▲ NSOOS constructed between 1916 and 1933

Project update

December 2025

Restoring our systems underground, for generations above

Legend

NSOOS wastewater system

NSOOS main sewer tunnel

NSOOS catchment boundary

▲ Map of the NSOOS wastewater system and catchment area

NSOOS 'once in a generation' rehabilitation program

Sydney Water has embarked on a 'once in a generation' rehabilitation program of our complex underground wastewater system.

What is the NSOOS?

The Northern Suburbs Ocean Outfall Sewer (NSOOS) is one of the first ocean outfall sewers in Australia. Spanning 28kms, it winds beneath our streets from Blacktown to Manly carrying over 25% of Sydney's wastewater.

Built more than 100 years ago, this underground system has played a vital role in protecting public health, our waterways and Sydney Harbour from wastewater overflows.

Why is this project needed?

Over time, the concrete lining of the tunnel has deteriorated causing it to crumble in places. The fallen concrete pieces result in silt and debris accumulating in the tunnel, reducing capacity and contributing to wastewater overflows during heavy rain events. Sydney Water is delivering a staged program of desilting and rehabilitation of the NSOOS to restore capacity and extend the life of the asset for at least another 50 years. This work is essential to maintain reliable wastewater services, protect our waterways and support Sydney's population growth.

To maintain wastewater services for the community, the work needs to be carried out in a live-sewer environment, making the work complex, high-risk, and weather dependent. Detailed planning is underway for the section of work between Clontarf and the North Head Water Resource Recovery Facility (WRRF). To prepare for work and to provide safe access for workers and equipment, we are currently constructing the NSOOS Access Cavern and desilting part of the Northside Storage Tunnel (NST).

Water IS OUR LIFE

Sydney WATER

What's happening now?

22 May 2025 19:01

▲ Excavation work below ground at North Head for the NSOOS Access Cavern

NSOOS Access Cavern at North Head WRRF

We're continuing to refine our plans to desilt and rehabilitate the next section of the NSOOS from Clontarf to North Head.

As part of our preparation, we're building an underground access cavern at the North Head Water Resource Recovery Facility (WRRF). This involves excavating sandstone about 60 metres underground. The cavern will serve as a new NSOOS access point for our specialist desilting equipment and crews. Work in the access cavern is progressing well and will continue in 2026.
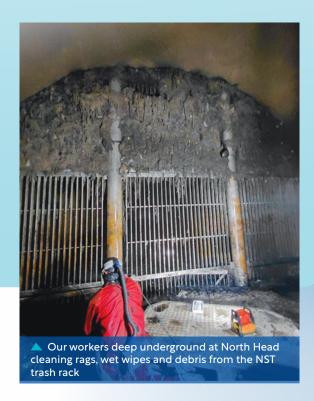
Our crews have been working hard to remove silt and debris from the NSOOS tunnel at North Head and will continue this work in 2026.

▲ Large excavators removing silt from the NST

Northside Storage Tunnel (NST) Desilting

While the NSOOS rehabilitation is underway, we'll redirect some of its wastewater to the Northside Storage Tunnel (NST). To support this, we're working to remove silt from parts of the NST at our North Head facility so it can continue operating as a diversion to the NSOOS. This diversion will support the rehabilitation work we are planning in the section of the NSOOS from Clontarf to Manly.

▲ Our workers deep underground at North Head cleaning rags, wet wipes and debris from the NST trash rack

NSOOS Desilting at North Head

Since March 2025 we have been removing silt and debris from the NSOOS tunnel between Darley Road (near the Manly Hospital) and Bluefish Drive in Manly and Sydney Harbour National Park at North Head. This important work will reduce wastewater overflows into the surrounding environment.

Looking ahead

As Sydney continues to grow, maintaining our ageing infrastructure – like the 100-year-old NSOOS – is essential to delivering world class water and wastewater services. Community members can rest assured Sydney Water is restoring the NSOOS through a rehabilitation program ensuring it continues to serve Sydney reliably for generations to come.

▲ Bin full of silt and debris removed from the NST at North Head

Christmas shutdown period

Please note our Christmas shutdown will start from close of business on **Thursday 18 December 2025.**

We will return to work on **Monday 5 January 2026.**

NORTHERN SUBURBS OCEAN OUTFALL SEWER (NSOOS)
Restoring our systems underground, for generations above

Sydney
WAT≈R

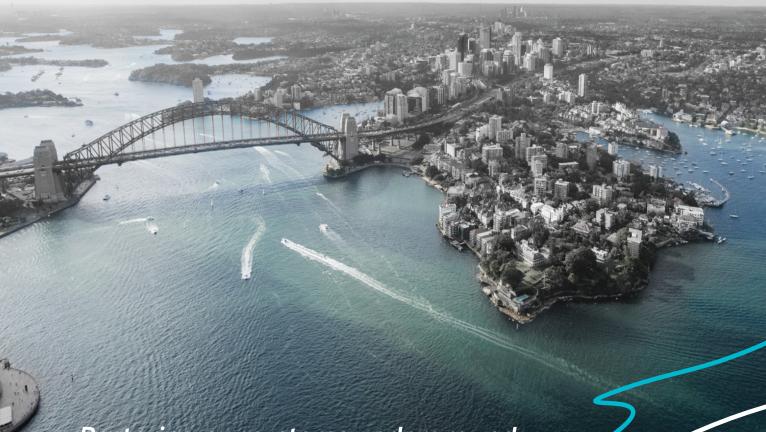**Sydney Water is seeking our customers' views on the NSOOS and its rehabilitation.**

If you are interested in sharing your thoughts, please complete our short survey by scanning the QR code or visit our webpage to access the survey weblink.

Share your thoughts:

NSOOS@sydneywater.com.au

sydneywater.com.au

Restoring our systems underground, for generations above