

Bondi Water Resource Recovery Facility

Sydney
WATER

Community update - December 2023



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70 years of serving the community

This December marks the 70th anniversary of the Bondi Water Resource Recovery Facility (WRRF). Constructed between 1936 and 1953, it's Sydney Water's oldest facility, initially designed to treat wastewater before its discharge into the ocean.

Construction began in 1936, with works stopping during World War II and restarting in 1951. It was partially opened in 1953. A brief history of Bondi WRRF is shown on page four.

The Bondi WRRF was the first facility to treat wastewater prior to it being discharged to the ocean. This was an ambitious project at the time, with the facility located 40 metres below ground.

The Bondi WRRF continues to protect the health of our waterways and the environment and improve the liveability of Sydney and Bondi Beach.

This newsletter provides an overview of our current projects, and highlights some of our upcoming work. 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.

Providing worldclass wastewater services for 780,000 people

To ensure we continue to provide safe, reliable and resilient wastewater services, we are developing a program of improvement works for the Bondi WRRF and the wider Bondi wastewater system. This will support future growth in Sydney and continue to protect our waterways, Bondi Beach and the wider community.

To support this work we have started planning for the future strategic needs of the Bondi wastewater system. This work will continue into 2024.

We expect that a planned program of improvement works will be delivered over the next 10 years. As we develop the planning, we will update our timeframe, project details and the community.

We will also continue with short-term upgrade works as part of the broader program improvements.

It's expected that work may include upgrades to the following areas:

- 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



Constructing one of the underground caverns for the sedimentation tanks at Bondi © Sydney Water / WaterNSW Historical Research Archive

Update on our current work

Bridge replacement at administration building

We installed the new elevated walkway bridge from O'Donnell Street to the Bondi WRRF administration building. This replaced the previous bridge that was no longer suitable. This new elevated walkway will improve access between the aboveground facility at Blair Street and the aboveground facility at Military Road.



Bridge replacement due to be completed by end of year

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

Eastern safe haven refurbishment

We are finalising designs to refurbish the Eastern Safe Haven, which is used as an emergency point for staff in the underground areas of Bondi WRRF and is located at the base of cliff-face. We expect to carry out this work from mid-2024.

Supernatant pipeline replacement

To ensure the safe operation of the aboveground facility at Military Road, a pipe extends through the golf course and down Blair Street, where it connects to the wastewater network.

We have recently completed a condition assessment of this pipe, this included confirming its location, depth and internal condition. We are currently finalising our designs to replace this pipe, and the work is expected to occur in mid-2024.

Ben Buckler vent stack refurbishment

We have completed a condition assessment of the vent stack and are preparing a remediation plan to ensure the ongoing use of this heritage listed asset. Once the remediation and refurbishment options are developed and approvals obtained, we expect to carry out works from late 2024.

Upcoming works

Ocean outfall raw sewage pumps

From 2024, we expect to start the renewal of the ocean outfall pumping station (OOPS).

The OOPS consist of six large pumps that transfer treated wastewater to the deepwater ocean outfall. The work will include refurbishment and upgrade of the pumps, motors and various mechanical and electrical equipment. This will ensure the OOPS is reliable and continues to protect our waterways.

These works are expected to be completed over the next five years as we are only able to renew one pump at a time, to ensure the OOPS is always available.

Administration building upgrade

We are currently investigating options to upgrade the existing administration building at Blair Street. This work is aimed to improve the available site offices, amenities, maintenance workshops and storage areas. The work will include an upgrade to the existing access lift in the administration building to the underground facility.

As part of these works, we will also be looking at the future use of the existing buildings at 176-178 Blair Street, as these require upgrades and no longer meet our ongoing needs. Options to increase the number of on-site parking for our staff and contractors will also be considered. These works will include measures to improve the visual amenity, streetscaping and landscaping along Blair Street. As these options are developed, we will update the community.



*Excavation works for the digesters in the late 1960's.
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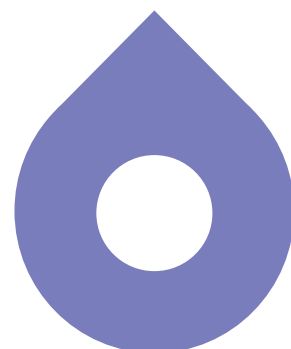
Working with the CRG

Since the Bondi Community Reference Group (CRG) was established we have met twice. This included a tour of the Bondi WRRF to gain an understanding of the current treatment processes.

To support our master planning for the Bondi WRRF the CRG members were asked to share their values, and what opportunities for improvement it may have. Some of their responses included:

- acknowledge the Aboriginal heritage of the area
- acknowledge the history of the site and its development
- improve the visual amenity of the buildings and facilities and landscaping treatment

We would also like to know what ideas you might have to improve the local area as part of our work.



Bondi Water Resource Recovery Facility

Our local history

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1875

Sewage and Health Board recommend city sewage be sent to a treatment plant at Bondi, to deal with the city's growing sewage problem.



1889

Sewer Pipe Constructions completed. It is one of the most significant engineering structures built by early colonists in Australia, the project was remarkable for its surveying accuracy allowing for the brick lining for the sewer to be laid before tunnelling was completed.

1936 - 1953

Bondi Sewage Treatment Plant was constructed

December 1953

Partial operation of the Sewage Treatment Plant begins. It was an ambitious project that had a significant impact on the way sewage was treated in Sydney.

2000

The WRRF undergoes a major revamp project that extended the life of many of the assets by 20 years



2021

The Facility turned 68 and major works began to upgrade many of the underground assets

1984 - 1990

The Deepwater Ocean Outfalls were constructed at Bondi. The outfalls disperse Primary treated effluent 2.2 kms offshore, improving water quality at Bondi Beach.



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If you are experiencing odour issues, let us know

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.

Reporting odour issues

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

