

DESAL SPOTLIGHT

October 2010

There are now more than 3000 people at work on the Victorian Desalination Project, which actually comprises five projects in one.

The desalination plant, underground tunnels, marine structures, transfer pipeline and underground power supply are all significant projects in themselves.

Construction has commenced on all 29 buildings that make up the desalination plant and installation of mechanical process components is proceeding rapidly.

Meanwhile, deep underground, 'Wonthaggi Maggie' the tunnel boring machine has completed more than 70 per cent of the 1.2km intake tunnel and 'Rocking Ruby' has completed around half of the 1.5km outlet tunnel.

Out on the water, an offshore work platform called a 'jack-up barge' has arrived from Rotterdam and taken up its first work position around a kilometre off Williamsons Beach.

The jack-up barge is a 55 x 32 metre mobile, offshore work platform from which marine structures will be installed.

Two intake structures will draw seawater into the desalination plant, while two outlet structures will return seawater concentrate at the end of the desalination process.

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

The barge is equipped with a pile top rig, a 300-tonne crane, a helicopter pad and accommodation for up to 60 workers, with sleeping quarters, canteen and a small gym and recreation area.

The barge has four 75-metre long self-elevating legs that can be raised or lowered so that it can be transported. The legs are jacked up to move the barge around, and jacked down to the seabed when it is ready to stand in position, allowing the work platform to sit above the water.

Construction and installation of the marine structures will take around six months. The seawater intake structures will be installed first, then the barge will be repositioned to allow installation of the outlet structures.

Members of the community may notice the offshore support vessel, UOS Discovery, delivering the intake structures, outlet structures and associated risers to the jack-up barge.

The structures are being manufactured in Tasmania and the risers in Geelong.

The 300-tonne crane on board the jack-up barge will lift the structures and risers from the deck of UOS Discovery and onto the jack-up barge, ready for installation.

As required by Transport Safety Victoria, a temporary marine exclusion zone is now in place around the jack-up barge.

It will remain in place at all times during construction, simply to create a safe boundary between the activities being undertaken on the barge, and other people and boats out on the water.

The marine exclusion zone is marked by six safety buoys, which are clearly visible both day and night. You can check out the marine exclusion zone co-ordinates here [<hyperlink to MEZ gazette on AquaSure website>](#).

The barge and marine exclusion zone are well offshore, and Williamsons Beach will remain open for public enjoyment at all times during construction.