

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 Mike Smart

Enquiries regarding this document should be directed to a staff member: Christine Allen (O2) 9290 8412

Maria Morahan (02) 9113 7752

The review team also includes:

 Jonathan Hopson
 (02) 9019 1915

 Leonie Huxedurp
 (02) 9019 1928

 Shweta Shrestha
 (02) 9113 7735

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.

Contents

Chapter 1

Our	review of the WaterNSW operating licence	1
1.1	Our Review	2
1.2	Our key recommended changes to the licence	3
1.3	How we developed our recommendations	6
1.4	We consulted widely with stakeholders	6
1.5	We applied lessons learnt from other licence reviews	7
1.6	We undertook a cost-benefit analysis of our recommendations	8
1.7	We have applied 5 principles to our Review	10
Chap	ter 2	
Orga	anisational management systems	11
2.1	Water quality management systems (WQMS)	12
2.2	Asset management system (AMS)	16
2.3	Environmental management system (EMS)	18
2.4	Fluoridation of the Fish River water supply scheme (FRWSS)	20
2.5	We explored including other management systems	21
Chap	ter 3	
Clari	ifying the level of service WaterNSW must provide	23
3.1	The licence must include performance standards	24
3.2	WaterNSW provides different services to different customers	25
3.3	Water quality performance standards	27
3.4	Water delivery performance standards	29
3.5	Service interruption performance standards	30
3.6	Account processing performance standards for temporary water trades	33
3.7	Clarifying when the performance standards apply	34
3.8	Performance standards annual report	37
Chap	ter 4	
Raw	water quality for drinking water suppliers	38
4.1	Raw water quality policy and service commitments for drinking water suppliers	39
4.2	Water quality monitoring enhancements program	43
4.3	Early warning system	46
Chap	ter 5	
Wat	erNSW's obligation to its customers	48
5.1	Customer supply agreements for direct water supply services	49
5.2	Water allocation accounts	50
5.3	Measuring water supplied, released and extracted	51
5.4	Engagement with customers and the community	52
5.5	Customer service charter	54
5.6	Code of practice on payment difficulties	55
5.7	Family violence policy	57
5.8	Internal complaints handling	59
5.9	External dispute resolution scheme	61

Chapter 6

Catchment and river health		63
6.1	Managing catchments across NSW	65
6.2	Catchment and river health research	67
6.3	Community education	71
Cha	pter 7	
Wa	ter planning and climate risk readiness	76
7.1	Calculating system yield	77
7.2	Water conservation planning	81
7.3	Planning for and managing climate-related risks	85
7.4	Drought response planning	89
7.5	Water supply augmentation planning	92
7.6	Long-term planning	93
Cha	pter 8	
Dat	a and information services	98
8.1	Data management framework (DMF)	99
8.2	NSW Government access to water data and information	103
8.3	Download of metering data	106
Cha	pter 9	
Pro	moting cooperative relationships with stakeholders	108
9.1	Cooperating with Government stakeholders	109
9.2	Promoting cooperative relationships with other stakeholders	116
Cha	pter 10	
Adr	ministration	117
10.1	Licence context	118
10.2	Licence authorisation	120
10.3	Performance monitoring and reporting	125
10.4	Miscellaneous	132
10.5	Changes to definitions and interpretation clause	135
Cha	pter 11	
Full	l list of recommendations	136
11 1	Full list of recommendations	137

Chapter 1

Our review of the WaterNSW operating licence

We have made recommendations for WaterNSW's operating licence to better meet its objectives and in the interest of the people of NSW.



We have undertaken an end-of-term review (Review) of the 2022–2024 Water NSW Operating Licence (current licence). The current licence will expire on 30 June 2024 and anticipates the Review in the final year of the operating licence to investigate whether it is fulfilling its objectives and to investigate any issues that have arisen during the term of the licence that may impact its effectiveness.

This report sets out our recommendations to the Minister for Water (Minister) for updating WaterNSW's operating licence in response to our investigation.

1.1 Our Review

WaterNSW is a monopoly service provider that provides bulk and drinking water for two-thirds of water used in NSW. Its customers include Sydney Water, local water utilities, regional towns, irrigators and beneficiaries of the environmental services WaterNSW provides. As a monopoly service provider, WaterNSW's customers do not have an option to change service providers if they are dissatisfied with their level of service. Therefore, as WaterNSW does not face competition, regulation and licensing are necessary to promote positive consume outcomes.

The current licence authorises WaterNSW to operate under the terms and conditions which address the quality and availability of essential products or services.

We are making our recommendations to the Minister for a new licence to come into effect by 1 July 2024. Our recommendations for the new licence are informed by the findings of this Review.

WaterNSW's prices are separately regulated by our price determinations. Price regulation, in combination with licence requirements, help protect customers from excessive (monopoly) prices.

We have also reviewed the WaterNSW Reporting Manual (Reporting Manual) and made updates informed by submissions to this Review. We will publish the new 2024–2028 reporting manual, and a document explaining the changes we made to the Reporting Manual, once the new licence comes into effect. We have not attached the reporting manual with our recommendations to the Minister for the operating licence as the reporting manual is an IPART document and does not require the Minister's approval.



The **operating licence** sets terms and conditions to regulate how WaterNSW undertakes its functions in its area of operations.



We publish a **reporting manual** to support the operating licence. The manual includes details and deadlines for WaterNSW's reporting requirements.

1.2 Our key recommended changes to the licence

We 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.

Our key recommendations for the operating licence are summarised below. The full list of recommendations is in Chapter 11.

Organisational management systems

- Retain the current water quality management system requirements but include an exemption
 from the requirement for WaterNSW to have a water quality management system (WQMS) in
 non-declared areas where NSW Health has exempted it.
- Retain the current asset management system (AMS) requirements and clarify the links between the AMS and catchment infrastructure works management.
- Include an obligation for WaterNSW to comply with the NSW Code of Practice for Fluoridation of Public Water Supplies.
- Include an obligation for WaterNSW to publish an annual report on its compliance against the performance standards.

Performance standards

- Replace the current water quality performance standard with water quality performance standards specific to direct water supply services, water release services and Fish River.
- Modify the current water delivery performance standards for water release services.
- Remove the obligation for WaterNSW to manage service interruptions in line with its AMS.
 Include new service interruption performance standards for direct water supply services and water release services and modify an existing standard for water release services.
- Include an additional standard for temporary water trades to ensure that WaterNSW continues to process temporary water trade applications within a reasonable timeframe.

Raw water quality for drinking water suppliers

- Replace the local water utility request procedure with a water quality policy for drinking
 water suppliers. Require WaterNSW to include processes for determining water quality
 monitoring parameters, engaging with drinking water suppliers and data provision. Require
 WaterNSW to determine water quality and quantity parameters and publish its summary of
 service commitments to drinking water suppliers.
- Include an obligation requiring WaterNSW to have a water quality monitoring enhancement program, for WaterNSW to monitor and provide information on water source events and raw water quality provided to drinking water suppliers.
- Modify the advance notification system requirements to address gaps in water quality data.

WaterNSW's obligations to its customers

- Modify customer engagement obligations to focus on the engagement outcomes rather than the methods used.
- Replace the requirement for WaterNSW to maintain its customer advisory group (CAG) with a requirement for WaterNSW to engage with different customer groups.
- Modify the requirement for WaterNSW to have a customer charter.
- Include an obligation for WaterNSW to develop, maintain, comply with, publish and notify customers of a family violence policy.
- Modify the requirement to maintain an internal complaint handling procedure to reflect the
 revised standards and include requirements for WaterNSW to provide a summary of its
 processes on its website and to anyone that requests it.

Catchment and river health

- Move the existing Reporting Manual requirement, for WaterNSW to submit an annual catchment management report to IPART, to the Licence.
- Replace the current research obligations with the requirement for WaterNSW to develop a
 research strategy prioritising catchment and river health research projects across its area of
 operations and develop and implement a corresponding research program. Replace the
 requirement for WaterNSW to submit an annual report on research to require WaterNSW to
 provide one report, during the term of the Licence, by 30 June 2027, on outcomes of its
 research program.
- Replace the current education obligations with a requirement for WaterNSW to develop an
 education strategy that includes a prioritisation strategy for education opportunities across its
 areas of operations, and require WaterNSW to develop and implement a corresponding
 education program.
- Include new obligations requiring WaterNSW to engage an independent expert to undertake
 a review of its system yield model by 31 March 2026, undertake relevant consultation to
 inform the review, and report on the review findings by 30 June 2026.

Water planning and climate risk readiness

- Include water planning obligations requiring WaterNSW to maintain, implement and annually review a 5-year water conservation plan for declared and non-declared catchments. The plan must consider the NSW Water Efficiency Framework, the NSW Water Strategy and the Greater Sydney Water Strategy and detail the water conservation activities that WaterNSW undertakes.
- Include new requirements for WaterNSW to designate a climate change risk officer and risk
 assessment team, assess its current level of climate risk maturity on an enterprise scale, meet
 a systematic level of climate change management by 30 November 2027, and make
 reasonable progress towards meeting an embedded maturity level in line with the
 NSW Government's Climate Risk Ready Guide.
- Add a new requirement for WaterNSW to report against the International Sustainability Standards Board (ISSB) sustainability-related disclosure standards.

- Include new obligations requiring WaterNSW to review the Greater Sydney Drought Response Plan annually with Sydney Water.
- Include a new obligation requiring WaterNSW to maintain and comply with a memorandum
 of understanding with Sydney Water to cooperate on water supply augmentation planning
 activities for Greater Sydney, including by clarifying water supply augmentation
 responsibilities and how the parities will consult with each other on system yield calculations.
- Remove the requirement for WaterNSW to implement actions assigned to it under Greater Sydney Water Strategy. Also remove the requirement for WaterNSW to implement actions in the strategy if directed to do so by the Minister. The Minister is still able to direct WaterNSW to undertake actions under the provisions in the State Owned Corporations Act 1989.
- Include an obligation requiring WaterNSW to cooperate with the Department on reviews of the NSW Water Strategy, Greater Sydney Water Strategy or other regional strategies as requested.
- Include an obligation that requires WaterNSW to maintain its Greater Sydney long-term
 capital and operational plan (LTCOP) and review the plan, in consultation with Sydney Water,
 at least once during the licence term. The plan must identify future water needs, long-term
 investment options for metering, and consider the NSW Water Strategy and the Greater
 Sydney Water Strategy and Ministerial guidance.
- Include a requirement for WaterNSW to cooperate with Sydney Water in Sydney Water's review of its LTCOP.

Data and information services

- Include a new obligation requiring WaterNSW to maintain and comply with a data management framework encompassing a data governance policy, data quality policy, and a data sharing policy.
- Include an obligation requiring WaterNSW to maintain data and information and provide NSW Government agencies with access as relevant to their functions.
- Modify the requirement for WaterNSW to download metering data annually to require them to only download data if requested to do so by a NSW Government agency.

Promoting cooperative relationships with stakeholders

- Replace the requirement for WaterNSW to maintain and comply with a memorandum of understanding with the Natural Resources Access Regulator (NRAR) to a cooperation protocol.
- Include a new obligation requiring WaterNSW to use its best endeavours to enter into a cooperation protocol with NSW Fisheries, and maintain and comply with that protocol once it comes into effect.
- Modify the requirement for WaterNSW to cooperate with WIC Act licensees seeking to establish a code of conduct with WaterNSW and comply with any code entered into.

Licence administration

- Move the existing Reporting Manual requirement for WaterNSW to submit an annual report on water quality in the declared catchment areas to IPART and NSW to the Licence.
- Include a new part of the licence that sets out miscellaneous matters to allow for better licence structuring and remove repetition in the licence.
- Amend some defined terms in the licence, to clarify the intention of those terms and for plain English purposes.

1.3 How we developed our recommendations

We have conducted this Review to assess whether the current licence meets:

- its objectives in a way that imposes the lowest possible cost on WaterNSW and its customers
- customer and stakeholder expectations and supports wider government policy.

The current licence objectives are set out in clause 1.1 of the operating licence.

1.4 We consulted widely with stakeholders

We consulted widely with WaterNSW's customers and relevant government stakeholders during this Review.

In August 2023, we published an issues paper outlining our early thinking for changes to the licence and seeking stakeholder input about issues relevant to the licence. Feedback to the issues paper informed our draft licence recommendations, which we released for consultation in December 2023. We subsequently consulted on our draft proposals for the reporting manual in February 2024. We held a public hearing in February 2024 for our stakeholders to provide verbal feedback on our draft recommendations and we received written submissions in March 2024. Where we required additional information following stakeholder responses, we sought clarification from relevant stakeholders after the formal stakeholder submission process.

The verbal and written submission to our draft recommendations have informed our final licence recommendations to the Minister.

We received written submissions to the issues paper and our draft recommendations from:

- WaterNSW
- Department of Climate Change, Energy, the Environment and Water (the Department) a on behalf of the NSW Government – including feedback from NSW Health, the Natural Resources Access Regulator (NRAR) and the Department of Regional NSW
- Energy and Water Ombudsman NSW (EWON)
- NSW Irrigators Council

In January 2024, DPE became the Department of Climate Change, Energy, the Environment and Water (the Department). Our draft recommendations for the operating licence referenced DPE but we have changed to the Department in our final recommendations.

- Lachlan Valley Water
- Sydney Water
- NSW Farmer's Association
- Bureau of Meteorology
- Coleambally Irrigation Co-operative Limited
- NSW Water Directorate
- one individual submission
- one anonymous submission.^b

We also received verbal feedback from Yanco Creek and Tributaries Advisory Council and 2 individuals (L. Wilson and B. Watson-Will) at our public hearing.

We have published a summary of submissions, including our responses to those submissions on our website.

Where we made significant changes to our draft recommended licence obligations, we sought targeted feedback from relevant stakeholders (i.e. the Department, WaterNSW and NRAR) after public consultation. This allowed us to minimise the risk of any unintended consequences of those changes. This related to the water quality enhancement program, catchment and river health research, community education and the water sector information hub.^d

1.5 We applied lessons learnt from other licence reviews

We have applied lessons learnt from our end-of-term reviews of the 2022–27 Hunter Water operating licence and the 2019–2024 Sydney Water operating licence, where there are similar conditions in the WaterNSW licence. Consistency across similar licence conditions for the 3 public water utilities that we regulate (including WaterNSW, Sydney Water and Hunter Water) enables more effective administration for regulators, and potentially enables utilities to benchmark against each other or collaborate on compliance-related solutions.

However, we have not made changes to WaterNSW's licence where consistency with other operating licences would not be suitable, or applicable to, WaterNSW. In this report, we have explained any differences from the approach in other licence reviews where we have recommended them.

b Stakeholder submissions to our issues paper are available on our website.

^c The transcript from our public hearing is available on our website.

d We have replaced the hub with the requirements for NSW Government access to data and information.

^e Details about the 2023-24 Sydney Water operating licence review are available on our website.

f Details about the 2023-24 WaterNSW operating licence review are available on our website.

1.6 We undertook a cost-benefit analysis of our recommendations

We undertook a cost-benefit analysis to assess if our recommendations for the licence provide a net benefit to customers and the community (i.e. the benefits outweigh the costs). For the most part, we have only made recommendations where there is a net economic benefit. However, in some cases, while the economic costs seem much higher than the economic benefits, there are other unquantifiable benefits, such as supporting the government's long-term water conservation and climate-resilience goals, that justify recommending the licence condition.

Our recommendations are informed by our cost-benefit analysis,⁹ unless noted otherwise in this report. The cost-benefit analysis report published in February 2024 provides details on the cost-benefit analysis on the draft licence conditions. Where we make different recommendations from our draft recommendations, we explain the changes to the cost-benefit analysis outcomes in this report. We have taken cost and benefit impacts into consideration when making our recommendations for the operating licence. To minimise cost impacts to WaterNSW and its customers, we have recommended minimum licence requirements that are:

- flexible which will allow WaterNSW to allocate appropriate funding to programs that will deliver the best outcomes for the people of NSW.
- outcomes-focused which will require WaterNSW meet the Licence obligations in the most cost-effective way.

We will consider cost impacts and benefits further in our review of WaterNSW's prices and separately assess whether proposed expenditure and prices are consistent with our regulatory framework. We will commence our pricing review later this year (the next price determination will apply from 1 July 2025).

_

⁹ IPART, CBA report on draft licence. February 2024.



What is a cost-benefit analysis?

An operating licence best serves the people of NSW when each condition adds value to the licence overall. Cost-benefit analysis is a method of testing the value of a condition. To perform a cost-benefit analysis we contrast 2 situations:

- an existing or proposed licence condition in force (we call this the 'factual' scenario)
- the existing or proposed licence condition is not included in the licence but some realistic alternative set of arrangements is in place (we call this the 'counterfactual' scenario).

We look at differences in social benefits between factual and counterfactual and differences in cost. Ultimately, all costs are borne by either water customers or taxpayers. Social benefits include net financial benefits to the State as a whole, but importantly they also include non-financial benefits, which could include:

- avoidance of health and safety risks from contaminated water
- avoidance of inconvenience from disrupted or poor-quality services
- a healthy environment
- resilience to extreme weather events.

Comparison of costs and benefits

In recommending licence conditions, we compared the costs and benefits of each proposed conditions to establish that there was a net benefit to customers and the community. If benefits or costs could not be reasonably quantified, we compared the benefits and costs qualitatively.

Benefits of licence conditions are usually experienced by the customers of the licensed utility or the general public (for example with environmental conditions). Quantifying these benefits is sometimes difficult, particularly if they relate to non-monetary values.

Licence conditions usually impose costs on the licensed utility because the licence requires it to undertake certain activities or to refrain from undertaking certain others that it might prefer to do on commercial grounds. Further, operating licence conditions entail compliance and enforcement costs. Activity costs or costs of foregone opportunities are usually able to be quantified with accounting data.

1.7 We have applied 5 principles to our Review

We applied the following principles when considering whether existing conditions in the current licence should be retained or removed, or whether the licence should include new conditions. We developed these principles taking into account the specific characteristics of WaterNSW's business and its customers, the functions it performs and the wider context of the review.



Principle # 1: Protect customers, consumers and the environment

WaterNSW's operating licence should authorise the provision of services in accordance with its objectives.



Principle # 2: Clear and enforceable

Licence conditions should be clearly expressed and enforceable so we can hold WaterNSW to account when providing the authorised services to its customers.



Principle # 3: Focus on outcomes

Our Review will focus on outcomes for WaterNSW's customers, the community and environment. We will consider how the licence compliments other regulatory frameworks and tools, and NSW Government policies, to achieve outcomes.



Principle #4: Set minimum requirements

Our Review will set minimum requirements and should not unnecessarily increase the financial burden on WaterNSW customers and the people of NSW. We will explore if the current licence sets appropriate minimum protections for customers, the community and the environment. This would allow us to monitor WaterNSW's compliance with delivering these protections.



Principle # 5: Remove redundancy

The Review focuses on removing redundancy and streamlining current regulation. This may mean removing current licence conditions that are redundant or duplicative without additional benefits.

Chapter 2

Organisational management systems

Management systems help to ensure consistent and predictable operations (Part 3 of the recommended Licence).



Management systems assist an organisation to manage interrelated parts of its business to achieve the objectives and goals of the organisation. The benefits of an effective management system include:

- improved efficiency in relation to use of resources and financial performance
- improved risk management and protection of people and the environment
- increased ability to deliver consistent and improved services and products, leading to increasing value to customers and all other stakeholders.¹

Section 12(2)(a)(i) of the *Water NSW Act 2014* (Act) specifies that a licence that authorises WaterNSW to capture, store, release or supply water must include terms and conditions requiring WaterNSW to provide, construct, operate, manage and maintain efficient, co-ordinated and commercially viable systems and services to capture, store, release or supply water.^a The current licence requires WaterNSW to maintain and implement management systems for water quality, asset management and the environment.

In this chapter, we provide our recommendations and justifications on whether the licence should continue to require WNSW to use these systems to meet its obligations under the Act for the next licence term.

2.1 Water quality management systems (WQMS)

Our recommendations for the operating licence

- 1. Retain the current requirement for WaterNSW to maintain, implement and comply with a WQMS consistent with the *Australian Drinking Water Guidelines*.
- 2. Retain the current requirement for WaterNSW's WQMS to be consistent with NSW Health's requirements and clarify that these requirements are health-related.
- 3. Retain the current requirement for WaterNSW to give NSW Health and IPART prior notice of any significant changes it proposes to make to the WQMS in accordance with the reporting manual.
- 4. Include an obligation clarifying that WaterNSW does not need to have a WQMS for non-declared catchments areas where NSW Health has granted exemptions.
- 5. Move the existing Reporting Manual 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, to the Licence.

^a Section 12(2)(a)(ii) of the Act further specifies that the licence must require WaterNSW to ensure that the systems and services meet the performance standards specified in the licence in relation to water delivery, water quality, service interruptions and other matters set out in the licence. We discuss our recommendations for these licence conditions in Chapter 3.

The Australian Drinking Water Guidelines (ADWG) are the drinking water quality standards specified in the current licence, and they have been since the licence first came into effect. The ADWG is appropriate for managing the quality of the water that WaterNSW supplies to its customers where the end use is drinking water, and ensures that WaterNSW provides water of an appropriate quality. The ADWG are the current National Health and Medical Research Council water quality standards.

The ADWG provides the guiding framework for establishing a WQMS and sets the minimum standards, from catchment to customer. WaterNSW only supplies drinking water to some Fish River water supply scheme customers. Therefore, we recognise that not all elements of the ADWG apply to all of WaterNSW's operations as it primarily provides raw water to customers across NSW. Some of this water may be for the production of drinking water by others. We consider that WaterNSW should only be required to implement relevant aspects of the ADWG that apply to its operations.

2.1.1 Applying WQMS to the different services WaterNSW provides

We recommend maintaining obligations for the WQMS but have recommended changes to allow flexibility for WaterNSW to maintain either one consolidated system or separate systems, to reflect the different catchment characteristics, the nature of activities and services that WaterNSW provides from different catchment areas and varying levels of risk. These changes aim to improve clarity, remove ambiguity and provide flexibility to WaterNSW.

We have also recommended exempting a small number of sites where WaterNSW provides drinking water from the requirement to have a WQMS. These sites are already being managed under a Quality Assurance Program (QAP) under section 25 of the *Public Health Act 2010* and we do not consider that there is added benefit by including these sites in WaterNSW's WQMS.

WaterNSW is responsible for the supply of drinking water to customers in the Fish River Water Supply Scheme (FRWSS). Because WaterNSW also provides water for non-drinking water purposes, we have defined water to which the WQMS will apply as "in-scope water". This includes water with the final end use as drinking water that is provided by WaterNSW as part of a service, or in an area, that has not been exempted by NSW Health.

2.1.2 Compliance with requirements specified by NSW Health

We also recommend retaining the current licence requirements for WaterNSW's WQMS, but clarifying the obligation to require WaterNSW to maintain a WQMS that complies with any requirements from NSW Health.² As NSW Health is the health regulator, it may sometimes need to impose requirements that are different from, or additional to, the ADWG to manage water quality and health-related matters. Given this, we have recommended that for non-declared catchment areas for in-scope water, declared catchment areas and the FRWSS, the WQMS must be consistent with the ADWG, subject to any requirements specified by NSW Health.

However, we recommend clarifying that NSW Health's requirements must be:

 health-based, reflecting NSW Health's role as the health regulator and its role in monitoring the quality of water supplied by water utilities including WaterNSW in writing, to help ensure that the licence condition is enforceable, and that we can monitor WaterNSW's compliance.

During this Review, we considered whether the new licence should also specify that NSW Health's requirements will be 'reasonable'. However, we concluded that this was not necessary. NSW Health has told us that it would not usually depart from the ADWG except in exceptional circumstances. For example, NSW Health may seek departures in relation to emerging contaminants, but it is required to demonstrate why such departures are necessary.

We also recommend retaining the licence condition requiring WaterNSW to give NSW Health and IPART prior notice of any significant changes that it proposes to make to its WQMS.

Our recommended licence conditions allow WaterNSW to nominate an updated or replacement version of the ADWG rather than the version currently specified in the recommended licence. WaterNSW would be required to comply with that version if IPART approves. This provides flexibility to move to an updated or replacement version of the ADWG if necessary.

During the Review, we considered defining what is a significant change. However, we concluded that it is appropriate that WaterNSW continues to agree this cooperatively with NSW Health, potentially through their memorandum of understanding.



WaterNSW's compliance during the 2017–2022 and 2022–2024 operating licence terms

WaterNSW's operational audits have found shortcomings and non-compliances with the maintenance, management and implementation of its WQMS during both the 2017–2022 and 2022–2024 operating licence terms.

While WaterNSW's compliance against its WQMS has generally been improving over the licence terms, there remain opportunities for WaterNSW to improve. We have not recommended removal of this condition.

We have not found additional issues, either through this licence review or through our compliance monitoring function, that need to be resolved through further changes to the licence conditions for WQMS.

Box 1 Recommended licence conditions for WQMS

- 9 Water quality management system (WQMS)
 - (1) Water NSW must maintain a management system for water quality that:
 - (a) complies with any health requirements specified by NSW Health, and

Box 1 Recommended licence conditions for WQMS

- (b) subject to (a), for non-declared catchment areas for in-scope water, declared catchment areas, and the Fish River water supply scheme, is consistent with:
 - (i) the Australian Drinking Water Guidelines, or
 - (ii) an updated or replacement version of the Australian Drinking Water Guidelines nominated by Water NSW and approved by IPART,

(the water quality management system).

Note 1: Water NSW may maintain one consolidated system or separate systems.

Note 2: Requirements under this licence for Water NSW to maintain systems that are consistent with a specified standard only require Water NSW to implement those aspects of the standard that are relevant to Water NSW's activities.

- (2) Water NSW must consult with NSW Health about any proposed significant changes to its water quality management system and must notify NSW Health and IPART of any significant changes made in accordance with any requirements in the reporting manual.
- (3) Water NSW must implement and comply with the water quality management system.
- (4) Water NSW must, by 30 November each year:
 - (a) submit an annual report to IPART and NSW Health on water quality in declared catchment areas during the preceding financial year that includes, at a minimum, the information set out in the reporting manual (annual water quality monitoring report), and
 - (b) make the annual water quality monitoring report publicly available online at the same time it submits it to IPART and NSW Health.
- (5) In this clause 9:

Australian Drinking Water Guidelines means the 'Australian Drinking Water Guidelines 2011' published by the National Health and Medical Research Council and the Natural Resource Management Ministerial Council and updated in September 2022.

In-scope water means water with the final end use as drinking water that is provided by Water NSW as part of a service, or in an area, that has not been exempted by NSW Health.

2.2 Asset management system (AMS)

Our recommendations for the operating licence

- 6. Retain the requirement for WaterNSW to maintain and implement an AMS consistent with *AS ISO 55001:2014* or another approved standard.
- 7. Modify the existing catchment infrastructure works obligation to clarify the links to the AMS and the construction, maintenance and operation of works.
- 8. Remove the obligation requiring WaterNSW to construct, maintain and operate Water Management Works in accordance with the AMS.

Appropriate asset management is necessary for WaterNSW to meet the performance standards specified in the licence, and ultimately customers' expectations for services. The benefits of WaterNSW maintaining and implementing an AMS are that it helps WaterNSW to:

- manage its assets through all phases of the asset's lifecycle including strategy and planning, asset creation, maintenance and asset renewal
- meet its system performance standards and operate critical assets to provide essential services
- monitor asset performance, which determines its overall system performance
- meet objectives (such as the system performance standards) by effectively managing asset risks and asset performance
- identify and pre-empt issues that may pose a significant risk to asset integrity and/or public health, including risks brought about by a changing climate
- identify the root cause of poorly performing assets and maximise asset value
- keep records of maintenance activities, which is essential to track performance, optimise maintenance, and identify areas requiring frequent attention.

The current licence recognises these benefits and requires WaterNSW to have an AMS, consistent with the relevant Australian Standard (*AS ISO 55001:2014*).³ We have recommended retaining the current licence condition because it:

- requires WaterNSW to manage its assets adequately through processes developed consistent with an approved industry standard
- makes WaterNSW accountable for adhering to its asset management processes there are currently no other legislative requirements requiring WaterNSW to have and implement an AMS and be accountable for it
- enables IPART to monitor WaterNSW's compliance with the system through compliance audits – if there was a high-risk incident or a non-compliance, we would be able to readily audit WaterNSW's asset management, identify the cause of the issue, make recommendations to rectify the non-compliance or take enforcement action

minimises any risk that WaterNSW could cease to maintain the AMS due to commercial
incentives if there are costs increases or changes to approach at WaterNSW in the future,
recognising the criticality of maintaining the asset management system for WaterNSW to
deliver on its functions and meet the performance standards.

We have not identified a need for additional obligations to strengthen this requirement. WaterNSW continues to demonstrate compliance as highlighted in recent operating audits.⁴

We also recommend retaining the flexibility in the current licence for WaterNSW's AMS to be consistent with another asset management standard (instead of *AS ISO 55001:2014*), if approved by IPART in writing. This will allow WaterNSW to transition to an updated standard if one becomes available and it is appropriate.

The International Organisation for Standardisation (ISO) Technical Committee for AMS is currently updating International Standard *ISO 55001:2014*. The ISO Technical Committee has not advised when the updated International Standard will be released but we expect this to occur sometime in 2024. We expect an updated Australian Standard will be released following the new International Standard.

We do not recommend requiring the 2024 International Standard to apply in the Licence. It would not give WaterNSW enough time to transition its AMS to the new standard. Further, we recommend that Australian utilities should comply with the Australian Standards rather than the international versions, in case of any differences between the standards.

We have also recommended a structural change to the AMS obligations. The current licence has several obligations under separate licence conditions requiring WaterNSW to manage works consistent with the AMS.⁵ We have grouped these obligations under the AMS clause for consistency and readability purposes. This will also simplify compliance monitoring for asset management requirements.

Finally, we recommend removing the current licence obligation requiring WaterNSW to construct, maintain and operate its water management works in accordance with the AMS. WaterNSW's AMS includes details about how it manages its water management works. Further, WaterNSW is required to maintain, implement and comply with its AMS. Therefore, we consider that the existing obligation is redundant as it duplicates the requirement for WaterNSW to implement and comply with the AMS.

Box 2 Recommended licence conditions for AMS

10 Asset management system (AMS)

- (1) Water NSW must maintain a management system for Water NSW's assets that is consistent with:
 - (a) the Australian Standard AS ISO 55001: 2014: Asset management management systems requirements, or
 - (b) another asset management standard nominated by Water NSW and approved by IPART,

(the asset management system).

- (2) Subject to (1), for catchment infrastructure works in declared catchment areas, the asset management system must also be consistent with the design criteria.
- (3) Water NSW must implement and comply with the asset management system.

2.3 Environmental management system (EMS)

Our recommendations for the operating licence

9. Retain the requirement for WaterNSW to maintain and comply with an EMS in line with AS/NZS ISO 14001:2016.

Appropriate environmental management is necessary for WaterNSW to meet its environmental responsibilities and minimising environmental impacts from its services and activities. The benefits of WaterNSW maintaining and implementing an EMS are that it helps WaterNSW to:

- protect the environment by preventing or mitigating adverse environmental impacts
- mitigate potential adverse effects of environmental conditions on the organisation
- assist in the fulfilment of compliance obligations
- enhance environmental performance
- utilise a life cycle perspective that prevent environmental impacts from being unintentionally shifted elsewhere within the life cycle
- achieve financial and operational benefits that can result from implementing environmentally sound alternatives
- communicate environmental information to relevant interested parties.⁶

The current licence recognises these benefits and requires WaterNSW to have an EMS, consistent with the relevant Australian Standard (AS ISO 14001:2016).⁷

We recommend retaining the current licence condition because it:

- requires WaterNSW to manage its activities adequately through processes developed in line with an approved industry standard
- makes WaterNSW accountable for adhering to its environmental management processes there are currently no other legislative requirements requiring WaterNSW to have and implement an EMS, and be accountable for it
- enables IPART to monitor WaterNSW 's compliance with the system through compliance audits – if there was a high-risk incident or a non-compliance, we would be able to readily audit WaterNSW's environmental management, identify the cause of the issue, make recommendations to rectify the non-compliance or take enforcement action
- minimises any risk that WaterNSW could cease to maintain the EMS due to commercial incentives if there are costs increases or changes to leadership at WaterNSW in the future.



WaterNSW's compliance during the 2017–2022 and 2022–2024 operating licence terms

Our operational audits have found shortcomings with WaterNSW's its EMS during both the 2017–2022 and 2022–2024 operating licence terms.

While WaterNSW's compliance against its EMS has generally been good over the licence terms, we consider there is a risk of future incidents resulting in adverse outcomes, without proper implementation of the EMS. Therefore, we recommend keeping this condition.

Box 3 Recommended licence conditions for EMS

11 Environmental management system (EMS)

- (1) Water NSW must maintain a management system that is consistent with:
 - (a) AS/NZS ISO 14001:2016: Environmental management systems requirements with guidance for use, or
 - (b) another standard nominated by Water NSW and approved by IPART, (the environmental management system).
- (2) Water NSW must implement and comply with the environmental management system.

2.4 Fluoridation of the Fish River water supply scheme (FRWSS)

Our recommendations for the operating licence

10. Include a requirement for WaterNSW to comply with the *NSW Code of Practice for Fluoridation of Public Water Supplies* for the FRWSS.

NSW Health has recommended adding an obligation for WaterNSW to comply with the Fluoridation Code for the FRWSS. We consider that directions to comply with the NSW Code of Practice for Fluoridation of Public Water Supplies (Fluoridation Code) are better contained in WaterNSW's fluoridation approval from NSW Health rather than the licence. However, we understand NSW Health's view that the licence is an appropriate mechanism to set out key Government requirements of public interest in a succinct and accessible form. Therefore, on balance, we recommend including the requirement to comply with the Fluoridation Code in the licence. There is no disbenefit in including this licence requirement.

NSW Health approved WaterNSW to fluoridate the FRWSS, subject to specified terms and conditions, by gazettal on 21 September 2018.

Box 4 Regulating fluoridation of water in New South Wales

Fluoridation of water in NSW is governed under the *Fluoridation of Public Water Supplies Act 1957* (Fluoridation Act), *Fluoridation of Public Water Supplies Regulation 2022* (Fluoridation Regulation) and the Fluoridation Code. Under this legislative framework, NSW utilities must not fluoridate the drinking water they supply except with the approval, or at the direction, of NSW Health. Once approved or directed to fluoridate, the Fluoridation Regulation requires water utilities to manage key aspects of fluoridation in accordance with the Fluoridation Code. As NSW Health has approved WaterNSW to fluoridate the FRWSS, WaterNSW must do so in accordance with the Fluoridation Code.

The Fluoridation Code was approved by the Director-General of the Department of Health under the Fluoridation Act. It includes generally technical material which has not been specified in the Fluoridation Act or in the Fluoridation Regulation.

When the Fluoridation Code was gazetted, it was stated that the material in the Fluoridation Code was intended to either from part of:

- the regulatory regime which fluoridators are to follow non-compliance with which may constitute an offence under the Fluoridation Regulation, or
- an advisory guide to fluoridators as to the source of other relevant material or legislation (such as that governing occupational health and safety).⁹

Box 5 Recommended licence conditions for compliance with the NSW Fluoridation Code for Fish River Water Supply Scheme

12 Application of Fluoridation Code to Fish River water supply scheme

- (1) To the extent Water NSW is authorised or directed to fluoridate drinking water under the *Fluoridation of Public Water Supplies Act 1957*, Water NSW must, subject to that Act, comply with:
 - (a) any requirements for fluoridation specified by NSW Health, and
 - (b) subject to (a), the Fluoridation Code.
- (2) In this clause 12, Fluoridation Code has the meaning given in the *Fluoridation of Public Water Supplies Regulation 2022*.

2.5 We explored including other management systems

We do not recommend any additional management systems. As part of the Review, we considered and consulted with stakeholders on the benefits and implications for requiring WaterNSW to maintain a quality management system (QMS) and requirements relating to critical infrastructure.

2.5.1 Quality management system

A QMS may help provide customers and other stakeholders with assurance about WaterNSW's system operations and decision-making processes and frameworks. There was initial interest from some stakeholders to require WaterNSW to maintain a QMS. Subsequent stakeholder views did not support the requirement. This is in part because WaterNSW is required to develop a Water Quality Management Framework (QMF) in response to the NSW Government's section 10 review. ^b The need for a QMS cannot be quantified until after the QMF is established, implemented and the benefits realised.

We do not consider that the QMF should be regulated under the licence. There is already adequate oversight:

Section 1.2 of the NSW Government's Corrective Action Plan outlines the monitoring and
reporting requirements for corrective actions. Under this part of the plan, WaterNSW would
be required to regularly report its progress against the recommendations of the review
(including development of the QMF) to the Water Group Leadership Committee.

NSW Department of Planning and Environment, Corrective Action Plan: Review of the activities of the department under Section 10 of the Water Management Act 2000, October 2023

• Under section 1.2.2 of the plan, implementation of the actions will be subject to independent oversight (via annual reporting) by the National Resources Commission.

The NSW Government's Water Group Risk and Assurance section within the Ministerial, Governance and Business Planning branch will provide oversight of corrective actions, including the QMF requirements.

2.5.2 Critical infrastructure

We do not recommend imposing national security clearance requirements in relation to cyber security. In March 2022, the Commonwealth Government's *Security of Critical Infrastructure Act 2018* (Cth) (SOCI Act) was amended to introduce enhanced critical infrastructure security obligations on responsible entities.

In March 2022, the SOCI Act was amended to introduce enhanced critical infrastructure security obligations on responsible entities. The SOCI Act now requires responsible entities, including WaterNSW, to develop, implement and comply with a Critical Infrastructure Risk Management Program. As the program provides the same function that we would expect from the cyber security management system and noting that WaterNSW is now also required to identify persons responsible for developing and implementing the program, we consider that there is no longer a gap to be filled by the licence.

We acknowledge that the Critical Infrastructure Risk Management Program provides a grace period until 18 August 2024, WaterNSW has until that date to comply with the cyber and information security framework requirements of the amended SOCI Act. ¹² On balance, we do not consider that there is a need for the licence to include an obligation for cyber security as WaterNSW will be required to maintain its current requirements under the SOCI Act. Further, the current licence does not require any additional cyber security obligations and we recommend that WaterNSW continue with current requirements until the end of the transition period. This aligns with feedback that we received from the Cyber and Infrastructure Security Centre during our Review.

Chapter 3

Clarifying the level of service WaterNSW must provide

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



Performance standards impact the level and quality of service that customers receive and set the minimum levels of service WaterNSW must meet. They hold WaterNSW accountable to deliver the services to the standards customers and the community expect. Specifying these standards in the licence protects customers from lower quality service by requiring WaterNSW to provide an acceptable minimum level of performance. If WaterNSW does not meet the required standard, it would face enforcement action.

While performance standards specify a desired standard, they do not prescribe how a service provider must achieve the outcome. This allows service providers to adapt their systems and processes to varying local circumstances. Performance standards do not prevent WaterNSW from providing a greater level of service if this aligns with their customers' preference.

In this chapter, we set out our recommendations for performance standards. We recommend maintaining or amending performance standards in the current licence and propose new standards to provide customers with timely notification in the case of water delivery delays or as required by the early warning system.

3.1 The licence must include performance standards

The Act specifies that a licence that authorises WaterNSW to capture, store, release or supply water must include terms and conditions requiring WaterNSW to ensure that the systems and services meet the performance standards for water delivery, water quality and service interruptions set out in the licence.¹³ Performance standards in the licence can also relate to other matters.

Through our review of WaterNSW's licence, we found that outcomes-focused performance standards would continue to allow WaterNSW sufficient flexibility to improve and innovate within its processes while ensuring its performance is in line with customer expectations and willingness to pay. We also concluded that performance standards which require WaterNSW to proactively communicate with stakeholders about issues related to water quality, water delivery and service interruptions would provide greatest benefit to stakeholders.

Our recommendations seek to set minimum standards for system and service reliability, resulting in clear service expectations, and seeks to hold WaterNSW accountable to deliver the services to the standards we expect. They are not intended to drive WaterNSW's performance. We recommend including an obligation that clarifies that WaterNSW must ensure its systems and services meet the performance standards in the licence.

Box 6 Recommended licence conditions for meeting performance standards

13 Requirement to meet performance standards

- (1) Water NSW must ensure its systems and services meet the performance standards:
 - (a) for direct water supply services, in performance standards table 1 in clause 16.
 - (b) for water release services (excluding temporary trades and interstate temporary trades), in Performance standards table 2 in clause 16,
 - (c) for drinking water supplied in connection with the Fish River water supply scheme, in Performance standards table 3 in clause 16, and
 - (d) for water release services that relate to temporary trades and interstate temporary trades, in Performance standards table 4 in clause 16.
- (2) If Water NSW provides other services related to provision of water, Water NSW must:
 - (a) identify in writing to the customer whether the service will be treated as a water release service or a direct water supply service for the purpose of performance standards, and
 - (b) ensure its systems and standards for that service meet the identified performance standards.

3.2 WaterNSW provides different services to different customers

WaterNSW provides water to its customers by 2 distinct service types i.e. direct water supply services and water release services (as described in Box 7). Given the differences between the services WaterNSW provides, we consider it necessary to set different performance standards for the different services.

Additionally, WaterNSW provides a drinking water supply service via the Fish River water supply scheme (FRWSS). The current licence does not include specific performance standards for the FRWSS which has historically caused confusion about which performance standards apply to Fish River customers. We have clarified the performance standards that apply to Fish River customers by including a Fish River water quality performance standard as discussed below.

Box 7 Services provided by WaterNSW

WaterNSW provides water to its customers via direct water supply services and water release services. We have included definitions in the licence to clarify what these services are.

Direct water supply services refer to the provision and management of water directly delivered to customers. The services are crucial for ensuring that customers and consumers receive a consistent and safe supply of water for a variety of purposes. We have recommended a new definition for direct water supply under the licence. Our recommended definition notes that direct water supply means the service of supplying raw water directly to a customer via a pipe, channel or canal (in declared catchment areas) or a pipe (in non-declared catchment areas) and includes the direct supply of raw water either taken from the State's water rights under WaterNSW's water access licences or under a licence held by a customer.

Water release services involve controlled discharge of water from reservoirs, dams or other water storage sources. These services are crucial for water users, water resource management, environmental management and public safety. Our recommended definition notes that water release services means the service of making raw water available by passively or actively releasing water from a work into a river, stream, channel or canal (in a nondeclared catchment area) or a river or stream (in a declared catchment area) for the customer to extract or for the purposes of cultural flow or environmental flows.

3.3 Water quality performance standards

Our recommendations for the operating licence

- 11. For direct water supply services replace the water quality standard requiring compliance with the WQMS with a standard requiring no water quality incidents resulting from non-conformance with the WQMS.
- 12. For water release services include a water quality standard requiring WaterNSW to notify relevant parties in line with the early warning system.
- 13. For the Fish River water supply scheme include a water quality standard requiring no water quality incidents resulting from non-conformance with WaterNSW's WQMS.

Under the current licence, WaterNSW must manage the quality of direct water supply services to customers in accordance with its water quality management system (WQMS).¹⁴ The recommended licence also requires WaterNSW to implement and maintain a WQMS. During our review, we determined that the current water quality performance standard duplicates requirements under other parts of the licence. We recommend revising the current water quality performance standards to address this duplication.

Direct water supply services

We recommend amending the current water quality performance standard to avoid water quality incidents for water where the final end use is drinking water, caused by WaterNSW failing to comply with its WQMS. This would require WaterNSW to manage incidents in accordance with its incident response procedures in its WQMS maintained under clause 9 of the recommended licence.

FRWSS

We recommend including a new water quality performance standard for WaterNSW to avoid water quality incidents for all drinking water supplied, caused by WaterNSW failing to comply with its WQMS. We recommend a separate water quality standard for the FRWSS, as WaterNSW provides drinking water directly to these customers. This service differs to the provision of raw water from the declared catchments.

Water release services

We recommend including a new water quality performance standard for water release services that requires WaterNSW to notify persons registered for early warning notifications in accordance with the early warning system, from 1 July 2026. Given the natural variability of the systems (water is rarely provided to customers via a closed network – e.g. pipes) we do not consider that the water quality performance standards for direct water services are relevant to customers receiving this type of service. Instead, we consider that timely notification of changes to relevant water quality parameters (as determined by WaterNSW and communicated to relevant customers) serves as a more useful and achievable performance indicator. This also aligns with our proposed approach for the early warning system under clause 19 in part 5 of the recommended licence, discussed in section 4.3 of this report.

Box 8 Recommended water quality performance standards

16 Performance standards tables

Performance standards table 1: standards for direct water supply services

Water quality performance standards

D-WQ-1100% avoidance of water quality incidents for all raw water supplied for the final end use as drinking water.

Relevant definitions

final end use means the final purpose for which the water is used whether that use is by a Water NSW customer directly or by a person supplied water by a Water NSW customer.

Example: If Water NSW supplies raw water to a public water utility and that public water utility treats and supplies that water to private residential properties as drinking water, the final end use of the water that Water NSW supplied is drinking water.

water quality incident means an impact on water quality resulting, in whole or part, from a non-compliance with the water quality management system maintained under clause 9.

Performance standards table 2: standards for water release services

Water quality performance standards

R-WQ-1 From 1 July 2026, 100% of persons registered for advance notifications are notified in accordance with the early warning system.

Performance standards table 3: standards for Fish River water supply scheme

Water quality performance standards

FR-WQ-1100% avoidance of water quality incidents for all drinking water supplied.

3.4 Water delivery performance standards

Our recommendations for the operating licence

14. For water release services – modify the existing water delivery performance standards to ensure all non-complying water orders are rectified in a timely manner, and for water orders to be delivered within one working day.

The current licence includes 2 water delivery performance standards that require WaterNSW to:

- ensure that each financial year no more than 5 Customers who place a non-complying water order are contacted more than one working day after WaterNSW receives that order to rectify that order
- to deliver 99% of water orders within one day of the scheduled day of delivery.

These performance standards only apply to water release services.

Water release services

We recommend amending the 2 water delivery performance standards as follows:

- Amend the performance standard to require that for 95% of non-complying water orders, customers are contacted within 1 working day to rectify the order. The revised standard requires WaterNSW to count each instance of an incorrect water order. We consider that this reduces the risk of WaterNSW only counting the first instance of a non-complying water order placed by a customer and ensures that WaterNSW works with customers to rectify all non-complying orders as efficiently as possible.
- Amend the performance standard to require WaterNSW to release raw water for at least 99% of water orders within one day of the scheduled day of release. We have replaced the term 'deliver' with 'release' to align the performance standard with the service WaterNSW delivers (i.e. when water is released vs when it is delivered). The recommended change better aims to align the standard to that which is within WaterNSW's control (i.e. release vs delivery). The one-day timeframe aligns with WaterNSW current operations and we do not expect WaterNSW's customers to notice any change in the service they receive because of the changed performance standard.

Direct water supply services

We do not recommend any water delivery performance standards for direct water supply services. We understand that direct water supply customers do not create water orders and can access water as required, in accordance with their water supply agreements or customer contracts. Therefore, we do not consider that a water delivery performance standard to ensure the availability of water is required.

Box 9 Recommended water delivery performance standards

16 Performance standards tables

Performance standards table 2: standards for water release services

Water delivery performance standards

R-WD-1 For at least 95% of non complying water orders, customers are contacted to rectify that order within one business day.

R-WD-2 Raw water for at least 99% of water orders is released within one day of the scheduled day of release.

Relevant definitions

non-complying water order means a request that would be a water order except that it:

- (a) contains insufficient information for Water NSW to release the requested water, or
- (b) is not consistent with or does not comply with the terms and conditions of a relevant licence or entitlement.

3.5 Service interruption performance standards

Our recommendations for the operating licence

- 15. For direct water supply services include 3 service interruption standards requiring WaterNSW to notify customers of planned and unplanned service interruptions.
- 16. For water release services modify the existing service interruption standard related to consultation about rescheduled water orders.
- 17. For water release services include a new service interruption standard requiring WaterNSW to notify customers before it ceases to, or becomes unable to, release water.

Service interruption performance standards are important for WaterNSW and its customers. The standards have been designed to ensure that WaterNSW's customers are provided with sufficient notification of service disruptions, including their frequency and impact. Our proposed amended performance standards also require WaterNSW to tell customers when they can anticipate a return to service.

The current licence includes 2 service interruption performance standards which require WaterNSW to:

- manage service interruptions for direct water supply customers in line with its asset management system
- for water release customers, reschedule water orders in consultation with affected customers within one working day of an expected water shortage or other delivery delay.¹⁶

Direct water supply services

We recommend adding 3 new service interruption performance standards as follows:

- WaterNSW must notify customers of planned service interruptions at least 7 days prior to the
 interruption commencing. Through our review, we identified issues with timely notification
 informing customers of planned interruptions across the system. We consider that the
 recommended performance standard will provide customers with the required clarity to plan
 for and manage planned interruptions in WaterNSW's water supply system.
- WaterNSW must provide customers with notification of when they expect to return to service
 for 95% of unplanned service interruptions. WaterNSW must provide the notification within
 24 hours of becoming aware that an interruption has occurred. We consider that it is
 reasonable for customers to expect that WaterNSW will inform them where there is a
 disruption to service and the expected rectification day/time. This will allow customers to
 better understand when they can anticipate a return to service.
- Where WaterNSW is unable to return to service by the expected rectification time (notified to
 customers under the previous performance standard), WaterNSW must notify customers of
 the revised rectification time before the end of the original rectification time. We consider that
 this updated notification will provide customers with an understanding of any notable delays
 which would impact them.

Water release services

We recommend the following interruption performance standards:

- Amend the existing performance standard to clarify that WaterNSW must reschedule water
 orders in consultation with an affected customer within one day of WaterNSW becoming
 aware of an expected water shortage or other relevant reason. This performance standard is
 effectively the same as the current performance standard. However, we have sought to
 clarify that the performance standard applies where WaterNSW is initiating the rescheduling
 of water orders, as opposed to any potential rescheduling requests made by customers.
- Add a new performance standard requiring WaterNSW to notify at least 95% of affected
 customers before WaterNSW ceases to, or becomes unable to, release water. This
 performance standard seeks to provide WaterNSW's water release service customers with
 clarity if WaterNSW ceases to be able to provide services in accordance with relevant
 licences, agreements and contracts (for example, in the case of prolonged drought).

Box 10 Recommended service interruption performance standards

16 Performance standards tables

Performance standards table 1: standards for direct water supply services

Service interruption performance standards

D-SI-1 For 100% of planned service interruptions, all affected customers are notified at least 7 days before commencement of the interruption.

D-SI-2: For 95% of unplanned service interruptions, all affected customers are notified of the expected rectification time within 24 hours of Water NSW becoming aware that an interruption has occurred.

D-SI-3: For 100% of unplanned service interruptions where Water NSW is unable to meet the expected rectification time notified under D-SI-2, all affected customers are notified of the revised expected rectification time before expiration of the original expected rectification time.

Performance standards table 2: standards for water release services

Service interruption performance standards

R-SI-1 100% of water orders that are rescheduled at Water NSW's initiative, are rescheduled in consultation with an affected customer within one day of Water NSW becoming aware of an expected water shortage or other relevant reason.

R-SI-2 At least 95% of affected customers are notified no less than 7 days before Water NSW ceases to, or becomes unable to, release water.

3.6 Account processing performance standards for temporary water trades

Our recommendations for the operating licence

- 18. Retain the current temporary trades performance standards.
- 19. Include a requirement that at least 95% of customers who place a non-complying temporary trade application are contacted to rectify that order within 5 business days.

The current licence includes 3 account processing performance standards related to temporary water trades. These standards require WaterNSW to ensure that no less than 90% of:

- complying temporary trades within NSW are processed within 5 working days of WaterNSW receiving a correct application and fee
- interstate temporary trades (except to South Australia) are processed within 10 working days of WaterNSW receiving a correct application and fee
- interstate temporary trades to South Australia are processed within 20 working days of WaterNSW receiving a correct application and fee.¹⁷

We recommend amending the trade standards as follows:

- for temporary trades within NSW WaterNSW must approve or reject no less than 90% of trade requests within 5 business days of WaterNSW receiving the application
- for interstate temporary trades (except to South Australia) WaterNSW must approve or reject no less than 90% of trade requests within 10 business days of WaterNSW receiving the application
- for interstate temporary trades to South Australia WaterNSW must approve or reject no less than 90% of trade requests within 20 business days of WaterNSW receiving the application.

We recommend amending the trigger point at which WaterNSW is required to start processing an application. Rather than the starting point being when WaterNSW receives a 'correct application and fee.' We recommend revising the performance standard to require WaterNSW to process the request (i.e. by approving it or rejecting it) within a certain time of receiving it. We consider that this will ensure that WaterNSW continues to effectively and efficiently process temporary trade requests. It also minimises the risk of WaterNSW failing to process requests because an application has not been made correctly or the associated fee has not been paid. We have also removed references to the financial year to align these performance standards with performance standards in other sections.

We also recommend adding one new performance standard requiring WaterNSW to contact at least 95% of customers who place a non-complying trade application within 5 business days, to ask the customer to rectify the application. We consider that the inclusion of this performance standard will encourage WaterNSW to continue to assess trade requests within an appropriate timeframe.

Box 11 Recommended trade performance standards

16 Performance standards tables

Performance standards table 4: standards for trades

Account processing standards

T-AP-1 No less than 90% of complying trade applications for temporary trades within the State are approved or rejected within 5 business days of Water NSW's receipt of the application.

T-AP-2 No less than 90% of complying trade applications for interstate temporary trades (except to South Australia) are approved or rejected within 10 business days of Water NSW's receipt of the application.

T-AP-3 No less than 90% of complying trade applications for interstate temporary trades to South Australia are approved or rejected within 20 business days of Water NSW's receipt of the application.

T-AP-4 At least 95% of customers who place a non complying trade application are contacted to rectify that application within 5 business days.

Relevant definitions

non-complying trade application means a request that would be a complying trade application except that:

- (a) the proposed temporary trade or interstate temporary trade is not consistent with the relevant licences or legislative frameworks, or is otherwise unlawful.
- (b) it contains insufficient information for Water NSW to process the request,
- (c) it is not accompanied by the relevant fee.

3.7 Clarifying when the performance standards apply

Our recommendations for the operating licence

20. Include an obligation outlining how to calculate performance standards.

There will be times when WaterNSW cannot meet certain performance standards for reasons outside of its control. Where relevant, we recommended exemptions in the licence to clarify that some water release service performance standards do not apply where failure to meet the standards are caused by:

- extreme events that WaterNSW could not reasonably have prevented or mitigated
- WaterNSW's compliance with a direction under law (e.g. if directed to stop releasing water by the Minister or SES).

We are recommending that these exemptions would only apply to water release services. Namely, the water delivery standard requiring WaterNSW to release water within one day of the scheduled day of release (R-WD-2) and the service interruption standard requiring WaterNSW to notify customers no less than 7 days before it becomes unable to release water (R-SI-2).

We also recommend including an exemption so that the water quality performance standards for water release services (R-WQ-1) do not apply where WaterNSW did not have advance notice of the event, and if WaterNSW provided notification as soon as reasonably possible after it became aware of the relevant event.

Box 12 We differentiate between calendar and business days

WaterNSW is required to service its customers at all times (i.e. not just on business days). Our performance standards distinguish between standards that apply by reference to 'business days' and those that apply by reference to 'days'. We consider that business days apply to administrative matters whereas days – which includes weekends and public holidays – apply to water delivery and service interruption performance standards.

Box 13 Recommended calculation and interpretation of performance standards

14 Calculation and interpretation of performance standards

- (1) The performance standards in this Part are to be calculated applying the following:
 - (a) standards that incorporate a percentage, are to be calculated as a percentage of the relevant event for that financial year,
 - (b) water delivery standard R-WD-2 and service interruption standard R-SI-2 are to be calculated to exclude issues caused by:
 - (i) extreme events that Water NSW could not reasonably prevent or mitigate,
 - (ii) compliance by Water NSW with a law (including a direction or order given under a law) if Water NSW could not reasonably have both complied with the law and taken steps to prevent or mitigate the issue,
 - (c) water quality standard R-WQ-1 is to be calculated to exclude non-provision of advance notifications where Water NSW did not have advance notice of the relevant event if Water NSW provided the notification as soon as reasonably possible after it became aware of the relevant event.
- (2) For the purposes of this clause 14 and the performance standards in this Part:

extreme event means a fire, flood, storm, earthquake or an illegal act by a third party, that is of unusual severity or duration, and includes any similar event or combination of Events.

planned service interruption means any service interruption that is not an unplanned service interruption.

scheduled day of release means the original scheduled day of release or the rescheduled day of release provided that the rescheduling occurs either at the customer's initiative or, if at Water NSW's initiative, is reasonably necessary.

unplanned service interruption means any service interruption where it is not possible for Water NSW to provide customers with at least 7 days of notice of the service interruption.

water quality incident means an impact on water quality resulting, in whole or part, from a non-compliance with the water quality management system maintained under clause 9.

3.8 Performance standards annual report

Our recommendations for the operating licence

21. Move the existing Reporting Manual requirement, for WaterNSW to submit an annual report on its compliance against the performance standards, to the Licence. Include a requirement for WaterNSW to make the report publicly available online.

Under the Reporting Manual, WaterNSW is required to provide an annual report to IPART on its performance against the performance standards.¹⁸ We recommend incorporating this obligation to the licence – this approach is consistent with other reporting requirements under the licence. We also recommend that WaterNSW be made to make the report to IPART publicly available online at the same time as it submits the report to us. We consider there is benefit, primarily in the form of increased transparency to customers, in requiring WaterNSW to publish an annual report that identifies how it tracked against the performance standards.

Box 14 Recommended performance standards annual report obligations

15 Performance standards annual report

Water NSW must, by 30 September each year:

- (a) submit an annual report to IPART on its compliance with the performance standards during the preceding financial year that includes, at a minimum, the information set out in the reporting manual, and
- (b) make that report publicly available online at the same time it submits it to IPART.

Chapter 4

Raw water quality for drinking water suppliers

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



To ensure continuity and quality of supply, drinking water suppliers such as Local Water Utilities (LWUs) rely on information provided by WaterNSW. LWUs use information on WaterNSW's raw water quality and water source events to inform the LWUs' drinking water quality assurance programs or management systems, which includes the LWUs' water treatment processes.

In this chapter, we provide our recommendations for ensuring WaterNSW commits to service levels with drinking water suppliers and maintains agreed water quality monitoring and notifications.

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

Our recommendations for the operating licence

22. Replace the current requirement for WaterNSW to have a local water utility register and information request procedure with a water quality policy for drinking water suppliers, and processes for determining water quality monitoring parameters, engaging with drinking water suppliers and data provision.

The current licence requires 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. ¹⁹ This request procedure is a reactive process that has not been widely used by LWUs during the current and previous licence terms.

The recommended licence conditions require WaterNSW to:

- Develop and implement a policy about the quality of water it makes available to drinking
 water suppliers. The policy must include the roles of and responsibilities of WaterNSW and
 drinking water suppliers, WaterNSW's processes for a matters including providing drinking
 water suppliers with water quality data or direct access to it, and WaterNSW's role in relation
 to educating drinking water suppliers on accessing and understanding water quality data.
- Develop parameters for monitoring and notification. This provides for a more coordinated and tailored approach to water quality monitoring and management. It also recognises that drinking water suppliers may have unique water quality concerns in various locations across the state and so a one-size-fits-all is not appropriate.
- Publish a summary of its service commitments to drinking water suppliers, have agreed water
 quality parameters and have a proactive notification protocol when those parameters are not
 met. This condition goes part way to replacing the current licence's reactive information
 request procedure.

A more proactive and customer focused arrangement will be more useful to drinking water suppliers in planning and adjusting treatment and delivery of drinking water to its customers. Further, it will enhance the ability for LWUs to have effective and timely responses to adverse water quality or quantity events and prepare or warn communities in an appropriate manner.

We consider that that the policy on raw water quality and summary of service commitments for drinking water suppliers would reflect the extent of WaterNSW's role in improving water quality for water supplied for drinking water purposes to the extent it can, within its control.

Together, these requirements aim to assist in maintaining drinking water quality and provide data that will assist in operational efficiency.

We consider that while WaterNSW is largely a water quantity manager in the non-declared catchments, it has some, albeit limited, ability to influence water quality. For example, WaterNSW can influence water temperature and dissolved oxygen levels through varying offtake levels at some dams. The same principle applies to identifying and reducing hazards to end users.

We consider our recommended approach provides the following benefits:

- Drinking water suppliers such as 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 raw 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.

We consider this condition to have positive net benefits and low costs. The cost-benefit analysis supports our recommendation.

Box 15 Recommended licence conditions for policy on raw water quality for drinking water suppliers

17 Policy on raw water quality for drinking water suppliers

- (1) Water NSW must, from 1 July 2025, make publicly available online a policy about the quality of water it makes available to drinking water suppliers (other than Sydney Water and Hunter Water) that specifies:
 - (a) the roles and responsibilities of Water NSW and drinking water suppliers, including Water NSW's role in relation to:
 - (i) improving water quality monitoring,
 - (ii) improving the quality of the water it makes available to drinking water suppliers,

Box 15 Recommended licence conditions for policy on raw water quality for drinking water suppliers

- (iii) identifying and reducing hazards and risks to end-users related to drinking water treated and supplied by drinking water suppliers, and
- (iv) educating drinking water suppliers on how to access and understand:
 - (A) advance notifications provided by Water NSW under clause 19, and
 - (B) water quality data provided by Water NSW,
- (b) Water NSW's processes for:
 - (i) supporting advance notifications under the early warning system by determining water quantity and water quality parameters that apply above or in addition to the performance standards and that are meaningful and reasonable considering local conditions,
 - (ii) water quality monitoring,
 - (iii) engaging with drinking water suppliers (including maintaining current contact details for each drinking water supplier), and
 - (iv) providing drinking water suppliers with water quality data or direct access to it,
- (c) the actions Water NSW commits to take to enhance the performance of its roles and responsibilities under (a) and its processes under (b).
- (2) Water NSW must consult with NSW Health and drinking water suppliers (other than Sydney Water and Hunter Water) to develop the policy required under clause 17(1).
- (3) If Water NSW revises the policy required under clause 17(1), Water NSW must:
 - (a) consult with NSW Health and drinking water suppliers (other than Sydney Water and Hunter Water) on the revisions, and
 - (b) make the updated policy publicly available online.

Box 16 Recommended licence condition for water quality parameters for drinking water suppliers

18 Water quality parameters for drinking water suppliers

- (1) Water NSW must, by 1 July 2026, determine the water quantity and water quality parameters for each region consistent with the processes set out in the policy referred to in clause 17(1).
- (2) Water NSW may update the water quantity and water quality parameters consistent with the processes set out in the policy.

Box 17 Recommended licence condition for policy on summary of service commitments to drinking water suppliers

20 Summary of service commitments to drinking water suppliers

- (1) Water NSW must, from 1 July 2026, make publicly available online a summary of its service commitments to drinking water suppliers (other than Sydney Water and Hunter Water) that:
 - (a) sets out the water quantity and water quality parameters for each region that Water NSW has determined under clause 18, and
 - (b) summarises the types of advance notifications covered by the early warning system maintained under clause 19.
- (2) If Water NSW revises the policy required under clause 17(1), the early warning system or the water quantity or water quality parameters determined under clause 18, it must update the summary if necessary to ensure the summary reflects any relevant revisions and make the updated summary publicly available online.

4.2 Water quality monitoring enhancements program

Our recommendations for the operating licence

- 23. Include a new requirement for WaterNSW to maintain a water quality monitoring enhancements program that enhances risk-related monitoring of raw water and identifies locations where monitoring equipment needs to be installed, replaced or relocated.
- 24. Include an obligation requiring WaterNSW to provide an annual report to IPART on the water quality monitoring enhancements program.

Water is released from dams and reservoirs based on the water orders requested from LWUs and is extracted from rivers and streams at various points downstream. WaterNSW collects water quality data at various locations including gauging stations across the state, both through online monitoring and manual sampling for laboratory analysis. However, LWUs are not able to easily access this information.

We recommend adding a new licence condition requiring WaterNSW to develop a risk-related monitoring program for water supplied to drinking water suppliers and the environment.

Additional monitoring of water released for LWUs would pre-emptively identify changed water quality and allow downstream drinking water suppliers to prepare or warn communities appropriately.

Drinking water suppliers such as LWUs often do not have adequate resilience and/or capability in their storage and treatment infrastructure to deal with sudden or significant changes in raw water quality, flow, or delivery, including from WaterNSW-operated river systems. We consider WaterNSW has limited ability to influence water quality, for example temperature and dissolved oxygen through varying offtake levels at some dams.

The Town Water Risk Reduction Program (developed and supported by the Department)^a is a partnership between LWUs and the wider water sector to enable LWUs to strategically manage risks and priorities in town water systems.²⁰

The 2017–2022 WaterNSW licence required WaterNSW to undertake a review of monitoring requirements for LWUs. This review was completed in 2019.²¹ The review identified several opportunities to improve water quality monitoring for LWUs. The key review findings included improving awareness of existing information and data, enhancing data and information availability and enhancements to the current monitoring program.

We consider that there is value in recommending the program include monitoring of regulated and unregulated rivers, as this provides for better environmental outcomes. To reduce duplication and limit the cost of the program, we recommend that WaterNSW consider a range of matters, including costs and benefits of different sampling locations and methods, and consult with the Department in developing the program, by 1 July 2026.

_

 $^{^{\}rm a}$ $\,$ The Department of Climate Change, Energy, the Environment and Water.

In refining the revised obligations, we sought additional feedback from WaterNSW and the Department after the consultation process. As a result, we amended our definitions to improve clarity around water for the environment.

We consider that additional monitoring of water released for local water utilities, particularly real-time monitoring, would identify water quality changes and allow for downstream water source adjustments, water treatment and allow water suppliers prepare or notify communities of water quality changes. Therefore, we recommend:

- Requiring WaterNSW to consider environmental monitoring. We consider that this would not
 necessarily add to its cost since certain parameters may be suited to both drinking water
 quality and environmental water quality (e.g. pH, dissolved oxygen, turbidity, electrical
 conductivity).
- Requiring risk-based prioritisation. The condition would require WaterNSW, in developing the
 program, to consider how priority is to be determined and to consider the costs and benefits
 of sampling methodology and parameters.
- Requiring WaterNSW to consult with the Department in developing its monitoring program and to also submit the relevant annual report to the Department.

We expect that requiring WaterNSW to prioritise and consider costs and benefits, will lead to a focus on online monitoring as opposed the more costly and inherently time-consuming manual grab sampling. The main benefit of this condition is that it will give LWUs timely information about water quality information, particularly the parameters that can be measured in real time or online. Such information is expected to better equip downstream users including LWUs to provide more effective and timely responses to adverse water quality or quantity events. For example, this is expected to potentially assist drinking water suppliers to:

- pre-emptively identify changed water quality
- prepare or warn communities appropriately
- make better decisions about water source and treatment
- diagnose problems before they arise
- save on additional treatment costs, customer complaints and boil water events.

Our February 2024 cost-benefit analysis report on the draft licence found that this condition was supported by a marginal net benefit of \$0.8m (BCR of 1.03). We expect that our recommended changes will reduce implementation costs related to staffing so that the revised BCR is now 1.25.

Given the positive net benefit found, we consider that this condition is supported by the cost-benefit analysis.

Box 18 Recommended licence condition for water quality monitoring enhancements program

21 Water quality monitoring enhancements program

- (1) Water NSW must, from 1 July 2026, maintain an ongoing water quality monitoring enhancement program that:
 - (a) enhances risk-related monitoring of raw water for:
 - (i) drinking water suppliers (excluding Sydney Water and Hunter Water), and
 - (ii) the environment, and
 - (b) identifies locations where monitoring equipment needs to be installed, replaced or relocated.
- (2) In developing the program, Water NSW must:
 - (a) consult with the Department, and
 - (b) consider:
 - (i) the 'Roadmap to an improved regulatory framework for local water utilities' published by the NSW Government in October 2021,
 - (ii) the activities already undertaken by Water NSW in connection with implementing the Town Water Risk Reduction Program referred to in the Roadmap,
 - (iii) environmental water quality monitoring opportunities for raw water for drinking water suppliers and for the environment,
 - (iv) how priority is to be determined including the costs and benefits of different sampling locations and methods, and
 - (v) comments provided by the Department.
- (3) Water NSW must, by 30 November each year commencing 2026, submit an annual report to IPART and the Department detailing its program-related activities for the preceding financial year and the implementation timeline for outstanding activities (including how it considered the matters in clause 21(2)(b)) in accordance with the reporting manual.

4.3 Early warning system

Our recommendations for the operating licence

25. Modify the advance notification system requirements to address information gaps related to water quality data.

The current licence requires WaterNSW to maintain an advance notification system to notify customers and other stakeholders of changes to flow release patterns. Customers and stakeholders must register to receive such notifications.²²

We recommend modifying the existing condition by requiring WaterNSW to provide more effective and timely responses to adverse water quality or quantity events, address information gaps in water quality data and, specify that the system must cover certain types of advance notification. We understand that LWUs need advance notification of changes to water quality arising from changes to source water, that is, water offtake levels and the location of water that is used to supply WaterNSW's customers. This type of information can assist LWUs in water treatment planning, for example, the type and extent of filtration needed for removal of turbidity. We recognise that WaterNSW already maintains its WaterInsights Portal where customers can find valuable information on water allocations, volumes in storages, water quality alerts and more.²³

We recommend that WaterNSW develop a set of key water quality parameters to provide interested stakeholders with a notification of significant water quality changes. WaterNSW should also provide a summary of service commitments to drinking water suppliers that sets out the water quantity and water quality parameters for each region, and the types of advance notifications covered by the early warning system. We do not propose that WaterNSW must comply with these water quality parameters, but rather provide notification of any exceedances under the early warning system.

We expect this condition will 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.

We had proposed in the draft licence to require WaterNSW to include actual and predicted downstream river heights We did not adopt that recommendation as the Bureau of Meteorology (BOM) is the responsible agency for providing flood warnings at forecast locations.

Our cost-benefit analysis estimated the net benefits of the proposed condition would range from a net benefit of \$5.0m (BCR 2.85) to a net benefit of \$0.9m (BCR 1.12). The cost-benefit analysis relied significantly on the benefits of flood notification, which has since been removed from the licence. However, we consider the costs would also become considerably lower and that the cost-benefit analysis would continue to support the recommendation,

Box 19 Recommended licence condition for early warning system

19 Early warning system

- (1) Water NSW must, from 1 July 2026, maintain an effective system for providing advance notification of the matters specified in clause 19(3) to all persons, including customers, who have registered for notifications (early warning system).
- (2) Water NSW must, from 1 July 2026, implement and comply with the early warning system.
- (3) Water NSW must ensure the early warning system includes the following types of advance notifications:
 - (a) significant changes to flow from its works, including:
 - (i) actual significant dam releases or overflow, including emergency situations such as flood related releases and overflow, and
 - (ii) predicted significant dam releases or overflow for the next 24 hours based on forecast modelling,
 - (b) changes to water source (including catchment and dam or other storage), including transfers between dams or other storages,
 - (c) changes to offtake levels that significantly impact water characteristics, including temperature and algal levels, and
 - (d) exceedance, or forecast exceedance, of the water quantity and water quality parameters determined under clause 18.
- (4) If Water NSW cannot provide a person with an advance notification under clause 19(3)(d) because it did not have information in advance of the relevant event, it must provide the notification as soon as reasonably possible after it becomes aware of the relevant event.
- (5) Until Water NSW has developed and implemented the early warning system required by this clause 19 it must maintain and implement its existing advance notification system.

Chapter 5 🔪

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 recommended Licence).



In this chapter, we discuss our recommendations for licence conditions requiring WaterNSW to:

- maintain a customer service charter and customer supply agreements
- undertake customer engagement to inform WaterNSW's business practices and the next licence and pricing reviews
- have policies and procedures in place to help vulnerable customers facing payment difficulties and family violence, and ensure that customers can make complaints to WaterNSW and escalate them to an external dispute resolution scheme if required.

Our recommendations aim to:

- ensure that WaterNSW continues to provide customers with a minimum level of customer service and protections
- minimise the risk that WaterNSW may avoid offering protections to its customers, where it is
 not in its commercial interest to do so. Having adequate measures to protect customers'
 rights is important to prevent WaterNSW from potentially taking advantage of its monopoly
 power. This could adversely affect the quality and delivery of essential water services.

Our recommendations are adequate measures to protect customers' rights, which is important to prevent WaterNSW from potentially taking advantage of its monopoly power to reduce the quality or delivery of essential water services

5.1 Customer supply agreements for direct water supply services

Our recommendation for the operating licence

26. Retain the current requirement for WaterNSW to establish and maintain customer supply agreements with customers to which it provides direct water supply services.

The current licence requires WaterNSW to establish and maintain agreements with customers, other than Sydney Water, that receive direct water supply services. ²⁴ The minimum requirements which these agreements must contain are specified in the current licence. We consider that this clause remains relevant to WaterNSW's operations and provides direct water supply customers with an understanding of what they can expect as a customer of WaterNSW. We recommend retaining the current licence condition, with minor amendments to clarify that the customer supply agreements also extend to Fish River Water Supply Scheme customers.

These requirements will not apply to the arrangements with Sydney Water, as they are already regulated under the *Water NSW Act 2014*.^a

^a Water NSW Act 2014, Part 2 Division 7.

Box 20 Recommended licence conditions for customer supply agreements for direct water supply services

22 Customer supply agreements for direct water services

- (1) Water NSW must establish and maintain an agreement with each customer it provides direct water supply services (other than Sydney Water) and each customer of the Fish River water supply scheme, that specifies:
 - (a) the quality of the water supplied by Water NSW,
 - (b) service continuity processes, including for service interruptions, disconnections and reconnections,
 - (c) metering arrangements (if relevant),
 - (d) fees and charges payable by the customer for the direct water supply services,
 - (e) dispute resolution and complaint handling procedures, and
 - (f) terms and conditions preventing the customer from supplying water as drinking water unless authorised to do so by law.
- (2) Water NSW must comply with the customer supply agreements that it maintains under clause 22(1).

5.2 Water allocation accounts

Our recommendations for the operating licence



27. Retain the current 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*.

Under the current licence, WaterNSW must maintain a water allocation account for customers that hold a water licence.^{b,25} We consider this clause continues to serve its purpose. We recommend retaining this obligation with minimal changes.

WaterNSW releases water to customers who hold water licences when they place a water order. For billing and water management purposes, these customers must have water allocation accounts to place these water orders and receive the water.

Water licences are issued to customers under Chapter 3, Part 2 of the *Water Management Act 2000* or Part 2, Division 3 of the *Water Act 1912*.

Box 21 Recommended licence conditions for water allocation accounts

23 Water allocation accounts

Water NSW must maintain a water allocation account for each customer with a licence issued under the *Water Act 1912* or the *Water Management Act 2000*.

5.3 Measuring water supplied, released and extracted

Our recommendations for the operating licence

28. Retain and clarify the current 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.

The current licence requires WaterNSW to determine the volume of water taken by customers at least once a year for the purposes of accurately billing customers, managing accounts and assisting with its reporting requirements.²⁶ This data is also used by other stakeholders, including Government agencies to meet their regulatory functions. Therefore, we recommend minor amendments to the clause to not limit the purpose of collection and use of this data for billing and reporting. We consider that this does not change the intent of the clause.

Box 22 Recommended licence conditions for measuring water supplied, released and extracted

24 Measuring water supplied, released and extracted

Water NSW must, for each financial year, determine the volume of water:

- (a) supplied to customers receiving direct water supply services and each customer of the Fish River water supply scheme, and
- (b) released to, and extracted by, customers receiving water release services.

5.4 Engagement with customers and the community

Our recommendations for the operating licence

29. Remove the current requirement to maintain a Customer Advisory Group (CAG) and-modify the current customer engagement requirements to focus on engagement outcomes.

Customer engagement is important for transparency and information sharing (e.g. notifying customers of upcoming maintenance work). We recommend licence conditions which require WaterNSW to engage regularly with the community to ensure that its services are aligned with customer expectations. However, our Review has found that the existing licence provisions place unnecessary regulatory burden on WaterNSW.

We recommend maintaining provisions for WaterNSW to engage with customer representatives as a minimum. The new obligation sets out minimum requirements for which WaterNSW must engage with its customers and the community about. For example, WaterNSW's customer base spans across several different regions and valleys, each with their own unique characteristics and needs. As part of the licence obligation, we recommend that one of the outcomes of WaterNSW's customer engagement should be to understand valley specific and regional issues.

To ensure that WaterNSW appropriately engages with its broad customer base, we also recommend that WaterNSW must make all reasonable efforts to engage with customers and community. The new licence condition lists the types and groups of customers that WaterNSW should engage with, at a minimum. It captures representation from a broad range of stakeholders including customers, community groups and water users such as Aboriginal cultural heritage water users.

The current licence requires WaterNSW to:

- establish and maintain customer advisory groups (CAGs) for customers in its area of operations²⁷
- consult with these groups and prescribes the various types of customer representations, for example, stock and domestic water users, regulation river water users, and others²⁸

Throughout our Review, we heard that many customers liked the CAGs. Our recommended approach does not prevent WaterNSW from continuing its current approach to engage via the CAGs but offers flexibility to tailor its engagement methods.

We do not prescribe the method by which WaterNSW must engage with its customers. However, we expect WaterNSW to engage with customers in a meaningful way to understand their needs and preferences. These insights should inform its submission to the price determination. We will assess the effectiveness of WaterNSW's engagement with customers and stakeholders in line with our Water Regulation Handbook and the 3C's framework at the next pricing review. ^{c 29} We provide examples in the Handbook of good practice engagement.

^c IPART regulates the price and performance of several NSW water businesses using a framework that focuses on customers, costs and credibility (i.e. the 3Cs framework).

Our cost-benefit analysis published in February 2024 found a net disbenefit based on information provided by WaterNSW at the time. The rationale for our finding was WaterNSW's feedback that the draft licence condition would not change the level of consultation they undertook. After further consultation on the draft conditions, we consider that this licence condition would permit WaterNSW to undertake that level of consultation in a different way that is perhaps more effective. WaterNSW noted that removing the prescription from the existing licence by including this new condition may not result in a large cost saving, however the benefits would be significant because of the newfound flexibility to consult in a more efficient and effective manner. We also note that the additional costs imposed by this licence condition would be minor. Given these points, we now consider that net benefits, while difficult to quantify, are positive.

Box 23 Recommended licence conditions for engagement with customers and the community

26 Engagement with customers and the community

- (1) Water NSW must regularly engage with customers and the community to:
 - (a) understand customer preferences and willingness to pay for service levels,
 - (b) understand valley specific and regional issues,
 - (c) understand how its systems and processes can support more effective, direct relationships with its customers and the community,
 - (d) obtain insights on such other issues related to Water NSW's functions under this licence that impact on customers and the community, and
 - (e) in the lead up to the end of term review referred to in clause 60, hear feedback and perspectives from customers and the community.
- (2) Water NSW must use all reasonable efforts to ensure its engagement with customers and the community under this clause 26 includes engagement with small, medium and large water users; users of both regulated and unregulated rivers (within the meaning of the *Water Management Act 2000*); stock and domestic water users; industrial and commercial water users; groundwater users; environmental water users; Aboriginal community representatives and cultural water users; WIC Act licensees; public water utilities; NSW Government Departments and agencies; and the broader community.
- (3) Water NSW must provide persons with whom it engages under this clause 26 with adequate information (excluding confidential information) to enable them to engage meaningfully with the relevant issues.
- (4) Water NSW must, by 1 July 2025, make publicly available online a policy for undertaking the engagement required by this clause 26 (**engagement policy**).

Box 23 Recommended licence conditions for engagement with customers and the community

- (5) Water NSW must, from 1 July 2025, implement and comply with the engagement policy.
- (6) Until Water NSW has published the engagement policy, it must maintain and continue to engage with its existing customer advisory group.
- (7) In this clause 26, **valley** means Fish River, and the coastal valleys and MDB valleys identified in IPART's Final Determination: Prices for Bulk Water Service from October 2021.

5.5 Customer service charter

Our recommendations for the operating licence

30. Modify the requirement for WaterNSW to have a customer service charter to simplify the obligation and clarify the intent.

The current licence requires WaterNSW to establish and maintain a customer service charter.³⁰ This obligation remains relevant to WaterNSW's customer service obligations. However, we do not consider it necessary to specify the matters a charter must address within this obligation. This is consistent with our recommended changes to the obligation to engage with customers and the community (section 5.4 above) which now specifies the outcomes which may previously have formed part of the charter. We recommend changes to this clause to simplify and clarify its intent.

Box 24 Recommended licence conditions for the customer service charter

25 Customer service charter

Water NSW must at all times make publicly available online a customer service charter that sets out the responsibilities of Water NSW and its customers and how Water NSW will engage with its customers.

5.6 Code of practice on payment difficulties

Our recommendations for the operating licence

31. Retain the current requirement for WaterNSW to have and follow a code of practice on payment difficulties and to make it available online.

We recommend retaining the current licence requirements for WaterNSW to maintain and implement a code of practice on payment difficulties. Access to payment assistance is necessary to protect customers experiencing payment difficulties. It protects them from WaterNSW restricting or disconnecting the water supply or suspending water access licences due to unpaid bills. Water supply is an essential service: customers rely on it for basic hygiene and drinking water and for farming and irrigation purposes.

WaterNSW currently offers customers the following payment assistance options:

- extensions to payment dates of bills
- payment plans to pay bills in smaller amounts more frequently with no payment fees or interest charges applied.

The current licence specifies minimum requirements for what the code of practice on payment difficulties should cover.³¹

We recommend retaining these requirements as we consider they are the minimum necessary to ensure that the code of practice on payment difficulties is effective and enforceable. We do not recommend prescribing any more requirements. We consider that WaterNSW's code of practice on payment difficulties is working effectively.

However, a payment assistance code is only effective as a customer protection if the customers are aware of its existence. Therefore, we recommend retaining requirements for WaterNSW to provide information about payment assistance to its customers, by doing the following:

- publish the code of practice on payment difficulties on its website
- notify customers (other than drinking water suppliers) at least once each financial year, through their bills, that they can access the code of practice on payment difficulties from WaterNSW's website
- require WaterNSW to provide the code to each customer (other than a drinking water supplier) that WaterNSW identifies is experiencing payment difficulty within one business day of the date WaterNSW first identifies the customer is experiencing payment difficulty.

Box 25 Recommended licence conditions for the code of practice on payment difficulties

27 Code of practice on payment difficulties

- (1) Water NSW must maintain a code of practice on payment difficulties that:
 - (a) provides for payment plans for customers who, in Water NSW's reasonable opinion, are experiencing payment difficulty,
 - (b) details the circumstances when Water NSW may restrict, suspend or cease to provide, water release services and direct water supply services and the process for restriction, suspension or cessation, and
 - (c) includes processes for self-identification, identification by community welfare organisations and identification by Water NSW of customers experiencing payment difficulty.
- (2) Water NSW must:
 - (a) make the code of practice publicly available online,
 - (b) notify all customers (other than drinking water suppliers) the code is publicly available online at least once each financial year using the method chosen by the customer to receive their bill, and
 - (c) provide the code to each customer (other than a drinking water supplier) that Water NSW identifies is experiencing payment difficulty within one business day of the date Water NSW first identifies the customer is experiencing payment difficulty.
- (3) Water NSW must implement and comply with the code of practice.

5.7 Family violence policy

Our recommendations for the operating licence

32. Include a new requirement for WaterNSW to maintain, implement and comply with a family violence policy, and publish and notify customers of this policy.

We recommend including a new licence requirement for WaterNSW to maintain, implement and comply with a family violence policy. The policy offers necessary security to customers experiencing family violence. It is important that providers of essential services take actions to reduce risks for such individuals.

Additionally, we recommend defining family violence in the licence consistent with the definition in section 8 of the *Intervention Orders (Prevention of Abuse) Act 2009* (SA). This is a thorough definition covering the various types of domestic abuse that we consider WaterNSW's policy should cover.^d

We recommend that the licence should require WaterNSW's family violence policy to cover the following matters, at a minimum:

- Provisions for identifying customers who are experiencing family violence. Adequate
 identification of vulnerable customers is a necessary first step before WaterNSW can take
 steps to protect personal information and minimise the need for the customers to disclose
 the family violence that they are experiencing.
- WaterNSW's payment assistance options for individuals experiencing both family violence and payment difficulty and how they can access these options. Additionally, the policy must set out that customers who own or occupy a residential property will not face consequences for not paying their bills. This means that they will not incur late/dishonoured payment fees, have their services restricted or disconnected due to non-payment of bills, and their debts will not be referred to third party debt collectors. Family violence can increase the complexity of financial hardship.³² Perpetrators of family violence often avoid responsibility for debts and leave their partners or former partners with substantial liabilities. Debt incurred through jointly held accounts is one of the most difficult issues for customers experiencing family violence to resolve with financial institutions.³³ Domestic and family violence is the leading cause of homelessness for women and children.³⁴
- Provisions for protecting the private and confidential information. Customers need to be confident that there will be no deliberate or inadvertent disclosure of their personal information to anyone associated with the perpetrator of abuse.
- Processes for minimising the need for individuals to disclose their family violence or provide
 evidence of it. To meet this requirement, WaterNSW should take steps to ensure that their
 status as individuals experiencing family violence is accurate, appropriately recorded and
 communicated within the organisation. WaterNSW should provide these individuals with
 suitable protections.

-

We previously considered aligning the recommendation of family violence with that in the Family Law Act 1975 (Cth). However, we have recommended aligning it with the South Australian Act's definition as it more completely covers the various types of domestic abuse that we consider WaterNSW's family violence policy should cover.

- WaterNSW's processes for enabling customers experiencing family violence to nominate
 when and how they can be contacted, so that they are not contacted at times or via
 communication methods that could inadvertently increase their vulnerability to family
 violence.
- WaterNSW's processes for referring individuals experiencing family violence to specialist support services. This might be for counselling services, emergency financial relief and medical advice and support.

The policy can also include additional matters that WaterNSW considers appropriate.

We consider 12 months (i.e. by 1 July 2025) provides WaterNSW sufficient time to develop and implement a family violence policy. We understand that WaterNSW intends to create new systems to deliver this obligation. However, our recommended licence condition allows WaterNSW to amend and update its policy as its systems and processes evolve. We consider there could be more than one option for how licence obligations are funded and consider that the benefits of a family violence policy are significant.

As with the code of practice on payment difficulties, we recommend a new licence condition requiring WaterNSW to publish its family violence policy on its website, communicate its availability to its customers at least once each financial year with their bills, provide the policy to any person upon request, and keep the information up to date, to ensure that customers are aware of their rights.

Box 26 Recommended licence conditions for the family violence policy

- (1) Water NSW must, from 1 July 2025, maintain a family violence policy.
- (2) The family violence policy must, at a minimum, provide for:
 - (a) the identification of customers experiencing family violence,
 - (b) the protection of private and confidential information,
 - (c) processes to minimise the reliance on individuals to disclose their family violence or to provide evidence of their family violence,
 - (d) processes for customers experiencing family violence to nominate their preferred method of communication and when they can be contacted,
 - (e) processes for referrals to specialist support services, and
 - (f) in the case of customers who receive drinking water and who own or occupy a residential property, access to payment difficulty processes, including the option to miss payments without:
 - (i) fees for late or dishonoured payments being charged,
 - (ii) services being restricted or legal action being taken, and

Box 26 Recommended licence conditions for the family violence policy (iii) debts being sold to third parties.

- (3) Water NSW must, from 1 July 2025:
 - (a) make the family violence policy publicly available online,
 - (b) notify all customers (other than drinking water suppliers) the policy is publicly available online at least once each financial year using the method chosen by the customer to receive their bill, and
 - (c) provide the policy to any person upon request.
- (4) Water NSW must, from 1 July 2025, implement and comply with the family violence policy.
- (5) In this clause 28, **family violence** means domestic abuse within the meaning of section 8 of the *Intervention Orders (Prevention of Abuse) Act 2009* (SA) as at 1 July 2024.

5.8 Internal complaints handling

Our recommendations for the operating licence

- 33. Modify the current complaints handling requirement to reflect revised standards.
- 34. Include an obligation for WaterNSW to publish a summary of the complaints handling process and provide a copy to anyone that requests it.

We recommend retaining the current licence requirements for WaterNSW to maintain. implement and comply with its internal complaints handling procedure. Customers of utilities should have the opportunity to provide feedback and make complaints if the service they receive does not meet their expectations. This allows the utility to improve their services, aligned with customer expectations. An effective complaints handling mechanism means that customers will enjoy a higher quality of service than they otherwise would, everything else being the same. This is particularly important in the case of monopoly suppliers of essential services like WaterNSW where customers do not have the choice of changing providers.

We recommend retaining the licence condition requiring WaterNSW's procedures to be consistent with the Australian Standard so that these procedures meet the minimum accepted industry standards and expectations.

WaterNSW's existing procedure complies with the 2014 version of the Australian Standard as required by the current licence. However, to ensure currency, we recommend requiring WaterNSW to comply with the newer 2022 version of the standard in the licence. The licence should allow WaterNSW a year to fully transition its procedures to be consistent with the 2022 version (i.e. by 1 July 2025). Until that time, the procedure should continue to be consistent with the 2014 version. This version remains appropriate for the interim.

As with the code of practice on payment difficulties and family violence policy, we recommend new licence conditions requiring WaterNSW to publish a summary about its internal complaints handling procedure on its website, communicate its availability to its customers at least once each financial year with their bills to ensure that customers are aware of their rights, and provide the summary to any person upon request.

Box 27 Recommended licence conditions for internal complaints handling

- (1) Water NSW must, from 1 July 2025, maintain an internal complaints handling procedure for receiving, responding to and resolving complaints that is consistent with:
 - (a) Australian Standard AS 10002:2022 Guidelines for complaint management in organizations, or
 - (b) another complaint management standard nominated by Water NSW and approved by IPART,

(the internal complaints handling procedure).

- (2) Water NSW must, from 1 July 2025, implement and comply with the internal complaints handling procedure.
- (3) Until Water NSW has developed the internal complaints handling procedure required by clause 29(1), it must maintain, implement and comply with a procedure that is consistent with the *Australian Standard AS/NZS 10002:2014 Guidelines for complaint management in organizations*.
- (4) Water NSW must, from 1 July 2025:
 - (a) make publicly available online a summary of the internal complaints handling procedure that explains how to make a complaint and how Water NSW will receive, respond to, and resolve complaints,
 - (b) notify all customers (other than drinking water suppliers) the summary is publicly available online at least once each financial year using the method chosen by the customer to receive their bill, and
 - (c) provide the summary to any person upon request.

5.9 External dispute resolution scheme

Our recommendations for the operating licence

35. Retain the current requirement for WaterNSW to be a member of EWON and publish the dispute resolution services provided by EWON online.

We recommend retaining the current licence requirements for WaterNSW to be a member of Energy and Water Ombudsman NSW (EWON).³⁶ Being a member of EWON enables its customers to escalate any unresolved complaints and disputes to an external resolution service. As with complaints handling, external dispute resolution helps to ensure that services provided meet customer expectations. Being a member of EWON is the minimum requirement we recommend for external dispute resolution.

We recommend that the licence also includes flexibility to allow WaterNSW to be a member of another external dispute resolution scheme if it meets the minimum requirements set out in the licence, and with IPART's approval. At this stage we consider that there are no suitable alternatives to EWON that would ensure customers are given similar levels of protection. However, the proposed flexibility will mean that the licence does not limit WaterNSW from considering other options if a suitable alternative were to become available during the licence term. Requiring IPART's approval before changing providers from EWON to the alternative scheme allows us a mechanism to review the scheme's appropriateness and ability to protect customers' interests, in a similar way that EWON currently does. We made similar recommendations for the 2022–2027 Hunter Water operating licence.

As with the code of practice on payment difficulties, family violence policy and internal complaints handling procedure, we recommend a new licence condition requiring WaterNSW to publish a summary about the external dispute resolution scheme on its website, and communicate its availability to its customers at least once each financial year with their bills to ensure that customers are aware of their rights.

Box 28 Recommended licence conditions for external dispute resolution scheme obligations

30 External dispute resolution scheme

- (1) Water NSW must be a member of the EWON or an alternative dispute resolution scheme to help Water NSW and its customers resolve disputes.
- (2) Water NSW must:
 - (a) make publicly available online a summary that explains the right to have a complaint or dispute referred to the external dispute resolution scheme, lists the dispute resolution services provided by the scheme, and explains how to contact the scheme provider, and
 - (b) notify all customers (other than drinking water suppliers) the summary is publicly available online at least once each financial year using the method chosen by the customer to receive their bill.
- (3) In this clause 30:

alternative external dispute resolution scheme means a scheme nominated by Water NSW and approved by IPART that satisfies the following:

- (a) approved by the Minister and published in the NSW Government Gazette,
- (b) provides an independent dispute resolution service,
- (c) free for customers and consumers, and
- (d) consistent with the Commonwealth Benchmarks for Industry-based Customer Dispute Resolution (published March 2015).

EWON means the Energy & Water Ombudsman NSW being the NSW industry complaints scheme for the water industry of that name and any successor to that scheme

Chapter 6 📡

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 recommended Licence).



WaterNSW's principal objectives under the Act include ensuring that declared catchment areas, and water management works in the declared catchments, are managed and protected to promote water quality, and to protect public health, public safety and the environment.³⁷ This is accompanied by some of WaterNSW's broader objectives which are applicable to declared and non-declared catchments:³⁸

- to exhibit a sense of social responsibility by having regard to the interests of the community in which it operates, and a sense of responsibility towards regional development and decentralisation in the way in which it operates
- where its activities affect the environment, to conduct its operations in compliance with the principles of ecologically sustainable development contained in section 6(2) of the *Protection of the Environment Administration Act 1991*.

In this chapter, we discuss our recommendations related to catchment management, catchment and river health research and WaterNSW's educative role across its areas of operation.

Box 29 WaterNSW has declared and non-declared catchment areas

Under section 40 of the Act, the Governor may, by order published in the Gazette, declare an area of land to be, or to be part of, a declared catchment area of WaterNSW. To date, only Sydney's drinking water catchments have been declared under this provision.

The declared catchment covers an area close to 16,000km² and extends from north of Lithgow in the upper Blue Mountains, to the source of the Shoalhaven River near Cooma in the south – and from Woronora in the east to the source of the Wollondilly River west of Crookwell.

Catchments that are not deemed declared catchment areas are considered nondeclared catchment areas.

Source: Sydney Water Catchment Management (Catchment Areas) Order 1999 and WaterNSW, Sydney's drinking water catchments. December 2015

6.1 Managing catchments across NSW

Our recommendations for the operating licence

- 36. Retain the current requirement for WaterNSW to manage and protect declared catchment areas.
- 37. Move the existing Reporting Manual requirement, for WaterNSW to submit its annual catchment management report to IPART, to the Licence and include an obligation for WaterNSW to publish the report online.

WaterNSW manages the Greater Sydney drinking water catchment to ensure the reliability and quality of water for customers in the Greater Sydney, Illawarra, Blue Mountains, Southern Highlands, Goulburn and Shoalhaven regions.³⁹ This includes undertaking catchment management and protection activities in the declared catchment areas and participating in catchment audits of the health of declared catchment areas.³ Catchment management encompasses the management of both the quality and quantity of water available.⁵

In non-declared catchment areas, WaterNSW controls and leases approximately 2500km² of 'foreshore land' which is primarily managed by local landholders. We understand that the terms and conditions of the lease do not specify catchment management targets but appear to focus on minimising erosion, sediment movement, nutrient ingress, and pesticide, herbicide and fertiliser usage.

The current licence requires WaterNSW to undertake catchment management activities in the declared catchment areas only. 40-c More specifically, it requires WaterNSW to manage and protect the declared catchment areas in a manner that is consistent with its objectives and functions under the Act. 41 We do not recommend extending the obligation for WaterNSW to include management of non-declared catchment areas as this may result in duplication with catchment management activities being undertaken by other parties (e.g. other NSW Government agencies and local councils). We also note that delivery of actions under the NSW Water Strategy is likely to improve catchment management practices in the non-declared catchment areas.d

Although we do not recommend expanding WaterNSW's catchment management obligations under the licence to include non-declared catchment areas, we recommend making changes to the obligation to clarify the intent of the obligation (i.e. to further its objectives under the Act and under clause 1(1)(b) of the licence), and to support WaterNSW to effectively exercise its functions under the Act and licence.

_

^a Catchment health audits occur once every 3 years.

b Under Part 6.5 of the *State Environmental Planning Policy (Biodiversity and Conservation) 2021*, the objectives of the Sydney drinking water catchment are "to provide for healthy water catchments that will deliver high quality water to the Sydney area while also permitting compatible development" and "to provide for development in the Sydney Drinking Water Catchment to have a neutral or beneficial effect on water quality".

At this stage, only Sydney's drinking water catchments have been declared under section 40 of the Act. Catchments that are not declared catchment areas are considered non-declared catchment areas. If the Governor were to declare other catchment areas under section 40 of the Act, WaterNSW would be required to undertake its functions and meet its objectives in those areas as well.

d Namely under priority 3 and priority 4 actions under the NSW Water Strategy.

Finally, we anticipate that our recommendations for catchment health research and education (discussed below) will help WaterNSW better understand the impacts that activities in and around catchments have on the catchment and river health. This is likely to have a positive impact on catchment health and the associated river systems.

6.1.1 We recommend strengthening reporting requirements in the Licence

There is currently no requirement for WaterNSW to publish a report on WaterNSW's catchment management activities for the declared catchment under the current licence. However, the Reporting Manual requires WaterNSW to submit this report to IPART annually.⁴²

We recommend strengthening the Reporting Manual obligation for WaterNSW to publish the report on its website by elevating it to the Licence. We consider that making this a licence requirement clarifies the requirement, keeps WaterNSW accountable and improves transparency about how WaterNSW's activities in the declared catchments impact these areas. We expect this report will be informed by WaterNSW's research findings discussed in section 6.2, below.

Box 30 Recommended licence conditions for catchment management

32 Catchment management for declared catchment areas

- (1) Water NSW must manage and protect declared catchment areas in a way that:
 - (a) furthers its objectives under the Act and the objectives in clause 1(1)(b) of this licence,
 - (b) supports it to effectively exercise its functions under the Act and this licence, and
 - (c) is consistent with:
 - (i) its water quality management system maintained under clause 9,
 - (ii) its asset management system maintained under clause 10, and
 - (iii) its environmental management system maintained under clause 11.
- (2) Water NSW must, by 30 November each year:
 - (a) submit an annual report to IPART on management of declared catchment areas during the preceding financial year that includes, at a minimum, the information set out in the reporting manual (annual catchment management report), and
 - (b) make the annual catchment management report publicly available online at the same time it submits it to IPART.

6.2 Catchment and river health research

Our recommendations for the operating licence

- 38. Include a new obligation requiring WaterNSW to develop a research strategy for its area of operations that prioritises catchment and river health research projects and geographical priority areas for these projects.
- 39. Amend the requirement for WaterNSW to have a program of research to ensure it is consistent with the strategy and require WaterNSW to implement the program by 30 November 2025.
- 40. Replace the requirement for WaterNSW to provide an annual report and submit one report on outcomes of its research program by 30 June 2027.
- 41. Retain the current requirement for WaterNSW to continue to implement its existing research program for declared catchment areas until it implements the amended program required under this licence.

Under the current licence, WaterNSW must maintain a research program for each declared catchment area only.⁴³ WaterNSW is also required to report on the program in accordance with the Reporting Manual.⁴⁴ The current licence does not require a program of research for the non-declared catchment areas nor is there a specific requirement to include river health within the scope. This is despite the Act referring to WaterNSW's functions as undertaking research on catchments generally.⁴⁵

6.2.1 Understanding existing research priorities in the area of operations

Declared catchment areas

In 2020, WaterNSW published its Source Water Protection Strategy for the declared catchment areas. The strategy identifies 6 priority areas for source water protection in the declared catchment including water sensitive towns, water-wise development, regenerative agriculture, land management, protection laws, and policy and practice.⁴⁶ It also states that WaterNSW's catchment management practices have historically focused on point source pollution and minimising risks to public health.⁶

WaterNSW's current scientific research program investigates water quality risks and seeks to identify solutions to address those risks to declared catchments. WaterNSW aims to identify how it can better address the impacts of diffuse pollution sources on the catchment. This includes impacts from climate change, the increased frequency of bushfire events and population growth from significant urban development in the drinking water catchment. WaterNSW does not have an equivalent strategy for the non-declared catchments and river systems.

^e For example from urban developments, on-site wastewater systems (such as septic tanks), sewage treatment plants, dairy farms and chemical collections in the declared catchment.

Non-declared catchments

Other agencies undertake research into non-declared catchment areas for certain things (e.g. Local Land Services' (LLS) fish-friendly diversion screens project^f which, in part, seeks to improve river health). This work is fragmented and does not address all issues in non-declared catchments.

We consider that as the system operator for non-declared catchments, there could be a role for WaterNSW to undertake complementary research in the priority areas identified in non-declared catchments ultimately to improve water quality to the extent that it does not duplicate work that is being undertaken by other agencies.

6.2.2 New requirements to allow expanding the scope to include river health

We recommend expanding the licence obligations related to catchment health research to include downstream river health. We also recommend that the obligations allow WaterNSW to undertake research activities in the non-declared catchments if WaterNSW determines that there is a need for research in these areas or that it would derive value by allowing it to respond more effectively and efficiently to key risk and threats to its system (including but not limited to water quality, water quantity, biodiversity).

The outcomes of an expanded research focus will place WaterNSW in a position to better consider how it can improve catchment and river health in the areas for which WaterNSW operates and has control. In addition, we anticipate that the wider research scope will provide additional data and evidence about key problem areas which will inform future policy and licencing decisions. Finally, we consider that findings from the research program would provide a starting point for WaterNSW to ensure its community education program(s) are tailored to meet the needs of the communities it operates in. We discuss this in more detail in section 6.3.

6.2.3 New requirement to develop a research strategy and program

We recommend that WaterNSW develop and maintain a research strategy which allows for an ongoing research program addressing catchment and river health. Our recommended obligations will allow WaterNSW to undertake a prioritisation exercise to determine what research projects it will ultimately include in its program. The recommended approach allows WaterNSW to target high-risk and high value/low-cost areas, ultimately resulting in reduced costs. Our recommended licence condition clarifies that the research strategy must identify research priorities, including by:

- identifying geographical priority areas in its area of operations which would likely benefit most from research considering:
 - the significance of catchment and river health issues in discrete catchments and downstream rivers

NSW Government - Local Land Services, Projects and Programs, accessed 20 May 2024.

g Namely water security, water quality and biodiversity.

^h Under our recommended licence obligations, WaterNSW can consider catchments and river systems in both declared and non-declared areas.

- opportunities to improve water security, water quality and biodiversity in those catchment and downstream rivers
- considering the costs of research and availability of funding
- maximising opportunities for collaboration with other stakeholders (including other State and Commonwealth agencies) and avoiding duplication of research already being undertaken.

The research strategy must also seek to further WaterNSW's objectives under the licence,⁴⁷ enhance its performance under the Act and improve water security, water quality and biodiversity in catchments and downstream rivers.⁴⁸

We recommend that WaterNSW develop and implement a research program, in line with the strategy (i.e. in line with the prioritisation requirements set out in the strategy). We consider that the research program should target high-risk, high-value and low-cost areas. This will minimise the cost of implementing state-wide research activities as required under the licence as only priority research activities will be undertaken.

We recommend that WaterNSW deliver its research strategy and program by 30 November 2025, after IPART makes its pricing determination on 1 July 2025. This will allow WaterNSW sufficient time to consider the value and cost impacts of its proposed research activities in developing the strategy and program. We expect WaterNSW would use the price determination process to consult with relevant stakeholders to input into the design of the strategy, allowing it to better understand customer needs and preferences, and reflect the long-term interests of customers. Until that time, WaterNSW must maintain its existing research program for declared catchment areas.

Under the current licence, WaterNSW is required to report on its research programs in accordance with the Reporting Manual. We recommend that WaterNSW submit a report outlining the key outcomes for at least the first 15 months of the research program by 30 June 2027. This will allow us to understand the value of the new obligations at the next licence review. It may also provide us with a better understanding of emerging risks to WaterNSW's systems where solutions may be best supported by obligations in the licence.

Our February 2024 cost-benefit analysis report on the draft licence concluded that there was uncertainty about the costs and benefits associated with our draft obligation. Our revised recommended obligation will reduce the cost of implementing research activities when compared to our draft recommendations. The revised obligation does not require WaterNSW to increase its current research costs, instead it ensures WaterNSW will focus its efforts on priority areas across its area of operations. From discussions with WaterNSW, we now anticipate a reasonable upfront cost to develop the research strategy and program. We will consider expenditure and cost impacts in our review of WaterNSW's prices (the next price determination will apply from 1 July 2025).

The key benefits under this obligation include:

research outcomes would allow WaterNSW to better target its education activities

Clause 2.1.3 of the Reporting Manual requires WaterNSW to submit an annual report on catchment management to IPART. This report includes details and outcomes of the research being undertaken.

- improved health of catchments and river systems (including water security, water quantity, biodiversity and other environmental aspects) across priorities catchments and river systems in WaterNSW's area of operations
- informing WaterNSW's educative role under clause 34
- research outcomes would inform future regulatory policy by NSW Government and licensing activities undertaken by IPART.

In refining the revised obligations, we sought additional feedback from WaterNSW and the Department after the consultation process. We clarified the role of the research strategy as opposed to the research program as a result.

Box 31 Recommended licence conditions for catchment and river health research

33 Catchment and river health research

- (1) Water NSW must, by 30 November 2025, develop a strategy for an ongoing research program for catchment health and downstream river health.
- (2) The research strategy must:
 - (a) aim to further the objectives in clause 1(1)(b) of this licence, enhance Water NSW's performance of its functions under the Act, and improve water security, water quality and biodiversity in catchments and downstream rivers, and
 - (b) identify research priorities, including by:
 - (i) considering the costs of research and availability of funding,
 - (ii) maximising opportunities for collaboration with other stakeholders (including other State and Commonwealth agencies) and avoiding duplication, and
 - (iii) identifying geographical priority areas in its area of operations that are most likely to benefit from research considering:
 - (A) the significance of catchment and river health issues in discrete catchments and downstream rivers, and
 - (B) opportunities to improve water security, water quality and biodiversity in those catchment and downstream rivers.
- (3) Water NSW must, from 30 November 2025, maintain and implement an ongoing research program that is consistent with the research strategy.

 $^{^{\}mathrm{j}}$ The Department of Climate Change, Energy, the Environment and Water.

Box 31 Recommended licence conditions for catchment and river health research

- (4) Water NSW must by 30 June 2027 submit a report to IPART detailing the outcomes, for at least the first 15 months, of the ongoing research program maintained under clause 33(3) in accordance with the reporting manual.
- (5) Until Water NSW has implemented the ongoing research program required by clause 33(3), it must maintain its existing research program for declared catchment areas.

6.3 Community education

Our recommendations for the operating licence

- 42. Include a new obligation requiring WaterNSW to develop a strategy for an ongoing community education program.
- 43. Amend the requirement for WaterNSW to undertake an educative role in declared catchment areas, to require WaterNSW to maintain and implement a community education program consistent with the strategy from 30 November 2025.
- 44. Retain the current requirement for WaterNSW to provide an annual report detailing the educational activities undertaken in line with the reporting manual.
- 45. Retain the current requirement for WaterNSW to maintain its existing education program for declared catchment areas until it implements the amended program required under this licence.

Under the current licence, WaterNSW must undertake an educative role for its activities and functions in the declared catchment areas.⁴⁹ WaterNSW presently meets this obligation through initiatives including the WaterInsights Portal,^k its customer service centre, exhibitions and site visit opportunities, publicly available resources on WaterNSW's website, and social media presence. While the current licence also authorises education in non-declared catchment areas,⁵⁰ there is no corresponding licence obligation which requires education to include non-declared catchments.

The WaterInsights Portal is a publicly available online tool that provides users with information about how WaterNSW manages water. This includes (but is not limited to) the following details for regulated, unregulated and groundwater sources: storage volumes; water quality; water availability, allocation and account balances; river flows/levels; rainfall forecast; historic stream, water allocation and usage data; rules and conditions that govern water management; and WaterNSW updates and alerts (e.g. algae alerts or flow restrictions).

6.3.1 Develop and implement an education strategy and program

Similarly to our recommendations for catchment and river health research, we recommend that the licence require WaterNSW to develop and implement a community education strategy and ongoing program. The strategy must identify education priorities and consider relevant research findings from the research program as findings become available. Allowing for an expanded education scope aligns with WaterNSW's functions under the Act. In addition, our recommended approach will continue to allow WaterNSW sufficient flexibility to develop and implement an education program that meets the needs of the various regions in which it operates.

Our recommended obligations will allow WaterNSW to undertake a prioritisation exercise to determine what education programs it will ultimately implement. The recommended approach allows WaterNSW to target high-risk and high value/low-cost areas, ultimately resulting in reduced costs to stakeholders. Our recommended licence condition clarifies that the education strategy must identify education priorities by:

- identifying geographical priority areas in its area of operations which would likely benefit most from education by considering:
 - the significance of catchment and river health issues in discrete catchments and downstream rivers
 - opportunities for community education to improve water security, water quality and biodiversity in those catchments and downstream rivers
- considering the costs of community education and availability of funding
- considering if other parties (e.g. NSW Government agencies or local councils) are already
 undertaking research in these areas and if WaterNSW can collaborate with those parties to
 avoid duplicating research already being undertaken.

WaterNSW's strategy must also consider relevant findings (as they become available) from the ongoing research program required under clause 33(3) of the recommended licence.

WaterNSW's sphere of control in non-declared areas is limited

WaterNSW has limited control of catchments and rivers in non-declared areas. However, there is merit in the licence promoting the inclusion of community education programs for priority areas. Community education programs will result in positive outcomes including improved catchment and river health, ultimately improving water quality and reducing costs to treat the water. We anticipate that it would also improve how customers, consumers and the general community interact with catchments and river systems, and use water to improve water security and environmental outcomes (e.g. biodiversity) throughout the system. Finally, we consider that enabling WaterNSW to undertake an educative role would improve water literacy and reduce confusion about WaterNSW's role in different catchments and river systems.

Under our recommended licence obligations, WaterNSW can consider catchments and river systems in both declared and non-declared areas.

Where relevant and predominantly at extraction points.

Under the current licence, WaterNSW is required to report on its educative activities in accordance with the Reporting Manual.ⁿ We recommend that WaterNSW continue to be made to report on its educational activities in line with the reporting manual.

Our February 2024 cost-benefit analysis report on the draft licence concluded that there was uncertainty about the costs and benefits associated with our draft obligation. Our revised recommended obligation will reduce the cost of implementing education initiatives in the community when compared to our draft recommendations. The revised obligation does not require WaterNSW to increase its current education costs, instead it ensures WaterNSW will focus its efforts on priority areas across its area of operations. From discussions with WaterNSW, we now anticipate a reasonable upfront cost to develop the research strategy and program.

The benefits that community education programs can have in influencing community behaviour, including behavioural change. The key benefits of our recommended obligations are:

- Increased water literacy and promotion of water security, improved water quality and water management practices. We consider that educating customers, consumers and the community about water:
 - Conservation is crucial for ensuring ongoing sustainable water use and promoting water security across WaterNSW's system. This may include raising community and consumer awareness about why it is important to conserve water resources to mitigate the impacts of future droughts and ensure continued supply for future generations.
 - Quality issues and the importance of protecting water sources and lands adjacent to waterways can help prevent poor water quality and reduced biodiversity in WaterNSW's systems.
 - Management practices can help WaterNSW optimise water use and minimise water waste/losses from its system. This may include promoting more efficient irrigation practices for farmers and water-saving strategies for other water users.
- Promotes climate change resilience. Educating stakeholders and the community about the
 impacts of climate change on water availability and water quality would improve community
 understanding about adaptation strategies. We expect that a successful community
 education program is likely to encourage community participation and engagement on
 climate resilience initiatives.
- Emergency preparedness. WaterNSW is well-placed to educate the broader communities in which it operates, about preparedness for water-related disasters including drought and flood. Through its education program, WaterNSW could provide information about emergency response plans and flood mitigation measures.

Water NSW operating licence review 2023-24

Clause 2.1.3 of the reporting manual provides for WaterNSW to provide an annual report on catchment management to IPART. This report includes details and outcomes of the community education activities and programs run by WaterNSW and completed community education activities.

We acknowledge that these benefits are largely qualitative and difficult to quantify. However, we consider that the cost impacts associated with our approach are justified. Our position was supported by WaterNSW and the Department^o and the New South Wales Irrigators' Council. Finally, in its submission WaterNSW referred to a 2022 literature review that examined the effectiveness of environmental education on children and adolescents, comparing over 169 studies from 43 countries across 6 continents.⁵¹ The review found that environmental education had a conclusive, noticeable, effective, and positive impact on the attitudes, intentions, and behaviours of young people. We will consider expenditure and cost impacts further in our review of WaterNSW's prices (the next price determination will apply from 1 July 2025).

In refining the revised obligations, we sought additional feedback from WaterNSW and the Department after the consultation process. We clarified the role of the education strategy as opposed to the education program as a result.

Box 32 Recommended licence conditions for community education

34 Community education

- (1) Water NSW must, from 30 November 2025, maintain a strategy for an ongoing community education program.
- (2) The community education strategy must:
 - (a) identify education priorities by:
 - (i) considering the costs of community education and availability of funding,
 - (ii) maximising opportunities for collaboration with other stakeholders (including other State and Commonwealth agencies) and avoiding duplication, and
 - (iii) identifying geographical priority areas in its area of operations that are most likely to benefit from education considering:
 - (A) the significance of catchment and river health issues in discrete catchments and downstream rivers, and
 - (B) opportunities for community education to improve water security, water quality and biodiversity in discrete catchments and downstream rivers,
 - (b) consider relevant research findings from the ongoing research program maintained under clause 33(3) as these findings become available.

[°] The Department of Climate Change, Energy, the Environment and Water.

Box 32 Recommended licence conditions for community education

- (3) Water NSW must, from 30 November 2025, maintain and implement an ongoing community education program that is consistent with the community education strategy and that aims to:
 - (a) improve community understanding about Water NSW's role and functions in the relevant region,
 - (b) improve practices in catchments and along downstream rivers that have a direct impact on water quality and sustainability,
 - (c) educate the community about opportunities to engage with Water NSW on projects in their region, and
 - (d) contribute to state-wide water literacy.
- (4) Water NSW must, by 30 November each year, submit an annual report to IPART on the educational activities it undertook in the previous financial year in implementing the community education program in accordance with the reporting manual.
- (5) Until Water NSW has implemented the community education program required by clause 34(1), it must maintain its existing education program for declared catchment areas.

Chapter 7

Water planning and climate risk readiness

Our recommendations for new obligations to ensure sustainable services now and into the future (Part 9 of the recommended Licence).



In this chapter, we discuss our recommendations for:

- aligning licence conditions with the policy objectives of the NSW Water Strategy and Greater Sydney Water Strategy and clarifying the cooperative relationship between WaterNSW and Sydney Water
- ensuring WaterNSW supports Sydney Water's planning efforts to service growth by determining system yield for Greater Sydney
- ensuring that WaterNSW can respond to system shocks, including drought and longer-term changing climate impacts
- updating licence requirements for WaterNSW to focus on water conservation and efficiency in declared catchments to achieve the desired outcomes under the NSW Water Efficiency Framework.

The current licence includes requirements for WaterNSW to support water planning.⁵² This is to ensure that WaterNSW accurately calculates system yield,² and manages water supply effectively and efficiently and contributes to achieving the NSW Government's policy objectives.

The NSW Water Strategy sets the policy to improve the security, reliability, quality and resilience of our water resources over the long term for NSW, while also building resilience to drought and a changing climate.

The Greater Sydney Water Strategy sets the direction for water management in Greater Sydney and considers the potential impact of decisions about reducing flood risks which could have an impact on the broader water supply system.

7.1 Calculating system yield

Our recommendations for the operating licence

- 46. Modify the current system yield requirements to clarify model inputs and when WaterNSW must recalculate system yield.
- 47. Include a new obligation requiring WaterNSW to publish the system yield, how it was calculated and the design criteria.
- 48. Include a new obligation requiring WaterNSW to engage an independent expert to review and report on the system yield model, modelling and processes by 31 March 2026, and for WaterNSW to report on the review findings and WaterNSW's anticipated actions by 30 June 2026.

^a Changes to system yield impact long-term water planning.

We recommend that the Licence should continue to require WaterNSW to determine system yield for the declared catchment using a hydrological model, with modifications. We also recommend that the Licence require WaterNSW to engage an independent expert to review and report on the model, consistent with requirements in the previous 2017–2022 licence.

WaterNSW manages catchment infrastructure works to protect the quantity of available water.^b System yield, refers to the amount of water that WaterNSW estimates can be supplied from water sources within the declared catchment areas annually over the long term based on inflows to the catchment infrastructure works in the declared catchment areas, an adopted set of operational rules and the design criteria.^c

The current licence condition continues to be effective. We recommend building on the existing framework for system yield and recommend that any recalculation of system yield should consider climate change. This more accurately depicts water availability with respect to long-term changes in rainfall, temperature and other climatic conditions. System yield should also consider losses. We understand that system losses are already included in system yield calculations and the Licence should reflect this.

Consideration of the impact of climate change in the determination of the system yield has become increasingly important in recent times, as climate change impacts the level and variability of rainfall. We recommend specifying that WaterNSW must consider the impact of climate change in the determination of system yield for the declared catchment.

It is our view that WaterNSW, Sydney Water and the Department^d should work together in the recalculation of system yield. This is essential to provide holistic information on water security and system resilience. Additionally, in 2021 the responsibility for water supply augmentation was transferred from WaterNSW to Sydney Water via a Ministerial direction. Accordingly, we have recommended additional conditions to clarify WaterNSW's responsibilities.

We recommend retaining the current requirement for WaterNSW to redetermine system yield in response to certain events:

- at the conclusion of a drought
- if modification or augmentation to catchment infrastructure significantly impacts supply
- if the Minister makes a material change to the operating rules
- if the Department makes material changes to the design criteria.

We recommend including an additional condition to allow the Minister to request that WaterNSW redetermine the system yield.

We also recommend making this information more transparent and accessible to the public. For this reason, we recommend that WaterNSW must make information on system yield publicly available online, including an explanation of how it was calculated and the design criteria.

b Catchment infrastructure works are defined under the Act as (a) water storages, water mains or connected or associated works; or (b) monitoring devices in, under, over or near any works in (a); or (c) any works ancillary or antecedent to any works in (a) or (b); or (d) hydroelectric plants or associated infrastructure or works. Catchment infrastructure works may also be prescribed by the WaterNSW Regulations.

^c Operational rules are approved by the Minister.

d The Department of Climate Change, Energy, the Environment and Water.

Box 33 Recommended licence conditions for system yield

35 System yield for declared catchment area

- (1) Water NSW must use a long-term hydrological model to determine the amount of water it can supply from water sources within declared catchment areas in successive 12 month periods based on:
 - (a) inflows to declared catchment areas,
 - (b) system losses impacting water available for supply from declared catchment areas,
 - (c) the operating rules approved by the Minister, and
 - (d) the design criteria,

(the system yield).

- (2) In determining (or redetermining) the system yield, Water NSW must:
 - (a) consider the impacts of climate change,
 - (b) consult with Sydney Water, and
 - (c) consider written guidance provided by the Department.
- (3) Water NSW must redetermine the system yield if any of the following occur:
 - (a) a drought affecting declared catchment areas concludes,
 - (b) a modification or augmentation to a catchment infrastructure work or customer's infrastructure commences that will have a significant impact on Water NSW's supply of water in and from declared catchment areas,
 - (c) the Minister makes a material change to the operating rules referred to in (1)(c),
 - (d) the Department makes a material change to the design criteria, or
 - (e) the Minister requests Water NSW to redetermine the system yield.
- (4) Water NSW must, as soon as possible, advise the Minister and Sydney Water in writing of any change to the system yield and reasons for the change.
- (5) Water NSW must make publicly available online:
 - (a) the system yield, and a report explaining how it was calculated, and
 - (b) the design criteria.

7.1.1 Reviewing the system yield model

The current licence does not require WaterNSW to undertake a review of its system yield model. This was not included as the next scheduled review was not due to be undertaken until after the current licence expires. In our 2022 final report to the Minister on the WaterNSW 2017–2022 licence review, we stated that we would explore the inclusion of the requirement in this Review.

The previous licence (2017–2022) required WaterNSW to engage a suitably qualified expert to review its System Yield model and consult with stakeholders on the review by 30 June 2021. WaterNSW completed its most recent independent review of the model in 2021. Historically, WaterNSW has been required to review its System Yield model once every licence term (i.e. approximately every 5 years).

We consider that this requirement should be reinstated to ensure rigour of the determination process and allow additional specialised expertise. We recommend including a requirement that emphasises the importance of independent review by specifying that the independent expert is suitably qualified and experienced to proficiently conduct the review and has not undertaken more than 2 consecutive reviews of the system yield (including the related model, modelling, or processes).

Box 34 Recommended licence conditions for reviewing system yield

36 Review of system yield

- (1) Water NSW must, by 31 March 2026, engage an independent expert to review and report on Water NSW's model, modelling and processes for determining the system yield (including the processes set out in clause 35) to:
 - (a) ensure they are robust and reflect good industry practice, and
 - (b) identify any opportunities for improvements.
- (2) Water NSW must provide the independent expert with stakeholder feedback received under (3) and direct the independent expert to consider that feedback in undertaking its review and preparing its report.
- (3) Water NSW must, at least 6 months before engaging the independent expert to undertake the review and through the review process, consult with the following stakeholders on Water NSW's model, modelling and processes for determining the system yield:
 - (a) customers who receive a direct water supply service from the declared catchment area,
 - (b) the Department and IPART, and

Box 34 Recommended licence conditions for reviewing system yield (c) other persons (excluding members of the public) that Water NSW, having

considered this issue, reasonably expects to have an interest in the system yield.

- (4) Water NSW must, by 30 June 2026, submit to IPART and make publicly available online a report in accordance with the reporting manual that:
 - (a) attaches the independent expert's report, and
 - (b) provides Water NSW's response to the report, including:
 - (i) opportunities for improvement that Water NSW proposes to action, and
 - (ii) opportunities for improvement that Water NSW does not propose to action and why.
- (5) In this clause 36, **independent expert** means a person who is independent of Water NSW, has suitable qualifications and experience to proficiently conduct the review, and has not undertaken more than two consecutive reviews.

7.2 Water conservation planning

Our recommendations for the operation licence

49. Replace the current water conservation strategy requirement with a 5-year water conservation plan that spans WaterNSW's area of operations.

The current licence requires WaterNSW to maintain its water conservation strategy and maintain and implement its water conservation work program. We recommend that the new licence should retain requirements for water conservation, but they should replace the requirement for a water conservation strategy and program with a 5-year water conservation plan. This plan is not static. Rather, it is a rolling 5-year plan, that is updated every year.

WaterNSW's water conservation work program includes a rolling 5-year plan (as detailed in the Reporting Manual). The 5-year water plan includes information on programs and projects planned for delivery, and how water conservation activities relate to the Greater Sydney Water Strategy.

We consider that the licence should continue to require water conservation as it should provide a basis for which WaterNSW can exercise its functions related to water management. Including a licence condition will allow us to monitor WaterNSW's maintenance and implementation of the plan. The licence condition is enforceable and transparent, and it will provide assurance that WaterNSW is undertaking water conservation appropriately. Water conservation activities support the delivery of the NSW Water Strategy and Greater Sydney Water Strategy and the NSW Government's priorities to provide opportunities to use the available water more efficiently and to support the uses of water that bring the highest return to regional and metropolitan communities.

We recommend that the licence should require WaterNSW's water conservation plan to cover its assets in both declared and non-declared catchment areas, and a range of options for water conservation. These options should include, at a minimum, a range of measures for water conservation including storage, transmission, leakage and system operations. This requirement will minimise the risk that WaterNSW only considers a narrow range of water conservation options. WaterNSW should investigate all options before deciding on water conservation measures to be implemented, making it more likely that prudent investments will be identified and less likely that good water conservation opportunities will be overlooked.

Since the current licence was granted, the Water Efficiency Framework has been released. The NSW Water Efficiency Framework is a best-practice guide and decision framework for developing and delivering water efficiency in a proactive manner. Adding an obligation requiring WaterNSW to consider the Water Efficiency Framework will allow WaterNSW to tailor the 5-year water conservation plan to their operating context and provides clear steps to design, deliver and review water efficiency programs.

The Water Efficiency Framework includes an assessment of water conservation options using an economic approach. We consider that using an economic approach to water conservation is appropriate and is in the public interest. Where possible WaterNSW should assess whether the potential benefits and water savings for a proposed water conservation option would outweigh the costs of investment, before selecting an option for implementation. WaterNSW should balance this economic assessment with considerations about whether the options considered contribute to wider policy objectives.

However, WaterNSW's decision making should not be guided by monetary costs and benefits alone. Consideration of the Water Efficiency Framework allows WaterNSW to also consider other social and environmental factors in identifying and deciding on water conservation programs and projects to implement. To clarify that WaterNSW should take a holistic approach to deciding which water conservation measures to implement, we recommend that the Licence should also require WaterNSW to consider the following in its water conservation plan:

- the strategic context provided by the NSW Water Strategy and the Greater Sydney Water Strategy
- any guidance that the Minister has provided.

To ensure that the water conservation options considered and WaterNSW's decision-making process for choosing options for implementation are clearly set out in the plan, we recommend specifying in the licence that WaterNSW should include details of water conservation programs and projects over the life of the plan, including timeframes, and reasonable estimates of costs and volumes of water lost or saved.

We recommend allowing WaterNSW adequate time (one year from commencement of the 2024 licence) for transitioning. This means that WaterNSW must develop and implement its new Water Conservation Plan by 1 July 2025. This will allow WaterNSW to consider the extent that the Water Efficiency Framework can be applied. Until it has developed the new Water Conservation Plan, it must maintain its existing water conservation strategy and water conservation program.

We have also recommended that the licence should require WaterNSW to review and update the water conservation plan annually to check that it is meeting its intended objectives. From 2026 onwards, after WaterNSW has updated its current water conservation plan to be consistent with the requirements of the Licence, WaterNSW would also be required to check, among other matters, that the plan is meeting the requirements of the licence as part of the annual review. That is, WaterNSW would be required to review its current water conservation plan on 30 November 2026. At that time, we recommend that WaterNSW should update the plan if there are any inconsistencies with the licence requirements. After each yearly update, WaterNSW must maintain and implement that version of the plan.

Box 35 Recommended licence conditions for water conservation planning

37 Water conservation plan

- (1) Water NSW must, from 1 July 2025, maintain a water conservation plan that:
 - (a) covers Water NSW's assets in both declared and non-declared catchment areas,
 - (b) covers a range of measures for water conservation including storage, transmission, leakage and system operations,
 - (c) considers the 'NSW Water Efficiency Framework' published by the NSW Government in August 2022, to the extent it applies to Water NSW's operations,
 - (d) considers the strategic context provided by:
 - (i) the 'NSW Water Strategy' published by the Department in August 2021, and
 - (ii) the 'Greater Sydney Water Strategy' published by the Department in August 2022,

Box 35 Recommended licence conditions for water conservation planning

- (e) includes details of water conservation programs and projects over the life of the plan, including timeframes, and reasonable estimates of costs and volumes of water lost or saved,
- (f) furthers the objectives set out in clause 1(1)(b) of this licence, and
- (g) considers any written guidance that the Minister provides to Water NSW.
- (2) From 2026, Water NSW must, by 30 November each year (or another date nominated by Water NSW and approved by IPART):
 - (a) review and update the water conservation plan to:
 - (i) identify the activities carried out under the plan over the preceding financial year,
 - (ii) assess its progress towards meeting the overall objectives of the plan,
 - (iii) ensure the plan is meeting its objectives and the requirements of clause 37(1), and
 - (iv) update the forward-looking component of the plan to cover the upcoming 5 years,
 - (b) submit to the Department and IPART:
 - (i) the updated water conservation plan, and
 - (ii) a report outlining the outcomes of the annual review of the plan, including reasons for any changes to the plan, and
 - (c) make the updated plan and report following the review publicly available online.
- (3) Water NSW must implement and comply with the current water conservation plan.
- (4) Until Water NSW has developed the water conservation plan required by this clause 37, it must maintain its existing water conservation strategy and water conservation program.

7.3 Planning for and managing climate-related risks

Our recommendations for the operating licence

- 50. Include new climate change obligations which align with the NSW Climate Risk Ready Guide.
- 51. Include a new obligation requiring WaterNSW to assess its level of climate risk management maturity on the enterprise scale by 30 June 2025, meet a systematic level of climate risk management maturity by 30 June 2027, and make reasonable progress towards meeting an embedded level of climate risk management maturity by 30 June 2028.

Climate change refers to long-term shifts in temperatures and weather patterns because of anthropogenic activities.⁵³ NSW's climate is projected to change which will mean changing weather patterns, and increasing frequency, duration, and intensity of extreme weather events such as bushfires and floods.⁵⁴ Government and policymakers have a key role in helping address the economic and social impacts of climate change.

The NSW Government has made commitments to take decisive and responsible action on climate change. These include climate-related objectives and actions outlined in NSW Climate Change Policy Framework, State Infrastructure Strategy 2018–2038, NSW Critical Infrastructure Resilience Strategy and NSW 2040 Economic Blueprint. Water specific objectives and priorities are outlined in the NSW Water Strategy and the Greater Sydney Water Strategy.

We recommend the introduction of climate risk related obligations to improve transparency and accountability of climate risk management actions. The conditions require WaterNSW to designate a climate change risk officer to lead a climate risk assessment team by 30 November 2024 and to assess WaterNSW's current level of climate risk management maturity by 30 June 2025.

Climate change can impact water security, quality, demand and how water will be used in the future. Water industry infrastructure are also vulnerable to climatic events. Therefore, effective risk management is critical to the water industry's climate change resilience and adaptation.

We consider the following climate-related risks may apply to WaterNSW operations:

- increased risk of severe bushfires in water catchments
- increased algal blooms in dams
- reduced fresh water supplies
- increased customer demand for water
- more extreme storms and events
- large-scale disruptions to electricity supplies.

7.3.1 Climate-related planning and risk management

Climate change threatens both quantity and quality of water available for capture and storage and sale. As such, climate change impacts are a significant risk to WaterNSW's core functions and can critically impact NSW communities and the environment. WaterNSW has a very strong incentive to consider and address climate risk.

We understand that WaterNSW is working towards tackling climate change, having regard to both mandatory legislative requirements as well as aspirational targets. However, the current licence does not include explicit conditions about how WaterNSW should prepare for and manage climate change impacts.

We recommend introducing licence conditions for WaterNSW to engage in an ongoing climate risk assessment and management process that is consistent with the NSW Climate Risk Ready Guide and considers principles of the NSW Government's Climate Change Adaptation Strategy. 55 We prescribe initial steps and timeframes which progress to more outcomes-focused requirements as WaterNSW's climate risk management matures during the term of the licence. Climate change is already having an impact on WaterNSW's operations. The timeframes we recommend reflect the urgency for WaterNSW, based on its size and the nature of its operations, to establish a mature and effective climate-related planning risk management process.

The NSW Climate Risk Ready Guide provides a 4-step process for NSW Government agencies on how to consider climate risks that might impact their ability to achieve government objectives. It is aligned to the general process and considerations contained in ISO 31000:2108 – Risk management guidelines and ISO 14091 – Adaptation to climate change – Guidelines on vulnerability, impacts and risk assessment.

Step 1. Establish Communication and consultation the context Step 2. Identify, analyse and Step 4. evaluate Monitor the risks review Step 3. Treat the risks Recording and reporting

Figure 1 Outline of the Climate Risk Ready NSW process aligned to ISO 31000

Source: NSW Climate Risk Ready Guide, page 11.

We recommend that WaterNSW's climate-risk management process should be consistent with the NSW Climate Risk Ready Guide. ⁵⁶ This would have the following benefits:

- Strengthen WaterNSW's management of climate-related risks.
- Provides WaterNSW with clear guidance on the NSW Government's expectations in a climate-risk management process.
- Enables WaterNSW to align with the NSW Government's approach to managing climate risks.⁵⁷ The NSW Audit Office includes state-owned corporations in its definition of agency.
- Provides WaterNSW flexibility to integrate that climate risk management and adaptation into existing frameworks and procedures and therefore minimises regulatory burden.
- Sets a standard against which we can audit WaterNSW's compliance and provide assurance that climate-related risks are being identified and managed appropriately.

7.3.2 Climate risk maturity

Climate risk maturity is a key concept that underpins the NSW Climate Risk Ready Guide. Our recommended licence conditions also require WaterNSW to plan and manage climate risk to initially achieve a maturity target level of systematic (i.e the 3rd of the 5 maturity levels set out in the Guide) by mid-2027, and then progress towards the next level of "embedded" by the end of the licence term. The 5 climate risk maturity levels that underpin the NSW Climate Risk Ready Guide are:⁵⁸

- Fundamental climate change risk assessments have been undertaken in isolated parts of the organisation. Climate change risk is not considered in risk frameworks
- Repeatable climate change risk is considered in risk management frameworks and processes. Climate risk assessments are undertaken in isolated parts of the organisation
- Systematic clear and disciplined climate change risk management processes are established and proactively managed with an annual review of adaptation action implementation. A climate risk officer role is established in a central corporate function
- Embedded priority climate change risks for the organisation have been identified. An organisation-wide adaptation strategy for managing climate risks has been established. Monitoring, learning and reporting on climate risks is consistent
- Advanced climate change risk assessments and adaptation responses consider broader economic, financial, social and environmental resilience. Shared and interdependent risks are being actively managed. Monitoring, learning and reporting on climate risks results in continuous improvement.

Our recommended climate change obligations for the Licence initially include a level of prescription, which progress to more outcomes-focused requirements over the licence term. WaterNSW's climate change obligations differ to those of Sydney Water. This reflects Sydney Water's higher level of organisational climate risk maturity and consideration of climate change in its operational processes.

To support these requirements, we have recommended broadening the Licence objectives to require WaterNSW to conduct its activities in a manner that considers the impacts of climate change and equity between generations (see section 10.1 of this report on licence objectives).

We consider that this condition should ultimately benefit customers through protection of water resources.

Box 36 Recommended licence conditions for climate-related risks

38 Climate-related planning and risk management

- (1) Water NSW must engage in an ongoing climate risk assessment and management process that:
 - (a) is consistent with the NSW Government's 'Climate Risk Ready Guide' (published March 2021) and addresses climate-related risks specifically, including priority risks, mitigation actions and adaptation actions,
 - (b) furthers the objectives set out in clause 1(1)(b) of this licence, and
 - (c) considers, where appropriate:
 - (i) principles of NSW Government's 'Climate Change Adaptation Strategy' (published June 2022), and
 - (ii) updated or replacement guidance material on climate risk assessment and management as it is released by the NSW Government and other bodies that Water NSW identifies as relevant.

(2) Water NSW must:

- (a) by 30 November 2024, consistent with the Climate Risk Ready Guide, designate:
 - (i) a climate change risk officer with oversight of climate change risk management and maturity, and responsibility for leading a climate risk assessment team, and
 - (ii) an executive level sponsor for climate risk management and maturity (not required if the climate change risk officer is an executive level appointment).
- (b) by 30 June 2025, consistent with the Climate Risk Ready Guide assess Water NSW's current level of climate risk management maturity on the enterprise scale,
- (c) by 30 June 2027, meet on the enterprise scale a systematic level of climate risk management maturity, as defined in the NSW Government's Climate Risk Ready Guide, and

Box 36 Recommended licence conditions for climate-related risks (d) by 30 June 2028, make reasonable progress towards meeting on the enterprise scale an embedded level of climate risk management maturity, as defined in the NSW Government's Climate Risk Ready Guide.

7.4 Drought response planning

Given the consequences of water scarcity and its implications on the people of NSW, it is important that the licence requires WaterNSW to take appropriate drought prevention measures. Drought planning and system resilience should begin well in advance of a forecast drought, i.e. before water availability depletes rapidly. Moreover, population growth, climate change and other factors place additional stress on our state's natural water resources.

We recommend a new obligation requiring WaterNSW to review the Greater Sydney Drought Response Plan (GSDRP), annually with Sydney Water.

7.4.1 Drought response planning – regional and regulated rivers

To date, WaterNSW has worked with the Department and the Department of Regional NSW to develop Regional Drought Resilience Plans and Regulated River Drought Management Plans. These plans support communities and industries in planning for future droughts. The plans are due for completion in late 2024.

We have not recommended any licence conditions to address drought response planning for regional and regulated rivers. WaterNSW does not need to coordinate the delivery of these plans with any other utilities or agencies. Instead, we recommend including a general obligation for WaterNSW, if requested by the Department, to cooperate with the Department in reviews of the NSW Water Strategy, Greater Sydney Water Strategy and other regional water strategies.

Box 37 Recommended licence conditions for cooperating with water strategy reviews

42 Water strategies

Water NSW must, if requested by the Department, cooperate with the Department on any review of the NSW Water Strategy, the Greater Sydney Water Strategy and other regional water strategies.

7.4.2 Drought response planning for Greater Sydney

Our recommendations for the operating licence

52. Modify the current Greater Sydney drought response plan obligations to clarify that WaterNSW must use its best endeavours to develop an agreed approach with the Department and publish a summary of the plan.

Maintaining and reviewing the GSDRP

The current licence requires WaterNSW to maintain jointly with Sydney Water, and deliver on actions specified in, the GSDRP.⁵⁹ WaterNSW and Sydney Water have now developed the GSDRP, with the Department's input. Therefore, there is no need for the new licence to retain the current requirements to develop the plan. However, we do recommend that the plan should be maintained as it is an important plan to ensure that we are prepared for drought in Greater Sydney.

We have not recommended licence conditions specifying minimum requirements for the GSDRP as we consider that this is adequately managed between WaterNSW, Sydney Water and the Department. There is no further role for the operating licence.

Instead, we recommend including requirements in the new licence for Sydney Water to cooperate with WaterNSW to jointly review and update the GSDRP annually. ⁶⁰ As Sydney Water and WaterNSW developed the plan together (with the Department's input) and both have responsibilities for drought response that are interrelated, we recommend that they have joint responsibility to maintain the plan. We also recommend that Sydney Water should be required to consult with the Department when reviewing the plan so that the Department continues to have an opportunity to input into the plan as it is updated. To facilitate effective reviews, we also recommend that Sydney Water should use its best endeavours to agree an approach to the review with WaterNSW and the Department. We have recommended similar requirements in the 2024–2028 WaterNSW licence.

We do not recommend including licence conditions for implementing actions specified in the plan so that the plan can remain adaptable and respond to changing climate and drought conditions. Requiring implementation through the licence can mean that any actions specified in the plan may not be able to be changed to respond quickly to changing conditions.

Communicating outcomes of the annual reviews of the plan

We have recommended a new licence obligation which will require WaterNSW, after reviewing the GSDRP, to provide the updated plan and a report explaining the outcome of the review and any changes to the plan to the Minister by 31 December each year. After providing the updated plan to the Minister, WaterNSW must publish a summary of the updated plan by 31 January of the following year. This allows WaterNSW time to prepare the summary, in a plain English format that is accessible to the public.

In our Review, we considered whether the licence should require WaterNSW to also provide a copy of the updated GSDRP to the Department and IPART. However, we concluded that this level of prescription is unnecessary in the licence. As this is an important tool informing policy decision making, we consider that it is appropriate that the plan is provided to the Minister as the appropriate decision maker. The Minister can engage the Department to assist in decision making, as required, but this does not need to be prescribed by the licence.

Box 38 Recommended licence conditions for drought response planning

39 Greater Sydney Drought Response Plan

- (1) Water NSW must:
 - (a) cooperate with Sydney Water to jointly review the Greater Sydney Drought Response Plan each calendar year and consult with the Department on the review,
 - (b) use its best endeavours to develop with the Department and Sydney Water an agreed approach to the review (including timeline, roles and responsibilities),
 - (c) jointly (with Sydney Water) submit to the Minister an updated plan, along with a report explaining the outcome of the review and any changes to the plan, by:
 - (i) 31 December each year, or
 - (ii) another date nominated by Water NSW and approved by IPART, and
 - (d) make a summary of the updated plan publicly available online by:
 - (i) 31 January each year, or
 - (ii) another date nominated by Water NSW and approved by IPART.

7.5 Water supply augmentation planning

Our recommendations for the operating licence

53. Include a new obligation for WaterNSW to maintain and comply with a MOU with Sydney Water for Greater Sydney water supply augmentation planning.

WaterNSW has been assisting Sydney Water, as the lead agency in water supply augmentation planning for Greater Sydney under a direction from the Minister issued on 22 January 2021 (Ministerial Direction). WaterNSW used to undertake this role. The Ministerial Direction transferred the role to Sydney Water. We recommend including new conditions in the licence setting out WaterNSW's role supporting Sydney Water in their role for augmentation planning, as currently set out in the Ministerial direction.

We recommend licence conditions requiring WaterNSW to maintain and comply with a Memorandum of Understanding (MOU) with Sydney Water because Sydney Water requires WaterNSW's support in undertaking the water supply augmentation planning role.

We recommend specifying the minimum requirements for the MOU in the licence, which should cover processes for:

- WaterNSW to support Sydney Water by providing the necessary information, resources and knowledge for Sydney Water to undertake its water supply augmentation role
- WaterNSW to consult with Sydney Water on system yield calculations^e
- Sydney Water to consult with WaterNSW on:
 - projects that may affect the system yield, and
 - water supply augmentation options that may impact WaterNSW.

Box 39 Recommended licence conditions for water supply augmentation planning

40 Water supply augmentation planning

- (1) Water NSW must:
 - (a) maintain a memorandum of understanding with Sydney Water about water supply augmentation planning for Greater Sydney, and
 - (b) comply with that memorandum of understanding.

System yield is the amount of water that WaterNSW estimates can be supplied from the water sources within the declared catchment areas over the long term,

Box 39 Recommended licence conditions for water supply augmentation planning

- (2) The memorandum of understanding referred to in clause 40(1)(a) must include processes for:
 - (a) Water NSW to assist Sydney Water with water supply augmentation planning by providing Sydney Water with:
 - (i) data, information and knowledge, and
 - (ii) resourcing support, including access to Water NSW subject-matter experts,
 - (b) Water NSW to consult with Sydney Water on system yield calculations, and
 - (c) Sydney Water to consult with Water NSW on:
 - (i) projects that may impact system yield, and
 - (ii) water supply augmentation options that may have implications for Water NSW.

7.6 Long-term planning

Our recommendations for the operating licence

- 54. Remove the current licence requirement for WaterNSW to implement Greater Sydney Water Strategy actions or implement actions if directed to by the Minister.
- 55. Include a new obligation requiring WaterNSW to cooperate with the Department on any review of the NSW Water Strategy, Greater Sydney Water Strategy and other regional water strategies if requested by the Department.

7.6.1 Supporting NSW Government's long-term water strategies

Robust long-term planning is essential to delivering in customers' long-term interests. It allows WaterNSW to make prudent investment decisions today that are ready for and resilient to future challenges. WaterNSW needs to take a long-term view of its operations and IPART's pricing framework is designed to give WaterNSW flexibility in meeting that challenge.

We expect WaterNSW to provide justifications for preferred solutions for meeting future water needs that align with relevant government strategies and plans, such as the NSW Water Strategy, Aboriginal Water Strategy (currently under development), regional water strategies, metropolitan water plans, water resource plans and water sharing plans.

We consider that the long-term capital and operational plan (LTCOP) for the declared catchments is the appropriate plan to consider and implement actions from Government strategies including the Greater Sydney Water Strategy. We therefore consider the licence should not require WaterNSW to implement any action under the Greater Sydney Water Strategy. Further, we do not recommend that the licence require WaterNSW to implement any action that the Minister directs. We acknowledge that the Minister already has the ability to issue directions to WaterNSW under the *State Owned Corporations Act 1989*.

We do not recommend including a new requirement for WaterNSW to develop a long-term plan to support capital and operational expenditure for non-declared catchments. WaterNSW does not need to coordinate the delivery of these plans with any other utilities or agencies. As a part of the pricing determination process WaterNSW is expected to provide us with detailed long-term investment plans, together with supporting evidence and assumptions. ⁶¹ We are not aware of any issues or concerns that WaterNSW will not provide the required information, and there is no clear rationale for us to consider recommending a licence condition.

We recommend the licence should continue to require WaterNSW participate in any review of the Greater Sydney Water Strategy but recommend modifying the obligation so that WaterNSW must also cooperate with the Department in any review of the NSW Water Strategy and other regional water strategies, if requested by the Department.

Greater Sydney long-term capital and operational plan (LTCOP)

Our recommendations for the operating licence

- 56. Replace the current requirement for WaterNSW to jointly develop a LTCOP with Sydney Water and submit the plan to the Minister with a new obligation requiring WaterNSW to maintain its own LTCOP.
- 57. Include a new obligation requiring WaterNSW to review and update the LTCOP, in consultation with Sydney Water, at least once during the licence term, and submit the updated plan and a report on the review to the Minister.
- 58. Include a new obligation requiring WaterNSW to cooperate with Sydney Water on Sydney Water's review of its LTCOP.

The current licence requires WaterNSW to maintain an LTCOP jointly with Sydney Water and submit the plan to the Minister. ⁶² WaterNSW has now developed the plan together with Sydney Water. Therefore, we have not recommended retaining the licence condition as it is no longer necessary.

The Greater Sydney LTCOPs for WaterNSW and Sydney Water were prepared through close collaboration. This was to ensure that, combined, the LTCOPs outline the proposed investments over the next 20 years to ensure a resilient and secure water supply into the future.

The LTCOP captures WaterNSW's key investment drivers, projected expenditure to achieve our service goals and infrastructure and operational decisions. It also provides the long-term context for future pricing proposals to IPART. We expect a business to provide us with its long-term investment plans to support its pricing proposals in some detail, together with supporting evidence and assumptions. We need to be confident that the investment plans are designed to deliver in the long-term interest of customers.

To this end, and to ensure that the plan is enforceable, we recommend that the licence should specify the following minimum requirements for what the LTCOP should contain:

- identify future water needs for water supply and release
- identify and assess long-term investment options for meeting future water needs and delivering best long-term value to customers, which includes considering:
 - managing aging assets in a way that furthers the objectives of the licence.
 - the strategic context of the NSW Water Strategy and the Greater Sydney Water Strategy
- consider any guidance the Minister provides to WaterNSW.

Including these requirements in the licence allows us to monitor WaterNSW's compliance and increases transparency and accountability.

During the Review, we considered whether the licence should also prescribe that WaterNSW's LTCOP should identify investment options for:

- water supply augmentation
- ensuring water supply resilience in the context of changing climate
- delivering the best value for customers with growth
- ensuring compliance with regulatory standards and meeting community expectations for performance standards and environmental outcomes
- managing ageing assets.

However, we concluded that these requirements do not need to be prescribed in the licence. Our approach has been to recommend the minimum requirements necessary in the licence for the LTCOP to achieve its intended objectives. We have already recommended requirements for WaterNSW to consider these matters in other parts of the licence. We would expect WaterNSW to include relevant information about these matters in the LTCOP when it "identifies and assesses long-term investment options," without a prompt in the licence.

^f WaterNSW, Greater Sydney Long-term capital and operational plan (LTCOP), June 2023.

Reviewing and updating the LTCOP

We have not recommended requirements to implement the LTCOP. The plan needs to be continually updated with new information to ensure the business is sufficiently nimble, adaptable to new conditions and is managing risks. Hardcoding requirements to implement the plan may result in the plan not being able to be updated and re-evaluated easily.

Instead, we recommend that the new licence should require WaterNSW to review and update the LTCOP at least once during the licence term to ensure that it remains current and adaptive. We understand that currently the plan is reviewed every 5 years. We have recommended that this be reviewed once during the 4-year licence term as we are unable to monitor compliance with this requirement if it falls outside the licence term.

As WaterNSW and Sydney Water work cooperatively to provide long-term servicing options in Greater Sydney, we recommend including licence conditions requiring WaterNSW to work cooperatively with Sydney Water to review both organisations' LTCOPs. This is to ensure that the 2 organisations' plans work together cohesively.

We recommend that the licence should require that WaterNSW, after reviewing the plan, provide the updated plan and an explanation of the changes to the Minister. As this is an important policy decision, we consider that the Minister is the appropriate decision maker, and the plan should be provided to the Minister. The Minister can engage the Department, as required.

Box 40 Recommended licence conditions for customer supply agreements for long term planning

41 Greater Sydney long-term capital and operational plan

- (1) Water NSW must maintain a long-term capital and operational plan for the Greater Sydney area and the declared catchment area that:
 - (a) identifies future needs for water for supply and release,
 - (b) identifies and assesses long-term investment options for meeting those needs and delivering the best long-term value to customers this includes considering:
 - (i) the 'Greater Sydney Water Strategy' published by the Department in August 2022,
 - (ii) managing ageing assets in a way that furthers the objectives set out in clause 1(1)(b) of this licence, and
 - (c) considers any written guidance the Minister provides to Water NSW.

Box 40 Recommended licence conditions for customer supply agreements for long term planning

- (2) Water NSW must review and update its long-term capital and operational plan and submit a copy of the updated plan, along with a report explaining the outcome of the review and any changes, to the Minister:
 - (a) at least once between 1 July 2024 and 30 June 2028, and
 - (b) on request by the Minister with any additional review to be completed within the timeframe requested by the Minister.
- (3) Water NSW must consult with the Department and Sydney Water in the review of its plan and consider their input.
- (4) Water NSW must cooperate with Sydney Water in Sydney Water's review of its own long term capital and operational plan.

Chapter 8 📡

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 recommended Licence).



In 2016 the NSW government transferred key data and information systems to WaterNSW including all the data and information within them.⁶³ This means WaterNSW is now custodian of most NSW water resource data and information.

WaterNSW is responsible for collecting, managing, and providing access to NSW water resource data and information. WaterNSW uses this information to inform how it operates water systems, actions water orders and bills its customers. Data and information is also used by other stakeholders such as the Department, for planning and policy development, and NRAR who use this data to enforce water laws through monitoring and compliance activities. Other data and information users include other NSW government agencies, local water utilities and the public.

In this chapter, we discuss our recommendations for a framework for data management, arrangements for NSW Government access to water data and information and metering equipment downloads.

8.1 Data management framework (DMF)

Our recommendations for the operating licence

59. Include a new obligation for WaterNSW to maintain and comply with a DMF that includes a data governance policy, data quality policy, and a data sharing policy.

The current licence requires WaterNSW to collect, manage and share data and information through obligations in the Roles and Responsibilities Agreement (RRA), data sharing agreements (DSAs) and the conditions in the licence related to the Duly Qualified Persons (DQP) portal. ⁶⁴ The existing obligations in the RRA and DSAs required WaterNSW to use its best endeavours to agree to the terms and conditions in the agreements, which has resulted in unfavourable outcomes for data users. The obligations related to the DQP portal are prescriptive and limit the obligations for data management and sharing data and information related to the DQP portal.

We recommend that the licence require WaterNSW to develop and maintain a data and information management framework (DMF). This will replace the current obligations requiring DSAs and the prescriptive DQP portal conditions related to data storage and management. A more outcomes focused approach will allow WaterNSW to determine the most effective and efficient way to manage and share data and information.

The licence condition will require WaterNSW to develop and maintain a DMF that includes a:

• data governance and management policy that is consistent with the NSW Data and Custodianship Policy and the *State Records Act 1998*. ⁶⁵ The policy should address data collection and provision requirements, roles and responsibilities of third parties, and identify process and procedures related to data management.

^a The Department of Climate Change, Energy, the Environment and Water.

- data quality policy consistent with the NSW Government's Standard for Data Quality
 Reporting.⁶⁶ The policy must ensure that for all new data created or collected, it must be fit
 for purpose where reasonable, must be clearly identified and include appropriate warning if
 not fit for purpose; metadata is collected and stored; and data quality statements are applied
 at the data set level or data element level to all data and provides for processes for resolving
 data concerns and remediating data deficiencies.
- data sharing policy for sharing data with third parties (excluding NSW Government agencies)
 that is consistent with the NSW Government's Open Data Policy.⁶⁷ The data sharing policy
 must identify the types of open-source data available for access, how it can be accessed, the
 types of data and information that WaterNSW can share with third parties and how to request
 it, and responsibility for data security and data use.
- data sharing policy for sharing data with NSW Government agencies that provides for NSW Government agencies to have access to data and information held by WaterNSW that is relevant to their functions. This policy must also provide for processes and practices for lawfully providing data and information. The data sharing policy must identify the types of data available for access, how it can be accessed, and the types of data and information WaterNSW can share, and how to request it. It should also require a process for resolving data access concerns raised by agencies.

As the DMF is not required to be implemented until 1 July 2025, we also recommend WaterNSW maintain existing data sharing agreements with NSW Government agencies until the DMF is implemented.

Our recommended Licence conditions extend the current licence conditions to accurately reflect WaterNSW's responsibility as the custodian of NSW water resource data. We consider this will address stakeholder concerns about data and information quality, and data and information access.

We expect that a DMF will 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. We consider the DMF will deliver significant benefits, through improved data management, quality, and access. Some of these benefits include:

- increased transparency
- improved compliance with water laws saves time and resources on regulatory activities
- 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 the Department and IPART.

Box 41 Recommended licence condition for the DMF

43 Data management framework (DMF)

- (1) Water NSW must, from 1 July 2025, maintain a framework for data that includes:
 - (a) a data governance and management policy that is consistent with the 'NSW Data and Custodianship Policy' published by NSW Government in June 2013 and the *State Records Act 1998*,
 - (b) a data quality policy that:
 - (i) is consistent with 'Standard for Data Quality Reporting' published by the NSW Government in October 2015,
 - (ii) ensures, for all new data created or collected, that:
 - (A) data is fit for purpose, including use for enforcement action, where this is reasonable and within Water NSW's control.
 - (B) data that is not fit for purpose is clearly identified and has appropriate warnings included,
 - (C) metadata is collected and stored, and
 - (D) data quality statements are applied at the dataset or data element level.
 - (iii) provides a process for resolving data quality concerns raised by agencies, including the prioritisation of concerns, and
 - (iv) provides a process for identifying and remediating deficiencies in data quality,
 - (c) a data sharing policy for sharing data with third parties (excluding NSW Government agencies) that:
 - (i) is consistent with the 'Open Data Policy' published by the NSW Government in 2016, and
 - (ii) details:
 - (A) the types of open-source data Water NSW publishes online and how third parties can access that data,
 - (B) types of data and information Water NSW shares with third parties on request, how to request such data and data request response times, and
 - (C) responsibility for data security and data use,

Box 41 Recommended licence condition for the DMF

- (d) a data sharing policy for sharing data with NSW Government agencies that:
 - (i) provides for NSW Government agencies to have access to data and information held by Water NSW that is relevant to their functions (unless Water NSW cannot lawfully provide access),
 - (ii) requires Water NSW to establish and maintain processes and practices that enable Water NSW to lawfully provide NSW Government agencies with data and information collected and created by Water NSW,

(iii) details:

- (A) the types of data and information that Water NSW holds,
- (B) how NSW Government agencies can request access to such data and data request response times, and
- (C) responsibility for data security and data use,
- (iv) provides a process for resolving data access concerns raised by NSW Government agencies, including the prioritisation of concerns,

(data management framework).

- (2) Water NSW must from 1 July 2025:
 - (a) make the following publicly available online:
 - (i) the policies referred to in (1)(a)-(d), and
 - (ii) user guides about how to access data and information, and
 - (b) train all relevant Water NSW personnel on the policies referred to in (1)(b)-(d).
- (3) Water NSW must implement and comply with the data management framework.
- (4) Until Water NSW has developed the data management framework required by this clause 43, Water NSW must maintain existing data sharing agreements with NSW Government agencies.

8.2 NSW Government access to water data and information

Our recommendations for the operating licence

60. Replace the current obligation requiring WaterNSW to provide access to the Duly Qualified Persons (DQP) data protocol with a requirement for WaterNSW to maintain and provide NSW Government agencies with access to systems containing data and information held by WaterNSW relevant to their functions.

Box 42 Why do the Department and NRAR need data and information?

The Department (DCCEEW Water) leads water legislation, policy and planning activities across NSW. It is responsible for ensuring sustainable, secure and healthy water resources and services for the people of NSW. To meet this, DCCEEW Water develops and updates policies, plans, and rules to determine how water is shared between users and the environment. It is also responsible for ensuring the plans, rules and other arrangements for water management are consistent with relevant water legislation.

NRAR is responsible for guiding, monitoring, auditing, investigating, and enforcing compliance with water legislation in NSW. It undertakes operational compliance policy activities and some licensing and approvals processes. NRAR also provides input to DCCEEW Water to inform its policy, plan, and rule-making functions.

WaterNSW currently provides both DCCEEW Water and NRAR access to a number of systems and databases to retrieve data and information to deliver their functions. DCCEEW Water uses this information in its planning and policy work while NRAR uses data and information from WaterNSW in its investigation and enforcement role of water laws and legislation.

Over time data and information needs have changed, and access to data and information is becoming increasingly important for WaterNSW's government stakeholders.

Under the current licence, this access is made under arrangements including through Data Sharing Agreements (DSAs) and prescribing access to a data portal (the DQP portal). We understand that the current arrangements do not provide sufficient access to the data and information that other agencies require to perform their functions.

In our draft licence we proposed that WaterNSW should co-design a water sector information hub to create a central repository where data and information can be stored, maintained and accessed by relevant government departments and agencies. While well supported by some stakeholders, others were concerned about the costs of developing and maintaining a data hub and the impact on WaterNSW customers who bear the cost through increased water prices.

We recommend that the licence take a more outcomes-focused approach. We do not recommend a requirement to develop a data and information hub. This does not prevent WaterNSW from developing the hub in the future if costs can be managed and if customers support it. The revised recommendation will allow WaterNSW to decide the most cost-effective way to deliver access to data and information within its own timing and budget constraints.

Instead of prescribing a data hub, we recommend a licence obligation that WaterNSW provide access to data and information systems within 20 business days by maintaining systems that allow NSW government agencies to access the data and information relevant to their functions. Previously WaterNSW has not provided access because of privacy and security concerns. We recognise that the way WaterNSW collects, manages and maintains data and information may prevent it from sharing that data and information with others. Therefore we also recommend a requirement that WaterNSW maintain processes for data creation and collection to enable WaterNSW to lawfully share or provide access to that data and information.

There may be circumstances that WaterNSW cannot lawfully provide access to data and information. In these circumstances WaterNSW is obliged to notify the requesting agency of the legal reason that access cannot be provided and any steps the agency can take to be granted access.

In refining the revised obligations, we sought additional feedback from NRAR, WaterNSW and the Department after the consultation process. This allowed us to clarify that access need not be granted where it would be unlawful to do so. Instead we recommend requiring that WaterNSW takes steps to ensure that data and information is collected in a way that avoids this.

We also recommend that if WaterNSW significantly modifies or replaces the information systems used to provide agencies with data and information, WaterNSW must cooperate with the Department and NRAR in designing and developing those changes.

We consider that the revised access obligation complements the new DMF obligation. Together, they allow WaterNSW to develop processes to ensure NSW Government agencies can access the data and information they need to deliver their functions.

The new access obligations will provide the following benefits:

More cost effective – we consider that it is imperative that NSW government agencies have
access to the data they need to undertake their functions. It is more costly to the people of
NSW, if effort was duplicated and data was collected and maintained by a second agency.
Therefore, WaterNSW should provide access to the data and information that it already
collects and maintains.

- Improved efficiency it would be more efficient for NRAR and the Department to have direct
 access to data in WaterNSW's systems rather than having to request and wait for data to be
 delivered. The limited self service capability has placed increased reliance on the
 WaterNSW's data team to respond to requests from across the ecosystem. The high number
 of requests increases the workload on the WaterNSW data team, who receive, triage, and
 must respond to data requests across the ecosystem.
- Better decision making access to all available information and data allows for better
 decision making from government agencies. When only limited access is provided, it is
 difficult for agencies to know what information is available to request, and decisions are often
 made in the absence of data. Currently, corporate knowledge is required to know what data
 exists, where it exists or how to access it. This creates an inherent risk of either no information
 being available, the incorrect information being used or incomplete information being shared.

We do not anticipate a significant cost increase to WaterNSW's current operations to maintain its existing systems and provide access to agencies. The benefits are likely to be considerable, as the provision of access to data and information enables those agencies to efficiently and effectively carry out their functions for the benefit of the people of NSW. We will consider expenditure and cost impacts further in our review of WaterNSW's prices (the next price determination will apply from 1 July 2025).

Box 43 Recommended licence condition for NSW Government access to water data and information

44 NSW Government access to water data and information

- (1) Water NSW must maintain systems that allow NSW Government agencies to access data and information that is relevant to their functions.
- (2) Water NSW must, from 1 July 2025, maintain processes and practices for data and information creation and collection that enable Water NSW to lawfully provide NSW Government agencies with access to the systems referred to in (1).
- (3) Water NSW must provide NSW Government agencies with access to the systems, or the part of the systems containing data and information relevant to the relevant agency's functions, upon request.
- (4) Water NSW must provide the access required by clause 43(3) within 20 business days (or a longer period of time agreed to by the relevant agency) unless Water NSW has:
 - (a) identified that Water NSW cannot lawfully provide access to the relevant agency, and
 - (b) notified the relevant agency that Water NSW cannot lawfully provide access, and identified the legal issue and any steps the agency can take to be granted access.

Box 43 Recommended licence condition for NSW Government access to water data and information

- (5) Water NSW must cooperate with the Department and the Natural Resources Access Regulator in the design and development of any significant modifications to, or replacement of, the systems maintained under this clause.
- (6) Water NSW must also consult with all NSW Government agencies who have been provided with, or who have requested, system access prior to making any significant modifications to, or replacement of, the systems maintained under this clause.

8.3 Download of metering data

Our recommendations for the operating licence

61. Replace the current obligation for WaterNSW to download metering data once a year with an obligation to download the data at the request of a NSW Government agency.

WaterNSW is currently required to download data from metering equipment at least once every 12 months for the purpose of accurate account management, billing and reporting. We recommend modifying this obligation so that WaterNSW will only be required to collect this data if a NSW Government agency request that it be collected.

We expect that removing the maximum time periods between data collection from this obligation will reduce the burden on WaterNSW. WaterNSW will no longer be required to physically collect data from the few sites that are not currently telemetered at least once every 12 months. We understand there are only a limited number of sites across the state that are not telemetered, and these sites do not extract significant volumes of water.

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

Box 44 Recommended licence condition for metering equipment downloads

45 Metering equipment downloads

- (1) Water NSW must, if requested by a NSW Government agency to do so, download all data from metering equipment used in connection with the works described in the Water Management (General) Regulation 2018, Schedule 8, clause 6(2).
- (2) Water NSW must manage the data downloaded under clause 45(1) in accordance with the data management framework referred to in clause 43(1).

Chapter 9 🔊

Promoting cooperative relationships with stakeholders

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



In this chapter, we discuss our recommendations for:

- retaining current licence requirements to maintain cooperative relationships with government agencies including NSW Health, Environment Protection Authority (EPA), the Department^a and the Natural Resources Access Regulator (NRAR) and the Ministerial Corporation (WAMC) so that these agencies and WaterNSW can undertake their roles effectively
- including a new licence requirement to maintain a cooperative relationship with NSW Fisheries
- retaining current licence conditions for WaterNSW to cooperate with WIC Act licensees.

9.1 Cooperating with Government stakeholders

The current licence requires WaterNSW to maintain cooperative relationships with key Government stakeholders through memoranda of understanding (MOUs) and other agreements. These relationships encourage WaterNSW to align its operations with the expectations of the public, Government and regulators.

A MOU is a flexible administrative tool that facilitates agreements between the parties on matters that may not be foreseen at the time that the licence is granted. Generally, we consider that MOUs are cost-effective ways for parties to establish effective working relationships. They promote cooperative approaches to addressing issues of mutual concern, such as data and information sharing, and they can be easily reviewed and updated.

Similar to MOUs, cooperation protocols are an administrative tool that facilitate agreements between parties to the protocol which may not have been foreseen at the time the licence was granted. We consider that a key difference between a MOU and cooperation protocol is the level of detail; a cooperation protocol includes more substantive details than a MOU. This could be more specificity about how parties to the protocol operate and how they would work together to achieve shared goals. We expect that protocols would include procedures and operational details whereas MOUs would not.

Water NSW operating licence review 2023-24

^a The Department means the Department of the Public Service responsible to the Minister administering the Act, Part 2, Division 4.

9.1.1 Memoranda of understanding with NSW Health and EPA

Our recommendations for the operating licence

62. Retain the current requirements for WaterNSW to maintain MOUs with NSW Health and EPA.

WaterNSW is required to enter into separate MOUs with NSW Health and the EPA under the Act. ⁶⁹ We recommend retaining the current licence conditions requiring WaterNSW to maintain and comply with these MOUs. The purpose of the MOUs is to maintain cooperative relationships with NSW Health and the EPA. MOUs are only effective if the parties involved maintain them and comply with them. Finally, we also recommend that the licence should require WaterNSW to publish these MOUs for transparency.

We acknowledge that for WaterNSW to comply with the MOU, it relies on cooperation from the other parties. During the Review, we considered whether the licence should require WaterNSW to 'use its best endeavours' to comply with MOUs to minimise the risk of WaterNSW contravening the licence due to circumstances outside of its control. However, we concluded that the 'best endeavours' clause is not required. WaterNSW and the other entities (NSW Health and the EPA) can and should draft their MOUs to allow the flexibility that WaterNSW seeks.

The MOU with NSW Health recognises NSW Health's role in providing advice to the Government about drinking water quality standards and the supply of water that is safe to drink. NSW Health is the lead agency for guiding water-related public health incident responses.

WaterNSW's current MOU with the EPA recognises EPA's role as the environment regulator for NSW. The MOU also recognises the EPA's role in preventing, avoiding, reducing and mitigating the effects of pollution events in the declared catchment areas and controlled areas, and other WaterNSW owned and managed lands across NSW.⁷⁰



WaterNSW's compliance during the 2022-2024 operating licence term

We audited WaterNSW's compliance with the operating licence requirements for these MOUs in 2023, for the first time in the current licence term. We found WaterNSW was compliant and did not identify compliance issues that need to be addressed through specific operating licence conditions.

Box 45 Recommended licence conditions for a MOUs with NSW Health and the EPA

46 Memorandum of understanding with NSW Health

- (1) The memorandum of understanding between Water NSW and the Secretary of the Ministry of Health referred to in section 21 of the Act must:
 - (a) recognise the role of NSW Health in providing advice to the NSW Government in relation to water quality standards and public health,
 - (b) set out reporting arrangements for Water NSW to notify NSW Health of events that might impact public health, and
 - (c) set out procedures to facilitate a cooperative relationship between the parties.

(2) Water NSW must:

- (a) maintain a memorandum of understanding with the Secretary of the Ministry of Health of the nature described in clause 46(1) for the term of this licence,
- (b) make the memorandum of understanding publicly available online, and
- (c) comply with that memorandum of understanding.

47 Memorandum of understanding with the EPA

- (1) The memorandum of understanding between Water NSW and the Environment Protection Authority (EPA) referred to in section 21 of the Act must:
 - (a) recognise the role of the EPA as the environmental regulator, and
 - (b) set out procedures to facilitate a cooperative relationship between the parties.

(2) Water NSW must:

- (a) maintain a memorandum of understanding with the EPA of the nature described in clause 47(1) for the term of this licence.
- (b) make the memorandum of understanding publicly available online, and
- (c) comply with that memorandum of understanding.

9.1.2 Roles and responsibilities agreement with the Department, NRAR and WAMC

Our recommendations for the operating licence

63. Modify the current requirement for WaterNSW to maintain an RRA with the Department to also recognise NRAR and WAMC as parties to the RRA, and remove limitations to ensure the RRA is applied in its entirety.

The current licence requires WaterNSW to enter into an agreement with the Department on the roles and responsibilities regarding the conduct of Conferred Functions and comply with that agreement (the RRA).⁷¹ The RRA largely identifies the roles and responsibilities of agencies that are party to the agreement for the purposes of collecting, managing, protecting and sharing data and information. The RRA was last revised in 2021 and continues to provide benefit by:

- minimising the risk of duplicative efforts to collect and manage water resource data across the state
- allowing water data and information users access to historic data.

We recommend keeping the requirement for WaterNSW to maintain and comply with the RRA as it continues to be relevant. However, we recommend changes to the licence clause to:

- acknowledge that NRAR and WAMC are also parties to the agreement
- remove the restriction that limits compliance to only the conduct of Conferred Functions set out in the RRA
- require WaterNSW to use its best endeavours to update the RRA
- require the agreement to identify the datasets covered by the agreement and the custodian and owner of each dataset.^b

Box 46 Recommended licence conditions for Roles and Responsibilities Agreement with Department, NRAR and WAMC

48 Roles and responsibilities agreement with the Department, NRAR and WAMC

- (1) Water NSW must maintain an agreement with the Department, the Natural Resources Access Regulator (NRAR) and the Ministerial Corporation (WAMC) that:
 - (a) defines the roles and responsibilities of each party to the agreement, and
 - (b) identifies the datasets covered by the agreement and the custodian and owner of each dataset.

b There is key difference between data owners and custodians as discussed in chapter 8 of this report.

Box 46 Recommended licence conditions for Roles and Responsibilities Agreement with Department, NRAR and WAMC

- (2) Water NSW must use its best endeavours to update the existing agreement by 30 June 2025.
- (3) Water NSW must make the updated agreement publicly available online.
- (4) Water NSW must comply with the agreement maintained under this clause 48.

9.1.3 Cooperation protocol with NRAR and NSW Fisheries

Our recommendations for the operating licence

- 64. Modify the requirement for WaterNSW to maintain and comply with a cooperation protocol with NRAR.
- 65. Include a new obligation for WaterNSW to use its best endeavours to enter into a cooperation protocol with NSW Fisheries by 30 June 2025.

The licence currently requires WaterNSW to use its best endeavours to maintain a MOU with NRAR and comply with that MOU.⁷² The purpose of the MOU is to form the basis for an ongoing cooperative relationship between WaterNSW and NRAR.

We recommend amending the current requirement for WaterNSW to enter into a cooperation protocol, rather than a MOU, with NRAR. The Act requires WaterNSW to enter into MOUs with EPA and the Secretary of the Ministry of Health.⁷³ The Act does not provide for MOUs with other parties and we have only recommended MOUs where required under the Act.

We also consider that the cooperation protocol is appropriate, given the complex nature of interactions between NRAR and WaterNSW and recommend removing the reference to 'best endeavours' from this obligation. Since the inclusion of this obligation in the licence, WaterNSW and NRAR have expressed difficulties agreeing to matters to be contained in the MOU. This has led to delays in formalisation of or updates to the MOU. We consider that the inclusion of best endeavours clauses in the licence introduces ambiguity about the expectations on WaterNSW (and NRAR). We acknowledge WaterNSW's concerns that they may be found to be noncompliant against the requirement to maintain and comply with a cooperation protocol, where in their view failure to comply did not result from their inaction. We expect the Tribunal or the Minister would consider the circumstances before determining whether a non-compliance has been established and, should a non-compliance arise, consider mitigating circumstances before deciding whether compliance or enforcement action was necessary.

We further recommend clarifying that the purpose of the cooperation protocol must:

- recognise the shared and complementary responsibilities of WaterNSW and NRAR
- identify opportunities for complementary work to improve service delivery and efficiency; and collaboration on research, education and engagement programs to deliver enhanced results and reduce duplication
- identify needs and constraints of each party as they relate to each other, and
- set out procedures to facilitate a cooperative relationship between the parties.

The licence does not currently require WaterNSW to enter into any formal arrangements with the NSW Fisheries. Through our review, we identified that WaterNSW and NSW Fisheries would benefit from a formalised cooperation protocol to help address the complexity between the interactions between both parties. Therefore, we also recommend that WaterNSW enter into a cooperation protocol with NSW Fisheries by 30 June 2025. The purpose of this protocol is to:

- recognise shared and complementary responsibilities of the parties around ecologically sustainable development and the protection of the environment. including conservation of fish reserves and habitat^c
- identify how WaterNSW and NSW Fisheries could cooperatively meet shared responsibilities and support each other in relation to complementary responsibilities.

Similar to the cooperation protocol with NRAR and the MOUs with NSW Health and EPA, the cooperation protocol with NSW Fisheries would set out procedures to facilitate a cooperative relationship between parties to the protocol. It would also clarify what each party is responsible for and reduce confusion about the responsibilities of both parties for delivering tasks and projects with shared responsibilities across NSW.

Box 47 Recommended licence conditions for cooperation protocol with NRAR

49 Cooperation protocol with NRAR

- (1) Water NSW must maintain a cooperation protocol with the Natural Resources Access Regulator that:
 - (a) recognises the shared and complementary responsibilities of the parties,
 - (b) identifies opportunities for:
 - (i) complementary work to improve service delivery and efficiency, and
 - (ii) collaboration on research, education and engagement programs to deliver enhanced results and reduce duplication,

_

c In particular, related to including conservation of fish reserves and habitat.

Box 47 Recommended licence conditions for cooperation protocol with NRAR

- (c) identifies the needs and constraints of each party as they relate to each other, and
- (d) sets out procedures to facilitate a cooperative relationship between the parties.
- (2) Water NSW must comply with the cooperation protocol maintained under clause 49(1).

Box 48 Recommended licence conditions for cooperation protocol with NSW Fisheries

50 Cooperation protocol with NSW Fisheries

- (1) Water NSW must use its best endeavours to enter a cooperation protocol with NSW Fisheries by 30 June 2025 that:
 - (a) recognises the shared and complementary responsibilities of the parties in relation to ecologically sustainable development and the protection of the environment, including conservation of fish reserves and habitat,
 - (b) identifies how the parties can cooperatively meet shared responsibilities and support each other in relation to complementary responsibilities, and
 - (c) sets out procedures to facilitate a cooperative relationship between the parties.
- (2) Water NSW must:
 - (a) maintain a cooperation protocol with NSW Fisheries of the nature described in clause 50(1) for the term of this licence, and
 - (b) comply with that cooperation protocol.

9.2 Promoting cooperative relationships with other stakeholders

Our recommendations for the operating licence

66. Modify the current 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 it enters into.

The current licence obligates WaterNSW to use reasonable endeavours to cooperate with WIC Act licensees seeking to establish a code of conduct required by a WIC Act licence or approval.⁷⁴ Establishing a code of conduct is intended to encourage ongoing cooperation and fair competition between WaterNSW and WIC Act licensees.

We recommend removing the current 'best endeavours' clause as the licence only requires WaterNSW to cooperate with WIC Act licensees to establish a code of conduct. This allows WaterNSW to not establish the code of conduct if it is not practicable, therefore a further 'best endeavours' clause does not provide benefit. Once a code of conduct has been established, we recommend that the licence should require WaterNSW to comply with it. A code of conduct will only be effective if the parties involved comply with it.

We also recommend removing the condition in the current licence that states where the Minister has established a code of conduct under the WIC Regulation, WaterNSW will be taken to have entered into a code of conduct with a WIC Act licensee by applying that code of conduct to that WIC Act licensee. This provision has been taken out of the WIC Regulation and is no longer relevant.

Box 49 Recommended licence conditions for establishing and complying with codes of conduct with WIC Act licensees

31 Code of Conduct with WIC Act licensees

- (1) Water NSW must cooperate with any WIC Act licensee that seeks to establish with Water NSW a code of conduct required by an approval or licence under the *Water Industry Competition Act 2006*.
- (2) Water NSW must comply with a code of conduct established with a WIC Act licensee.

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 recommended Licence).



In this chapter, we discuss our recommendations for the 2024–2028 licence to retain and update conditions in the current licence that:

- authorise, and in some cases require, WaterNSW to undertake activities specified in the licence
- set out the licence context, including the licence objectives and the terms and conditions for other administrative parts of the licence
- specify WaterNSW's obligations for performance monitoring and reporting
- explain a new miscellaneous part of the licence which is intended for better structuring of the licence and to reduce repetition.

10.1 Licence context

10.1.1 Operating licence objectives

Our recommendations for the operating licence

- 67. Include objectives in the Licence that:
 - a. are linked to WaterNSW's principal functions under the Act
 - b. clarify authorisations and requirements under the licence
 - c. provide clarity about WaterNSW's objective to supply or provide services in a way that does not prevent or hinder competition
 - d. reflect the social, economic and environmental objectives outlined in section 8 of the *State Owned Corporations Act 1989* (NSW)
 - e. promote the sustainable supply of services with the long-term interests of the community in mind
 - f. encourage WaterNSW to conduct its activities in a manner that considers the impacts of climate change and equity within and between generations in its activities.

An operating licence (or other regulatory instrument) should clearly identify objectives that describe the outcomes the licence aims to achieve. This helps people understand why specific conditions are included in the licence.

The current licence objectives are to provide transparent, auditable terms for WaterNSW to undertake its activities, recognise the interests of its stakeholders and impose the minimum regulatory burden on WaterNSW by avoiding regulatory duplication. We recommend updating the licence objectives to better align with the objectives set out in the Act. Further, we recommend broadening the Licence objectives to require WaterNSW to conduct its activities in a manner that considers the impacts of climate change and equity within and between generations.

We recommend that the new licence objectives should be modified to set clear public and government expectations for WaterNSW to:

- align the objectives more closely to WaterNSW's principal functions, as prescribed in the WaterNSW Act 2014 and the State Owned Corporations Act 198977
- provide greater certainty and establish clear expectations for WaterNSW to consider sustainability in its services, and climate change risks and actions, by conducting its activities in a manner that:
 - is efficient, resilient, reliable, sustainable and equitable, when supplying its services
 - supports the long-term interests of customers, consumers and the community
 - considers the impact on the environment
 - considers the impacts of climate change
 - considers equity within and between generations
- clarify that WaterNSW must consider the licence objectives when doing anything authorised or required by the licence.

Setting out explicit climate change objectives

We recommend amending the licence objectives to provide greater certainty and establish clear expectations for WaterNSW with respect to its climate change obligations under the Licence. This will clarify public and government expectations on WaterNSW to conduct its activities in a manner that considers the impacts of climate change, and equity within and between generations.

We expect that this will require WaterNSW to engage with customers, the wider community, stakeholders and regulators about future challenges and promote conversations that balance risk, costs and interests in both the short and longer term.

Box 50 Recommended licence objective

1 Objective of this licence

- (1) The objectives of this licence are to:
 - (a) authorise and require Water NSW to:
 - (i) provide, construct, operate, manage and maintain efficient, coordinated and commercially viable systems and services for the capture and storage of water, release of water and supply of water, and
 - (ii) protect catchment areas and works,
 - (b) require Water NSW to conduct these activities in a manner that:
 - (i) is efficient, resilient, reliable, sustainable and equitable,

Box 50 Recommended licence objective

- (ii) supports the long-term interests of customers and the community,
- (iii) considers impacts on the environment,
- (iv) considers the impacts of climate change, and
- (v) considers equity within and between generations.
- (c) set efficient and effective terms and conditions, including performance standards, that Water NSW must meet when supplying or providing services in a way that:
 - (i) supports its principal objectives under the *Water NSW Act 2014* and the *State Owned Corporations Act 1989*, and
 - (ii) does not prevent or hinder competition.
- (2) Water NSW must consider these objectives when it does anything authorised or required by this licence.

10.2 Licence authorisation

Our recommendations for the operating licence



- 68. Retain the licence authorisations in the licence.
- 69. Add a new authorisation for water metering.

This licence condition specifies what functions the licence authorises WaterNSW to do. Including an authorisation clause in the licence meets the requirements of the Act.⁷⁸

We recommend retaining the authorisation clauses in the Licence, as we consider it continues to be effective. Specifically, the licence authorises WaterNSW to capture and store water, to release water to persons entitled to take it, or for other lawful purposes, and to supply water to Sydney Water and other customers. WaterNSW is also authorised to construct, maintain and operate water management works, protect and enhance quality and quantity of water and manage and protect catchments, undertake research on catchments and education in the community. WaterNSW is also authorised to undertake flood mitigation for all areas of NSW except for the Sydney catchment area.

10.2.1 Water metering functions

The current licence includes a licence condition that requires WaterNSW to obtain agreement from the owner of metering equipment it does not own prior to operating, replacing, repairing, maintaining, removing, connecting, disconnecting or otherwise modifying metering equipment.⁷⁹ We recommend moving this obligation into the authorisations part of the Licence.

We consider that the licence should authorise WaterNSW to operate, replace, repair, maintain, remove, connect, disconnect, or modify metering equipment that it does not own. The Act states that the licence can make provisions to allow this activity.⁸⁰

We understand that without this authorisation in the licence, WaterNSW cannot undertake any of the proposed work at metering equipment it does not own, even on request by the meter owner. We therefore consider that the authorisation is necessary. To protect the interests of the owner of the metering equipment, we propose that the licence also requires WaterNSW to obtain the approval of the metering equipment owner before it can undertake any of the authorised metering activities, and comply with section 32 of the Act.

Where WaterNSW cannot obtain the agreement of the customer, but the meter is considered faulty, WaterNSW has been conferred functions under the *Water Management Act 2000* to direct a landholder or person to take specified measures to install, replace or to properly maintain metering equipment.⁸¹ Unless the direction specifies otherwise, the direction is taken to include that the equipment is properly maintained and that it is to not be used unless it is properly sealed. This allows WaterNSW to withhold provision of services until the faulty meter is fixed.

Box 51 Recommended licence conditions for water metering functions

8 Metering equipment functions

- (1) Subject to (2), this licence authorises Water NSW to exercise the functions set out in the Act. section 31(1).
- (2) Subject to the Act, section 32, before Water NSW operates, replaces, repairs, maintains, removes, connects, disconnects or modifies metering equipment that Water NSW does not own, it must obtain the approval of the owner of the equipment.

10.2.2 Flood mitigation and management

The current licence does not authorise flood mitigation in the declared catchment. We do not consider that the licence should authorise flood mitigation in the declared catchment. In this case, clause 1.2.1(k) of the current licence remains fit for purpose.

As mentioned in our Issues Paper, the NSW Parliamentary Research Service has identified a number of current barriers which are preventing WaterNSW from undertaking this role. Specifically, this includes practical limitations of existing dams, i.e. the design and configuration, as well as other instruments including but not limited to:

- water supply and water use work approvals
- operating protocols
- water sharing plans.82

Changes to these instruments are beyond the scope of our licence review. We consider that dams (and the corresponding operating protocols) in the declared catchment are designed for water supply security only. We are cognisant that holding lower volumes of water for additional airspace would reduce system yield. This would adversely impact water availability for Greater Sydney at a time where droughts are already placing stress on water supply.

WaterNSW also maintains an early warning network system to provide notifications of a significant dam release and/or an emergency situation.⁸³ It is our understanding that WaterNSW provides data to the Bureau of Meteorology (the Bureau) as per requirements of the *Water Act 2007.* The NSW State Emergency Services (SES) and the Bureau issue flood warning information to the public using information from the NSW gauge network.⁸⁴

Should the NSW Government decide to alter WaterNSW's role in flood mitigation and management, then the licence can be amended accordingly. This would occur after the modification of infrastructure, 'changes to operating protocols, and development of systems and procedures to enable flood mitigation.

10.2.3 Other administrative parts of the licence

Our recommendations for the operating licence

- 70. Set out a 4-year licence term.
- 71. Clarify that the licence applies to WaterNSW's whole area of operations.
- 72. Retain the non-exclusivity clause in the licence.
- 73. Retain the schedule of conferred functions conferred on WaterNSW under other Acts.
- 74. Retain the authorisation to undertake flood mitigation and management in all areas of New South Wales, except for the Sydney catchment area as defined under the Act.

Term of operating licence

The Act sets out that the term of an operating licence is to be for a maximum of 5 years. ⁸⁵ We recommend that the Licence be set for a 4-year term, commencing on 1 July 2024.

The 4-year licence term will allow a 2-year gap between licence and pricing reviews. The 2-year gap between the licence and ongoing pricing reviews will allow for better customer engagement and resourcing for WaterNSW to inform both reviews.

Typically, we would recommend 5-year terms, which is the maximum term allowable under the Act, to minimise costs associated with frequent end-of-term reviews of the licence. However, our intention with the 4-year licence and 2-year gap between licence and price reviews is for this gap to be retained in the future, with a return to 5-year terms for subsequent licences.

Area of operations

The current licence sets out WaterNSW's area of operations in a definition. ⁸⁶ Without altering the definition, we recommend elevating the area of operations to a condition in the body of the Licence, and to confirm that the licence applies to WaterNSW's whole area of operations. WaterNSW's area of operations is set out in section 15 of the Act.

Non-exclusive licence

The current licence states that the operating licence does not prohibit another person from providing services in WaterNSW's area of operations that are the same as, or similar to, WaterNSW's services.⁸⁷ We recommend retaining this licence condition.

Conferred functions

On 1 July 2016 the Minister amended the previous State Water Corporation and Sydney Catchment Authority (SCA) operating licences and issued these as the WaterNSW (State Water and SCA) operating licences. In this first WaterNSW licence, the Minister included an extensive list of functions conferred on WaterNSW under other acts, and in particular the *Water Management Act 2000* and the *Water Act 1912*.

The schedule of conferred functions has been amended as additional functions are conferred on WaterNSW. The most recent amendment occurred on 11 October 2023 when the Executive Council approved the conferral of functions to enable WaterNSW to undertake floodplain harvesting.⁸⁸

Box 52 Recommended licence conditions for administrative parts of the licence

3 Term of this licence

The term of this licence is 4 years from 1 July 2024.

4 Area of operations

(1) This licence applies to Water NSW in its whole area of operations, including the Fish River water supply scheme.

Note: The Act, section 15(1) states the area of operations of Water NSW is the whole of the State.

- (2) This licence authorises Water NSW to carry out its functions outside of the State to the extent permitted by law.
- (3) This licence authorises Water NSW to exercise the functions referred to in the Act, section 15(2) but only with the agreement of the relevant body.

5 Non-exclusive licence

This licence does not prohibit another person from providing services in the area of operations that are the same as, or similar to, the services provided by Water NSW.

7 Conferred functions

Water NSW is authorised to undertake the conferred functions specified in Schedule A.

10.3 Performance monitoring and reporting

Our recommendations for the operating licence

- 75. Retain the current operational audit requirements.
- 76. Move existing Reporting Manual obligations, to clarify WaterNSW's reporting obligations, to the Licence.
- 77. Retain the current reporting and record keeping requirements, and provision of information and performance monitoring, and obligations requiring WaterNSW to cooperate with the person appointed to undertake the catchment audit.
- 78. Retain the current requirement for WaterNSW to monitor and compile environmental indicators consistent with the reporting manual and amend the obligation to clarify that WaterNSW must report this data in a way that allows for year-to-year comparison of the indicators.
- 79. Add a new requirement for WaterNSW to report against the International Sustainability Standards Board's (ISSB) sustainability-related disclosure standards.

10.3.1 Operational audits

We undertake annual operational audits of the 3 public water utilities that we regulate (i.e. WaterNSW, Sydney Water and Hunter Water) as part of our function to monitor the utilities' compliance with their licences. Operational audits, coupled with the utilities' self-reporting, is an important part of our compliance monitoring function.

The Act states that IPART must ensure that WaterNSW's operational audits are prepared in accordance with the operating licence.⁸⁹ This means that the licence must include terms and conditions for the operational audits.

We recommend retaining the current licence obligations related to operational audits. ⁹⁰ This will allow us to monitor WaterNSW's compliance with licence obligations and help us understand if WaterNSW is on track to deliver on its objectives.

We recommend minor changes to the current obligation. This is to reflect changes to contemporary operational audit processes, such as the ability to conduct remote audit interviews and field verification visits as was required following the COVID-19 pandemic and ensure that WaterNSW provides auditors with reasonable access to necessary systems at operational audits.

Box 53 Recommended licence conditions for operational audits

53 Operational audits

- (1) Water NSW must cooperate with an audit undertaken by IPART, or an auditor engaged by IPART, of Water NSW's compliance with this licence, including the reporting manual (the operational audit).
- (2) For the purpose of any operational audit or verifying a report on an operational audit, Water NSW must:
 - (a) provide IPART or the auditor with any information in Water NSW's possession or control that is:
 - (i) necessary to conduct the operational audit, and
 - (ii) reasonably requested by IPART or an auditor.
 - (b) subject to clause 53(3), permit IPART or the auditor to:
 - (i) access any works, premises or offices occupied by Water NSW,
 - (ii) carry out inspections, measurements and tests on, or in relation to, any such works, premises or offices,
 - (iii) take on to any such premises or offices any person or equipment necessary for the purpose of performing the operational audit or verifying any report on the operational audit,
 - (iv) inspect and make copies of, and take extracts from, any documents, records and systems of Water NSW that are maintained in relation to the performance of Water NSW's obligations under this licence (including the reporting manual), and
 - (v) discuss matters relevant to the operational audit or any report on the operational audit with Water NSW's personnel.
- (3) The activities in clause 53(2)(b) may be carried out remotely:
 - (a) with IPART's written approval, or
 - (b) where state or federal government restrictions:
 - (i) prohibit access to any works, premises or offices occupied by Water NSW, or
 - (ii) limit the movement of IPART, the auditor or Water NSW's personnel.

10.3.2 Reporting, record keeping and provision of information

The current licence requires WaterNSW to comply with its reporting obligations in accordance with the licence and Reporting Manual.⁹¹

The Reporting Manual sets out the information that WaterNSW must report to IPART. These reporting requirements support our function in monitoring WaterNSW's compliance with its licence (together with the operational audits discussed above). We recommend retaining the current licence condition to comply with the Reporting Manual to ensure that WaterNSW complies with the Reporting Manual. Further, under the Reporting Manual, WaterNSW must provide various reports to IPART (and other agencies such as NSW Health). We recommend formalising the existing obligations by including them in the Licence, noting that the reporting manual will detail what the reports must include.

The current licence also requires WaterNSW to provide information to IPART, NSW Health or auditors acting on our behalf.⁹³ We recommend retaining these requirements to support the audit and review processes. The information that WaterNSW is required to provide could be reporting information, compliance and performance information to support the operational audit process, water quality information to NSW Health, or other information that we may request to support our reviews under the operating licence.

Box 54 Recommended licence conditions for reporting and record keeping

54 Reporting and recording keeping

- (1) Water NSW must comply with its reporting and auditing obligations set out in the reporting manual.
- (2) Water NSW must maintain sufficient records and systems to enable it to report accurately under this licence, including the reporting manual.
- (3) In the case of any disagreement between IPART and Water NSW regarding the interpretation or application of any requirements of the reporting manual, IPART's interpretation or assessment will prevail.

Box 55 Recommended licence conditions for the provision of information and performance monitoring

55 Provision of information for performance monitoring

- (1) Water NSW must provide IPART or an auditor any information reasonably requested by IPART or an auditor, to enable IPART to review or investigate Water NSW's compliance with its obligations under this licence.
- (2) If Water NSW engages any person (including a subsidiary) to undertake any activities on its behalf, it must take all reasonable steps to ensure that such persons:
 - (a) provide information to IPART or an auditor on request, and
 - (b) do the things specified in clauses 53 to 56 as if that person were Water NSW.
- (3) If IPART or an auditor requests information from Water NSW that is confidential, Water NSW must provide that information, subject to entering reasonable confidentiality arrangements with IPART or an auditor directed at protecting confidential information.
- (4) Water NSW must provide NSW Health with information relating to water quality in the manner and form specified by NSW Health.

Note: Under section 19 of the *Public Health Act 2010*, the Secretary of NSW Health may require Water NSW to produce certain information.

Catchment audit

Similarly, the current licence requires WaterNSW to reasonably cooperate with the auditor appointed to undertake a catchment health audit under section 42 of the Act. 4 The information required informs the outcomes of the catchment health audit, which audits the health of the declared catchment areas. We recommend retaining this obligation but have modified the requirement so that WaterNSW must cooperate with a catchment auditor, provide the required information and maintain sufficient records and systems to provide that information.

Box 56 Recommended licence conditions for the catchment audit

56 Catchment audit

- (1) Water NSW must cooperate with a person appointed by the Minister under the Act, section 42 (catchment auditor) and must provide that person with all information reasonably required to assess the state of declared catchment areas having regard to any Gazetted catchment health indicators.
- (2) Water NSW must maintain sufficient records and systems to enable it to provide the information required by clause 56(1) to the catchment auditor.

10.3.3 Environmental reporting

Environmental performance indicators

The current licence requires WaterNSW to monitor, record and compile data on environmental indicators relevant to the declared catchment, and report on the indicators in line with the Reporting Manual.95

We recommend clarifying the scope of reporting in the reporting manual. We recommend not limiting environmental reporting to the declared catchment only as we consider that the environmental indicators are applicable to both declared and non-declared catchment areas. We consider that environmental indicators should reflect WaterNSW area of operations, as WaterNSW's operations, in its entirety, impact the environment.

We consider that WaterNSW should also collect and report on environmental indicators for held environmental water (HEW) and planned environmental water (PEW) releases.

Box 57 Recommended licence conditions for environmental reporting

51 Environmental performance indicators

Water NSW must:

(a) monitor and compile indicators of the direct impact on the environment of Water NSW's activities, including, at a minimum, indicators consistent with the reporting manual including indicators on the impact of energy used and waste generated (the environmental performance indicators), and

Note: The reporting manual identifies these with an indicator number starting with 'E'.

(b) report on the environmental performance indicators consistent with the reporting manual and in a way that allows a year-to-year comparison of the indicators.

Climate related disclosures

The current licence does not require WaterNSW to make climate related disclosures.

We recommend adding a new requirement for WaterNSW to report against the International Sustainability Standards Board's (ISSB) sustainability-related disclosure standards. However, where this reporting may be already required under another law, including a Treasury directive that is legally binding on WaterNSW, WaterNSW will not be required to duplicate this reporting. In either case, WaterNSW will be required by the licence to make the information publicly available. We consider that publicly disclosing sustainability related disclosures may result in an accelerated achievement of emission reduction target due to increased transparency and accountability.

The ISSB reporting standards enable consistent, comparable and reliable reporting on sustainability information. They are designed to ensure that sustainability related information is reported alongside financial information—in the same reporting package. The ISSB reporting standards include the extent to which organisations are managing their greenhouse gas emissions. They include the extent that the organisations identify and respond to climate risks and will help identify areas where organisations are able to assist other organisations. They also enable the comparison of organisations across jurisdictions.

If WaterNSW makes and publishes climate related disclosures that are similar to IFRS S2 or an Australian equivalent that are required by a law, WaterNSW is not required to also make the climate related disclosures that are required under clause 52(1) of the licence.

Our cost-benefit analysis estimated the net benefits of this draft condition to be \$0.2m (BCR 2.13). However the cost was largely attributable to the inclusion of annual reporting of Scope 3 emissions from the financial year commencing 1 July 2026. With the removal of Scope 3 emissions from the final condition we expect costs to be less. Our cost-benefit analysis supports the recommendation. We will consider expenditure and cost impacts further in our review of WaterNSW's prices (the next price determination will apply from 1 July 2025).

Box 58 Recommended licence conditions for climate-related disclosures

52 Climate-related disclosures

- (1) Water NSW must make climate-related disclosures for the preceding financial year publicly available online by 30 November each year (or another date nominated by Water NSW and approved by IPART) that are consistent with:
 - (a) International Financial Reporting Standard S2 Climate-related Disclosures issued in 2023 (IFRS S2), or
 - (b) another standard nominated by Water NSW and approved by IPART.
- (2) Water NSW is not required to make disclosures for the purposes of clause 52(1), for:
 - (a) the financial year commencing on 1 July 2024, or
 - (b) a financial year for which Water NSW has made disclosures required by another law that are consistent with IFRS S2 or an Australian equivalent, or that cover the matters required to be disclosed by IFRS S2, and has made those disclosures publicly available.

10.4 Miscellaneous

Our recommendations for the operating licence

80. Include a new part in the Licence setting out miscellaneous matters including:

- a. requirements for WaterNSW to make a copy of the licence available to any person free of charge, on its website and upon request
- b. the timeframe for WaterNSW to take actions required in the licence
- c. requirements for approvals and notices to be in writing and sent to the intended recipient
- d. specifying when IPART intends to begin the next end-of-term review of the licence and the purpose of the review
- e. IPART's functions (for information purposes only).

We have recommended a new part of the licence for better structuring of the licence. It does not have a material impact on the terms and conditions of the licence but seeks to reduce some repetition and contain clauses that do not need to be in the first part of the licence. The miscellaneous part of the licence contains the following clauses:

- Availability of Licence this current licence condition requires WaterNSW to make a copy of
 the licence available to any person free of charge, on its website and upon request.⁹⁷ We have
 not recommended any substantive change to the current licence condition as we consider it
 is working effectively.
- Timeframe for WaterNSW to take actions this is a new licence condition but it does not impose new obligations. Rather, it seeks to consolidate requirements currently scattered throughout the licence. Instead of stating the timeframe for updating documents or information in every condition of the licence where WaterNSW is required to take action (e.g. update a published map or a policy), this clause sets out that WaterNSW must make all updates within 10 business days. For other actions (e.g. respond to requests for information in IPART's operational audits), WaterNSW must respond within a reasonable period. Finally it clarifies that if an operating licence states that WaterNSW must maintain a system, or similar, or publish a document by a certain date, WaterNSW must have developed it ready for maintenance/publishing by the day before.
- Approvals and notices the current licence confirms how notices must be presented. We recommend modifying the obligation to confirm that it applies to approvals given under the licence. The change seeks to consolidate requirements currently scattered throughout the licence that any approval, notice, exemption, request, guidance or other communication given under this licence must be in writing and delivered or sent to the address (electronic or postal) last notified by the recipient or otherwise specified for the intended recipient in the reporting manual. We also recommend that any nomination by WaterNSW for an alternative date or standard, must be made by the WaterNSW Managing Director.

- End of term review this current licence condition specifies when IPART intends to begin the next review of the licence and the purpose of the review. 98 We have not recommended any substantive change to the current licence condition as we consider it is working effectively.
- IPART functions the Act provides that IPART has such functions as may be conferred or imposed on it by an operating licence in connection with operational audits of WaterNSW.⁹⁹ We recommend that IPART's key functions in connection with operational audits be confirmed by conferring those functions on IPART under the licence. This supports transparency. This is an information clause setting out IPART's audit functions and responsibilities. It does not impose obligations on WaterNSW. It provides context for WaterNSW's obligations to participate in these audits and provide information.

Box 59 Recommended licence conditions for miscellaneous clauses

57 Availability of licence

Water NSW must make a copy of this licence publicly available online.

58 Timeframe for Water NSW to take action

- (1) If a clause of this licence requires Water NSW to:
 - (a) publish on its website or make publicly available a map, plan, policy, code of practice or other document or information, Water NSW must, if it updates the relevant document or information, publish the updated document or information within 10 business days unless this licence specifies an alternative period of time, and
 - (b) take other action, but does not specify a period of time in which Water NSW must act, Water NSW must take the relevant action within a reasonable period.
- (2) If a clause of this licence requires Water NSW to maintain or publish a management system, program, policy, procedure, summary or other system or document from a specified date, Water NSW must have developed the relevant system or document by the end of the preceding day.

59 Approvals and notices

- (1) Any approval, notice, exemption, request, guidance or other communication given under this licence must be:
 - (a) in writing addressed to the intended recipient, and
 - (b) where an address for a recipient is specified in the reporting manual (electronic and/or postal), delivered or sent to that address.
- (2) Any nomination by Water NSW for an alternative date or standard under this licence must be made by Water NSW's Managing Director.

Box 59 Recommended licence conditions for miscellaneous clauses

60 End of term review

- (1) IPART intends to review this licence in its final year to investigate:
 - (a) whether this licence is fulfilling its objectives, and
 - (b) any issues that have arisen during the term of this licence that may impact its effectiveness.
- (2) Water NSW must provide IPART with information reasonably requested by IPART as part of the review by the date specified by IPART.

61 IPART functions

- (1) IPART has the following functions:
 - (a) to prepare operational audits of Water NSW including at the times directed by the Minister,
 - (b) to appoint auditors to conduct operational audits of Water NSW,
 - (c) to determine Water NSW's reporting and auditing obligations in relation to requirements imposed on Water NSW under this licence and to publish those requirements in a reporting manual,
 - (d) to determine audit scope for each annual operational audit, including the clauses of this licence to be audited, subject to any direction given by the Minister,
 - (e) to approve alternate dates and standards under this licence and to determine audit compliance with this licence by reference to those approved dates and standards, and
 - (f) to do any of the following (or appoint an auditor or other person to do any of the following) in connection with an operational audit:
 - (i) access any works, premises or offices occupied by Water NSW,
 - (ii) carry out inspections, measurements and tests on, or in relation to, any such works, premises or offices,
 - (iii) inspect and make copies of, and take extracts from, any books, electronic systems and other records of Water NSW, and
 - (iv) direct Water NSW (or Water NSW's personnel) to:

Box 59 Recommended licence conditions for miscellaneous clauses

- (A) provide records or information to IPART,
- (B) answer question orally or in writing, and
- (C) make relevant personnel available to answer questions.
- (2) This clause 61 does not limit any of IPART's functions under the Act or any other law.

10.5 Changes to definitions and interpretation clause

Our recommendations for the operating licence

81. Modify some definitions.

The current licence defines terms used throughout the licence. We have reviewed the definitions and recommend changes to clarify the meaning of the defined terms and improve readability. We also propose removing unnecessary definitions and relying on definitions already included in the Act and the *Interpretation Act 1987*. 100

Chapter 11

Full list of recommendations

This chapter provides our full list of our recommendations for the WaterNSW operating licence.

11.1 Full list of recommendations

The full list of recommendations made in this report are available below.

Recommendations

1.	Retain the current requirement for WaterNSW to maintain, implement and comply with a WQMS consistent with the <i>Australian Drinking Water Guidelines</i> .	12
2.	Retain the current requirement for WaterNSW's WQMS to be consistent with NSW Health's requirements and clarify that these requirements are health-related.	12
3.	Retain the current requirement for WaterNSW to give NSW Health and IPART prior notice of any significant changes it proposes to make to the WQMS in accordance with the reporting manual.	12
4.	Include an obligation clarifying that WaterNSW does not need to have a WQMS for non-declared catchments areas where NSW Health has granted exemptions.	12
5.	Move the existing Reporting Manual 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, to the Licence.	12
6.	Retain the requirement for WaterNSW to maintain and implement an AMS consistent with <i>AS ISO 55001:2014</i> or another approved standard.	16
7.	Modify the existing catchment infrastructure works obligation to clarify the links to the AMS and the construction, maintenance and operation of works.	16
8.	Remove the obligation requiring WaterNSW to construct, maintain and operate Water Management Works in accordance with the AMS.	16
9.	Retain the requirement for WaterNSW to maintain and comply with an EMS in line with <i>AS/NZS ISO 14001:2016</i> .	18
10.	Include a requirement for WaterNSW to comply with the NSW Code of Practice for Fluoridation of Public Water Supplies for the FRWSS.	20
11.	For direct water supply services – replace the water quality standard requiring compliance with the WQMS with a standard requiring no water quality incidents resulting from non-conformance with the WQMS.	27
12.	For water release services – include a water quality standard requiring WaterNSW to notify relevant parties in line with the early warning system.	27
13.	For the Fish River water supply scheme – include a water quality standard requiring no water quality incidents resulting from non-conformance with WaterNSW's WQMS.	27
14.	For water release services – modify the existing water delivery performance standards to ensure all non-complying water orders are rectified in a timely manner, and for water orders to be delivered within one working day.	29
15.	For direct water supply services – include 3 service interruption standards requiring WaterNSW to notify customers of planned and unplanned service interruptions.	30

1	6.	For water release services – modify the existing service interruption standard related to consultation about rescheduled water orders.	30
1	7.	For water release services – include a new service interruption standard requiring WaterNSW to notify customers before it ceases to, or becomes unable to, release	20
1	0	water.	30
1	8.	Retain the current temporary trades performance standards.	33
1	9.	Include a requirement that at least 95% of customers who place a non-complying temporary trade application are contacted to rectify that order within 5 business days.	33
2	Ю.	Include an obligation outlining how to calculate performance standards.	34
2	1.	Move the existing Reporting Manual requirement, for WaterNSW to submit an annual report on its compliance against the performance standards, to the Licence. Include a requirement for WaterNSW to make the report publicly available online.	37
2	2.	Replace the current requirement for WaterNSW to have a local water utility register and information request procedure with a water quality policy for drinking water suppliers, and processes for determining water quality monitoring parameters, engaging with drinking water suppliers and data provision.	39
2	3.	Include a new requirement for WaterNSW to maintain a water quality monitoring enhancements program that enhances risk-related monitoring of raw water and identifies locations where monitoring equipment needs to be installed, replaced or relocated.	43
2	4.	Include an obligation requiring WaterNSW to provide an annual report to IPART on the water quality monitoring enhancements program.	43
2	5.	Modify the advance notification system requirements to address information gaps related to water quality data.	46
2	6.	Retain the current requirement for WaterNSW to establish and maintain customer supply agreements with customers to which it provides direct water supply services.	49
2	7.	Retain the current requirement for WaterNSW to maintain a water allocation account for customers with licences issued under the <i>Water Act 1912</i> or the <i>Water Management Act 2000</i> .	50
2	8.	Retain and clarify the current 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.	51
2	9.	Remove the current requirement to maintain a Customer Advisory Group (CAG) and modify the current customer engagement requirements to focus on engagement outcomes.	52
3	Ю.	Modify the requirement for WaterNSW to have a customer service charter to simplify the obligation and clarify the intent.	54
3	1.	Retain the current requirement for WaterNSW to have and follow a code of practice on payment difficulties and to make it available online.	55
3	2.	Include a new requirement for WaterNSW to maintain, implement and comply with a family violence policy, and publish and notify customers of this policy.	57

33.	Modify the current complaints handling requirement to reflect revised standards.	59
34.	Include an obligation for WaterNSW to publish a summary of the complaints handling process and provide a copy to anyone that requests it.	59
35.	Retain the current requirement for WaterNSW to be a member of EWON and publish the dispute resolution services provided by EWON online.	61
36.	Retain the current requirement for WaterNSW to manage and protect declared catchment areas.	65
37.	Move the existing Reporting Manual requirement, for WaterNSW to submit its annual catchment management report to IPART, to the Licence and include an obligation for WaterNSW to publish the report online.	65
38.	Include a new obligation requiring WaterNSW to develop a research strategy for its area of operations that prioritises catchment and river health research projects and geographical priority areas for these projects.	67
39.	Amend the requirement for WaterNSW to have a program of research to ensure it is consistent with the strategy and require WaterNSW to implement the program by 30 November 2025.	67
40.	Replace the requirement for WaterNSW to provide an annual report and submit one report on outcomes of its research program by 30 June 2027.	67
41.	Retain the current requirement for WaterNSW to continue to implement its existing research program for declared catchment areas until it implements the amended program required under this licence.	67
42.	Include a new obligation requiring WaterNSW to develop a strategy for an ongoing community education program.	71
43.	Amend the requirement for WaterNSW to undertake an educative role in declared catchment areas, to require WaterNSW to maintain and implement a community education program consistent with the strategy from 30 November 2025.	71
44.	Retain the current requirement for WaterNSW to provide an annual report detailing the educational activities undertaken in line with the reporting manual.	71
45.	Retain the current requirement for WaterNSW to maintain its existing education program for declared catchment areas until it implements the amended program required under this licence.	71
46.	Modify the current system yield requirements to clarify model inputs and when WaterNSW must recalculate system yield.	77
47.	Include a new obligation requiring WaterNSW to publish the system yield, how it was calculated and the design criteria.	77
48.	Include a new obligation requiring WaterNSW to engage an independent expert to review and report on the system yield model, modelling and processes by 31 March 2026, and for WaterNSW to report on the review findings and WaterNSW's anticipated actions by 30 June 2026.	77
49.	Replace the current water conservation strategy requirement with a 5-year water conservation plan that spans WaterNSW's area of operations.	81

50.	Include new climate change obligations which align with the NSW Climate Risk Ready Guide.	85
51.	Include a new obligation requiring WaterNSW to assess its level of climate risk management maturity on the enterprise scale by 30 June 2025, meet a systematic level of climate risk management maturity by 30 June 2027, and make reasonable progress towards meeting an embedded level of climate risk management maturity by 30 June 2028.	85
52.	Modify the current Greater Sydney drought response plan obligations to clarify that WaterNSW must use its best endeavours to develop an agreed approach with the Department and publish a summary of the plan.	90
53.	Include a new obligation for WaterNSW to maintain and comply with a MOU with Sydney Water for Greater Sydney water supply augmentation planning.	92
54.	Remove the current licence requirement for WaterNSW to implement Greater Sydney Water Strategy actions or implement actions if directed to by the Minister.	93
55.	Include a new obligation requiring WaterNSW to cooperate with the Department on any review of the NSW Water Strategy, Greater Sydney Water Strategy and other regional water strategies if requested by the Department.	93
56.	Replace the current requirement for WaterNSW to jointly develop a LTCOP with Sydney Water and submit the plan to the Minister with a new obligation requiring WaterNSW to maintain its own LTCOP.	94
57.	Include a new obligation requiring WaterNSW to review and update the LTCOP, in consultation with Sydney Water, at least once during the licence term, and submit the updated plan and a report on the review to the Minister.	94
58.	Include a new obligation requiring WaterNSW to cooperate with Sydney Water on Sydney Water's review of its LTCOP.	94
59.	Include a new obligation for WaterNSW to maintain and comply with a DMF that includes a data governance policy, data quality policy, and a data sharing policy.	99
60.	Replace the current obligation requiring WaterNSW to provide access to the Duly Qualified Persons (DQP) data protocol with a requirement for WaterNSW to maintain and provide NSW Government agencies with access to systems containing data and information held by WaterNSW relevant to their functions.	103
61.	Replace the current obligation for WaterNSW to download metering data once a year with an obligation to download the data at the request of a NSW Government agency.	106
62.	Retain the current requirements for WaterNSW to maintain MOUs with NSW Health and EPA.	110
63.	Modify the current requirement for WaterNSW to maintain an RRA with the Department to also recognise NRAR and WAMC as parties to the RRA, and remove limitations to ensure the RRA is applied in its entirety.	112
64.	Modify the requirement for WaterNSW to maintain and comply with a cooperation protocol with NRAR.	113
65.	Include a new obligation for WaterNSW to use its best endeavours to enter into a cooperation protocol with NSW Fisheries by 30 June 2025.	113

66.	Modify the current 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 it enters into.	116
67.	Include objectives in the Licence that: a. are linked to WaterNSW's principal functions under the Act b. clarify authorisations and requirements under the licence c. provide clarity about WaterNSW's objective to supply or provide services in a way that does not prevent or hinder competition d. reflect the social, economic and environmental objectives outlined in section 8 of the State Owned Corporations Act 1989 (NSW) e. promote the sustainable supply of services with the long-term interests of the community in mind f. encourage WaterNSW to conduct its activities in a manner that considers the impacts of climate change and equity within and between generations in its activities.	118 118 118 118 118 118 118
68.	Retain the licence authorisations in the licence.	120
69.	Add a new authorisation for water metering.	120
70.	Set out a 4-year licence term.	123
71.	Clarify that the licence applies to WaterNSW's whole area of operations.	123
72.	Retain the non-exclusivity clause in the licence.	123
73.	Retain the schedule of conferred functions conferred on WaterNSW under other Acts.	123
74.	Retain the authorisation to undertake flood mitigation and management in all areas of New South Wales, except for the Sydney catchment area as defined under the Act.	123
75.	Retain the current operational audit requirements.	125
76.	Move existing Reporting Manual obligations, to clarify WaterNSW's reporting obligations, to the Licence.	125
77.	Retain the current reporting and record keeping requirements, and provision of information and performance monitoring, and obligations requiring WaterNSW to cooperate with the person appointed to undertake the catchment audit.	125
78.	Retain the current requirement for WaterNSW to monitor and compile environmental indicators consistent with the reporting manual and amend the obligation to clarify that WaterNSW must report this data in a way that allows for year-to-year comparison of te indicators.	125
79.	Add a new requirement for WaterNSW to report against the International Sustainability Standards Board's (ISSB) sustainability-related disclosure standards.	125
80.	Include a new part in the Licence setting out miscellaneous matters including:	132
	 a. requirements for WaterNSW to make a copy of the licence available to any person free of charge, on its website and upon request b. the timeframe for WaterNSW to take actions required in the licence c. requirements for approvals and notices to be in writing and sent to the intended 	132 132
	recipient	132

	d. specifying when IPART intends to begin the next end-of-term review of the licence and the purpose of the reviewe. IPART's functions (for information purposes only).	132 132
81.	Modify some definitions.	135

- International Organization for Standardization, Management System Standards, accessed 17 April 2024
- ² 2022–2024 WaterNSW Operating Licence, cl 2.1.1 and 2.1.2.
- ³ Clause 5.1.1 of the current licence.
- ⁴ IPART, Report to the Minister, WaterNSW 2021 operational audit. March 2022, and IPART, Report to the Minister, WaterNSW's compliance with its operating licence 2021–22. March 2023.
- ⁵ Clauses 2.2, 2.4.1, 3.1, 4.2.3, 5.1 of the Licence.
- 6 ISO 14001:2015 Environmental management systems Requirements with guidance for use, 2015. See section 0.2 "Aim of an environmental management system".
- Olause 5.2 of the current licence.
- 8 Fluoridation of Public Water Supplies Regulation 2022, cl 5,6 and 8.
- 9 NSW Govt Gazette No. 91 of 15 August 1997, p 6388.
- ¹⁰ Security Legislation Amendment (Critical Infrastructure Protection) Act 2022 (Cth).
- Security of Critical Infrastructure (Critical infrastructure risk management program) Rules (LIN 23/006) 2023 (Cth), 5 7(2)(c)
- ¹² Security of Critical Infrastructure (Critical infrastructure risk management program) Rules (LIN 23/006) 2023, s 8(3)..
- Section 12(2)(a)(ii) of the Act.
- ¹⁴ Clause 4.2.2 of the current licence.
- ¹⁵ Clauses 4.3.2 and 4.3.3 of the current licence.
- ¹⁶ Clauses 4.2.3 and 4.3.5 of the current licence.
- ¹⁷ Clauses 4.2.6 to 4.3.8 of the current licence.
- ¹⁸ Section 4.1.1 of the Reporting Manual.
- 19 Clause 3.4 of the current licence.
- ²⁰ NSW Government, Town Water Risk Reduction Program, accessed 7 December 2023.
- ²¹ WaterNSW, Local Water Utility Release Review of the monitoring of the quality of water released to LWUs, June 2019.
- ²² Clause 6.4 of the current licence.
- ²³ WaterNSW, WaterInsights, accessed 7 December 2023.
- ²⁴ Clause 6.1 of the current licence.
- ²⁵ Clause 6.2 of the current licence.
- ²⁶ Clause 6.3.1 of the current licence.
- ²⁷ Clause 6.5 of the current licence.
- ²⁸ Clause 6.5.4 of the current licence.
- ²⁹ IPART, Water Regulation Handbook, accessed 8 December 2024.
- ³⁰ Clause 6.7 of the current licence.
- ³¹ Clause 6.8.2 of the current licence.
- Thriving Communities Partnership, What We Do, Family Violence Report, People impacted by family violence, accessed 25 September 2023.
- Essential Services Commission, Moving Towards Better Practice, Implementing family violence in the Victorian water sector, May 2017.
- Domestic Violence NSW, Domestic Violence Strategic Plan 2021-24.
- 35 Clause 6.9 of the current licence.
- ³⁶ Clause 6.10 of the current licence.
- 37 Section (6)(1)(c) of the Act.
- 38 Section 6(2)(b)-(d) of the Act.
- ³⁹ WaterNSW, Sydney's drinking water catchments, accessed 20 June 2023.
- 40 Clause 2.2 of the current licence.
- ⁴¹ Section 6(1)(c) of the Act.
- Section 2.1.3 of the 2022–2024 reporting manual.
- ⁴³ Clause 2.7.1 of the current licence.
- 44 Clause 2.7.2 of the current licence.
- 45 Section 7(1)(j) of the Act.
- ⁴⁶ WaterNSW, Source Water Protection Strategy Sydney drinking water catchment 2040.
- Clause 1 of the Licence and sections 6(1)(a)–(c), 6(2)(b) and 6(2)(d) of the Act.
- 48 Section 7(1)(g)-(j) of the Act.
- 49 Clause 6.11 of the current licence.
- ⁵⁰ Licence, section 1.2.1.
- Van de Wetering J. et al. (2022) Does environmental education benefit environmental outcomes in children and adolescents? A meta-analysis, Vol. 81 Journal of Environmental Psychology 101782. Accessed at: Does environmental education benefit environmental outcomes in children and adolescents? A meta-analysis - ScienceDirect
- ⁵² Clause 2.8 of the current licence.
- United Nations, What is Climate Change?, accessed 13 November 2023.
- NSW Department of Planning, Industry and Environment, Climate Risk Ready NSW Guide, Practical guidance for NSW Government sector to assess and manage climate change risks, 2021, p7.
- NSW Government, NSW Climate Change Adaptation Strategy, June 2022.
- NSW Department of Planning, Industry and Environment, Climate Risk Ready NSW Guide, Practical guidance for NSW Government sector to assess and manage climate change risks, 2021.

- NSW Department of Planning, Industry and Environment, Climate Risk Ready NSW Guide, Practical guidance for NSW Government sector to assess and manage climate change risks, 2021, p 10.
- ⁵⁸ NSW Department of Planning, Industry and Environment, *Climate Risk Ready NSW Guide, Practical guidance for NSW Government sector to assess and manage climate change risks*, 2021, p 21.
- ⁵⁹ Clause 2.8.4 of the current licence.
- 60 Recommended 2024–2028 operating licence, cl. 39(1)(b).
- ⁶¹ IPART, Water Regulation Handbook, July 2023.
- 62 Clause 2.8.1 of the current licence.
- ⁶³ Roles and Responsibilities Agreement between DPIE Water, NRAR and WaterNSW, dated 30 June 2021.
- 64 Clauses 2.8.8, 6.15.1, 6.17.1. and 6.19 of the current licence.
- ⁶⁵ NSW Government, NSW Data & Information Custodianship Policy, June 2013, and State Records Act 1998.
- 66 NSW Government, NSW Government Standard for Data Quality Reporting, October 2015.
- 67 NSW Government, Open Data Policy, 2016.
- 68 Clause 6.18.2 of the current licence.
- 69 Section 21(1) of the Act.
- Memorandum of Understanding between WaterNSW and the Environment Protection Authority, executed on 4 October 2022.
- ⁷¹ Clause 6.15 of the current licence.
- 72 Clause 6.16.1 of the current licence.
- 73 Section 21(1) of the Act.
- 74 Clause 6.12 of the current licence.
- ⁷⁵ Clause 6.12.2 of the current licence.
- ⁷⁶ Clause 1.1 of the current licence.
- 77 Clause 1.1.1 of the current licence.
- ⁷⁸ Section 12(2) of the Act.
- 79 Clause 6.3.2 of the current licence.
- 80 Section 31(1) of the Act.
- Section 326(1) of the Water Management Act 2000,
- 82 NSW Parliamentary Research Service, Operating Warragamba Dam for flood mitigation: current legal and regulatory barriers, e-brief Issue 3/2022, November 2022
- ⁸³ WaterNSW, Early Warning Network, accessed 14 November 2023.
- 84 NSW State Emergency Service, How does NSW SES Plan for Floods, Storms and Tsunami?, accessed 14 November 2023.
- 85 Section 14(1) of the Act.
- See definition of "Area of Operations" in clause 8.1 of the current licence.
- 87 Clause 1.4 of the current licence.
- Department of Planning and Environment, Minute Paper for the Executive Council Amendment of Water NSW Operating Licence 2022–2024, 11 October 2023.
- 89 Section 57(3) of the Act.
- 90 Clause 7.1 of the current licence.
- ⁹¹ Clause 7.2.1 of the current licence.
- 92 IPART, WaterNSW Reporting Manual 2022–2024, October 2022.
- 93 Clause 7.3 of the current licence.
- Clause 2.3.1(a) of the current licence.
- 95 Clause 2.3.1(d)-(e) of the current licence.
- IFRS, IFRS S1 General Requirements for Disclosure of Sustainability-related Financial Information, accessed 7 December 2023.
- 97 Clause 1.5.1 of the current licence.
- 98 Clause 1.6 of the current licence.
- 99 Section 56(4) of the Act.
- 100 Interpretation Act 1987.

 $\hbox{@}$ Independent Pricing and Regulatory Tribunal (2024).

With the exception of any:

- a. coat of arms, logo, trade mark or other branding;
- b. photographs, icons or other images;
- c. third party intellectual property; and
- d. personal information such as photos of people,

this publication is licensed under the Creative Commons Attribution-NonCommercial-NoDerivs 3.0 Australia Licence.



The licence terms are available at the Creative Commons website

IPART requires that it be attributed as creator of the licensed material in the following manner: © Independent Pricing and Regulatory Tribunal (2024).

The use of any material from this publication in a way not permitted by the above licence or otherwise allowed under the Copyright Act 1968 (Cth) may be an infringement of copyright. Where you wish to use the material in a way that is not permitted, you must lodge a request for further authorisation with IPART.

Disclaimer

This document is published for the purpose of IPART fulfilling its statutory or delegated functions as set out in this document. Use of the information in this document for any other purpose is at the user's own risk, and is not endorsed by IPART.

Nothing in this document should be taken to indicate IPART's or the NSW Government's commitment to a particular course of action.

ISBN 978-1-76049-716-3