

# COMMUNITY UPDATE

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## WELCOME

It's just over eight months since construction began on Victoria's new desalination plant, and the project is on track to deliver water by December 2011.

Since being awarded the contract to deliver the \$3.5 billion Victorian Desalination Project in July 2009, AquaSure and its design and construction contractor Thiess Degrémont have wasted no time in getting down to business.

"We are committed to making this the most technically advanced, environmentally sensitive and energy efficient desalination facility in Australia and we are well on our way to achieving these goals," said AquaSure CEO, Chris Herbert.

"Not only has the project succeeded in gaining full financial backing in a difficult economic climate, but construction progress on both the desalination plant site and the pipeline corridor during this time has been quite extraordinary."

The Victorian Desalination Project involves construction of a reverse osmosis plant, associated marine

tunnels and structures and the building of an 84km long transfer pipeline and an 87km underground powerline to supply power to the plant.

When complete, the desalination plant will be the largest in Australia, capable of supplying up to 150 billion litres of rainfall independent water per year to Melbourne and regional communities.

Thiess Degrémont Project Director Greg Miller said that while the scale of the project presented a challenge, significant progress had already been made.

"Bulk earthworks on the plant site are now 92% complete and foundations for the main reverse osmosis and pre-treatment buildings are well underway.

"The first sections of the transfer pipeline were laid at the start of February and clearing and grading works along the easement are now more than 70% complete.

"Most importantly, we are working with local communities at every opportunity to minimise impacts during construction and to ensure the environment is protected."



# VICTORIA'S NEW DESALINATION PLANT TAKES SHAPE

Work commenced on the desalination plant site at the end of September 2009. In just over eight months, the site has been transformed. Let's take a look at some of the key achievements.

## REVERSE OSMOSIS BUILDING

Foundations nearing completion on the reverse osmosis building, where seawater will be pushed through more than 55,000 super-fine membranes to separate salt and water molecules.

## SITE OFFICES

More than 60 temporary site buildings are now in place for staff, including canteens and facilities for the site's own medical team – a doctor, industrial paramedics and emergency response team.

## TEMPORARY CARPARK

Parking for 800 cars during construction is now complete on site.

## PRE-TREATMENT BUILDINGS

Hundreds of concrete piles have been driven into the ground to provide structural support for the pre-treatment buildings, where sand and sediment will be filtered out of seawater.

## EARTHWORKS

A huge earthmoving effort has seen almost 1.3 million cubic metres of earth excavated, almost enough to fill the MCG! Everything has been kept on site to create new dunes.

## BOX CUT

Excavation of the 27 metre deep 'box cut' is nearly complete, to provide a launching pad for boring machines that will tunnel under the dunes and out to sea.







### DUNES

Soil excavated during construction has been retained on site and used to construct dunes that will surround the plant. They range between 6 and 12 metres high and will minimise noise and visual impacts.

### PERMANENT ACCESS ROAD

A new access road has been built, allowing vehicles to safely access the site without having to travel through construction areas. The road also provides emergency access for residents living on Mouth of Powlett Road.

### RUMBLE GRID

A rumble grid and wheel wash has been built on site, one of many environmental controls in place on the project. All trucks pass through the wash to remove dust, dirt and mud from their tyres before leaving the site.

### STRUCTURAL STEEL

The 2500-tonne structural steel frame is now being erected on site.

The frame comprises 70 'bracing bays', each weighing around 16 tonnes and stand 16 metres high and 11 metres wide.

The structural steel is being supplied by OneSteel from Noble Park and fabricated by Page Steel from Derrimut.



### UNDERGROUND PIPING

Glass reinforced plastic pipe, up to 2.5 metres in diameter, is being installed to move filtrated water throughout the plant site. Pipe sections are laminated together in a specially constructed 'igloo' on site.





## A WATCHFUL EYE ON THE ENVIRONMENT



Minimising impacts to the environment is a key objective for the Victorian Desalination Project.

An Environmental Management System (EMS) and Environmental Management Plans (EMPs) have been developed for the project, providing a framework for effective and professional management of a wide range of environmental issues, from flora and fauna to air quality.

The EMPs are implemented by a specialist team of environmental personnel based at the desalination plant and along the pipeline and power alignment. These teams form an important part of the construction team, helping to ensure environmental impacts are minimised during day to day construction activities.

AquaSure's Environmental Management Representative serves as the environmental leader for the project and ensures that all work is carried out in compliance with the EMS and EMPs.

Supporting this role, for the first time on a major project in Victoria, is an Independent Reviewer and Environmental Auditor (IR &EA).

The IR&EA is responsible for overseeing the construction and operation of the desalination plant, conducting monitoring, reviewing performance and carrying out environmental audits to ensure that AquaSure and its contractors have complied with environmental requirements and environmental management plans.

The IR&EA will continue to oversee environmental performance when the plant begins operating in December 2011.

Other organisations, such as the Victorian Environment Protection Authority (EPA), are involved in the approval and monitoring of environmental management.

*Above and below:  
Strict environmental monitoring and controls are in place to protect the environment during the construction and operation of the desalination plant.*



### DID YOU KNOW?

The Victorian Desalination Project is subject to stringent environmental performance requirements.

The project must comply with 221 strict environmental performance requirements across 38 areas including flora and fauna, waterways and wetlands, cultural and historical heritage, waste management, acid sulphate soils, resource efficiency, visual amenity and social and economic impacts.

Details of the environmental performance requirements can be found in the project's Environmental Management Plan (EMP) which is available from our website or pick up a copy from the Community Information Centre in Wonthaggi.





## MEETING THE TRAFFIC CHALLENGE

Traffic management is an important issue on the project, requiring careful planning to minimise the impact of increased construction traffic on local communities.

A Traffic Management Liaison Group has been established to look at ways of minimising traffic impacts on local areas during construction.

One of the group's key roles is to exchange information about any upcoming construction works that are likely to have traffic impacts for the community and to plan

and implement mitigation strategies to ensure that any impacts are minimised.

The group meets regularly and comprises representatives from Bass Coast, Cardinia and Casey Councils, VicRoads, Victoria Police, DSE, AquaSure and the construction contractors.

**Check out our website to stay up to date with the latest traffic news in your area.**



*Photo courtesy Kailash Willis and Ecology Partners Pty Ltd*

*Hooded Plover chicks head out for a stroll on Williamsons Beach.*

## PARTNERSHIP BREEDS SUCCESS FOR HOODED PLOVERS

Four hooded plover chicks born on Williamsons Beach this year are now old enough to fly. Three were born from the one nest – a very rare story of survival.

As few as 400 hooded plovers remain in Victoria, with populations continuing to decline due to low breeding success and availability of habitat.

Last year 335 chicks hatched across the state, but only 10% survived to fledge – that is, old enough to fly.

Plovers nest on the beach, often on the sand just metres above the high-tide mark. Their nests can be washed away, or their eggs and chicks can be stolen by hungry foxes, cats and other scavengers. Dogs and humans can disturb the nests or they can be accidentally crushed by vehicles, walkers and horse riders.

The Bass Coast Friends of the Hooded Plover have been helping the construction team identify and protect nests with fencing and signage.



# BENEFITS FLOW TO VICTORIAN BUSINESSES

The biggest infrastructure project in the state's history, the Victorian Desalination Project will source around \$1.3 billion worth of goods and services during construction. Let's take a look at some of the businesses, big and small, playing a role in this landmark project.

## BAKING UP A STORM IN WONTHAGGI



Increased demand for pies, sausage rolls, chocolate éclairs and bread rolls are just some of the flow-on effects being felt by Connells Bakery in Wonthaggi.

As a long standing local business, the bakery has noticed a surge in demand for their products since work commenced at the desalination plant site.

"We expanded our premises before Christmas and have since been

employing more staff to keep up with the daily orders we receive from site as well as the catering requirements of both the community information centre and the site itself," said store managers Dee and Brad Connell.

In addition to enjoying more customers coming through the door, Connells also supply around 500 bread rolls per week to the on-site canteen. They expect this figure to double when two more canteens open later in the year.

## STEEL DEAL REINFORCES LOCAL COMPANIES



More than \$24 million in steel contracts have been awarded to Victorian companies.

One of them is Page Steel from Derrimut, awarded a \$7 million contract to fabricate, galvanise and install around 2,500 tonnes of structural steel frame for the project.

The contract will keep the company so busy for the next four months that they have hired 20 new staff and they will also offer additional training for some of their existing staff.

Lynne Piacentini, Director of Page Steel, said filling the contract for Australia's biggest desalination plant would bring positive changes for the company.

"Our factory will be flat out for the next four months, focused solely on this order," she said. "We're hiring about 20 new staff and our existing staff will also be undertaking advanced quality assurance and quality control training, which will give us a greater competitive advantage on future jobs."

## KEEPING PROPERTIES CONNECTED

Reece Irrigation Pakenham is one local supplier lending support to the construction of the pipeline and underground power supply.

During grading and topsoil removal, work crews often come across water and irrigation pipes which must be relocated or modified in order to ensure all existing services to the property are maintained.

Reece regularly supplies materials and fittings at short notice, helping the work crews to maintain water supplies and minimise disruption to neighbours adjacent to the pipe and power corridor.

Dan Hyland, Reece Irrigation Pakenham Manager, said he was pleased to be involved with the project.

"Our large network of branches and wide range of materials ensures we can provide all the supplies needed as part of the project. Plus, our rapid delivery service ensures that urgent supplies are available on site when and where they are needed."





## POWERING UP VICTORIAN INDUSTRY

Tottenham based power manufacturer Olex will supply \$43 million worth of high voltage underground power cable for the project.

The cable will carry electricity for 87 km, connecting the reverse osmosis plant to the existing grid at Cranbourne.

Thiess Degremont Project Director Greg Miller said he was pleased to be able to award such a significant contract to a Victorian company.

“We’re committed to local industry involvement on this project and we’re very proud to have more outstanding Victorian companies join our team of suppliers – it’s a testament to how competitive the Victorian industry is and the quality of the product and service available in our own backyard.

Most importantly, buying local helps to ensure that jobs and economic benefits associated with this project stay in the region.”

## SUPPORTING VICTORIAN INDUSTRY

Here’s a snapshot of some of the Victorian companies supplying goods and services to the Victorian Desalination Project.

COMPANY	DESCRIPTION OF GOODS/WORKS	LOCATION OF COMPANY	CONTRACT VALUE
Tyco Water	Pipe supply	Coolaroo, VIC	\$150 million
Olex Australia	Underground power cable supply	Tottenham, VIC	\$43 million
Alfasi	Steel racks	Dandenong, VIC	\$36 million
Barro/Donmix Joint Venture	Concrete supply	Melbourne/Wonthaggi, VIC	\$17 million
OneSteel Reinforcing	Reinforcing steel	Noble Park, VIC	\$14 million
RTL	Bulk earthworks	Morwell, VIC	\$10 million
Page Steel	Structural steel fabrication	Derrimut, VIC	\$7 million
Wilson Transformer Company	Power transformers	Glen Waverley, VIC	\$5.6 million
OneSteel Steel & Tube	Structural steel supply	Scoresby, VIC	\$3 million
Geotech	Shotcrete and soil nails	Tullamarine, VIC	\$1.8 million
Vibro-Pile Australia	Piling works	Mount Waverley, VIC	\$1.2 million



# IT'S IN THE PIPELINE

## *PIPELINE FAST FACTS*

- Pipeline is 84km long
- Capable of transporting up to 200 billion litres of water per year if required
- Pipeline made up of more than 6200 lengths of pipe
- Each pipe 1.93 metres in diameter, 13.5 metres long and weighing around 13 tonnes
- 80,000 tonnes of pipe delivered to date
- Pipeline will cross 36 roads, including 11 major roads
- More than 13km of pipe laid
- Pipes supplied by Victorian firm Tyco Water, using Bluescope Steel
- Total value of pipes \$150 million



## INSIDE A ROAD CROSSING

One of the challenges of laying an 84 kilometre pipeline is to complete a number of road crossings safely and with minimal impact to the environment and community.

The transfer pipeline will pass through 36 roads, including 11 major road crossings, as it makes its way from the desalination plant site near Wonthaggi to Cardinia Reservoir.

These crossings require detailed planning and care to minimise impacts to the surrounding environment and community.

Six road crossings have been completed on the pipeline so far, including two road crossings at Pound Road in Berwick and a crossing at Cardinia Road in Cardinia.

This major task involves closing the road temporarily, digging a four metre wide trench, laying the pipe and then backfilling the trench and reinstating the road to its original condition.

Thiess Degrémont Nacap Project Director, Jason Spears, said the road crossings presented an additional challenge for construction teams.

"The crews need to work extremely quickly and efficiently to get the job completed and the roads re-opened, without any compromise to safety or quality," Mr Spears said.

"We also have to develop a comprehensive traffic management plan in advance, including setting up any traffic diversions and road closures and advising the local community of any changes to existing traffic conditions."

### INSIDE THE CARDINIA ROAD CROSSING

- Photo 1 Workers start digging trench
- Photo 2 Pipe is lowered into place
- Photo 3 Pipe sections are welded together
- Photo 4 Trench is backfilled and road reinstated.







*Some of the first local recruits start work at the plant site.*

## WELCOME TO THE WORKFORCE

A strong contingent of locals is among the workforce building Victoria's new desalination plant.

After advertising labour and trade jobs for the first time in November last year, Thiess Degrémont received an unprecedented 14,500 employment applications, with strong interest from locals.

Thiess Degrémont Project Director Greg Miller said the company was overwhelmed with the response. "I've said it before – if you work in construction, this is the project to be on. I'm particularly pleased that so many locals want to join us and be part of it," said Mr Miller.

Workforce recruitment is now well underway and more than a quarter of the 1500 workers Thiess Degrémont needs on the plant site have now started work. Among them is well-known Wonthaggi local, Peter Liddle.

After five years working overseas, missing family and friends, Peter now works ten minutes up the road as site supervisor, bringing to the project his extensive experience in materials co-ordination and logistics.

He is responsible for ensuring that all equipment and supplies delivered to the plant site are accounted for and available when needed on different areas of the site.

"The main attraction with this job was the opportunity to spend much more time at home," Peter said. "But I am also really enjoying the challenge that the project presents."

Thiess Degrémont will continue interviewing, with recruitment continuing to ramp up until the workforce reaches its peak around November this year.

## DESALINATION WORKERS HOUSED ACCORDINGLY



Accommodating the workforce, while maintaining the availability and affordability of long-term rental properties and tourist accommodation, is a key challenge during construction.

The Government required AquaSure to develop an accommodation strategy to ensure the project has a positive impact on the local community and economy.

The Victorian Desalination Project Housing Accord has been developed by Bass Coast Shire Council, Thiess Degrémont and local real estate agents to help achieve this goal.

It provides desalination workers with an entirely new and exclusive accommodation option – holiday homes and properties that have never been rented before.

More than 450 properties are now listed on a dedicated workforce housing website.

Thiess Degrémont Accommodation Manager Robyn Hayes said workers were finding it an easy and straightforward way to source local rental accommodation.

"Workers are very keen to do the right thing by the community," said Ms Hayes.

"We have processes and strategies in place to inform and encourage our employees and subcontractors to only consider rental properties from the Accord."

*Team member Nicola moves into one of more than 450 homes now listed on the Housing Accord.*



## COMMUNITY LIAISON GROUP VISITS PLANT SITE



The Victorian Desalination Project Community Liaison Group (CLG) visited the desalination plant site recently to inspect progress first hand.

Members were impressed by the rapid rate of activity and the excellent safety record on site.

"I've seen this site go from a paddock to where it is today – I can't get over the sheer magnitude and scale of the project and the amount of progress that's been achieved so far," said Neville Goodwin, Bass Coast community representative.

The Community Liaison Group was established by the Department of Sustainability and Environment (DSE) as a forum to address key community issues or concerns about the project, provide feedback to members of the group and to seek community input to project issues where possible.

The group has grown out of the Council Liaison Group, which met regularly from the start of the project.

The CLG is run by an Independent Chair, John Nicol, and comprises representatives from Bass Coast, Casey and Cardinia councils, community representatives from these municipalities, AquaSure, Thiess Degrémont and DSE.

Former Bass Coast Shire Mayor, Neville Goodwin, and current Victorian Farmers Federation (VFF) Cardinia Branch President, Ian Anderson, represent the communities of Bass Coast and Cardinia Shires respectively, while Cr Geoff Ablett is the community representative for the City of Casey.

### CONTACT YOUR CLG REPRESENTATIVE

Bass Coast Shire – Mr Neville Goodwin  
[goodwin@aussiebroadband.com.au](mailto:goodwin@aussiebroadband.com.au)

Cardinia Shire – Mr Ian Anderson  
[anviewi@dcsi.net.au](mailto:anviewi@dcsi.net.au)

City of Casey – Cr Geoff Ablett  
[gablett@casey.vic.gov.au](mailto:gablett@casey.vic.gov.au)

To view the minutes of CLG meetings visit:  
[www.ourwater.vic.gov.au/desalination](http://www.ourwater.vic.gov.au/desalination)

## PARKING PIPE WORKERS

Lang Lang Showgrounds and Recreation Reserves at Koo Wee Rup, Glen Forbes and Grantville are set to benefit from the desalination project after entering into agreements to provide parking for pipeline construction workers.

The arrangements will see pipeline workers parking at these venues and travelling to work by bus, helping to minimise traffic and parking impacts on the local areas.

In return, construction crews will undertake a range of upgrade and improvement works at each of the three community facilities.

Discussions are now underway at various other locations along the pipeline to secure more parking locations.





## VISIT OUR NEW COMMUNITY INFORMATION CENTRE!

Visitors to Wonthaggi have access to a new community information centre. The purpose built facility features a wide range of project information, photos and interactive displays, including a theatrette for community presentations. The centre is also wheelchair accessible.

The centre is located at Shop 2, 33–35 Murray Street, Wonthaggi (next to Connell's Bakery).

Opening hours are Tuesday to Friday 9.30am to 4.30pm and Saturday 9am to 12pm.

Also keep any eye out for our mobile information facility that will tour events and festivals in the region over the coming months.



The Victorian Desalination Project Community Update is a quarterly publication designed to keep you informed of the latest project news and progress as we construct the desalination plant that will help to secure Victoria's water future.

You can download the latest edition of this newsletter from our website, pick up a copy from the Community Information Centre or register your details below.

## REGISTER FOR PROJECT INFORMATION

If you would like to receive information about the Victorian Desalination Project, please complete the form below and return to: AquaSure C/o PO Box 7387 St Kilda Rd Melbourne VIC 8004.

NAME

ADDRESS

EMAIL

For information on our privacy policy, visit [www.aquasure.com.au](http://www.aquasure.com.au)

## CONTACT US

Visit the Victorian Desalination Project Community Information Centre 33–35 Murray St, Wonthaggi  
Opening hours: Tuesday–Friday 9.30am–4.30pm, Saturday 9am–12pm.



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