

Rouse Hill update

December 2025

Sydney
WATER

We're making great strides with wastewater infrastructure investment in Sydney's north west, and our major Rouse Hill projects are progressing well.

The new and upgraded infrastructure will ensure the ongoing resilience and reliability of our wastewater system, supporting the NSW Government's growth ambitions in the north west while protecting the environment.

This newsletter provides an update on our three main projects, each supported by teams located at the Rouse Hill Water Resource Recovery Facility (WRRF) on Mile End Rd. These three projects are the North West Wastewater Connection and the North West Treatment Hub (growth plus compliance work).

You'll also find information on our project timelines and Christmas-New Year working hours.

We would like to thank the community for your patience as we complete these critical projects.



Aerial view of Rouse Hill pumping station worksite.

North West Wastewater Connection reaches key milestone

We reached a key milestone in mid-October, completing the underground tunnelling between the Rouse Hill WRRF and the Taylee Place pumping station. We are now finalising the installation of the pipe inside the tunnel. Once complete, the launch and retrieval pits at the pumping station, Lot 96 Mile End Road and the WRRF, will be restored to their original state.

Mechanical installations at the pumping station will be ongoing to enable the major connections by the end of this year. We expect to finish the remaining upgrades and complete a new odour control unit at the pumping station in early 2026.

The newly installed underground pipeline will boost the capacity of the wastewater system, ensuring it can handle the increased demand and reducing the risk of wastewater overflows to the environment.

Our delivery partner for this project is Ironbark Joint Venture. For more information about this project, including how we are managing construction noise and vibration, please visit our website at www.sydneywater.com.au/north-west-wastewater-connection.



Tunnel Boring Machine breaks through at the pumping station, completing the tunnelling component of the North West Wastewater Connection.



The North West Treatment Hub program is designed to meet environmental protection standards, enhance water quality, minimise odour, and support the region's anticipated growth. This work is being delivered by Fulton Hogan and the North West Hub Alliance – a partnership between Sydney Water, John Holland, KBR and Stantec. Below is an update on the main parts of our work program. For more information about the program, please visit www.sydneywater.com.au/north-west-treatment-hub

On track to deliver improved treatment process

Plant upgrades at the Rouse Hill WRRF to support the growth ambitions of the area are progressing well.

A key milestone has been reached with the installation of the base concrete slab and walls for one of the new membrane bioreactors. Early next year, equipment installation will commence to bring the bioreactor online.

Membrane bioreactors significantly enhance the wastewater treatment process, enabling the production of high-quality recycled water. This water is then supplied to the community for non-potable uses such as toilet flushing and garden irrigation. The new bioreactor will improve the plant's efficiency, reliability and sustainability, ensuring it can meet the needs of a growing population while promoting smarter water management.



New odour control unit at the Rouse Hill WRRF



Membrane bioreactor progress

New Odour Control Unit nears completion

This advanced system is designed to neutralise hydrogen sulphide, an odorous gas produced during wastewater treatment, preventing its release into the atmosphere.

Once operational, the new unit will be ten times more effective than the current system, significantly improving air quality around the facility. This upgrade is a key part of our environmental compliance efforts and reflects our commitment to minimising impacts on the surrounding community.

Electrical upgrade to boost power supply

To support the ongoing upgrades at the plant, preparations are underway to increase the power supply.

Starting 3 November, installation of high-voltage underground electrical cables will begin along Withers Road, Mile End Road and Old Windsor Road. This work is expected to take approximately four months and will be carried out during both day and night shifts. These essential electrical upgrades will ensure the expanded facility has the capacity to meet future demand. We'll continue to keep the community updated.

New inlet structure coming soon

Construction of the new inlet structure, which will enable us to manage much larger flows of wastewater while complying with environment protection guidelines, is also progressing well.

The inlet structure is a vital part of the treatment process, receiving incoming wastewater and performing initial screening, capturing fine debris, sand and grit before the filtered flows enter the next treatment stages. This work will boost the plant's capacity to manage wet weather and improve overall operational resilience.

The new inlet structure is expected to be operational in the first quarter of 2026.



Progress of the new inlet structure

The North West Hub Alliance wins sustainability award

The North West Hub Alliance has been honoured with the 2025 Sustainability Project of the Year at the Faculty's Awards of Excellence, a fantastic achievement recognising our commitment to making a real difference in the way this project is delivered.

The Australian award highlights how we have gone above and beyond, weaving sustainability into every step of our work.

Some of the standout features that caught the judges' eyes include:

- Insisting on sustainability as a key factor in picking all suppliers, ensuring every partner shares our values
- Using clever, environmentally friendly materials, such as Sense600 steel (which is made entirely from scrap metal and boasting a unique, smart design), as well as low-carbon concrete and biofuels
- Embracing digital tools to track and report sustainability progress, giving everyone a clear view of how the supply chain is performing
- Aligning our work with ten of the United Nations Sustainable Development Goals, showing a genuine commitment to global progress
- This award is a testament to the Alliance's innovative thinking and our drive to leave a lasting, positive impact on both the industry and the wider community.



Members of the North West Hub Alliance with the sustainability award

Project timelines

Here is the project timeline for the North West Wastewater Connection and the North West Treatment Hub compliance and growth programs.



Christmas shutdown

Operations will pause over the holiday break, with the last working day being Wednesday 24 December, and work resuming Monday 5 January. For emergencies during this period please call 13 20 90.

We'd like to take this opportunity to wish you a very Merry Christmas and a safe holiday season.

Here is how you can save water at home!

