



# 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.

**The Northern Suburbs Ocean Outfall Sewer, commonly known as the NSOOS**, is an important part of our wastewater network. This vital piece of infrastructure runs along the north side of the Parramatta River, extending as far west as Blacktown and transporting wastewater all the way to the North Head WRRF.

The NSOOS was built progressively between 1916 and 1933 and was mostly tunnelled through rock, deep underground. It was the third major wastewater system built to service a rapidly growing Sydney and was significant in the development of the north shore, inner and northwestern suburbs of Sydney.

Thanks to its impressive scale – around 3.5 metres high by 2.6 metres wide – the NSOOS delivers wastewater services to 1.7 million people across Sydney's Western and Northern suburbs. In fact, the 28km-long NSOOS collects around 25% of Sydney's total sewage each day.

This newsletter provides an update on what's happening at the North Head facility and the NSOOS in the Manly area.

### We're making the NSOOS more reliable

When it was built, concrete was used to line the NSOOS and protect the rock from corrosion caused by wastewater. Over time, this concrete has deteriorated, resulting in large pieces falling from the roof of the sewer tunnel. These concrete pieces are now sitting on the tunnel floor, collecting further silt and debris from the hundreds of thousands of litres of wastewater that passes through it each day.

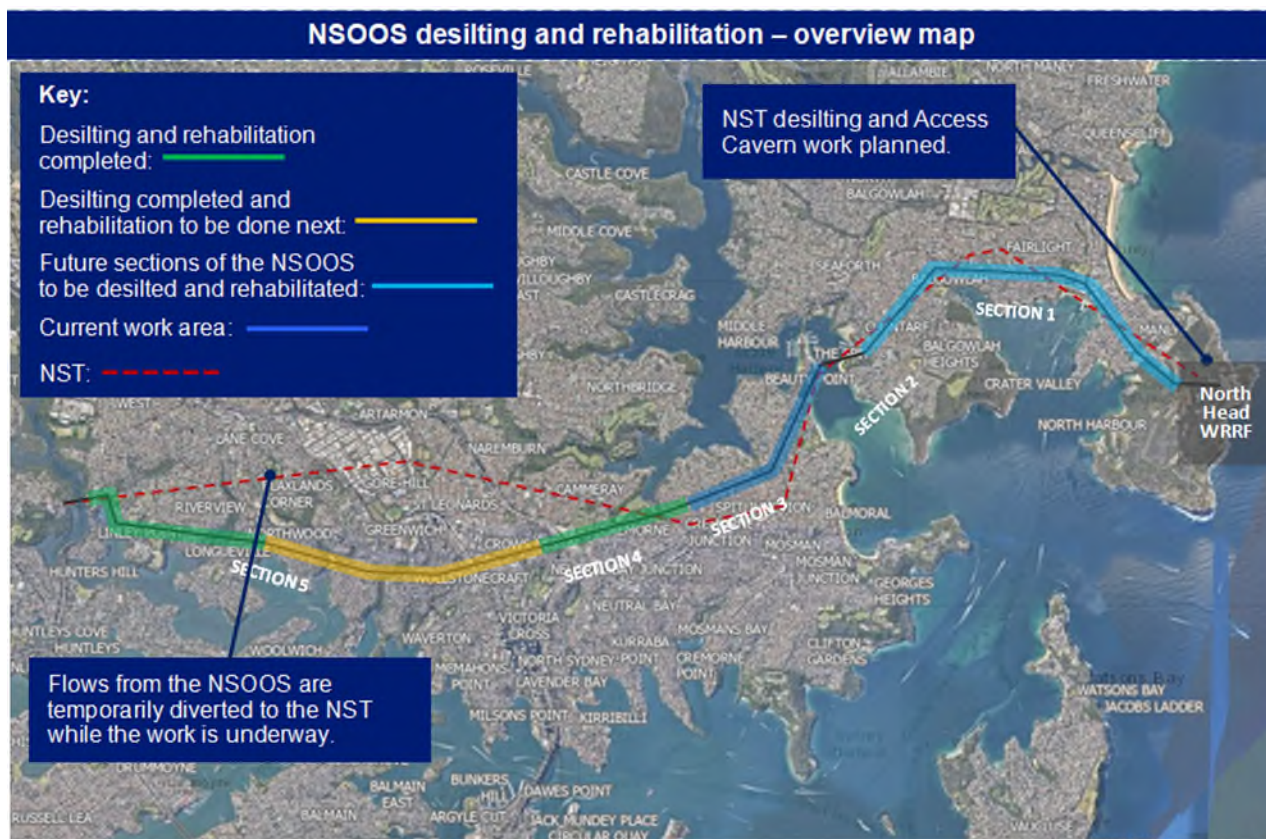
Work is happening inside the sewer to restore it to its optimum condition. We have developed custom made machines that can be driven through the wastewater tunnel by our specialist workers to remove the debris. The walls and roof are gaining new life through the application of spray-on abrasion-resistant concrete.



Our work crew rehabilitating the NSOOS tunnel below ground.

The once-in-a-generation restoration works taking place inside the NSOOS are crucial for protecting Sydney Harbour and other waterways from sewage overflows and will

extend the life of the structure by at least 50 years.



## Update on NSOOS rehabilitation

You may recall from our previous newsletters, our ‘once in a generation’ rehabilitation work on the Northern Suburbs Ocean Outfall Sewer (NSOOS) is underway. The map above shows an overview of our progress and next steps.

### Cremorne to The Spit section (Section 3)

Over ten kilometres of the tunnel has been desilted and rehabilitated since we started in 2017, mainly between Lane Cove and Cammeray (Section 4 and 5). Work on the section of the tunnel between Cremorne and The Spit (Section 3) is progressing and is expected to be completed by early 2027.

### Clontarf to North Head section (Section 1)

We’re continuing to refine our plans to desilt the next section of the NSOOS from Clontarf to North Head (Section 1).

As part of our preparation, we’re building an underground access cavern at the North Head facility.

This involves excavating sandstone rock about 60 metres underground. The cavern will serve as a new NSOOS access point for our specialist desilting equipment and crews.

This important work will help to pave the way for future sections of the NSOOS to be rehabilitated and once completed, will increase capacity, assist in preventing overflows and extend its lifespan.

While the NSOOS rehabilitation is underway, we’ll redirect some of its wastewater to the Northside Storage Tunnel (NST). To support this, we’re commencing work 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.





### Removal of silt and debris from the NSOOS at North Head

In late March 2025, we will commence work removing silt and debris from the NSOOS tunnel at Darley Road and Bluefish Drive, North Head (see map above).

Parking in the immediate surrounds of the work areas may be limited. Traffic and pedestrian management will be in place to safely escort motorists and pedestrians around the work areas.

At the Bluefish Drive work area, we will be clearing vegetation around the NSOOS access point. This is identified in the pink outlined area on the map above, and we have consulted with National Parks and Wildlife about the work. At the completion of work the area will be revegetated and returned to its original condition.

If you have any specific questions or feedback about the vegetation clearing, please contact us through the NSOOS rehabilitation contact details, by close of business Friday 28 March 2025.

**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 appreciate your patience and cooperation.**

## Road maintenance on Bluefish Drive

At the end of February, we carried out some road maintenance work on Bluefish Drive, the main access road to North Head WRRF.

We re-surfaced the road and replaced the speed bumps to improve the condition of the road for all users.

We know this is a popular route for local walkers, runners and cyclists, and we thank the local community and residents for working with our traffic control teams to keep vehicles and pedestrians moving safely while we worked.



## To find out more

### North Head operations

For general enquiries related to the North Head facility, you can contact the North Head Hub on **9934 4423** or email at [northheadhub@sydneywater.com.au](mailto:northheadhub@sydneywater.com.au)

### NSOOS rehabilitation

Visit our Sydney Water website at [sydneywater.com.au/nsoos](https://sydneywater.com.au/nsoos) or scan the QR code.



You can also contact our team directly on **0475 767 272** or email at [scott.mckellar@sydneywater.com.au](mailto:scott.mckellar@sydneywater.com.au)