Planning our water future

Central Coast Council is planning for our future now to ensure our region has a sustainable and resilient water system that can adapt and respond to change. We need to consider new sources of water (supply) and find new ways to reduce the water we all use (demand). This series of information sheets provide an overview of the potential water supply and demand option types we are discussing with our community as we plan our water future together.

love water use it wisely

Central Coast Council

Demand option: **Recycled water (non-drinking)**

What is it and how does it work?

Recycled water involves the treatment of wastewater to a standard suitable for non-drinking end uses, such as industrial and commercial use, toilet flushing or irrigation of parks, gardens, crops and golf courses.

The process relies on advanced water treatment, such as UV disinfection or chlorination, to ensure water quality standards are met.

What is currently in place on the Central Coast?

There are currently eight recycled water schemes on the Central Coast which produce a total of around 650 million litres of recycled water each year. These recycled water schemes are all attached to our existing treatment plants.

The recycled water from this scheme is typically provided for golf courses and sports field irrigation, as well as supplying one of the Coast's power stations.

Things we need to consider

Recycled water for industrial and commercial use, toilet-flushing or irrigation of parks, gardens, crops and golf courses reduces the demand on the drinking water system.

This is a reliable rainfall-independent supply of water, particularly during drought.

Recycled water provides environmental benefits by reducing the volume of treated wastewater released to waterways.

Due to advanced treatment requirements and associated infrastructure, as well as high energy use, recycled water schemes are relatively high cost to build and operate for the volume of water produced. The demand for recycled water can also vary depending on weather, which can make the option less cost effective.

Because recycled water use reduces the demand for town water supply and wastewater releases, recycled water schemes can defer the need for investments in other parts of Council's water or wastewater systems.

How we're considering this option for the Central Coast Water Security Plan

We've investigated a range of recycled water options including the expansion of three existing recycled water distribution schemes at Kincumber, Bateau Bay and Toukley treatment plants, and engaging with our major recycled water customers to increase their use of recycled water for power station cooling, irrigation of sporting field, golf courses, and public open spaces.

See key results table for further detail about how this option is being considered in the plan.

Key results

The table below provides further detail about how this option is being considered in the plan.

	Category	Additional information
Potential additional water available	Low	The potential water yield for the RW option is 1.1 ML/day which is relatively low compared to the other options.
Reliability and resilience	High	Improves the diversity of sources in our supply system. Does not rely on rainfall which improves the reliability of our system. Ensures an ongoing water supply in long and severe droughts.

	Impact	Cost	Additional information
Indicative cost to build	Low	$6.6 million	Relatively low cost compared to other options due to existing distribution infrastructure.
Indicative cost to operate	Low	$200,000 per year	Relatively low cost compared to other options, dependent on level of treatment required.

	Impact	Additional information
Environmental impacts	Low	Less treated wastewater released to waterways. Low impacts on natural biodiversity. Medium/high energy use and associated greenhouse gas emissions. Options exist for offsets to reduce impact.
Cultural and social impacts	Low	Provides local water sources to maintain green parks and sporting fields.
Timeframe for delivery	Medium	Three to seven years.

Recycled water at Central Coast Stadium

Some information contained in this fact sheet was sourced from Hunter Water Corporation