


Introducing alternative water sources

What we heard from utilities

January 2024





Acknowledgement of Country

The Department of Climate Change, Energy, the Environment and Water acknowledges that it stands on Aboriginal land. We acknowledge the Traditional Custodians of the land and we show our respect for Elders past, present and emerging through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.

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Introducing alternative water sources - what we heard from utilities

The NSW Government wants to ensure that communities in regional and metropolitan NSW have the water they need to thrive, grow and enjoy — now and for future generations. As we grow and our climate changes, we support all water sources being on the table as options to consider in developing resilient and secure water supply mixes for towns and cities.

From consultation carried out over the course of 2023, we have heard what some of the barriers are for utilities engaging with customers. We met with larger utilities such as Sydney Water, Hunter Water, interviewed the Water Directorate and engaged with 130 local water utility representatives at roadshows in Dubbo, Tamworth, Coffs Harbour, Griffith and Queanbeyan.

What utilities have identified would be helpful for them in talking to their communities about alternative water sources is presented in Table 1. The issues raised can result in an absence of communication for fear of negative outcomes, or poorly timed and planned, sub-optimal engagement at critical times.

Water utilities play a critical role in developing resilient and secure water supplies for their area. Bringing your community on the journey to define the right mix of water supply and demand options, including alternative water sources for your utility and region, is the most effective way of increasing public acceptance.

Table 1: Barriers and identified support needs for utilities to engage with their communities.

Barriers to utilities engaging with customers/ community on alternative water sources	What would be helpful for utilities talking to customers on alternative water sources	Recommendations
General public water literacy needs improvement.	<ul style="list-style-type: none"> A state-wide water literacy study to inform utilities on the levels of literacy across the State. Skills and resources to improve literacy in the local area. 	<ul style="list-style-type: none"> State-wide community education advertising campaign. Public guidance information on water sources, challenges and uses. The department consider funding a new state-wide up to date water literacy study, which compares results to previous studies undertaken.¹
Resourcing <ul style="list-style-type: none"> Justifying large expenditure on communications and engagement is difficult for regional utilities with the investment required for diversifying water sources for long-term water security. This significantly impacts their ability to demonstrate potential water options with quality resources and media. 	Sharing <ul style="list-style-type: none"> Shared information resources, templates, icons and support from larger utilities would assist regional utilities commence and continue engagement with customers on diversification. Improved and consistent information sharing from State Owned Corporations and other regional utilities. 	<ul style="list-style-type: none"> A toolkit of information resources, templates and icons available through the department's website for all utilities to use. Resources are developed using the learnings from our State Owned Corporations. A forum is established for information sharing or existing forums such as the Water

¹ For example: CRC for Water Sensitive Cities Water Literacy in Australia 2015; McCarroll and Hamann 2020 'What we know about water: a water literacy review, *Water* 2020, 12, 2803.

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<ul style="list-style-type: none"> • Need for financial support for sentiment and literacy/existing knowledge surveys, cost benefit analyses, feasibility studies, communications and engagement, demonstration plants. • Collaboration between State Owned Corporations and other water utilities is important, however the context of the State Owned Corporations is different to many regional utilities and this needs to be explicitly recognised. • Planning and infrastructure take time, money and effort. There is little time and money for engagement. 	<ul style="list-style-type: none"> • Collaboration with State Owned Corporations who have done more or are further along their journey with alternative water sources and engaging the public, to provide useful materials to utilities and maximise education value of assets like the new Sydney Water Purified Recycled Water for Drinking Demonstration Plant. • Demonstration plants would be incredibly valuable in non-metropolitan NSW but only useful for a few years. They would enable communities to see the process, the water quality resulting from it and understand the impacts locally. ‘Seeing is believing’ and research has indicated demonstration plants have the biggest influence on public perception changes and acceptance of alternative water supplies like recycled water. However, these are large investments that many utilities won’t be able to achieve – it would be great if the investment is shared between regional utilities and the demonstration plant is 	<p>Directorate, Water 360 and the department’s Local Water Utilities newsletter share resources better between NSW utilities.</p> <ul style="list-style-type: none"> • State government work with utilities to explore investment in demonstration plants/ portable demonstration plants to help NSW communities to understand the water cycle and build trust in purification technology. • The department share ideas with utilities of how they could communicate with the community using existing resources e.g. resources within council. • Coordinate with state-owned water corporations and local water utilities to develop and implement a public engagement program for alternative water sources. • Consider needs based funding models to encourage community

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	<p>shared/relocated throughout regional NSW.</p> <ul style="list-style-type: none"> Where there is a waste education officer but no similar resource for water, waste education officers could be equipped with water knowledge to also educate the community on water, water efficiency, avoiding waste and reusing water, with the story of our water is precious and we need to use it wisely and perhaps differently to how we have been. 	<p>engagement and strategic planning for regional communities.</p>
<p>Skills</p> <ul style="list-style-type: none"> Need for upskilling the full range of staff in contact with customers with accurate key messages using helpful language. Clear goal posts are needed including appropriate training around the risks and challenges and what a ‘commitment to safe water’ (the essential requirement of the Australian Drinking Water Guidelines framework) actually looks like in the context of alternative water supplies. 	<p>Skills</p> <ul style="list-style-type: none"> On-ground assistance with educational material and engagement programs. Specialist resources in community engagement to get the most value out of it. Examples where engagement has been successfully done. 	<p>The department support utilities with:</p> <ul style="list-style-type: none"> Factual unbiased information sheets publicly available on the overarching pros, cons and considerations of each water source. Updated recycled water guidelines. Factsheet about assessment timeframes and considerations for alternative water supplies. Case studies from different and successful engagements on alternative water sources.

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		<ul style="list-style-type: none"> Funding or strategic department staff attendance to assist with education programs. Advocacy to harness all the educative benefits of assets such as the Sydney Water Purified Recycled Water for Drinking Demonstration Plant.
Leadership It's unclear what State government are doing in this space and/or if there's a State position on it. Water utilities look to State government for leadership. Risk or uncertainty around whether the utility will need and utilise alternative water sources and therefore when and why to engage with their community on it.	Leadership State government participation in public education	<ul style="list-style-type: none"> The department/NSW Government fund and develop a State-wide community education advertising campaign The department provide public explanation of regulatory oversight of water sources and supply systems, clarity on regulations and risk for alternative water sources.
Clear message and guidance While there are a range of resources already out there, there is inconsistency in messaging and no one stop shop, making it difficult and time consuming to wade through. There are information gaps (for	Clear message and guidance <ul style="list-style-type: none"> Clear guidance information explaining the sources, levels of treatment and what they can and cannot be used for (e.g. recycled water), risks and benefits of each option. 	<ul style="list-style-type: none"> The department provide basic information on water source options and guidance for how utilities might talk with their community about the

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<p>example on the urban water cycle) and lack of direct messaging on water diversification.</p>	<ul style="list-style-type: none"> • Basic information to improve understanding that our water treatment process makes tap water safe for drinking. • Conversation materials to help our community understand that different sources of water are perfectly safe to consume once treated correctly 	<p>urban water cycle, the challenges we face and alternative water supplies.</p>
<p>Consistent language</p> <ul style="list-style-type: none"> • There is uncertainty on what terms to use. • Lack of consensus on term definitions. • Terms are used inconsistently and are not well defined to the public, leading to confusion. • Trying to be consistent while capturing the differences in individual systems without getting too technical. 	<p>Consistent language</p> <ul style="list-style-type: none"> • Communication guidelines • Consistent approach and language 	<ul style="list-style-type: none"> • The department develop communication and language guidelines for all water utilities in NSW to use.
<p>Location relevant</p> <p>Many existing resources do not readily relate to the rural/regional NSW context which is a barrier to their use in connecting with customers.</p> <p>Every city, district, region has its own unique circumstances, history and policy/ media environment, that could impact consideration of</p>	<p>Location relevant</p> <ul style="list-style-type: none"> • Educational resources/materials that recognise the differences in demographics, hydrology, topology across regional NSW • More relevant information on water sources based on regional catchment locations 	<ul style="list-style-type: none"> • Place based engagement, considering the audience and its water supply, is encouraged and supported. • The department develop resources that are relevant to anywhere in NSW.

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<p>options in different ways. Sentiment varies depending on location - specific water security, demographic, media exposure. There is a lot more support for options such as recycled water than we may think but getting the communications right before engaging with the public can hamper the progress of conversations on it.</p>	<ul style="list-style-type: none"> There needs to be stronger strategic links between state and regional water strategies, regional plans and LWU planning. 	
<p>Other barriers to considering alternative water sources:</p> <ul style="list-style-type: none"> difficulty determining the local water allocation/ augmentation solutions refer to Recycled Water Roadmap what we heard report. 	<p>There is a need for a cost-benefit assessment framework utilities can use for all water supply options so that all options can be systematically compared. The process should link to economic regulation requirements and approach be aligned with the requirements of IPART. This analytical framework will help utilities then communicate on the financial considerations for all options.</p>	<ul style="list-style-type: none"> The department support utilities to financially plan and clearly link IPART funding requests to government policy. Public explanation of regulatory oversight, clarity on regulations and risk.

What we are doing

We are supporting water utilities to develop resilient and secure water supply mixes for towns and cities. The NSW Government supports all water sources being on the table as options for consideration as utilities plan for a future with drought, variable climate and increasing population challenging us to think differently in how we plan and manage water. Increasing public awareness of alternative sources of water can make it easier to include these in future supply plans.

We are supporting water utilities with water security by:

- helping utilities use what they have more efficiently – leak reduction, water efficiency program, developing a catalogue of quantitative costs and benefits for urban water efficiency initiatives
- overseeing and helping local water utilities in regional NSW with strategic planning for the future under the Regulatory and Assurance Framework for Local Water Utilities
- providing an Integrated Water Cycle Management best practice framework
- progressing, over the next 5 years, regulatory reform, policy and guidelines to make the development and use of diverse water supply options easier, for example Managed Aquifer Recharge Framework, Stormwater Harvesting Policy, Recycled Water Roadmap.

We are supporting utilities to engage with their communities through:

- having a policy statement on our website
- communications and engagement tools utilities need to inform and engage customers on alternative water sources
- baseline information on our website available to the public and utilities to facilitate clear and consistent messaging and provide a starting point for conversations on different source options.

Based on our learnings from utilities, a toolkit for utility community engagement will be built and published here over the next 6-12 months. It will include:

- tips and pointers for understanding and engaging with customers (communication/ engagement style/ language guide)
- collation of great existing resources on alternative water supplies
- case studies with insights from around NSW on alternative water sources in strategic planning and customer engagement
- toolkit of new or adapted ready to use communications tools such as factsheets, social media tiles, gifs, icons, images and videos.

In addition to our website, we are sharing widely useful resources we publish via the Water Directorate blog (for case studies) and Water 360.

Next steps

- In early 2024 we will have a package of engagement material for alternative water sources available on our website. We will notify water utilities when it's up there via our newsletters.
- We invite you to trial the materials and provide feedback:
 - on how they could be improved
 - requesting access to the files to adapt them to your specific utility
 - what else you need to implement community engagement for alternative water sources in your area.
- We will update and supplement the resources based on the feedback that is received, how much the materials are being used and as the NSW context changes.