

Department of Climate Change, Energy, the Environment and Water

What We Heard Report

Draft Recycled Water Roadmap Public Exhibition

July 2025



Acknowledgement of Country



Department of Climate Change, Energy, the Environment and Water acknowledges the traditional custodians of the land and pays respect to Elders past, present and future.

We recognise Australian Aboriginal and Torres Strait Islander peoples' unique cultural and spiritual relationships to place and their rich contribution to society.

Artist and designer Nikita Ridgeway from Aboriginal design agency – Boss Lady Creative Designs, created the People and Community symbol.

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Published by NSW Department of Climate Change, Energy, the Environment and Water

<https://www.nsw.gov.au/departments-and-agencies/dcceew>

First published: May 2025

PUB25/462

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“We cannot grow our population and mitigate the risks of climate change-induced natural disasters – including drought and extreme heat – through reliance on rainfall dependent dam-sourced water and modest amounts of desalinated water alone.” – Committee for Sydney

1 Executive summary

In October 2024 the Department of Climate Change, Energy, the Environment and Water published a draft Recycled Water Roadmap (the draft Roadmap) for public exhibition,

This report summarises the feedback received from the survey, written responses, webinars and workshops. Some themes that emerged from the feedback were that the final Roadmap should:

- Acknowledge the bigger role that local councils and private sector play in the delivery of recycled water infrastructure
- Make clearer links to Integrated Water Cycle Management and Circular Economy principles
- Consider how recycled water can contribute to greening and urban cooling, including in the context of new housing developments
- Place more emphasis on the importance of engagement and education
- Provide greater clarity on timeframes and actions

In general, a vast majority of the feedback supported government taking more action to increase water recycling in NSW, with some saying that they would like to see the visions and actions go further.

The survey responses indicated broad agreement that the proposed actions in the draft Roadmap will facilitate water recycling.

The final Roadmap reflects the feedback received and is published alongside this report on the DCCEEW website.

2 Background

2.1 Draft Recycled Water Roadmap overview

The draft Roadmap was developed to make it easier for water utilities to assess, cost and engage with their customers on recycled water, and invest in it for both drinking and non-drinking purposes. It sets out how we will work across government to remove the policy and regulatory barriers to increase the use of recycled water.

While recycled water is not a cost-effective option for all locations, where it is a good solution we want to increase its use as a rainfall-independent water supply.

The draft Roadmap includes 14 action actions planned for the next 2 years, listed under 5 priority areas:

1. Integration with early strategic land planning
2. Economic tools and guidance
3. Co-ordination and regulatory change
4. Capacity and capability
5. Steps for future purified recycled water

2.2 Who we consulted

The draft Roadmap was developed during a large program of consultation with government and external stakeholders from 2022 to 2024. This included workshops with local water utilities, private utilities, State-Owned corporations, government agency representatives, property developers, peak bodies, researchers and one metropolitan council.

The Independent Pricing and Regulatory Tribunal was also engaged in the development of the draft Roadmap, as well as NSW Health, Department of Planning, Housing and Infrastructure, Department of Primary Industries and Regional Development, The Cabinet Office and NSW Treasury.

2.3 Public exhibition overview

On 28 October 2024, the draft Roadmap was published on the DCCEEW website, and open for public comment until 10 January 2025.

Feedback could be provided either through the survey or via written submission. In total, 70 survey responses and 10 written submissions were received.

During this period, 3 webinar sessions were held for the general public, government agencies, and local water utilities.

3 face-to-face sessions were also held with 8 Regional Aboriginal Water Committees in Dubbo, Albury and Tamworth, with 50 committee members in attendance across these sessions.

5,500
website
visitors

70 survey
responses

10 written
submissions

187
webinar
attendees

50 Regional
Aboriginal Water
Committee
members

3 What we heard

In general, the vast majority of feedback was very supportive of the draft Roadmap and its objectives. While some respondents stated they would like to see its ambitions go further, a minority expressed hesitation around the idea of using purified recycled water for drinking.

The following sections summarise some common trends observed by theme and under each priority area of the roadmap.

3.1 Feedback by themes

3.1.1 Role of local councils and private sector

Some responses highlighted that recycled water is not just the role of large utilities and local water utilities managed by regional local councils - metropolitan local councils, private water utilities and private developers also have an important role to play.

“Many metro councils have invested in...infrastructure that can support recycled water schemes. Identifying and utilising these assets could reduce projects cost and enhance the scalability of water reuse schemes.” – City of Sydney

One respondent noted they would like to see the final Roadmap address the role of all local councils in increasing the use and acceptance of recycled water, while another stated that the final Roadmap should better highlight the benefits of decentralised systems and smaller scale recycling.

Some respondents said they would like to see a wider representation of case studies reflecting the different ways in which recycled water can be delivered.

“Deep community engagement should be promoted and supported. Local Government has a significant role in small, decentralised water recycling systems even when a council isn't the water and sewerage service provider.” – NSW Water Directorate

3.1.2 Integrated Water Cycle Management and Circular Economy

Several submissions noted there are clear links between recycled water and Integrated Water Cycle Management (IWCM), as well as circular economy. They highlighted that increasing the recycling of water is not just about water supply, but it is a way of managing waste.

Integrated Water Cycle Management (IWCM) is recognised as a crucial part of urban water reform in Australia. It is all about the coordinated management of water, land, infrastructure and related resources. The goal of

IWCM is to balance the needs of people, the economy, and the environment, ensuring everyone has access to water while protecting water sources and ecosystems. IWCM considers the urban water cycle early in the urban planning process and involves different groups collaborating to create liveable and resilient cities and towns.

“There are benefits in positioning water recycling within the context of Integrated Water Cycle Management (IWCM) and resource recovery more broadly. The key to an effective water solution is using the right water for the right purpose, guided by an IWCM approach and a holistic view of the entire water cycle. Water recycling decisions form an important part of a complete resource recovery approach, including managing biosolids, nutrients, salinity, and the beneficial use of these products.” – Sydney Water

The respondents said they would like to see these links clearer in the text and diagrams in the final Roadmap, and that the actions relating to economic costs and benefits should consider these principles.

“Considering water recycling as part of the circular economy measures, and as a fundamental community resilience and risk management tool, would also help ensure it is properly characterised and prioritised” – The Justice and Equity Centre

One submission suggested that incorporating the principles of the government’s Circular Economy Policy Statement would not only support water recycling but also promote broader resource recovery initiatives that can drive innovation and support emerging industries in regional areas.

“By aligning recycled water initiatives with circular economy principles, regional utilities can contribute to reducing waste, enhancing sustainability, and creating new economic opportunities for local communities.” - NSW Water Directorate

3.1.3 Greening, urban cooling and new developments

The issue of heat risk, greening and urban cooling was raised a number of times, with feedback noting that the links between these issues and recycled water should be made clearer in the roadmap, particularly in the context of climate change and increasing housing supply in Western Sydney.

“The Draft Recycled Water Roadmap and its priorities are consistent with Council’s adopted position on recycled water, emphasising the urgent need for integrated planning to address the challenges of population growth, urban heat, and drought.” – Maitland City Council

Some respondents suggested that developers should be encouraged more to incorporate recycled waters into their projects, whether they are residential, commercial or industrial.

One respondent also suggested that the final Roadmap should show a link with the Government’s *Framework for Valuing Green Infrastructure and Public Spaces*, and explain recycled water’s relationship with stormwater management, urban cooling and greening.

“Water stress and urban heat risks mutually amplify the impacts [of climate change]. Urban Heat mitigation should be further highlighted as a benefit in the roadmap.” - Aquacell

3.1.4 Importance of engagement and education

Much of the feedback noted the critical role that engagement and education will play in the future of recycled water. Submissions noted that engagement and education should focus on decision-makers (including local councils) and at schools.

Others also noted that tailored messages must be delivered to regional communities, who face their own water security challenges and whose relationships with water are uniquely different to those living in urban and metropolitan areas.

“A collaborative, community-focused approach featuring workshops, local events, and tailored communication will help build trust, dispel myths, and empower communities to embrace [purified recycled water] as a key component of water resilience.” – Ballina Environment Society

3.1.5 Clarity on timeframes and actions

Another common point raised in the feedback was the impression that the 2 year timeframe of the Roadmap was too short to undertake all the required work. Some feedback stated that the Roadmap needs to have a clearer scope and objectives.

“...there is a relatively small time frame for the roadmap to be implemented. I felt uneasy when I had to list the priorities in order of importance as they are all essential, nothing can be omitted.” – anonymous survey respondent

3.2 Feedback by roadmap section

3.2.1 Proposed Vision

Many responses noted their agreement that recycled water is critical to our future water security. A number of parties told us that they would like to see this reflected in a more ambitious vision that communicates a stronger sense of urgency.

Respondents provided many suggestions on additions to make to the vision, some of which are covered in section 3.1. Additional feedback included: adding references to the role of recycled water in meeting demand for water from emerging industries such as data centres; providing clearer links to Infrastructure NSW and the State Infrastructure Strategy; and having a stronger emphasis on public health.

Whilst the vision statement itself cannot contain all of these ideas, we have incorporated these suggestions into the body of the final Roadmap.

3.2.2 Priority 1 - we need state-wide planning and policy frameworks in place that support integrated and coordinated planning for recycled water

Many of the responses support the actions to review BASIX to include water recycling measures. There was also feedback that the actions under this priority should consider the aforementioned themes of IWCM and circular economy.

One response suggests that in the review there should be consideration that on-site water recycling could adversely impact a site's BASIX energy score, and that this should be accounted for on the energy side.

Further feedback was received that any review should account for the specific conditions of regional utilities, such as seasonal variability in water demand, differing usage patterns, and the fact that these schemes operate on a smaller scale.

47/61 people (77%) who responded to this survey question said they do think the proposed actions facilitate water recycling.

3.2.3 Priority 2 - we need to provide tools and resources to support planning and delivery of recycled water solutions

Many respondents supported a focus on cost-benefit analysis, especially on non-monetary benefits and the value of system resilience in the context of future possible climate change, drought and natural disaster events – i.e. the cost of running out of water.

Other suggestions included highlighting the role of developers and need for water resilience in greenfield development; consideration of IWCM principles in the CBA guidelines and any economic analysis; and making links to IPART's pricing framework for recycled water.

One response stated that it is important that any updates to the NSW Guidance for Recycled Water Management Systems do not create any additional requirements that preclude or challenge private water recycling schemes.

50/61 people (82%) who responded to this survey question said they do think the proposed actions facilitate water recycling.

“I support the development of a cost-benefit analysis approach to considering water recycling, that includes the benefits associated with avoided costs...” – Russell Beatty

3.2.4 Priority 3 – we need clear regulatory and approvals processes in place for recycled water

While there was positive feedback on DCCEEW's coordination role, some flagged that we must ensure that this coordination role focuses on streamlining activities, not creating additional or unnecessary bureaucracy and regulation.

One respondent suggested that action 3.2 should include a role for local councils, noting that they are key stakeholders for local water solutions and often face similar regulatory burdens as larger schemes. Others supported this action, saying that decisions makers can currently use the absence of a specific water recycling regulatory framework as a reason not to approve or progress with water recycling.

There was further feedback that the Roadmap should consider including councils in decision-making processes for water recycling infrastructure planning and implementation, and that the regulatory reform should prioritize flexibility and scalability to account for the diverse conditions of regional utilities.

Some stakeholders noted that the coordination body should bring together all aspects of water recycling, not just regulatory bodies, while others required further clarity on the role of NSW Health in regulating recycled drinking water.

54/64 people (84%) who responded to this survey question said they do think the proposed actions facilitate water recycling.

“Establishing the NSW Department of Climate Change, Energy, the Environment and Water (DCCEEW) as the lead coordination agency for water recycling is a welcome step toward streamlining regulatory processes and providing clearer guidance for utilities.” – NSW Water Directorate

3.2.5 Priority 4 – we need to build capacity and capability across the water sector to plan and deliver innovative recycled water solutions

There was broad agreement that this priority is critical to increasing recycled water in NSW, with many suggestions on how best to go about this. These suggestions include:

- Reviewing current accredited training, such as VET Training through the National Water Package and accredited engineering programs, to ensure it is fit-for-purpose.
- Providing educational resources that address specific challenges faced by regional utilities, including small-scale operations and localized water security needs.
- Avoiding relying on online resources alone - physical, in-person demonstrations for education
- Ensuring that the existing Regulatory Assurance Framework for LWUs is not duplicated.
- Working with Universities and TAFE to create courses to help improve the capability and capacity of the water recycling sector.
- Having DCCEEW host a library of all water recycling information.
- Providing clarity on Hunter Water and Sydney Water’s role in education and upskilling

49/58 people (84%) who responded to this survey question said they do think the proposed actions facilitate water recycling.

3.2.6 Priority 5 – we need to take steps now so purified recycled water is an option for our future drinking water supply

On action 5.1, some suggested that the proposed review of the Australian Guidelines for Water Recycling should consider the challenges regional utilities face in complying with updated standards, and the differences in requirements for direct and indirect purified recycled water.

On action 5.2, one respondent suggested that education campaigns must prioritise schools, and fostering awareness early will support innovative water resilience strategies. Others seek more clarity in the Roadmap on who is primarily responsible for community engagement.

Another respondent stated that immediate action is critical – that pilot purified recycled water projects should happen concurrently with development of planning/policy frameworks.

55/65 people (85%) who responded to this survey question said they do think the proposed actions facilitate water recycling.

“To effectively support utilities in engaging with their communities and decision-makers on recycled water options, online educational resources should be complemented by regional workshops and on-ground support. Physical demonstrations of water quality principles are highly valuable for building public understanding and trust in recycled water initiatives... these educational tools can play a crucial role in fostering community confidence, encouraging informed discussions, and supporting the acceptance of recycled water solutions” – NSW Water Directorate

4 Next steps and more information

4.1 Next steps

In response to this feedback, the Recycled Water Roadmap has been updated and published on the DCCEEW website.

While some of the comments received were outside the scope of this Roadmap, they have been noted and will be considered in the implementation of the actions, where relevant.

DCCEEW has commenced its coordination role and will ensure that the actions outlined in the roadmap are completed within their stated timeframes.

4.2 More information

You can find more information about the Recycled Water Road map on the DCCEEW website.

If you have any questions, you can get in contact with the Water Group, Department of Climate Change, Energy, the Environment and Water, at water.enquiries@dpie.nsw.gov.au.