

Lower Hunter Water Security Plan



The Lower Hunter Water Security Plan is a whole-of-government approach to ensuring the region has a resilient and sustainable water future that contributes to regional health and prosperity and is supported by the community. The plan outlines a program of actions to secure water for the Lower Hunter over the next 40 years.

Belmont desalination plant

Desalination is an important rainfall-independent water supply option and was originally identified as an emergency drought response measure in the 2014 Lower Hunter Water Plan. As investigations for the Lower Hunter Water Security Plan progressed, a permanent desalination plant emerged as a key option for securing our water supply.

The proposed Belmont desalination plant would be a new, permanent rainfall independent water supply producing up to 30 million litres per day of drinking water. It would involve a new ocean intake and water treatment plant located adjacent to the existing Belmont Wastewater Treatment Plant.

Water would be treated to comply with the Australian Drinking Water Quality Guidelines and would be supplied to Hunter Water's existing water supply network.

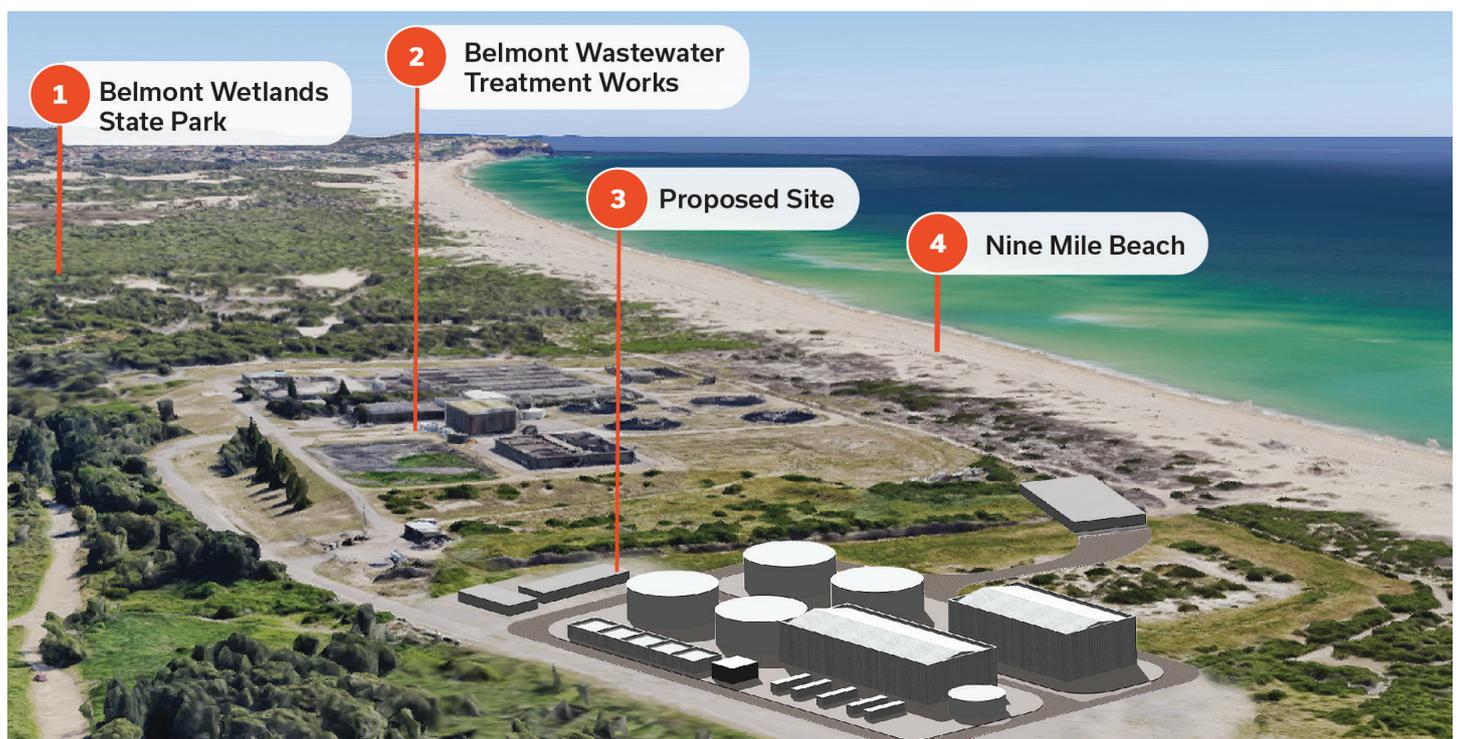
Building and operating the Belmont desalination plant now would extend our ability to withstand a severe drought by about six months.

Key features

- Provides up to 30 million litres of rainfall-independent water supply per day
- Supplies around 15% of the region's average daily water needs
- Increases the diversity of the region's water supply system
- Helps to reduce the rate storages deplete in a long and severe drought by around six months
- Would cost between \$220-250 million to deliver.

The concept design and planning approval for a drought response plant are complete. A modification to the planning approval will be required for a permanent plant.

In line with our community's value for an environmentally sustainable water supply, Hunter Water will consider the use of renewable energy or carbon offsets to reduce the environmental footprint of the plant's operation.



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Location of the new desalination plant at Belmont

We selected the Belmont site following a multi-site analysis that compared the costs of the plant and associated infrastructure, power supply requirements, and environmental and community impacts.

Land at the Belmont site is already owned by Hunter Water. Construction costs are lower than other sites and there would be low community disruption and impacts.

This site also allows us to discharge the brine (remaining salt water from the desalination process) to the ocean via the existing outfall at the nearby Belmont Wastewater Treatment Works, minimising environmental impacts.

Where are we now

Readiness activities are complete for the drought response desalination plant at Belmont and planning approval has been granted by the Department of Planning, Industry and Environment.

Hunter Water will seek approvals to allow the desalination plant to be built now and operated as part of the region's permanent water supply.

