



North Head

Water Resource Recovery Facility

Our wastewater system works behind the scenes to protect the environment and the health of our communities.

The **North Head Water Resource Recovery Facility** (WRRF) serves over one million Sydneysiders: from Seven Hills in the west, Yagoona in the south, and Ku-ring-gai and Collaroy in the north.

This newsletter provides an update on what's happening at the North Head facility, including:

- the Biosolids upgrade project
- other upgrades at North Head and around the Manly area.

Biosolids upgrade project

Construction for phase one of the Biosolids upgrade project has been ongoing since November 2021 and we've reached an important milestone – **construction of our two new digesters is now finished!**

Standing over 14 metres high, the two new digesters were built by pouring over 1300 cubic metres of concrete. This was done over eight months between August 2022 and March 2023.

The new digesters will increase the processing capacity of the facility from 40 to 70 tonnes of sludge per day by 2043 and contribute to reusing 100% biosolids as fertiliser on NSW farms.



We recently completed building two new digesters at our North Head facility

Next steps

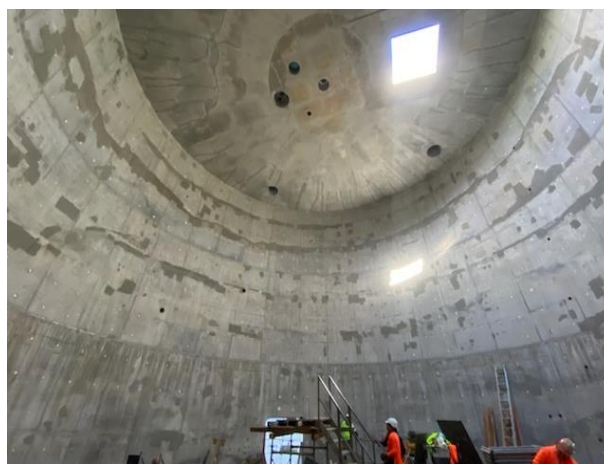
We will install new fittings and equipment to support the new digesters as well as complete tests and checks to get them ready for use.

Our remaining work for phase one of the Biosolids upgrade project is expected to continue to early 2025 and involves:

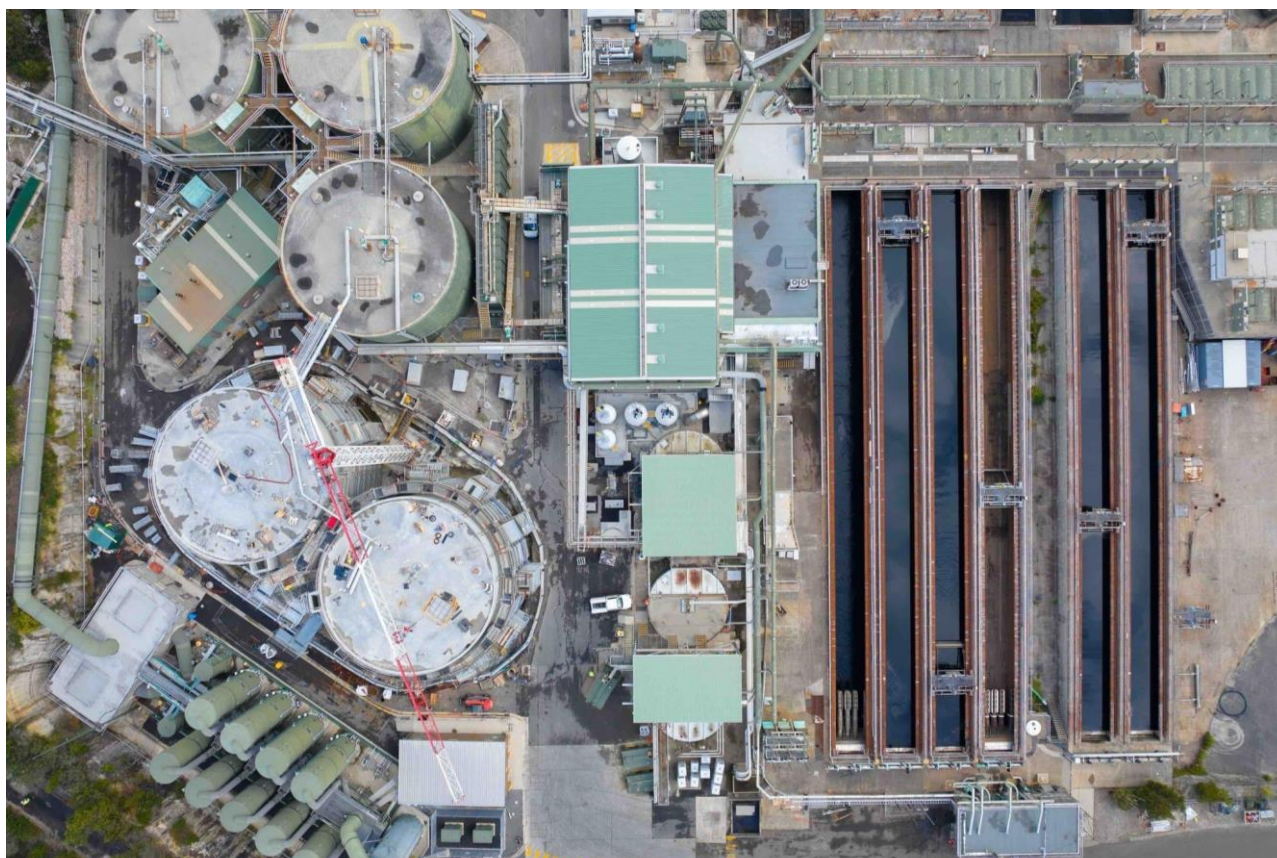
- installing a new waste gas burner to support the two new digesters
- installing two new switchrooms and a supporting transformer room
- underground and above-ground electrical works and installing steel structures to support piping and electrical connections to ground equipment
- installing an additional centrifuge into the existing dewatering building.

Thank you to our neighbours in Manly for bearing with us during this important work.

We know that the increase in truck movements can be disruptive, so we really appreciated your patience and cooperation.



View from inside one of the digesters



Aerial view of our North Head facility showing the two new digesters

Other upgrades at North Head and surrounding suburbs

There are several other upgrades underway at the North Head facility and around the Manly area to keep things running reliably.

Update on NSOOS rehabilitation

You may recall from our June 2022 newsletter, our 'once in a generation' rehabilitation work on the Northern Suburbs Ocean Outfall Sewer (NSOOS) is underway.

Cremorne to The Spit section

Approximately ten kilometres of the tunnel have been desilted and rehabilitated since we started in 2017, mainly between Lane Cove and Cammeray. Work on the section of the tunnel between Cremorne and The Spit is currently in progress.

Clontarf to North Head section

We're starting to prepare for our work on the stretch from Clontarf to North Head which is expected to start in 2025. As part of our preparation, we're planning to construct an underground access cavern at the North Head facility. This involves excavating sandstone rock about 100 metres underground. The cavern will serve as a new NSOOS access point for our specialist equipment and crews.

While the NSOOS rehabilitation is underway, we need to temporarily redirect wastewater flows from the NSOOS to the Northside Storage Tunnel (NST). To support this, we're planning to clean out silt from parts of the NST underground at our North Head facility so it can continue operating as a diversion to the NSOOS.

The NST desilting and access cavern construction is planned to start in 2024 and is expected to take about 18 months to complete. This important preparatory work will pave the way for future sections of the NSOOS to be rehabilitated and once completed, will increase capacity, assist in preventing both dry and wet

weather overflows and extend its operational life.



Custom-designed pontoons used to rehabilitate the NSOOS

New Odour Control Unit (OCU) at The Spit

Odorous gases, such as hydrogen sulphide, are generated by the transport of wastewater through the NSOOS. We use OCUs to filter this air before it is released. This helps us remove these gases and meet our environment protection licence requirements.

As part of the NSOOS rehabilitation, we are also designing a new permanent OCU to replace the current temporary OCUs at the Spit Syphon site at Mosman. The site is located across Middle Harbour from Clontarf Reserve.

Early concept designs have been shared with key stakeholders and relevant community, including the Clontarf Community Forum and locally impacted residents. The feedback received is being considered for further design development. The detailed concept design will be presented back to stakeholders by mid-2024. Construction is planned to start in 2025.

Water main renewals in the Northern Beaches

From our regular maintenance programs and special projects to emergency repairs, our crews are out there every day working to ensure you have safe, reliable water whenever you need it.

We assess the condition of our water pipes across Greater Sydney to get information about which pipes need to be repaired or replaced before they break. This ongoing program reduces leaks and breaks and helps maintain a reliable good quality drinking water supply.

You might have seen our crews renewing the water main in Fairway Close in Manly Vale recently. We're planning some more water main renewals next year in Manly and across the Northern Beaches. You'll get a separate letter from us with more detail if you live near one of our work areas.

Maintenance work on Manly Dam bridge

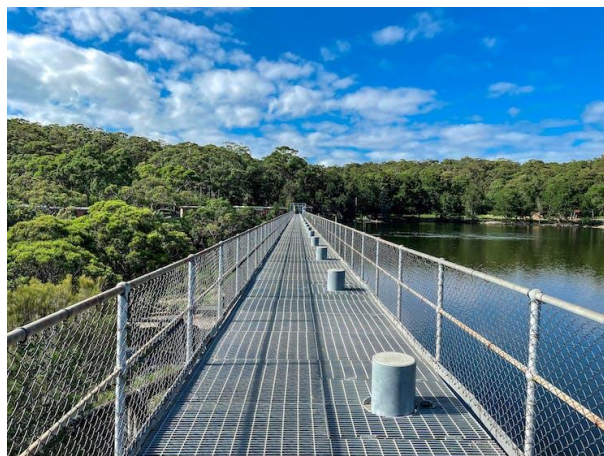
Manly Dam is one of the 16 dams we manage within our area of operations – this dam is our only dam used solely for recreation and not water supply.

We need to do some maintenance work on the bridge along the Manly Dam wall. Our work involves repairing handrails, replacing some grated floor panels on the walkway and some minor concrete repairs on one of the piers.

This work is expected to take from three to four weeks in February 2024.

We'll need to close the Manly Dam bridge while our work is underway. This is to ensure our work area and the community are safe.

We'll have signage in place to detour walkers around the dam wall via King Street, joining back on to the track on the opposite side.



Manly Dam bridge

To find out more

Biosolids upgrade project

For more information and updates on the project, visit our Sydney Water Talk page at www.sydneywatertalk.com.au/nh-biosolids

You can also contact our team directly on **1800 943 119** or email confluence@sydneywater.com.au

North Head operations

For general enquiries related to the North Head facility, you can contact the North Head Hub on **9934 4423** or email northheadhub@sydneywater.com.au

NSOOS rehabilitation

For more information and updates on the project, visit our Sydney Water Talk page at www.sydneywatertalk.com.au/nsoos

You can also contact our team directly on **0475 767 272** or email scott.mckellar@sydneywater.com.au