

# **Appendix I** – Stakeholder consultation materials



Hunter Water Corporation  
ABN 46 228 513 446

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Thursday, 2 August 2018

Our Ref: 2219308-81400

President  
Belmont Residents Action Group

## **Investigation work on site: Planning for a Temporary Desalination Plant at Belmont**

As you may be aware, Hunter Water is seeking planning approval for the possible construction of a temporary desalination plant at Belmont. This temporary plant is our insurance policy in a worst case scenario if the Hunter reached critical water storage levels in unprecedented drought conditions. The plant would only be built after a suite of water saving, drought response measures were introduced across the Hunter.

This letter is to let you know about some investigation works that will soon be occurring on the proposed site at Belmont, on Hunter Water land, next to the Waste Water Treatment Works (WWTW) including the dunes and down to the water's edge. Hunter Water is planning to drill bore holes and undertake geotechnical surveys to investigate subsurface conditions. Environmental investigations will also be undertaken as well as reviewing existing power and water connections.

This work is expected to commence in August and will be undertaken by Hunter Water's contractor GHD. Given the significance of this project, testing will be ongoing over the next eight to ten months as we prepare an Environmental Impact Assessment for the Department of Planning.

During the work you may notice the drilling rig and vehicles onsite, however the work should not result in excessive dust or noise. An important aim of all Hunter Water projects is to minimise any inconvenience to the community, businesses and customers.

### **Access to Nine Mile Beach**

Hunter Water will not be restricting access to Nine Mile Beach. The work on Nine Mile Beach is expected to take place over a four day period, on weekdays, between 7:00 am and 5:00 pm. Beach users will need to take appropriate care and are asked to stay clear of testing sites. All sites will be clearly sign posted and bore holes will be protected by screens to prevent damage.

The site plan, attached, shows the current planned location of test sites including the sand dunes.

## **Your Voice**

Hunter Water is committed to open, ongoing engagement with the community about plans for the desalination plant and our drought response measures. Our Your Voice webpage is an opportunity for members of our community to give Hunter Water feedback on plans for the temporary desalination plant as we go through the planning stages. To sign up to Your Voice, and receive project updates, visit [www.yourvoice.hunterwater.com.au](http://www.yourvoice.hunterwater.com.au).

## **For more information**

If you have any questions about this work please call 1800 066 243 or email [tempdesal@hunterwater.com.au](mailto:tempdesal@hunterwater.com.au).

Yours Sincerely

## **Project Manager**

Attachment – Site Plan

## Site plan and proposed testing locations





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Community Liaison  
Officer Belmont Police

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Attachment – Site Plan



## Site plan and proposed testing locations



# Belmont Temporary Desalination Plant



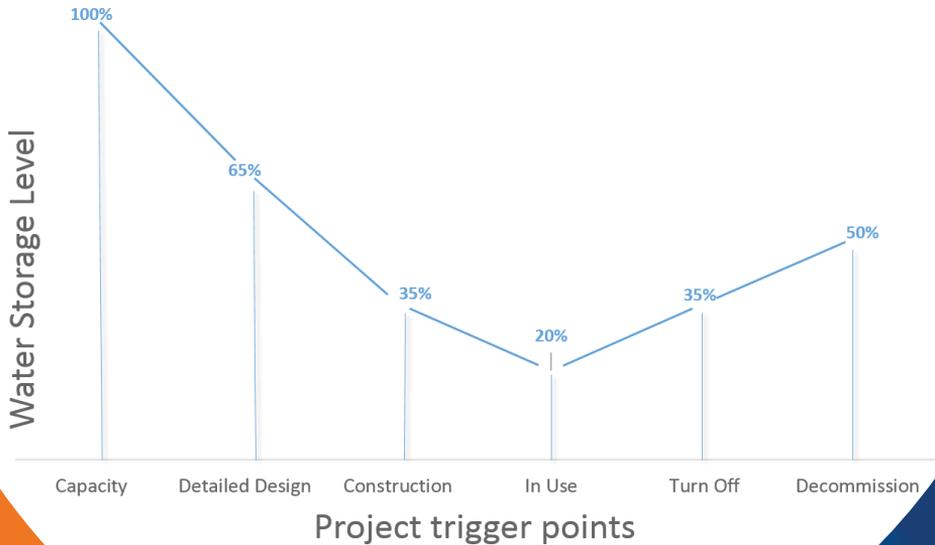
Artist's impression  
Not to scale

Belmont Waste  
Water Treatment  
Works

Proposed site  
of temporary  
desalination plant.

9 Mile Beach





## Have your say

A temporary desalination plant is our insurance policy against unprecedented drought conditions.

Temporary desalination was included in the Lower Hunter Water Plan as a last resort measure to secure our water supply against drought.

Hunter Water is obtaining planning approvals and conducting environmental assessments now so we have everything in place if, or when, we need to build the plant.

[www.yourvoice.hunterwater.com.au](http://www.yourvoice.hunterwater.com.au)

[tempdesal@hunterwater.com.au](mailto:tempdesal@hunterwater.com.au)

1800 066 243



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Friday, 20 July 2018

Our Ref: 2219573-1421

Ausgrid  
Area Management - Newcastle  
PO Box 487  
Wallsend, NSW, 2300

Dear Sir/Madam,

## **Belmont Temporary Desalination Plant ~ Invitation to Comment**

Hunter Water is seeking planning approval for the possible construction of a temporary desalination plant at Belmont adjacent to the existing Belmont Waste Water Treatment Works (WWTW).

The temporary desalination plant forms part of the Lower Hunter Water Plan adopted by the NSW Government in 2014. Planning for a temporary desalination plant at Belmont will help provide the Lower Hunter community with a climate independent source of potable water as part of an emergency drought response for a very extreme (rare) drought.

Hunter Water has engaged consultants GHD Pty Ltd to prepare a Concept Design and Environmental Impact Statement for the temporary desalination plant in support of planning approval.

In the event of a severe drought, plans for the construction of a temporary desalination plant include:

- **Temporary Desalination Plant** – the proposed plant will be located on a generally level area south of the existing Belmont WWTW. The proposed temporary desalination plant will consist of pre-filtration, ultra-filtration and reverse osmosis containers, tanks, range of pumps and blowers, chemical dosing facility, access tracks and fences.
- **Seawater Intakes** – most likely this will comprise a series of horizontal bores buried several metres below the sand level. Subject to investigation, the bores could extend beyond the sand dunes and will be located within the salt-water zone. Pumps will deliver sea water to the plant.
- **Pipelines** – treated potable water will be delivered to the water reticulation network (refer to figure). This will involve trenched pipelines with some trenchless sections.
- **Power** – supply of power to the facility is being investigated, but may include a mix of onsite generators, high voltage power lines (refer to figure), photovoltaic cells and/or battery systems.
- **Brine** – wastewater from the temporary desalination plant will be discharged through the existing 1.8 km long outfall at the adjacent WWTW.

The Temporary Desalination Plant will only be constructed if Hunter Water's total water storage levels falls to 35%. The plant would be decommissioned when the storage levels recover to 50%. In the event that storages drop to this level, modelling of an extreme drought prepared during for Lower Hunter Water Plan indicated that the facility may operate for periods of up to 1 year, and be on standby for up to 2 years prior to decommissioning. The seawater intakes, pipelines and power supply will remain as permanent infrastructure once constructed, however the desalination plant itself may be demobilised.

Under the State Environmental Planning Policy (SEPP) (State and Regional Development) 2011, development for desalination plants by, or on behalf of a public authority, greater than \$10 million are considered State Significant Infrastructure and requires an Environmental Impact Statement to be prepared for consideration and approval by the Minister for Planning or their delegate. Hunter Water has obtained the Secretary's Environmental Assessment Requirements (SEARS) for the project on 24 January 2017 (Application Number SSI 8896).

The proposed works comprise the following key activities:

- An intake structure, consisting of horizontal bores emanating from a pump well structure, will be constructed behind the dunes. They may be installed either via trenching or trenchless methods subject to the required length determined from investigation. Feed pumps will be installed in the intake structure. Once installed, this will be a permanent structure.
- It is proposed that the desalination plant would be installed south of the existing WWTW. This area was previously used for sludge ponds so the area will need to be regraded and possibly raised to the required level. A hardstand area will be provided that is likely to comprise a mixture of gravel and sealed areas. Pipework and power for the treatment system may be installed underground, and the plant componentry delivered to site and commissioned. Once installed, portions of this facility may be decommissioned and removed from site until needed again.
- Trenched installation of brine pipelines will be adjacent to existing tracks and infrastructure areas around the WWTW. The pipelines will be in the order of 300mm to 450mm in diameter. Portions of underground power may also be trenched and will include a number of conduits and pits.
- The existing and proposed water pipelines traverse several sections of Coastal Wetland areas as defined in the Coastal Management SEPP, roads and other environmentally sensitive areas. Consideration will be given to trenchless installation methods at these locations. Notwithstanding, works in and adjacent to these areas will involve the minimum footprint possible.
- Where possible, spoil will be reused as trench fill. Excess spoil will be used for the desalination plant hardstand area.
- Depending on climatic conditions at the time of construction, dewatering may be required to facilitate pipe installation.
- If the plant is required to be built, construction is expected to take approximately 12 months but may be staged over a longer period. Some portions of the work with long lead times may be constructed earlier.
- Temporary construction easements or agreements with landowners and local authorities may be required to facilitate construction. Hunter Water will manage acquisition of these as required.

**Ausgrid is invited to comment on the proposed works including:**

- 1. Input on the proposed works and any approvals or constraints required.**
- 2. Requirements for the preparation of the Environmental Assessment.**
- 3. Power supply constraints in the area**
- 4. Any upgrades proposed in the future**
- 5. Other matters of relevance to Ausgrid.**

**Ausgrid is invited to comment on the proposed works by close of business on Friday 17 August 2018.**

**Further information about the project is available at Hunter Water's community consultation website: <http://yourvoice.hunterwater.com.au/>.**

**Please send your comments to [tempdesal@hunterwater.com.au](mailto:tempdesal@hunterwater.com.au)**

**A representative from Ausgrid is invited to attend a site visit with Hunter Water and GHD to be held on Thursday 9 August 2018. The purpose of this site visit is to inspect key areas of the project and discuss any mitigation measures or other requirements to be considered in the project assessment. To register your attendance, please email [tempdesal@hunterwater.com.au](mailto:tempdesal@hunterwater.com.au).**

**If you wish to discuss this project or require any further information, please do not hesitate to contact the project consultation line on 1800 066 243.**

**Yours Sincerely**

**Attachment – Site Plan (1 sheet)**



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XX August 2018

Our Ref: HW

Dear Sir/Madam

## **PROPOSED BELMONT TEMPORARY DESALINATION PLANT – NOISE MONITORING**

Hunter Water is seeking planning approval for the possible construction of a temporary desalination plant at Belmont. This temporary plant is our insurance policy in a worst case scenario if the Hunter reached critical water storage levels in unprecedented drought conditions. The plant would only be built after a suite of water saving, drought response measures were introduced across the Hunter.

Consulting company GHD is undertaking an Environmental Impact Assessment which includes understanding existing background noise levels around the proposed site location in Belmont. This aim is to get baseline readings so that inconvenience to community members due to possible future construction work and equipment operation can be minimised. Noise assessments are part of Hunter Water's usual practice and occur as part of our planning process for many projects.

To complete the noise assessment, noise monitoring devices need to be placed within some residential properties near Beach Street and Ocean Park Road in Belmont. Noise monitoring in other locations may also occur in the future. Your property has been identified as a suitable location for the temporary placement of one of these devices.

Noise monitoring devices:

- are often placed on private property as these locations are more secure
- record background noise levels only, as averages, not actual sounds such as voices, cars, birds, etc
- consist of a plastic case with a pole and microphone, are usually encased in a cage for additional security and are usually attached to a pole or tree (see photos attached)
- are battery powered and do not make any noise themselves.

When a noise monitoring device is placed on your property:

- it will be installed in your yard, and we will not need to enter your house
- the device will usually be on site for up to 14 days
- it will take 15-30 minutes to install, and then to dismantle and collect the device
- you do not need to be home during installation and collection, unless you want to be, and we will let you know what time we will be on your property

- you can undertake usual activities including lawn-mowing, but it would be appreciated if you let us know when extra-noisy activities such as these occur.

The photographs below are examples of noise monitoring devices.



Hunter Water proposes installing the monitoring devices on [redacted] and collecting them on [redacted]. We may also need to check their operation during this time.

Please note that all employees of Hunter Water and our contractor, GHD, will be required to carry appropriate identification and authority at all times and will inform you of their presence on each occasion if you are home. If you happen to be away at the time, a notice will be left to inform you that representatives of Hunter Water visited your property.

This work is being undertaken in accordance with the provisions of the Hunter Water Act 1991. This Act authorises Hunter Water to enter onto private land to perform these duties. A Notice of Entry letter is enclosed to formally advise you that representatives from Hunter Water and/or approved contractors may need to enter your property to carry out this work. The Notice of Entry letter also gives you more information about the Act.

### **Your Voice**

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### **For more information**

Hunter Water's project manager for the Belmont Temporary Desalination project, [redacted], is available to discuss this work with you. If you would like more

