

COMMUNITY UPDATE

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WELCOME

Thiess Degrémont recently celebrated the first samples of drinking water entering the pipeline as part of the final stages of commissioning.

This means the plant is producing drinking water that meets the strict quality guidelines. Read more about this achievement on page 2 of this update.

Since construction began, there have been considerable employment opportunities available to the community with local employment peaking at 35% of our workers.

The project has provided the motivation and confidence to local job seekers and the long term unemployed to up skill or formalise their training so they could gain employment*.

From the project's perspective, it is rewarding to see many locals gain new skills that can now be utilised to benefit the local community.

There are now only 600 people working at the plant site compared to the peak during September 2011 of 3672.

At the plant site, there has been a reduction in the amount of lighting required at night. Once construction is complete and the plant is handed over to the operations and maintenance team, only minimal external security lighting will be in place.



Along the utilities corridor, final reinstatement works of the easement and designated haulage roads are nearing completion.

We are now in the final stages of construction and commissioning activities. See how much progress has been achieved on page 7.

We hope you enjoy Edition 10 of the Community Update.

* Information provided by Employment Innovations Victoria, Wonthaggi

DRINKING WATER ENTERS PIPELINE

Drinking water from the Victorian Desalination Plant has now started to flow into the 84km underground water transfer pipeline that connects to Cardinia Reservoir.

This is a significant commissioning milestone for the project and confirms that the plant is now producing high quality water.

The amount of water produced will increase as commissioning continues.

The commissioning process ensures that high quality drinking water is produced and meets the specifications of Australian Drinking Water Guidelines and the contract requirements before it leaves the plant.

The water that has entered the pipeline has met these requirements and is being transferred to Cardinia Reservoir as part of the commissioning process.

The plant is expected to be at full capacity by the end of the year.

READY TO DELIVER

Seven water delivery points along the 84 km underground water transfer pipeline will connect communities to water from the desalination plant.

Construction of all the delivery points is complete with only minor landscaping works remaining.

Each delivery point contains the technology that enables water to be delivered to water authorities as well as the equipment which monitors water quality.

The pipeline was designed so water can be delivered in both directions. This means that if the desalination plant is not pumping water, water can be supplied under gravity from Cardinia Reservoir to water authorities connected to the pipeline via the seven delivery points.

Each delivery point has undergone commissioning, involving the testing and verification of all electrical and instrumentation components as well as water quality analysis equipment.

Commissioning tests also involved simulating faults to ensure all safety measures and alarms would be successfully activated.

The fibre optic cable that has been installed in the pipeline easement enables the delivery points to be operated remotely from a central control room at the desalination plant.

Although their day to day functions are operated remotely, the delivery points will be accessed by staff to undertake routine testing and maintenance.



The Victorian Desalination Plant is a State asset for the long term. It will produce high quality water to help meet the needs of the people of Victoria whenever required, a resource that will be valued in times of future drought.

DID YOU KNOW?

Capable of carrying up to 150 billion litres of water annually if required, the underground pipeline will connect regional communities to drinking water from Cardinia Reservoir or the desalination plant via delivery points along the pipeline. Local water authorities will have a connection to these delivery points to use if they choose to. These delivery points are closed during commissioning, but will be available during operations.

Background image supplied courtesy of Melbourne Water

ECOLOGICAL RESERVE UPDATE

Work on the 225 hectare ecological reserve surrounding the desalination plant is now well underway. It is one of the largest ecological restoration projects ever undertaken in Victoria.

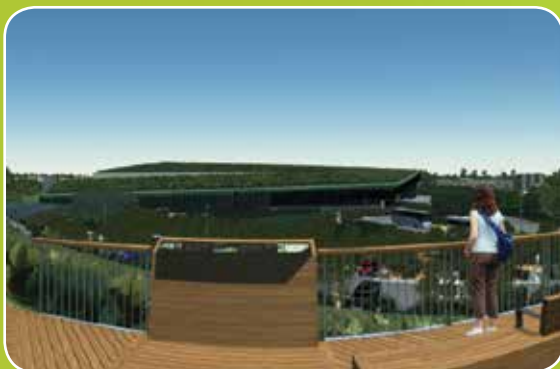
The vision for the project is built on the philosophy to integrate ecology, landscape, architecture and technology – merging all elements into one of the most significant design projects in Australia.

Revegetation work is scheduled to be finished by the end of 2013 and it is expected the reserve will be open to the public soon after that. Naturally it will take some time for the plants to establish themselves but once fully established the reserve will include wetlands, woodland, coastal heath landscapes, new habitat for flora and fauna and a network of paths for cyclists, pedestrians and horseriders.

VIEWING PLATFORMS, BOARDWALKS AND TRAILS

Two viewing platforms will be constructed to provide vantage points for visitors to view the desalination plant and ecological reserve.

Elevated timber boardwalks and an 8km network of walking, cycling and horse riding trails will also be constructed connecting visitors to the many different areas of the ecological reserve. Along the way, interpretive signage will provide information about the operation of the plant, ecological reserve, existing land morphology and local coal mining history.



GREEN LINE

The 'green line' is the architectural concept integrating the built form with the landscape - connecting the Administration and Reverse Osmosis buildings to the constructed dune system.

Construction of the dunes that form the basis of the 'green line' is complete and they have recently been revegetated.

Did You Know?

The ecological reserve will feature 100% indigenous species and contain no exotic plants. All non-indigenous species are being progressively removed and management systems will be in place to maintain the ecological integrity of the reserve.

PICNIC SHELTER

A centrally located picnic shelter and public amenities will be a meeting point for visitors to the ecological reserve.



WETLANDS AND BIRD HIDE

An existing tributary to the Powlett River has been rehabilitated and forms the main wetland within the ecological reserve. A bird hide is under construction within this wetland for the enjoyment of bird watchers and ornithologists to observe wildlife in their natural environment.

In addition, a number of old farm dams have also been rehabilitated and established as points of interest along the walking trails while also increasing habitat for animals and migratory birds.



ENTRY VALLEY

The entry valley will be a beautifully designed landscape, aimed to enhance the experience of visitors driving and walking through it.

Over 200,000 plants will form open woodland showcasing the local indigenous tree and grass species.

The feature gravel bands consisting of red scoria, light grey and black basalt are a symbolic representation of Wonthaggi's coal mining history.

"Minimising the visual impact of the plant was a key community concern when the project was announced. Now that the construction is almost complete, it is remarkable to see just how well it blends into the landscape. The coastal park created around the plant is an asset for our community."

Cr Veronica Dowman,
Mayor, Bass Coast Shire Council

ENVIRONMENTAL MANAGEMENT

The ongoing environmental management of the desalination plant has been of interest to the community since the project was announced in June 2007.

The Operation and Maintenance Environmental Management Plan (O&M EMP) was consented to by the Minister for Environment and Climate Change on 30 August 2012.

The O&M EMP governs the environmental requirements for the operation of the desalination plant over the next 27 years. The plan is now available to view on AquaSure’s website.

The Victorian Desalination Project has been through an extensive environmental assessment process under both State and Commonwealth laws. Strict environmental standards have been adopted in the O&M EMP to achieve best practise.

Reverse osmosis technology utilised at this plant is state of the art. Extensively employed around the globe, its performance and minimal impact on the environment have been proven to provide a reliable source of drinking water.

AquaSure’s commitment to Victoria is to deliver the most technically advanced, environmentally sensitive and energy efficient desalination facility in Australia. The O&M EMP is one way in which this commitment is demonstrated.



PROGRESS CHECKLIST

- ✓ 1.2km underground intake tunnel complete and filled with seawater
- ✓ 1.5km underground outlet tunnel complete and filled with seawater
- ✓ Marine structures that connect to intake and outlet tunnels complete
- ✓ 84km underground water transfer pipeline complete and hydrotested
- ✓ Seven delivery points complete, commissioned and ready to deliver water
- ✓ Surge tanks and booster pump station complete, commissioned and ready to operate
- ✓ 87km underground 220 kV HVAC power supply complete, energised and handed over to SP AusNet for operation
- ✓ Two power compensation stations complete, energised and handed over to SP AusNet for operation
- ✓ Largest green roof in the southern hemisphere on reverse osmosis building complete
- ✓ Over 55,000 reverse osmosis membranes installed
- ✓ Environmental regulatory approvals in place for commissioning activities
- ✓ First sample of drinking water produced
- ✓ Stream 1 of desalination plant commissioned and plant is now operating at 1/3 capacity
- ✓ Drinking water entering pipeline

FINAL STAGES

- ☐ Complete commissioning of stream 2 and 3 of desalination plant
- ☐ Reliability testing of plant operating at full capacity

DESAL TRAILER MAKES HISTORY

The community relations team recently prepared the project’s mobile Community Information Centre for demobilisation as construction nears completion.

Over the last three years, the team has taken the custom built trailer out to the local community keeping it informed about the progress of the project. The team has engaged with over 6,500 visitors at local events with the help of the trailer.

As part of the project’s demobilisation, the trailer has been donated to proud new owners - the Wonthaggi and District Historical Society.

The society will now take over the reins utilising the trailer to better facilitate their activities promoting and educating the community about Wonthaggi’s history.

Redesigning of the trailer is currently underway and will be financially supported by Thiess Degremont.

Wonthaggi and District Historical Society operates a museum at the old railway station near Safeway and visits local schools, attends community events and participates in various community activities.

For more information visit wonthaggihistoricalsociety.org.au



Photos: Volunteers from the society at work removing the old graphics from the trailer

BIG CHEQUE FOR LOCAL REVEGETATION GROUP



A major ecological restoration project by a local group has recently begun right next door to the desalination plant site.

The Friends of the Wonthaggi Heathland and Coastal Reserve Group is restoring a 16 hectare block of vacant crown land that has been heavily grazed and cleared of native vegetation over the years.

The project has been supported by the Wonthaggi Seed Bank, Friends of the State Coal Mine, South Gippsland Conservation Society, Cape Paterson Coastal Plains Landcare, Wonthaggi Urban Landcare, Bass Coast Shire Council and Parks

Victoria because of its broad benefits to the community and natural environment. The group has extensive experience in local revegetation and rehabilitation projects.

The group's initiative to restore the parcel of land will complement the new 225 hectare ecological reserve being developed on the desalination plant site.

The Department of Sustainability and Environment, AquaSure and Thies Degremont were proud to hand over a cheque for \$56,100 to support this restoration project.

The Victorian Desalination Project Community Update is a quarterly publication designed to keep you informed of the latest project news and progress.

You can download copies of this newsletter from our website or pick up a copy from the Community Information Centre.

CONTACT US

Visit the Victorian Desalination Project Community Information Centre 33–35 Murray St, Wonthaggi
Opening hours: Wednesday–Friday 9.30am–4.30pm



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