it overstates the steady-state cost of metering and is an upper bound to metering costs.

Unmetered usage leads to an opportunity cost to WaterNSW equal to the foregone usage component of revenue. This is a lower bound estimate to the value of measurement, if the counterfactual is no measurement at all. IPART's pricing model for the FY21 WaterNSW price review indicates that usage revenue in total for the WaterNSW rural valleys was forecast to exceed \$30m per year (\$2020-21) in each year of the determination.

Even comparing the upper bound of costs to the lower bound of benefits, measurement leads to a net benefit of more than \$20m per year. This quantitative comparison assumes a counterfactual of no measurement.

More realistically, if the licence condition was removed, WaterNSW would still wish to measure volumes for high-volume users. However, WaterNSW may choose not to incur metering costs for low-volume users. Even high-volume users may resist measurement if there is no formal entitlement for WaterNSW to impose metering requirements on them. Further, having a class of unmetered users is problematic. Over time, the low-volume users could begin to extract high volumes, and WaterNSW would lose control of the take.

Our preliminary position is that the CBA supports the draft recommendation.

5.4 Consultation with customers and the community

Draft recommendations

19. Modify the requirements about how WaterNSW consults with its customers so the obligation focuses on the outcomes of the engagement (**clause 25**).

20. Remove the requirement to maintain the Customer Advisory Group (CAG) and include requirements to engage with different customer groups (**clause 25(2)**).

This proposed condition requires WaterNSW to consult with a range of customer types. Without this licence obligation, WaterNSW might still consult with customers and the community. However, we note that its consultation may be selective and less extensive.

We expect that consultation would yield a better understanding of customers' preferences and needs. The licence condition provides WaterNSW the opportunity to determine the most suitable and cost-effective means of consultation, to ensure all customer groups are adequately consulted.

We expect WaterNSW to determine the most efficient and cost-effective way to consult with stakeholders. This would also require WaterNSW to select consultation methods that best suit the stakeholders it is consulting with. Not all stakeholders need or expect the same type and level of engagement as others. It is anticipated that consultation would involve staff time. It is possible these costs could be significant depending on how WaterNSW chooses to consult.

We also expect that there is a benefit to some specific communities from this condition. Being heard provides equity for stakeholder representatives such as Aboriginal community groups (including Local Aboriginal Land Councils, Traditional Owner groups, and others as appropriate) and cultural water users. We expect that this process would also circumvent grievances from manifesting into complaints which cost far more to tend to.

We do not currently have sufficient information to determine the net benefit of this condition. While cost may range from minor to significant, the benefits are difficult to quantify. We will seek additional information from WaterNSW prior to finalising the CBA and making a recommendation to the Minister.

We consider there is uncertainty about the costs and benefits associated with this condition. We will seek more information from stakeholders on the proposed obligation to inform our recommendation. We welcome any submissions that address the costs and benefits of this condition in the draft licence, including on the changes of behaviour this condition is expected to drive and why those changes are beneficial to stakeholders. We note at a minimum some level of customer and community consultation will be required in the licence, as appropriate for any public agency.

5.5 Customer service charter

Draft recommendation

21. Modify the requirement for WaterNSW to have a customer service charter (clause 24).

This proposed condition requires WaterNSW to publish a charter on how it will engage with its customers.

We consider there is a benefit for customers being aware of this charter. WaterNSW may elect not to publish this document if the condition did not exist.

We consider there is an immaterial cost in publishing this charter.

We therefore consider that this condition has a positive net benefit, since there are non-zero benefits and near-zero costs.

Our preliminary position is that the CBA supports the draft recommendation.

5.6 Code of practice on payment difficulties

Draft recommendation

22. Retain the requirement for WaterNSW to have, and carry out its activities in accordance with, a code of practice on payment difficulties and to make it available online (**clause 26**).

The essence of this proposed condition is leniency toward customers who may struggle to pay bills on time. The counterfactual scenario would involve an absence of leniency. This could involve harsh measures for customers facing payment difficulties, including disconnection or restriction of water supply. We consider that an operating licence requirement for a payment assistance policy would take WaterNSW further in the direction of leniency than they might choose to go based on commercial considerations alone (noting however that most public utilities will have some form of leniency). Therefore, we consider that this licence requirement generates net economic benefits.

The leniency provided to customers experiencing hardship is of benefit to them. By forming part of the general social safety net, this type of leniency policy provides wider benefits to the community. That is to say that there is a public benefit to the hardship policy which outweighs the additional revenue accruing to WaterNSW.

We came to a similar conclusion in the 2022 review of the Hunter Water operating licence.

Our preliminary position is that the CBA supports the draft recommendation.

5.7 Family violence policy

Draft recommendation

23. Include a new requirement for WaterNSW to maintain, comply with, publish and notify customers of a family violence policy (**clause 27**).

This proposed condition requires WaterNSW to have a family violence policy that protects customer privacy and ensures that family violence sufferers can access payment difficulty arrangements.

If this condition is not included WaterNSW would continue to implement a Code of Practice on Payment Difficulties. However, there would be no requirements to provide family violence victims access to payment difficulty assistance and protection of their personal information. Reviews undertaken across Australia found that there were significant failings that have been addressed with reforms in this area.^a This is particularly the case for privacy and engagement with customers.

^a Essential Services Commission, Water Industry Standards Family Violence Provisions Review - Findings Paper, July 2023.

The costs of this condition are driven by establishment or development of policy, confidential information management systems, debt management and recovery, referral systems and ongoing training for staff. We calculate the present value of costs at \$0.4m.

The benefits of avoiding the incidence and impacts of family violence have been examined by Australian Government health departments and are far reaching.^b This condition is expected to result in avoided financial hardship and reduction in the impact of domestic violence. We calculate the present value of benefits at \$1.4m.

This provision imposes modest costs on WaterNSW, however we conclude that it potentially provides protection to customers who may be vulnerable to or because of family violence. Broader social benefits more generally include avoided financial hardship and reduction in the impact of domestic violence.

We came to a similar conclusion in the 2022 review of the Hunter Water operating licence.

The condition is supported by an estimated net benefit of **\$1.0m** and a BCR of 3.74.

Our preliminary position is that the CBA supports the draft recommendation.

5.8 Internal complaint handling

Draft recommendation

24. Modify the requirement to maintain an internal complaint handling procedure to reflect the revised standard for complaints handling and include new requirements for WaterNSW to provide a summary of the process on its website and provide a copy to anyone that requests it (**clause 28**).

This proposed condition requires WaterNSW to provide a mechanism for customer complaints to be resolved within WaterNSW management. Without this condition, we expect there to be a greater likelihood that customer complaints are ignored.

The net benefit of an effective complaint-handling process is that WaterNSW is prevented from earning monopoly rents by providing a lower quality of service. Complaint handling systems help to ensure that quality standards are enforced. While a monopoly firm foregoes an opportunity to increase profits by reducing quality (something that even a price-regulated organisation can sometimes do), there is a net gain to society. Inefficiency through lower quality service is minimised by good complaint-handling. This analysis presumes that the complaint-handling system is relatively efficient itself, and that WaterNSW's reputation would be an insufficient incentive to provide the ideal level of quality.

We came to a similar conclusion in the 2022 review of the Hunter Water operating licence.

Our preliminary position is that the CBA supports the draft recommendation.

^b The National Council to Reduce Violence against Women and their Children, *The cost of violence against women and their children*, March 2009.

5.9 Energy and Water Ombudsman NSW (EWON)

Draft recommendation

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25. Retain the requirement for WaterNSW to be a member of EWON and make publicly available online contacts and details of dispute resolution services provided by EWON (**clause 29**).

This proposed condition requires WaterNSW to provide a mechanism for customer complaints to be resolved externally.

We consider that membership of EWON allows improved customer service and involves minor costs to WaterNSW of joining and participating in EWON protocols. We expect this condition would provide net positive benefits through potentially significant improvements in customer service.

Our preliminary position is to not change the draft recommendation.

Chapter 6 脧

Catchment and river health

The health of a catchment and its river systems directly correlates to the quality and quantity of water available (Part 8 of the draft Licence).



6.1 Managing catchments across NSW

Draft recommendations

-) 26. Retain the requirement for WaterNSW to manage and protect declared catchment areas only (**clause 31**).
- 27. Include a new requirement that requires WaterNSW to publicly report on the health of the catchments by 30 November each year (**clause 52**).

These proposed conditions require WaterNSW to manage and protect the declared catchment and submit and publish a report on catchment health (not restricted to the declared catchment).

Catchment management is a core function of WaterNSW. The fact that WaterNSW holds this function implies that the Government formed a judgement that the benefits to society outweigh the costs. We consider these benefits to include the reduced risk of drinking water contamination through the management of access and potential contaminators of catchments for surface water.

If this condition were not in force, it would be similar to a scenario where the *Water NSW Regulation of 2013* was repealed and not replaced by an alternative. Catchments would be left with no intervention, with greater risk of contamination from natural events or human activity.

Tooth (2020)^a noted that WaterNSW budgeted \$16.1m in FY2019 for catchment management. Tooth also found that the repeal of the Water NSW regulation would result in an increased water quality risk indicatively valued at \$2m per year. This estimate was highly conservative, based on a 1 in 200 chance of repeating the 1998 contamination crisis, which was estimated to have cost \$435m.^b

This estimate was highly conservative, based on a 1 in 200 chance of repeating the 1998 contamination crisis, which was estimated to have cost \$435m. A likelihood of 1 in 27 or greater continues to yield a positive benefit.°

Our preliminary position is that the CBA supports the draft recommendation.

6.2 Research on catchments and river health

Draft recommendation

28. Modify the scope of the requirement for WaterNSW to undertake catchment research to the non-declared catchment areas and associated rivers with an aim to improve the health of WaterNSW's catchments and rivers, ultimately improving water quality (**clause 32**).

^a Tooth, R, 'Regulatory Impact Statement for review of the Water NSW Regulation 2013', March 2020.

^b The benefit calculation is taken from s4.3.2, p 28.

^c The cost estimate is based on Appendix 1, Table 10, p 39.

This proposed licence condition modifies the scope of the requirement for WaterNSW to undertake catchment research to the non-declared catchment areas and associated rivers with an aim to improve the health of WaterNSW's catchments and rivers, ultimately improving water quality.

In the absence of the licence obligation (counterfactual), research remains listed as a function under the *Water NSW Act 2014* and Licence with the current practices expected to continue. A listed function of WaterNSW is "to protect and enhance the quality and quantity of water in declared catchment areas" under the *Water NSW Act 2014*.

We note the scope of the proposed obligation allows WaterNSW flexibility in how it approaches discharging this obligation and what it would do in addition to current activities. Nevertheless, the costs of catchment research can be significant. WaterNSW reported to IPART that its current research program for the declared catchment areas is around \$2 million per year.

A research program that includes all of WaterNSW's catchments and associated rivers and at a minimum assesses threats and scopes research opportunities will incur significant costs. We expect these costs would principally be driven by the design and establishment of a program (\$0.3m) and ongoing costs associated with the catchment and river research (\$1.m per year). We calculate the present value of costs at \$9.4m over a 10-year horizon.

The benefits of this condition are expected to be in the form of improved health of waterways and improving water quality. We expect this condition would lead to avoided health and environmental incidents.

An example of WaterNSW's research is creating water sensitive towns. This project focus on the issue of flood prevention and conveyance of water away from development areas leading to polluted run-off. Works to reduce run-off can reduce water quality impacts from storm events, erosion, and degraded waterways.

However, in regional NSW, WaterNSW captures and stores water in weirs and dams, including 18 large dams. These dams are located across the state on 12 major river systems, including Border Rivers, Gwydir, Namoi and Peel to the north; Lower-Darling, Murray and Murrumbidgee to the south; Bega/Brogo, Hunter/Paterson and Richmond on the Coast; and Lachlan and Macquarie Rivers in Central NSW.

The benefits in mitigating threats to water quality and quantity in these areas are less clear than the declared areas and we have found are likely to vary significantly between catchments. Given this uncertainty, we have calculated the present value of benefits at \$2.5m over a 10-year horizon.

Due to the high costs and difficulty to quantify benefits, we have found on a preliminary basis that this condition would generate a net disbenefit of -\$6.9m (BCR 0.27).

There may be other benefits and spillover effect of research on water quantity and water quality threats across NSW catchments. These are unlikely to bridge the gap between the benefits and costs.

We consider there is uncertainty about the costs and benefits associated with this condition. We will seek more information from stakeholders on the proposed obligation to inform our recommendation. We welcome any submissions that address the costs and benefits of this condition in the draft licence, including the changes of behaviour this condition is expected to drive and why those changes are beneficial to stakeholders.

6.3 Community education

Draft recommendation

29. Modify the requirement for WaterNSW to undertake an educative role to maintain an ongoing community education program for non-declared catchment areas and downstream rivers (**clause 33**).

This proposed licence condition extends the requirement for WaterNSW to undertake an educative role to maintain an ongoing community education program to the non-declared catchment areas and downstream rivers.

In the absence of the licence obligation (counterfactual) current practices are expected to continue. There are existing requirements under the *Water NSW Act 2014* in relation to education, however WaterNSW's listed functions do not extend to catchment management or water quality in non-declared areas.

We note the scope of the proposed obligation allows WaterNSW flexibility around how it approaches discharging this obligation and what it would do in addition to current WaterNSW activities. Nevertheless, the costs of community education can be significant. WaterNSW reported to IPART that its current education program for the declared catchment areas is around \$1.36m per year.

An education program that is state-wide and, at a minimum, targets landholders and the wider community will incur significant costs. We expect these costs would principally be driven by the design and establishment of a program (\$0.9m) and ongoing costs associated with the community education activities (\$3.0m). We calculate the present value of costs at \$21.1m over a 10-year horizon.

This condition is expected to benefit health and the environment. We note that WaterNSW's outlined benefits included increased awareness of water quality and catchment health issues for the community. The program influences community behaviour and understanding of the declared catchment. Much of the education activities in declared catchment focusses on modifying behaviours in those that are moving and operating in the catchment areas and may impact on water quality.

It is expected that wider water knowledge and efficiency may be the role of other entities, for example water retailers - Sydney Water, Hunter Water and Local Water Utilities. The Department also plays a role in wider water education.^d

d NSW Government, School water education resources, accessed February 2024.

We consider the benefits from WaterNSW education relate directly to improved water quality and avoiding deleterious incidents which require treatment to meet drinking water standards. The benefits accrue to the water users and community due to the reduction in incidents, as well as the reduction in management costs. We calculate the present value of benefits at \$3.5m over a 10-year horizon.

Due to the high costs and uncertain quantified benefits, we have found this condition would generate a net disbenefit of -\$17.6m (BCR 0.17).

There may be other benefits and spillover effect of education on water quantity and environmental threats across NSW catchments. These are unlikely to bridge the gap between the benefits and costs.

We consider there is uncertainty about the costs and benefits associated with this condition. We will seek more information from stakeholders on the proposed obligation to inform our recommendation. We welcome any submissions that address the costs and benefits of this condition in the draft licence, including the changes of behaviour this condition is expected to drive and why those changes are beneficial to stakeholders.

Chapter 7 🕻

Water planning and climate risk readiness

Water planning and climate risk preparedness ensure sustainable services now and into the future (Part 9 of the draft Licence).



7.1 System yield for the declared catchment areas

Draft recommendation

\bigcirc 30. Retain the existing system yield requirements with the following modifications:

- a. clarify the definition of 'in the long term' to mean 30 years
- b. clarify that WaterNSW must consider climate change impacts, consult with Sydney Water and consider guidance from DPE in determining system yield
- c. modify the triggers for which WaterNSW must recalculate system yield
- d. include a requirement for WaterNSW to provide information on system yield and how it was calculated upon request
- e. include a condition for WaterNSW to make the design criteria publicly available online (**clause 34**).

This proposed condition requires WaterNSW to calculate system yield for declared catchments upon certain specified triggers. It also requires related material to be provided and published.

This condition is expected to help avoid future water restrictions for Sydney.

If this condition is not required, then there would be no requirement to calculate system yield using a sophisticated model. In this counterfactual there is a greater likelihood that water take might exceed sustainable levels, leading to drought conditions, or that water take is unnecessarily restricted, leading to avoidable economic losses.

The cost of this condition is primarily driven by the use, maintenance and ongoing refinement of the long-term hydrological model. We expect this would be in the order of \$180,000 for each yield calculation and \$200,000 per year to maintain the model.

As for the benefits, academic studies of willingness to pay to avoid water restrictions are relevant. Cooper, Burton and Crase (2018) found that, for Sydney, median willingness to pay ranged from \$151 to \$311 per year per person to avoid water restrictions. For a city with 2 million households and 5 million residents, even the conservative end of this range leads to an extremely large figure of willingness to pay, on the order of \$300m per year or more.^a

Further, significant damage to the environment or the economy could be caused if WaterNSW operated on an incorrect assumption about system yield.

Despite the high cost, positive net benefits seem likely. Consequences of mis-estimating yield are potentially very serious. Whether the mis-estimation is an overestimate that later leads to water restrictions, or an underestimate that unnecessarily prevents some sustainable water uses from taking place, the willingness to pay figures are relevant to estimating the consequences of mis-estimation. The most conservative estimate of net benefits is \$299.6m per year. This conservative BCR is 789.

^a We rely on Cooper, Burton and Crase (2018) for the willingness to pay (WTP) estimates. See 'Willingness to pay to avoid water restrictions in Australia under a changing climate', Table 7, p 839.

The benefit of accurate system yield estimates is assumed to equal the individual willingness to pay to avoid water restrictions in Sydney multiplied by the number of households or individuals living in Greater Sydney.

Our preliminary position is that the CBA supports the draft recommendation.

7.2 Water conservation plan

Draft recommendation

31. Include new requirements for WaterNSW to maintain and comply with a 5-year conservation plan and retain the requirements to maintain a water conservation strategy and water conservation program until it has developed the plan (**clause 35**).

This proposed condition requires WaterNSW to maintain and comply with a 5-year water conservation plan.

WaterNSW largely manages river systems and water storages, which limits its ability to conserve water. However, this doesn't mean WaterNSW shouldn't implement a water conservation plan. It simply means WaterNSW should target the activities that will have an impact on water conservation.

Were this condition not in the licence, it is expected that WaterNSW may still make plans for conservation, but they would be less formal and offer less opportunity for external scrutiny. Hence any water savings target in such ad hoc plans may be less likely to be achieved.

The benefit of having a 5-year water conservation plan is that more water would be conserved than if the plan was not required by the licence. In reply to our information request, WaterNSW noted, it was unable to tell us how much water will be saved, and that the amount of water expected to be conserved will be determined as part of adapting to the new requirements. It was also noted that the water savings are unlikely to be significant due to the focus of the Water Efficiency Framework being treated water production and distribution in the urban context.

We question whether the benefits are likely to be insignificant and would like to seek further information from stakeholders.

While the actual water savings costs are hard to determine, the costs are also expected to be minimal. WaterNSW already maintains a water conservation strategy and plan, which aims to identify programs to minimise water losses in the system, and conserve and manage water efficiently.

In addition to the water savings, costs savings are also expected to apply to IPART for compliance activities as all public water utilities will have consistent obligations across licences. Other agencies are also expected to gain efficiencies as the information accessed from the water conservation plan will be consistent and accessible.

For our CBA, actual water savings costs have been assessed as minor and the costs are also low (\$35,000 establishment and \$15,000 per annum ongoing). WaterNSW already maintains a water conservation strategy and plan, which aims to identify programs to minimise water losses in the system, and conserve and manage water efficiently.

While the costs of this condition are low, the benefits in terms of water saved are uncertain. Therefore, this condition may not provide a positive net benefit.

We consider there is uncertainty about the costs and benefits associated with this condition. We will seek more information from stakeholders on the proposed obligation to inform our recommendation. We welcome any submissions that address the costs and benefits of this condition in the draft licence, including the changes of behaviour this condition is expected to drive and why those changes are beneficial to stakeholders.

7.3 Planning for and managing climate-related risks

Draft recommendation

- 32. Add new requirements, consistent with the NSW Climate Risk Ready Guide, for WaterNSW to:
 - a. designate a climate change risk officer to lead a climate risk assessment team and, if the climate change risk officer is not an executive level appointment, designate an executive level sponsor by 30 November 2024
 - b. assess WaterNSW's current level of climate risk management maturity on the enterprise scale by 30 June 2025
 - c. meet, on the enterprise scale, a systematic^b level of climate risk management maturity by 30 November 2026
 - d. meet, on the enterprise scale, an embedded° level of climate risk management maturity by 30 November 2029 (**clause 36**).

This proposed condition requires WaterNSW to develop and maintain a climate-related risk management program consistent with the NSW Climate Risk Ready Guide.

This condition is expected to better equip WaterNSW to identify and address priority risks and mitigative actions as well as improve their climate risk maturity.

Without this condition (counterfactual), it is almost certain that WaterNSW would continue this work regardless. WaterNSW reports that Section 180(1) of the *Corporations Act 2001* imposes a duty of care and diligence on company directors and officers. WaterNSW also advises that it is currently developing a Climate Risk and Adaptation Plan, which addresses the requirements of the Guide. However, it is likely that the plan will be customer focussed and effective in protecting water quantity. Climate change is a threat to WaterNSW in terms of both quantity and quality of water available for capture and storage and sale. WaterNSW has a very strong incentive to consider and address climate risk.

^b As defined in NSW Department of Planning, Industry and Environment's, *Climate Risk Ready NSW Guide*, March 2021.

c Ibid.

We consider that this condition provides benefits through an incentive to engage with its customers to plan and respond to climate change. This focus should ultimately benefit customers through protection of water resources and lower costs. We calculate that the benefit of an improvement in the adaptation plan in response to climate change will result in a positive benefit (it is assumed that impact will commence in Year 5 of the assessment period).

Further, given the sensitivity of WaterNSW and its operation to climate change, the inclusion of specific climate change risk management expectations signals its importance to stakeholders, in particular customers.

These requirements could also provide a mechanism for IPART to review and audit WaterNSW's management of climate-related risk driving greater transparency and accountability. Requiring WaterNSW to develop and maintain a program that is consistent with the Guide provides certainty to WaterNSW and sets a standard that ensures a comprehensive risk management program that is consistent with NSW Government expectations.

The condition requires a systemic level of climate risk maturity by 30 June 2026 and an embedded level of climate risk maturity by 30 November 2029. The Climate Risk Ready Guide states that organisations should demonstrate leading practice (systematic risk maturity and above). This condition therefore furthers progression through the climate risk maturity levels.

Given that climate risk readiness is expected to be developed under the counterfactual, the costs imposed by the clause are modest and relate to the development and operational costs of reporting. The reporting should be designed to ensure that reporting reduces duplication.

Our preliminary position is that the CBA supports the draft recommendation.

7.4 Greater Sydney Drought Response Plan

Draft recommendation

- 33. Modify the requirements relating to the Greater Sydney Drought Response Plan to require WaterNSW to:
 - a. cooperate with Sydney Water to jointly review the Greater Sydney Drought Response Plan.
 - b. implement actions under the Greater Sydney Drought Response Plan that are assigned to it or jointly assigned to it with Sydney Water
 - c. clarify the obligation to update the Greater Sydney Drought Response Plan with Sydney Water using a best endeavours approach
 - d. include a requirement to submit the updated Greater Sydney Drought Response Plan to DPE (**clause 37**).

Our proposed condition is to require WaterNSW to develop an emergency drought response plan and implement it.

The counterfactual is that WaterNSW has no formal requirement for drought planning. In this scenario, there is the potential for suboptimal responses to drought emergencies.

The costs of the proposed condition are only procedural. They include staff time to undertake planning activities and implement plans. Some plans will likely be implemented even in the counterfactual, but they may not be as well thought out. The implementation costs in the counterfactual could even be higher if they are rash or ill-considered.

The consequences of making sub-optimal emergency drought plans could include water supply failure or longer, more severe water restrictions than necessary. While difficult to quantify, these would be very high.

It is expected that this condition would very likely provide positive net benefits. There are small costs of preparing plans but the potential for avoiding water availability crises would be very significant. As noted, implementation costs of this condition are not necessarily higher than the counterfactual.

Our preliminary position is that the CBA supports the draft recommendation.

7.5 Water supply augmentation planning

Draft recommendation

34. Include a new requirement that WaterNSW maintain an MOU with Sydney Water to cooperate on water supply augmentation (**clause 38**).

This proposed condition requires WaterNSW to engage in ongoing water supply augmentation planning for Greater Sydney and use best endeavours to work cooperatively with Sydney Water through a memorandum of understanding (MOU) to progress that planning.

It is difficult to perform a quantitative cost-benefit analysis on this requirement, given that it is focused on processes rather than outcomes. However, it is possible to say in general that undertaking planning functions and working cooperatively with other supply chain partners are not particularly high-cost activities.

In contrast, the consequences of making a sub-optimal investment choice in multi-billion-dollar assets such as a new dam, water recycling or desalination plant would likely be of a similar order of magnitude to these investments themselves.

It seems very likely that the requirements to plan and work cooperatively with Sydney Water would deliver net economic benefits that are potentially large.

Our preliminary position is that the CBA supports the draft recommendation.

7.6 Long-term capital and operational plan (LTCOP)

Draft recommendation

- 35. Modify the requirement to maintain a LTCOP and remove the requirements to implement actions under the Greater Sydney Water Strategy.
 - a. Revise the requirement for WaterNSW to maintain a LTCOP
 - b. Remove requirements for WaterNSW to implement actions under the Greater Sydney Water Strategy
 - c. Remove the condition specifying the directions from the Minister to WaterNSW to implement actions under the Greater Sydney Water Strategy (clause 39).

This proposed condition requires WaterNSW to maintain a long-term capital and operational plan (LTCOP).

Without this condition, it is expected that there would be no formal investment planning process. Under this scenario, the cost of undertaking and updating the LTCOP is avoided.

The benefit of a Long-Term Capital and Operational Plan (LTCOP) is that WaterNSW is likely to make better choices for its strategic investments. The improvement in the quality of these important decisions can be gauged in an approximate way by comparing the net benefit of the preferred option to the net benefit of the second-best option. Intuitively, the idea is that without the plan, the second-best option may have been chosen.

WaterNSW's LTCOP indicates a baseline capital expenditure of \$3.876b to 2043. Of this total, \$2.108b is for dam safety. There is some uncertainty over whether this full amount would need to be spent, or whether it would need to be spent in the staged way that is anticipated. One alternative set out in the LTCOP would involve spending the lesser amount of \$1.704b on dam safety.

It is unknown at this point whether the lower cost option would be feasible or whether it would deliver different benefits that might offset the cost difference. In any case, we presume that the benefit of continuing to refine the LTCOP over time is that the option involving the greatest net social benefits would be chosen. If the LTCOP process were not continued, then there is a greater chance that the chosen option could deliver lower net social benefits.

The LTCOP document did not provide the separate economic analysis of the net costs to the community of the second-best option. However, it seems reasonable to assume that these net costs to the community were at least 1% greater than the extra \$404m that was spent in the baseline case.

If they were any less, then the second-best option would be roughly equal to the best option. Making this assumption, we infer that the benefit of having the LTCOP is the ability to realise a \$4m (being 1% of \$404m) saving over 20 years by choosing the optimised pathway instead of the second-best option. This would be roughly an average benefit of \$202,000 per year. This benefit estimate can be compared to Water NSW's estimate of preparing the LTCOP. In correspondence dated 22 December 2023, Water NSW estimated that its efficient cost of maintenance of the LTCOP would be \$130,000 per annum.

On a life-cycle basis, the estimated benefits of the LTCOP would be about \$202,000 per annum and the estimated costs would average \$130,000 per annum. These figures indicate a positive net benefit from the licence requirement to prepare a LTCOP. Note that the benefit estimate is based on what may turn out to be an extremely conservative assumption about the difference in net present value (NPV) between the best option and the second-best option.

Our preliminary position is that the CBA supports the draft recommendation.

Chapter 8 发

Data and information services

WaterNSW is the custodian of data that is used by a wide range of stakeholders, including government agencies (Part 10 of the draft Licence).



8.1 Data management system

Draft recommendation

⁾ 36. Include a new obligation requiring WaterNSW to maintain and comply with a data management system that includes a data governance policy, data quality policy, and a data sharing policy (**clause 41**).

This proposed condition requires WaterNSW to maintain and comply with a data management system (DMS) that includes a data governance policy, data quality policy, and a data sharing policy.

Were this condition not in the licence (counterfactual), we expect WaterNSW would continue with the existing data provision practices, including through their Roles and Responsibilities Agreements, data sharing agreements and WaterInsights, without setting up a DMS.

A DMS is expected to facilitate better data quality and consistency for the benefit of the public, government agencies, regulators and water users and to streamline the process of data access and management. The highest quantifiable benefits of a DMS are expected to accrue to NRAR when they perform their regulatory role. We expect that better quality data achieved via implementation of the data management system results in the time saving of 2 hours per enforcement activity. We also expect benefits to other users of information. Better quality data would result in time savings by both irrigators and third parties requiring access to the water data (e.g. researchers, students, policymakers etc). We also note that benefits from the proposed change may accrue to a wider base (e.g. outside the NSW water users or NSW community). Finally, we expect a small cost savings to WaterNSW from the removal of duplicative policies. Over a 10-year horizon, we calculate the present value of benefits at \$4.8m.

In addition to the benefits quantified, we also expect there to be unquantified benefits. These include:

- increased transparency.
- improved monitoring of water extraction preventing unlawful extraction.
- improved efficiency for state-wide water planning and program development.
- improved efficiency in undertaking their statutory obligations for DPE and IPART.

The cost of the DMS is that which is beyond the current data provision practices (including a Roles and Responsibilities Agreement, data sharing agreements and WaterInsights). These costs consist principally of the development of policies and procedures, staff training in their application, data quality management and data security management. Annual audits of the DMS are also expected. Over a 10-year horizon, we calculate the present value of costs at \$4.2m.

Overall, the proposed DMS is expected to have a net benefit of \$0.6m (BCR of 1.15).

Our preliminary position is that the CBA is more likely to support than not support the draft

recommendation. however, given the BCR is marginal, we will seek more information before finalising the CBA and recommendation. We welcome any submissions that address the costs and benefits of this condition in the draft licence, including the changes of behaviour this condition is expected to drive and why those changes are beneficial to stakeholders.

8.2 The duly qualified persons (DQP) portal

Draft recommendation

angle 37. Remove all obligations related to the DQP portal.

We did not undertake a CBA for the condition proposed to be removed.

Our preliminary position is to not change the draft recommendation.

8.3 Data sharing agreements with DPE and NRAR

Draft recommendation

38. Remove the requirements for WaterNSW to maintain data sharing agreements with DPE and NRAR.

We did not undertake a CBA for the condition proposed to be removed.

Our preliminary position is to not change the draft recommendation.

8.4 Water sector information hub

Draft recommendation

39. Include a new obligation requiring WaterNSW to lead the co-design and development of an 'information hub' with central storage, management and access to water sector information and data, and deliver it (**clause 42**).

This proposed condition requires WaterNSW to lead the co-design and development of an 'information hub' with central storage, management and access to water sector information and data, and deliver it.

Were this condition not in the licence (counterfactual), we expect WaterNSW would continue the existing data provisions and practices. This is enacted through their Roles and Responsibilities Agreement (RRA), data sharing agreements with DPE and NRAR, WaterInsights and a DQP portal (for metering data; not for public access).

A water sector information hub is expected to streamline provision of water sector information in NSW, achieving wider efficiencies in data access and management for the benefit of public and water users. We expect the benefits to include:

- time saving to water users and the general public
- cost savings to WaterNSW due to the removal of duplicative data management processes
- increased efficiency of enforcement by NRAR due to timely availability of data
- increased efficiency of water planning by NSW Government
- development of value-added services (e.g. market tools and analytics) using information hub data.

Over a 10-year horizon, we calculate the present value of benefits at \$8.7m.

In addition to the benefits quantified, we also expect there to be unquantified benefits. These include:

- improved efficiency due to a single source of information not multiple systems managed by different agencies or with different models
- better data leading to better decision making by the government
- improved data availability and data access for IPART to carry out its activities
- timely data availability and data access for NRAR to increase the number of prosecutions and prevent water theft, by increasing the likelihood of successful prosecution.

The cost of the water sector information hub is principally in the establishment of the data information system which is able to provide water sector information to all users in NSW. The ongoing maintenance is also significant. Over a 10-year horizon, we calculate the present value of costs at \$10.9m. While the CBA has been undertaken for a 10-year period, we recognise that the information hub, once developed will provide benefits in the longer term.

Overall, the proposed water sector information hub is expected to have a net benefit of -\$2.2m (BCR of 0.80).

We consider there is uncertainty about the costs and benefits associated with this condition. We will seek more information from stakeholders on the proposed obligation to inform our recommendation. We welcome any submissions that address the costs and benefits of this condition in the draft licence, including the changes of behaviour this condition is expected to drive and why those changes are beneficial to stakeholders.

8.5 Download of metering data

Draft recommendation

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) 40. Retain the requirement to download metering data at intervals of no more than 12 months (**clause 43**).

This proposed condition requires WaterNSW to download metering data at least once a year.

Strong metering discipline ensures that customers can be billed for usage, and entitlement restrictions can be enforced to avoid over-extraction.

Were this condition to be removed, WaterNSW may fail to download metering data in a timely way.

We expect the cost of this condition over the counterfactual to be immaterial.

We expect this condition to have non-zero benefits and near-zero costs. We therefore consider this condition to have positive net benefits.

Our preliminary position is to not change the draft recommendation.

Chapter 9 义

Promoting cooperative relationships with stakeholders

WaterNSW relies on, and is relied upon by, other agencies and stakeholders (Parts 7 and 11 of the draft Licence).



9.1 Facilitating relationships with government agencies

Draft recommendations

- 41. Retain the requirement for WaterNSW to maintain and comply with memoranda of understanding with NSW Health (**clause 44**) and the EPA (**clause 45**) and specify the nature of those memoranda of understanding.
 - ¹ 42. Modify the obligation for WaterNSW to maintain the Roles and Responsibilities Agreement (RRA) with DPE to clarify that the:
 - a. obligation also extends to NRAR and WAMC
 - b. RRA is not limited to the conduct of Conferred Functions (**clause 46**).
 - 43. Modify the requirement for WaterNSW to maintain and comply with a cooperation protocol with NRAR (**clause 47**).
 - 44. Include an obligation for WaterNSW to use its best endeavours to enter into, a cooperation protocol with NSW Fisheries by 30 June 2025 and to maintain and comply with that protocol (**clause 48**).

9.1.1 Memoranda of understanding with NSW Health and EPA

We did not undertake a CBA for proposing to retain the operating licence conditions for the memoranda of understanding (MoU) with WAMC, NSW Health and the EPA as this is a requirement of the *Water NSW Act 2014*. The Act gives IPART no discretion to recommend removing this requirement from the operating licence. As we do not recommend substantial changes, there is no increased burden on WaterNSW.

We came to a similar conclusion in the 2022 review of the Hunter Water operating licence.

Our preliminary position is to not change the draft recommendation.

9.1.2 Roles and responsibilities agreement (RRA) with DPE, NRAR and WAMC and Cooperation protocol with NRAR and with NSW Fisheries

These proposed conditions require WaterNSW to make arrangements with other entities on how they interact and cooperate.

We consider the benefits of these conditions is that they promote cooperation and reasonable actions by WaterNSW. In the absence of these conditions, relationships and necessary coordination of activities could break down in the event of commercial conflict between parties.

The cost of these conditions is that staff would need to meet more frequently, however this is expected to be a low cost.

We expect potentially significant benefits from these conditions. These benefits include the delivery of a coordinated response in developing strategies, obtaining optimal health and environmental outcomes, enforcement action against illegal water take, and cost-effective actions affecting fish stocks.

We consider these conditions to carry low costs but potentially significant benefits. We therefore consider these conditions to provide positive net benefits.

Our preliminary position is that the CBA supports the draft recommendation.

9.2 Promoting cooperative relationships with other stakeholders

Draft recommendation

A5. Modify the requirement for WaterNSW to cooperate with WIC Act licensees that seek to establish a code of conduct with WaterNSW and comply with any code of conduct entered into (clause 30).

9.2.1 WIC Act

The benefits and costs of this proposed condition are each very modest. However, the condition results in little to no burden and yet it helps to promote a more competitive industry structure in the future.

The benefit of this condition is tied to the benefit more broadly of the WIC Act, which aims to promote competition in the water industry. The immediate costs of the recommended licence condition would be administrative in nature. An efficient organisation should be able to meet the licence requirement at modest cost.

We came to a similar conclusion in the 2022 Hunter Water operating licence review.

Our preliminary position is that the CBA supports the draft recommendation.

Chapter 10 》

Administration

This chapter discusses the operating licence objectives, term of the licence, requirements to comply with pricing determinations and other administrative matters (Parts 1, 2, 13, 14 and 15 of the draft Licence).



10.1 Licence objectives

Draft recommendation

46. Replace the current licence objectives with objectives that better align with the Act (**clause 1**).

We did not undertake a CBA for the proposed condition as this clause is standard for a licence of this sort.

Our preliminary position is to not change the draft recommendation.

10.2 Term of the operating licence

Draft recommendation

47. Set out a 5-year Licence term (**clause 2**).

This proposed condition requires a new licence review in 5 years.

The alternative to this licence condition would be to undertake a licence review either sooner or later than 5 years. Importantly, the *Water NSW Act 2014* sets a maximum licence term of 5 years.

This condition is expected to result in higher average review costs to WaterNSW and IPART if the term is less than 5 years, but lower costs if the term is greater than 5 years.

Reviewing sooner than 5 years allows the licence to be more responsive to changed circumstances whereas reviewing greater than 5 years is less responsive to these changes. It is uncertain as to whether there would be material changes in circumstances which would influence the benefits of a different term.

Our preliminary position is to not change the draft recommendation.

10.3 Area of operations

Draft recommendation

48. Clarify that the licence applies to Water NSW's whole area of operations (**clause 3**)

We did not undertake a CBA for the proposed condition as this clause is standard for a licence of this sort.

Our preliminary position is to not change the draft recommendation.

10.4 Non-exclusive licence

Draft recommendation

angle 49. Retain the non-exclusivity clause in the Licence (**clause 4**).

This proposed condition requires WaterNSW to have no exclusive right to serve customers within its service area.

Were this condition not in the licence, WaterNSW may exploit a monopoly status within its service area.

WaterNSW may be less motivated to invest in future service if it can't capture all the benefits through monopoly power. This may lead to an under provision of assets and under-servicing of customers. However, we expect that WaterNSW's government ownership makes underinvestment very unlikely.

We consider this clause is a necessary precondition for entry of competitors, which could potentially bring dynamic and productive efficiency benefits. In some localised areas, this benefit could be tangible and significant, even though large-scale competition seems unlikely.

We consider this condition would most likely provide a positive benefit.

Our preliminary position is that the CBA supports the draft recommendation.

10.5 Licence authorisation

Draft recommendation

 \bigcirc 50. Retain the licence authorisations in the Licence (**Part 2**).

We did not undertake a CBA for the proposed condition as this clause is standard for a licence of this sort.

Our preliminary position is to not change the draft recommendation.

10.6 Operational audits

Draft recommendation

51. Retain the requirements related to operational audits (clause 53).

Performance monitoring and reporting, including auditing, is a necessary tool to ensure that licence conditions that create net economic benefits are complied with in practice. It is compliance with these clauses that delivers the expected net benefits.

Therefore, the performance monitoring and reporting activities will deliver net benefits wherever the cost of these activities is less than the net economic benefit generated by the licence conditions that they apply to (and compliance is dependent on effective monitoring and reporting).

Our preliminary position is to not change the draft recommendation.

10.7 Reporting, record keeping and provision of information

Draft recommendations

52. Modify the reporting requirements to clearly identify and define WaterNSW's reporting obligations from the reporting manual to the Licence.
53. Include a new requirement for WaterNSW to submit an annual report on water quality in the declared catchment areas to IPART and NSW Health and publish the report on its website (clause 51).
 54. Retain the existing: a. operational audit requirements (clause 53) b. reporting and record keeping requirements (clause 54) c. provision of information and performance monitoring requirements (clause 55 d. obligations requiring WaterNSW to cooperate with the person appointed to undertake the catchment audit (clause 56).

The proposed clause 51 requires WaterNSW to submit and publish an annual report on water quality in the declared catchment. Without this condition, WaterNSW may elect not to publish this report.

We consider the cost of this condition to be immaterial. We consider the information contained in the public water quality reports would benefit customers and the community. Including this requirement in the licence also increases enforceability of the licence package.

We therefore consider clause 51 to have non-zero benefits and near-zero costs, resulting in a positive net benefit.

The proposed clauses 53 to 56 require WaterNSW to cooperate with IPART and its auditors and provide reports to regulators.

Performance monitoring and reporting, including auditing, is a necessary tool to ensure that licence conditions that create net economic benefits are complied with in practice. It is compliance with these clauses that delivers the expected net benefits.

Therefore, the performance monitoring and reporting activities will deliver net benefits wherever the cost of these activities is less than the net economic benefit generated by the licence conditions that they apply to (and compliance is dependent on effective monitoring and reporting).

Our preliminary position is that the CBA supports the draft recommendations.

10.8 Environmental reporting

10.8.1 Environmental performance indicators

Draft recommendation

55. Retain the requirement for WaterNSW to monitor and compile environmental indicators consistent with the reporting manual. Amend the obligation to clarify that WaterNSW must report this data in a way that allows for year-to-year comparison of the indicators (**clause 49**).

We did not undertake a CBA for proposing to retain the condition as this is a requirement under section 12(2)(b) of the Act.

Our preliminary position is to not change the draft recommendation.

10.8.2 Climate related disclosures

Draft recommendation

56. Add a new requirement for WaterNSW to report and publish annually its progress towards Net Zero and to report against the International Sustainability Standards Board (ISSB) sustainability-related disclosure standards (**clause 50**).

This proposed condition requires WaterNSW to publish climate related disclosures and progress towards net zero and for it to be consistent with the International Sustainability Standards Board (ISSB) sustainability-related disclosure standards.

The condition is expected to improve transparency of and accountability for climate risk management actions by making the information publicly available.

If this condition is not required (counterfactual), WaterNSW would continue to make climaterelated disclosures in alignment with the Task Force on Climate-related Financial Disclosures (TCFD) recommendations, as required by Treasury under the *Government Sector Finance Act 2018* as well as reporting obligations under the *National Greenhouse and Energy Reporting Act 2007*. WaterNSW is expected to submit its first climate-related financial disclosures to Treasury for the 2024-2025 financial year. Note that WaterNSW's current reporting of corporate emissions is subject to thresholds which WaterNSW does not meet every year.

WaterNSW has also outlined its intent is to meet or exceed the NSW Government's 2050 net zero objective and interim carbon reduction targets of 50 percent by 2030 and 70 percent by 2035 compared to 2005 levels in its annual report.

The cost of this condition is largely attributable to the inclusion of annual reporting of Scope 3 emissions (those from supply chains) from the financial year commencing 1 July 2026, since these are not currently undertaken. Note that the clause exempts WaterNSW from reporting where it has already made climate-related disclosures consistent with IFRS S2 or an Australian equivalent, required by another law and been made publicly available online. We calculate the present value of costs at \$0.2m over a 10-year horizon.

The benefits of publicly disclosing progress toward net zero may result in an accelerated achievement of emission reduction target due to increased transparency and accountability. The estimate of the bringing forward of the target is one way of assessing the value of transparency. We calculate the present value of benefits at \$0.4m over a 10-year horizon.

We estimate the net benefits of this proposed condition are \$0.2m (BCR 2.13).

Our preliminary position is that the CBA supports the draft recommendation.

10.9 End of term review

Draft recommendation

57. Retain the licence obligations related to end of term review (**clause 60**).

We did not undertake a CBA for the proposed condition as this clause is standard for a licence of this sort.

Our preliminary position is to not change the draft recommendation.

10.10 Notices and approvals

Draft recommendation

58. Modify the licence obligations related to how and when communications under the Licence must be given to confirm that it applies to approvals (**clause 61**).

We did not undertake a CBA for the proposed condition as this clause is standard for a licence of this sort.

Our preliminary position is to not change the draft recommendation.

10.11 IPART functions

Draft recommendation

59. Confer functions on IPART in connection with operational audits of Water NSW (**clause 62**).

Operational audits are a necessary tool to ensure that licence conditions that create net economic benefits are complied with in practice. It is compliance with these clauses that delivers the expected net benefits.

Therefore, the performance monitoring and reporting activities will deliver net benefits wherever the cost of these activities is less than the net economic benefit generated by the licence conditions that they apply to (and compliance is dependent on effective monitoring and reporting).

Our preliminary position is to not change the draft recommendation.

 $\ensuremath{\mathbb{C}}$ Independent Pricing and Regulatory Tribunal (2024).

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ISBN 978-1-76049-719-4