



**Ministerial Information Brief Coversheet**

MINISTER	<b>Minister for Water, Energy and Emissions Reduction - Shane Rattenbury MLA</b>
Cc	<b>Deputy Director-General, Access Canberra</b>
SUBJECT	ACT Water Networks Pricing
OBJECTIVE NUMBER	21/04348
<b>CRITICAL DATE FOR MINISTER'S SIGNATURE*</b>	<b>Friday, 30 April 2021</b>

	Cleared By	Date
Director-General	Ben Ponton	06/04/2021
Government Services	Lisa Sampson	31/03/2021
Executive Branch Manager (AC)	Ben Green	30/03/2021
Contact Officer: Simon Grice	Telephone No: 53078	

<p>Further Action/Comment:</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>Signature</p>
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*\*All briefs must list a critical date (ie when the Minister is required to sign, even if considered routine)*

**Environment, Planning and Sustainable Development Directorate**

**To:** Minister for Water, Energy and Emissions  
Reduction

Tracking No.: 21/04348

**CC:** Minister Cheyne  
DDG, Access Canberra

**Date:** 29 March 2021

**From:** Technical Regulator

**Subject:** ACT Water Networks and Pricing

**Critical Date:** 30 April 2021

**Critical Reason:** In the normal course of business

**Recommendations**

That you:

1. Note the information contained in this brief.

**Noted / Please Discuss**

Shane Rattenbury MLA .....

*14/6/21*

Minister's Office Feedback

*Please discuss next steps on this brief.*

## Background

1. The water industry has adopted the term “non-drinking water” as the standard descriptor for all water that is non potable. Non-drinking water is water that is not of drinking quality and has not been treated to the standards outlined in the Australian Drinking Water Guidelines (2011)<sup>1</sup> and ACT Public Health (Drinking Water) Code of Practice. In the ACT it is water in our rivers, lakes, ponds, dams, aquifers, stormwater system and includes treated effluent, treated greywater as well as rainwater water.
2. Non-drinking water includes recycled sewage effluent, harvested stormwater and water taken from raw water storages such as lakes, rivers and aquifers.
3. Non-drinking water is usually treated to a level suited for its intended purpose (typically through filtration, access controls and/or disinfection) typically a form of irrigation. Water treatment controls faecal coliforms, which are also managed through irrigation controls that reduce the risk of human contact from spray drift.
4. The responsibility for management of non-drinking water rests with several different portfolios within the ACT Government. This briefing includes content provided by regulatory agents including the ICRC, Technical Regulator and Environmental Protection Authority. This briefing also includes content provided operators including TCCS and Icon Water; and policy agents including EPSD Water Policy and Treasury Economic and Regulatory Policy.
5. The Water Abstraction Charge (WAC) applies to all water users. There are two charges for water - drinking water (currently \$0.61) and non-drinking water (\$0.305) determined annually under the *Water Resources Act 1997*. The non-drinking water WAC is set at 50 percent of the drinking water WAC and increases by CPI each year, which takes into consideration the differences between the two water sources, such as, the associated environmental costs, availability of resource and its relative “scarcity value”.
6. Non-drinking water may be sourced and used as a standalone activity (i.e., a school oval from a bore on a single property) or it may be sourced and delivered through a network to a number of end-users (customers).
7. The focus of this brief will be on the arrangements for supply and pricing to customers of non-drinking water networks.
8. Where non-drinking water is provided through a network to customers it constitutes a utility and it is subject to regulation through the *Utilities Act 2000* and the *Utilities (Technical Regulation) Act 2014* (UTR Act). The *Non-Drinking Water Supply Code 2014* provides technical guidance specific to this industry. The only licensed water utility in the ACT is Icon Water who can provide non-drinking water under its utilities licence, subject to the regulation of the ICRC and the Technical Regulator.
9. A water utility may apply for a utility licence exemption from the Minister of Water, Energy and Emissions Reduction. Exempt utilities such as the Inner North Reticulation Network (INRN) operated by TCCS Roads ACT work to the provisions of an Operating Certificate, issued by the Technical Regulator in accordance with the UTR Act.

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<sup>1</sup> <https://www.nhmrc.gov.au/about-us/publications/australian-drinking-water-guidelines>

10. Development and commissioning of the service is regulated through a Design and Construction Certificate, negotiated during the planning stage, with the ongoing operation regulated through a Provision of Service Operating Certificate.
11. A non-drinking water scheme falls within regulatory scope if water is taken for the purpose of distribution to another party, the network crosses lease boundaries or is not connected to the source. INRN is regulated as it takes water from the public stormwater drainage system and distributes it for sale to non-related water users such as schools, public ovals and recreational facilities. In contrast a large unit development which collects its own stormwater runoff and roof water for use within the complex is not subject to UTR or ICRC regulation under the *Utilities (Technical Regulation) Act 2014* or the *Utilities Act 2000*.
12. The utilities licence exemption issued to the INRN (DI2019-268) requires TCCS to undertake a triple bottom line assessment after 5 years of operation. This report would be required after end of financial year 2021-22. UTR would anticipate that the report would be provided by end 2022.

## Issues

### Treasury Consultation Regarding Water Networks and Pricing

13. On 2 March 2021, Treasury released the Non-potable Water Review<sup>2</sup> for community consultation, with submissions due by 30 April 2021. As part of the review, the Government also announced that high-intensity club users would automatically receive a rebate for 2020-21 usage of non-drinking water.
  - The rebate is for clubs that have a licence to take at least 3,000 kL of non-drinking water as part of their licence, and covers usage in 2020-21 from any of the following sources:
    - i. surface and ground water – non-drinking WAC;
    - ii. Icon Water recycle water; and
    - iii. stormwater from the Inner North Reticulation Network (INRN).
  - Treasury is also developing a business case for options for extending this rebate beyond 30 June 2021.

### How Potable Water Prices Are Set and Policy Responsibility

14. Drinking water is provided by Icon Water as a monopoly provider and therefore prices are regulated to ensure they reflect only prudent and efficient costs of delivery. The ICRC undertake this work as part of regular pricing investigations, which are managed by Treasury and initiated by the Treasurer. The next pricing investigation for regulated water and sewerage prices in the ACT is required to begin in December 2021 as the *Independent Competition and Regulatory Commission Act 1997* requires a terms of reference to be signed at least 18 months before the expiry of the current price direction (expiring 30 June 2023).

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<sup>2</sup> <https://www.yoursay.act.gov.au/non-potable-water-review>

15. Treasury is responsible under the *Administrative Arrangements 2021 (No 1)* for administering the *Independent Competition and Regulatory Commission Act 1997*.
16. There is no role for the Technical Regulator in setting potable water pricing, although the ICRC may consult with UTR when assessing some pricing pass through requests submitted by the utility.

How Non-Drinking Water Prices Are Set and Policy Responsibility

17. There are a range of Non-Drinking water providers and these prices are not currently regulated by ICRC in the ACT.
18. Unlike prices charged by Icon Water for drinking water and sewerage services, the price for non-drinking recycled water provided under contract through ad-hoc supply arrangements is not regulated in the Territory.
19. Icon Water supplies non-drinking water priced at a maximum of 75 per cent of the regulated price charged by Icon Water for drinking water, excluding the drinking water WAC and the Utilities Network Facilities Tax.
20. Historically Icon Water has set a standard non-potable water charge of 75% of the standard Tier 2 potable water rate, minus the Water Abstraction Charge (WAC) and the Utilities Network Facility Tax (UNFT). The 75% approach reflected international and local industry standards for recycled water pricing at the time (1999 price submission) and also the amenity difference between potable and re-cycled water, such as pressure or long term supply reliability. However, for some users prices are negotiated on an individual contract basis given the cost of delivering recycled water varies substantially between sites.
21. The INRN charge is currently also \$3.69/KL plus \$0.305/KL WAC = \$3.995. The price was recommended by the ICRC in 2009 at \$3.32/KL and has increased by WPI since its commencement of its commissioning in 2015 and subsequent operation in 2017. This price was agreed to by Government as a transitional price while the INRN becomes established. The intention is for the price to reflect the full costs of the scheme, after it has been in place for enough years for these costs to be able to be reasonably estimated.
22. Treasury will undertake a high-level assessment of how INRN prices relate to the costs of provision as part of the Non-Potable water review.
23. The non-drinking water price is not regulated by the ICRC. The price set by Icon Water for non-drinking water is based on the organisation's internal policy and effectively capped at 75% of the regulated drinking water price by a 1999 ICRC determination.
24. While the Government does not regulate non-potable water prices, it does set the WAC for both non-drinking and drinking water. WAC is indexed by 3 per cent annually as per 2016-17 Budget Review, with any increases above this would be subject to the Treasurer's consideration and also requiring Cabinet consideration as part of the Budget process.
25. As the Minister for Water, Energy and Emissions Reduction, you are the Minister responsible for implementing any agreed changes to the WAC as a determination under the *Water Resources Act 1997*.
26. There is no role for the Technical Regulator in setting non-drinking water pricing.

#### Location of Major Existing ACT Non-Drinking Water Supply Systems

27. The three major schemes operating in the ACT (see map at Attachment A) include the INRN. This is a stormwater harvesting operated by TCCS (Roads ACT), supplying filtered water to school ovals and public sportsgrounds. There is also a standpipe for supply of water, via tankers, to construction sites.
28. Icon Water operates the Stockdill Drive recycled water distribution main, supplying fully treated and disinfected recycled water from the Lower Molonglo Water Quality Control Centre (LMWQCC). Current customers are Magpies Golf Club and a standpipe. Previous customers included vineyards on the northern side of Stockdill Drive.
29. Icon Water provides non-drinking water to Urriara village; via a connection from the raw water main that delivers from dams to Mount Stromlo water treatment plant.
30. Icon Water also operates the North Canberra Recycled Water Scheme, supplying water to sportsgrounds from Campbell to O'Connor. At officer level, Icon Water officers have confirmed that this plant originally sourced water from Fyshwick Sewage Treatment Plant (STP). Water was tertiary treated and disinfected. After the Millennium drought, a decision was made to discontinue production of recycled water at this site due to economic considerations this system continues to supply customers using potable water supplied through the existing non-drinking water network. system.
31. There are many non-drinking (stormwater, groundwater, lakes and ponds) harvesting operations operating in the ACT that provide irrigation to operators but are not utilities providing services to customers and subject to regulation by the ICRC or Technical Regulator.
32. These are administered by the EPA under the *Water Resources ACT 1997* and are not considered within this briefing. There is also a small historic community installed system operating in Tharwa providing some residents with non-drinking water from the Murrumbidgee River.

#### Proposed Non-Drinking Water Supply Systems

33. The current planning for Ginninderry (Attachment A) contains provision for a number of water quality ponds. Currently, Ginninderry is developing a concept design and business case to support a submission seeking policy approval for a major non-drinking water network. The current Ginninderry concept design considers use of non-drinking water for road landscaping, parkland and sportsgrounds, and export of non-drinking water to nearby customers.
34. UTR was advised by TCCS (Senior Director Roads ACT) that subject to future government approval there is a possible opportunity for future network augmentation of the INRN. This further augmentation would use an existing aquifer to provide an additional source of non-drinking water in some areas extending from the Inner North to Civic.

Advice on options/issues with extending our non-drinking water supply network

35. There is scope for developing another class of non-drinking water supplier, which supplies only the site owner but has more complex source or storage arrangements. This briefing does not consider the material impacts on the ACT's sustainable diversion limit of any proposal.
36. A non-drinking water supplier would require a licence issued by the ICRC, or to seek an exemption from the Minister of Water, Energy and Emissions Reduction. If exempted from holding a licence issued by the ICRC, the unlicensed regulated utility would require an Operating Certificate from the Technical Regulator. The Inner North Reticulation Network (INRN) holds a Ministerial exemption from holding a utilities licence (DI2019-268) and an Operating Certificate.
37. The INRN has significant capacity for extension and has valuable environment benefits for Sullivans Creek Catchment as well as extensive social and financial benefits for users. In 2019-20, EPSD engaged a consultant to review costs and benefits of extending the INRN within the context of an opportunity for the ACT to access grant funding from the Australian Government through the Water Efficiency Fund. The INRN has capacity to capture approximately 500ML per annum and store the majority of this water in the aquifer for use during peak irrigation.
38. Currently INRN supplies up to 300ML in a drier year to current users. Additionally, the nature of the linear aquifer enables water to be abstracted at the site of the irrigation need, reducing further pipeline extension and associated costs. For examples, water could be directly abstracted relatively inexpensively from the aquifer to irrigate sites such as; Turner school, Turner Bowling Club, rail corridor, Ainslie Football Club, Majura Ovals, O'Connor District Playing Fields, Haig Park and Capital Hill.
39. Advice from Senior Director Roads ACT is that TCCS intends to explore options to undertake feasibility and design studies to further assess the costs and benefits of extending the INRN as Canberra becomes drier. Upon request, TCCS has offered to provide a detailed briefing on its benefits and opportunities for its extension (further information and map provided at Attachment B).

Feasibility of installing recycled water supply networks in new developments

40. There are provisions under the Water Sensitive Urban Design Code for considering non-drinking water matters in new developments. Policy responsibility for Water Sensitive Urban Design is a matter for the Minister of Water, Energy and Emissions Reduction.
41. The Territory Plan provides the regulatory provisions relating to water management in new developments. This is a responsibility of the Minister for Planning and Land Management.
42. Additional non-drinking water networks could be developed from previous preliminary design studies using an updated model, from that developed in the AECOM 2011 report, to test viability and ranking. This report considered irrigation schemes for Lake Tuggeranong, Combes & Weston Ponds, Gungahlin and Yerrabi Ponds, and Lake Ginninderra.

43. Other studies have also considered Ginninderry, LMWQCC effluent and could be extended to include (noting this may be a matter for the Suburban Land Agency) the Whitlam and Coppins Crossing area.
44. Reticulated non-drinking water (purple pipe or 3rd pipe) has been installed and trialed at a number of locations around Australia, since the 1980's. Most of these systems were initiated through the inability to achieve a full or even partial stream discharge licence for the sewage treatment plant associated with the development.
45. Development of these schemes within the main utility catchments has slowed, mainly because the trend in sewage management has cycled back to large, central treatment plants. These plants are able to justify installation and maintenance of sophisticated processes capable of consistently achieving high quality effluent suitable for discharge to receiving waters.
46. Several purple pipe schemes have been developed in NSW, facilitated by the Water Industry Competition Act (WICA). This act has allowed development in areas beyond the immediate or foreseeable reach of Sydney Water, through the facilitation of private enterprise. Third party providers are licensed through IPART to provide water supply and sewerage systems. Purple pipe reticulation is usually adopted because the environmental requirements to obtain a discharge licence are challenging to meet.

## **Financial Implications**

### Economic viability of recycled water supply networks in new developments

47. Traditional water utilities have been unsupportive of purple pipe schemes because it is another system to maintain. Utilities also deem it necessary to maintain very high standards of treatment and disinfection, because of the potential liability associated with supply to residential lots for use by people used to accessing high quality drinking water. Utilities have a much higher comfort level with bulk supply for irrigation of sportsgrounds, noting water sales from large users are an important revenue source for water utilities and because of the capacity of trained grounds maintenance staff to manage non-drinking water irrigation systems.
48. Multiple small utilities would increase operating costs, because there are ongoing operational and maintenance requirements for these systems. There are also ongoing regulatory costs for UTR and EPA relating to these systems. Advice from Roads ACT notes the environmental value and economic opportunities available from neighbourhood scale stormwater harvesting systems where there are a large number of water users in close proximity.

## **Consultation**

49. This briefing summarises regulatory, policy and operational responsibilities shared across multiple areas of Government. This briefing has been reviewed by Senior Director Roads and Stormwater Maintenance TCCS, Senior Director Planning and Sustainable Development EPSD, Assistant Director EPA, Senior Director Water Conservation Planning and Policy EPSD and Senior Director Economics ICRC.
50. Treasury, Director Economic and Regulatory Policy (incorporating EBM comments) provided detailed advice on 19 March 2021. This advice notes the importance of the ACT's sustainable diversion limit in considerations of any changes of non-potable water usage.

51. Elements of this briefing have been reviewed by Icon Water.

**Work Health and Safety**

52. None at this stage.

**Benefits/Sensitivities**

53. There is increasing pressure on drinking water within the ACT and wider region. Decreasing the use of drinking water for irrigation and other uses and substituting this with non-drinking water has clear environmental, economic and social benefits for the ACT.

54. Any changes in non-potable water usage could impact on the ACT’s sustainable diversion limit.

**Communications, media and engagement implications**

55. None at this stage.

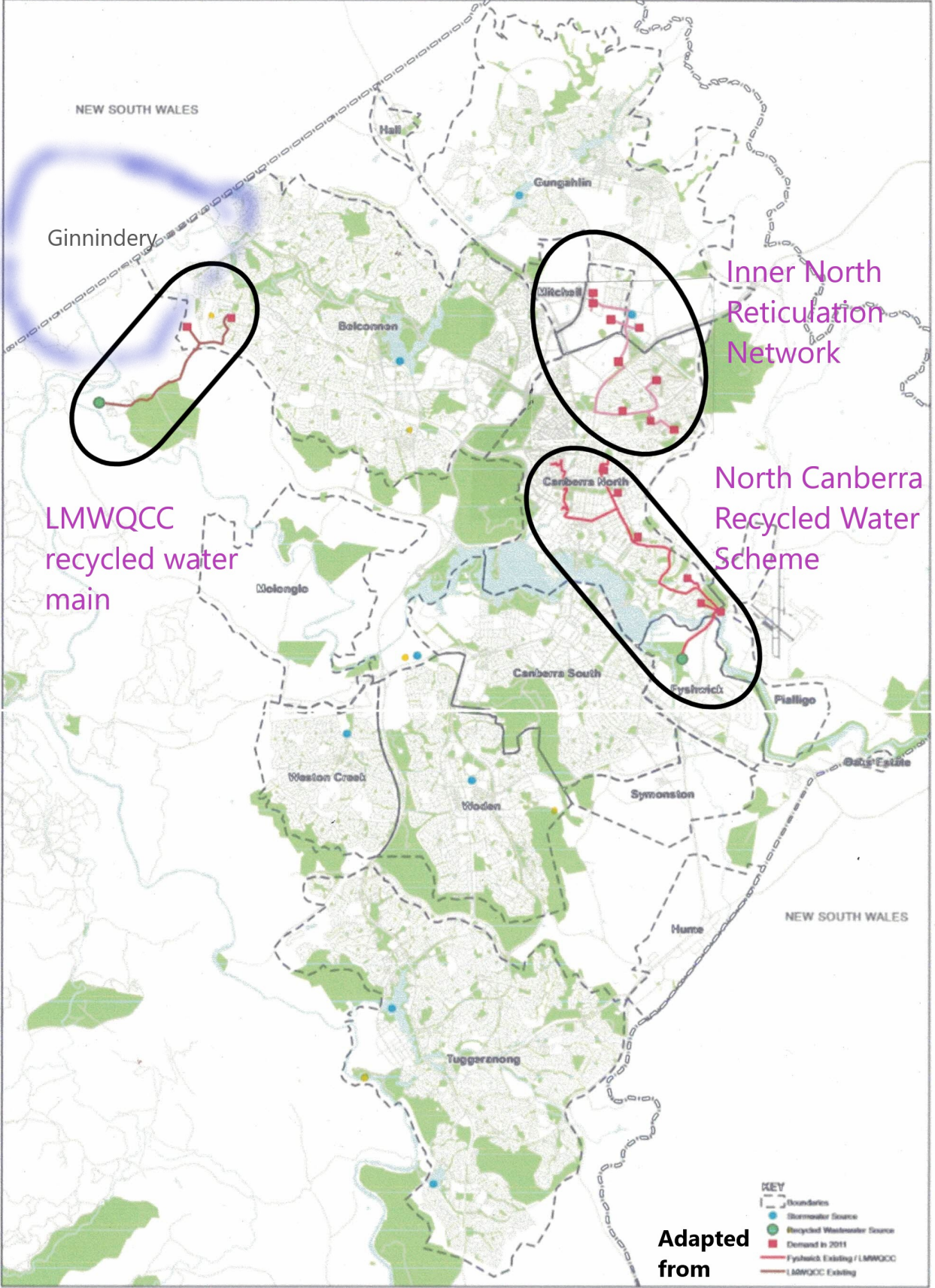
Signatory Name: Ben Ponton Phone: 78359  
Action Officer: Simon Grice Phone: 53078

**Attachments**

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Attachment	Title
Attachment A	Map of sites

AECON does not warrant the accuracy or completeness of information displayed in this map and any person using it does so at their own risk. AECON also bears no responsibility or liability for any errors, omissions, or variations in the information.



Adapted from