

Bondi Water Resource Recovery Facility

Sydney
WATER

Community update - December 2024



Tomorrow's water starts today

We're continuing to upgrade the Bondi Water Resource Recovery Facility (WRRF) to protect the community and Bondi Beach. The work we do today, helps us meet our environmental obligations, protect the environment, as well as support the needs of a growing Sydney.

We're planning important improvements to the Bondi WRRF and the Bondi wastewater system to keep our waterways safe and clean.

Earlier this year we presented our strategic business case for the future investment and upgrade of the Bondi WRRF to Infrastructure NSW (INSW). INSW supported our proposed plans to improve the reliability and resilience of the Bondi wastewater system and the Bondi WRRF.

INSW is an agency of the NSW Government that provides independent advice for public infrastructure investments.

This newsletter outlines work being delivered today, as well as some of our long-term projects.

We know that our work can sometimes have an impact on our community, and we'd like to thank everyone for their patience and understanding as we continue to upgrade Bondi WRRF.

Update on our current work

Supernatant pipeline replacement

We've completed installing a new section of the supernatant pipeline located in the Bondi Golf Club. This pipe collects and prevents spills and overflows in times of heavy rain from the digester area on Military Road. This work will ensure we continue to protect our community and the environment.



New supernatant pipeline being installed at Bondi Golf Club

Decline tunnel repairs

We've completed urgent remediation work on a section of the decline tunnel, which provides vehicle access to the underground facility. Work included repairs to the shotcrete lining, installing rock-bolts and other minor repairs. This work has ensured the integrity of a section of the decline tunnel and the safety of our personnel.



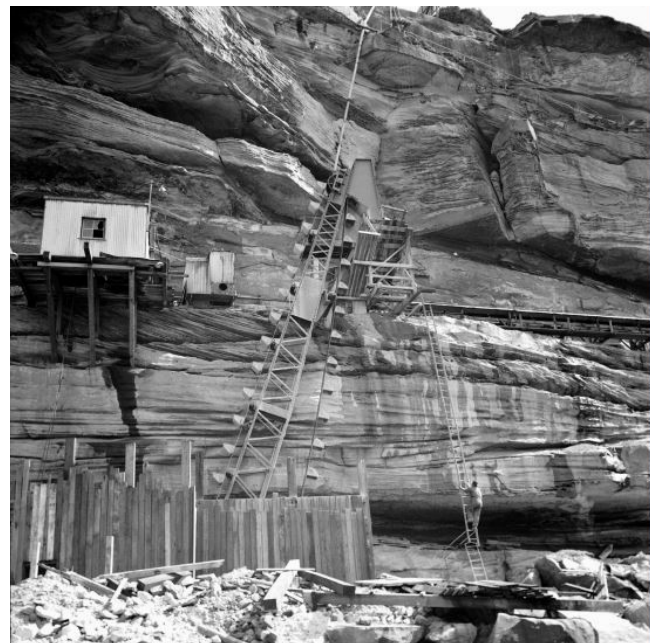
Decline access tunnel repairs

Upcoming work

Eastern safe haven refurbishment

The Eastern Safe Haven is a concrete structure located at the base of the cliff-face used as an emergency exit point for the underground facility. Refurbishment work is set to begin early in the new year. Temporary rock-netting will be installed on the cliff-face to ensure safety of our project team while they do this work. This rock-netting will be removed when the work is completed in late-2025.

Our work may impact users of Williams Park and golfers, but will have minimal impacts on the community. We're working with Bondi Golf Club to minimise impacts. Bondi Golf Club and the golf course remain open during this work.



Eastern safe haven being built (Sydney Water archives)

Ben Buckler vent stack refurbish

Refurbishment work on the Ben Buckler vent stack will begin early in the new year and is expected to be completed in late-2025.

Perched high on the northern headland of Bondi Bay, the Ben Buckler vent stack is an iconic part of the coastline. Built more than 110 years ago, this 30 metre tall vent stack is an important part of the Bondi WRRF, as well as being a state heritage asset.

Stay updated – on time, every time and paperless

We're committed to ensuring you are kept informed. If you'd like to receive email notifications about our work or would like more information. Send your details to: bondiwrrf@sydneywater.com.au

The Ben Buckler vent stack is the second vent stack to be built on the site. A brick vent stack was originally built in 1888, however, this soon developed cracks and had to be demolished and replaced.

As part of the work, fencing and scaffolding will be installed around the Ben Buckler vent stack to protect our project team and the community.

Our work may impact users of Williams Park and golfers. We are working with Bondi Golf Club to minimise impacts. Bondi Golf Club and the golf course will remain open during this work.



Ben Buckler vent stack being built c.1910 and the original vent stack to the right (Sydney Water archives)

Long term planning projects

Over the next decade, we plan to implement a series of improvements at Bondi WRRF and within the Bondi wastewater system to ensure we continue to provide safe, reliable and resilient wastewater services. As planning develops, we'll update our timetable, project details and the community. Work on short-term upgrades will continue as part of the broader program improvements.

It's expected that work may include:

- upgrade and/or rehabilitate the Bondi Ocean Outfall Sewer (BOOS)
- upgrade of the treatment process at Bondi WRRF, including:
 - screenings and grit collection and systems
 - solids collection, transfer and digester heating and mixing systems
 - biosolids dewatering, storage and out-loading facilities
 - ocean outfall raw sewage pumps
 - fresh air and foul air ventilation systems and odour control facilities
 - electrical equipment and control systems
 - upgrade of administration buildings and offices
 - refurbish and upgrade mechanical, civil and geotechnical structures.

Administration building upgrade

We're investigating options to upgrade our office and administration building at Blair Street.

The existing buildings at 176-178 Blair Street no longer meet our needs. We are proposing to remove these buildings and reuse this area for on-site parking for our staff and storage areas, giving more street parking back to the community. As part of the design, we have included measures to improve the visual amenity and streetscape along Blair Street. Below is an artist impression of the design.

Once we have consulted with Waverley Council and the local community, we aim to commence this work in the first half of 2025.



Proposed landscape design 176-178 Blair Street (artists impression subject to change)

Ventilation and odour control upgrades

Wastewater produces unpleasant odours due to bacteria, and these odours are influenced by environmental and operational conditions. To manage these odours, we use two odour control units (OCU's), one underground and one above ground at the Military Road facility.

In the underground facility, the OCU's extract the odorous air through fans and ductwork. The air is then treated with a chemical mixture that removes the odour-causing compounds. Once treated, the clean air is discharged through a vent stack at the cliff face.

To ensure the safety of our staff who work in the underground facility, a ventilation system supplies fresh air to the underground and above ground facility. This consists of fans, ventilation shafts and ductwork. This fresh air is circulated and is discharged via Ben Buckler vent stack.

The ventilation and odour control systems at Bondi WRRF are complex, aged, and at capacity. They are not always reliable and don't adequately treat odours, which can sometimes affect the community. We are currently investigating options to upgrade these systems to improve reliability and reduce odours.



Our team working to continually maintain and upgrade existing assets

Bondi solid streams

As a by-product of treating wastewater we produce organic solids (sludge). This sludge is collected and processed to convert it to a safe, stable nutrient rich fertiliser product called biosolids. Bondi WRRF produces over 100 tonnes of biosolids per week. We also capture biogas from our digesters and use it to generate electricity that supplies the facility.

We're investigating options to improve our existing solids (sludge) collection and treatment systems and our biosolids storage and out-loading facilities. This will ensure we continue to contribute to a circular economy and service a growing Sydney. As well as ensuring our assets are reliable and resilient and minimise impacts on the environment and our customers.

Our planning work will look at upgrading the above and underground areas of Bondi WRRF.

To find out more about these projects scan the QR Code:



Reporting odour issues

If you're experiencing odour issues you can let us know using a short online form via this QR Code. This is the quickest way to submit your experience and for us to respond.

You can also let us know when there is no odour present. This is valuable information too.

Open the QR Code reader on your smart device. Hold your device over the QR Code to scan it.

The form should automatically open, or prompt you to click to open the form.

