

North West Treatment Hub

Keeping our waterways clean



We're planning for the future, now

Sydney's North West is growing rapidly, with the region's population expected to more than double by 2056. We need to make sure we're prepared and can continue to deliver a reliable, world-class wastewater service. To do this, we're changing the way we operate to provide a more efficient and integrated wastewater system.

We're creating a North West Treatment Hub by linking three treatment plants in your area – Castle Hill Water Recycling Plant, Rouse Hill Water Recycling Plant and Riverstone Wastewater Treatment Plant. We have been progressively improving our plants, to meet the needs of a growing population, and will continue to do this into the future. Linking the plants with a pipeline is an important step towards a centralised and resilient wastewater system.

Review of Environmental Factors (REF)

The REF looks at all the possible environmental impacts of the project as we build it, and once it's up and running. As this project is still in concept stage, the REF needs to

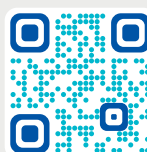
cover a range of scenarios. There will be opportunities to review and refine these impacts as we continue to fine-tune this project.

Connecting Rouse Hill and Castle Hill Water Recycling Plants

To highlight the work that is most relevant to you, this newsletter will summarise our plans at the Rouse Hill plant and the proposed pipeline that will connect to the Castle Hill plant.

Have your say

We have detailed our work and the proposed impacts in the REF. Now we're asking for your feedback on our plans.



To view and download the REF, scan the QR code or go to sydneywatertalk.com.au/north-west-treatment-hub

About the wastewater pipeline

We're planning to connect Rouse Hill and Castle Hill Water Recycling Plants with a pipeline to transfer partially treated wastewater (sludge), under pressure. A second pipeline will transfer all the partially treated wastewater onto Riverstone Wastewater Treatment Plant.

By connecting the plants, we will transfer some of our wastewater processing away from Castle Hill and Rouse Hill plants, surrounded by residential and commercial neighbours, to Riverstone Wastewater Treatment Plant, in an industrial zone.

The pipe from Rouse Hill to Castle Hill will be about 20cm wide – as wide as a standard business envelope – and 10.2km long. Our construction corridor (the space in which we work to build the pipeline) is about 15m wide. This width is required in order to safely fit all construction equipment and personnel.

How we will build it

We plan to build most of the pipeline by trenching. This will involve digging a trench, laying a pipe and then burying it.

In some sections the pipe will be trenchless to avoid impacts to major roads and creeks. Here, we will push the pipe through underground, from an entry pit to an exit pit. The depth of our work will depend on local soil and rock conditions.

Construction with community in mind

We expect there will be some noise impacts for local residents. These will be temporary and will reduce as our construction crews move along the pipeline route.

We expect there will be some noise impacts for local residents. Where we are trenching, these noise impacts will be temporary and will reduce as our construction crews move along the pipeline route. At the start and end points of trenchless sections of pipeline, we expect there may be some noise impacts at night. We will notify impacted residents in advance of this work. We also expect our work along the pipeline route to produce some vibration. In most cases, our work is at some distance from established buildings and people, so it is unlikely to have an impact.

We are committed to reducing these impacts and we will work with our crews to investigate opportunities to do so.

Unlocking lasting benefits

By connecting Castle Hill, Rouse Hill and Riverstone plants, the North West Treatment Hub will help unlock benefits for our communities, now and into the future.

Catering for growth

The North West Treatment Hub will ensure we continue to provide a world-class wastewater service to Sydney's booming North West. It will support the rapid growth of new and existing communities by continuing to deliver a reliable and sustainable wastewater system for about 190,000 people who live and work across the catchment area.

We have been progressively upgrading our plants, in line with population growth, and will continue to deliver improvements to ensure we're ready for a future where the North West population is expected to more than double by 2056.

A hub for green energy and the circular economy

By connecting our plants, we will consolidate our biosolids processing at a larger site. Biosolids are a nutrient rich product, made from wastewater and used as agricultural fertiliser. This will also enable new renewable energy opportunities at Riverstone Wastewater Treatment Plant, reducing our operating costs and carbon footprint.

Better outcomes for communities

Our work will transfer biosolids processing away from plants surrounded by residential areas to a plant in an industrial zone. This will reduce the number of trucks carrying biosolids, reduce local traffic impacts and potentially reduce odour for local communities neighbouring the plants.

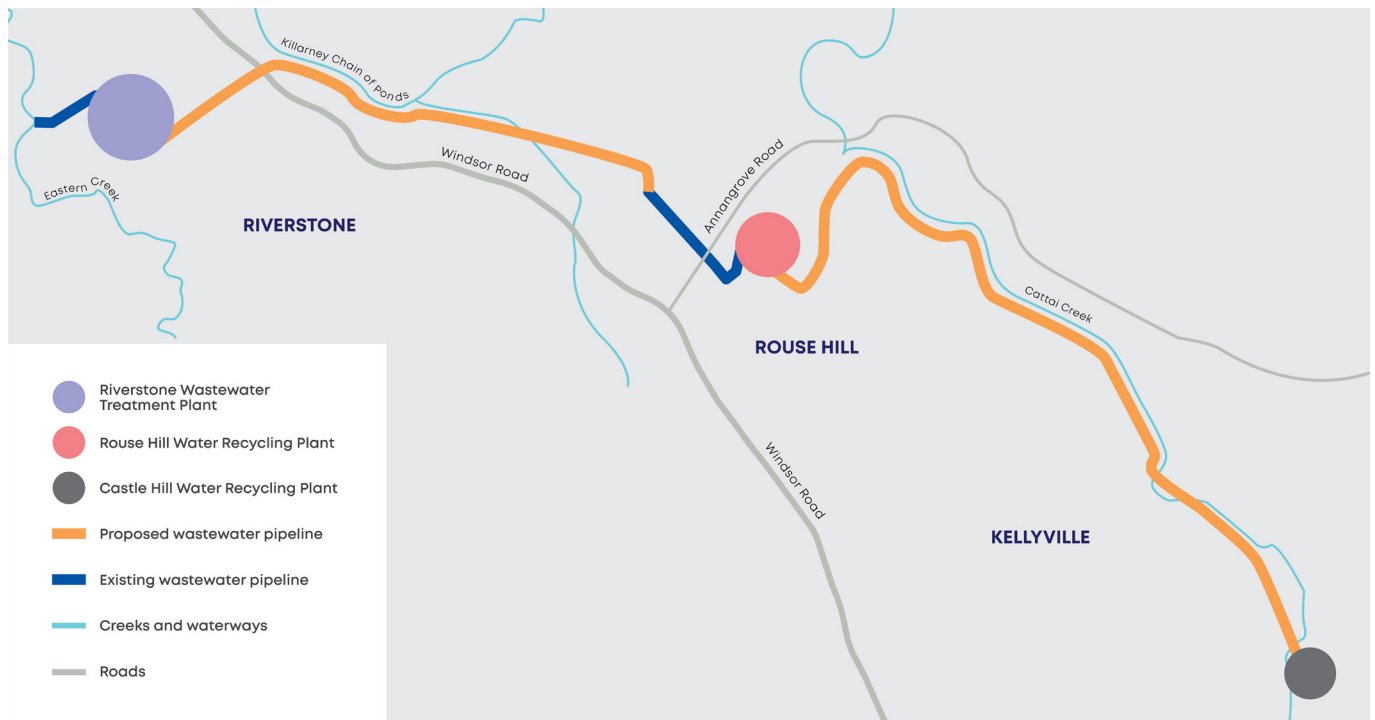
A regional approach to improving local creeks and waterways

Your local creeks and waterways flow into the Hawkesbury-Nepean River system, a large catchment area stretching from Sydney's North West to its South West. We're taking a regional view to improve the quality of the treated water discharged to local creeks and waterways from our plants across the catchment area, by progressively improving the Rouse Hill, Castle Hill, and Riverstone plants. This ensures we continue to provide a resilient and reliable wastewater service.

We'd like to thank the local community for their support, as we continue this work towards a North West Treatment Hub.



**North West
Treatment Hub**



Project overview

We're building a pipeline to transfer partially treated wastewater (sludge) from Castle Hill Water Recycling Plant to Rouse Hill Water Recycling Plant. From there, the sludge will be transferred by another pipeline to Riverstone Wastewater Treatment Plant. This will increase capacity across our network, allow us to treat more wastewater for our customers, and ensure we continue to provide a resilient and reliable wastewater service.

Our work on the North West Treatment Hub will include:

- a 10.2km pipeline between Castle Hill and Rouse Hill water recycling plants
- a 6.3km pipeline between Rouse Hill and Riverstone plants
- upgrading the Rouse Hill plant to increase capacity and close the biosolids waste facility
- upgrading the Riverstone plant to increase capacity so it can accept sludge from both recycling plants.

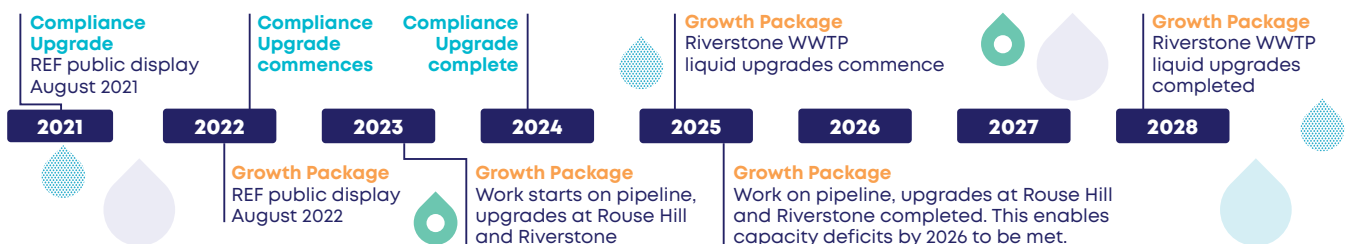
Project timeline

This timeline reflects the project plan as we know it today and we will keep engaging with stakeholders as the project evolves and progresses through to detailed design.

At this stage, construction is planned to start in late 2023. The wastewater pipelines and the work within the boundary of Rouse Hill and Riverstone plants are expected to be completed by the end of 2025. Once we have a construction contractor on board and detailed design has started, we will be able to confirm this timeline. We will continue to engage with stakeholders throughout the project.

In 2021 we asked the community, near Castle Hill and Rouse Hill water recycling plants, for feedback on our compliance upgrade plans for the water recycling plants to improve the quality of discharged treated water. This time, we're asking for your feedback on our plans to connect three plants with two pipelines and further upgrades at the Rouse Hill and Riverstone plants. We will continue with these works simultaneously so that we can deliver on our commitment for a resilient and reliable wastewater service that's fit for the future.

We will continue to plan for further improvements and upgrades to ensure we will be ready to meet the needs of the growing North West population, which is expected to more than double in the next 30 years.



Our work hours will be between 7am and 6pm, Monday to Friday and 8am to 1pm on Saturdays. Where work may be required outside of these hours, we will notify affected residents before the work.

Vegetation removal and trimming

We know that bushland is valued by the local community. However, some vegetation removal and trimming cannot be avoided. We will ensure this is kept to a minimum and appropriate measures are in place to ensure the safety of local wildlife. Sydney Water is committed to offsetting removed vegetation as required. For example, this means we will plant up to three new trees to replace one tree removed in some areas.

Reducing above ground impacts of the pipe

When our work is complete, the pipeline and its various access points will be underground. We have designed the pipeline to minimise the number of ventilation shafts needed and reduce the impact of above ground infrastructure. If there is a ventilation shaft planned for your property, we will contact you to discuss this further.

Temporary changes to local roads around our plant

During construction, we expect there will be periods of increased local traffic around the plants and near the pipeline construction corridor. At Rouse Hill Water Recycling Plant, we will use both our main access, via Mile End Road, and access via Withers Road for construction traffic. We will also use access points off Cattai Creek Drive, Braekell Place, and Deua Way in Kellyville, to transport some machinery to and from the pipeline.

Temporary changes to Mile End Road

Some sections of the pipe will be built in local roads, including Mile End Road, Rouse Hill. This will temporarily impact local access and driveway crossings. To do this work, we will close one lane to traffic and use temporary traffic control to maintain two-way access. Where our work crosses driveways, we will work with impacted residents to manage access and notify you of the timing and duration of our work, closer to construction.

To ensure the safety of pedestrians and cyclists, we will temporarily close the western side of the footpath (opposite residential properties) on Mile End Road. Some bus stops will also be relocated temporarily.

We will have signage in place to help pedestrians, cyclists and bus users safely navigate. We will do our best to minimise any impacts on the surrounding roads and community during work hours.

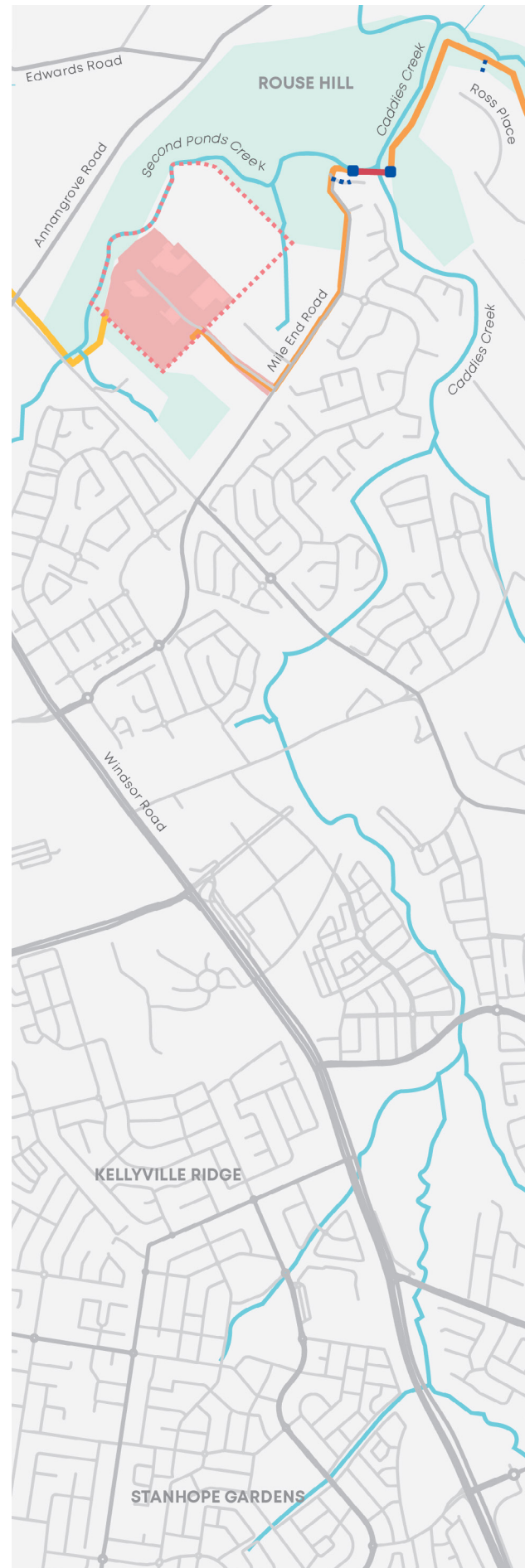
Changes at Rouse Hill Water Recycling Plant

At Rouse Hill Water Recycling Plant, our work will include building one barometric loop – pipes that stand vertically and help manage the flow of wastewater at the site – about 12m high.

The barometric loop is set back at some distance from Mile End Road and will be hidden from nearby residential neighbours, by future developments.

Being a good neighbour

Biosolids are produced as part of the wastewater treatment process. Currently, biosolids are trucked out of Rouse Hill Water Recycling Plant, which can cause odour issues. Once this project is complete, we will close the biosolids waste facility at Rouse Hill, which means no more trucks carrying biosolids in local streets surrounding the plant.





Proposed pipeline from Castle Hill to Rouse Hill plants

Cattai Creek to Rouse Hill July 2022



Find out more

We are holding online and face to face community information sessions to give you an opportunity to speak to the project team and ask questions about the proposed works and the REF.

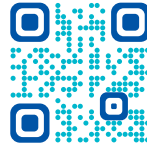
Face to face information sessions will be held:

- Vinegar Hill Library, Rouse Hill Town Centre, White Hart Drive, Rouse Hill
- **Saturday 13 August 2022, from 9am to 12pm.**

Online community information sessions will be held:

- **Thursday 11 August 2022, from 5.30pm to 6.30pm**
- **Tuesday 16 August 2022, from 10am to 11am.**

To register for online information sessions



Scan the QR code or go to
[NWTreatmentHub.eventbrite.com.au](https://nwtreatmenthub.eventbrite.com.au)



NorthWestTreatmentHub@sydneywater.com.au



1800 560 682



Have your say

For more detail on this next stage of work, our Review of Environmental Factors (REF) is available to download now.

You can view and download the REF at
sydneywatertalk.com.au/north-west-treatment-hub.

The next step is for you to let us know what you think.

You are invited to make a written submission by
Monday 22 August 2022. You can do this via email to
NorthWestTreatmentHub@sydneywater.com.au

Interpreter service

If you need an interpreter, please call **13 14 50**

Arabic | Chinese (Traditional) | Chinese (Simplified) | Greek |
Korean | Vietnamese

مترجم إلى بحاجة كنت إذا أعلاه بالرقم اتصل

如果您需要口譯員，請撥打上面列出的電話號碼

如果您需要口译员，请拨打上面列出的电话号码

Εάν χρειάζεστε διερμηνέα, καλέστε τον αριθμό που αναφέρεται παραπάνω

통역이 필요한 경우 위에 나열된 번호로 전화하십시오.

Nếu bạn cần thông dịch viên, hãy gọi số điện thoại được liệt kê ở trên