

VICTORIAN DESALINATION PROJECT

FACT SHEET

**WATER NOW
AND FOR THE FUTURE.
FOR SURE.**

JACK-UP BARGE

Work will soon begin to construct the intake and outlet structures for the Victorian Desalination Project. This work will be carried out from a 'jack-up barge' off Williamsons Beach.

What is a jack-up barge?

A jack-up barge is a mobile work platform, from which offshore construction work can be safely carried out.

The barge for the Victorian Desalination Project measures 55 x 32 metres in size and will be equipped with a pile top rig, crane, helicopter pad and accommodation for workers.

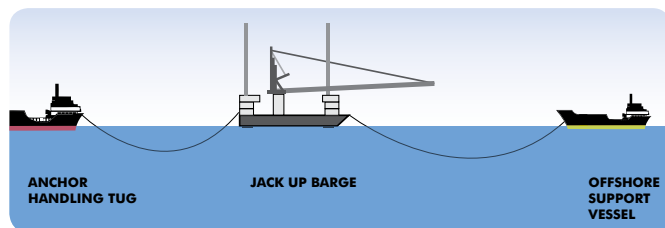
The pile top rig will be used for slow rotation grinding to excavate the risers – no percussive piling work will be carried out.

How will the jack-up barge be secured?

The barge is fitted with four self-elevating legs that can be raised or lowered.

The barge will be transported with the legs up from The Netherlands to Victoria on a semi-submersible vessel.

The vessel will travel to Western Port, where it will be positioned off the coast of Phillip Island. The vessel will be partly submerged and the jack-up barge will float off.



The jack-up barge will be towed into position.

The barge will remain at Western Port for a number of weeks for final preparations. When this is complete, an offshore support vessel and tug boats will tow the barge into position off Williamsons Beach, where the barge legs will be jacked down and safely secured with anchors.

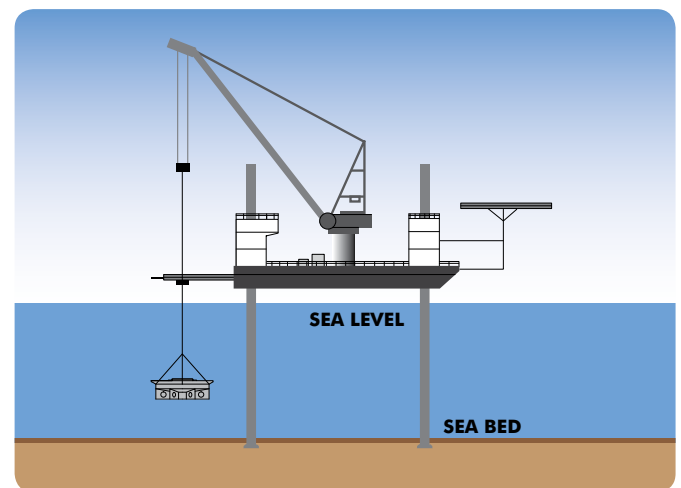
The barge will be jacked well above the water, taking into account local wave and tidal activity, to ensure that construction work can be carried out safely.

What is it being used for?

The jack-up barge is being used to construct two seawater intake and two outlet structures on the seabed.

The intake structures will draw seawater into the plant, while the outlet structures will return seawater concentrate to the ocean at the end of the desalination process.

Vertical shafts known as 'risers' will also be built to connect the structures to underground tunnels leading to and from the desalination plant.



The jack-up barge will be equipped with a pile top rig, a crane and helicopter pad.

Where will the jack-up barge be located?

The jack-up barge will be located approximately 800m to 1.1 km offshore from Williamsons Beach.

It will be positioned to allow construction of the seawater intake structures first, then repositioned for construction of the outlet structures.

How will workers get to and from the barge?

A helicopter will transport workers from Melbourne to the jack-up barge at scheduled times each week.

On average, workers will spend two weeks at a time living and working on the barge.

Will the helicopters disrupt Hooded Plovers nesting on the beach?

Williamsons Beach is an important nesting site for the Hooded Plover, a threatened species of bird, between the months of August and February.

The flight path transporting the workers to and from the barge will be from the ocean - away from Williamsons Beach and important nesting sites for the Hooded Plover.

What can we expect to see when the jack-up barge is in place?

The jack-up barge will be in operation 24 hours a day and will require lighting at night to ensure the safety of staff on board the vessel. Lighting will be kept to a minimum.

How long will the barge be there?

The jack-up barge is scheduled to arrive in September 2010, weather permitting, and will be in place for around six months until construction is complete.

Will you be closing Williamsons Beach?

No. Williamsons Beach will remain open for public enjoyment at all times during construction.

Further reading

- Marine Structures and Underground Tunnels Fact Sheet.
- Understanding the Marine Environment Fact Sheet.
- Tunnel Boring Machine Fact Sheet.



Will there be a marine exclusion zone during construction?

Yes.

As required by Transport Safety Victoria, a marine exclusion zone will be in place around the jack-up barge at all times, marked by safety buoys.

This is to ensure the safety of the marine crew and members of the public.

The Marine Exclusion Zone Fact Sheet provides more information.

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