

# Marine Construction

## What's happening?

We're building underwater intake and outfall structures that will connect to underground pipes to bring seawater into the desalination plant and then return salty water back to the ocean.

### What to expect:

- **When:** Early works began in mid-December 2025 and will be completed by mid-2026. Work will be occurring 24/7.
- **How:** A floating platform called *jack-up barge* is used to house crews and equipment during construction. It moves like a boat, then lowers four legs to stand firmly on the seabed.
- **Safety:** A 1 km diameter temporary exclusion zone will be in place around the barges during construction.
- **Visibility:** You'll be able to see the barges from local beaches including Shorehaven and Alkimos Beach.
- **Planning Ahead:** The intake and outfall structures are large enough to cater for future expansion of the desalination plant to double its capacity.



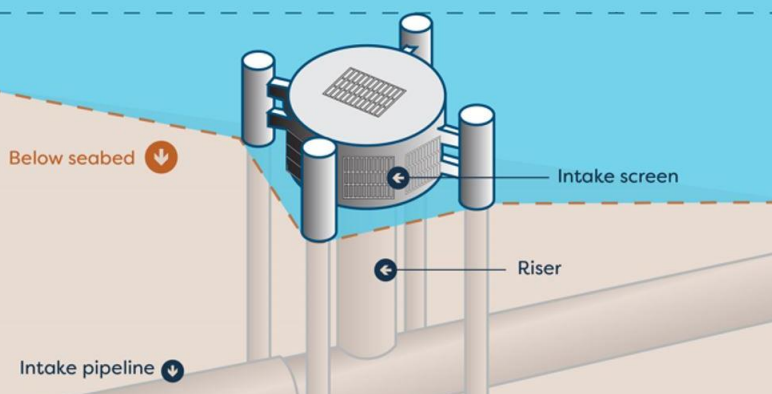
Jack-up barge

## Intake Structures

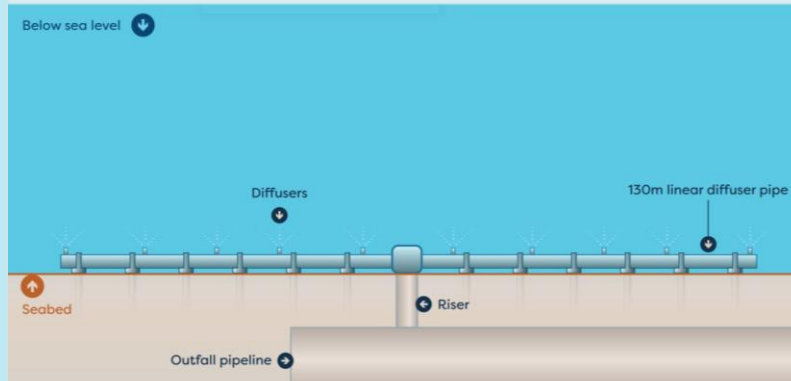
Connected to the pipe that brings seawater into the plant.

- Two 12-metre-wide structures. Water depth 5.9m below sea level.
- Located 1.6 km offshore.
- Located within a sandy patch, inside the inner reef.
- When operating, the seawater flowrate will be a slow and steady stream – the speed of a natural ocean current.
- The screens have 20cm spacing between bars so smaller fish can swim in and out freely while keeping out large sea animals.
- Work started in January 2026 and took approximately 4 months to complete.

5.9m Below sea level



## Outfall Structure



Connecting to the pipe that returns the leftover salty water (brine) back to the ocean.

- A 130-metre-long diffuser pipe, with 20 diffuser ports that will slowly release brine with aerated technology to maximise distribution.
- Water depth will be ~20 m.
- Located 2.6 km offshore.
- Located in a sandy patch, within the outer reef.
- Work started in February 2026 and will take approximately six months to complete.

# Protecting Marine Life

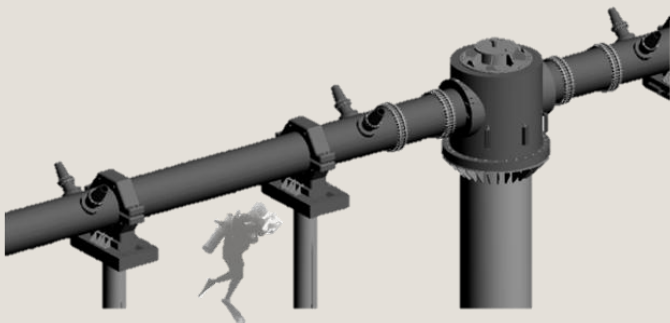
We've planned the work carefully to help keep sea animals and their environment safe.

- **Where we build:** Structures go in sandy areas, away from reefs and seagrass.
- **Whale safety:** Work occurs during summer, avoiding whale migration season.
- **Watching for animals:** Trained observers watch for dolphins, whales and other marine mammals. If they come within 500m, work pauses.
- **Rock lobster migration:** Work started towards the end of the whites run lobster migration, which occurs from November to the end of January. We've made every effort to minimise impacts where possible.
- **Fish entering the pipes:** The flowrate of the intake is like a slow, steady stream. Any marine life that can swim against the tide, like fish, can easily swim against the flow.
- **Slow boats:** Construction vessels are stationary or slow moving, significantly reducing the risk of injury to sea animals.
- **Returning the salty water:** The specifically designed long diffuser, with nozzles spaced along its length, helps the brine mix safely and quickly with the surrounding ocean. Before the brine is released into the ocean, it's tested to make sure it stays within levels that are safe for local marine life.
- **Environmental approvals:** WA's Environmental Protection Authority (EPA) sets rules to make sure desalination is safe for the environment and marine life. This includes things like level of water saltness, water temperature and cloudiness of the water – all of which are monitored throughout operations to ensure they stay within acceptable levels.

## Our Crews

Specialised marine construction crews complete the work. Their work includes:

- Crews of around 50 people remain on board the barge, with rotations of 14 days on and 7 days off to reduce the need for daily transfers = less boats in the area.
- Work occurs in two 12-hour shifts: a day and night shift. One crew from each shift generally share a cabin, to reduce interruptions to sleep.
- There are catering, cleaning and laundry services onboard.
- Specialised divers play a key role in building the underwater structures.



*Representation of a diver working on the outfall structure.*

## Community Impacts

- The construction barge is visible from local beaches.
- As construction is offshore, we expect minimal noise at the shoreline. However, some sound may be noticeable during specific activities, such as piling.
- For safety reasons, we kindly ask that boats, swimmers, divers, and surfers stay clear of the construction area while work is underway.
- Beach access remains open and unaffected throughout the construction period.

## Need more information?

Please visit our website

[watercorporation.com.au/asdp](https://watercorporation.com.au/asdp)