

Sydney Water Update

Work in Cremorne and Mosman

March to May 2024

Community Engagement Representative:

Scott McKellar

0475 767 272

scott.mckellar@sydneywater.com.au

How the community benefits

Our wastewater system works behind the scenes to protect the environment and the health of our communities. This work will reduce the risk of wastewater overflows into the surrounding environment in the Cremorne, Mosman, and Manly area.

We often take for granted the impact that our wastewater systems have on the cleanliness of Sydney Harbour, Middle Harbour, and other waterways, so it is important we work on them from time to time to keep things running reliably. Our work in the area will add a further 50 years to the lifespan of our wastewater assets.

Northern Suburbs Ocean Outfall Sewer (NSOOS) - Main activities

The four main activities are:

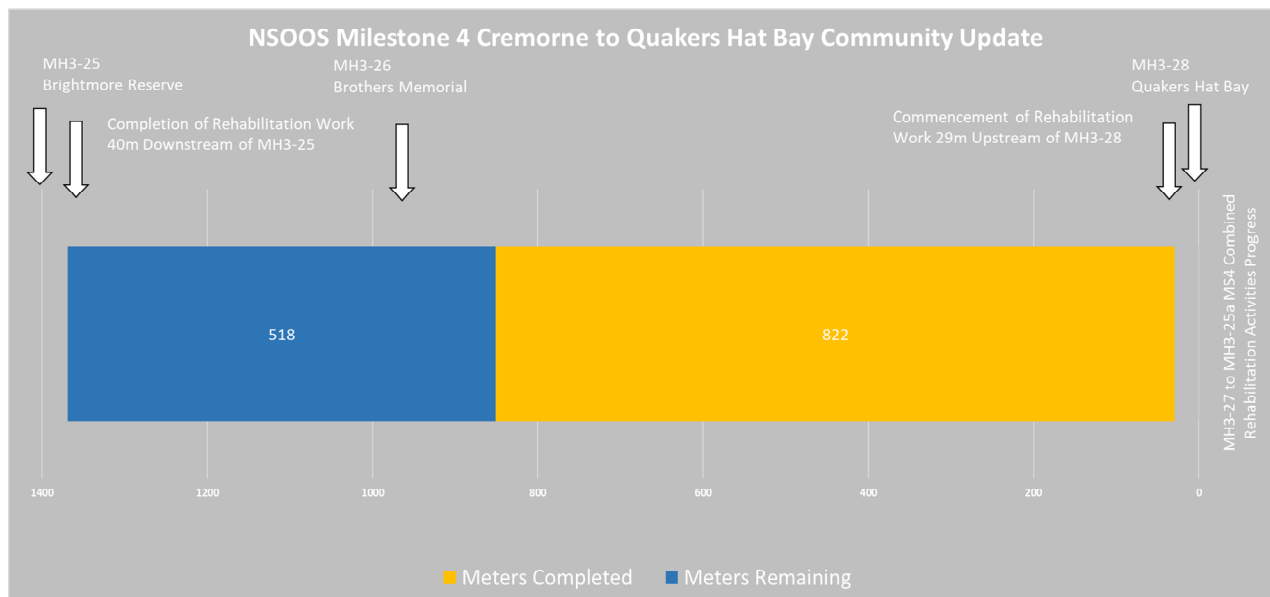
1. silt and debris removal
2. surface preparation – use of hydraulic rock wheel and high pressure washing of the tunnel roof and walls ensure clean and solid surface for repair work
3. concrete repair – shotcrete sprayed over steel mesh restores the tunnel roof and walls to its original form; this work can be slow going (five metres per day or less) and depends on the level of repair needed
4. top layer application – a final layer of coating using calcium aluminate cement is sprayed onto the repaired area, providing a durable and smooth finish

Work crews enter and exit the NSOOS tunnel inside a shed at Quakers Hat Bay, Mosman. They also enter and exit at Brightmore Reserve, Cremorne and The Spit, Mosman.

Sydney Water's access to the NSOOS tunnel during daytime work hours at the locations, is dependent on a system diversion of wastewater flows into the Northside Storage Tunnel (NST) at Lane Cove.

Progress overview

The table over page provides a summary of progress rehabilitating the NSOOS tunnel between Quakers Hat Bay and Brightmore Reserve (almost 1.4km). Repair work inside the more northerly section between Quakers Hat Bay and The Spit (approximately 1.3km) is also continuing.



Our work sites and planned activities

Location	Work site activity	
	<p>Major Worksite with daily entry and exit for workers into tunnel to complete desilting, repair, and rehabilitation work</p> <p>Above ground machinery and equipment to support work inside the tunnel</p> <p>Delivery for construction materials</p>	<p>Unmanned work site with minimal activity except in an emergency</p> <p>Emergency tunnel access and egress for workers</p> <p>Emergency ventilation system, pushing fresh air into tunnel for safety of workers</p>
Brightmore Reserve, Cremorne	✓	
WH Brothers Memorial Park, Cremorne		✓
Quakers Hat Bay, Mosman	✓	
Upper Spit Road, Mosman		✓
The Spit Syphon, Mosman	✓	

Odour and noise management

Working inside the tunnel while it operates results in some odour and noise issues.

We are committed to minimising the impact of our work.

For odours experienced during work hours, please call 1800 233 076. After hours, please call 13 20 90.

Odour



Due to the nature of our work, there is potential for odours to escape from the wastewater network while lids are open. We will have odour controls in place.

Noise



There will be some noisy works due to heavy machinery, including water blasters and generators. Noise blankets are used as mitigation.

Rehabilitation of Large Wastewater Submains in Mosman

Sydney Water has identified three large wastewater submains requiring rehabilitation and repair. The submains at Balmoral Slopes, Pearl Bay, and Spit Road flow into the NSOOS tunnel between Quakers Hat Bay and The Spit at Mosman. Planning the work has commenced and is in the early concept design phase. Sydney Water will consult the impacted communities for this work as a key part of their planning process.

Completion of our work in the area

We previously advised that we will complete our work at these locations in late 2024.

At the time we advised this estimated completion, we had insufficient information on other Sydney Water work that requires the ongoing access of the NSOOS tunnel using these sites. In addition, we used an arbitrary duration to forecast delays due to wet weather and other system events.

We have since identified additional Sydney Water work from 2023 and early 2024 in the Cremorne, Mosman, and North Head Water Resource Recovery Facility (WRRF) areas that require continued access to the NSOOS tunnel at these sites, including:

- A project to remove silt from the Northside Storage Tunnel (NST) access decline and wet well areas at North Head WRRF is expected to commence in mid-2024. This will require removing the NSOOS flow diversion into the NST. It is estimated that the current NSOOS works in Cremorne and Mosman will be delayed by three to four months in early 2025 while the work occurs in the NST wet well area at the North Head plant.
- More detailed repair work has been identified in the NSOOS tunnel between Quakers Hat Bay and the Spit Syphon at Mosman. We encountered some unforeseen tunnel conditions in this section of the NSOOS that slowed down our work. We also need to change our construction method to ensure the ongoing safety of our work crews inside the tunnel.
- We experienced greater impacts from wet weather and tunnel system conditions than we originally anticipated.

- Additional work has been identified to rehabilitate three large submains that flow into the NSOOS tunnel between Quakers Hat Bay and the Spit Syphon at Mosman. Planning the work on the Balmoral Slopes, Pearl Bay, and Spit Road submains has commenced and is in the early concept design phase. Our technical teams have yet to determine access requirements into the NSOOS tunnel this work will have.

In light of this, Sydney Water has revised its expected completion timing at these sites to be early 2027.

The early 2027 timing includes contingency for us not being able to access the NSOOS tunnel with wet weather and other network conditions.

It also allows for full demobilisation and restoration of the sites at

- Brightmore Reserve, Cremorne
- Brothers Memorial Park – Fifth Avenue, Cremorne
- Quakers Hat Bay – Bay Street, Mosman
- Upper Spit Road, Mosman

The Spit Syphon site will be demobilised with equipment and left secured for ongoing operational use by Sydney Water.

For more information

Visit our Sydney Water website at sydneywater.com.au/nsoos or scan the QR code.

Thanks for your patience and understanding while we complete this important work. We also aim to be good neighbours and appreciate community feedback.





Our Work Areas

