Alkimos Seawater Desalination Plant

Information for marine stakeholders

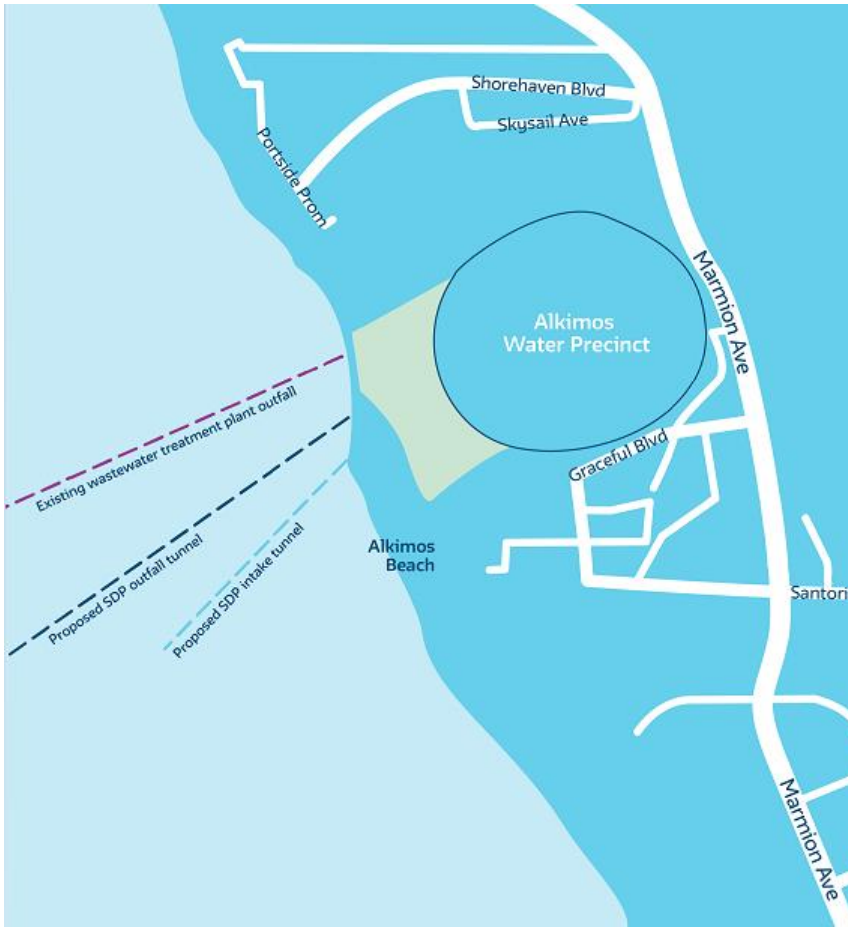
Overview

Water Corporation is progressing plans to build a seawater desalination plant in Alkimos.

Declining rainfall and a growing population mean that WA will soon need a major new water source.

A new desalination plant will help reduce our dependence on groundwater, providing a secure, sustainable drinking water source.

It will be built in two 50 billion litre-per-year stages, with the first stage operational in 2028. Construction above the seabed in the marine environment is expected to start from 2026.



Where is this happening?

The proposed Alkimos Seawater Desalination Plant will be on Water Corporation land within an area known as the Alkimos Water Precinct.
We already operate a wastewater treatment plant in the precinct.

How will you reduce marine impacts during construction?

To minimise dune and seabed disturbance, the intake and outfall tunnels will be constructed by tunnelling under the dunes and seabed.

Sediment from the tunnelling will be disposed of onshore. Construction of the tunnels is expected to take between 12 and 18 months to complete. During construction of the intake and outfall structures above the seabed (approximately 6 months) a 500-metre exclusion zone will be in place, which will be communicated via a Notice to Mariners.

We will be undertaking further marine geotechnical and geophysical investigations in late 2022. These investigations will provide information for the construction of the marine tunnels.

How have you considered the marine environment during operation?

We have conducted extensive research, including modelling of the ocean currents, as well as mapping of reef and sandy seafloor habitats, to inform the operation of the plant.

The proposed design and location of the infrastructure have been selected to minimise impacts on the environment.

Diffusers have been designed to ensure brine (which is a by-product of desalination) is diluted and mixes quickly with seawater several kilometres offshore.

The seawater intake design will also ensure marine life does not get drawn into the tunnel.

Why desalination?

Desalination is a safe and climate-resilient water source.

Climate change is impacting groundwater levels across Western Australia. We will reduce our annual groundwater abstraction by 30 billion litres from the Gnangara groundwater system by 2028.

It's important we act now to ensure the future security and sustainability of our precious drinking water supplies.

We already operate two desalination plants. These provide nearly half the drinking water to homes and businesses across Perth and some regional areas.

How can I have my say?

We have referred the proposal to the Environmental Protection Authority.

All information will be publicly available. There will be a four-week public comment period. It is anticipated that this will occur from September 2022. Comments on the proposal can be made on the EPA consultation hub:

https://consultation.epa.wa.gov.au

More information

If you have any concerns or require further information, please email or call:

Community Engagement
Community.Engagement@watercorporation.com.au
(08) 9420 2231

www.watercorporation.com.au/asdp
To subscribe for updates. Click on Engagement Hub to view the progress of the proposal.

www.watercorporation.com.au/newdesal
For general information about the key drivers of the proposal.

Thank you for your support as we progress plans to deliver this critical infrastructure

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