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IPART Independent
Pricing and Regulatory
Tribunal | NSW

WaterNSW Operating Licence Review

Issues Paper

August 2023

Water >>



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:

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Invitation for submissions

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

Submissions are due by Friday, 13 October 2023

We prefer to receive them electronically via our [online submission form](#).

You can also send comments by mail to:

WaterNSW Operating Licence Review
Independent Pricing and Regulatory Tribunal
PO Box K35
Haymarket Post Shop, Sydney NSW 1240

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

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

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 We generally do not publish sensitive information.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

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

The Independent Pricing and Regulatory Tribunal

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

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Chapter 1 >>

Preliminary

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1.1 Introduction

We want to know what you think about the WaterNSW operating licence

WaterNSW supplies raw water, unfiltered and drinking water to customers including Sydney Water, certain local water utilities (LWUs), and some retail customers in accordance with individual supply agreements and/or protocols. The agreements identify the water quality standards and arrangements for supply quantity while the operating protocols (where applicable) provide a mechanism for the joint management of water supply issues. In other parts of the State, LWUs source water to be treated and used for drinking from bulk water released from storages into river systems.

WaterNSW undertakes water delivery activities in regional NSW.¹ This includes the operation of major water management infrastructure, and release of raw water for customers to draw on downstream, to end-users including rural towns, irrigators, other states and environmental water holders.

WaterNSW supplies raw water to customers of the Fish River Water Supply Scheme (FRWSS) in the NSW Central Tablelands (including Wallerawang and Mount Piper power stations, Oberon and Lithgow councils). WaterNSW also supplies drinking water to approximately 230 properties connected to the FRWSS.² While it does not directly supply drinking water to any of its other customers, WaterNSW provides raw water to some customers to be treated and used for the purposes of drinking water.

The 2022-2024 WaterNSW Operating Licence (Licence) authorises WaterNSW to operate under terms and conditions which address the quality of water or services including the protection of public health and the environment, and the availability of water or services.

WaterNSW's prices are regulated through a separate price determination process, also undertaken by IPART. Price regulation, combined with licence requirements, protect customers from excessive (monopoly) prices.

Our recommendations to make any changes to WaterNSW's Licence will be informed by the findings of this end-of term Licence review (Review).

1.2 About our Review

WaterNSW may only exercise its functions under the authority of, and in accordance with, one or more operating licences.³ An operating licence can both authorise and require WaterNSW to carry out certain functions. We deferred the end-of-term licence review in 2021, due to ongoing policy work in the NSW water sector. The Minister issued a 2-year licence (the Licence) in 2022, which included the same or similar terms and conditions to the 2017-2022 licence. The current Licence expires on 30 June 2024. A new Licence must be issued by 1 July 2024, to permit WaterNSW to continue to exercise its functions under the *Water NSW Act 2014* (Act).

In conducting this Review, we will investigate any issues that have arisen during the term of the current licence that may impact its effectiveness. We will also assess whether the Licence continues to meet the objectives set out in section 1.1 of the current Licence:

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

We will consider whether these objectives remain fit for purpose and if the current Licence meets these objectives in a way that imposes the lowest possible cost to WaterNSW and its customers. We will also consider whether the Licence objectives align adequately with those in the Act.

1.3 We encourage your input into the Review

This paper is an opportunity for you to provide feedback on the current Licence and raise any issues of concern. It discusses our preliminary positions on how the Licence could be improved. We seek feedback to inform how our preliminary positions might develop into draft recommendations (which we expect to publish in November 2023).

We will continue to engage with stakeholders as the Review progresses. In addition to this Issues Paper, we will seek feedback on our draft proposed licence and report. We will also hold a public hearing on the draft proposed licence. We will consider all feedback we receive at the public hearing when preparing our draft licence and report. We expect to make our final recommendation to the Minister in May 2024 in our final report and licence.

We will consider all feedback received in response to this Issues Paper. We list specific questions where we invite your comment throughout this paper. You may also make a submission raising other issues that we have not covered in this paper in response to question 65.

1.4 The main focus areas for this Review



Expanding catchment management



Enhancing flood and drought preparedness



Ensuring climate risk readiness



Reviewing service levels



Sustaining water quality



Protecting customers



Improving data sharing



Helping regulators, agencies and LWUs



Ensuring a systems approach

1.5 How will we conduct the Review?

We will follow a stakeholder-focused approach

We consider a stakeholder-focused approach to the Review will help improve outcomes for customers, communities and the environment, which is key to effectively regulating water utilities.

Your feedback to this Issues Paper is important. We aim to undertake our Review with the interests of WaterNSW's stakeholders at the forefront of our decision-making. In doing so, we seek to recommend terms and conditions in the Licence that will reflect stakeholders' preferences and needs.

1.6 Cost-benefit analysis

We will undertake a cost-benefit analysis (CBA) when developing our draft recommendations for the Licence to assess that our recommendations are providing a net benefit that outweighs costs. The CBA considers both the qualitative and quantitative costs and benefits, as appropriate.

Complementing this Issues Paper, we have published our approach to undertaking the CBA in a CBA Approach paper, for your input. The CBA Approach paper outlines the focus areas for this Review and does not discuss all areas of the Licence.

In the paper we ask a series of questions seeking your feedback on our general CBA approach, the identified counterfactuals to the current Licence conditions/regulatory framework and the preliminary costs and benefits that we have identified.

1.7 We will apply 5 principles for this Review

We will apply the following 5 principles to guide our Review of the Licence:



Principle 1

WaterNSW's Licence should **authorise** the provision of services in accordance with its objectives.^a



Principle 2

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

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



Principle 4

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

The Review will focus on removing redundancy and **streamlining** current regulation. This may mean removing current Licence conditions that are redundant or duplicative without additional benefits.

a. WaterNSW's objectives are set out in section 6 of the Act.

b. This is consistent with the objectives under section 6 of the Act.

The abovementioned principles will also allow us to target stakeholder input into the Review.

1.8 We will apply our Design Framework for designing the Licence

After receiving your responses and identifying the relevant issues, we will develop our draft recommendations for the operating licence by applying the Design Framework summarised in **Figure 1**.

Figure 1 Our Framework for designing the Licence



1.9 Summary of this Issues Paper

This paper discusses key issues relevant to the Review and, where applicable, provides our preliminary position for addressing these issues in each of the themed sections.

1	Preliminary Provides background and context to the Information Paper.
2	Catchment management We seek to explore extending WaterNSW's obligations to undertake community educative activities to the non-declared catchments.
3	Water planning and management We seek to consider aspects of water conservation, augmentation and flood mitigation to enhance ongoing sustainable water supply and to consider authorising flood mitigation in all areas of NSW.
4	Climate risk readiness We seek to understand what climate-related risk management obligations, if any, should be imposed on WaterNSW through the Licence.
5	Performance standards We seek feedback on whether the Licence should, and if so how, the Licence should specify performance standards for WaterNSW's different service types.
6	Water quality We seek to explore if water quality performance targets should be included in the Licence, whether conditions relating to FRWSS could be clearer, and ways to improve information sharing with LWUs.
7	WaterNSW's obligations to its customers We seek feedback about how WaterNSW can continue to best engage with its customers to understand and address their needs, and if the Licence should improve customer protections for family violence victims.
8	Access to information and data We seek feedback on how the obligations for WaterNSW to collect, maintain and share data to meet the needs of the Department of Planning and Environment (DPE), the Natural Resources Access Regulator (NRAR), and other data users, could be better articulated and delivered.
9	Fostering collaboration with other agencies We seek to explore if the Licence can enhance cooperative relationships with NSW Health, EPA, the NRAR, the Department of Primary Industries Fisheries (DPI Fisheries) and local water utilities (LWUs).
10	Management systems We seek feedback on whether the Licence should maintain and/or implement an Environmental Management System, an Asset Management System and Quality Management System.
11	Administration We seek feedback on the remaining sections of the Licence not included above.
12	List of questions Here we list the full set of questions we seek your feedback on that are asked throughout the paper.


1.10 How you can submit feedback

We invite all interested people to make submissions in response to this paper. Please include any feedback that you have on the CBA Approach Paper in your response.

We request that WaterNSW make its submission on the Issues Paper by 29 September 2023.

We will publish WaterNSW’s submission on our website.

We invite other interested parties to provide their submissions by 13 October 2023, and to consider WaterNSW’s submission in formulating their own submissions. We will publish all submissions on our website.

 **Have your say**

Your input is valuable to our review process. [Make a submission »](#)

You can be involved by making a submission in response to this Issues Paper.

1.11 Next steps

We expect to release a draft Licence package in November 2023 for comment. The package will include a draft Licence, draft reporting manual, draft CBA and explanatory report. Consultation on the Draft Licence Package will close in February/March 2024.

We intend to provide our recommendation for a new operating licence and reporting manual to the Minister by May 2024. This will allow a new Licence to come into effect by 1 July 2024.

We will complete the Review according to the timeline in **Figure 2**.

Figure 2 Our timeline for this Review



Chapter 2

Catchment management

There is a direct correlation between the health of a catchment, and the quality and quantity of water available

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WaterNSW's principal objectives under the Act include ensuring declared catchment areas – and water management works in the declared catchment areas – are managed and protected to promote water quality, the protection of public health and public safety, and the protection of the environment.⁴ This is accompanied by WaterNSW's broader objectives (applicable to declared and non-declared catchments):⁵

- to exhibit a sense of social responsibility by having regard to the interests of the community in which it operates
- to exhibit 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*.

Box 2.1 WaterNSW has declared and non-declared catchment areas

Under section 40 Act, the Governor may declare an area of land as 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 non-declared catchment areas.

Source: WaterNSW, *Sydney's drinking water catchments*.

2.1 WaterNSW's catchment management obligations currently focus on declared catchment areas

The Licence focuses on WaterNSW's catchment management activities in the declared catchment areas. This reflects the focus of the Act, i.e. around the management and protection of declared catchment areas, and the protection and enhancement of the quality and quantity of water in these areas.

2.1.1 WaterNSW's catchment management role in declared catchment areas

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.⁶ This includes undertaking catchment management and protection activities in the declared catchment area^a (including the special areas – see **Box 2.2**).^b WaterNSW is also required to undertake catchment audits of the health of declared catchment areas, and present a report on that audit to the Minister.⁷ Catchment management encompasses the management of both the quality and quantity of water available.^c

The Licence requires WaterNSW to manage and protect the declared catchment areas in a manner consistent with the Act, Water Quality Management Systems (WQMS), Asset Management System (AMS) and Environmental Management System (EMS).⁸ This obligation clearly links to other parts of the Licence (e.g. WQMS) and recognises the importance of protecting declared catchments as a primary objective governing WaterNSW's operations.

Box 2.2 Declared special and protected areas in declared catchments

In the declared catchment areas, there are also special and protected areas. The Governor declares these special areas under Section 47 of the Act. The declarations are made to either protect water quality and/or maintain the ecological integrity of an area of land in a manner that is consistent with WaterNSW's objectives. WaterNSW works with the NSW National Parks and Wildlife Service (NPWS) to jointly manage special areas.

The special areas primarily consist of undamaged native forest. They are critical for protecting the quality and quantity of water available. Special areas allow for the conservation of threatened fauna and flora and other significant natural and culture values.

Source: WaterNSW and Office of Environment & Heritage, *Special Areas Strategic Plan of Management 2015*, August 2015.

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- ^a The Governor may declare an area of land as a declared catchment area under section 40 of the Act. To date, only the Sydney Catchment area has been declared under the Act. However, we note that 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.
- ^b The Governor declares Special Areas under section 47 of the Act. The declarations are made to either protect water quality and/or maintain the ecological integrity of an area of land in a manner that is consistent with WaterNSW's objectives. The Special Areas are shown in [this Special Areas map](#).
- ^c 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".

2.1.2 WaterNSW's catchment management role in the non-declared catchment

We understand that outside of the declared catchment, WaterNSW is responsible for undertaking care and control of approximately 2500km² of 'foreshore land'. This is generally the land adjacent to and within major inland dam catchments. The land is held in ownership by the Water Administration Ministerial Corporation (WAMC), with management understood to be undertaken by WaterNSW via a deed or licence. We note that the land is primarily leased and managed by local landholders who can apply to lease the land for a period of time.^d The lease conditions do not specify catchment management targets but appear to focus on minimising erosion, sediment movement, nutrient ingress, and pesticide, herbicide and fertiliser usage.

We seek your comment



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

2.2 Water quality management in catchment areas

WaterNSW sets the strategic direction for protecting the declared catchment. It follows a multiple barrier approach to ensure safe drinking water in line with the ADWG.⁹ The multi-barrier approach states that contamination prevention provides greater security than the removal of contaminants provided by treatment alone. The multiple barrier approach outlined in the ADWG recognises protection of source water as an effective mechanism to providing quality drinking water to end-users. Further, the ADWG notes that "preventative measures should be applied as close to the source as possible, with a focus on prevention in catchments rather than sole reliance on downstream control."¹⁰

WaterNSW's Source Water Protection Strategy sets out WaterNSW's 6 priority areas, its targets and approach to source water protection until 2040.¹¹ The strategy notes that WaterNSW's catchment management practices have largely focused on point source pollution and minimising risks to public health.^e WaterNSW has an established scientific research program to investigate risks to water quality and identified solutions to address the risks. WaterNSW's focus under the current strategy aims to identify how WaterNSW 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.

While WaterNSW does not have explicit catchment management obligations for non-declared catchments, it does have a function to undertake research on catchments generally.¹² There are no conditions in relation to this function, with respect to non-declared catchments, in the current Licence.

^d This is normally for a period of 5 years, with the option to extend the lease for up to 2 additional terms of 5-years each.

^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.

The current Licence requires WaterNSW to:¹³

- maintain a program of research for the declared catchments
- report on its research programs.

Our preliminary position is to keep this obligation. We will consider if this condition should be extended to require WaterNSW to also maintain a program of research for the non-declared catchment.

Licence conditions relating to the WQMS are discussed in Chapter 6.

We seek your comment



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

2.3 Community education in catchment areas

The current Licence authorises WaterNSW to undertake an educative role within the community in catchment areas – this authority extends to both declared and non-declared catchment areas. Additionally, the current Licence requires WaterNSW to undertake an education program that covers its activities and functions in the declared catchment area.¹⁴ This requirement does not currently extend to non-declared catchment areas.

WaterNSW promotes education programs in the declared catchment area through several initiatives, including:

- The WaterInsights Portal¹⁵ which is an interactive tool that provides information on how water resources are managed across NSW.¹⁶ The portal collates data from WaterNSW, the Bureau of Meteorology (the Bureau), Murray Darling Basin Authority and DPE's databases to provide users with information including water availability, allocations and balances; water quality alerts; storage volumes; water trades; forecast rainfall; historical data.
- WaterNSW's website contains considerable information on projects and provides educational resources for a variety of stakeholders from students/teachers to the wider community.¹⁷ The resources provide stakeholders with general information about the water cycle and identify how people can help maintain the quality of water in and around the catchments.
- Site visits and exhibitions for school groups, or general entry, are available (e.g. at Warragamba Dam).¹⁸ This provides the opportunity for the community to better understand WaterNSW's role in NSW and managing the health of the catchment.
- A customer service centre to help customers with queries regarding licensing, temporary water trading and allocation, water orders, water quality alerts, billing and account enquires. Field officers are also available in various locations.¹⁹
- Social media presence informing of emergency water releases, flooding, adverse water quality events and more.

There is considerable merit in promoting community education to highlight WaterNSW's functions and role in water supply. Section 7(1)(k) of the Act does not constrain WaterNSW to undertake this role in the declared catchment area only. WaterNSW already promotes community awareness at regional events including local tourism.²⁰ Therefore, it may be appropriate to expand the educative requirement to both the declared and non-declared catchments without causing unnecessary regulatory burden.

The current Licence requires WaterNSW to undertake an educative role in the community on its activities and functions in Declared Catchment Areas consistent with its objectives under section 6(1)(c) of the Act and report on educative activities. The existing Licence condition is broad and allows WaterNSW to set the direction for its education role in the community. We consider that providing more guidance around the direction and focus of the education programs may provide benefit to WaterNSW and the greater community – we seek input on if this is warranted. For example, this could include tailoring educative programs to align with government strategies and/or initiatives.

Our preliminary position is to extend the requirement for WaterNSW to undertake an educative role in the community to the non-declared catchment areas.

We seek your comment



3. Should WaterNSW be required to undertake education programs in the community for both the declared and non-declared catchments?
4. Should the Licence specify what the education programs should include? If so, what should it specify?

2.4 Improving river health

The quality of water entering river systems from catchments can impact the health of the river systems. We note that river health in the non-declared catchment has been the focus of increased scrutiny in recent years, particularly in light of mass fish kills on the Darling River. The NSW Chief Scientist is currently undertaking an independent review into the Menindee mass fish kill in February–March 2023.²¹ The review is due to be completed, with findings released by the end of August. The NSW Government is also developing a water quality roadmap as part of the NSW Water Strategy.²² Where relevant, we intend to consider the review findings and the water quality roadmap in our consideration of WaterNSW's new licence.

The current Licence requires WaterNSW to report on catchment health indicators annually.^f Other than reporting on catchment health indicators for the declared catchment area, the Licence does not include conditions around monitoring or managing the non-declared catchment around rivers for the purposes of improving river health.

We do not have a preliminary position on requiring WaterNSW to manage or monitor river health.

^f The catchment health indicators are legislated under section 41 of the Act and only apply to declared catchments.

We will consider if WaterNSW should be required to undertake any additional catchment management activities for the purposes of improving river health. Noting that all additional conditions will undergo cost benefit analysis.

We seek your comment



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

Chapter 3 >>

Water planning and management

Water conservation and planning ensure the ongoing sustainable supply of water

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Water conservation and planning are integral to efficient investment in the long-term interest of customers. Long-term plans provide a framework for strategic decision making. They allow water utilities to set clear goals, prioritise investments and align resources with long-term sustainable water supply objectives. Regular reviews and monitoring help ensure the utility's plans remain relevant, aligned with changing needs and responsive to emerging challenges. The Licence relies on the strategies identified in the NSW Water Strategy and the Greater Sydney Water Strategy.²³

The NSW Water Strategy is part of a suite of long-term water strategies including 12 regional and two metropolitan water strategies which set out the approach to maintaining and building the resilience of the state's water resources, including in response to climate variability and change.

The Greater Sydney Water Strategy sets the direction for water management in Greater Sydney to deliver sustainable and integrated water services for the next 20–40 years.

3.1 Long-term water planning

In 2019, new requirements to participate in and support water planning were included in the Licence. The primary objectives for including these requirements were to ensure that WaterNSW effectively and efficiently plans for, and responds to, expected water supply and demand and contributes to achieving the policy objectives of the NSW Government.

3.1.1 Greater Sydney Water Strategy

WaterNSW is required to implement initiatives related to water planning under the NSW Water Strategy and Greater Sydney Water Strategy. The strategies provide the policy guidance to inform water planning for the immediate and medium to long-term.

The current Licence requires WaterNSW to participate in any review of the strategy and use its best endeavours to cooperate with all parties.²⁴

The Greater Sydney Water Strategy requires that WaterNSW collaborates with Sydney Water and DPE to deliver coordinated actions set out in the strategy. DPE will formally evaluate, review and update the Greater Sydney Water Strategy at least every 5 years, or in response to changing circumstances.

We propose to maintain the existing requirement to participate in any review of the Greater Sydney Water Strategy.

The current Licence requires WaterNSW to:²⁵

- implement actions the WaterNSW is responsible for under the Greater Sydney Water Strategy
- implement any actions the Minister directs.

Our preliminary position is to remove the existing requirement to implement the actions WaterNSW is responsible for in the Greater Sydney Water Strategy. The strategy requires annual public reporting on implementation.²⁶ In line with our approach to the Review (Figure 1), we seek to reduce regulatory duplication where there are already mechanisms in place to ensure that WaterNSW meet intended outcomes. Therefore, we consider that there are already transparency and accountability mechanisms built into the strategy. Retaining the Minister's powers under the Licence would enable the Minister to direct WaterNSW to implement certain aspects of the strategy – for example, if WaterNSW is underperforming, or hardwiring compliance with implementing an action is considered appropriate.

Our preliminary view is to retain the ability for the Minister to direct WaterNSW to implement specific actions of the Greater Sydney Water Strategy.

3.1.2 Long-term capital and operational plan

The current Licence requires WaterNSW to develop and submit to the Minister a long-term capital and operational plan jointly with Sydney Water, and to review and update that plan if requested by the Minister. It is intended that WaterNSW and Sydney Water will be required to review and update the plan every 5 years unless the Minister specifies another date in writing.²⁷

The long-term capital and operational plan is an adaptive plan that captures WaterNSW and Sydney Water's key infrastructure and operational decisions to 2050. It is aligned with the NSW Water Strategy and the Greater Sydney Water Strategy. It also provides the long-term context for future pricing proposals to IPART. We recently reviewed our price regulation framework and prepared a Water Regulation Handbook for the utilities to guide proposals.²⁸ The handbook addresses long-term planning and investment and is discussed in **Box 3.1**.

Our preliminary position is to update the requirement for WaterNSW to maintain a long-term capital and operational plan in cooperation with Sydney Water. We consider that the plan should be approved by the Minister as this is not clear in the current Licence. At the next licence review, we propose to consider if long-term planning has become an embedded process following the newly updated pricing proposal process and assess if maintaining a requirement in the licence is still appropriate.

We note that this is a joint obligation on WaterNSW and Sydney Water. The decision to retain or remove the same condition will be reflected in both the Sydney Water and WaterNSW licences.

Box 3.1 IPART's Water Regulation Handbook for pricing proposals

Our determination periods are typically 5-years, but robust long-term planning is essential to delivering in customers' long-term interest. It allows businesses to make prudent investment decisions today that are ready for and resilient to future challenges.

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 do not intend to micro-manage the investment programs, but we need to be confident that the investment plans are designed to deliver in the long-term interest of customers.

Source: IPART, *Water Regulation Handbook*, July 2023.

3.1.3 Drought response planning

The Greater Sydney Drought Response Plan²⁹ was prepared to complement the Greater Sydney Water Strategy. It describes the actions to be undertaken by the NSW Government, WaterNSW and Sydney Water in preparing for and managing future droughts.

The current Licence requires WaterNSW, jointly with Sydney Water, to:

- maintain, and deliver on the actions specified in, the Greater Sydney Drought Response Plan
- review and update the plan annually by 31 December each year, or another date approved by the Minister³⁰

The Greater Sydney Drought Response Plan was developed, and DPE published an overview of the plan, in August 2022.³¹ We seek to understand if the Licence should continue to require WaterNSW to maintain, implement and review the Greater Sydney Drought Response Plan.

Our preliminary position is that the Licence should require WaterNSW to review the Greater Sydney Drought Response Plan (in cooperation with Sydney Water) and maintain and implement that plan.

3.1.4 Water quantity management (System Yield)

WaterNSW manages catchment infrastructure works to protect the quantity of available water.^a

System Yield, as defined in the Licence, refers to the amount of water that WaterNSW estimates (using a hydrological model) can be Supplied from the Water Sources within the Declared Catchment Areas annually over the long term, subject to:

- a. inflows to the Catchment Infrastructure Works in the Declared Catchment Areas
- b. an adopted set of operational rules
- c. the Design Criteria.

We consider these are fundamental requirements particularly for long-term water planning and projections. A determination of the System Yield has also become an important factor in recent times given climate change and its impact on the level and variability of rainfall, in the context of a rising population driving water demand.

The Greater Sydney Water Strategy Implementation Plan³² outlines how the NSW Government will progress the delivery of priorities listed in the Greater Sydney Water Strategy. System Yield is a critical factor delivering the actions in the implementation plan.

The current Licence requires WaterNSW to:

- recalculate System Yield in a declared catchment area following specified events such as the conclusion of droughts, or modifications/changes to the operating rules of the Catchment Infrastructure Works, and more.
- advise the Minister of any changes to the System Yield or if it considers that future demand may exceed the supply yield including when this might occur.³³

Our preliminary position is that the current system yield calculations are fit-for-purpose and should remain in the Licence. Removal of this requirement would compromise the sustainable determination of water demand, a feature imperative to the supply of water to Sydney Water, WaterNSW's customers and by extension the growing community.

3.1.5 Water supply augmentation

In 2021, some accountability for water supply augmentation was assigned to Sydney Water.^b The arrangements are currently managed under an MOU between Sydney Water and WaterNSW. There are no obligations that monitor this relationship, and there might be a role for the licence to address this gap. We consider that any new MOU should not confer exclusivity rights on WaterNSW in terms of augmented water supply.

^a 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.

^b Sydney Water's agreed Decision Framework for SDP Operation (June 2022) developed with DPE in response to Action 2.2a of the Greater Sydney Water Strategy implementation plan.

We do not have a preliminary position on requiring an MOU with Sydney Water and seek your feedback on this issue. We note that this is a joint obligation on WaterNSW and Sydney Water. The decision to add a new condition would be reflected in both the Sydney Water and WaterNSW operating licences. The current Licence does not require WaterNSW to maintain a relationship with Sydney Water.

We seek your comment

6. Do you agree with removing licence conditions requiring WaterNSW to implement actions under the Greater Sydney Water Strategy?
7. Should the Licence require WaterNSW to implement actions in the Greater Sydney Water Strategy requested by the Minister?
8. Should the Licence require WaterNSW to maintain a long-term capital and operating plan, to be approved by the Minister?
9. Should the Licence require WaterNSW to maintain and implement the Greater Sydney Drought Response Plan and participate in any review of the plan?
10. Are the current Licence requirements to calculate System Yield in the Declared Catchment Areas adequate? If not, what requirements are appropriate?
11. Should the Licence require WaterNSW to maintain an agreement, MOU or protocol with Sydney Water to support water supply augmentation?

3.2 Water conservation

Water conservation is vital to ensuring the long-term resilience of water supplies, particularly as climate change and droughts become more prevalent and severe. Other factors such as population growth impact water availability, again reinforcing the need for greater water conservation measures to be enacted.

In the context of WaterNSW's functions, water conservation generally refers to water efficiency measures in storage, transmission and system operations.

WaterNSW has made progress towards water conservation initiatives such as improving modelling capabilities and reviewing process improvements to water storages, remote monitoring and control strategies. However, it is not transparent what volume of water is saved (predicted and actual) through these measures and initiatives.

The current Licence requires WaterNSW to:³⁴

- maintain a Water Conservation Strategy
- maintain and implement its Water Conservation Work Program

- review, update and report on its Water Conservation Work Program.

These licence conditions seek to ensure WaterNSW fulfills its obligations while making decisions on investments accordingly.

Our preliminary position is that the Licence should require WaterNSW to develop and implement a new 5-year water conservation plan that is consistent with the NSW Water Strategy, the Greater Sydney Water Strategy and the NSW Water Efficiency Framework.³⁵

Once developed, the 5-year water conservation plan would replace WaterNSW's current Water Conservation Strategy and Water Conservation Work Program. The Licence condition for the 5-year water conservation plan would be an enforceable and transparent obligation, providing assurance that WaterNSW is undertaking water conservation appropriately. Similar requirements were included in the Hunter Water operating licence and proposed for the next Sydney Water operating licence.

3.2.1 Water Efficiency Framework

In August 2022, the NSW Department of Planning and Environment (DPE) released the NSW Water Efficiency Framework (Framework). This document serves as a best-practice guide on the design, delivery, and review of water efficiency programs. It is applicable to both supply and demand side planning. The Framework is a holistic process that covers planning (context, current situation, develop response), implementation (design and deliver options), and review (monitoring, reporting, and adapting). It is also underpinned by effective stakeholder engagement, resourcing, governance, and knowledge sharing. Moreover, there is a strong set of evaluation criteria to assess the effectiveness of each step.



Box 3.2 NSW Water Efficiency Framework and Program

The NSW Water Efficiency Framework and Program is consistent with action 6.6 of the NSW Water Strategy. Action 6.6 is one of many actions in the NSW Water Strategy to support resilient, prosperous and liveable cities and towns. The Framework seeks to drive greater water efficiency and water conservation in NSW and considers the total water cycle.

The Framework serves as a best practice guide for the water industry to use when implementing water efficiency initiatives. The Framework contains guidance for economic evaluation and criteria that emphasises the use of a robust economic assessment.

Source: DPE, *NSW Water Efficiency Framework*, August 2022.

We seek your comment

-  12. Do you agree with transitioning the existing requirements in the current Licence for WaterNSW to maintain a Water Conservation Plan that is consistent with the NSW Water Efficiency Framework, NSW Water Strategy and the Greater Sydney Water Strategy?
-  13. Is there anything else that WaterNSW's licence should authorise or require in relation to water conservation?

3.3 Flood management

WaterNSW uses dams, weirs, and gauging stations to measure flow rates in the water network. During high and flood flows, WaterNSW works closely with other agencies, like the NSW State Emergency Service (SES), to manage flows from its dams and provide timely information to affected communities. Additionally, WaterNSW has an early warning network to notify interested stakeholders about dam safety, high regulated releases and flood events.

In regional NSW, WaterNSW is currently authorised to act in a flood mitigation capacity.³⁶ This means that WaterNSW may release water from a dam before a possible flooding event to create airspace for the forecasted rain.^c Airspace requirements are determined in consultation with Airspace Reference Panels, made up of local community members. WaterNSW sets up Airspace Reference Panels, to consult with downstream stakeholders, when regional storage dams with control gates are at risk of spilling.³⁷

We acknowledge that in recent times NSW has experienced numerous flooding events. These events provide learning opportunities, which should be considered as part of this Licence review. The Act allows for the licence to authorise flood mitigation and management functions, but does not require mandatory obligations to be included in the Licence in relation to these functions.

The current Licence authorises WaterNSW to undertake flood mitigation in all areas of NSW (i.e. regional NSW), but specifically excludes the Sydney catchment area^d (i.e. the Greater Sydney region).³⁸ While the current Licence authorises flood mitigation in regional NSW, it does not require WaterNSW to undertake any specific activities related to flood mitigation or management.

We understand that WaterNSW's water supply work approvals for catchments in regional NSW, issued under the *Water Management Act 2000* (WMA), impose requirements on WaterNSW to manage and operate most of its dams during floods to maintain the safety of its water supply works and to minimise risks to public safety. Under many of these approvals, WaterNSW is also expected to operate these assets to maintain the dam water supply levels and minimise downstream flood damage.

WaterNSW's combined water supply work and use approvals for the Sydney catchment area do not include any requirements related to flood mitigation and management.

^c Airspace refers to how much capacity is available in a dam (i.e. it is the difference between the actual volume of water in the dam and the volume when the dam is full).

^d Sydney catchment area is defined in section 3 of the [Act](#).

3.3.1 Flood management in the Greater Sydney region

WaterNSW is currently not authorised to undertake flood mitigation and management in the Sydney catchment area.³⁹ Even if the Licence authorised WaterNSW to undertake flood mitigation in the Greater Sydney region, there are several additional barriers that would need to be addressed to allow it to undertake this function.

The NSW Parliamentary Research Service has identified a number of changes to other instruments for WaterNSW to undertake flood mitigation in the Greater Sydney region, including:

- amendments to the water supply works and water use approvals governing the operation of dams.
- changes to the operating protocol of dams - in the case of Greater Sydney dams, responsible for the water security of 5 million people in Greater Sydney, which are classified as water supply dams only⁴⁰. In contrast, dams outside the Sydney catchment area are generally classified as having the dual purpose of water supply and flood mitigation.⁴¹
- relevant Water Sharing Plans would need to be updated to permit flood mitigation strategies.⁴²

It should be noted that changes to water works approvals, classifications and Water Sharing Plans are outside the scope of this Issues Paper given these are managed by other stakeholders including other NSW Government authorities. We also note that WaterNSW has previously highlighted potential legal liability issues related to an expansion of its flood management functions and suggested that additional protections would be needed in the Act. This is also outside the scope of this Review.⁴³

The Licence currently authorises flood mitigation outside the Sydney catchment area. **Our preliminary position is that the Licence should also authorise flood mitigation for the Sydney catchment area** to allow for flood mitigation in government policy. However, we do not propose imposing any specific obligations or conditions for flood mitigation activities in regional NSW or the Greater Sydney region. If WaterNSW's authority under the Licence is extended to undertake flood mitigation and management in all areas of NSW, the NSW Government and its various authorities can then determine whether and what specific flood mitigation activities should be undertaken by WaterNSW in the Sydney catchment area and make any further changes to other instruments or legislation necessary to facilitate this. The Licence will not be a barrier to the achievement of government policy in this area.

3.3.2 Sharing information with downstream customers

WaterNSW works closely with the SES and the Bureau of Meteorology (the Bureau) in planning for and responding to flood emergencies^e. WaterNSW has responsibilities related to flood preparation and emergency response as set out in the NSW State Flood Plan to:⁴⁴

- assist the SES with community engagement programs
- provide information to the SES necessary for response planning and warning distribution

^e The SES is responsible for acting as the combat agency for dealing with floods under section 8(1)(a) of the *State Emergency Service Act 1989*.

- identify correlations between water level and/or discharges at dams to aid the SES in flood warning and evacuation
- consult with the SES in the development of Dam Emergency Plans, including the development of dam failure alerts in accordance with Dams Safety NSW Guidelines
- provide Dam Emergency Plans and spatial data to NSW SES.

The NSW State Flood Plan also explains WaterNSW's responsibilities in assisting the SES and the Bureau in planning for floods and issuing flood warnings by providing monitoring data for forecasting purposes when floods are occurring.⁴⁵ We understand that WaterNSW only provides notifications. Forecasting and warning are done by the relevant agencies such as the Bureau, SES, and relevant councils.

These responsibilities are about communication and preparation for flood response. They are not related to management of assets to mitigate or manage floods. We consider that these responsibilities are adequately regulated, and there is no need to require WaterNSW to undertake any additional flood planning or emergency response activities.

These activities may not prevent flooding, however, are particularly important for rural communities and those with dwellings situated in the downstream rivers.

The current Licence requires WaterNSW to provide advance notification of any significant changes to flow release patterns from its Water Management Works to customers and other stakeholders registered to be notified.⁴⁶ This relates to any changes to flow release patterns and is not specific to flood management or warning.

Preliminary discussions with stakeholders identified that the notification process is effective, but that stakeholders would like to be involved in the development of the protocols around flow releases.

Our preliminary position is to keep the existing requirements to notify stakeholders of significant changes to flow release patterns from its dams. However, we seek your input to refine the arrangements that are in place.

We seek your comment

14. Do you agree that planning and responding to flood emergencies is adequately regulated? If not, should we consider requiring WaterNSW to undertake any additional flood planning and emergency response activities?
15. Should the Licence authorise WaterNSW to undertake flood mitigation and management in all parts of NSW including the Sydney catchment area? If so, are there any terms and conditions that are appropriate for this?
16. How could the advanced notification of changes to flow release patterns be strengthened to further warn and protect downstream customers and other stakeholders of water releases from the dams (not for the purpose of flood warning)?

Chapter 4

Climate risk readiness

Climate risk preparedness ensures the sustainable supply of water



Climate change is a long-term shift in temperatures and weather patterns. NSW's climate is projected to change with increasing frequency, duration and intensity of extreme weather events such as bushfires, floods and changing weather patterns. Climate change impacts are a significant risk to WaterNSW's core functions and can critically impact the communities and environment of NSW.

We consider it is important for WaterNSW to:

- consider the impact of climate change risks to its service delivery, both now and into the future
- develop climate change resilience and adaptation strategies
- reduce its greenhouse gas (GHG) emissions (abatement).

We consider that WaterNSW is working towards tackling climate change, having regard to both mandatory legislative requirements as well as aspirational targets. This Review is an appropriate time to consider whether licence conditions are required to ensure WaterNSW is prepared and responsive to climate change risks and manages those risks accordingly.

We consider that WaterNSW should prepare for climate change risks, including changing water quantity and quality. For this to happen, they will need to build in climate forecasts and plans into their policies and programmes.

There are currently no specific conditions about climate change in WaterNSW's Licence.

4.1 Abatement

Abatement refers to how WaterNSW is reducing GHG emissions from its operations contributing to climate change. While not explicitly specifying climate change, clause 1.1.2(h) of the Licence describes one of its purposes is to "with respect to a Declared Catchment Area – include terms and conditions under which WaterNSW is required to compile indicators of the direct impact of WaterNSW's activities (including, but not limited to, the impact of energy used and waste generated) on the environment so as to provide information about its performance and enable reports to be prepared".

GHG emissions can be categorised as follows:

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

Scope 2 and 3 emissions are generally a consequence of activities undertaken by an entity but occur from sources not owned or controlled by it.

We note that WaterNSW's draft Environmental, Social and Governance (ESG) Strategy and Action plan will seek to achieve net zero emissions.⁴⁷ It is unclear whether this includes scope 1, 2 and 3 emissions.

We also note that WaterNSW are consulting with customers on this plan before taking it to IPART as part of their pricing determination. We consider this is the appropriate approach for WaterNSW in relation to abatement and therefore **our preliminary position is that the licence would not include conditions concerning abatement.** We consider reporting on environmental impacts under the Licence, including GHG emissions, in section 4.4 below.

We seek your comment



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

4.2 Resilience and adaption

Resilience relates to WaterNSW's ability to withstand and adapt to changing climate conditions and recover positively from shocks and long-term stresses. Adaptation refers to actions that WaterNSW takes to reduce the impact of changing climate conditions on assets, systems and products.^a

WaterNSW's operations are subject to a number of impacts from climate change. Key climate threats include:

- changes in timing, predictability and intensity of rainfall, creating a range of challenges, including:
 - difficulty meeting demand for water amid an increasing risk of longer and more severe droughts
 - more frequent heavy downpours may increase flooding and reduce water quality with follow on increased water treatment requirements
- heatwaves – creating stress on scarce water resources during times of high demand including through increased evaporation
- floods – putting key assets at greater risk of being flooded while changes in soil moisture levels may lead to changing patterns of asset damage including pipe bursts and leaks
- drought – for example, the 2017-2020 drought forced Sydney dam levels from almost full to below 40%
- increased number and scale of bushfires – ash and runoff through bushfire affected lands, impacting water quality in catchments and storages.

Addressing these risks is consistent with the objectives of the NSW Water Strategy and Greater Sydney Water Strategy.

^a Resilience is the characteristic of a system that enables it to remain or return to the same basic structure or function after disturbance. Adaptation is a coping mechanism in response to a perceived or future hazard. Adaptation can help to maintain system resilience.

As discussed in section 3.2 of this Issues Paper, the current Licence requires WaterNSW to:⁴⁸

- maintain a water conservation strategy
- maintain and implement a water conservation works program.

As discussed in that section, our preliminary position is to review this condition while retaining its intent.

The current Licence also authorises WaterNSW to undertake flood mitigation in the non-declared catchment. We consider that the previous Government's Statement of Expectations,^{b, 49} WaterNSW's objectives under the Act, together with other existing obligations (including reporting obligations under other legislation discussed in Section 4.4) provide WaterNSW with the opportunity to implement climate change resilience and adaptation actions.

Given the above, our preliminary position is not to include any additional resilience and adaption obligations in the Licence.

We seek your comment



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

4.3 Climate-related risk management

The current Licence does not explicitly require WaterNSW to address climate related risks. However, we note that WaterNSW considers climate risk in several of its activities, including:

- Under its current Licence, WaterNSW is required to have management systems in place which include risk management frameworks that would implicitly consider risks posed by natural hazards.^c
- The Corporate Risk Management Plan (CRMP) details the risks to achieving the strategic, financial and operational objectives of WaterNSW.⁵⁰ The CRMP identifies climate change risks in relation to water quality, availability, supply, infrastructure and the environment.
- The Computer Aided River Management (CARM) Greater Sydney, which focuses on the declared catchment areas and its bulk water supply system for Greater Sydney, is designed to assess future impacts through using a relative difference model.
- For its Long Term Capital and Operational Plan (LTCOP), WaterNSW has adopted a Representative Concentration Pathway (RCP) 4.5^d scenario for yield estimates provided to Sydney Water.^{51, 52}

^b The Statement of Expectations aims to ensure that WaterNSW's strategic direction aligns with the Government's expectations.

^c WaterNSW currently has a WQMS, AMS and an EMS, as required under the Licence. WaterNSW also has other management systems.

^d Four RCPs have been developed by climate-modelling community. They span a large range of future global warming scenarios. RCPs are space and time dependent trajectories of future greenhouse gas concentrations and different pollutants caused by different human activities. RCP4.5 is an intermediate scenario whereby global surface temperature change for the end of the 21st century (2081–2100), relative to 1850–1900, is projected to likely exceed 1.5°C.

- WaterNSW is building and further enhancing climate change forecasts into models to support regional water delivery and flood operations across NSW.⁵³
- WaterNSW is completing Hydrologic Risk Assessments for high-risk priority dams (which include assessment of likely climate change impacts on rainfall and river flows) and developing the related models.⁵⁴
- Technical studies and collaborative research with leading universities and industry partners, to improve knowledge and reduce uncertainty related to climate change predictions and inform approaches for incorporating them into our models.⁵⁵
- Under WaterNSW's Science Program in the declared catchment areas, studies are under way to:⁵⁶
 - understand the risks of fire to water quality with outputs to improve the ability to model and plan for fire events and to potentially incorporate protection of water quality in planning for hazard reduction burns
 - research into cyanobacteria risk for improving prediction and monitoring, such as remote sensing and genomic methods of toxicity potential
 - assessment of GHG emissions from lakes and the potential to mitigate this using green powered aeration (with added water quality benefits and GHG reduction potential)
 - further research on the long-term impacts of undermined swamps drying out in terms of water storage and fire risk
 - research to understand how water transfers and indirect potable water strategies interact with lake and river water quality to maintain ecosystem function under a potential increase in these strategies of supply augmentation under a more variable rainfall future.

Climate-related risks are addressed for specific areas over different management systems and obligations. There could be benefit in requiring WaterNSW to establish a climate risk management program that addresses climate-related risks specifically, including identifying priority risks and mitigative actions.

A climate risk management program could ensure that all climate related risks are clearly identified, visible and appropriately addressed. It could also provide a mechanism for IPART to review and audit WaterNSW's management of climate related risk and drive greater transparency and accountability.

However, such a program would need to draw from existing management systems rather than replace them to ensure current management systems do not become truncated and climate change risks continue to be managed through the appropriate organisational processes and structures.

4.3.1 Consistency with NSW Government issued guidance for climate risk management

To provide WaterNSW with clear expectations for a climate-risk management program, we consider that the Licence could require WaterNSW to develop and maintain a program that is consistent with the Climate Risk Ready NSW Guide (Guide).^{e-57} The Guide provides direction to NSW Government agencies for considering climate risks that might impact their ability to achieve government objectives.^f A key message from the Guide is that climate risk management and adaptation should be integrated into existing frameworks and procedures where possible.

Following the Guide could strengthen WaterNSW's management of climate-related risks. Further, a licence obligation would allow us to audit WaterNSW's compliance, providing assurance that climate-related risks are being identified and managed appropriately.

The Guide recommends:

- establishing an authorising environment and resources for climate change risk assessment and management
- establishing a plausible climate future and document priority climate change risks
- developing an adaptation plan to treat priority climate change risks and increase climate risk maturity with an economic assessment to prioritise adaptation actions
- monitoring implementation of adaptation plans, climate change impacts and embed reviews in existing procedures and systems.

Our preliminary position is to require WaterNSW to develop and maintain a climate-related risk management program consistent with the Guide, including identifying priority risks and mitigative actions.

We seek your comment

19. Should the objectives in the Licence be amended to explicitly refer to a climate risk management program?
20. Is there anything further that we should consider when deciding whether WaterNSW should be required to develop and maintain a climate related risk management program consistent with the Guide?
21. Should the Licence require WaterNSW to include climate risks in their operations, water quality and asset management risk assessments? If so, should WaterNSW be made to report on its implementation of risk management measures?

^e Or any subsequent versions of the Guide or other NSW Government issued guidance that achieves similar objectives.

^f The Guide 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*.



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

4.4 Reporting

4.4.1 Current reporting arrangements

The previous NSW Government's Statement of Expectations for WaterNSW includes a focus on environmental outcomes, in particular to:

- operate its business in a way that is consistent with the Government's Net Zero 2050⁹ Plan, including Stage 1 of that plan to fast-track emissions reduction over the next decade
- monitor and report annually its activities against agreed sustainability reporting and climate risk disclosure frameworks.

WaterNSW has existing reporting obligations. These include:

- Reporting to NSW Treasury on climate-related financial disclosures in alignment with the Task Force on Climate-related Financial Disclosures (TCFD)^h recommendations, as required by Treasury under the *Government Sector Finance Act 2018*⁵⁸. WaterNSW is expected to submit its first climate-related financial disclosures to Treasury for the 2024-2025 financial year.⁵⁹ The TCFD framework reporting is organised under four pillars: Governance, Strategy, Risk Management and Metrics & Targets.⁶⁰ The reporting focuses on adaptation and abatement but not resilience.
- Providing updates to NSW Treasury on progress towards formalising their draft ESG strategy and program.⁶¹
- Obligations, including reporting, under the *National Greenhouse and Energy Reporting Act 2007*.
- Some of the National Water Initiative environment indicators, as required by the current Licence, which are also reported to the Bureau of Meteorology annually.

EPA is also considering emissions reporting more broadly across NSW for licenced facilities under its Climate Change Action Plan.⁶² While WaterNSW has a single environment protection licence (EPL) for the Duckmaloi water treatment plant, it is not known whether this EPL would contain conditions relating to emissions reporting in future.

⁹ The Net Zero Plan Stage 1: 2020–2030 is the foundation for NSW's action on climate change and goal to reduce our emissions by 70% by 2035 and reach net zero emissions by 2050.

^h The TCFD, with over 30 members from across the G20, was created by the Financial Stability Board (FSB) to improve and increase reporting of climate-related financial information. Following the TCFD recommendations delivered by the FSB in 2017, there has been rapid uptake by industry and government recognising the need for disclosure of the financial implications of climate change: TCFD, *Task Force on Climate-related Financial Disclosures*, accessed on 28 July 2023.

4.4.2 Reporting to the International Sustainability Standards Board standard

In June 2023, the International Sustainability Standards Board (ISSB) released the IFRS S1 General Requirements for Disclosure of Sustainability-related Financial Information and IFRS S2 Climate-related Disclosures standards.⁶³ The ISSB reporting standards enable consistent, comparable and reliable reporting on sustainability information. They are designed to ensure that sustainability-related information are reported alongside financial information—in the same reporting package.⁶⁴ The ISSB reporting standards include the extent to which organisations are managing their scope 1, 2 and 3 emissions.⁶⁵ 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.⁶⁶

The ISSB standards were endorsed in July 2023 by the International Organization of Securities Commissions (IOSCO).⁶⁷ The Federal Government is consulting on implementing mandatory climate-related disclosures by large businesses and financial institutions, however we do not expect this would extend to State Owned Corporations (SOCs). The requirements of the ISSB reporting standards on climate-related disclosures are consistent with the 4 pillars and 11 recommended disclosures published by TCFD.⁶⁸ The primary difference is in the guidance, which differs substantially from TCFD guidance, and a requirement to provide more detailed information including how the entity intends to respond to risks and opportunities.⁶⁹

We consider there would be benefits in terms of public accountability and gaining trust in placing an obligation on WaterNSW to publish its progress towards Net Zero. We also note that the ISSB reporting standards on climate-related disclosures may offer an internationally recognised mechanism to encapsulate and draw together WaterNSW's currently fragmented reporting arrangements and potentially highlight any climate risk management gaps. This would also enable WaterNSW to demonstrate its regard to the interest of stakeholders, as per its current Licence objective.⁷⁰

Our preliminary position is to require WaterNSW to report on its progress towards achieving Net Zero and to report against the ISSB's sustainability-related disclosure standards.

We seek your comment



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



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

Chapter 5 >>

Performance standards

Performance standards clarify the level of service that customers can expect from WaterNSW

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Performance standards define the minimum levels of service that WaterNSW must meet to satisfy certain regulatory requirements or provide customers with certainty about the level of service they can expect to receive. 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. Without mandatory performance standards, there is a risk that customers would not understand what levels of service to expect from WaterNSW, or that WaterNSW may not continue to provide the service in an effective manner. Performance standards do not prevent WaterNSW from providing a greater level of service if this aligns with their customers preference.

A licence which authorises WaterNSW to capture, store, release or supply water must include terms and conditions to ensure WaterNSW's systems and services meet performance standards in the Licence.⁷¹ These performance standards may relate to water delivery, water quality, service interruptions or any other matters set out in the Licence.

The current Licence contains performance standards related to:⁷²

- the capture, store and release (CSR) of water by WaterNSW in non-declared catchments
- the supply of water to a customer of WaterNSW by means of works (such as a water pipe or irrigation channel) owned and/or controlled by WaterNSW (Supplied Water) in the declared catchment.

The performance standards have been categorised by service (i.e. CSR water and Supplied water), as the requirements for each service differ considerably.

We propose to review these performance standards to determine if they meet their intended objectives. We will also explore if the Licence should include performance standards related to other areas, to help customers better understand the levels of service they can expect to receive from WaterNSW. In addition to the required performance standards related to water delivery, water quality and service interruptions, minimum standards could be prescribed for timing of delivery and other customer services.

In developing performance standards, we will undertake a cost-benefit analysis (CBA). In considering the appropriate minimum service levels that should be specified in an operating licence, we generally consider the level of service which presents the highest net benefit.

5.1 CSR water performance standards

For CSR water,^a the current Licence includes 6 performance standards – 2 for water delivery,⁷³ one for service interruptions⁷⁴ and 3 for account processing.⁷⁵ These standards are presented in **Table 5.1** below.

^a CSR water means water that is released by WaterNSW for the purposes of fulfilling customers' orders. CSR water is provided to customers in the non-declared catchment.

Table 5.1 CSR performance standards in the current Licence

Category	Performance standard
Water delivery	<p>CSR Water Delivery Performance Standard A</p> <p>4.3.2 Water NSW must ensure that in each financial year no more than 5 Customers who place a Non-Complying Water Order are contacted more than one working day after Water NSW receives that order to rectify that order.</p>
	<p>CSR Water Delivery Performance Standard B</p> <p>4.3.3 Water NSW must ensure that in each financial year:</p> <p>(a) 99% of Water Orders are Delivered within one day of the scheduled day of Delivery; and</p> <p>(b) this is calculated as a percentage of all complying Water Orders placed in the financial year.</p> <p>4.3.4 The Performance Standard referred to in clause 4.3.3 does not apply where Water NSW is subject to a direction or order given under any law that requires Water NSW to reduce or cease the supply of water in a manner that prevents Water NSW from Delivering a Water Order within the timeframe required by clause 4.3.3 [sic].</p> <p>Note: The scheduled day of Delivery takes into account the period of required notice specified in Water Management Work approvals, licences, or entitlements. This is measured by Complaints and/or if Water NSW identifies a Delivery delay, e.g. through its staff, systems or otherwise identifies or becomes aware of a Delivery delay. This clause does not apply to the deferral of Water Orders due to Water NSW complying with a direction or order under any law.</p>
	<p>CSR Water Service Interruptions Performance Standard</p> <p>4.3.5 Water NSW must ensure that:</p> <p>100% of Water Orders rescheduled, are rescheduled in consultation with an affected Customer within one working day of an expected water shortage, or other delivery delay; and</p> <p>this is calculated as a percentage of all Water Orders rescheduled in the financial year due to an expected shortage or Delivery delay.</p>
Account processing	<p>CSR Water Account Processing Performance Standard A</p> <p>4.3.6 Water NSW must ensure that no less than 90% of complying Temporary Trades within the State in the financial year are processed within five working days of Water NSW's receipt of a correct application and fee.</p>
	<p>CSR Water Account Processing Performance Standard B</p> <p>4.3.7 Water NSW must ensure that no less than 90% of Interstate Temporary Trades (except to South Australia) in the financial year are processed within 10 working days of Water NSW's receipt of a correct application and fee.</p>
	<p>CSR Water Account Processing Performance Standard C</p> <p>4.3.8 Water NSW must ensure that no less than 90% of Interstate Temporary Trades to South Australia in the financial year are processed within 20 working days of Water NSW's receipt of a correct application and fee.</p>

We intend to review the performance standards in the current Licence related to the capture, store, and release of water. We will undertake this review to determine if the performance standards continue to be relevant.



In our consideration of the performance standards, we will consider many factors including if:

- the standards are still relevant to WaterNSW's functions and its customers, in light of any changes to WaterNSW's business practices
- the standards continue to provide WaterNSW's customers with sufficient clarity around when they can anticipate the delivery of water and receive service interruption notifications
- other performance standards could provide WaterNSW's customers with clarity around WaterNSW's obligations to its customers.

We will consider WaterNSW's historical and expected levels of performance in amending, removing, or determining any new performance standards.

Our preliminary position is to review the current performance standards for CSR Water and amend, remove or set new performance standards for water delivery, water quality and service interruptions.

We seek your comment

-  25. Are the current CSR performance standards still relevant to WaterNSW's operations?
-  26. Should we explore the inclusion of additional performance standards for CSR water? If so, what types of performance standards (e.g. water delivery or water quality) should we include?

5.2 Supplied Water performance standards

For Supplied Water,^b the current Licence includes 2 system-based standards – one related to water quality and another for service interruptions (see **Table 5.2**).

Table 5.2 Supplied Water performance standards in the current Licence

Category	Performance standard
Water quality	Supply Water Quality Performance Standard 4.2.2 Water NSW must manage the quality of water Supplied to its Customers in accordance with the relevant Water Quality Management System required under clause 2.1.1 or 2.1.2
Service interruptions	Supply Service Interruption Performance Standard 4.2.3 Water NSW must manage service interruptions in accordance with the Asset Management System required under clause 5.1.1

We note that the Supplied Water performance standards above require WaterNSW to implement management systems rather than achieve quantitative measurable standards. At a previous review of WaterNSW's licence, we proposed quantitative standards in the draft licence but did not include them in the final draft as we agreed with stakeholders that they were not practical to implement or audit. The NSW Government and Sydney Water, in their submissions also cautioned that water quality and service interruption performance standards should not contradict the WQMS or contradict customer supply agreements with WaterNSW's customers. We note that setting minimum performance standards in the licence would not prevent WaterNSW from setting higher targets in their WQMS or customer agreements.

^b Supplied water means the water that WaterNSW delivers to customers in the declared catchment up to the customer's meter.

While we acknowledge the challenges of setting quantitative performance standards for Supplied Water, our view is that performance standards would set a minimum standard. This would protect customers from receiving poor quality water. We consider that the existing Supplied Water performance standards may not provide customers (e.g. local water utilities) with sufficient clarity or certainty about the level of service they can expect from WaterNSW. We received feedback from some smaller stakeholders that they do not have the bargaining power of larger stakeholders. As a result, they have been unable to negotiate inclusion of minimum standards for water quality, quantity or customer service in their water supply agreements.

We note that any cost to WaterNSW meeting new performance standards set in its licence would be borne by its customers. Before introducing new standards we would need to be confident that benefit to customers would outweigh the cost (i.e. through our CBA process).

Our preliminary position is to review the current performance standards for Supplied water and amend, remove or set new performance standards for water delivery, water quality and service interruptions.

We seek your comment



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



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

Chapter 6 >>

Water quality

Water quality management goes from source to tap. WaterNSW has a role in managing water intended for drinking

06

WaterNSW is responsible for the supply or release of raw water for many customers across NSW and for the supply of drinking water in the FRWSS.

The current Licence places obligations on WaterNSW to protect water sources through catchment management and managing water under its control, whether or not it is ultimately for drinking water. WaterNSW must do this by maintaining and implementing a Water Quality Management System (WQMS) for both the declared and the non-declared catchments.

The Licence identifies that in declared catchments it is WaterNSW's role to manage catchments and infrastructure works including for providing bulk water and for treating, storing and supplying drinking water. WaterNSW should manage bulk water quality, taking into account risk management across the whole supply chain. In relation to non-declared catchments, WaterNSW is expected to manage the water under its control with consideration of the downstream water supply system. This requires the development of a WQMS in consultation with relevant customers.

The current Licence specifies that the WQMS must be consistent with the Australian Drinking Water Guidelines (ADWG), or requirements specified by NSW Health or IPART. The ADWG provides a solid foundation for assessing drinking water quality. It specifies health-based and aesthetic criteria, in addition to the philosophy of a 'multiple barrier approach' from catchment to tap, to ensure the safety of water at the point of use.

Where WaterNSW supplies drinking water to picnic areas WaterNSW is also required to have a quality assurance program to meet section 25 of the *Public Health Act 2010* (NSW)⁷⁶. WaterNSW's WQMS encompasses the elements of a drinking water quality assurance program and meets its legal obligations under the Licence and *Public Health Act*.

Operational audits conducted in 2017-2022 identified non-compliances (both material and non-material) with the adequacy and implementation of WaterNSW's WQMS. However, we have observed significant improvement in compliance since the introduction of Modelpedia, WaterNSW's newer online WQMS.⁷⁷ The 2021-2022 audit identified that WaterNSW's Modelpedia WQMS was consistent with requirements of the ADWG and that WaterNSW was also compliant in implementation of its WQMS.

The current Licence separates water quality obligations by the services delivered. That is, water supplied in the declared catchment including the FRWSS and capture, store and release water supplied in the non-declared catchment.

The current Licence requires WaterNSW to maintain and implement a WQMS in declared catchment areas and a WQMS in the non-declared catchment.

Our preliminary position is to maintain the requirement to maintain and implement a WQMS, however we will consider if there is benefit in maintaining the separate licence conditions for the declared and non-declared catchments. We will also consider if creating a separate requirement to maintain a WQMS for the FRWSS would be beneficial (see section 6.3 on the FRWSS below).

We seek your comment



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

6.1 Water quality performance targets

The ADWG set the minimum standards necessary to ensure that WaterNSW provides water of an appropriate quality for its intended end-uses.. With some limited exceptions, WaterNSW does not produce drinking water. WaterNSW supplies bulk water for its customers to treat and supply to a drinking water standard. However, the quality of the water that WaterNSW supplies can have a significant impact on the quality of the end product and the cost of treating and producing drinking water to standard. This means management of the quality of water supplied by WaterNSW can impact the quality and price of drinking water provided to end users.

For internal governance and reporting purposes, WaterNSW have set key performance indicators (KPIs) for the quality of water it supplies to its bulk water customers. These indicators were set by WaterNSW without input from stakeholders. There is no obligation for WaterNSW to comply with these targets. During the most recent audit, the auditor found that since the performance indicators are not embedded within their WQMS, there is also no obligation for WaterNSW to comply with these targets under their Licence.⁷⁸

We are considering adding a condition to the Licence requiring WaterNSW monitor performance against water quality performance targets. These may be developed in consultation with NSW Health and relevant stakeholders as appropriate. There may be costs in complying with water quality performance targets and these would be passed onto WaterNSW customers. The cost-benefit analysis will consider all costs and benefits. As an alternative to mandatory targets, monitoring and publishing specified water quality measures for each customer may present a lower cost option to incentivise performance.

We note that we are also considering setting water quality performance standards as discussed in Section 5. While there are some similarities between the issues, we intend to consider both issues. We will ensure both source water and customers are protected, without creating duplication and unnecessary burden on WaterNSW.

We are seeking feedback to determine if WaterNSW should be held accountable to meet any water quality targets either by mandating them in the Licence or requiring that WaterNSW report against targets or measures. We recognise that some, but not all, customers have agreements that include water quality targets. We do not propose to replace agreed water quality targets in agreements with a new set of water quality targets in the Licence.

Our preliminary position is to require WaterNSW to monitor water quality against targets developed in consultation with NSW Health and relevant stakeholders.

We seek your comment



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

6.2 Water quality at picnic areas

WaterNSW manages water supplies in several picnic areas in the declared catchment. These picnic areas are regulated under Section 25 of the *Public Health Act*.⁷⁹ which requires that a drinking water supplier must adhere to a quality assurance program.

To remove ambiguity and any perception of duplicated regulation, **our preliminary position is to specifically exclude drinking water in private water supplies (picnic areas and regional sites) from the scope of the WQMS**. This is because NSW Health already regulates WaterNSW's drinking water activities at these sites.

We note this is largely an administrative change to the Licence.

We seek your comment



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

6.3 Fish River Water Supply Scheme

WaterNSW operates the FRWSS. The FRWSS draws water from Oberon Dam and Duckmaloi Weir and includes 236 kilometres of pipelines and a tunnel under the Great Dividing Range. FRWSS provides water to Wallerawang and Mount Piper power stations, to Oberon and Lithgow councils for domestic and industrial use, and to over 230 properties along its route. It also supplements town supplies in the upper Blue Mountains.^a

In operating the FRWSS, WaterNSW has functions as a water supply authority under Part 2 (Water Supply Authorities) of the *Water Management Act 2000* and Part 9 of the *Water Management (General) Regulation 2018*. These water supply authority functions differ considerably from the rest of WaterNSW's bulk water functions under the Act.

As a water supply authority, WaterNSW is also required to comply with various sections of the *Water Management Act 2000* and the *Water Management (General) Regulation (2018)* for the FRWSS, for example:

- annual performance reporting - Section 121A of the *Water Management (General) Regulation (2018)* requires a water supply authority to provide an annual performance report to the Minister for Water
- planning and management documentation - Section 121B of the *Water Management (General) Regulation (2018)* requires water supply authorities to submit certain planning and management documents for approval of the Minister by 1 July 2024.

^a While the Blue Mountains local government area is serviced by Sydney Water, WNSW can augment Katoomba's water supply, using FRWSS, if needed.

DPE has a performance reporting framework for water supply authorities however we understand that there is uncertainty about whether WaterNSW is meeting the above requirements for the FRWSS.⁸⁰ Our operational audits have identified compliance issues related to the WQMS for FRWSS. Shortcomings relating to fluoridation at the Duckmaloi water treatment plant have also been identified by auditors in recent years.^{b, 81, 82}

The current Licence requires WaterNSW to supply water in the declared catchment in accordance with a WQMS. This does not clearly distinguish the differences between WaterNSW's dual roles as a bulk water supplier and the operator of the FRWSS. Separating the obligations for FRWSS from the current obligation could help FRWSS customers better distinguish and understand the services they receive from WaterNSW.

We intend to review the existing requirements that WaterNSW has for the FRWSS to determine if they are meeting their intended purpose and whether there may be duplication with other regulatory obligations.

Our preliminary position is to consider if there is benefit in separating the FRWSS from the current WQMS licence condition. We do not intend for the obligation to change significantly, but focus the obligation on the services it is expected to deliver.

We seek your comment

- 32. Should conditions for FRWSS be separated out in the licence? For example, a separate condition for WQMS and reporting requirements.
- 33. Should the FRWSS be excluded from some obligations under the Licence where there is duplication with the WMA? If so, which Licence obligations or activities should be excluded?
- 34. Should the Licence include new conditions in relation to FRWSS?

6.4 Local water utilities

WaterNSW releases water to 31 local water utility (LWU) customers across the state.⁸³ 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 across the state. However, from our preliminary discussions with stakeholders, we understand that LWUs are not able to easily access this information. Additional monitoring of water released for LWUs would pre-emptively identify changed water quality and allow LWUs to prepare or warn communities appropriately.

^b WaterNSW operates the Duckmaloi water filtration plant, in the FRWSS, to supply treated drinking water to parts of Lithgow.

The Town Water Risk Reduction Program (developed and supported by DPE) is a partnership between LWUs and the wider water sector to enable LWUs to strategically manage risks and priorities in town water systems.⁸⁴ We will engage with DPE and other stakeholders to understand if WaterNSW should be accountable for helping manage risks and what role (if any) the Licence should play.

6.4.1 Water quality monitoring

WaterNSW does not monitor the quality of water released. However, WaterNSW collects a range of water quality information at various locations across the state.⁸⁵ Water management licences issued by WaterNSW under the *Water Act 1912 (Cth)* and water supply work approvals under the WMA include conditions for some water quality monitoring.

The 2017-2022 WaterNSW Operating Licence required WaterNSW to undertake a review of monitoring requirements for LWUs. This review was completed in 2019.⁸⁶ The review identified several opportunities to improve water quality monitoring for LWUs.

The key findings from the water quality monitoring review include:

- improving awareness of existing information and data
- enhancing data and information availability
- enhancements to the current monitoring program.

The current Licence does not include obligations related to monitoring of water quality for LWUs. However, we propose to consider if any of the findings from the water quality monitoring review should be implemented, and if we should include a new licence condition related to water quality monitoring for water released to LWUs.

We do not have a preliminary position on including a new condition related to water quality monitoring for water released to LWUs.

6.4.2 LWU Information Request Procedure

LWUs provide drinking water services to customers and communities across NSW. Many LWUs rely on WaterNSW to access raw water so they can treat and deliver drinking water to their customers. To ensure continuity and quality of supply, LWUs rely on information provided by WaterNSW. 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 and operation of the LWUs' water treatment processes. Monitoring data is available to LWUs via a request for information. A number of the data sets are also publicly available in various forms via the WaterNSW website.

The current Licence requires WaterNSW to maintain and implement a procedure for providing information to LWUs, known as the LWU Information Request Procedure. This obligation gives WaterNSW flexibility around the procedure it adopts. We recognise this may limit the efficacy of this obligation. We are considering how this condition could be amended to provide better outcomes for LWUs.

WaterNSW's existing procedure is reactive and could be recast to be more customer focussed and proactive. Rather than requiring a LWU to request information from WaterNSW, WaterNSW could proactively provide information to the LWU when specific parameters have not been met or triggered by water source events. We are seeking feedback on the practicality of this.

This could be achieved through individual agreements with LWUs or at a policy level. LWUs would identify the information and parameters that are critical to their drinking water supply.

We do not have a preliminary position on how WaterNSW should share information with LWUs.

We seek your comment



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



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



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

Chapter 7

WaterNSW's obligations to its customers

Customer-focused obligations will help improve customer protections



WaterNSW has a broad range of customers, ranging from large water utilities like Sydney Water to small local councils, landholders and irrigators. We consider the current Licence conditions relating to customers largely meet the needs and expectations of WaterNSW customers. Where there are issues, we have addressed them in other chapters of this Issues Paper.

We are not proposing any significant changes to the Licence conditions relating to WaterNSW's obligations to its customers. We seek feedback on conditions relating to payment difficulties and the Customer advisory groups as discussed below.

7.1 Payment difficulties and family violence

Customers and consumers experiencing family violence may experience financial hardship and therefore require access to payment difficulty processes. Victims of family violence should also feel confident that their personal information is secure, and their privacy is safeguarded.

The current Licence requires WaterNSW to implement a Code of Practice on Payment Difficulties.

There are currently no specific conditions about family violence and payment difficulties in WaterNSW's Licence. We propose to explore whether WaterNSW adequately provides family violence victims access to payment difficulty assistance and protection of their personal information.

Our preliminary position is for WaterNSW to develop and implement a family violence policy that includes provisions to protect customer privacy and ensure access to payment difficulty arrangements.

We seek your comment



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

7.2 Consultation with customers

WaterNSW is currently required to consult with customers through Customer Advisory Groups (CAGs). CAGs enable involvement in issues relevant to the performance of WaterNSW's obligations under the current Licence or the Customer Service Charter.

The current Licence requires WaterNSW to:

- establish and maintain advisory groups of its customers based in different regions
- regularly consult with the CAGs on issues relevant to WaterNSW obligations to customers
- obtain advice from the CAGs on the interests of WaterNSW's customers, and other key issues relating to WaterNSW's planning and operations

- ensure adequate representation of different customers categories from different regions, e.g. stock and domestic water users, Regulated River water users, and groundwater users, local water utilities, Aboriginal cultural heritage water users, etc
- establish and maintain a Customer Advisory Group Charter for each CAG.⁸⁷

This allows for a range of issues to be raised from different categories of customers. While the Act does not require WaterNSW to have these provisions, the CAGs have been used as a key method for customers to share information and raise concerns with WaterNSW.

Aside from the Licence, the IPART Water Regulation Handbook provides an opportunity for WaterNSW to focus on delivering better value for customers via its water pricing proposal.⁸⁸ WaterNSW must actively involve and engage with its customers to set the priorities and deliver outcomes that matter most to them. The 3Cs framework (Customers, Costs, Credibility) outlined in the handbook is designed to motivate WaterNSW and other water businesses to employ a customer-centric approach. We will then determine whether the pricing proposal promotes the long-term interest of customers. We note that the pricing framework fosters customer-centric action by WaterNSW, however through our early consultation with stakeholders, we understand that the CAGs provide customers with a valuable opportunity for consultation outside the water price determination period.

While CAGs have been a successful mechanism for WaterNSW to engage with different types of customers, we are proposing to change this obligation to be more outcomes focused. This would allow WaterNSW to determine the best way to engage with its customers to understand issues that relate to different customer groups.

We seek feedback on how WaterNSW currently engages with customers and how WaterNSW can continue to improve engagement with its customers.

Our preliminary position is to change the current Licence obligation to be more outcomes focused and allow WaterNSW to determine how it engages with its customers.

We seek your comment



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



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

Chapter 8 >>

Access to information and data

WaterNSW is the custodian of data which is used by other agencies



WaterNSW's role is to provide, construct, operate, manage, and maintain systems and services to capture, store release and supply water across NSW. To undertake these functions, WaterNSW collects, manages and retains information and data. This data is largely used by WaterNSW to inform how it operates water systems, actions water orders and for billing customers. The data is also used by other agencies, which access it through data sharing agreements and roles and responsibilities agreements. Local water utilities and the general public may access this data through a request process.

Box 8.1 Managing water resource information and data for NSW

In 2016 the NSW Cabinet endorsed the implementation of the Water Transformation Project.⁹⁹ WaterNSW and the Former DPI Water (now DPE Water) entered into a Deed of Business Transfer to perform the functions, exercise the powers and discharge certain responsibilities in complementary ways. One of the key functions transferred to WaterNSW was the management of water resource information and data for NSW. In the transfer, all historic data and data systems were transferred from the NSW Government to WaterNSW. These changes effectively made WaterNSW the custodians of most water data for NSW.

The Roles and Responsibilities Agreement (R&R Agreement) replaced the Deed of Business Transfer. This agreement articulates the obligations on each party in the exercise of their respective functions under NSW Water Legislation and the current Licence.

Source: Roles and Responsibilities Agreement between DPIE Water, NRAR and WaterNSW dated 30 June 2021.

In 2021 the R&R Agreement was extended to place responsibilities on DPE, NRAR, WaterNSW and WAMC for planning and managing water resources in NSW on behalf of the NSW Government. Its purposes and intent go beyond the conferred functions in Schedule A of the current Licence.

We consider the intent of the R&R Agreement is to require WaterNSW to not only collect, manage and provide access to data it collects for its own purposes, but extend this obligation to collect, manage and provide access to all water resource data on behalf of the NSW government. We make this assumption, as we understand that this was the role transferred to WaterNSW in the Deed of Business Transfer. If WaterNSW is not responsible for this activity, no one is currently responsible to undertake the role of collecting and managing data for data users (e.g., regulatory agencies) other than WaterNSW.

Without the R&R Agreement in place there is no obligation on WaterNSW to share data and information about NSW water resources with data users. This could result in users of water resource data and information not having access to historic data. It could also result in the need to duplicate efforts in collecting and managing water resource data across the state.

To our knowledge, there is no statutory instrument that facilitates the collection, management and sharing of NSW water resource data and information. The R&R Agreement provides some assurance in the absence of a statutory instrument.

We seek your comment



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



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

8.1 Access to information

The R&R Agreement requires WaterNSW to provide access to information and data to DPE and NRAR as well as other users of the water resource information.

WaterNSW currently provides both DPE and NRAR access to a number of IT platforms to retrieve data and information. They also provide an information provision service where the agencies can request information and data and WaterNSW will extract and deliver the requested information.

It is not clear in the R&R Agreement what access to information and data is required by DPE and NRAR, but it could be inferred at a minimum it would be all data and information required to undertake DPEs and NRARs responsibilities listed under section 2.4 of the R&R Agreement as represented in **Box 8.2**.

Box 8.2 The R&R Agreement outlines what is expected from parties to the agreement

DPE is responsible for ensuring sustainable, secure and healthy water resources and services for NSW through policies, plans, and rules that determine how water is shared between users and the environment, and between different categories of water use and that plans, rules and other arrangements for water management are consistent with relevant Water Legislation. DPE leads all Water Legislation, policy and planning activities in NSW.

NRAR is responsible for guiding, monitoring, auditing, investigating, and enforcing compliance with water regulation, and for undertaking operational compliance policy activities. NRAR is also responsible for undertaking some licensing and approvals processes consistent with the NSW Water Legislation, and providing input to DPE for its policy, plan, and rule-making functions.

Box 8.2 The R&R Agreement outlines what is expected from parties to the agreement

WaterNSW is responsible for carrying out water monitoring and forecasting, water take assessment and **information access and provision to meet the needs of DPE Water and NRAR**, including as set out in clause 7.2. WaterNSW is responsible for operating NSW's river systems and providing services to customers, including licence advisory services, and customer support, processing licence and approval applications consistent with the NSW Water Legislation, administering water trades, account management and billing, **and providing water resource information for most users**. WaterNSW is also responsible for providing water take assessment and meter maintenance services in accordance with existing operational requirements.

Source: *Roles and Responsibilities Agreement between DPIE Water, NRAR and WaterNSW dated 30 June 2021.*

The current Licence requires WaterNSW to:

- Agree the R&R Agreement regarding the conferred functions. We consider that by including requirements regarding data sharing and access, WaterNSW has agreed to undertaking these roles, and therefore must also comply with the agreement as required by clause 6.15.1(b).
- Comply with the R&R Agreement.

The R&R Agreement appears to contain sufficient detail to require WaterNSW to collect and manage data to meet the needs of both DPE and NRAR as well as other stakeholders. However, data availability and data access remain an issue.

Our preliminary position is that WaterNSW is responsible for collecting and maintaining data to meet the needs of DPE and NRAR, however we seek your feedback as to how these needs should be dealt with in the Licence.

We would ordinarily expect DPE and NRAR reach an arrangement with WaterNSW in relation to their data needs. We are open to hearing from stakeholders on any reasons why this approach might not be effective in this case.

We seek your comment



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



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



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

8.2 Portal and IT platforms

In 2020 the Minister amended the 2017-2022 Operating Licence to include conditions relating to an online portal to collect and store documents relating to metering equipment and data sharing requirements with DPE and NRAR.

The current Licence requires WaterNSW to:

- operate and maintain an online portal for the lodgement of information (limited to specific requirements of the Water Management Regulation) and retain this information in accordance with a data retention protocol
- provide access to a specific set of data
- develop, maintain and implement a data retention protocol.

When introducing new obligations to a licence, we consider it can be valuable to prescribe the requirements in detail to avoid any confusion about the intent or the requirements of the obligation. The IT system has been developed in accordance with the requirements and is now being maintained. Now that the system developed and operational, we consider there may be benefit in amending this obligation to be more outcomes focused. We are also considering if there is benefit in expanding the condition to include other data sets and important information.

Preliminary stakeholder engagement identified that the current obligation does not achieve its intended purpose (i.e. for WaterNSW to share reliable data and information with relevant users, via data management systems in a way that supports these users' functions). As part of our review, we will consider if WaterNSW should provide IT services and support to facilitate the sharing of, or access to, information between agencies or to the broader NSW water sector.

We do not have a preliminary position on how WaterNSW should facilitate the sharing of information.

We seek your comment



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



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



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

8.3 Data management – integrity and reliability

Data and information collected by WaterNSW is largely managed to inform WaterNSW's business activities. However, it is also provided to other agencies and users to support their business needs. Through our preliminary consultation with stakeholders, we have identified concerns about the integrity and reliability of data they have been provided or have access to.

8.3.1 Data Sharing Agreements

The current licence requires WaterNSW to:

- use its best endeavours to maintain and comply with a data sharing agreement with DPE
- use its best endeavours to maintain and comply with a data sharing agreement with NRAR.

Amongst other requirements, the agreements are to contain standards and metrics for data accuracy, quality, continuity and timeliness of data provision, and information technology and system access, where this is not already addressed under other arrangements between the parties.

The 2021 operational audit (of the previous 2017-2022 licence) found that WaterNSW complied with the Data Sharing Agreements. However, the agreements did not include details about standards and metrics for data accuracy, quality, continuity and timeliness of data provision at the time.⁹⁰ The current Licence requires an update to the Data Sharing Agreements to be in place by 1 September 2023.⁹¹

Our preliminary position is for the Data Sharing Agreements to remain in the licence. We intend to audit these conditions at the 2023 operational audit to understand if the current Licence conditions adequately addresses data integrity and reliability issues.

8.3.2 Data quality standards

Despite these requirements, data quality and data access continue to be an issue for DPE and NRAR.

To address these stakeholder concerns we will also consider if requiring data and information to be collected, managed, and maintained consistently with standards or guidelines. We seek your feedback on which, if any standard or guideline should be required. The standards we intend to consider are briefly described below:

- NSW Government Standard for Data Quality Reporting.⁹² In 2015, the NSW Government released a standard for data quality reporting, however the standard does not apply to SOCs. Despite not being obligated to apply the standard, we understand that WaterNSW already applies this standard to some if not all the data they manage.

- *ISO 8000-1:2022 – Data quality* is an international standard for data quality.⁹³ The ISO 8000 series provides frameworks for improving data quality for specific kinds of data. The series defines which characteristics of data are relevant to data quality, specifies requirements applicable to those characteristics, and provides guidelines for improving data quality. The series is applicable within all stages of the data life cycle. The ISO 8000 series can be used independently or in conjunction quality management systems (QMS).
- *ISO 9001:2015 Quality management systems - Requirements* is an international standard for a QMS.⁹⁴ A QMS can be implemented to improve business processes, increase the quality of an organisation's products and/or services, and consistently deliver on customer expectations. We will consider if a QMS could sufficiently address data quality and reliability concerns, without the need to implement the ISO 8000 series. We discuss the option to require WaterNSW to develop, maintain and implement a QMS in section 10.2 of this Issues Paper.

The current Licence does not require WaterNSW to manage data consistent with any standards or guidelines.

We do not have a preliminary position about whether WaterNSW should be required to manage data consistently with standards or guidelines and seek your feedback on the issue.

8.3.3 Timeliness of data

WaterNSW collects data about water extracted or supplied to its customers, and determines this data based on its business needs.

Our 2021 review of the WaterNSW's 2017-2022 Licence identified that other agencies rely on this data to undertake their business activities⁹⁵. Determining the accuracy of this data more frequently than once per year may benefit other agencies.

The current Licence requires WaterNSW to determine the volume of water extracted by, or supplied to, each of its customers, at least annually, for the purpose of accurate account management, billing and reporting.





We note that determining the accuracy of the volume of water extracted and supplied more frequently, would increase costs to WaterNSW that would likely be passed onto customers.

We do not have a preliminary position on whether the frequency of determining accuracy of water Extracted or Supplied should be increased. We seek your feedback if we should consider amending this licence condition to account for the data needs of other agencies. We also seek your feedback if there is other data that should be collected, and accuracy confirmed, at a greater frequency than is already required.

We seek your comment



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

-  50. Should the Licence require WaterNSW to manage data consistently with any standards or guidelines? If so, which standards would you recommend and why? (NSW Government Standards for Data reporting, ISO 8000:1, ISO 9001:2015, or another standard or guideline not listed)
-  51. Are there any other options to improve data integrity and reliability we have not considered?
-  52. Should we amend the current Licence condition about accounting for water extracted or supplied to account for the needs of other agencies?
-  53. Is there other data that should be collected, and accuracy confirmed, at a greater frequency than is already required?

Chapter 9 >>

Fostering collaboration with other agencies

WaterNSW relies on and is relied upon by other agencies



The current Licence includes requirements for WaterNSW to develop and maintain cooperative relationships with certain stakeholders, primarily through memoranda of understanding (MOUs). The purpose of the MOUs is to form the basis of cooperative relationships between parties to the memoranda.

WaterNSW regularly engages with a wide variety of regulatory agencies including (but not limited to) NSW Health, EPA, the Natural Resources Access Regulator (NRAR) and the Department of Primary Industries Fisheries (DPI Fisheries). Collaboration with these stakeholders allows WaterNSW to meet its objectives and undertake its functions under the Act.⁹⁶ It also allows the other agencies to meet their objectives and regulatory functions under their governing legislation. We recognise there are benefits to promoting collaborative working relationships with the agencies WaterNSW works with. We consider that some of these relationships may benefit from the establishment of agreements, protocols or MOUs, or by directly including information sharing and issue resolution obligations in the Licence.

9.1 Memoranda of understanding with NSW Health and EPA

The Act prescribes that WaterNSW must enter MOUs with NSW Health and the Environment Protection Authority (EPA).⁹⁷ The Licence sets out the nature of the MOUs and requires WaterNSW to maintain and comply with the MOUs.⁹⁸

9.1.1 NSW Health

NSW Health is the lead agency on water-related public health incident response. We consider that the MOU with NSW Health is beneficial. The MOU recognises the role of NSW Health in providing advice to the Government about drinking water quality standards and the supply of water which is safe to drink. WaterNSW's role in the drinking water supply chain is primarily around capturing water, managing assets that store the water and making raw water available to utilities for treatment and distribution. WaterNSW also provides treated drinking water to some Fish River System customers, picnic areas and at some dam sites.⁹⁹

Both parties to the MOU have been satisfied that the relationship works well. This obligation helps support the ongoing collaboration between WaterNSW and NSW Health.

The current Licence sets out the nature of the MOU with NSW Health and requires WaterNSW to:

- maintain an MOU with NSW Health
- comply with the MOU.

Our preliminary position is to include a similar obligation in the new licence.

9.1.2 EPA

The MOU with the EPA recognises the EPA's role as the primary environmental 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.¹⁰⁰

Both parties to the MOU have been satisfied that the relationship works. We note that the EPA previously identified that it considers the MOU “is no longer required considering the maturity of the relationship and enduring cooperation on matters of common interest.”¹⁰² However, we consider that, similar to the MOU with NSW Health, this obligation helps to ensure an ongoing effective relationship between WaterNSW and EPA. We consider there is a public benefit in continuing to publish the MOU. Further, we consider that there is little additional regulatory burden imposed by requiring WaterNSW and EPA to maintain an MOU, given the status quo. Finally, given the MOU with the EPA is legislated under section 21 of the Act, we consider that removal of the MOU would require amendments to the Act.

The current Licence sets out the nature of the MOU with the EPA and requires WaterNSW to:

- maintain an MOU with the EPA
- comply with the MOU.

Our preliminary position is to include a similar obligation in the new licence.

We seek your comment



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

9.2 Promoting collaborative relationships with other regulators

The Act does not require WaterNSW to enter into MOUs with regulatory agencies other than NSW Health and EPA but empowers the Minister to direct WaterNSW to enter into MOUs with certain agencies. The current Licence does not require WaterNSW to enter into an MOU with other regulatory agencies apart from NRAR (as discussed below). The primary purpose of the MOUs are to build cooperative relationships between the parties to the MOUs.

9.2.1 NRAR

The Licence requires WaterNSW to use its best endeavours to maintain and comply with an MOU with NRAR.^a ¹⁰² The MOU is intended to “form the basis for an ongoing cooperative relationship between the parties to the memorandum to assist in meeting their joint responsibilities and principal objectives of water supply and compliance and enforcement”.¹⁰³

^a NRAR is the independent regulator that was established under the *Natural Resources Access Regulator Act 2017*. NRAR is responsible for ensuring the effective, efficient, transparent and accountable compliance and enforcement measures for natural resources management legislation, and maintaining public confidence in the enforcement of the natural resources management legislation. [Should this be a footnote instead of an endnote?]

From our preliminary discussions with NRAR, we understand that there may be some opportunities to improve the Licence condition for an MOU.^b NRAR has indicated that the Licence does not adequately prescribe requirements for the MOU. Given the relationship between the entities is relatively new, WaterNSW and NRAR may benefit from additional detail clarifying the requirements and intent of the MOU. We also note that NRAR has previously identified issues related to accessing data and systems that WaterNSW is responsible for. We detail this issue in Chapter 7.

The current Licence requires WaterNSW to:

- maintain an MOU with the NRAR
- comply with the MOU with NRAR.

Our preliminary position is to retain a similar condition in the new Licence and review this obligation to identify if the MOU can and should be used to facilitate better collaboration. We are also considering whether the Licence could incorporate an additional or alternative mechanism to regulate this relationship. For example, by directly specifying WaterNSW's obligations or by requiring WaterNSW to comply with an information sharing and issue resolution protocol.

9.2.2 DPI Fisheries

Prior to the creation of WaterNSW, State Water was required to use its best endeavours to enter into an MOU with the former Department of Primary Industry^c to "address the impact of State Water's operations and information sharing arrangements on the aquatic habitat and fish passage."¹⁰⁴ This obligation was removed in subsequent licences. From our preliminary engagement with DPI Fisheries, we understand that the relationship between the entities may benefit from a requirement in the Licence, requiring the parties to formally collaborate with one another (e.g. via an MOU or protocol). This would encourage the entities to clearly articulate the roles and responsibilities of both parties. DPI Fisheries informs us that this may assist it to undertake its statutory functions (primarily related to conserving fish stocks and key fish habitats, threatened species, fish populations and ecological communities, and to promote ecologically sustainable development). An MOU may allow for greater visibility of and involvement in the decision making around what each party is responsible for.



The current Licence does not require WaterNSW to have an MOU with DPI Fisheries.

We do not have a preliminary position on requiring an MOU or protocol with DPI Fisheries and seek your feedback on this option. We are also considering whether the Licence could incorporate an additional or alternative mechanism to regulate this relationship. For example, by directly specifying WaterNSW's obligations or by requiring WaterNSW to comply with an information sharing and issue resolution protocol.

^b The primary purpose of the MOUs is to build cooperative relationships between the parties to the MOUs.

^c Now the Department of Primary Industry Fisheries NSW (DPI Fisheries) within the Department of Regional NSW.

We seek your comment

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

9.3 Improving relationships with local water utilities

The Act and Licence do not currently require WaterNSW to enter into MOUs with local water utilities (LWUs), nor do they preclude the parties from establishing MOUs at their discretion. In a previous licence review we considered if LWUs could benefit from the establishment of MOUs with WaterNSW.¹⁰⁵

In that review, we considered if MOUs could address matters of public health, water quality standards for water that is released to the LWUs, and emergency coordination. At that time we considered that the combination of the LWU register, the consultative review of water quality monitoring and the Customer Advisory Groups would provide LWUs with sufficient opportunity to engage with WaterNSW but that their effectiveness may be considered in a future review.

MOUs can be costly to develop and maintain. Other options to consider could include protocols or policies that commit WaterNSW to agreed actions and obligations.

Preliminary stakeholder engagement has identified that the relationship between WaterNSW and LWUs could be improved, to promote better outcomes for LWUs and their customers.

The current Licence requires WaterNSW to maintain a register of all LWUs:

- a. for which WaterNSW maintains a Water Allocation Account
- b. to which WaterNSW releases water that will be used for the purposes of Drinking Water (LWU Customers).

Our preliminary position is to retain a similar clause in the new Licence but we do not have a preliminary position on whether a condition should be included in the Licence requiring WaterNSW to maintain an MOU, protocol or policy with LWU. We propose to explore how WaterNSW interacts with LWUs to better manage risk around adverse water quality events. This will include considering whether the Licence should directly impose additional conditions on WaterNSW related to LWUs.

We seek your comment

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



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

Chapter 10 >>

Management systems

Management systems help to ensure a consistent and predictable response

10

10.1 Environmental Management System

The current Licence requires WaterNSW to maintain an Environmental Management System (EMS) for managing its environmental responsibilities and the environmental impacts of its services and activities. This EMS must be consistent with *AS/NZS ISO 14001:2016 – Environmental management systems – Requirements with guidance for use*.¹⁰⁶ In the context of environmental performance, and in line with ISO 14001:2016, an EMS helps businesses 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.¹⁰⁷

WaterNSW has been found to be compliant with this licence condition in recent audits.¹⁰⁸

Our preliminary position is to retain the conditions in the Licence concerning an EMS.

We seek your comment



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

10.2 Quality Management System

A Quality Management System (QMS) is a system that documents processes, procedures and responsibilities for achieving quality policies and objectives. A QMS is beneficial to help deliver quality services and outcomes to meet customers' expectations and regulatory requirements.

Preliminary discussions with stakeholders identified concerns about WaterNSW's corporate record keeping, particularly around currency of regulatory instruments, authorities and records relating to authorised officers.

Implementing a QMS may also solve an issue related to data integrity and reliability as discussed in section 8.3 above.

The Hunter Water operating licence currently requires Hunter Water to maintain and implement a QMS for delivering quality services and outcomes to meet customers' expectations and regulatory requirements.¹⁰⁹ A similar obligation could be included in the new WaterNSW License.

The WaterNSW Licence does not currently have any obligations related to developing, maintaining and implementing a QMS.

We do not have a preliminary position on including an obligation requiring a QMS and seek your feedback on the value of adding such a condition to the Licence.

We seek your comment



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



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

10.3 Asset Management System

The current Licence requires WaterNSW to maintain an Asset Management System (AMS) consistent with ISO 55001:2014 – *Asset Management – Management Systems – Requirements*.¹¹⁰ WaterNSW has generally been compliant with implementing and carrying out activities in accordance with the AMS as highlighted in recent operating audits.^{111, 112} The standard outlines best practice in the asset lifecycle including the establishment, implementation, management and review of assets.¹¹³

WaterNSW prepares a Strategic Asset Management Plan that outlines the objectives of the AMS. Some of these objectives include the following:

- considerations of Health and Safety implications in conducting AMS activities
- maintenance and continuous improvement of the AMS
- staff engagement and development to meet future asset management requirements
- raw water supply infrastructure meets current and future demands
- assets are reliable and maintained to appropriate standards
- declared catchment areas are managed and protected appropriately
- management Information Systems and relevant technologies are maintained and improved
- operations are within the design criteria.

No material non-compliances in relation to the AMS have been observed since the inception of the Licence.

Our preliminary position is to retain the current conditions in the Licence concerning an AMS.

An updated ISO 55001 is under development and will shortly be issued, rendering the 2014 version obsolete. It is currently at the draft international standard (DIS) stage. It is therefore our preliminary position that the Licence be updated with the most recent version of ISO 55001.

We seek your comment



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



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

10.4 Critical infrastructure

The Commonwealth Government's *Security of Critical Infrastructure Act 2018 (Cth) (SOCI Act)* is the principal mechanism to regulate critical infrastructure assets across a broad range of sectors. The *SOCI Act* defines critical water assets as a water or sewerage system or network that:¹¹⁴

- is managed by a single water utility
- ultimately deliver services to at least 100,000 water connections or 100,000 sewerage connections.¹¹⁵

In accordance with section 12L(9) of the *SOCI Act*, WaterNSW is classified as the 'responsible entity' of a critical water asset given that it holds a licence under the NSW Government to provide the services of its assets. As the owner and operator of these critical water assets, WaterNSW must meet legislative obligations outlined in the *SOCI Act*. The legislation provides a framework for managing risks relating to critical infrastructure, which aims to:

- improve the transparency of the ownership and operational control of critical infrastructure in Australia in order to better understand those risks
- facilitate cooperation and collaboration between all levels of government, and regulators, owners and operators of critical infrastructure, in order to identify and manage those risks
- provide a regime for the Commonwealth to respond to serious cyber security incidents.¹¹⁶

Recent amendments to the legislation commenced on 17 February 2023 and introduced new obligations on entities to produce and comply with a Critical Infrastructure Risk Management Program (CIRMP).¹¹⁷ This will require entities to take a holistic and proactive approach in identifying and mitigating hazards that pose material risks to the availability, integrity, reliability, or confidentiality of the asset. WaterNSW would be given 6 months to develop and adopt a CIRMP from the day the asset becomes a critical infrastructure asset. As part of this, WaterNSW is required to comply with the cyber security framework identified in their CIRMP – a further 12-month extension is permitted for this.¹¹⁸

WaterNSW will also be required to submit an annual report to the Cyber and Infrastructure Security Centre (CISC). This provides the CISC with insight into threats specific to WaterNSW and allows appropriate assistance to be provided in the event of a hazard.

Comparatively, the current Sydney Water operating licence already contains provisions for a Cyber Security Management System to be developed. It also requires a Critical Infrastructure Compliance Manager to be nominated, and national security clearances for two board members and specific executive level employees. These requirements were put in place before the *SOCI Act* was amended.

Our preliminary position is to impose national security clearance requirements for executive level employees responsible for operational technology security, network operations security, and personnel security operations; and at least two board members. This is consistent with the current Sydney Water operating licence.

We seek your comment



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

Chapter 11 >>

Administration

11

11.1 Administration

Our preliminary position is that unless there is stakeholder input which compels change, the following sections of the Licence are working effectively and will remain largely unaltered. We may propose minor amendments, updates or clarifications in the draft Licence when we will consult on it later in 2023.

Section number in current Licence	Section heading in current Licence
1.1	Objective of this Licence
1.3	Term of this Licence
1.4	Non-exclusive Licence
1.5	Making copies of this Licence available
1.6	End of Term Review
1.7	Notices
2.2	Catchment management
2.3	Information on the Declared Catchment Areas
2.4	Catchment Infrastructure Works management
3.1	Construct, maintain and operate Water Management Works
3.2	Water Supply
3.3	CSR Water
6.1	Customer Supply Agreements – Customers other than Sydney Water
6.2	Accounting for water
6.3	Water metering and monitoring
6.7	Customer Service Charter
6.9	Internal Complaints Handling Procedure
6.10	External dispute resolution scheme
6.18	Downloading of data from certain metering equipment
7.1	Operational Audits
7.2	Reporting in accordance with this Licence and the Reporting Manual
7.3	Provision of information to IPART and Auditor

11.2 Other comments

We seek your comment



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

Chapter 12 >>

Full list of questions for your
comments

12

12.1 Full list of questions for your comments

We include the full list of questions, asked in this Issues Paper, for your comment below.

We seek your comment

- | | | |
|-----|---|----|
| 1. | Should WaterNSW's obligation to undertake catchment management activities extend to the non-declared catchment? If so, what could WaterNSW do in the non-declared catchment to encourage catchment management practices and source water protection? What are the benefits? | 16 |
| 2. | Should WaterNSW be required to undertake a program of research in both the declared and the non-declared catchments? | 17 |
| 3. | Should WaterNSW be required to undertake education programs in the community for both the declared and non-declared catchments? | 18 |
| 4. | Should the Licence specify what the education programs should include? If so, what should it specify? | 18 |
| 5. | Should WaterNSW be required to manage river health, beyond monitoring and reporting against the catchment health indicators identified in the reporting manual? | 19 |
| 6. | Do you agree with removing licence conditions requiring WaterNSW to implement actions under the Greater Sydney Water Strategy? | 25 |
| 7. | Should the Licence require WaterNSW to implement actions in the Greater Sydney Water Strategy requested by the Minister? | 25 |
| 8. | Should the Licence require WaterNSW to maintain a long-term capital and operating plan, to be approved by the Minister? | 25 |
| 9. | Should the Licence require WaterNSW to maintain and implement the Greater Sydney Drought Response Plan and participate in any review of the plan? | 25 |
| 10. | Are the current Licence requirements to calculate System Yield in the Declared Catchment Areas adequate? If not, what requirements are appropriate? | 25 |
| 11. | Should the Licence require WaterNSW to maintain an agreement, MOU or protocol with Sydney Water to support water supply augmentation? | 25 |
| 12. | Do you agree with transitioning the existing requirements in the current Licence for WaterNSW to maintain a Water Conservation Plan that is consistent with the NSW Water Efficiency Framework, NSW Water Strategy and the Greater Sydney Water Strategy? | 27 |
| 13. | Is there anything else that WaterNSW's licence should authorise or require in relation to water conservation? | 27 |
| 14. | Do you agree that planning and responding to flood emergencies is adequately regulated? If not, should we consider requiring WaterNSW to undertake any additional flood planning and emergency response activities? | 29 |
| 15. | Should the Licence authorise WaterNSW to undertake flood mitigation and management in all parts of NSW including the Sydney catchment area? If so, are there any terms and conditions that are appropriate for this? | 29 |

16.	How could the advanced notification of changes to flow release patterns be strengthened to further warn and protect downstream customers and other stakeholders of water releases from the dams (not for the purpose of flood warning)?	29
17.	Should the objectives in the Licence be amended to explicitly refer to abatement?	32
18.	Should the objectives in the Licence be amended to explicitly refer to climate change resilience and adaption?	33
19.	Should the objectives in the Licence be amended to explicitly refer to a climate risk management program?	35
20.	Is there anything further that we should consider when deciding whether WaterNSW should be required to develop and maintain a climate related risk management program consistent with the Guide?	35
21.	Should the Licence require WaterNSW to include climate risks in their operations, water quality and asset management risk assessments? If so, should WaterNSW be made to report on its implementation of risk management measures?	35
22.	Should the Licence require WaterNSW to undertake climate change risk assessments consistent with ISO 14091:2021 <i>Adaptation to climate change – Guidelines on vulnerability, impacts and risk assessment</i> ?	36
23.	Should WaterNSW be required to report on its progress to Net Zero?	37
24.	Should the Licence include any other reporting requirements related to abatement, adaptation, resilience or climate risk?	37
25.	Are the current CSR performance standards still relevant to WaterNSW's operations?	41
26.	Should we explore the inclusion of additional performance standards for CSR water? If so, what types of performance standards (e.g. water delivery or water quality) should we include?	41
27.	What performance standards should apply to water delivery, water quality and service interruptions?	42
28.	Should the Licence prescribe any other performance standards in relation to Supplied Water? i.e. in addition to the required performance standards related to water delivery, water quality and service interruptions, minimum standards could be prescribed for timing of delivery and customer service.	42
29.	Is there benefit in maintaining separate licence conditions in the licence for the declared and the non-declared catchments.	44
30.	Should WaterNSW be required to define and monitor Water Quality Performance targets in consultation with NSW Health and relevant stakeholders?	45
31.	Is there any reason we should not specifically exclude picnic areas from the WQMS obligations in the licence?	46
32.	Should conditions for FRWSS be separated out in the licence? For example, a separate condition for WQMS and reporting requirements.	47

33.	Should the FRWSS be excluded from some obligations under the Licence where there is duplication with the WMA? If so, which Licence obligations or activities should be excluded?	47
34.	Should the Licence include new conditions in relation to FRWSS?	47
35.	Is there benefit in increasing WaterNSW's responsibilities to monitor and provide information on water source events and the quality of raw water supplied to LWUs?	49
36.	Should the information request procedure be recast to require WNSW to provide information to the LWU when specified parameters have not been met?	49
37.	How else could WaterNSW be more proactive in notifying LWUs of water source events or sharing of information?	49
38.	Should WaterNSW be required to have a family violence policy that protects customer privacy and ensures that family violence sufferers can access payment difficulty arrangements? If so, what as a minimum, should the condition include? Would a change to the Code of Practice on Payment Difficulties also be required?	51
39.	Should the Licence require WaterNSW to engage with its customers, but allow WaterNSW to determine the best way for engagement?	52
40.	Is there any value in continuing to require WaterNSW to utilise CAGs to engage with different customer groups?	52
41.	Do you agree that WaterNSW is responsible for collecting, managing, and sharing data and information of water resource data on behalf of the NSW Government? If so, does this obligation extend beyond the data and information it uses for its own purposes.	55
42.	Is the licence the right instrument to ensure all NSW data and information users can adequately access water resource data for the state?	55
43.	Does the current licence condition to agree to, and comply with, the Roles and Responsibilities agreement adequately obligate WaterNSW to provide access to information and data to all NSW data and information users?	56
44.	Does the Roles and Responsibilities agreement require WaterNSW to provide sufficient access to information for other agencies (such as DPE and NRAR) to undertake their functions/statutory obligations?	56
45.	Are there any reasons why an arrangement could not be made with WaterNSW to address the data quality and data access requirements of DPE and NRAR?	57
46.	Do the current conditions provide DPE and NRAR the access to information and systems they need? What, if any changes are required?	57
47.	Should the Licence require WaterNSW to develop, operate and maintain IT systems, and provide support, to allow access to users of NSW water resource information and data? If so, what information and data should the system provide access to?	57
48.	How else could WaterNSW facilitate the sharing of water resource information with the NSW water sector?	57
49.	Do the Data Sharing Agreement adequately address the needs of NRAR and DPE Water in relation to data accuracy, quality, continuity and timeliness of data provision?	59

50.	Should the Licence require WaterNSW to manage data consistently with any standards or guidelines? If so, which standards would you recommend and why? (NSW Government Standards for Data reporting, ISO 8000:1, ISO 9001:2015, or another standard or guideline not listed)	60
51.	Are there any other options to improve data integrity and reliability we have not considered?	60
52.	Should we amend the current Licence condition about accounting for water extracted or supplied to account for the needs of other agencies?	60
53.	Is there other data that should be collected, and accuracy confirmed, at a greater frequency than is already required?	60
54.	Should the nature or purpose of the MOUs with NSW Health and EPA change? If so, what should the revised nature and/or purpose of the MOUs be?	63
55.	Should the Licence further specify the contents of the MOU (or similar) between WaterNSW and NRAR? If so, what should the MOU prescribe? Alternatively or additionally, should the Licence directly impose conditions on WaterNSW related to NRAR?	65
56.	Are there any other parties that WaterNSW should enter into an MOU (or similar) with? If so, who are these parties and what should the Licence require for each of the parties? Alternatively or additionally, should the Licence directly impose conditions on WaterNSW related to other agencies?	65
57.	How effective are the current mechanisms in achieving the required relationship and information sharing needs between WaterNSW and LWUs?	65
58.	Should WaterNSW be required to manage its relationships with LWUs through an MOU, protocol or policy?	66
59.	Should the current Licence conditions relating to an EMS be changed? If so, what should these changes include?	68
60.	Would adding a requirement under the licence requiring WaterNSW to develop, maintain and implement a QMS provide benefit to WaterNSW and/or its customers? If so, what are these benefits?	69
61.	What other mechanisms could be included in the licence to improve WaterNSW's corporate record keeping.	69
62.	Should the current Licence conditions relating to an AMS be changed?	70
63.	Should WaterNSW be required to comply with the latest version of ISO 55001?	70
64.	Do you agree that the Licence should impose national security clearance requirements for executive level employees responsible for operational technology security, network operations security, and personnel security operations; and at least two board members?	71
65.	Do you have any other issues or concerns you would like to raise relating to WaterNSW's Licence?	73

Appendices

Appendix A >>

Contextual information

A

A.1 Who is WaterNSW?

WaterNSW is a State Owned Corporation, wholly owned by the NSW Government and governed by an independent Board of Directors. WaterNSW operates under the Act and the *State Owned Corporations Act 1989*. WaterNSW was established as a State Owned Corporation on 1 January 2015 under the *WaterNSW Act 2014 (Act)*.¹¹⁹ WaterNSW operates under the Water NSW operating licence 2022-2024 (Licence).

WaterNSW supplies two-thirds of water used in NSW, supplying it to Sydney Water, LWUs, regional towns and irrigators. WaterNSW delivers 5 main functions:¹²⁰

1. **Source water protection.** This includes protecting the drinking water catchment for Greater Sydney to ensure safe water supply to Sydney Water, LWUs, and other distributors for treatment and distribution to consumers.
2. **Bulk water supply.** This includes supplying water from dams and weirs to customers in the Greater Sydney drinking water catchment, and in NSW's regulated surface water systems.
3. **System operator.** This includes efficiently managing NSW's surface and groundwater resources to reliably supply water to users via the operation of NSW's bulk water supply systems and rivers. WaterNSW does this in collaboration with the Murray Darling Basin Authority.^a
4. **Infrastructure planning, delivery and operation.** This requires WaterNSW to meet defined service levels to increase the security and reliability of water supply to the people of NSW.
5. **Customer water transaction and information services.** This requires WaterNSW to provide timely and efficient services to customers around water access licences (WALs), billing and water trades. It also requires WaterNSW to meet water resource information needs for groundwater quality and quantity.

A.2 What does WaterNSW do?

WaterNSW's operations span a highly diverse set of systems and services that includes:

- **Managing and operating the bulk water supply system for Greater Sydney.** Examples of WaterNSW's role include maintaining water quality; managing dams, reservoirs, pipelines and canals; and monitoring the health of the catchment.
- **Managing and operating the FRWSS** for Fish River scheme customers. Examples of WaterNSW's role include Asset Management and Water Quality.
- **Supplying NSW's bulk water needs outside of Greater Sydney.** Examples of WaterNSW's role include operating regulated rivers by releasing water from dams and weirs; managing dams, weirs and pipelines; fulfilling environmental flow requirements; and undertaking flood mitigation.

^a MDBA directs how WaterNSW releases water along the Murray River system.

- **Providing customer services** across Greater Sydney and rural areas. Examples of WaterNSW's role include fulfilling requests for raw water from Sydney Water, LWUs and Fish River customers; supplying filtered water to Fish River customers; issuing and managing WALs; receiving applications for and issuing water supply work approvals, water use approvals and flood work approvals.

A.3 Why does WaterNSW need an operating licence?

Supply of water is an essential service that is regulated in most developed countries. Water supply businesses are commonly government-owned, public utilities and are usually monopoly suppliers within geographic regions. WaterNSW is an independent State Owned Corporation. The operating licence ensures WaterNSW would not exploit its natural monopoly position.

The operating licence enables and requires WaterNSW to provide, construct, operate, manage and maintain systems and services for:

- supplying water in the declared catchment
- capture, store and release water in the non-declared catchment
- functions conferred to it by government
- functions transferred to it under the Water Administration Ministerial Corporation
- supplying water in the FRWSS.

The operating licence is an enforceable instrument and is subject to a compliance monitoring regime with penalties for contravention. The operating licence has already been subject to a number of public reviews, conducted by IPART. We last reviewed the licence in 2022.^b

The current operating licence term is from 1 July 2022 to 30 June 2024. We are responsible for administering the operating licence, including the functions of monitoring, auditing and reporting to the Minister on compliance.

WaterNSW's operating licence is supported by a Reporting Manual. The Reporting Manual was established so that procedural matters associated with the operating licence could be more easily updated.

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

We issue a Reporting Manual to support the operating licence which includes details and deadlines for WaterNSW's reporting requirements.

^b This was a limited-scope review of the *Water NSW 2017-2022 Operating Licence*. Our review focused on clarifying obligations, amending or deleting lapsed obligations, and removing errors or inconsistencies in the previous licence. The review resulted in an extension to the 2017-2022 licence, with sufficiently similar terms and conditions to the previous licence.

A.4 Why are we reviewing the operating licence?

The Licence contemplates an end-of-term review prior to expiry. We are conducting this Review to assess if the current Licence is fulfilling its objectives. As part of the Review, we investigate any issues that have arisen during the Licence term and may recommend changes to the operating licence to address the issues we identify.

A.5 Who will this Review affect?

As this Review may result in amendments to the current operating licence, it may directly affect the operation of WaterNSW. The following stakeholders would also be affected by this Review because they have direct relationships with WaterNSW under the Licence:

- customers and consumers of WaterNSW's water services (e.g. Sydney Water, LWUs, regional towns and irrigators)
- NSW Government agencies that WaterNSW has cooperative relationships with (e.g. DPE, EPA, NSW Health, NRAR).

Appendix B >>

Glossary

B

Acronym	
ADWG	Australian Drinking Water Guidelines
AGWR	Australian Guidelines for Water Recycling
AMS	Asset Management System
CAG	Customer Advisory Group
CARM	Computer Aided River Management
CCAP	Climate Change Adaptation Plan
CRMP	Corporate Risk Management Plan
DPE	NSW Department of Planning and Environment
DPIE	NSW Department of Planning, Industry and Environment
EMS	Environmental Management System
EPA	NSW Environment Protection Authority
ESG	Environment, Social and Governance (Strategy or Program)
FRWSS	Fish River Water Supply Scheme
GHG	Greenhouse gas
GSDRP	Greater Sydney Drought Response Plan
ISSB	International Sustainability Standards Board
LWU	Local Water Utility
MOU	Memorandum of understanding
NRAR	NSW Department of Natural Resources Access Regulator
OPI	Opportunity for Improvement
TCFD	Task Force on Climate-related Financial Disclosures
SES	NSW State Emergency Service
WAL	Water Access Licence
WMA	<i>Water Management Act 2000</i>
WQMS	Water Quality Management System

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- have a quality assurance program (QAP) that complies with the Regulation
 - comply with (i.e. implement) its QAP
 - provide a copy of the QAP to the local Public Health Unit
 - keep records relating to managing the safety of its drinking water supply.
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- have a quality assurance program (QAP) that complies with the Regulation
 - comply with (i.e. implement) its QAP
 - provide a copy of the QAP to the local Public Health Unit
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