

Marine stakeholder information –

Alkimos Seawater Desalination Plant investigations

As part of our long term planning to secure Perth's water supply, Water Corporation has completed feasibility investigations and is seeking environmental approvals for a seawater desalination plant to be located at Alkimos.

What is being proposed to be built?

- A 25 billion litres per year seawater desalination plant, with future expansions to an ultimate capacity of 100 billion litres per year
- Two offshore pipelines below the seabed to bring seawater into and take brine away from the plant
- A pipeline from Alkimos to Wanneroo, where the water will be connected to Perth's water supply

The plant is one of a number of water source options being considered, with a new water source likely to be needed for Perth within the next five to ten years.

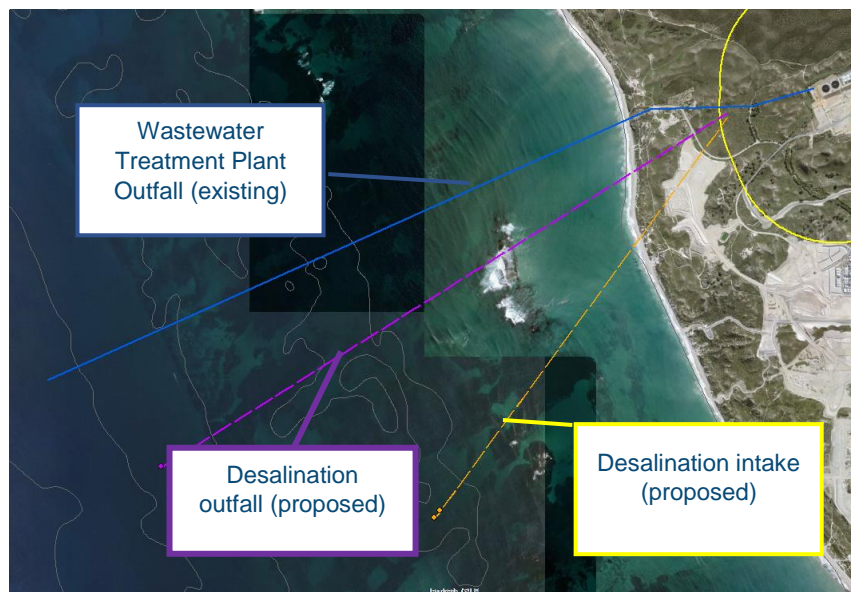
Where will it be located?

The plant would be located on land to the immediate west of the Alkimos Wastewater Treatment Plant, within the Alkimos Water Precinct.

The intake pipeline is planned to extend about 2.3km from the shoreline, with the outfall pipeline extending about 3.8km from the shoreline.

Impact on fisheries

Pipeline construction - Marine pipelines are planned to be installed using a tunnel boring machine. This methodology reduces impacts on the dune system, beach and seabed.



Brine stream

A peer reviewed hydrodynamic marine model was developed and used to understand the potential impacts of the discharge of brine on the marine environment. The results of the initial assessment indicate the brine mixes quickly with the seawater and the desalination plant can operate with an acceptable environmental impact.

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Geotechnical investigations

Geotechnical investigations to understand the geotechnical characteristics of the seabed are currently underway and will be completed by end March 2019.

Snagging hazards

The intake and outfall structures are designed to minimise the risk of snagging from marine vessels similar to Water Corporation's existing desalination plants. By tunnelling the pipeline we will also eliminate risk of fishing equipment being affected by it.

Beach access

The marine pipelines would launch from within the Alkimos Water Precinct, limiting the impact on the beach or dune system. It is not expected the beach will be closed for significant durations during pipeline construction.

Seeking environmental approval

Water Corporation will submit proposals to the State Government's Environmental Protection Authority and the Commonwealth Government's Department of the Environment and Energy early in 2019 to seek environmental approvals. During the assessment process there will be opportunity for public comment.

Find out more and have your say

Find out more about the feasibility investigations underway in relation to a possible future Alkimos Seawater Desalination Plant or join the online community to have your say on what is proposed at www.watercorporation.com.au/securingsupply.

You can also contact Water Corporation's Community Engagement team or submit feedback via email community.engagement@watercorporation.com.au or phone 9420 3488.