

Review of the Hunter Water Corporation Operating Licence 2017-2022

Water Licensing — Draft Report
December 2016

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Invitation for submissions

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

A public forum will be held in **Newcastle, on 21 February 2017** to discuss the proposed changes to the new operating licence. You can register your interest in attending the public workshop. Please contact us by 23 January 2017 if you would like to make a presentation at the workshop. Final submissions to the operating licence review should be made after this meeting.

Submissions are due by 3 March 2017.

We would prefer to receive them electronically via our online submission form <www.ipart.nsw.gov.au/Home/Industries/Water/Reviews/Licensing-Hunter-Water-Corporation/Review-of-Hunter-Waters-Operating-Licence-2012-2017>.

You can also send comments by mail to:

Review of the Hunter Water Corporation Operating Licence
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Late submissions may not be accepted at the discretion of the Tribunal. Our normal practice is to make submissions publicly available on our website <www.ipart.nsw.gov.au> 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 on the previous page.

We may choose not to publish a submission—for example, if it contains confidential or commercially sensitive information. If your submission contains information that you do not wish to be publicly disclosed, please indicate this clearly at the time of making the submission. IPART will then make every effort to protect that information, but 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.

Contents

Invitation for submissions	iii
1 Executive summary	1
1.1 Overview of our major draft recommended changes	2
1.2 Our review process	3
1.3 Structure of this paper	4
1.4 List of draft recommended changes	5
2 Review context	8
2.1 What is an operating licence?	8
2.2 Our objectives for this review	9
2.3 Our approach to the review	9
3 Licence structure	11
3.1 Summary of draft recommended change	11
3.2 Modify licence structure to better align with operational activities	11
4 Licence context and authorisation	15
4.1 Summary of draft recommended changes	15
4.2 Add an objective statement	15
4.3 Amend licence authorisation to allow but not require construction and augmentation of stormwater drainage infrastructure	17
4.4 Extend the obligation to provide services to include certain wholesale customers	20
4.5 Consider the licence review period from 2022 onwards	25
5 Water conservation	29
5.1 Summary of draft recommended changes	29
5.2 Develop and implement an ELWC approach	29
5.3 Prepare an annual Water Conservation Report	33
6 Supply services and performance standards	35
6.1 Summary of draft recommended changes	35
6.2 Amend the note to the Drinking Water Quality Management System	36
6.3 Clarify NSW Health's role in relation to water quality management	40
6.4 Include new licence condition to enable review of System Performance Standards as part of a future licence review	42
6.5 Maintain drinking water quality compliance regime in licence	46

7	Organisational systems management	48
7.1	Summary of draft recommended changes	48
7.2	Change licence conditions to require ISO 55001 asset management system and certification	48
7.3	Remove requirement to provide State of the Assets Report	53
7.4	Maintain certification of the EMS and QMS to the most current standards	55
8	Performance monitoring and reporting	59
8.1	Summary of draft recommended changes	59
8.2	Include new clause to require reporting against NWI indicators to IPART	59
8.3	Make no change to requirements to report against IPART performance indicators	61
9	Customer and stakeholder relations	64
9.1	Summary of draft recommended changes	64
9.2	Adopt Hunter Water's revised customer contract with minor changes	65
9.3	Adopt revised rebates clauses	67
9.4	Add a requirement to establish a Code of Conduct with WIC Act licensees	71
9.5	Amend Roles and Responsibilities Protocol with DPI Water	73
9.6	Add a requirement to establish a MoU with Fire and Rescue NSW	76
9.7	Make no change in relation to use of non-standard customer contracts	80
9.8	Make no change in relation to a MoU with NSW Health	82
10	Schedules	84
10.1	Update the area of operations	84
	Glossary	87
A	Water supply chain governance	90
B	Summary of Submissions	91

1 Executive summary

The Independent Pricing and Regulatory Tribunal (IPART) is conducting an end of term review (review) of the current Hunter Water Corporation (Hunter Water) Operating Licence (licence).¹ The current Hunter Water licence expires on 30 June 2017.

The operating licence is the main regulatory instrument that authorises and requires Hunter Water, within a defined area of operations, to provide, construct, operate, manage and maintain systems and services for:

- ▼ supplying water
- ▼ providing sewerage and drainage services, and
- ▼ disposing of wastewater.²

It also sets out the terms and conditions Hunter Water must meet to ensure it operates in a way that protects public health, consumers, and the environment, and meets other policy objectives of the NSW Government.³

As part of our end-of-term review, we are investigating whether the current licence is fulfilling its objectives, and whether any issues have arisen during the current term that may impact on its effectiveness. We will recommend to the Minister for Lands and Water (the Minister) changes to the current terms and conditions to improve the effectiveness of the licence to meet its objectives. These changes are one part of the licence package to be provided to the Minister. The licence package consists of the draft report (this report), draft licence, draft customer contract and draft reporting manual, supported by a draft cost-benefit analysis (CBA).

This report sets out our draft recommended changes, explains the analysis that supports them and seeks comment from all interested parties prior to finalising our recommended changes to the Minister.

¹ The Hunter Water operating licence is granted under the *Hunter Water Act 1991* (Act), s 12.

² *Hunter Water Act 1991*, s 12(1).

³ IPART, *Assessment of Hunter Water Corporation Operating Licence – Application of the Licensing Framework*, August 2014, p 2.

1.1 Overview of our major draft recommended changes

We have developed a total of 22 draft recommended material changes to the current operating licence to address issues identified by IPART and stakeholders. The most significant of these changes are to:

- ▼ extend Hunter Water's obligation to provide services so it includes certain wholesale customers,
- ▼ adopt an economic level of water conservation approach, to replace the current economic level of leakage approach and prescriptive water conservation target, and
- ▼ amend the customer contract to make it easier to understand and more consistent with Sydney Water's customer contract.

1.1.1 Extend obligation to provide services to include wholesale customers

Under the current licence, Hunter Water's obligation to provide services is limited to property owners. We propose to recommend this be extended so that Hunter Water also has an obligation to provide services to certain wholesale customers, subject to conditions.

If adopted, our draft recommended change would require Hunter Water to provide water and wastewater services to wholesale customers, who we define as licensees under the *Water Industry Competition Act 2006*. Hunter Water would be allowed to impose conditions on wholesale customers to ensure the provision of these services is safe, reliable and financially viable.

We consider that these changes would facilitate competition in the provision of water and wastewater services, while minimising the risk to Hunter Water and protecting end-use customers.

1.1.2 Adopt an economic level of water conservation approach

Under the current licence, Hunter Water must ensure that residential water consumption is equal to or less than the water conservation target, and the level of leakage is determined by the economic level of leakage methodology approved by IPART. We propose to recommend changes to update the requirements related to water conservation.

If adopted, our draft recommended change would require Hunter Water to develop and implement a methodology for determining its economic level of water conservation, and a water conservation program to achieve this level of conservation. It would also be required to report annually on its implementation of the program.

Our draft recommended changes are consistent with those made to the Sydney Water Operating Licence. We consider these changes would remove the arbitrary and prescriptive water consumption target and allow Hunter Water to have the operational flexibility to adapt its water conservation activities as circumstances change, promoting innovation and efficiency.

1.1.3 Amend the customer contract

Hunter Water's current customer contract was last approved by the Governor in 2012. We propose to recommend changing the customer contract in the licence to make it easier to understand and more consistent with Sydney Water's customer contract.

If adopted, our draft recommended changes would include adopting a revised set of rebates for customers (or their tenants) who are inconvenienced by planned water interruptions, low water pressure and wastewater overflows, as proposed by Hunter Water. The draft recommended changes also include updated maintenance responsibility descriptions and diagrams that provide greater clarity to customers. Hunter Water would also be required to make the recommended changes to the customer contract and provide a brief explanation of the changes to its customers via their bills and on its website.

We consider these changes would improve the customer contract's readability, clarify maintenance responsibilities, improve the rebate scheme and remove duplicate or obsolete references.

1.2 Our review process

The process we have followed in conducting this review to date has included public consultation and analysis. As part of this process, we have:

- ▼ Released an Issues Paper⁴ in May 2016 that explained the review and sought submissions from Hunter Water and other stakeholders on the issues and options for change we should consider. We received 10 submissions to our Issues Paper. The submissions, and our responses, are summarised in Appendix B to this report.
- ▼ Considered these submissions to develop a set of options for change to the current operating licence and associated documents (the customer contract and reporting manual).
- ▼ Conducted a cost-benefit analysis (CBA) of the options and undertaken further consultation. The costs and benefits of the various options were assessed relative to the 'base case' of the current licence requirements.

⁴ IPART, *Review of the Hunter Water Corporation Operating Licence - Issues Paper*, May 2016.

- ▼ Considered the draft results of the CBA, including qualitative and quantitative net benefits, and stakeholder comments to develop our draft recommended changes, and develop drafts of the new operating licence, customer contract and reporting manual.
- ▼ Released our draft operating licence package, which includes this Draft Report and the draft operating licence, draft customer contract, draft reporting manual and the draft CBA.

We now invite all interested parties, including current or potential customers, environmental and other interest groups and water user advocacy organisations, to make submissions on the Draft Report and other elements of the package by 3 March 2017. Information on how to make a submission is provided on page iii, at the front of this report.

We also propose to hold a stakeholder workshop in Newcastle on 21 February 2017. This workshop will allow interested parties to participate in a discussion with the Tribunal on the proposed changes to the operating licence. We will publicise arrangements for this workshop closer to the date.

We will consider all the comments made in submissions and the public workshop before making our final recommendations and providing our recommended operating licence with the customer contract and supporting reports to the Minister in May 2017. The Minister may accept or reject our recommendations before endorsing a new operating licence for approval by the Governor and subsequent gazettal by the end of June 2017.

Table 1.1 provides our indicative timetable for completing this review. We will update this timetable on our website as the review progresses.

Table 1.1 Indicative timetable for the review

Action	Date
Hold stakeholder workshop on draft operating licence package	21 February 2017
Receive stakeholder submissions on the draft operating licence package	3 March 2017
Provide the Minister with final recommended operating licence package	12 May 2017
Release approved new operating licence, customer contract and reporting manual	1 July 2017

1.3 Structure of this paper

The rest of this report explains our recommended changes to the licence, reasons for these changes and the costs and benefits of the changes. The structure of the paper reflects our draft recommended structure for the new licence and is as follows:

- ▼ Chapter 3 explains this draft recommended structure of the new licence
- ▼ Chapter 4 discusses our proposed changes to the licence term, objective statement, authorisation, and obligation to provide services
- ▼ Chapter 5 discusses our proposed changes to the conditions related to water conservation
- ▼ Chapter 6 explains our proposed changes to the conditions dealing with water quality and system performance standards
- ▼ Chapter 7 focuses on our proposed changes to the requirements for organisational systems management, including for Hunter Water's asset, environmental and quality management systems
- ▼ Chapter 8 discusses our proposed changes to performance monitoring and reporting requirements
- ▼ Chapter 9 discusses our proposed changes to conditions related to customer and stakeholder relations
- ▼ Chapter 10 outlines our proposed changes to the schedules.

1.4 List of draft recommended changes

Our draft recommended changes are set out in Chapters 3 to 10. For convenience, a complete list for these changes, together with the page they appear on, is provided below.

Licence structure

- | | | |
|---|--|----|
| 1 | Adopt a proposed licence structure (shown in Table 1) to better align the licence terms and conditions with Hunter Water's operational activities. | 13 |
|---|--|----|

Licence context and authorisation

- | | | |
|---|--|----|
| 2 | Add an objective statement to the operating licence. | 16 |
| 3 | Amend the licence obligations to explicitly allow Hunter Water to construct and augment the stormwater drainage systems under its control. | 19 |
| 4 | Extend the obligation to provide services to include certain wholesale customers. | 25 |

Water Conservation

- | | | |
|---|---|----|
| 5 | No change to licence review period at this point in time. | 28 |
| 6 | Adopt the concept of Economic Level of Water Conservation to replace the prescriptive limit on water consumption and the Economic Level of Leakage. | 33 |

- 7 Introduce a requirement to prepare an annual Water Conservation Report after the Economic Level of Water Conservation methodology is approved by IPART. 34

Supply services and performance standards

- 8 Amend the note to the Drinking Water Quality Management System licence clause to make it clear that unfiltered water is restricted to non-potable uses. 40
- 9 Clarify NSW Health's role in relation to water quality management. 42
- 10 Include a new licence condition to ensure information is gathered within the term of the new licence to inform a future review of the system performance standards. 46

Organisational systems management

- 11 Introduce in the licence a requirement for an AMS to be consistent with ISO 55001 by 31 December 2017 and certified by 1 July 2018. 53
- 12 Remove the requirement for State of the Assets reporting in the Reporting Manual. 55
- 13 Include a one-off reporting requirement to provide a copy of the Strategic Asset Management Plan to IPART once certification to ISO 55001 is achieved. 55
- 14 Amend the EMS and QMS licence conditions to require Hunter Water to maintain systems and certification to the most up-to-date standards. 58

Performance monitoring and reporting

- 15 Add new licence conditions to require Hunter Water to report to IPART against NWI performance indicators. 61

Customer and stakeholder relations

- 16 Amend the customer contract to make the contract easier to understand. 67
- 17 Revise rebate clauses in the customer contract as proposed by Hunter Water for planned water interruptions, low water pressure and wastewater overflows. 71
- 18 Add a requirement to negotiate a Code of Conduct with WIC Act licensees. 73

- | | | |
|----|---|----|
| 19 | Amend Roles and Responsibilities Protocol with DPI Water so that it says "...the review and implementation of the Lower Hunter Water Plan" rather than "...the development of the Lower Hunter Water Plan". | 75 |
| 20 | Add a requirement to establish a MoU with FRNSW to form the basis for a co-operative relationship. | 80 |

Schedules

- | | | |
|----|---|----|
| 21 | Include the current map of Hunter Water's Area of Operations. | 85 |
| 22 | Include authorisation of the transfer of water to and from Central Coast Council in the Area of Operations. | 86 |

2 | Review context

To help stakeholders provide informed input to this review, the sections below explain what an operating licence is and outline our objectives and approach for the review.

2.1 What is an operating licence?

Hunter Water is a state-owned corporation with voting shareholders consisting of Ministers in the NSW Government. The *Hunter Water Act 1991 (NSW)* (the Act) establishes the water utility as a state owned corporation and sets out its functions. However, Hunter Water can only carry out certain of its functions under the authority of, and in accordance with, an operating licence.⁵

An operating licence is an enforceable regulatory instrument that authorises and requires a water utility to carry out its functions. The objectives of the operating licence are to:

- ▼ provide transparent and auditable terms and conditions for Hunter Water to lawfully undertake its activities at industry good-practice
- ▼ consider the interests of stakeholders within its Area of Operations
- ▼ impose the minimum regulatory burden on Hunter Water by avoiding duplication or conflict with other regulatory instruments.

To this end, Hunter Water's current licence contains:

- ▼ terms and conditions that specify the way in which it is to carry out its functions
- ▼ quality and performance standards that it must achieve
- ▼ requirements for monitoring and reporting on its performance against these standards
- ▼ a customer contract that sets out charges, terms and conditions for the provision of its services to its customers.

⁵ Information on the requirements of the Act in relation to the contents of the operating licence can be found in Chapter 3 of our issues paper. See IPART, *Review of the Hunter Water Corporation Operating Licence, Water Licensing - Issues Paper*, May 2016.

The terms, conditions and standards in the licence should reflect customer expectations and willingness to pay, and set the priorities for the utility's operations within the licence term.

The operating licence is supported by a reporting manual, which is issued by IPART, and contains the details, deadlines and definitions of its reporting requirements.

2.2 Our objectives for this review

The operating licence is regularly reviewed to ensure that it maintains currency and reflects changes in public expectations, good practice and changing circumstances. We review Hunter Water's licence every five years.

For this review, our main objective is to identify and recommend changes to the current operating licence that will improve the way we regulate Hunter Water and the effectiveness of its operations. We also aim to:

- ▼ increase the consistency in the licensing approach to the major public water utilities in NSW
- ▼ further enhance a system-based approach to licensing, and
- ▼ consider the potential issues associated with the alignment of price determination and operating licence periods.

Any changes we recommend should ensure that the new operating licence meets the objectives outlined in section 2.1 without imposing unnecessary compliance and administration costs, and should provide a net benefit to society.

2.3 Our approach to the review

Our approach for this review reflects Stages 2 to 4 of the Licensing Framework⁶ that we developed as part of our review of licensing schemes in NSW, and applied to the Hunter Water operating licence.⁷

Broadly speaking, this approach includes the following main steps:

1. Developing a set of options for change to the current licence after considering:
 - a) the regulatory framework that applies to Hunter Water, including the requirements in the Act and other regulatory instruments
 - b) the performance of Hunter Water under its current operating licence

⁶ Pricewaterhouse Coopers (PwC), *A best practice approach to designing and reviewing licensing schemes*, March 2013.

⁷ IPART, *Case Study – Assessment of Hunter Water Corporation Operating Licence – Application of the Licensing Framework*, August 2014, p1.

- c) developments in best-practice operation and regulation, including issues raised and changes that we made in the recent review of Sydney Water's operating licence, and
 - d) the issues raised by stakeholders in our review consultation process.
2. Conducting cost benefit analysis (CBA) on these options for change to the licence. This analysis compares the costs and benefits of each potential change to the 'base case' of the current licence requirements (ie, no change to requirements and practices under the current licence regime).
 3. Deciding on our recommended changes, based on the results of our CBA and further consultation.
 4. Drafting a new operating licence, customer contract and reporting manual that incorporate our recommended changes.

As Chapter 1 discussed, once we have finalised our recommended changes and these documents, we provide them to the Minister. The Minister may accept or reject our recommendations before endorsing a new operating licence for approval by the Governor of NSW.

3 Licence structure

We did not discuss the licence structure in our Issues Paper and no concerns were raised by stakeholders about the current licence structure. However, Hunter Water's operating licence has been amended significantly over the last 25 years. During our review, we noted that its current structure does not provide the general public or relevant stakeholders with a clear understanding of the scope of Hunter Water's operations, or logically group and sequence related clauses. Therefore, we have considered options for change to the structure.

The sections below summarise our draft recommended change, and then discuss our analysis and draft recommended structure in more detail.

3.1 Summary of draft recommended change

We propose to recommend changes to the structure of the licence to better align the licence terms and conditions with Hunter Water's operational activities. There is little cost associated with this change, and its benefits include making the licence clearer, more logical and more accessible to stakeholders.

3.2 Modify licence structure to better align with operational activities

In drafting the terms and conditions of the new licence, we considered the role of other regulators, to avoid duplications with other regulatory instruments. Our analysis is summarised in Appendix A. We considered whether a new licence structure would help to provide stakeholders with a clearer understanding of the scope of Hunter Water's operational activities. The new licence chapters are presented in section 3.2.3 (noting the linkages with the existing licence).

3.2.1 Issue raised

As noted above, stakeholders did not raise any issues related to the current licence structure of the licence. However, we identified a range of potential improvements to this structure when developing the draft recommended licence. We therefore propose to modify the structure of the licence, for the following reasons:

- ▼ to provide a better grouping of licence requirements into similar activity areas, and base these around the general water supply chain of ‘catchment to tap’ where applicable
- ▼ to allow stakeholders to better understand Hunter Water’s operations, easily identify any area of interest, and to locate the relevant licence clauses
- ▼ to better align with the responsibility areas within Hunter Water, thus making compliance more efficient and effective
- ▼ to create a licence structure that can (as a general rule) be applied to all public water utility operating licences.

The restructured licence should allow stakeholders to better align the operating licence conditions to each component of Hunter Water’s activities.

3.2.2 Options assessed

Options	Description
Option A (Base Case)	No change to licence structure.
Option B	Modify licence structure as proposed in Table 1.

We did not identify any costs associated with Option B.

The benefits of the proposed structure are that it may improve accessibility to customers, the community and other stakeholders. We consider our draft recommended structure may improve understanding of the licence requirements and the regulatory context in which Hunter Water operates.

3.2.3 Preferred option

We prefer Option B, and propose to recommend that the licence be restructured as follows:

- ▼ **Part 1: Licence context and authorisation**, to include all of the conditions from Part 1, all of the conditions from Part 10 and all of the conditions from Part 11 of the 2012-2017 licence.
- ▼ **Part 2: Water conservation**, to include conditions 3.1 and 3.2 of the 2012-2017 licence.
- ▼ **Part 3: Supply services and performance standards**, to include all of Part 2 and condition 4.2 of the 2012-2017 licence.
- ▼ **Part 4: Organisational systems management**, to include condition 4.1 and all of Parts 6 and 7 of the 2012-2017 licence.
- ▼ **Part 5: Performance monitoring and reporting**, to include all of Part 8 of the 2012-2017 licence.
- ▼ **Part 6: Customer and stakeholder relations**, to include condition 3.3 and all of Parts 5 and 9 of the 2012-2017 licence.
- ▼ **Schedules A and B**, to include schedule B (map of the area of operations) and schedule C (the customer contract) of the 2012-2017 licence.

We anticipate these structural changes on their own will not require any additional auditable licence clauses. We also consider they are consistent with the principles of the licensing framework, and will have qualitative benefits.

Draft recommendation

- 1 Adopt a proposed licence structure (shown in Table 1) to better align the licence terms and conditions with Hunter Water's operational activities.

Table 1: Proposed licence structure

New licence (2017-2022) structure						
Licence context and authorisation	Water conservation	Supply services and performance standards	Organisational systems management	Performance monitoring and reporting	Customer and stakeholder relations	Schedules
<ul style="list-style-type: none"> ▼ Licence objectives and authorisation ▼ Term ▼ Licence Amendment ▼ Obligation to make services available ▼ Pricing ▼ Other administrative functions 	<ul style="list-style-type: none"> ▼ Economic level of water conservation 	<ul style="list-style-type: none"> ▼ Drinking Water ▼ Recycled Water ▼ System performance standards 	<ul style="list-style-type: none"> ▼ AMS ▼ QMS ▼ EMS 	<ul style="list-style-type: none"> ▼ Operational audits ▼ Reporting manual (include performance indicators) ▼ NWI indicators reporting ▼ Provision of information 	<ul style="list-style-type: none"> ▼ Customer Contract ▼ Consumers ▼ Payment difficulties ▼ Internal complaints ▼ External dispute ▼ Provision of information ▼ Code of Conduct ▼ MoUs ▼ Protocol 	<ul style="list-style-type: none"> A. Area of Operation B. Customer Contract
Corresponding existing licence (2012-2017) conditions						
All of Part 1 All of Part 10 All of Part 11	Conditions 3.1 & 3.2	All of Part 2 Condition 4.2	Condition 4.1 All of Parts 6 and 7	All of Part 8	Condition 3.3 All of Part 5 All of Part 9	Schedules B and C

4 Licence context and authorisation

The first part of our draft recommended licence includes the clauses that relate to the licence as a whole, rather than particular operational activities. In relation to this part of the licence, we consider changes to the term of the licence, to the licence objectives, the licence authorisation, and the obligation to provide services.

The sections below summarise our draft recommended changes, and then discuss each change in more detail.

4.1 Summary of draft recommended changes

We propose to recommend changes to improve the licence's clarity and user-friendliness, including:

- ▼ adding a licence objective statement (new licence clause 1.1.1)
- ▼ amending the licence authorisation to allow, but not require, Hunter Water to construct and augment stormwater drainage infrastructure under its control (new licence clause 1.2.4), and
- ▼ extending the obligation to provide services to include certain wholesale customers (new licence clause 1.5).

We have also considered moving to a four-year licence term from 2022 onwards. This would allow the price review and licence review cycles to be aligned so there is a two-year gap between the completion dates of the reviews. We consider the five year term is appropriate for the next licence from 2017-2022. We propose to consider alignment of the operating licence and pricing reviews again as part of the next review.

4.2 Add an objective statement

4.2.1 Issue raised

While this issue was not directly raised by stakeholders, we considered whether an objective and/or purpose statement would help to clarify what the licence is intended to achieve, and/or why the licence is necessary.

4.2.2 Options assessed

Options	Description
Option A (Base Case)	No objective statement or purpose statement
Option B	Add a new objective statement
Option C	Add a new objective statement and a new purpose statement

No costs were identified relating to these options.

We consider that the benefit of including a statement of the overall objective of the licence would be an improved stakeholder understanding of why we have an operating licence and what it is intended to achieve. We consider that the purpose of the licence is adequately articulated in the Act, so we have decided to establish an objective statement only in the licence.

4.2.3 Preferred option

We prefer Option B, and have included an objective statement as clause 1.1 of the draft licence. The proposed licence clause is shown in Box 4.1.

Box 4.1 Proposed Licence Objective

1.1.1 This Licence aims to:

- a) provide transparent and auditable terms and conditions for Hunter Water to lawfully undertake its activities at industry good-practice;
 - b) consider the interests of stakeholders within its Area of Operations; and
 - c) impose the minimum regulatory burden on Hunter Water by avoiding duplication or conflict with other regulatory instruments.
-

Recommendation

2 Add an objective statement to the operating licence.

4.3 Amend licence authorisation to allow but not require construction and augmentation of stormwater drainage infrastructure

Hunter Water's obligations in the licence have been to "provide, operate, manage and maintain a drainage service as described in section 13(1)(b) of the Act." This appears to have been interpreted by Hunter Water as a requirement to maintain only the stormwater/drainage assets that existed when the Act was gazetted, and in the same state in which they were handed over to the then new Corporation.

Both the licence and the Act contain references to Hunter Water's obligations regarding drainage services. The clauses, as written, may be (and have been) interpreted to limit Hunter Water's responsibilities to maintaining the existing capacity of stormwater drainage systems, and not allowing additional investment in amplification or modification of the current assets. The absence of any specific reference to 'construct' or 'augment' causes uncertainty about Hunter Water's ability to construct or augment its stormwater assets generally.

4.3.1 Issues raised

Although this issue was not included in our Issues Paper, two submissions made comments on Hunter Water's obligations in relation to stormwater drainage activities that suggest there is a need for greater clarity on these obligations. In its submission, Newcastle City Council (NCC) questioned whether Hunter Water should have additional responsibilities for stormwater drainage in the region, and whether the utility could do better than its current practice.⁸

NCC expressed concern that Hunter Water has not been using all the funding generated by its stormwater service charge on its existing stormwater assets. It also noted that Sydney Water has identified additional activities regarding management of its stormwater system, including flood risk mitigation and waterway health, is committed to maintaining and increasing the hydraulic capacity of the stormwater network, and is collaborating with local councils to address flooding risks for the community.

NCC submitted that Hunter Water's lack of similar action and engagement affects future development in the Hunter region due to capacity constraints in the existing stormwater system (eg, Newcastle West). It requested that Hunter Water undertake similar activities for stormwater/drainage as Sydney Water including:

- ▼ asset renewal, waterway health and flooding risk, including maintenance, renewal and augmentation of its assets
- ▼ preparation and implementation of floodplain risk management plans.

⁸ Newcastle City Council submission to IPART Issues paper, 29 July 2016.

In addition, in relation to water quality, NCC stated that Hunter Water needs to treat stormwater, not only for environmental health but also for protecting Hunter Water's assets from degradation. NCC is seeking to collaborate with Hunter Water and other stakeholders to improve stormwater quality in Hunter Water's open channels, through the development of Water Cycle Management Plans. NCC suggests that Hunter Water should embrace the tenets of Water Sensitive Urban Design when renewing its assets, as a cost-effective means of renewing existing assets, for example, by 'naturalising' stormwater channels rather than replacing them with concrete.⁹

The Public Interest Advocacy Centre (PIAC) raised a similar issue, with regard to 'liveable cities' and sustainable development. PIAC noted that the role that water plays in liveable cities and how the associated issues can be addressed through the operating licence and consequently in price determinations should be a topic for discussion.¹⁰

4.3.2 Options assessed

Options	Description
Option A (Base Case)	No change to the licence.
Option B	Amend licence condition to explicitly allow construction and augmentation of stormwater drainage systems.

We sought advice to determine if Hunter Water's interpretation of its responsibilities under the Act was correct. Our analysis confirmed that Hunter Water is not prevented from augmenting or constructing its stormwater/drainage assets, but is not required to do so.

Option B would explicitly allow Hunter Water to construct and augment the existing stormwater drainage systems. Option B makes it clear that Hunter Water is allowed to go beyond maintaining the status quo, provided each project is considered on its merits.

This option would also allow for third party funding of augmentation projects. Hunter Water would be in a position to consider possible amplification works where funding is provided by an external party (eg, a local council or developer). Councils and developers could approach Hunter Water to consider stormwater amplification works as an alternative to higher cost projects (detention basins).

Depending on the project, it could result in a lower overall cost from a community perspective.

⁹ NCC submission to IPART Issues Paper, 29 July 2016, p 5.

¹⁰ PIAC submission to IPART Issues Paper, 29 July 2016.

4.3.3 Preferred option

In response to these stakeholder comments, we had further discussions with Hunter Water. Hunter Water agreed that the inclusion of the terms ‘construct’ and ‘augment’ in the licence would clarify their responsibilities, and could provide the drivers to mitigate operational risks through asset augmentation. It also indicated it would discuss the issue further with NCC to determine an optimal way forward regarding the issues raised in its submission.¹¹

We investigated NCC’s concern that Hunter Water has not been spending all the revenue raised by its stormwater service charge on its existing stormwater assets, and found that this is not the case. The annual operating expenditure of approximately \$1.4 million quoted in NCC’s submission is only part of the total stormwater expenditure. The other costs that stormwater charges cover are the share of corporate overheads, funding costs for stormwater capital expenditure, and a tax allowance.¹² In addition to the operating expenditure, the capital expenditure on stormwater services over the 4-year period to 2019-20 is approximately \$0.9 million per year. The stormwater service charge will also fund this capital work.

We prefer Option B, which would explicitly allow Hunter Water to construct and augment its existing stormwater drainage assets, and would clarify that Hunter Water is allowed to go beyond maintaining the status quo, provided each project is considered on its merits. Box 4.2 lists the existing licence clause 1.2.3, as well as the proposed new clause 1.2.4, enabling Hunter Water to augment its existing stormwater assets.

Box 4.2 Proposed stormwater licence clauses (cl 1.2.3 and 1.2.4)

1.2.3 This Licence authorises and requires Hunter Water to provide, operate, manage and maintain a drainage service as described in section 13(1)(b) of the Act.

1.2.4 This Licence authorises (but does not require) Hunter Water to provide, construct, operate, manage and maintain a drainage service within the Area of Operations in excess of the drainage service it is required to provide, operate, manage and maintain under clause 1.2.3. For the avoidance of any doubt, this clause authorises Hunter Water to enhance, expand and add capacity to the drainage service described in section 13(1)(b) of the Act.

Draft recommendation

- 3 Amend the licence obligations to explicitly allow Hunter Water to construct and augment the stormwater drainage systems under its control.

¹¹ Meeting minutes, Hunter Water and IPART, 29 August 2016

¹² IPART, *Review of prices for Hunter Water Corporation, Water – Final Report*, June 2016, p 36.

4.4 Extend the obligation to provide services to include certain wholesale customers

The current licence conditions, related to Hunter Water's obligations to provide services to customers, were developed before there were significant competition and alternative suppliers of water and wastewater services in the Hunter area. These conditions include four components:

1. Hunter Water is only required to provide services to property owners within the area of operations.
2. Hunter Water must provide water supply services (including drinking water and non-potable water) and wastewater services (including sewage and trade waste services) to properties connected to, or for which connection is available to, the relevant water supply or sewerage network.
3. Hunter Water must also provide drainage services to any property within an area of land declared by an order of the Governor to be a drainage area for the purpose of section 46 of the Act.
4. Connection to services is subject to any conditions Hunter Water may lawfully impose to ensure the safe, reliable and financially viable supply of the services to properties in the area of operations in accordance with the licence.

We considered whether Hunter Water should be obliged to provide services to customers in general, including wholesale customers, and the conditions Hunter Water should be able to place on this supply of services.

4.4.1 Issue raised

Hunter Water's submission indicated that it was not convinced that there was a reasonable basis to require it to service anyone other than property owners for the following reasons:¹³

- ▼ The provisions covering the operating licence in the Act specifically relate to the owners of land.
- ▼ The licensing framework for good practice in licensing sets out that licensing requirements should complement, rather than duplicate, other legislative requirements. Hunter Water queries whether IPART has made a case that there are any shortcomings or gaps in the current regulatory framework, or inadequate protections under existing consumer law.
- ▼ IPART determines prices for other monopoly services for which there is no corresponding obligation to supply services.

¹³ Hunter Water submission to IPART Issues Paper, July 2016, pp 58-60.

- ▼ The wholesale pricing review is currently underway, and limits Hunter Water's ability to make a thorough reply until definitions, financial implications and timing of implementation are published.
- ▼ There may be unintended consequences of an obligation to service all wholesale customers, including those who are not land or property owners.

To date, Hunter Water has agreed to supply wholesale customers, and has negotiated agreements, in the form of Utility Services Agreements, for the provision of services.

Sydney Water considered that there are sufficient provisions in general competition law to ensure that Hunter Water and Sydney Water's dealings with wholesale customers comply with competition principles.¹⁴ Duplicating such requirements in an operating licence is therefore neither optimal nor regulatory good practice.

4.4.2 Options assessed

We have undertaken a qualitative cost-benefit analysis on this issue.

Hunter Water is a monopoly supplier of water supply and sewerage services - that is, services for which they are the only supplier in that part of the market, and for which there is no contestable market by potential suppliers in the short term in that part of the market.¹⁵ We considered to whom Hunter Water should be obligated to provide services as a monopoly supplier, and the implications due to the introduction of alternative service providers since the commencement of the WIC Act.

In principle, we consider that Hunter Water should be obliged to provide services where any competitors have been effectively foreclosed¹⁶ from providing that same service to end-use customers. However, the obligation arising from this foreclosure principle should be qualified. Hunter Water should be able to recover its efficient costs of providing that service. For this reason, we consider that components 2 and 4 outlined above should remain in place for the following reasons:

- ▼ **Component 2:** We consider that Hunter Water has effectively foreclosed other suppliers from providing services where they have a water supply (including non-potable water) or sewerage network. We therefore consider that an obligation to supply should be limited to customers connected to, or

¹⁴ Sydney Water submission to IPART's Issues Paper, 29 July 2016, p4.

¹⁵ The Premier has declared certain services provided by Hunter Water to be "government monopoly services" under section 4 of the IPART Act: see *Independent Pricing and Regulatory Tribunal (Water, Sewerage and Drainage Services) Order 1997*.

¹⁶ This is where the utility is the only supplier that can practically supply services to customers (ie similar to a monopoly supplier principle).

who can be connected to, an existing water supply or sewerage network (the same as the existing provision).

- ▼ **Component 4:** We consider that Hunter Water should be able to make the provision of services subject to conditions. Where the supply of services is not covered by a deemed customer contract (as outlined in the operating licence), Hunter Water would be able to negotiate these conditions with the customer.

We consider that Component 3 should be removed to better align with section 13(1)(b) of the Hunter Water Act.

We assessed three options in relation to Component 1 for water and wastewater services only, as outlined in the table below.

Options	Descriptions
Option A (Base Case)	Make no change to licence. (Retain the current arrangement whereby Hunter Water is only obliged to service property owners within the area of operations.)
Option B	Require Hunter Water to service any person within the area of operations.
Option C	Require Hunter Water to service property owners and certain wholesale customers within the area of operations.

We carried out a qualitative analysis of the costs and benefits of each option.

Option A

Under this option, Hunter Water would only be obliged to service customers that have a deemed customer contract (as outlined in the operating licence) with Hunter Water.¹⁷

The benefit of this option is that Hunter Water would not be obliged to negotiate supply with any other customers.

The cost of this option is that there is a risk Hunter Water would refuse to service wholesale customers that do not own property, given they are potential competitors. This would stifle competition by preventing wholesale customers from entering into the market.

Option B

Under this option, Hunter Water would have to service any person within the area of operations.

¹⁷ Draft Operating Licence, Schedule B – Proposed customer contract, clause 2.2.

The benefit of this option is that it aligns with our foreclosure principle, in that Hunter Water has foreclosed other suppliers from providing services to any person.

There are however two key costs of this option:

- ▼ Extending the obligation to ‘any person’ is a significant change from the existing provisions that relate only to property owners.
- ▼ There could be unintended consequences. For example, it may introduce risk to Hunter Water as it would be required to negotiate supply to ‘non-property owners’, which could be problematic, as there are no standard terms and conditions for this purpose.

Option C

Under this option, Hunter Water would be obliged to service both property owners (that have a deemed customer contract) and certain wholesale customers. For the purpose of this obligation to service, we have based our definition of wholesale customers broadly on the definition contained in our Draft Determination for wholesale prices for Hunter Water and Sydney Water.¹⁸ The key differences are that:

- ▼ We have included ‘existing services’ and ‘negotiated services agreements’, which are excluded from the Draft Determination.
- ▼ We have included non-potable water supply, which was excluded from the Draft Determination.
- ▼ The obligation applies to network operators and retail suppliers licensed under the WIC Act, as we consider that these are the most likely wholesale customers (for the purpose of the Draft Determination).

Our definition of wholesale customers is:

Wholesale Customer means a person who is authorised under a licence or authorisation under the WIC Act to:

- a) construct, maintain and operate Water Infrastructure or Sewerage Infrastructure;
- b) provide water supply services by means of Water Infrastructure; or
- a) provide sewerage services by means of Sewerage Infrastructure.

¹⁸ IPART, *Prices for Wholesale water and sewerage services – Sydney Water Corporation and Hunter Water Corporation, Water- Discussion Paper*, April 2016, p 13

The benefits of this option are:

- ▼ It requires Hunter Water to provide services to wholesale customers, where they have foreclosed other suppliers from doing so. This will promote competition.
- ▼ It means Hunter Water does not have a reason to refuse to deal with wholesale customers.
- ▼ It removes the risk of Hunter Water having to negotiate with a potentially large number of 'non-property owners' (when compared to Option B – 'any person'), while ensuring wholesale customers are serviced.
- ▼ Hunter Water is only obliged to service wholesale customers where the end-user is within Hunter Water's area of operations. This means Hunter Water is only obliged to plan for the efficient provision of services within its area of operation.

The costs of this option are:

- ▼ It is not a pure application of the foreclosure principle, as Hunter Water has effectively foreclosed the provision of services to 'any person', not just property owners and wholesale customers.
- ▼ The Draft Determination for wholesale prices gives a narrower definition of 'wholesale services' than Hunter Water could provide. Wholesale customers in general, are customers that purchase a wholesale service, ie, a service for which they are not the final end-user. This means Hunter Water could provide other wholesale services that are not covered by the pricing determination, for example, to local councils or to customers with end-users outside Hunter Water's area of operations. However, we consider the Draft Determination provides the best proxy for wholesale services at this time, for the purpose of an obligation to supply services.

4.4.3 Preferred option

We prefer Option C because it removes risk to Hunter Water in that it can refuse to deal with certain wholesale customers, without introducing unintended consequences of extending the obligation to 'any person' (Option B). Under this option, Hunter Water would retain the power to negotiate the terms and conditions of supply of services to wholesale customers, where this is not covered by a deemed customer contract (Section 8.7 discusses the use of non-standard contracts).

We do not favour Option A (do nothing) because, in principle, we consider that Hunter Water should have to provide services to more than just property owners, where they have foreclosed other suppliers. Box 4.3 shows the proposed

new licence clauses, obliging Hunter Water to make its Services available to property owners and certain wholesale customers within the area of operations

Box 4.3 Obligation to make services available

1.5.1 Subject to Hunter Water continuing to comply with any applicable law, Hunter Water must provide the Services on request to any Property situated in the Area of Operations which is connected to, or for which a connection is available to:

- (a) in the case of supplying water, the Water Supply System; and
- (b) in the case of providing sewerage services and/or disposing of Wastewater, the Sewerage System.

1.5.2 Subject to Hunter Water continuing to comply with any applicable law, Hunter Water must provide the Services on request to any Wholesale Customer for ultimate end-use within the Area of Operations, where that Wholesale Customer is connected to, or where a connection is available in respect of that Wholesale Customer to:

- (a) in the case of supplying water, the Water Supply System; and
- (b) in the case of providing sewerage services and/or disposing of Wastewater, the Sewerage System.

1.5.3 Hunter Water may impose any lawful conditions it sees fit on the making available of Services under clause 1.5.1 or clause 1.5.2, to ensure the safe, reliable and financially viable supply of the Services in accordance with this Licence.

Draft recommendation

4 Extend the obligation to provide services to include certain wholesale customers.

4.5 Consider the licence review period from 2022 onwards

In the Issues Paper, we recognised that IPART's price regulation and licensing roles have an impact on Hunter Water's operations. The paper noted the relationship (and trade-off) between performance standards (set by the operating licence) and prices (set to reflect efficient costs, including the costs of complying with the licence) as one example of where the approved capital expenditure program can affect potential changes to the licence.¹⁹ We are now proposing to consider the alignment of the operating licence and pricing reviews as part of the next review.

¹⁹ IPART, *Review of the Hunter Water Corporation Operating Licence, Water Licensing – Issues Paper*, May 2016, p 40.

4.5.1 Issue raised

Hunter Water submitted that there would be advantages in a licence review finishing two years prior to a price review. Knowledge of new or amended licence obligations one year prior to the lodgement date for a price submission would enable the water utility to incorporate any revised performance standards or additional compliance costs into operating and capital expenditure proposals.²⁰

PIAC agreed with Hunter Water that there is merit in better aligning the timing of pricing and operating licence reviews to ensure the licence review is able to inform the price determination.²¹

Sydney Water put the view that there may be merit in aligning the price and operating licence reviews, but IPART needs to ensure no adverse financial or system performance impacts will eventuate from the proposed changes.²²

4.5.2 Options assessed

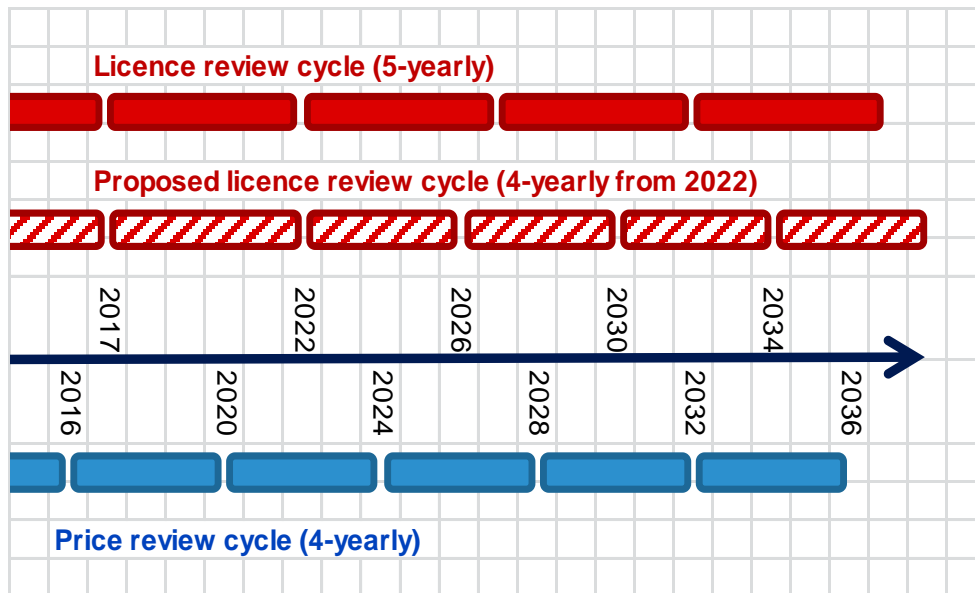
Options	Description
Option A (Base Case)	No change to licence review period (ie, Price review every 4 years; Licence review every 5 years).
Option B	No change in licence review period in the next 5 years (same as Base Case). From 2022, reduce licence review period from every 5 to every 4 years, with the aim of keeping a 2-year gap between the licence review and price review completion dates.

Option B considers aligning the timing of the licence reviews and the price reviews such that any changes to the licence can be considered immediately in the subsequent price review. We note that to achieve 4-yearly alignment, an adjustment to the period of the operating licence review could be made from 2022 (when such an alignment is already scheduled to occur). The review cycles are demonstrated in Figure 1.

²⁰ Hunter Water submission to IPART Issues Paper, 15 July 2016, p 10.

²¹ PIAC submission to IPART Issues Paper, 29 July 2016.

²² Sydney Water submission to IPART Issues Paper, 29 July 2016, p 17.

Figure 1 Existing and possible licence review cycles

The benefits are qualitative as they are difficult to quantify.

However, the CBA noted that there would be additional administrative costs incurred by bringing the operating licence review forward by one year, but also noted that this will not occur until 2025-26, which is outside of the time period covered by this cost-benefit analysis.

The cost increase is estimated to be approximately 25% more over 20 years,²³ or one additional review in each 20-year period.

Potential changes in expenditure caused by changes in licence requirements, such as system performance standards (SPS) or stormwater infrastructure amplification, could be more efficiently assessed if the licence review identified them initially, and the price review then allowed the efficient cost as approved expenditure.

4.5.3 Preferred option

We consider that there is merit in operating licence requirements being established such that they can subsequently inform the pricing implications of those requirements. A 2-year gap from the finalisation of the operating licence to the finalisation of a price determination allows for such an interaction.

However, at this point in time there remains the question of whether it is more appropriate to shorten the operating licence term to 4 years or extend the pricing period to 5 years. This question contains a number of complexities and therefore

²³ Calculated as $(5 \text{ years} / 4 \text{ years}) - 1 \times \text{cost of review}$.

our draft recommendation is to reconsider **Option B** as a future matter that will be subject to further analysis in the next licence review.

Draft recommendation

5 No change to licence review period at this point in time.

5 Water conservation

The current licence includes two main conditions related to water conservation. These require Hunter Water to meet a water conservation target and to determine the Economic Level of Leakage (ELL). In reviewing the licence, we considered whether these should be replaced with requirements to adopt an Economic Level of Water Conservation approach, in line with current good practice for NSW's public water utilities.

The sections below outline our recommended changes to these conditions, and then discuss our considerations and analysis on each change in more detail.

5.1 Summary of draft recommended changes

We have made draft recommendation changes to:

- ▼ introduce a requirement to develop and implement a methodology for determining an Economic Level of Water Conservation (ELWC), to replace the water conservation target and ELL approach (new licence clause 2.1),and
- ▼ introduce a requirement to prepare an annual Water Conservation Report, as per the Reporting Manual, after the ELWC methodology is approved by IPART (new licence clause 2.1.7).

5.2 Develop and implement an ELWC approach

The current licence requires Hunter Water to develop and implement a methodology for determining the economic level of leakage (ELL). In general, the ELL is the point where the value of water lost from leakage is equal to the value of the resources committed to reducing these losses.

However, the more recently developed Economic Level of Water Conservation (ELWC) concept is a more holistic approach that incorporates other elements of water conservation, including water leakage, water recycling and water efficiency activities (including demand management) in its definition.

5.2.1 Issue raised

Hunter Water has developed and applied an Economic Level of Leakage (ELL) methodology in the current licence term. Hunter Water submitted that it has an understanding of how it could extend this approach more generally to cover a wider range of water conservation initiatives such as in an ELWC methodology. Hunter Water has observed Sydney Water's progress in developing the methodology through the work of the ELWC Interagency Reference Group. In addition, Hunter Water and Sydney Water have discussed the process and necessary timelines to complete key tasks.

Sydney Water stated that it is prepared to assist Hunter Water in developing a robust methodology that suits its business and operating environment.²⁴

Hunter Water supports a licence requirement to develop and implement an ELWC methodology. However, it suggested that the principles and approach would need to be tailored to Hunter Water's operating environment, taking into account the size of the business, the scope of potential water conservation activities, available data on costs and benefits, existing stakeholder engagement processes, and the resourcing costs of preparing the methodology.²⁵

Hunter Water considered that a six month period for establishing the approach and principles and a further 12 months to finalise the ELWC methodology was reasonable and achievable. IPART supports the suggested timeframe, which is consistent with the timeframe provided to Sydney Water.

Hunter Water considered that the purpose and scope of the ELWC methodology should be the development of a robust analytical framework, identifying relevant costs and benefits, both financial and non-financial, and the basis for valuing those costs and benefits. It should not require Hunter Water to implement all three elements or to quantify an overall level of water conservation for each element. Rather the methodology is an economic framework that is capable of testing and measuring the net benefits or costs of potential projects, programs and initiatives across the three water conservation elements as a whole. If some elements do not have viable options then these would not be explored further.

Sydney Water's submission also noted a potential for confusion over this issue, given the current wording in its own operating licence may be interpreted as meaning Sydney Water must carry out each aspect of water conservation as part of an ELWC.²⁶

Department of Primary Industry – Water (DPI Water) noted in its submission that if an ELWC approach is adopted, it should be framed with reference to the

²⁴ Sydney Water submission to IPART Issues paper, 29 July 2016 – p 9.

²⁵ Hunter Water submission to IPART Issues Paper, 15 July 2016 pp 21-22.

²⁶ Sydney Water submission to IPART Issues paper, 29 July 2016, pp 9-10.

current Lower Hunter Water Plan (LHWP).²⁷ DPI Water's position is that the LHWP is the primary mechanism for developing an optimal portfolio of demand and supply measures to secure the region's water needs. It noted that a new process may be inefficient, being separate from the modelling and analysis that underpins the LHWP.

DPI Water argued that the LHWP reflects the economic level of investment in supply and demand measures. It further argued that a standard cost-benefit analysis may not fully price non-financial benefits to water conservation measures, providing little financial incentive to invest in water conservation. The submission implied that the ELWC approach may limit societal benefits from potential water conservation measures that are included in the LHWP's portfolio of measures.²⁸

Hunter Water's current reporting manual (clause 3.2.1) sets out a requirement for Hunter Water to report on projects undertaken in the previous year to achieve the Water Conservation Target, including a description of each project and an estimate of the amount of water saved. Hunter Water must also provide a list of proposed projects. Hunter Water has generally reported on proposed projects for the following financial year.

Hunter Water considered that the operating licence should not oblige Hunter Water to detail a water conservation plan over a five year period, as is required of Sydney Water in its operating licence. Its stated reason is that Hunter Water is smaller than Sydney Water and does not have the resources to establish a program of potential projects and activities extending out for five years.

Hunter Water did not have any concerns with reporting on the maximum reliable quantity of water that Hunter Water can derive from one year to the next, from its existing water storages, taking into account all relevant factors.

5.2.2 Options assessed

Options	Description
Option A (Base Case)	No change to operating licence conditions.
Option B	Replace the ELL and water conservation target with a requirement in the licence to adopt an ELWC (this would not occur until the ELWC methodology is fully implemented).
Option C	Tie the ELWC provisions to the demand side measures identified in the LHWP.

Our CBA shows there is a significant quantifiable cost (our mid-range forecast is \$205,010 over five years) associated with replacing the current operating licence

²⁷ DPI Water submission to IPART Issues Paper, 29 July 2016.

²⁸ DPI Water submission to IPART Issues Paper, 29 July 2016.

requirements with a requirement to adopt an ELWC. However this is a relatively modest amount compared with the cost of water conservation activities undertaken by Hunter Water overall. Hunter Water's actual expenditure on water conservation programs in 2015-16 was approximately \$5 million.²⁹

In addition, there are equally important qualitative benefits to be realised from the adoption of an ELWC. The most significant of these benefits are increased efficiency from considering a wider set of influences on water conservation decisions and increased flexibility for the business to optimise water conservation expenditure on various projects, rather than just focussing on water usage and water leakage. The impact of efficiency gains could be large given the amount of cost associated with water conservation activities.

Option C was analysed qualitatively in conjunction with Hunter Water. Hunter Water reported that the LHWP contains predominantly drought-related responses, and confirms a series of schemes that Hunter Water is already committed to implementing when necessary. In addition Hunter Water noted that there is nothing in the current LHWP that requires IPART-mandated expenditure. However, linking the ELWC to the LHWP could inadvertently require Hunter Water to undertake works that it cannot fund or does not consider economical.³⁰

We further note that the LHWP is not a statutory requirement. Linking the LHWP to the requirements of the licence would have the effect of turning the plan into a statutory one. We believe that this is not the intent of the licence. We further believe that the degree of flexibility inherent in the ELWC approach is preferable when assessing project implementation options.

5.2.3 Preferred option

Our preferred option is Option B. We consider it good practice to include new economic water conservation obligations in public water utilities' operating licences, which are designed to:

- ▼ apply to the relevant functional responsibility areas for that public water utility,
- ▼ replace arbitrary and prescriptive limits, and
- ▼ allow the utility to exercise its judgement, and have the operational flexibility to adapt its water conservation activities to changes in circumstances, promoting innovation and efficiency.

²⁹ Email to IPART, Hunter Water Corporation, 18 October 2016.

³⁰ Information provided to IPART, Hunter Water Corporation, Meeting 29 August 2016.

We consider that the ELWC methodology could form a component of an overall supply/demand balancing exercise and is therefore consistent with the framework created by the LHWP. We envisage that DPI Water would be consulted in the development of the ELWC methodology as it has been on the development of Sydney Water's methodology. This would help to ensure consistency between the ELWC methodology and the over-arching strategy of the LHWP. However, we do not consider it necessary to tie the operating licence conditions to the LHWP provisions. The LHWP is a non-statutory plan, and any agreements with Hunter Water regarding implementation can and should be made separately.

Therefore, we have recommended the inclusion of new ELWC provisions in the licence. A well-designed ELWC methodology will allow Hunter Water to take a business-wide approach to assessing ongoing and new investment in water conservation measures (including those in the LHWP), and to better determine an appropriate level of that investment.

Draft recommendation

- 6 Adopt the concept of Economic Level of Water Conservation to replace the prescriptive limit on water consumption and the Economic Level of Leakage.

(Note: this draft recommended change is shown in clause 2.1 of the draft licence.)

5.3 Prepare an annual Water Conservation Report

We propose to recommend that current requirements in relation to reporting on the Water Conservation Target be replaced with requirements to prepare an annual Water Conservation Report. This report would outline the actions that Hunter Water has taken or proposes to take to determine the optimal mix of water conservation activities and the appropriate amount to invest in these activities. We consider the net benefit/cost of this change to be neutral.

In addition, we propose to recommend including licence conditions that require Hunter Water to:

- ▼ submit a report outlining its approach to, and the principles for, developing an ELWC methodology
- ▼ develop and obtain IPART's approval for the methodology
- ▼ develop a water conservation program using the methodology, and
- ▼ submit an annual water conservation report to IPART in accordance with the Reporting Manual.

Being a smaller business, Hunter Water may have difficulty in establishing a range of potential projects and activities over a five-year period, as per the Sydney Water licence conditions. However, we consider Hunter Water should

be able to provide an indicative forecast of projects within the five-year reporting period, and add detail at each reporting period.

The proposed licence clause is shown in Box 5.1.

Box 5.1 Proposed ELWC reporting clause

2.1.6 By 1 September 2019, or by a later date specified by IPART, Hunter Water must develop and provide to IPART, a water conservation program using the methodology approved by IPART under clause 2.1.3.

[Note: The water conservation program will be outlined in the first Water Conservation Report, which is to be submitted to IPART by 1 September 2019 in accordance with the Reporting Manual.]

Draft recommendation

- 7 Introduce a requirement to prepare an annual Water Conservation Report after the Economic Level of Water Conservation methodology is approved by IPART.

6 Supply services and performance standards

The current licence includes a range of conditions related to water quality and system performance standards. We considered options to clarify water quality management system requirements, and to move the drinking water quality compliance responsibility (ie, the auditing role) from the licence to NSW Health. We also considered options to strengthen the system performance standards.

The sections below outline our draft recommended changes to the current conditions, and then discuss our analysis and draft recommended changes in more detail.

6.1 Summary of draft recommended changes

We propose to recommend three changes related to the conditions on water quality and system performance standards. These are to:

- ▼ amend the explanatory note to the Drinking Water Quality Management System (DWQMS) clause to make it clear that unfiltered water is restricted to non-potable uses (refer new licence clause 3.1.1).
- ▼ clarify NSW Health's role in relation to water quality management by removing clauses that require NSW Health's **approval** for significant changes to the DWQMS, and
- ▼ include a new licence condition to enable a review of System Performance Standards to be undertaken as part of the next licence review (refer new licence clause 3.3.4).

We propose to recommend that drinking water quality compliance responsibility remains with the licence and is not moved to NSW Health.

6.2 Amend the note to the Drinking Water Quality Management System

Customers situated between Chichester Dam and Dungog Water Treatment Plant do not have direct access to potable water. Hunter Water supplies these customers with 'unfiltered water' (ie, raw water (with added chlorine) that has not been treated to a potable water standard), via the transfer pipeline from Chichester Dam to Grahamstown Dam. Hunter Water has developed non-standard customer contracts to provide the terms and conditions of supply and to note the (non-potable) quality of the water being supplied to these customers.³¹

We will clarify that Hunter Water has obligations to both its potable and non-potable water customers.

6.2.1 Issue raised

Hunter Water noted that there are less than 100 customers served by this pipeline, most of which are residential customers.³² The water supplied to these customers is dosed with chlorine but is not filtered or otherwise treated. This water can vary in quality (particularly turbidity) after heavy rain and runoff into Chichester Dam. The microbiological quality of the unfiltered water cannot be guaranteed. It should also be noted that, as the unfiltered water customers are serviced by a single trunk main, the water continuity standards in the operating licence cannot be reliably met. These unfiltered water customers have historically had non-standard water service agreements that contain qualifying clauses regarding water quality and the end uses for which the water is safe.

Hunter Water considered that its current licence already includes some coverage of the supply of unfiltered water through the requirement to maintain and implement a management system that is consistent with the Australian Drinking Water Guidelines (ADWG). The unfiltered water from the Chichester Trunk Gravity Main does undergo some disinfection, however this single barrier is insufficient to reliably produce water suitable for drinking.

Recently IPART's annual operational audits have considered the supply of unfiltered water within the scope of compliance with drinking water quality licence clauses. In 2014, IPART's annual audit report recommended that:

Hunter Water should develop a process to inform customers who receive unfiltered water from the Chichester Trunk Gravity Main about the quality and use of that water.³³

³¹ Hunter Water submission to IPART Issues Paper, 15 July 2016, pp 47-48.

³² Ibid.

³³ IPART, *Hunter Water Corporation Operational Audit 2013/14, Report to the Minister, Water - Compliance Report*, December 2014, p 4.

Hunter Water noted that the process of updating non-standard agreements with unfiltered water customers revealed a difference of opinion on the quality of the unfiltered water and suitable end uses. The difference of opinion raised two issues:

1. Whether existing licence terms have sufficient coverage of unfiltered water, as a non-drinking grade of water.
2. Whether the relationship between Hunter Water and its unfiltered water customers should continue to be formalised in non-standard agreements or be incorporated into the Customer Contract instead.

Hunter Water's preference is to continue to maintain non-standard contracts with unfiltered water customers, rather than incorporate the service into its Customer Contract, due to the small number of customers affected (less than 0.1 % of its customer base). Hunter Water contends that this approach results in a clearer, more concise customer contract for standard customers and services.

Hunter Water has suggested adding a new provision for "other grades of water", to cover non-potable water supplied to residential properties that do not fall within the 'drinking water' and 'recycled water' categories. Hunter Water contends that the addition of these provisions should lower public health risks.

The submission from NSW Health noted that this issue "...is probably best managed through clear and concise individual customer agreements which are reflective of the management framework of the ADWG."³⁴ The advice concurred with Hunter Water's submission that noted that it is currently negotiating with the affected landowners to ensure the new agreements are understood, including the qualifying clauses regarding water quality, system performance and appropriate end uses for which the water is safe.

6.2.2 Options assessed

Options	Descriptions
Option A (Base Case)	No change to the licence (ie, licence does not explicitly cover the management of unfiltered water).
Option B	Introduce licence conditions to cover unfiltered water with standards similar to the Australian Drinking Water Guidelines.
Option C	Require Hunter Water and NSW Health to agree on the terms and conditions for the supply of unfiltered water in the MoU.
Option D	Make minor amendments to the drinking water conditions in the licence to include management of unfiltered water for non-potable purposes.

³⁴ NSW Health submission to IPART Issue Paper, 29 July 2016, p 3.

These unfiltered water customers do not currently have reticulated potable water supply. The cost of providing reticulated potable water services to these customers is in the order of \$7.5 million, which is approximately \$110,000 per affected customers.³⁵ This option is considered too expensive and is therefore not included in our list of options.

Option B would allow Hunter Water to disconnect customers who may be using unfiltered water for potable water purposes. The new licence condition would specifically target this small group of customers³⁶ and could be used to provide a basis for Hunter Water to take action against those customers who do not comply.

While disconnection of customers from the unfiltered water supply could mitigate the negative health risks of consuming water not intended for drinking purposes, it would impose a cost on those customers who need an alternative supply. Disconnection of the unfiltered water supply may result in some customers, who may not already have water tanks, or large enough tanks, being required to install water tanks and pay for water carters to fill up their tanks regularly.

Under Option B, Hunter Water would be able to fulfil its commitment to maintaining a management system which is compliant with the ADWG and only supply potable water if it is safe and reliable. NSW Health noted that this option could reduce health risks to consumers, and provide better understanding of health risks by those who supply this water to the public.³⁷ Hunter Water would lose revenue from the reduced sale of unfiltered water due to the disconnections. However, the loss could be partially offset by the increased sale of potable water through water carters to these customers.

Option C requires Hunter Water and NSW Health to agree on the terms and conditions for the supply of unfiltered water through the existing Memorandum of Understanding (MoU) between them. Hunter Water would be required to continue to supply unfiltered water to customers. However, it would not provide the benefit of reducing the risk of consuming water that is not intended for drinking. It may also introduce inflexibility and discourage collaboration.³⁸

Option D acknowledged that preventing the use of unfiltered water for potable water purposes should be managed as part of the drinking water management framework, which is the current management approach. We consider the existing drinking water licence conditions appropriate.

Under Option D, Hunter Water is required to continue to administer new non-standard agreements with the unfiltered water customers, and provide

³⁵ Hunter Water's reply to IPART request for information, 7 September 2016.

³⁶ Approximately 55 customers.

³⁷ NSW Health's reply to IPART request for information, 13 September 2016.

³⁸ NSW Health's reply to IPART request for information, 13 September 2016.

educational material and information to these customers regarding the safe use of unfiltered water. There would be a minor cost to Hunter Water for providing targeted community education. The health benefits are qualitative as better education should lower the risk of consuming non-potable water unintentionally.

6.2.3 Preferred option

We prefer Option D. We consider that Hunter Water should continue to meet the requirements of ADWG by providing the appropriate information to its customers. The information should reinforce that unfiltered water is not suitable for drinking. Disconnecting customers from the unfiltered water supply, as in Option B, could cause inconvenience and disruption to customers, result in net costs to the broader community and should only be considered as a last resort.

We analysis concludes that:

- ▼ Making minor amendments to the licence to include unfiltered water for non-potable purposes would provide more transparency in managing the risk of customers consuming unfiltered (non-potable) water.
- ▼ The existing drinking licence clause is appropriate, and we have decided to expand the existing explanatory note under the clause.
- ▼ The potential misuse of unfiltered water can be effectively dealt with through the compliance audit and the implementation of a Drinking Water Quality Management System (within the framework of the ADWG).
- ▼ The protections within the framework of ADWG are sufficient to manage this issue, along with clear and concise individual agreements with these unfiltered water customers.

We therefore propose to add a note under the draft licence clause 3.1.1 to clarify that the potential misuse of unfiltered water for drinking purposes is to be addressed under the drinking water management framework, as shown in Box 6.1.

Box 6.1 Proposed unfiltered water note (clause 3.1.1)

Note: The Australian Drinking Water Guidelines have provisions relating to the prevention of use of non-potable water for potable purposes.

Given the variable nature of unfiltered water from Chichester Dam, we do not believe a meaningful set of standard conditions can be applied. We prefer that the customers in question sign the agreements provided, and that the ADWG framework is the basis for managing this service.

Draft recommendation

- 8 Amend the note to the Drinking Water Quality Management System licence clause to make it clear that unfiltered water is restricted to non-potable uses.

6.3 Clarify NSW Health's role in relation to water quality management

We sought input from stakeholders on three issues relating to NSW Health's role in relation to water quality management:

- ▼ NSW Health's role as an 'approval' body (existing licence conditions 2.1.4 and 2.2.4)
- ▼ Whether to define 'significant changes' (existing licence conditions 2.1.3 and 2.2.3)
- ▼ Whether to define 'to the satisfaction of NSW Health' (existing licence conditions 2.1.2 and 2.2.2).

6.3.1 Issue raised

Both Hunter Water³⁹ and NSW Health⁴⁰ indicated that the current arrangements appear to be working well for both parties and should be retained. Sydney Water also supported this view.

NSW Health submitted that it is not an 'approval' authority. There is a degree of contention around whether NSW Health is required to approve changes in Hunter Water's Drinking Water Quality Management System (DWQMS) and Recycled Water Quality Management System (RWQMS). Hunter Water has indicated that it expects to continue its current approach of involving NSW Health when developing and implementing significant changes to its management systems to ensure that outcomes are mutually acceptable.

Hunter Water expressed concerns about defining 'to the satisfaction of...'⁴¹ including determining how broad or narrow the definition and scope would be. Both Hunter Water and NSW Health argued that the existing system works well, each party understands its role and the MoU between the two organisations results in a good understanding and level of communication between the parties. This is underscored by the audit role that IPART undertakes, with input from NSW Health.

³⁹ Hunter Water submission to IPART Issues Paper, 15 July 2016, p 13.

⁴⁰ NSW Health submission to IPART Issues Paper, 29 July 2016, p 2.

⁴¹ Email, Hunter Water's reply to IPART request for information, 7 September 2016.

6.3.2 Options assessed

Issue 1: NSW Health's role as an 'approval' body

Options	Descriptions
Option A (Base Case)	Maintain wording of Licence conditions 2.1.4 and 2.2.4 which requires NSW Health's "approval" for any significant changes to the DWQMS.
Option B	Change Licence conditions 2.1.4 and 2.2.4 to require any significant changes to the DWQMS to be "to the satisfaction of" NSW Health.
Option C	Remove Licence conditions 2.1.4 and 2.2.4.

Issue 2: Defining 'significant changes'

Options	Descriptions
Option A (Base Case):	Do not define the meaning of 'significant changes'.
Option B	Define the meaning of 'significant changes' in the licence
Option C	Require the meaning of 'significant changes' to be defined in the MoU with NSW Health.

Issue 3: Defining 'to the satisfaction of NSW Health'

Options	Descriptions
Option A (Base Case):	Do not define the meaning of 'to the satisfaction of NSW Health'.
Option B	Define the meaning of 'to the satisfaction of NSW Health' in the licence.
Option C	Require the meaning of 'to the satisfaction of NSW Health' to be defined in the MoU with NSW Health.

The CBA demonstrates that changes to these clauses would result in no net benefit.⁴² In addition, the two agencies have indicated that the system works well in its current format, regardless of a degree of uncertainty over definitions. Changes to definitions (eg 'significant changes') present a risk that those changes may result in increased requirements and therefore compliance costs. The existing regime works well and no changes are considered necessary.

However, we have noted NSW Health's position that it is not an "approval body". To remove any doubt from the licence and clarify stakeholders' understanding, we propose to remove the relevant clauses.

Significant changes to Hunter Water's drinking water and recycled water management plans will need to be 'to the satisfaction of NSW Health'.

⁴² IPART, *Cost benefit analysis of proposed changes to Hunter Water Corporation's operating licence, Water - Draft Report*, December 2016, pp 40-41.

6.3.3 Preferred option

In relation to the role of NSW Health as an approval body, we prefer Option C, removing the existing licence clauses 2.1.4 and 2.2.4. In relation to defining 'significant changes' and 'to the satisfaction of NSW Health', our preferred options are to not define these terms. These terms could be defined in the MoU between the two parties, should they consider it necessary.

We consider the management of changes in the DWQMS and RWQMS, whether the changes are significant or not, is part of the implementation of both management systems. The implementation of the management systems 'to the satisfaction of NSW Health' is already specified in the existing licence clauses 2.1.2 and 2.2.2. We considered inserting 'significant changes' into existing clauses 2.1.1 and 2.2.2, but decided that it is not required as the implementation of the management system to the satisfaction of NSW Health implicitly includes managing changes. Clause 2.1.3 requires NSW Health to be notified of any significant changes.

Draft recommendation

9 Clarify NSW Health's role in relation to water quality management.

(Note: this draft recommended change is shown by the absence of current licence clauses 2.1.4 and 2.2.4 from the draft licence.)

6.4 Include new licence condition to enable review of System Performance Standards as part of a future licence review

The Issues Paper raised the question of whether the existing system performance standards (SPS) are too generous, given that Hunter Water routinely meets the standards by a considerable margin. SPS are included in the current licence to reflect the fact that Hunter Water is a monopoly provider of essential services. These standards are aimed at ensuring that customers receive a suitable level of service.⁴³ There are trade-offs between the standard of service provided by Hunter Water and the costs of providing that service. The challenge is to meet customers' expectations and minimum requirements whilst not exceeding their willingness to pay.

The current SPS thresholds were agreed following the 2008 Pricing Determination, and were subsequently included in the 2007-2012 operating licence.⁴⁴ The thresholds were designed to also incorporate major weather events since there is no mechanism to exclude major weather events from the calculations. In the years since the changes were promulgated, Hunter Water has continued to remain significantly (in most cases) below the SPS thresholds. A

⁴³ *Hunter Water Act 1991*, s 13(1)(c).

⁴⁴ An amendment was made to the SPS contained in Hunter Water's operating licence on 16 July 2010, as published in the NSW Government Gazette, No 92, 16 July 2010.

cursory assessment for the results from 2010-11 to 2015-16 shows that Hunter Water is between 15-50% below its thresholds. This signifies that there is scope to undertake an evaluation of these SPS.

6.4.1 Issue raised

Stakeholders did not raise any significant concerns with the current SPS. Hunter Water's submission considered the following factors:⁴⁵

- ▼ Hunter Water's 2015 price submission assumed there would be no substantive changes to the SPS.
- ▼ Forecast growth in new connections and water consumption over the next five years means there will be a natural tightening of the SPS each year.
- ▼ Further engineering investigations are required to understand the investment needed to achieve different performance levels.
- ▼ Further engagement with customers is required to understand their preferences and values.

Sydney Water's submission⁴⁶ noted that the SPS do not necessarily represent customer advocated service levels or reflect efficient life cycle costs of assets. However it further noted that simply tightening the current standards without exploring customer preferences or efficient costs is unlikely to bring service benefits, but could limit the scope for cost efficiencies. Sydney Water did not support changes to the current SPS thresholds, but noted that these thresholds could be reviewed in the future.

6.4.2 Options assessed

Options	Descriptions
Option A (Base Case)	Keep existing standard in the licence.
Option B	Use a proportional basis (i.e., a percentage basis) for the standards so that standards remain constant relative to an increasing customer base.
Option C	Use a proportional basis (i.e., a percentage basis) for the standards and define excluded events (i.e., event outside Hunter Water's control such as major weather events).
Option D	Additional reporting requirement at the end of each financial year in SAIDI, SAIFI and Major Day Event thresholds for exclusions. The definitions are based on IEEE Standard 1366-2012.

⁴⁵ Submission from Hunter Water to IPART Issues Paper, 15 July 2016, p 31.

⁴⁶ Submission from Sydney Water to IPART Issues Paper, 29 July 2016, p 3.

The major factor influencing the options analysis relates to how much it will cost Hunter Water to improve standards of service, and Hunter Water's customers' willingness to pay for the improved service standards.

Hunter Water does not expect to breach existing performance standards and thresholds over the next five years, except in circumstances of extreme or major weather events. Hunter Water also stated that increasing the performance standard thresholds would not have a measurable impact on likely capital expenditure.⁴⁷

Hunter Water stated that while there is merit in excluding major weather events (ie, major storms, earthquakes, floods) in Options C and D, it is difficult to define an independent and objective measure for 'excluded events'.⁴⁸

With regard to changing to a standard that excludes major weather events, similar to the electricity industry performance reporting requirements, Hunter Water notes the following:⁴⁹

- ▼ The input data required for the indicator is currently recorded, however, it is not readily extractable in the required form.
- ▼ ICT costs of approx. \$3,500 (35 hours for 1 employee) would be incurred to extract the six years of data required for use in informing further discussion and development of the indicators.
- ▼ Other internal labour costs of approx. \$35,000 required to adapt and develop the indicators for use in the water industry.
- ▼ A robust process would involve discussions between Hunter Water, Sydney Water, Central Coast and IPART.
- ▼ The cost in information system changes are \$20,000 in both 2017-18 and 2018-19.

For Option B, there may be savings in lower capital and operating expenditure for Hunter Water and customers, as increasing the performance standard thresholds would reduce the risk of operating licence breaches and would defer expenditure targeted at particular performance standards. Hunter Water stated however it was not possible to quantify the magnitude of these savings.⁵⁰

For Option C, Hunter Water noted that the current SPS are designed for 1-in-20 year storm events, which therefore includes major weather events. As major

⁴⁷ Hunter Water's reply to IPART request for information, 7 September 2016.

⁴⁸ IPART, *Cost benefit analysis of proposed changes to Hunter Water Corporation's operating licence, Water - Draft Report*, December 2016, p 25.

⁴⁹ Ibid.

⁵⁰ IPART, *Cost benefit analysis of proposed changes to Hunter Water Corporation's operating licence, Water - Draft Report*, December 2016, p26.

weather events are already considered in the current standards, there is no incremental benefit relating to this option.⁵¹

For Option D, if a robust process leads to an appropriate new indicator, then the benefits could include:

- ▼ improved indication of Hunter Water's day-to-day performance in normal operating conditions and impact on customers
- ▼ improved comparability across utilities
- ▼ potential improvements in performance or cost savings to meet more relevant targets
- ▼ potential for future development of incentive schemes
- ▼ improved understanding of the practical application of these indicators in the water industry
- ▼ development of robust, well-designed, meaningful measures that could potentially replace existing performance standards
- ▼ avoided cost of reporting against non-robust measures.⁵²

6.4.3 Preferred option

Our draft recommendation is Option A. We recommend that the SPS thresholds in the new operating licence remain at the current levels. Option D, or a similar approach, requires further investigation and analysis before the potential benefits can be assessed and appropriate new SPS can be developed.

To inform any future consideration of adjustment of these SPS, Hunter Water proposes to survey its customers before the next pricing review (in 2020), to determine the levels of service for which customers are willing to pay. In addition, Hunter Water proposes to investigate the underlying performance standards that should apply if major weather events are removed from the SPS measurement, and collect relevant data to inform the next pricing review and operating licence review with regard to re-evaluating these SPS.

We recommend a new licence condition be added to ensure the completion of these information gathering tasks within the term of the new licence to inform a future review of the performance standards. The proposed licence clause is shown in Box 6.2.

⁵¹ IPART, *Cost benefit analysis of proposed changes to Hunter Water Corporation's operating licence, Water - Draft Report*, December 2016, p26.

⁵² Ibid

Box 6.2 Proposed customer survey clause 3.3.4

3.3.4 Hunter Water must survey its Customers by 31 December 2020 for the purpose of informing a review of system performance standards.

[Note: Clause 3.3.4 is not intended to prevent Hunter Water:

- a) surveying its Customers and Consumers for any lawful purpose at such times as it sees fit; or
 - b) using the survey required by that clause to survey its Customers and Consumers on topics additional to the topic referred to in that clause.]
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Draft recommendation

- 10 Include a new licence condition to ensure information is gathered within the term of the new licence to inform a future review of the system performance standards.

6.5 Maintain drinking water quality compliance regime in licence

Currently the licence contains conditions that govern the quality of drinking water supplied to Hunter Water's customers.⁵³ Specifically, these conditions relate to water quality objectives for the provision of drinking water and recycled water that meet the required public health standards.

In the Issues Paper, we raised the possibility of moving the drinking water compliance responsibility, including Water Quality Management Plan compliance, from the licence to NSW Health.

6.5.1 Issue raised

Both Hunter Water and NSW Health oppose the proposed change. NSW Health does not see itself as an approval authority, and generally has no approval processes.⁵⁴ Hunter Water has noted that it is satisfied with the current arrangements.

⁵³ Refer current operating licence clause 2.1.

⁵⁴ NSW Health submission to IPART Issues Paper, 29 July 2016, p 2.

6.5.2 Options assessed

Options	Descriptions
Option A (Base Case)	Retain the current drinking water quality provisions in the existing licence.
Option B	NSW Health establishes a compliance regime under the Public Health Act, and IPART removes audit requirements for drinking water from the operating licence.
Option C	NSW Health establishes a compliance regime under the Public Health Act, and IPART removes audit requirements for drinking water from the operating licence (same as Option B above) and NSW Health audits and reports (publicly and to IPART) on Hunter Water's compliance with its drinking water Quality Management Plan.

Our quantitative analysis suggests that Option B and C both result in an initial net cost for NSW Health in developing its own internal processes to support the audit regime. Option C results in an initial net cost for NSW Health in developing its own internal processes and an additional recurring net cost relating to additional reporting requirements compared with the base case (Option A).

Our qualitative analysis shows that there is no incremental benefit arising from Option B but a qualitative benefit arising from Option C, which we consider does not offset the quantitative net costs of this Option.

A benefit for Hunter Water would arise as the cost of operational audits would be borne by NSW Health. We note that Section 18D of the *Hunter Water Act 1991*, in relation to the licence auditing functions of the Tribunal, requires Hunter Water to pay Treasury "the cost (as certified by the Tribunal) involved in and in connection with carrying out the operational audit of the Corporation". A regulatory mechanism does not currently exist for NSW Health's costs to be passed through to Hunter Water, resulting in a cost saving to Hunter Water that is offset by an equal cost increase for NSW Health.

6.5.3 Preferred option

Our preferred option is Option A, that no change is made. NSW Health does not have resources nor expertise available to audit and support a licensing regime for the public water utilities. Both NSW Health and Hunter Water have indicated that the current arrangements are appropriate and effective. The overall costs and benefits do not favour either of the options over the base case. Therefore the preferred option is to maintain the current arrangements in the operating licence.

7 Organisational systems management

The current licence requires Hunter Water to develop and/or maintain an Asset Management System (AMS) (cl 4.1), an Environmental Management System (EMS) (cl 6.1), and a Quality Management System (QMS) (cl 7.1) that provide effective planning, operation and control of processes. We considered options for changes to the licence conditions on these organisational systems, and related requirements in the Reporting Manual.

The sections below summarise our draft recommended changes, and then discuss each of these changes in more detail.

7.1 Summary of draft recommended changes

We propose to recommend several changes to the licence conditions and reporting requirements related to the AMS:

- ▼ Change the licence conditions to require Hunter Water to maintain an AMS that is consistent with ISO 55001 by 31 December 2017, certify this system by 31 December 2018, and maintain this certification for the remainder of the term of the licence (refer new licence clause 4.1).
- ▼ Remove the requirement in the reporting manual to provide a periodic State of the Assets Report, and include a one-off requirement to provide a copy of the Strategic Asset Management Plan to IPART with the 2018-19 annual compliance and performance report submission.

We also propose to recommend that the licence conditions related to the EMS and QMS be amended to require Hunter Water to maintain systems and certification to the most up-to-date standards (refer new licence clauses 4.2 and 4.3).

7.2 Change licence conditions to require ISO 55001 asset management system and certification

The current licence requires Hunter Water to maintain an AMS that is consistent with the PAS 55 Asset Management Standard, or the Water Services Association of Australia's Aquamark benchmarking tool, or another asset management standard agreed to by IPART. The ISO 55000 series of Asset Management

standards was launched in January 2014 after the current licence had commenced. ISO 55001 represents the application of good practice principles in asset management, which is appropriate for Hunter Water given the critical nature of the assets it manages.

7.2.1 Issue raised

Hunter Water advised IPART of its intention to transition to an asset management system consistent with ISO 55001.⁵⁵ IPART has accepted this proposal. Hunter Water is significantly advanced towards its stated aim of implementing an asset management system consistent with ISO 55001 by 1 July 2017. This would complete the transition to a fully systems-based licence and will be consistent with Hunter Water's stated intentions.

The asset management system would be one of four certified management systems within the organisation's overall integrated management system. The environmental, safety and quality management systems have already been certified as consistent with international standards by an appropriately qualified third party.

Sydney Water supported the belief that ISO 55001 is the appropriate standard for asset management for a major public water utility.⁵⁶

Hunter Water considered that the scope of the annual operational audits would reduce significantly for those parts of the licence that require certified management systems.⁵⁷ For example, IPART could observe certification and surveillance audits. Alternatively, IPART's independent auditors could review the reports of these audits rather than conduct a separate review with similar scope.

Hunter Water has reviewed the benefits and impacts of consistency versus the certification of the asset management system relative to the international standard. Hunter Water intends to obtain certification due to the broad business benefits attainable through embedding systems into Hunter Water's work practices and the additional reassurance certification provides to external stakeholders.⁵⁸

Hunter Water maintains that it is appropriate to pursue certification. Several components of its integrated quality management are already certified and periodic surveillance audits (to maintain certification) are conducted in an integrated manner. Hunter Water estimates that the incremental cost of

⁵⁵ IPART, *Compliance Report – Hunter Water Corporation Operational Audit 2014-15, Report to the Minister*, March 2016, Appendix C, p 18.

⁵⁶ Sydney Water submission to IPART Issues Paper, July 2016, p 3.

⁵⁷ Hunter Water submission to IPART Issues Paper, 15 July 2016, p28.

⁵⁸ Hunter Water submission to IPART Issues Paper, 15 July 2016, p 27.

maintaining certification of an additional management system would be relatively modest.

7.2.2 Options assessed

Options	Descriptions
Option A (Base Case)	Continue the current requirement to maintain an asset management system.
Option B	Change the requirement for an AMS to be consistent with ISO 55001 (but without a requirement for certification) by 31 December 2017.
Option C	Change the requirement for an AMS to be consistent with ISO 55001 in the licence by 31 December 2017 and certified by 31 December 2018.

The CBA indicated that:

- ▼ There are no incremental costs associated with the transition to ISO 55001 as Hunter Water is committed to the change and significantly advanced in transitioning its existing systems. To date, the estimated capital cost required to refine the Asset Management System such that it is consistent with ISO 55001 and integrated with Hunter Water's Business Management Systems⁵⁹ is \$1 million. This does not include certification costs.
- ▼ Option C would require an initial certification audit of the AMS in 2017-18 which is forecast to cost \$15,000. Annual surveillance and re-certification audit activities are forecast to be \$5,000 in 2018-19, 2019-20 and 2021-22, and 15,000 in 2020-21 (re-certification audits occur every three years).
- ▼ There is a net unquantifiable benefit to the community arising from the assurance that Hunter Water's assets are managed to 'good practice' guidelines.
- ▼ There is a net benefit arising from the avoided costs to Hunter Water regarding auditing of the AMS clauses in the operating licence.⁶⁰

IPART commissioned an independent report⁶¹ into auditing the asset management clauses in the operating licences of public water utilities. The report's recommendations included that IPART:

- ▼ Monitors the results of the ISO 55001 audit process and implements a lighter handed approach if it is satisfied that it provides sufficient rigour and assurance.

⁵⁹ E.g. IMS, QMS etc as described in chapter 7 of Hunter Water's Compliance and Performance Report 2015-16.

⁶⁰ IPART, *Cost benefit analysis of proposed changes to Hunter Water Corporation's operating licence, Water - Draft Report*, December 2016, pp 42-45.

⁶¹ Cardno, *Asset Management Systems Audit Approach – Report on Workshop*, May 2014, Executive Summary p iv.

- ▼ Considers forming a panel of asset management auditors that are certified by a Conformity Assessment Body for auditing to ISO 55001.

The report notes that, in the first few years following certification (ie a 'transition' period), IPART should continue undertaking audits of high risk components. Assurance of low risk components would be addressed through reporting (ie certification/surveillance/desktop audits).

If IPART concludes after the transition period that the ISO 55001 audit process has sufficient rigour then we could accept the certification as sufficient evidence of effective asset management implementation. However, auditing of higher risk components would continue to be undertaken every year or as deemed necessary.

It was recommended in the report that IPART have input into audit scopes. It also recommended that certified auditors have appropriate (ie water sector) experience, and that IPART set up a panel of approved auditors.

During the recent price review, IPART's expenditure consultants reviewed the need for certification, noting that alignment with the international standard may be sufficient to obtain most of the benefits. However, the consultant also concluded that certification was justified and in keeping with its proposed output targets for the coming pricing period.⁶²

The draft Asset Management Policy from NSW Treasury⁶³ seeks to align agency core asset management practices with the internationally recognised sound practices contained within the international asset management standard (ISO 55001). This draft policy has not been finalised and does not apply to State Owned Corporations like Hunter Water. However, the following benefits are highlighted in the policy, which we consider are also applicable to Hunter Water generally:

- ▼ Improved assurance for the Government in the agency's asset management performance and maturity through greater alignment of agency activities to government priorities, regulatory and legislative requirements and a demonstrated focus on continuous improvement.
- ▼ Improved financial performance and sustainability through greater alignment between life-cycle planning and decision making and the agency's financial management framework, greater use of life-cycle costing and focusing on maximising the value derived from planned and existing assets over the assets life.

⁶² Jacobs Group (Australia) Pty Ltd, *Hunter Water Expenditure Review – Final Report*, Jan 2016, p 207.

⁶³ NSW Treasury, *Draft Asset Management Policy for the NSW Public Sector – An accountability framework to support agencies in realising value from planned and existing non-financial assets*, Policy & Guidelines Paper, 2015.

- ▼ Improved organisational sustainability by effectively planning for, and managing, short and long term demand pressures and risks and basing decisions on whole of life-cycle impacts (costs and benefits).
- ▼ Improved investment decision making through greater use of life-cycle information to prioritise investments, evaluation of trade-offs between investment options, incorporating Government priorities in the decision making process and a stronger focus on balancing costs and risks against the desired performance.
- ▼ Improved internal business operations through promoting strong leadership, clear accountabilities and greater collaboration and integration across functional areas.
- ▼ Improved services by making life-cycle decisions that maximise the value from existing assets and ensuring investments in new assets support improved service delivery.

In the draft policy, NSW Treasury did not require agencies to seek independent accreditation against ISO 55001. It encouraged the agencies to assess whether the benefits of accreditation outweigh the costs.

7.2.3 Preferred option

After considering the CBA and the above analysis, we prefer Option C, which is to require Hunter Water's asset management system to be consistent with ISO 55001 and achieve certification.⁶⁴

This option is supported by the pricing review's independent expenditure assessment consultant, as well as being supported by both Hunter Water and Sydney Water as good practice. Although the CBA analysis identifies a small net cost relative to Option B and the Base Case, we consider that Hunter Water's identification of qualitative business benefits, the unquantified saving in IPART's audit costs and integration with its existing certified systems justifies the decision to pursue certification.

To provide Hunter Water with sufficient time to achieve its stated goal of implementation of ISO 55001, we are recommending the compliance dates be amended to end of calendar year 2017 for implementation and 1 July 2018 for certification. See Box 7.1 for the proposed licence clauses.

⁶⁴ IPART, *Cost benefit analysis of proposed changes to Hunter Water Corporation's operating licence, Water - Draft Report*, December 2016, p 45.

Box 7.1 Proposed AMS clauses

4.1.1 By 31 December 2017, Hunter Water must develop a Management System that is consistent with the International Standard ISO 55001:2014 Asset Management System Requirements (the Asset Management System), in delivering the functions authorised under this Licence.

4.1.2 Hunter Water must ensure that by 1 July 2018:

- a) the Asset Management System is fully implemented and that all relevant activities are carried out in accordance with the Asset Management System; and
 - b) the Asset Management System is certified by an appropriately qualified person to be consistent with the International Standard ISO 55001: 2014 Asset Management System – Requirements.
-

Draft recommendation

11 [Introduce in the licence a requirement for an AMS to be consistent with ISO 55001 by 31 December 2017 and certified by 1 July 2018.](#)

7.3 Remove requirement to provide State of the Assets Report

Hunter Water is required to provide the State of the Assets Report biennially as specified in the Reporting Manual. The report must include a description of each group of assets, an assessment of the expected capability of the assets, major issues or constraints on current and future performance of the assets, strategies and expected costs of future investment in assets, and other matters reasonably required by IPART.

The State of the Assets Report is meant to provide transparent and readily accessible information to regulators. It is also meant to provide regulators with assurance that they will have access to information required to undertake their duties. IPART requested this report with the intention of informing our audit and pricing review processes.

7.3.1 Issue raised

Hunter Water's Reporting Manual requires it to provide a biennial report on the state of its assets to IPART. The Reporting Manual also prescribes the content of the State of the Assets Report.

Hunter Water commented that the uses of this report had not been evident, and questioned the potential unnecessary administration costs of such a reporting requirement.⁶⁵

⁶⁵ Hunter Water submission to IPART Issues Paper, July 2016, p 53.

Sydney Water suggested reducing the frequency of reporting to every four years as part of the price review.⁶⁶

7.3.2 Options assessed

Options	Descriptions
Option A (Base Case)	Continue to include the requirement for biennial State of the Assets reporting in the Reporting Manual.
Option B	Reduce the required frequency of reporting in the Reporting Manual to coincide with price reviews (4-yearly).
Option C	Remove the requirement for State of the Assets reporting in the Reporting Manual.

The cost of generating the State of the Assets report is \$26,000. This represents a benefit for Option C and a lesser benefit for Option B.

7.3.3 Preferred option

We consulted internally to determine if the report is used for any purpose. Information in the report may be relevant to the 4-yearly price review. During the last price review, IPART requested significantly more asset information for its analysis than that contained in the State of the Assets Report.

It may also be relevant to the annual operational audit. However, neither the pricing team nor the licensing team actively use the report, as the detailed requests for information during both of these processes effectively make the report redundant. There is not a strong justification to require the report every two years.

As a result, we consider that the report is no longer required and Option C is preferred.

The ISO 55001 standard requires organisations to have an asset management policy, asset management objectives, a strategic asset management plan and asset management plans. The information that is required to be included in the State of the Assets Report is sufficiently covered in the ISO 55001 standard requirements.⁶⁷ We consider the State of the Assets Report could be a duplication of a reporting requirement under ISO 55001 once Hunter Water's asset management system consistent with ISO 55001 and certified.

The operational audit requirements will become less prescriptive when Hunter Water's AMS is compliant with ISO 55001. Hunter Water will be required to provide the outcome of its annual surveillance audits to the operating licence

⁶⁶ Sydney Water submission to IPART Issues Paper, July 2016, p 11.

⁶⁷ IPART, *Review of the Hunter Water Corporation Operating Licence - Issues Paper*, May 2016, Appendix D.

auditor, as well as recertification audit results every three years. Therefore, we envisage the State of the Assets Report would also become less significant for the auditors.

The preparation of a strategic asset management plan is a requirement under ISO 55001. We consider that a one-off submission of the strategic asset management plan to IPART, once Hunter Water is certified, will assist us in understanding Hunter Water's overall commitment and direction in asset management. This will subsequently inform the future compliance audit regime after certification of the asset management system.

Draft Recommendation

- 12 Remove the requirement for State of the Assets reporting in the Reporting Manual.
- 13 Include a one-off reporting requirement to provide a copy of the Strategic Asset Management Plan to IPART once certification to ISO 55001 is achieved.

(Note: this draft recommended change is shown in section 4.2.1 of the draft Reporting Manual.)

7.4 Maintain certification of the EMS and QMS to the most current standards

The current licence requires Hunter Water to develop and implement an EMS certified to AS/NZS ISO 14001:2004: *Environmental Management Systems – Requirements with guidance for use* (ISO 14001), to manage risks to the environment of its business and service delivery.⁶⁸ Hunter Water achieved certification of its EMS in October 2014, ahead of the required timeframe.

The licence also requires Hunter Water to achieve certification of a QMS that is consistent with AS/NZS ISO 9001:2008 *Quality Management Systems – Requirements* (ISO 9001). Hunter Water achieved certification of its QMS in August 2015, ahead of the required timeframe.

7.4.1 Issue raised

During the current term of the licence, Hunter Water has developed and certified both environmental and quality management systems to meet the relevant Australian Standards.

Hunter Water considered that it is appropriate to maintain certification of its EMS and QMS and the current provisions are appropriate.⁶⁹

⁶⁸ *Hunter Water Operating Licence 2012-2017*, cl 6.1.

⁶⁹ Hunter Water submission to IPART Issues Paper, July 2016, p 51.

Sydney Water considered that there is significant value in retaining these management system requirements.⁷⁰

The NSW Environment Protection Authority (EPA) noted and encouraged the development and implementation of an EMS to manage risks to the environment from Hunter Water's operations.⁷¹

IPART has noted that new versions of ISO 9001 and ISO 14001 were released in 2015. Certified organisations must adopt the new versions of the standards by no later than September 2018 (ie a three year transition period from the date of publication) in order to maintain certification.

7.4.2 Options assessed

Options	Descriptions
Option A (Base Case)	No change to the licence
Option B	Remove the requirement for certification of an EMS and/or QMS from the operating licence
Option C	Remove the requirement for an EMS and/or QMS from the operating licence

Option B removes the requirement to maintain certification of the EMS and QMS but does not remove the requirement for management systems that are consistent with ISO 14001 and ISO 9001. In doing so, there would be savings for Hunter Water associated with no longer maintaining certification of approximately \$5,000.⁷² IPART would not incur additional costs associated with assessing the adequacy and implementation of these systems in the absence of certification, as this scenario matches the base case in the current operating licence (ie we audit Hunter Water's compliance in full).

Option C relies on Hunter Water's own business decisions to maintain and certify to the relevant Australian Standards. Given the nature of its operations, having no requirement in the operating licence to maintain an EMS or QMS would mean we would not have an instrument with which to monitor and audit Hunter Water's performance in these areas. The net benefits to Hunter Water would be \$25,000.⁷³ However the unquantifiable costs to the community would be very large if an environmental or public health crisis developed because Hunter Water's operations were compromised.

⁷⁰ Sydney Water submission to IPART Issues Paper, July 2016, p 14.

⁷¹ Environment Protection Authority submission to IPART Issues Paper, 11 July 2016.

⁷² Jacobs Group (Australia) Pty Ltd, *Hunter Water Expenditure Review – Final Report*, Jan 2016, p 84.

⁷³ Ibid

We note that changes associated with Options B and C would create inconsistency with Sydney Water's 2015-2020 Operating Licence (which recently introduced requirements for certification of the EMS and QMS).

We further consider there is a small benefit in keeping the requirement for certification in the licence, to provide formal assurance that the EMS and QMS are maintained to the accepted Australian Standard.

In addition to the costs noted above, we sought information from Hunter Water regarding transition costs for adoption of the new versions of the standards ie ISO 9001:2015 and ISO 14001: 2015. Hunter Water responded that it is obligated to transition to and obtain certification against the new standards, even if the new licence does not require it. As such it considers that there is no net cost or benefit for this requirement.

However, a preliminary estimate provided by Hunter Water indicates that upgrading to the new versions of the standards would cost between \$300,000 and \$500,000 for each system.

We are unable to quantify the benefits. However the reasoning that was applied to the 2012 licence review⁷⁴ still applies. The potential to enhance Hunter Water's efficiency, improve its service levels, reduce the risk of system failure and minimise environmental impacts will likely exceed the costs of any upgrade.

7.4.3 Preferred option

Implementation of a certified EMS is industry good practice and provides a framework for an organisation to identify and target the environmental risk and impact of all its business activities.

Implementation of a certified QMS is industry good practice. An integrated management system may reduce the need to audit elements that are common across all management systems within the business. This would enable operating audits to be more targeted to higher risk elements of those systems.

We consider both an EMS and a QMS consistent with Australian Standards are essential components in systems based licensing to achieve Hunter Water's objectives in providing water, wastewater and stormwater services to the community.

Our preferred option is the base case (Option A) with minor amendments to the licence conditions, to maintain certifications to the most recently released standards for EMS and QMS. The net cost for Hunter Water to maintain its certified EMS and QMS to the newer standards is likely to be outweighed by the

⁷⁴ IPART, *Cost Benefit Analysis of proposed changes to Hunter Water Corporation's Operating Licence, Water Licensing – Final Report, April 2012*, pp 9-14.

potential benefits to the organisation as a whole. This preferred option is supported by Hunter Water, Sydney Water and the EPA as good practice.

We consider the systems based approach to licensing is still at an early stage of implementation. We are considering undertaking audits of high risk components in the next licence term, and would consider relying on certifications for compliance monitoring in the future depending on audit findings and recommendations.

We propose minor amendments to the EMS and QMS conditions to remove the 'development' of an EMS and QMS given they are now developed, update the standards to the most recent version, and require Hunter Water to maintain certifications to the required standards during the licence term. The proposed licence clauses are shown in Box 7.2.

Box 7.2 Proposed EMS and QMS licence clauses

4.2.1 Hunter Water must maintain a Management System that is consistent with and certified to the International Standard ISO 14001 (the Environmental Management System), in delivering the functions authorised under this Licence.

[Note: For Hunter Water to remain certified, Hunter Water must transition its Environmental Management System to ISO 14001:2015 by September 2018.]

4.2.2 Hunter Water must fully implement, and carry out all relevant activities in accordance with, the Environmental Management System.

4.3.1 Hunter Water must maintain a Management System that is consistent with, and certified to, the International Standard ISO 9001 (the Quality Management System) in delivering the functions authorised under this Licence.

[Note: For Hunter Water to remain certified, Hunter Water must transition its Quality Management System to ISO 9001:2015 by September 2018.]

4.3.2 Hunter Water must fully implement, and carry out all relevant activities in accordance with, the Quality Management System.

Draft Recommendation

14 Amend the EMS and QMS licence conditions to require Hunter Water to maintain systems and certification to the most up-to-date standards.

8 Performance monitoring and reporting

The current licence and Reporting Manual includes conditions and requirements related to performance monitoring and reporting.⁷⁵ We considered options to improve or streamline the requirements for the reporting of information. We also sought views on whether Hunter Water should continue providing IPART with the same National Water Initiative (NWI) indicators that it provides to the Bureau of Meteorology. The sections below summarise our draft recommended changes then discuss them in more detail.

8.1 Summary of draft recommended changes

We propose to recommend adding a new clause in the operating licence to require Hunter Water to report to IPART on its performance against the NWI indicators. However, we propose no changes to the requirements related to IPART's performance indicators.

8.2 Include new clause to require reporting against NWI indicators to IPART

The current licence does not require Hunter Water to report to IPART on its performance against the NWI indicators. However, it does so voluntarily as part of its wider compliance activities.

8.2.1 Issue raised

Hunter Water noted in its submission that it supports inclusion of an operating licence condition to report against NWI indicators, noting that it would be consistent with Sydney Water's operating licence and would meet the Council of Australian Government's (COAG's) principal agreement for water reform ie, the NWI.⁷⁶ Both Sydney Water and DPI Water also supported continuing reporting of the NWI indicators.

In 2006, IPART was nominated by the NSW Government to be the Data Coordinator and Audit Coordinator for NSW public water utilities in the

⁷⁵ Current operating licence, clause 8 and Reporting Manual, chapter 8.

⁷⁶ Hunter Water submission to IPART Issues Paper, July 2016, p 51.

National Framework for Reporting on Performance of Urban Water Utilities Deed (Deed).⁷⁷ Although not a party to the Deed, IPART (as the NSW Government's appointee) is required to collect the NWI data from public water utilities in NSW and report to the relevant national body (currently the Bureau of Meteorology (BOM)).

8.2.2 Options assessed

Options	Descriptions
Option A (Base Case)	Make no change to the licence.
Option B	Add a new licence clause to require Hunter Water to report to IPART against NWI indicators.

The CBA analysis indicated that, as Hunter Water currently reports against the NWI indicators to the BOM, the costs and benefits of Option B are the same as the base case. Hunter Water would continue to provide the collected data in the Compliance and Monitoring Report to IPART.⁷⁸

As noted, IPART is required, under the terms of the Deed, to coordinate the collection, reporting and auditing of Hunter Water performance with regards to the NWI performance indicators. BOM does not monitor compliance, it merely collates data across the industry.

8.2.3 Preferred option

We prefer Option B, to include a new licence condition requiring the continued collection, collation and reporting of information to IPART as per the NWI indicators, administered and modified from time to time by the BOM.

To facilitate this change, and to match the requirements currently imposed on Sydney Water, we recommend a new clause (new licence clause 5.3.1) in the operating licence as well as an additional sub-clause in the reporting manual (chapter 8) requiring Hunter Water to report against the NWI performance indicators. (Refer Box 8.1).

⁷⁷ DLA Phillips Fox, *National Framework for Reporting on Performance of Urban Water Utilities Deed*, signed December 2006.

⁷⁸ IPART, *Cost Benefit Analysis of proposed changes to Hunter Water Corporation's Operating Licence, Water Licensing – Final Report, April 2012*, pp 51-52.

Box 8.1 Proposed NWI reporting clause
5.3 National Water Initiative Performance indicators

5.3.1 Hunter Water must report to IPART, in accordance with the Reporting Manual, on Hunter Water's performance against the National Water Initiative Performance Indicators, as amended from time to time.

5.3.2 Hunter Water must maintain sufficient records and record systems that enable it to report accurately in accordance with clause 5.3.1.

Recommendation

15 Add new licence conditions to require Hunter Water to report to IPART against NWI performance indicators.

8.3 Make no change to requirements to report against IPART performance indicators

IPART undertook a review of its performance indicators in 2012.⁷⁹ The outcome of the review was a streamlining of reportable indicators, with improved consistency between utilities.

For this review, we sought stakeholder views on how the reporting of information against these indicators could be improved to reduce the regulatory burden on Hunter Water.

8.3.1 Issue raised

The submissions received were largely supportive of retaining the current reporting requirements. Sydney Water noted that it would be beneficial if there were consistency in the indicators reported by both utilities.⁸⁰ It also stated that there may be alternative approaches of leveraging existing reporting to meet the required outputs of the DWQMS.⁸¹

Hunter Water also put the view that there may be opportunities to achieve greater consistency in definitions across some performance indicators and thereby reduce the regulatory burden. Hunter Water nominated the Annual Information Return (AIR) as the item requiring the largest input of resources and time.⁸² However this report is not a requirement of the licence or reporting manual. It is a requirement of the water pricing function and is not part of this review.

⁷⁹ IPART, *Tribunal briefing – Revised Performance Indicators for Sydney and Hunter Water*, 9 May 2012.

⁸⁰ Sydney Water submission to IPART Issues Paper, 29 July 2016, p15.

⁸¹ Sydney Water submission to IPART Issues Paper, 29 July 2016 p 16.

⁸² Hunter Water submission to IPART Issues Paper, 15 July 2016, p 52.

8.3.2 Options assessed

Options	Descriptions
Option A (Base Case)	Make no change to the licence.
Option B	IPART to conduct a Hunter Water-specific performance indicator definition review as part of the licence review process.
Option C	IPART to conduct a Hunter Water-specific performance indicator definition review as part of the licence review process and conduct an industry-wide performance indicators review after July 2017.

Option B: Capital and operating costs resulting from changes in performance indicators are heavily dependent on the nature of the proposed changes. An increase or decrease in the number of indicators would cause an incremental increase or decrease in the cost of maintaining sufficient records to enable accurate measurement against the indicators.

Other issues that might increase costs are the potential lack of alignment and loss of comparability between NSW public water utilities and the costs relating to a discontinuous data set.

There is also a potential cost to IPART of further customising its NSW Water Utilities Performance database and report.

There could be potential stakeholder confusion and misinterpretation of IPART's database and/or report.⁸³

Option C: This option could lead to abortive costs due to required system changes to report new or altered indicators arising from the first review, that are subsequently discontinued in the second review.⁸⁴

Other incremental costs include:

- ▼ increased labour costs for Hunter Water related to participating in multiple reviews,
- ▼ potential lack of alignment and loss of comparability between NSW metropolitan water utilities and a discontinuous temporal data set if indicators are altered or discontinued as part of the first review and then reinstated as part for the second review, and
- ▼ duplication of effort by stakeholders who are active across several jurisdictions (eg, advocacy groups).

⁸³ IPART, *Cost Benefit Analysis of proposed changes to Hunter Water Corporation's Operating Licence, Water Licensing – Final Report, April 2012*, p 53.

⁸⁴ Ibid.

Option B and C: Benefits that arise from both options are:

- ▼ the ability to refine the current definitions and resolve existing inconsistencies in indicators,
- ▼ potential increases in efficiency and productivity that may arise from the reviews.⁸⁵

8.3.3 Preferred option

On balance, given the feedback from the two public water utilities and the qualitative information in the CBA, we consider option C should be pursued as a separate review across the industry.⁸⁶ However, we consider that a Hunter Water-specific review cannot be undertaken in the time available in a meaningful manner.

Therefore, we propose to recommend no changes to the licence in relation to the IPART indicators. There is no change to the operating licence package, but an action for IPART to pursue at the conclusion of the review.

⁸⁵ IPART, *Cost Benefit Analysis of proposed changes to Hunter Water Corporation's Operating Licence, Water Licensing – Final Report*, April 2012, p 53.

⁸⁶ Ibid.

9 Customer and stakeholder relations

The current operating licence requires Hunter Water to publish a customer contract, and this contract is included in the existing licence as schedule C. As part of our review, we assessed a revised customer contract submitted by Hunter Water which included amendments to improve the clarity of the contract and a revised rebate scheme. We also considered options to update the licence requirements related to customer and stakeholder relations.

The sections below outline our draft recommended changes, and then discuss these changes in more detail.

9.1 Summary of draft recommended changes

We propose to recommend adopting the revised customer contract submitted by Hunter Water, including the revised rebate clauses, with some additional changes recommended by us.

We also propose to recommend some further changes in relation to other stakeholders as follows:

- ▼ adding a requirement for Hunter Water to negotiate cooperatively with WIC Act licensees to establish a Code of Conduct (new licence clause 6.8.1),
- ▼ amending the Roles and Responsibilities Protocol with DPI Water (new licence clause 6.10), and
- ▼ adding a requirement to establish a MoU with Fire and Rescue NSW (new licence clause 6.11).

In general, we consider these changes will address the interests of customers and stakeholders within Hunter Water's Area of Operations.

We propose to not include non-standard customer contracts in the draft licence as this may confuse the general public in relation to the services they receive. We also propose to not change the requirement to have a MoU with NSW Health, as the existing MoU facilitates effective ongoing interaction between the two organisations.

9.2 Adopt Hunter Water's revised customer contract with minor changes

Hunter Water has developed and submitted a proposed new customer contract to IPART. The proposed customer contract focuses on ease of understanding and better consistency with Sydney Water's customer contract.

9.2.1 Issue raised

Both PIAC⁸⁷ and the Energy and Water Ombudsman NSW (EWON)⁸⁸ generally support Hunter Water's proposed revisions to the customer contract, noting that moving to a simpler structure to improve readability and clarity are positive steps.

9.2.2 Options assessed

Options	Descriptions
Option A (Base Case)	Maintain existing customer contract
Option B	Adopt revised customer contract, as submitted by Hunter Water, with minor material modifications

We did not conduct a CBA on these options. However, we consider that material changes between the current and the revised customer contract would all result in qualitative benefits. For example:

- ▼ The inclusion of an 'insolvency event' clause would provide Hunter Water (and its customers) with a means of mitigating losses and potentially recover outstanding debts from businesses that are, or are about to be, insolvent.
- ▼ The revisions to the rebate clauses would strengthen the rebate scheme, providing additional benefits to affected customers and consumers, and reinforcing the notion that these rebates are payable for events that cause 'inconvenience' to customers.
- ▼ The inclusion of a mechanism to suspend affected obligations for unusual events beyond Hunter Water's reasonable control would provide benefits to Hunter Water in terms of its operating performance, without affecting customers' rights in relation to the provision of services.

9.2.3 Preferred option

Our initial assessment identified that the existing Hunter Water customer contract had some editorial and structural differences with Sydney Water's

⁸⁷ PIAC submission to IPART Issues Paper, 29 July 2016.

⁸⁸ EWON submission to IPART Issues Paper, 29 July 2016.

customer contract. Hunter Water's submission has provided a revised version, which has aimed to provide:⁸⁹

- ▼ A simpler structure and more logical sequencing of clauses
- ▼ Improved clarity in relation to provisions that:
 - Do not extend to non-standard customers that are subject to separate agreements; or
 - Apply specifically to 'drinking water', reticulated 'recycled water' or both.
- ▼ Updated communication channels and methods for customers to obtain information, including via Hunter Water's website and a General Enquiry Process rather than telephoning.
- ▼ Updated maintenance responsibility descriptions and diagrams that provide greater clarity to customers, particularly for pressure sewer systems. The updates also address challenges with the current Customer Contract raised in customer enquiries or complaints.
- ▼ A mechanism to suspend affected obligations for unusual events beyond Hunter Water's reasonable control.
- ▼ Reference to an 'insolvency event' as an enabler to mitigate losses and potentially recover debt from non-residential customers.
- ▼ Strengthened rebate clauses (wastewater overflows and low drinking water pressure).
- ▼ Updated references to policies and standards under Hunter Water's new document hierarchy.
- ▼ Removal of duplicate or obsolete references and generally ensuring that the document references current practices whilst maintaining sufficient flexibility appropriate for its term of at least five years.
- ▼ Amendments to existing, and addition of new, definitions and interpretations.

The proposed customer contract provisions are generally consistent with Hunter Water's existing customer contract but have a number of differences, as noted above. The changes are largely in structure and editing, but with additional protections for Hunter Water and its customers.

We support Hunter Water's proposal to amend the customer contract. It is significantly easier to read and logical in structure. We have made some further minor amendments and we will continue to discuss and negotiate parts of the customer contract during the public consultation phase.

⁸⁹ Hunter Water submission to IPART Issues Paper, 15 July 2016, p 39.

Draft recommendation

16 Amend the customer contract to make the contract easier to understand.

(Note: this draft recommended change is shown in Schedule B of the draft licence.)

9.3 Adopt revised rebates clauses

Hunter Water has also developed a revised rebate scheme, which is detailed in the new customer contract. This scheme is more generous than the previous customer contract and is broadly consistent with other major water utilities, such as Sydney Water.

Our view is that rebates should be provided for events that cause inconvenience to customers, be set at a level proportionate with the extent of inconvenience and the recipient should be the inconvenienced occupant (rather than the account holder who may not be the occupant, for example in leased premises).⁹⁰

9.3.1 Issue raised

EWON questioned why the proposed rebates are restricted to interruptions in peak hours (ie, between 5am and 11pm) only.⁹¹

EWON also questioned why Hunter Water does not match Sydney Water in rebating the annual water or wastewater service charge to customers affected by three or more interruptions or overflows. Hunter Water provided evidence to the our request for information that addressed the issue.

9.3.2 Options assessed

The CBA analysis focused on:⁹²

- ▼ Rebates for planned interruptions limited to the hours of 5am-11pm.
- ▼ Whether Hunter Water should match the rebates provided by Sydney Water for three or more unplanned water interruptions.
- ▼ Whether Hunter Water should match the rebates provided by Sydney Water for three or more unplanned wastewater interruptions.
- ▼ Whether Hunter Water should change the rebates structure for low water pressure as proposed in its submission.

⁹⁰ IPART's position was established in 2011, regarding rebates for inconvenience rather than as a punitive measure. Refer to report – IPART, *Review of the Customer Contract for Hunter Water Corporation – Final Report*, February 2011, p 7.

⁹¹ EWON submission to IPART Issues Paper, 29 July 2016.

⁹² IPART, *Cost Benefit Analysis of proposed changes to Hunter Water Corporation's Operating Licence, Water Licensing – Final Report*, April 2012, pp 54-62.

Note that the rebates provided by Hunter Water are issued as multiples of 15 kL on the affected **consumer's** water usage charge.⁹³ In this way, the inconvenienced **consumer** (ie, property owner or tenant) receives the benefit of the rebate, rather than just the property owner who may not be inconvenienced.

The rebates represent a transfer payment. That is, for each rebate paid (representing a cost to Hunter Water), there is an equal value benefit to customers of a rebate received. Incremental costs or benefits would only arise from changes in behaviour that resulted from changes to the rebate regime.

The information technology costs vary depending on how many changes are introduced to the rebate system. Each rebate change is estimated to cost \$20,000 (except low pressure rebates), but any structural change to the software requires a fixed cost of \$100,000 (2016 dollars).⁹⁴

Given the variable allocation of fixed costs to each change, we have included these costs in our considerations as part of our quantitative analysis. For our Net Cost/Benefit calculations we have only included the 'per change' cost, and separately taken into account the fixed cost of structural software changes.

Issue 1: Limit planned service interruption rebates to 5am-11pm

Options	Descriptions
Option A (Base Case)	Make no change to the licence.
Option B	Limiting rebates on planned interruptions to interruptions between 5am-11pm.

There will be no incremental cost of rebates as rebate eligibility is identified automatically and rebates are paid automatically to all eligible customers. That is, there is no change in behaviour as a result of the change in the rebate scheme. No rebates have been paid under the current criteria (ie, events at any time of day) over the last four years and this option includes more stringent criteria (limiting rebate to events occurring during peak hours).

A qualitative benefit arising from Option B is better alignment of rebates with times that customers are inconvenienced. This is consistent with IPART's stated position regarding the purpose of rebates as compensation for inconvenience.⁹⁵

⁹³ Hunter Water submission to IPART Issues Paper, 15 July 2016, Appendix B.

⁹⁴ IPART, *Cost benefit analysis of proposed changes to Hunter Water Corporation's operating licence, Water - Draft Report*, December 2016, p 54.

⁹⁵ "Because the cost of providing rebates is borne by Hunter Water's customer base we consider there are strong arguments for providing rebates only where customers are inconvenienced", IPART, *Review of the Customer Contract for Hunter Water Corporation, Water - Final Report*, Feb 2011, p 7.

Issue 2: Increase amount of rebates for unplanned water interruptions

Options	Descriptions
Option A (Base Case)	Make no change to the licence.
Option B	Increase rebate to an amount equal to annual water service charge for unplanned water interruptions for 3 or more events between 5am-11pm.
Option C	Increase rebate to an amount equal to the annual water service charge for unplanned water interruptions for 3 or more events at any time during a financial year.

It has been assumed that the 'amount equal to the annual water service charge' component of this option relates to the water service charge applying to single residential properties. If the alternative applied, ie the water service charge component was based on the meter size and property type (residential vs non-residential, multi premise, multiple meters etc.) of the affected customer then the software changes would be significantly more complex and the associated cost would be substantially higher.

The water service charge is not typically passed on to tenants, which means the inconvenienced occupant is not necessarily the recipient of the rebate (if the rebate is to the water service charge). Furthermore, customers experiencing financial hardship are often tenants.⁹⁶

Option C: The removal of reference to "peak hours" (5am to 11pm) would remove the alignment of the rebate with times that customers are inconvenienced. This would be inconsistent with IPART's previous position regarding the purpose of rebates, as noted above.

We found no net benefit for Options B or C.

Issue 3: Increase frequency of rebates for wastewater overflow

Options	Descriptions
Option A (Base Case)	Make no change to the licence.
Option B	Hunter Water to pay for first, second and third overflow.
Option C	Require Hunter Water to rebate an amount equal to annual wastewater service charge for wastewater overflows for 3 or more events.

Options B and C: Wastewater overflows on private property appear to be the most inconveniencing and emotive service-related event, based on responses to the 2010 customer survey and Customer Service contracts (including complaints). Under Option B customers will, on average, receive greater rebates, which may better align to the inconvenience experienced by customers.⁹⁷

⁹⁶ IPART, *Cost benefit analysis of proposed changes to Hunter Water Corporation's operating licence, Water - Draft Report*, December 2016, p 54.

⁹⁷ IPART, *Cost benefit analysis of proposed changes to Hunter Water Corporation's operating licence, Water - Draft Report*, December 2016, p 59.

Issue 4: Change eligibility of rebates for low water pressure

Options	Descriptions
Option A (Base Case)	Make no change to the licence.
Option B	Hunter Water to pay a rebate for one low pressure event per year based on system monitoring.
Option C	Hunter Water to pay a rebate for one low pressure event per quarter based on system monitoring.

Option B and C: There have been few escalated complaints during the 2012-2017 licence period objecting to the eligibility criteria for the low water pressure rebate, however Hunter Water considers this option to more appropriately recognise the inconvenience of a reduced service level.

Option C only: Low water pressure is most likely to be experienced during periods of high demand. Option B considers the highest demand day for each year whereas this option considers the highest demand day for each billing period, which will vary substantially between seasons. This is likely to result in fluctuations in rebate eligibility across bills, with most temporary pressure problems being experienced only over summer (i.e. rebate issued in summer, possible rebate during shoulder season and no rebate during winter) and stable rebate eligibility for those customers with permanent low pressure.

9.3.3 Preferred option

The issue regarding restriction of rebates to peak hours has been expressed previously by EWON.⁹⁸ IPART considers that the issue has been adequately addressed in the revised customer contract proposed by Hunter Water and no further changes are required.

Sydney Water's rebates are based on a flat fee reimbursement on the bill, or a water/wastewater service fee reimbursement for repetitive unplanned service interruptions or overflows. Hunter Water's rebates are based on a 15kL rebate (or multiples thereof for repeat occurrences) of the water usage component of the bill. This difference takes into account tenants as well as property owners.

Hunter Water has proposed an amended set of rebates in the new proposed customer contract. We recommend adoption of the proposed rebate regime in Hunter Water's proposed customer contract.

In summary, we recommend that:

- ▼ For planned water interruptions, we approve amendment of the customer contract to limit rebates to interruptions between 5am – 11 pm.

⁹⁸ IPART, *Review of the Customer Contract for Hunter Water Corporation – Final Report*, February 2011, p 7.

- ▼ For unplanned water interruptions, there is no change to the current amount of rebates provided by Hunter Water.
- ▼ For dry weather wastewater overflows, amend the customer contract to require a rebate to be paid on the first, second and third event.
- ▼ For low water pressure events, amend the customer contract to require a rebate to be paid for one low pressure event per year based on system monitoring or individual complaints.

It should be noted that all rebates currently paid by Hunter Water are paid as water/wastewater usage charges, not water/wastewater service charges. We recommend that this method of payment be continued as it will ensure the inconvenienced party receives the rebate.

Draft recommendation

- 17 [Revise rebate clauses in the customer contract as proposed by Hunter Water for planned water interruptions, low water pressure and wastewater overflows.](#)

9.4 Add a requirement to establish a Code of Conduct with WIC Act licensees

In the current licence, there are no requirements for Hunter Water to have a Code of Conduct with WIC Act licensees. However, WIC Act licensees have a requirement to have a Code of Conduct with the interconnected public water utilities in their licences. The recent Sydney Water operating licence review determined that this change was appropriate to minimise risks, to ensure there was this obligation on both parties and to enhance co-operation between the public water utility and WIC Act licensees.⁹⁹

9.4.1 Issue raised

DPI Water raised the issue in its submission, noting that a clause similar was added to the recent Sydney Water operating licence, and therefore should be added to Hunter Water's operating licence, as it faces the same issues in dealing with WIC Act licensees.¹⁰⁰

⁹⁹ IPART, *Sydney Water Corporation Operating Licence, End of Term Review, Report to the Minister*, May 2015, p 23.

¹⁰⁰ DPI Water submission to IPART Issues Paper, 29 July 2016, p 5.

9.4.2 Options assessed

Options	Descriptions
Option A (Base Case)	Make no change to the licence.
Option B	Add a condition in the operating licence requiring Hunter Water to have a Code of Conduct with WIC Act licensee.

WIC Act licensed network operators are already required to establish a Code of Conduct with the incumbent public water utility as a condition of their licence.¹⁰¹

Co-operation between Hunter Water and WIC Act licensees can result in the following benefits:

- ▼ Assist in establishing a more level playing field in terms of regulatory requirements (and hence negotiations) between Hunter Water and WIC Act licensees.
- ▼ Reduce the establishment costs of WIC Act schemes.
- ▼ Clarify responsibility for interconnected infrastructure, which can reduce the risk of system or service failure for both organisations.

The first two points above can assist in enhancing the potential for competition in the water industry – which can lead to a range of benefits, including greater innovation, lower costs, and enhanced service levels.

Having a code of conduct would reduce risks and enhance co-operation between Hunter Water, licensed network operators and retail suppliers in Hunter Water's area of operation.

We consider the costs of this proposed change are negligible, as it is already the current practice, and that there are unquantifiable benefits of this change relating to facilitating improved and more equitable negotiating relationships between the public water utility and the WIC Act licensees.

9.4.3 Preferred option

We prefer Option B, adding a new clause in the operating licence requiring Hunter Water to have a Code of Conduct with WIC Act licensees. The option is supported by DPI Water, and will improve consistency between the operating licences of Hunter Water and Sydney Water. The proposed clause is shown in Box 9.1. This option is also consistent with the new obligation for Hunter Water to provide services to wholesale customers.

¹⁰¹ CI B10 WIC Act Licence – for an example refer to the Huntlee network operators licence, https://www.ipart.nsw.gov.au/files/sharedassets/website/trimholdingbay/granted_licence_-_huntlee_water_pty_ltd_-_network_operator_-_3_march_2015.pdf

Box 9.1 Proposed code of conduct clause

6.8.1 Hunter Water must use its best endeavours to co-operate with any Licensed Network Operator and Licensed Retail Supplier that seeks to establish with Hunter Water a code of conduct under clause 25 of the WIC Regulation.

Draft recommendation

18 Add a requirement to negotiate a Code of Conduct with WIC Act licensees.

9.5 Amend Roles and Responsibilities Protocol with DPI Water

Hunter Water's current licence requires it to use its best endeavours to develop and agree, and maintain and comply with, a Roles and Responsibilities Protocol with DPI Water for the development of the Lower Hunter Water Plan.¹⁰²

9.5.1 Issue raised

Both Sydney Water¹⁰³ and Hunter Water¹⁰⁴ agreed that a continuation of the Roles and Responsibilities Protocol with DPI Water is preferable and sensible.

Sydney Water noted it would ensure consistency with its licence requirement.¹⁰⁵

Hunter Water noted that, with the next supply augmentation review needed by no later than 2023, it makes sense that Hunter Water and DPI Water contribute their expertise in a collaborative manner to the next LHWP iteration.¹⁰⁶

In reply to IPART's information request, Hunter Water stated that amending the condition to say "...the review and implementation of the Lower Hunter Water Plan" rather than "...the development of the Lower Hunter Water Plan" would not accurately describe of the status of the LHWP over the new licence term.¹⁰⁷ In its submission to the operating licence review, Hunter Water stated that the 2014 LHWP is in its implementation phase however DPI Water intends to review and update the LHWP during the new licence term.¹⁰⁸

¹⁰² *Hunter Water Operating Licence 2012-2017*, p 5.

¹⁰³ Sydney Water submission to IPART Issues Paper, 29 July 2016, p 10.

¹⁰⁴ Hunter Water submission to IPART Issues Paper, 15 July 2016, p 24.

¹⁰⁵ Sydney Water submission to IPART Issues Paper, 29 July 2016, p 10.

¹⁰⁶ Hunter Water submission to IPART Issues Paper, 15 July 2016, p 24.

¹⁰⁷ Email to IPART, Hunter Water, 7 September 2016.

¹⁰⁸ Hunter Water submission to IPART Issues Paper, 15 July 2016, p 24.

Hunter Water has provided potential wording for the existing licence clause (cl 3.3.1) as follows:

Hunter Water must use its best endeavours to:

- a) develop and agree a Roles and Responsibilities Protocol with the Metropolitan Water Directorate for the development and implementation of the Lower Hunter Water Plan; and
- b) maintain and comply with the Roles and Responsibilities Protocol that has been developed and agreed under clause 3.1.1(a).

9.5.2 Options assessment

Options	Descriptions
Option A (Base Case):	Retain in the licence the condition in its current form that requires Hunter Water to develop and agree, and maintain and comply with, a roles and responsibilities protocol with DPI Water.
Option B	Amend the condition to say "...the review and implementation of the Lower Hunter Water Plan" rather than "...the development of the Lower Hunter Water Plan".
Option C	Remove the roles and responsibilities protocol with DPI Water from the licence.

IPART has considered alternative options to the current requirements. Given the current protocol has no expiry date, and that the Lower Hunter Water Plan has now been developed, we have considered changing or removing the existing condition.

The analysis assumes that the relationship between DPI Water and Hunter Water would be documented and possibly formalised regardless of whether it is a requirement of the licence. This means that under Option C there is no avoided cost of developing and agreeing the protocol.¹⁰⁹

Option B: Update the licence condition to reflect the state of the LHWP. A Protocol is still required as per the base case.

Option C: We could not identify any costs relating to this option.

There would be no avoided cost of developing and agreeing the protocol because the relationship between DPI Water and Hunter Water would be documented (and possibly formalised) in any case (as discussed above).¹¹⁰

¹⁰⁹ IPART, *Cost benefit analysis of proposed changes to Hunter Water Corporation's operating licence, Water - Draft Report*, December 2016, p 71.

¹¹⁰ IPART, *Cost benefit analysis of proposed changes to Hunter Water Corporation's operating licence, Water - Draft Report*, December 2016, p 72.

The potential need for a compliance audit of the existing condition is eliminated, which would avoid the cost of IPART's operational audit of this clause. However IPART's practice over the current licence period has been to seek DPI Water's views and only conduct an audit by exception, which has occurred at no cost, suggesting that this saving would not be realised.

9.5.3 Preferred option

Our draft recommendation is Option B, as it accurately reflects current practice, and provides a net benefit in providing a means of auditing compliance with this clause. Option B also better aligns the existing licence clause 3.3.1 with the status of the LHWP and licence clause 3.3.1 of the Sydney Water operating licence.

However, we note that the LHWP is a non-statutory policy document that allows Hunter Water flexibility to efficiently achieve objectives and outcomes. We also note that greater specificity around this clause could affect IPART's ability to set Hunter Water's maximum prices based on the prudent and efficient costs of delivering its monopoly services. The proposed licence clause amendment is shown in Box 9.2.

Box 9.2 Proposed clause for a Roles and responsibilities protocol with DPI Water

- 6.10.1 Hunter Water must use its best endeavours to:
- a) maintain a Roles and Responsibilities Protocol with the Department of Primary Industries Water for the review and implementation of the Lower Hunter Water Plan; and
 - b) comply with the Roles and Responsibilities Protocol maintained under clause 6.10.1(a).
- 6.10.2 The purpose of the Roles and Responsibilities Protocol referred to in clause 6.10.1(a) is to form the basis for a co-operative relationship between the parties to the Roles and Responsibilities Protocol. In particular, the purpose of the Roles and Responsibilities Protocol referred to in clause 6.10.1(a) is to recognise the role of Department of Primary Industries Water in assessing options to address water supply security in the lower Hunter.
-

Draft recommendation

- 19 Amend Roles and Responsibilities Protocol with DPI Water so that it says "...the review and implementation of the Lower Hunter Water Plan" rather than "...the development of the Lower Hunter Water Plan".

9.6 Add a requirement to establish a MoU with Fire and Rescue NSW

The recent Sydney Water licence includes a new requirement for it to liaise with Fire and Rescue NSW (FRNSW) and use ‘best endeavours to develop and enter into a MoU’. The licence also prescribed some of the matters that such a MoU should address. We sought stakeholder feedback on whether the Hunter Water operating licence should include similar requirements.

The purpose of the MoU is to form the basis for co-operative relationships between the parties, to develop roles and responsibilities for each party, identify needs and constraints, and to identify and develop strategies for efficient and effective provision of firefighting water.

9.6.1 Issue raised

Hunter Water submitted that it has voluntarily begun negotiations with FRNSW (initially) with a view to developing a MoU. In subsequent meetings Hunter Water indicated that it is keen to work more closely with FRNSW and does not object to a requirement to formalise this relationship.¹¹¹

Sydney Water submitted that its work to date on establishing a MoU with FRNSW has allowed stakeholders to collaborate, to bring real improvements for fire safety, thus bringing greater safety improvement. It also noted that two separate MoUs with FRNSW and Rural Fire Service (RFS) would formalise good working relationships with both parties.¹¹²

FRNSW supported a requirement for a MoU with Hunter Water. It noted that with the advent of the pressure management program by water authorities to manage leakage losses in their water supply systems, FRNSW has observed pressures and flows that do not appropriately support FRNSW activities.¹¹³ It recommended that the operating licence incorporate an ongoing community safety obligation and requirement to provide minimum pressures and flows across its network to facilitate fire brigade intervention as well as hydrants placed at regular intervals to facilitate access.

We did not receive a submission from RFS.

¹¹¹ Meeting minutes Hunter Water and IPART, 29 August 2016.

¹¹² Sydney Water submission to IPART Issues Paper, 29 July 2016, p 17.

¹¹³ FRNSW submission to IPART Issues Paper, 29 July 2016.

9.6.2 Options assessed

Option	Descriptions
Option A (Base Case)	No change to the licence.
Option B	Include a licence requirement for a MoU with FRNSW without specific requirements.
Option C	Include a licence requirement for a MoU with FRNSW with specific requirements (similar to SWC's licence).
Option D	Include a licence requirement for a MoU with FRNSW with specific requirements relating to minimum pressures and flows (over and above the SWC's operating licence conditions).

Hunter Water notes that capital expenditure savings could be substantial if there were more effective planning and decision making in this policy area.

Costs for Option B and C: Both options involve costs relating to a one off cost of \$5,000 (\$2,500 for Hunter Water and \$2,500 for FRNSW) in developing and reporting a MoU as well as ongoing meeting costs of \$10,000 annually for both FRNSW and Hunter Water. There is an increased cost under Option C of \$50,000 for Hunter Water in 2018-19 that relates to additional reporting and compliance costs.

Costs for Option D: There are significant, and difficult to quantify, costs relating to infrastructure upgrades. Hunter Water notes that a minimum supply standard would be expensive to implement and may not guarantee improved fire safety (or may not do so efficiently). The cost of infrastructure upgrades to comply with minimum pressures and flow is highly dependent on thresholds set and the feasibility of various upgrade solutions. For example if 10% of the network required upgrading it may cost around \$200 million. This is significant compared with IPART's 2016 price determination which allowed Hunter Water a total capital expenditure of \$365 million (in 2015-16 dollars) over the 4 year determination period.¹¹⁴

Hunter Water's water prices do not include an allowance for the additional expenditure. The additional capital expenditure would require Community Service Obligation funding from the NSW Government, reducing the ability to fund other services. Alternatively, using additional debt may compromise Hunter Water's credit rating, which would increase debt costs and potentially place financial sustainability at risk.¹¹⁵

¹¹⁴ IPART, *Review of prices for Hunter Water Corporation, from 1 July 2016 to 30 June 2020, Water – Final Report*, June 2016, p 59.

¹¹⁵ Hunter Water's reply to IPART request for information, 7 September 2016.

Benefits for Option B include:

- ▼ greater flexibility for Hunter Water and FRNSW to agree mutually beneficial content of the MOU.
- ▼ Hunter Water and FRNSW can collaborate to identify issues and work together to bring about practical, efficient improvements for fire safety.

Benefits for Option C: Benefits arising from this option are the same as for Option B except there would be less flexibility to agree content of a MoU as the Governor's approval is required to change the licence. This may result in requirements that do not address needs and cannot be easily amended to suit mutually agreed changes or changes in circumstances.

Benefits for Option D: Benefits arising from this option are the same as for Option C, with an additional benefit of enhanced firefighting capability for a small portion of connected properties.

9.6.3 Preferred option

From the CBA, both options B and C provide a net benefit compared with the base case. Our analysis shows that there are greater benefits, and only marginally higher costs, arising from Option C when compared with Option B. Therefore we recommend that Option C be adopted. A new licence clause is proposed as shown in Box 9.3.

We note that the water supply network is one of several mechanisms affecting water availability for urban firefighting. Urban fire protection is provided through a range of mechanisms including building codes and requirements for on-site systems, the water supply network, and firefighting capabilities of FRNSW and the RFS. Evolving standards mean that there are always opportunities to improve.

Box 9.3 MoU with Fire and Rescue NSW

- 6.11.1 Hunter Water must use its best endeavours to develop and enter into a memorandum of understanding with Fire and Rescue NSW (FRNSW) by 31 December 2017.
- 6.11.2 Once the memorandum of understanding referred to in clause 6.11.1 is developed and entered into, Hunter Water must use its best endeavours to comply with the memorandum of understanding.
- 6.11.3 The purpose of the memorandum of understanding referred to in clause 6.11.1 is to form the basis for co-operative relationships between the parties to the memorandum of understanding. In particular, the purpose of clause 6.11.1 is to:
- a) develop the roles and responsibilities of the parties to the memorandum of understanding as they relate to each other;
 - b) identify the needs and constraints of the parties to the memorandum of understanding as they relate to each other; and
 - c) identify and develop strategies for efficient and effective provision of firefighting water consistent with the goals of each party to the memorandum of understanding.
- 6.11.4 The memorandum of understanding referred to in clause 6.11.1 must require:
- a) the establishment of a working group, comprised of representatives from Hunter Water and FRNSW; and
 - b) the working group to consider the following matters (at a minimum):
 - i) arrangements regarding information sharing between Hunter Water and FRNSW;
 - ii) agreed timelines and a format for Hunter Water to provide a report to FRNSW detailing the network performance with regard to availability of water for firefighting (taking into account the minimum available flow and pressure in localised areas of the network);
 - iii) arrangements for Hunter Water to consult with FRNSW in the design of new assets and planning of system maintenance, where modelling indicates that minimum available flow and pressure may unduly affect firefighting in the network section under consideration; and
 - iv) other matters as agreed by both parties to the memorandum of understanding.
- [Note: Clauses 6.9.1, 6.10.1 and 6.11.1 do not limit the persons with whom Hunter Water may be a party to a memorandum of understanding or a roles and responsibilities protocol.]
-

Draft recommendation

- 20 Add a requirement to establish a MoU with FRNSW to form the basis for a co-operative relationship.

9.7 Make no change in relation to use of non-standard customer contracts

This issue relates to how Hunter Water can, or should, enter into contracts with various types of customers, including WIC Act licensees (wholesale customers), and users of unfiltered water.

Both the Act and the standard customer contract provide for other agreements to override the default provisions available to all customers. This enables negotiation of terms and conditions for the provision of non-standard services through non-standard contracts with one or more customers.

9.7.1 Issue raised

Hunter Water and Sydney Water had opposing views on this issue.

Hunter Water suggested there is merit in having more than one type of customer contract, particularly with regard to residential and business customers. It argued that it would be beneficial in tailoring provisions for the specific class of customer. However it noted that it is unclear if there is a legal basis to establish more than one type of customer contract under the operating licence and the Act.¹¹⁶

Sydney Water considers that there is no need for more than one type of customer contract and that individually negotiated contracts currently allowed for in the operating licence address the needs of 'non-residential' customers.¹¹⁷

¹¹⁶ Hunter Water submission to IPART Issues Paper, 15 July 2016, p 49.

¹¹⁷ Sydney Water submission to IPART Issues Paper, 29 July 2016, p 13.

9.7.2 Options assessed

Options	Descriptions
Option A (Base Case)	Make no change to the licence.
Option B	Provide a template for a non-standard customer contract (eg, for wholesale customers or unfiltered water customers) in the operating licence.

The CBA on this issue focuses on unfiltered water customers, and whether the non-standard customer contract applicable to them should be included in the operating licence.

The issues associated with wholesale customers are discussed in Section 4.4. Currently both Sydney Water and Hunter Water negotiate non-standard customer contracts with wholesale customers in the form of Utility Services Agreements (USAs). The USAs are commercially negotiated on a case-by-case basis and therefore provide scope to reflect the terms and conditions and types of services required for each new scheme. This is a better way of addressing this issue rather than attempting to develop standard terms and conditions for what are generally bespoke arrangements between competitors.

Hunter Water and NSW Health agree that unfiltered water is not potable at all times.¹¹⁸ Option B involves a cost of lost revenue to Hunter Water relating to 55 unfiltered water customers who have not signed non-standard agreements and therefore could potentially be disconnected. There would be significant costs to these customers in providing rainwater tanks, and trucking in potable water supplies when needed. In addition, there would be a substantial increase in audit and compliance cost associated with including a template in the operating licence.

Using the same assumptions as above, there would be a benefit to customers who tanker in water and do not pay for unfiltered water.

We note that current non-standard contracts are in place. However the uptake by the affected customers has been relatively low to date.

9.7.3 Preferred option

On balance, we recommend no change is made to the operating licence. Our analysis considers that the practice of agreeing non-standard contracts with customers for specific services is appropriate and effective.

¹¹⁸ IPART, *Cost benefit analysis of proposed changes to Hunter Water Corporation's operating licence, Water - Draft Report*, December 2016, p 20.

The benefits are:

- ▼ The main Customer Contract is more succinct, more easily read and less confusing to the general public when it only contains provisions common to most customers.
- ▼ Specific categories ('template') of non-standard agreements can be developed by Hunter Water for similar types of customers, managing risks for these customers and Hunter Water whilst minimising the administrative burden.

9.8 Make no change in relation to a MoU with NSW Health

The current licence requires Hunter Water to maintain and comply with a MoU with NSW Health as the drinking water quality regulator to facilitate effective interaction between the two organisations. In particular, the MoU recognises the role of NSW Health in providing advice to the Government in relation to drinking water quality standards and the supply of water which is safe to drink.¹¹⁹

9.8.1 Issue raised

Hunter Water noted in its submission that it would be worthwhile clarifying compliance expectations during operational audits, in particular the issue regarding 'approval' by NSW Health.¹²⁰ However, Hunter Water's current approach is to involve NSW Health throughout the development of its significant change proposals to ensure that mutually acceptable outcomes are achieved. Hunter Water intends to continue this practice. Hunter Water can see benefits in agreeing with NSW Health the types of changes that are considered 'significant' and therefore may warrant more formal acknowledgement of agency involvement. To this end they consider it sensible to continue the formal arrangement between the two agencies.

Sydney Water supports the current arrangements and believes maintaining a licence obligation to require a MoU highlights the importance of preserving the relationship between the two parties.¹²¹

NSW Health supports the obligation to require a MoU, as it outlines the basis for the cooperative relationship between the two organisations.¹²² The MoU is aligned to the operating licence review which provides an opportunity to review any relevant clauses.

¹¹⁹ *Hunter Water Operating Licence 2012-2017*, Condition 9.1, p 19.

¹²⁰ Hunter Water submission to IPART Issues Paper, 15 July 2016, p 16.

¹²¹ Sydney Water submission to IPART Issues Paper, 29 July 2016, p 16.

¹²² NSW Health submission to IPART Issues Paper, 29 July 2016, p 4.

9.8.2 Options assessment

Options	Descriptions
Option A (Base Case)	No change to the licence.
Option B	Remove the requirement for a MoU with NSW Health from the licence.
Option C	Be more specific in the requirements for a MoU with NSW Health, to include specific auditing and reporting requirements in the MoU rather than in the licence.

We considered an option to remove the requirement for a MoU with NSW Health from the operating licence, and considered to the auditing and compliance role of IPART and the risk associated with removal of this requirement.

There would be no avoided cost of developing and agreeing the MoU because the relationship between NSW Health and Hunter Water would need to be documented (and possibly formalised) regardless of whether it is a regulatory requirement.

The only difference between this option and the base case is that it invokes potential for an audit of compliance.

There may be an avoided cost of IPART's operational audit of this clause.

We consider there is a small benefit in keeping the requirement in the licence to provide formal assurance the MoU with NSW Health is maintained.

We have not identified benefits relating to Option B.

9.8.3 Preferred option

We prefer Option A, and do not propose to recommend changes to the licence in relation to the MoU with NSW Health.

10 Schedules

10.1 Update the area of operations

We are proposing that Hunter Water must report on any changes to the area of operations, and must also provide a more detailed description of the area of operations (maps and words) as new areas are added or removed.

10.1.1 Issue raised

The area of operations was not included as an issue in the Issues Paper and none of the stakeholders raised any concerns. However, during our review of the current licence, we formed the view that improvements could be made.

Schedule B of the existing licence contains a description of the local government areas and various other areas of land that make up the approved area of operations supported by a map of parts of Singleton Shire.

When drafting the new licence, we found that:

- ▼ the map boundary of the area of operations was inaccurate,
- ▼ the description of local government areas has been superseded by new council names (following amalgamations), and
- ▼ Hunter Water has been supplying services to areas outside its approved area of operations through agreements with Midcoast Water and the Central Coast Council. It was initially unclear whether these services were covered by the operating licence.

Further discussions with Hunter Water clarified the issue of supplying water and wastewater services to areas outside of the area of operations. We are satisfied that the provision of these services is within the area of operations. Hunter Water subsequently provided an up-to-date map of the area of operations.

10.1.2 Options assessed

We considered whether there is a need to add a new licence condition to ensure changes to the area of operations are undertaken in accordance with the Act.¹²³ We concluded that this would be unnecessary duplication of the Act.

We also addressed the issue of the Central Coast to Hunter Water Pipeline agreement. This agreement, signed in 2006, allows for the two-way transfer of water to replenish water storages in each region, as required. To date, this issue has not been covered by the operating licence, although IPART does determine prices associated with the transfer.

We were concerned that the agreement could be construed as requiring Hunter Water to operate outside of its area of operations, leading to a view that it may be in breach of its licence. We investigated this issue with a view to incorporating changes in the operating licence that would unambiguously authorise Hunter Water to operate the Hunter Water to Central Coast pipeline and perform all related functions.

10.1.3 Preferred option

The amended area of operations is included in Schedule A of the new draft licence.

Draft recommendation

21 Include the current map of Hunter Water's Area of Operations.

(Note: this draft recommended change is shown in Schedule A of the draft licence).

The new draft licence has been strengthened to include authorisation of the transfer of water to and from the Central Coast Council. This gives authorisation to Hunter Water's limited activities outside of its area of operations. Refer to clause 1.2.2 of the draft licence. A new licence clause is proposed, as shown in Box 10.1.

¹²³ *Hunter Water Act 1991*, s 16.

Box 10.1 Proposed clause authorising the Central Coast pipeline

1.2.2 Without limiting clause 1.2.1, this Licence authorises Hunter Water to do all things necessary or convenient to achieve, and to promote the capability to achieve, the transfer of water to and from its Area of Operations and the Area of the Central Coast Council in accordance with the Hunter/Central Coast Pipeline Agreement.

These changes have not been explicitly addressed in the CBA as they are only clarifying existing regulatory requirements and should not involve any costs to the community.

22 Include authorisation of the transfer of water to and from Central Coast Council in the Area of Operations.

Glossary

ADWG	Australian Drinking Water Guidelines
AGWR	Australian Guidelines for Water Recycling
AMS	Asset Management System
Aquamark	Asset management performance assessment tool developed by WSAA
BOM	Bureau of Meteorology
CBA	Cost-benefit analysis
COAG	Council of Australian Governments
Consumer	Any person who consumes or uses Hunter Water's services (as defined in the operating licence), and includes, but is not limited to, a tenant or occupier of a Property
Customer	Any person who is taken to have entered into a customer contract under section 36 of the Act, or or a person who has made a contract with the Corporation of a kind referred to in section 37 of the Act
DPI Water	Department of Primary Industry - Water
ELWC	Economic Level of Water Conservation
ELL	Economic Level of Leakage
EMS	Environmental Management System
EPA	Environmental Protection Authority
EWON	Energy and Water Ombudsman NSW
FRNSW	Fire and Rescue NSW

Hunter Water	Hunter Water Corporation
IEEE 1366: 2012	Institute of Electrical and Electronic Engineers, Guide for Electrical Power Distribution - Reliability Indices
IPART	Independent Pricing and Regulatory Tribunal
ISO 9001	<i>AS/NZS ISO 9001 Quality Management Systems – Requirements</i>
ISO 14001	<i>AS/NZS ISO 14001 Environmental Management Systems – Requirements with guidance for use</i>
ISO 55001	<i>ISO 55001 International Standard for Asset Management</i>
LHWP	Lower Hunter Water Plan
Minister	Minister for Lands and Water
MoU	Memorandum of Understanding
NCC	Newcastle City Council
Non-potable water	Water that is not of drinking water quality
NSW Health	NSW Ministry of Health
NWI	National Water Initiative
Operating licence/ Licence	Hunter Water's operating licence issued under Section 12 of <i>Hunter Water Act 1991</i>
PAS 55	British Standards Institution (BSI) Publicly Available Specification for the optimised management of physical assets.
PIAC	Public Interest Advocacy Centre
QMS	Quality Management System
Review	End of term operating licence review
RFS	Rural Fire Service

SAIDI	System Average Interruption Duration Index – total duration of interruption for the average customer for a predefined period of time.
SAIFI	System Average Interruption Frequency Index – how often the average customer experiences a sustained interruption over a predefined period of time.
SD	Standard Deviation
SCA	Sydney Catchment Authority
SPS	System Performance Standards
Sydney Water	Sydney Water Corporation
Unfiltered Water	Dam water that is dosed with chlorine but is not filtered or otherwise treated.
Wholesale customers	Licensees under the WIC Act, service providers exempt from the requirement to obtain a WIC Act licence, and local councils
SOC	State Owned Corporation
The Act	<i>Hunter Water Act 1991</i>
WIC Act	<i>Water Industry Competition Act 2006</i>
WQMS	Water Quality Management System
WSAA	Water Services Association of Australia

A Water supply chain governance

IPART administers the licence. The licence does not cover every operational aspect of Hunter Water as there are other regulators with key roles in the water supply chain, as shown below. The licence is designed to avoid duplications with the roles of other regulators.

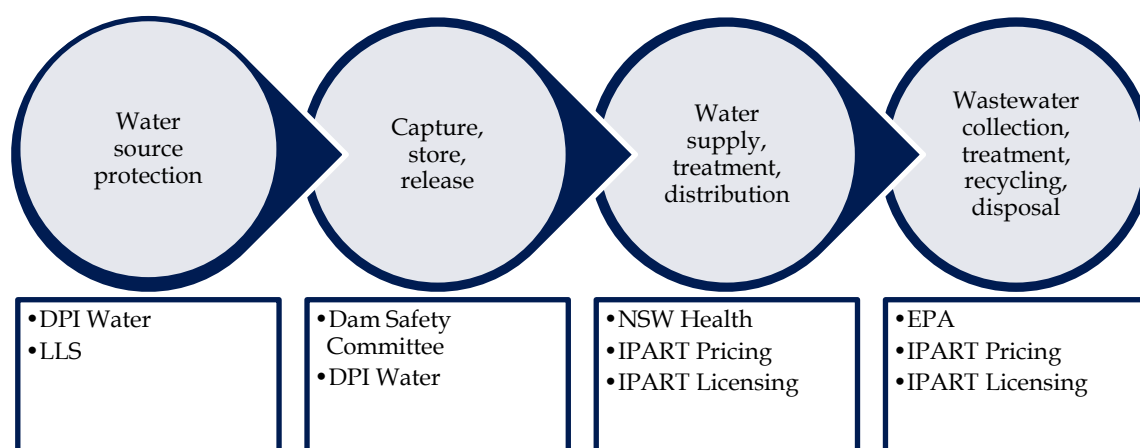


Table A.1 Regulators, their roles and regulatory instruments

Regulator	Key role	Regulatory instrument
NSW Department of Primary Industries (DPI) Water	Water legislation, policy and planning	Water Sharing Plans, Water licences and approvals
NSW Ministry of Health (NSW Health)	Water quality, public health	Public Health Act, Fluoridation of Public Water Supplies Act
Independent Pricing and Regulatory Tribunal NSW (IPART)	Operational compliance monitoring and review, Water Pricing	Operating licence, Customer Contract, Reporting Manual Price determinations
NSW Environment Protection Authority (EPA)	Control wastewater pollution to the environment	POEO Act, Environment Protection Licences
Local Land Services	Health of water catchments	Regional Catchment Action Plans
Department of Planning and Environment	Development assessment	EP&A Act, LEPs, SEPPs

B | Summary of Submissions

Stakeholder	Issue category	Issue No.	Stakeholder Position	Stakeholder Comment	IPART's Response	Chapter Reference
Hunter Water Corporation	Water Quality	1	#	Supports retention of the drinking water obligations in its operating licence. The Chief Health Officer may grant major public water utilities an exemption from section 25 of the Public Health Act 2010, which manages the potential for regulatory duplication.	No change to OL as part of this review.	6.5
NSW Health	Water Quality	1	#	NSW Health has provided HWC with an exemption from certain requirements under the <i>Public Health Act 2010 (PHA)</i> in order to avoid regulatory duplication between the PHA and their operating licence. If the operating licence were amended such that the requirements of the PHA were not met, the Chief Health Officer may revoke the exemption.	No change to OL as part of this review.	6.5
Sydney Water Corporation	Water Quality	1	0	No preference over whether water utilities are regulated under the Quality Assurance Program Provision of the Public Health Act 2010 or under a Drinking water Quality Management System provision in an operating licence.	No change to OL as part of this review.	6.5
Hunter Water Corporation	Water Quality	2	#	It would be worthwhile clarifying compliance expectations during operational audits. However, Hunter Water's current approach is to involve NSW Health throughout the development of its significant change proposals to ensure that mutually acceptable outcomes are achieved. Hunter Water intends to continue this practice. Hunter Water can see benefits in agreeing with NSW Health the types of changes that are considered 'significant' and therefore may warrant more formal acknowledgement of agency involvement.	No change to OL as part of this review.	6.3
NSW Health	Water Quality	2	0	NSW Health does not see itself as an approval authority and has no statutory approval processes. However, they are happy with the current arrangements of review and expressing satisfaction with finalised documents.	No change to OL as part of this review.	6.3
NSW Health	Water Quality	2	+	The Operating license could be updated to reflect the wording used in the Sydney water operating license which specifies 'to the satisfaction of NSW Health'	No change to OL as part of this review.	6.3
Sydney Water Corporation	Water Quality	2	#	Supports the articulation of requirements as they appear in SWC's 2015-2020 Operating Licence.	No change to OL as part of this review.	6.3
Hunter Water Corporation	Water Quality	3	#	Considers that the risk of inappropriate use of recycled water by non-residential customers is already adequately addressed through various elements of Hunter Water's recycled water quality management system including contractual terms that enable suspension of service. These customers sign agreements, attend workshops, with the customer given information and training to implement onsite preventative measures addressing potential compliance gaps. HWC can access its customers sites to audit compliance with their agreements.	IPART has completed investigation of this issue. Main industrial customers are no longer contracted to HWC for this product. No further action required.	NA
NSW Health	Water Quality	3	0	IPART issue's paper does not accurately reflect NSW Health's comments on the use of recycled water by industrial customers. The Australian Guidelines for Water Recycling recommend end user agreements between utilities and users which specify the actions and conditions that the end user is required to adhere to. Compliance with the guidelines is therefore sufficient detail to include in the Operating Licence. The implications of HWC ceasing supply to industrial customers needs to be understood with regard to HWC's discharge requirements under its various Environment Protection License conditions.	IPART has completed investigation of this issue. Main industrial customers are no longer contracted to HWC for this product. No further action required.	NA
Sydney Water Corporation	Water Quality	3	#	Supports the empowerment of the Recycled Water Quality Management System to address any potential inappropriate use of recycled water for both industrial and residential customers. Does not believe a specific action relating to water utility overseeing end use should be included within the operating licence.	No change to OL as part of this review.	NA
Hunter Water Corporation	Water Quantity	4, 5, 6	+	Supports inclusion of ELWC. Water conservation target and ELL should be discontinued once new methodology approved. New approach should consider relative size of HWC to its peers with regards implementation. HWC has participated in SWC IRG providing advice and input to the ELWC methodology and has a good understanding of it.	IPART supports inclusion of ELWC that is generally consistent with the SWC OL	5.2
Department of Primary Industries - Water	Water Quantity	4	0	Differences between the water security planning requirement for Sydney and the Hunter region should be considered before deciding whether or not to adopt similar ELWC requirements in Hunter Water's operating licence. If an ELWC approach is adopted in the licence, it would be desirable to frame the requirement with reference to the LHWP to support consistency and integration and reduce the risk of duplication.	IPART supports inclusion of ELWC that is generally consistent with the SWC OL	5.2
Public Interest Advocacy Centre	Water Quantity	4	+	Supported SWC adopting an ELWC approach and would support HWC doing the same. Water conservation, leakage prevention and recycled water targets are no longer considered necessary.	IPART supports inclusion of ELWC that is generally consistent with the SWC OL	5.2
Sydney Water Corporation	Water Quantity	4	+	Supports the inclusion of an ELWC in HWC's new operating licence but suggest minor wording changes to ensure the regulated utility and other stakeholders have a clear understanding of the role of the ELWC.	IPART supports inclusion of ELWC that is generally consistent with the SWC OL	5.2
Department of Primary Industries - Water	Water Quantity	5	#	Supports an ongoing need for Hunter Water to report on its water conservation outcomes and a summary of current water conservation initiatives. If the reporting requirement is removed from the operating licence, DPI water will still need to obtain the information directly from Hunter Water to inform the MERI (Monitoring, Evaluation, Reporting and Improvement) plan which evaluates Hunter Water's water conservation performance from the perspective of the LHWP.	No change to OL as part of this review.	5.2

Department of Primary Industries - Water	Water Quantity	6	0	Introducing a new ELWC clause for Hunter Water would be consistent with Sydney Water's operating licence, but may result in duplication or inconsistency unless framed in a way that supports the integration with the LHWP. It may be inefficient to set up a new process for water conservation, separate from the integrated modelling of a portfolio of demand and supply measures for the LHWP. There is a potential gap which was raised in Sydney Water's issues paper on the methodology for determining ELWC in which requirements create an expectation the corporation will implement water conservation projects but the implementation of the projects are not firm requirements under an operating license.	IPART supports inclusion of ELWC that is generally consistent with the SWC OL	5.2
Public Interest Advocacy Centre	Water Quantity	6	#	Does not support HWC's proposal to remove current conservation targets from the operating license before seeking approval of an EWLC method. PIAC supports the method used for SWC where they had to maintain current targets which will only be removed once their EWLC method are approved.	IPART agrees and will maintain targets until ELWC is implemented	5.2
Sydney Water Corporation	Water Quantity	6	0	SWC would be happy to assist IPART and HWC in developing an ELWC approach using learnings from their own development of ELWC.	No change to OL as part of this review.	5.2
Department of Primary Industries - Water	Water Quantity	7	#	Both Hunter Water and DPI Water have ongoing roles and responsibilities for the implementation, monitoring, evaluation and development of the current and future LHWP. The new operating licence should continue to reflect Hunter Water's ongoing obligations regarding the LHWP. The operating license could strengthen the requirement on Hunter Water to implement the LHWP and in turn to strengthen the driver to invest efficiently in supply and demand measures to achieve broad societal outcomes. IPART could strengthen the relationship between the operating licence and the LHWP with a requirement for Hunter Water to comply with its obligations to implement the LHWP and contribute to its periodic review.	The roles and responsibilities Protocol is for negotiation and agreement between HWC and DPI Water	9.5
Hunter Water Corporation	Water Quantity	7	#	Continue with Roles and Responsibilities protocol with DPI Water. Any OL requirements in relation to scope should not be too prescriptive.	No significant changes required - editorial	9.5
NSW Health	Water Quantity	7	#	Yes they should maintain a relationship with DPI Water as the Lower Hunter Water Plan is under constant review and has relevance to multiple agencies including NSW Health.	No change to OL as part of this review.	9.5
Sydney Water Corporation	Water Quantity	7	#	It would be prudent that HWC's new operating licence continue to require a roles and responsibilities protocol with DPI Water.	No change to OL as part of this review.	9.5
Hunter Water Corporation	Assets and Infrastructure	8	+	Supports inclusion of ISO 55001 - best practice	No significant changes required - editorial	7.2
Sydney Water Corporation	Assets and Infrastructure	8	+	ISO 55001 is the most appropriate.	No change to OL as part of this review.	7.2
Hunter Water Corporation	Assets and Infrastructure	9	0	Hunter Water welcomes further discussion with IPART of the intended use of the State of the Assets report and the most appropriate means to meet this need.	Agree that the State of the Assets Report should either be removed as a requirement of reduced to match the pricing determination timeline	7.3
Sydney Water Corporation	Assets and Infrastructure	9	-	The State of the Assets report could only be produced every four years for the pricing review. IPART could rely on assurance and performance reports between pricing reviews.	Agree that the State of the Assets Report should either be removed as a requirement of reduced to match the pricing determination timeline.	7.3
Hunter Water Corporation	Assets and Infrastructure	10	#	Maintain current targets for system performance standards. Price submission significantly affects how HWC will meet these levels, along with customers willingness to pay for them.	No changes to current targets contemplated. HWC to undertake customer survey and data collection to inform future assessment of targets. New operating licence condition.	6.4
Sydney Water Corporation	Assets and Infrastructure	10	#	Current system performance standards do not necessarily represent customer advocated service levels or reflect efficient life cycle costs of assets. Simply tightening current standards without exploring customer preferences or efficient costs is unlikely to bring service benefits but could limit cost efficiencies being implemented. The current standards in HWC operating licence should not be changed for the new licence but should be reviewed in the future.	No change to SPS targets as part of this review. New operating licence condition to require survey and data collection.	6.4
Hunter Water Corporation	Customers and consumers	11	#	Supply of unfiltered water to customers between Chichester Dam and Dungog water treatment plant is already addressed in the water quality provisions in the operating licence. Hunter Water's preference is to continue to use non-standard contracts to formalise the relationship with unfiltered water customers.	Continue using non-standard contracts to address the issue regarding unfiltered water users. No additional licence conditions required. Minor amendment to existing conditions to include 'non-potable' water.	6.2
NSW Health	Customers and consumers	11	0	Have strong concerns about the provisions of non-potable water to customers who may themselves, or third parties, use the water for unsuitable functions (cooking, brushing teeth etc.). The provisions of non-potable water where potable water is not feasible should be well managed and controlled, probably best done through clear and concise individual customer agreements which are reflective of the management framework of the Australian Drinking Water Guidelines.	Continue using non-standard contracts to address the issue regarding unfiltered water users. No additional licence conditions required. Minor amendment to existing conditions to include 'non-potable' water.	6.2
Hunter Water Corporation	Customers and consumers	12, 13, 14, 16	+	New draft customer contract provided for comment. Simpler structure, improved clarity, updted communication channels, strengthened rebate clausesand removal of obsolete and duplicate references.	New customer contract. Minor alterations to existing conditions. Mainly editorial and structural changes to aid understanding. Ongoing discussion regarding some of the wording changes.	9.2-9.3

NSW Health	Customers and consumers	13,14,15	#	WICA licensees are not typical customers and should need to negotiate non-standard customer contracts. If a licensee failed to control risks in the distribution system, HWC should not* be obligated to supply the licensee. [* the word 'not' was inadvertently left out in the submission]	No change to OL as part of this review.	9.7
Department of Primary Industries - Water	Customers and consumers	13	+	A clause should be added to Hunter Water's operating licence to ensure that HWC works with WIC licensees to develop a code of conduct.	Recommend inclusion of licence condition similar to Sydney Water's licence condition.	9.4
Hunter Water Corporation	Customers and consumers	13	#	Wholesale customers - Hunter Water does not consider that there is a need to provide additional obligations in Hunter Water's operating licence or customer contract to facilitate the negotiation of utility services agreements with wholesale customers.	Extend obligation to provide services to include certain wholesale customers - new licence conditions	4.4
Sydney Water Corporation	Customers and consumers	13	#	There are sufficient requirements in general competition law to ensure dealings with wholesale customers comply with competition principles. There is no need to duplicate these provisions nor include any potentially conflicting provisions within an operating licence.	Extend obligation to provide services to include certain wholesale customers - new licence conditions	4.4
Department of Primary Industries - Water	Customers and consumers	14	0	No changes should be made without considering the relationship between definitions in both the operating licence and related price determinations	No change to OL as part of this review.	9.2
Energy and Water Ombudsman NSW	Customers and consumers	14	#	Supports the current definitions of customers and consumers in operating licence and customer contracts	No change to OL as part of this review.	9.2
Energy and Water Ombudsman NSW	Customers and consumers	14	+	Critical of HWC for restricting water (without sufficient warning) to properties where tenants are not responsible for paying utility bills. Suggests HWC should lift the restriction if it is established that the outstanding amount is not normally paid by the tenant.	HWC has responded to this claim. No further action is required to address this issue.	NA
Department of Primary Industries - Water	Customers and consumers	15	0	This matter should be considered once IPART's current review of the prices SWC and HWC can charge wholesale customer is complete	No response	NA
Hunter Water Corporation	Customers and consumers	15	#	Does not consider that there is a reasonable basis to place any additional licence obligations on Hunter Water to service anyone other than property owners.	Extend obligation to provide services to include certain wholesale customers - new licence conditions	4.4
Sydney Water Corporation	Customers and consumers	15	#	There are sufficient requirements in general competition law to ensure SWC's and HWC's dealing with wholesale customers comply with competition principles. Duplicating that in an operating licence is not optimal.	Extend obligation to provide services to include certain wholesale customers - new licence conditions	4.4
Department of Primary Industries - Water	Customers and consumers	16	+	Supports the standard HWC customer contract which contains obligations that are consistent with those required under the Sydney Water customer contract.	No change to OL as part of this review.	9.2
Energy and Water Ombudsman NSW	Customers and consumers	16	#	Supports HWC decision not to introduce a late payment fee for overdue account balances.	No change to OL as part of this review.	9.2
Energy and Water Ombudsman NSW	Customers and consumers	16	#	Supports HWC linking rebate levels to multiples of water usage in relation to supply interruptions, which is adjusted every year.	Changes to Rebates to be included in new customer contract.	9.3
Energy and Water Ombudsman NSW	Customers and consumers	16	#	Does not support HWC's proposal to tighten the eligibility criteria from providing a rebate for interruptions that occurred at any time in the day, to peak hours only (ie 5am-11pm). This may disadvantage some customers who are eligible for rebates due to service interruptions.	Changes to Rebates to be included in new customer contract.	9.3
Energy and Water Ombudsman NSW	Customers and consumers	16	0	The rebate purpose is twofold. First it is to compensate customers who experience a reduced level of service. Second it acts as an incentive to prevent service failures.	Changes to Rebates to be included in new customer contract.	9.3
Energy and Water Ombudsman NSW	Customers and consumers	16	+	Suggests the proposed wastewater overflow rebates is significantly less when compared to SWC.	There is no supportable reason to amend this rebate as requested. The original basis for the set level is still valid.	9.3
Public Interest Advocacy Centre	Customers and consumers	16	+	Supports HWC's plans to review Customer Contracts to improve readability, clarity and consistency with legislation and Sydney Water's Customer Contract.	No response required. New customer contract to be included in draft package, subject to minor wording modifications.	9.2
Public Interest Advocacy Centre	Customers and consumers	16	+	Suggests HWC provide a one-page plain English summary of the key provisions in the Customer Contract.	HWC already provides this to its customers No change to OL as part of this review.	9.2
Public Interest Advocacy Centre	Customers and consumers	16	+	Supports HWC's proposal to introduce stricter eligibility requirements for planned interruption rebates.	Changes to Rebates to be included in new customer contract.	9.3
Public Interest Advocacy Centre	Customers and consumers	16	+	Supports HWC's proposal to revise rebate payments for dry weather wastewater overflows.	Changes to Rebates to be included in new customer contract.	9.3
Public Interest Advocacy Centre	Customers and consumers	16	+	Support HWC's proposal to revise the low water pressure rebate payment schedule.	Changes to Rebates to be included in new customer contract.	9.3
Hunter Water Corporation	Customers and consumers	17	0	The Hunter Water Act 1991 has not been substantively reviewed in the 25 years since its enactment and therefore a review would be timely. It would be cost-effective and beneficial to consider amending some provisions associated with varying the customer contract as part of such a broader review.	No change to OL as part of this review.	NA

Sydney Water Corporation	Customers and consumers	17	0	Supports flexibility regarding variations to the customer contract, noting this would require changes to the legislation as well as the operating licence	No change to OL as part of this review.	NA
Hunter Water Corporation	Customers and consumers	18	0	There is merit in having more than one type of customer contract, particularly having separate documents for residential and non-residential (business) customers. ie business(non-residential) customers have a separate CC to residential.	No change to OL as part of this review.	9.7
Sydney Water Corporation	Customers and consumers	18	#	No need for more than one type of customer contract. The current process of individually negotiate contracts is more appropriate to address the needs of specific customers.	No change to OL as part of this review.	9.7
Hunter Water Corporation	Environment, Quality, Performance Monitoring and Memoranda of	19	#	EMS and QMS - no significant changes required. Appropriate to maintain EMS and QMS, and also maintain certification	No change to OL as part of this review.	7.4
Sydney Water Corporation	Environment, Quality, Performance Monitoring and Memoranda of	19	#	There is value in retaining these management system requirements in the operating licence.	No change to OL as part of this review.	7.4
Environment Protection Authority	Environment, Quality, Performance Monitoring and Memoranda of Understanding	19	#	Notes and encourages the development and implementation of EMS to manage risks to the environment from Hunter Water's operations. Encourages IPART to review HWC's Environment Protection Licenses as part of the operating licence review to ensure consistency.	No change to OL as part of this review.	7.4
Hunter Water Corporation	Environment, Quality, Performance Monitoring and Memoranda of	20	#	Opportunities to streamline reporting requirements through greater consistency in performance indicator definitions	An industry-wide review is recommended to be conducted after the completion of the operating licence review (ie post July 2017)	8.3
Sydney Water Corporation	Environment, Quality, Performance Monitoring and Memoranda of	20	0	Does not consider that any performance indicators are unnecessary or unduly costly to compile but note that the situation may be different for HWC.	No change to OL as part of this review.	8.3
Department of Primary Industries - Water	Environment, Quality, Performance Monitoring and Memoranda of	21	+	Support including a requirement for HWC to report against NWI performance indicators in the operating licence. DPI Water relies on the reporting of particular indicators for annual evaluations of the LHWP implementation and performance.	No change to OL as part of this review.	8.2
Hunter Water Corporation	Environment, Quality, Performance Monitoring and Memoranda of	21	#	Maintain NWI reporting requirements with inclusion of an OL clause to require it (currently a gap in the OL)	Agreed and to be implemented either in OL or Reporting Manual	8.2
Sydney Water Corporation	Environment, Quality, Performance Monitoring and Memoranda of	21	+	There is benefit in including the requirement for HWC to report against NWI performance indicators in the operating licence.	Need to draft and include a licence condition to compile and report against NWI indicators.	8.2
Hunter Water Corporation	Environment, Quality, Performance Monitoring and Memoranda of	22	#	The current water quality reporting obligations are considered transparent and appropriate.	No change to OL as part of this review.	NA
Sydney Water Corporation	Environment, Quality, Performance Monitoring and Memoranda of	22	-	An alternate approach of leveraging existing reporting under the drinking water quality management system may suffice, for example use of exception reporting for some elements of the framework	No change to OL as part of this review.	NA
Hunter Water Corporation	Environment, Quality, Performance Monitoring and Memoranda of	23	0	Thorough review of AIR requirements to minimise reporting burden	Not relevant. Pricing to review AIR requirements.	NA
NSW Health	Environment, Quality, Performance Monitoring and memorandum of	23	0	IPART issues paper was inaccurate in stating SWC daily online water quality report was made to 'inform the public and prevent risks to public health'.	Comment - no change required	NA
NSW Health	Environment, Quality, Performance Monitoring and memorandum of	23	-	Daily reporting of water quality should not be a requirement under the Operating Licence.	Comment - no change required	NA
Hunter Water Corporation	Environment, Quality, Performance Monitoring and Memoranda of	24	#	Continue with MOU with NSW Health	No change to OL as part of this review.	9.8
Sydney Water Corporation	Environment, Quality, Performance Monitoring and Memoranda of	24	#	Supports the role of the MoU and believes maintaining licence obligation to require a MoU highlights the importance of preserving the relationship between the parties	No change to OL as part of this review.	9.8
NSW Health	Environment, Quality, Performance Monitoring and memorandum of	24	#	Support the obligation to require an MoU with NSW Health.	No change to OL as part of this review.	9.8
Hunter Water Corporation	Environment, Quality, Performance Monitoring and Memoranda of	25	#	Continue with exemption from PH Act, and current auditing requirements	Agreed - CBA analysis confirms that both NSW Health and Hunter Water would prefer to maintain the current auditing arrangements	6.5

NSW Health	Environment, Quality, Performance Monitoring and memorandum of Understanding	25	#	NSW Health is already informed directly by HWC of any immediate risks or potential risks to public health. NSW Health's review of recycled water and drinking water management plans focuses on potential public health issues but should not be considered an approval or endorsement of the utility's documentation. NSW Health is consulted by IPART for input into the audit scope and directly by the auditor as required, they regard the audit process as essential to ensure the ongoing adequacy of the recycled water and drinking water management plans and compliance with the Australian Guidelines for Water Recycling and Australian Drinking Water Guidelines.	NSW Health is not seeking any alteration to the auditing process. No net benefit to be gained from the change. NSW Health has no resources available for this role.	6.5
Sydney Water Corporation	Other potential licence issues	26	0	There are no potential issues in relation to competition in either our or Hunter Water's operating licences. This is also a legal matter.	No change to OL as part of this review.	NA
Hunter Water Corporation	Other potential licence issues	27	+	Considers that there would be advantages in an operating licence review commencing two years prior to a price review. Knowledge of new or amended licence obligations one year prior to the lodgement date for a price submission would enable the water utility to incorporate any revised performance standards or additional compliance costs into operating and capital expenditure proposals.	IPART to implement timing adjustment for future reviews to be 2 years apart (ie 4 year cycle)	4.2
Public Interest Advocacy Centre	Other potential licence issues	27	+	Considers there is merit in holding future licence reviews before price determinations.	IPART to consider timing adjustment for future reviews to be 2 years apart (ie 4 year cycle) from 2022	4.5
Sydney Water Corporation	Other potential licence issues	27	0	There may be merit in aligning the two reviews but any change in timing must ensure there are no adverse financial or system performance impacts. It is difficult for a business to assess the necessary funding requirements for the price review without being able to assess the impacts of any changes to performance standards that may arise from a review of the operating licence.	IPART to consider timing adjustment for future reviews to be 2 years apart (ie 4 year cycle) from 2023	4.5
Fire and Rescue NSW	Other potential licence issues	28	+	Recommend IPART place obligations in the Hunter Water Corporation operating license to develop a Memorandum of Understanding with FRNSW, incorporating an ongoing community safety obligation and requirement to provide minimum pressures and flows across the network.	Recommend inclusion of licence condition similar to Sydney Water's licence condition	9.6
Hunter Water Corporation	Other potential licence issues	28	+	Water for fire fighting - HWC does not object to formalising this relationship with FRNSW	HWC to meet with and negotiate with FRNSW	9.6
Sydney Water Corporation	Other potential licence issues	28	+	Supports an introduction of two MoUs, one with RFS and one with FRNSW	IPART to support MOU with FRNSW. No response from RFS at this stage.	9.6
Individual - Frank and Kim Johnson	Other issue - Complaint	NA	0	Complaint in relation to HWC's handling of wastewater overflows on a number of local properties.	IPART has contacted HWC who are investigating the complaint	NA
Public Interest Advocacy Centre	Other issue - Liveable cities	NA	0	Would like to see a conversation about how operating licences and price determinations can account for the role of water in liveable cities	IPART has reviewed inclusion of stormwater/drainage augmentation requirements, to mirror SWC OL clauses. IPART notes that Hunter Water have the right to augment stormwater/drainage infrastructure as required. Minor changes to existing licence condition.	4.3
Newcastle City Council	Other issue - Stormwater	NA	0	Not satisfied that HWC is doing enough maintenance on stormwater assets, says all of the funds they collect for stormwater services should be expended on maintenance.	The assertion is inaccurate. IPART assessment indicates that between direct and indirect costs, all money collected is used.	4.3
Newcastle City Council	Other issue - Stormwater	NA	+	Despite SWC and HWC having the same operating licence provisions (Section 1.3.1), SWC is involved in and provides resources to floodplain management planning and amplification of stormwater assets. HWC does not undertake stormwater asset amplification and this is causing some issues as one third of properties in Newcastle are flood prone. Furthermore, their lack of actions are impacting on future development in Newcastle West where capacity constraints within the Hunter Water stormwater system at Cottage Creek impact on redevelopment of the area.	HWC may augment/construct its stormwater/drainage assets, but is not required to do so. This also impacts on HWC's capex and opex budgets and IPART's determination of efficient costs. We intend to modify the OL to include 'augment' into the licence so that HWC may augment its stormwater assets without making it a requirement to do so.	4.3
Newcastle City Council	Other issue - Stormwater	NA	+	Council seeks amendment to HWC operating license so they are required to augment drainage service for its assets		4.3
Newcastle City Council	Other issue - Stormwater	NA	+	Request that HWC operating licence be made more consistent with SWC's so they have similar roles and responsibilities for drainage management including asset renewal, waterway health and flooding risk and ensure HWC actively engages in the preparation and implementation of floodplain risk management plans in accordance with the NSW Government's Flood Prone Land Policy.		4.3
Newcastle City Council	Other issue - Stormwater	NA	0	Disagrees with HWC opinion that stormwater does not need to be treated. Believes it is inconsistent with the <i>Protection of the Environment Operations Act 1997</i> .		4.3
Newcastle City Council	Other issue - Stormwater	NA	+	Recommends that HWC work cooperatively with councils and stakeholders to develop Water Cycle Management Plans for each catchment with common drainage and HWC should seek to rehabilitate and naturalise stormwater assets needing renewal rather than replacing these assets with concrete to align with community objectives outlined in local and state planning documents.		4.3

Stakeholder position

+	The operating licence should do more
-	The operating licence should do less
#	The operating licence should continue, with minor adjustments
0	Neutral comments from stakeholders or position undecided