

Upper South Creek Advanced Water Recycling Centre

Sydney
WATER

Environmental Impact Statement Overview



Purpose of this brochure

This brochure summarises the Environmental Impact Statement (EIS) for the Upper South Creek Advanced Water Recycling Centre (AWRC) project. The EIS assesses the project's impacts and outlines how Sydney Water will manage them.

You can provide feedback on this EIS by visiting planningportal.nsw.gov.au/major-projects

Project overview

Sydney Water is planning to construct the Upper South Creek AWRC to support predicted population and economic growth in Western Sydney, including designated growth areas known as South West Growth Area and Western Sydney Aerotropolis Growth Area.

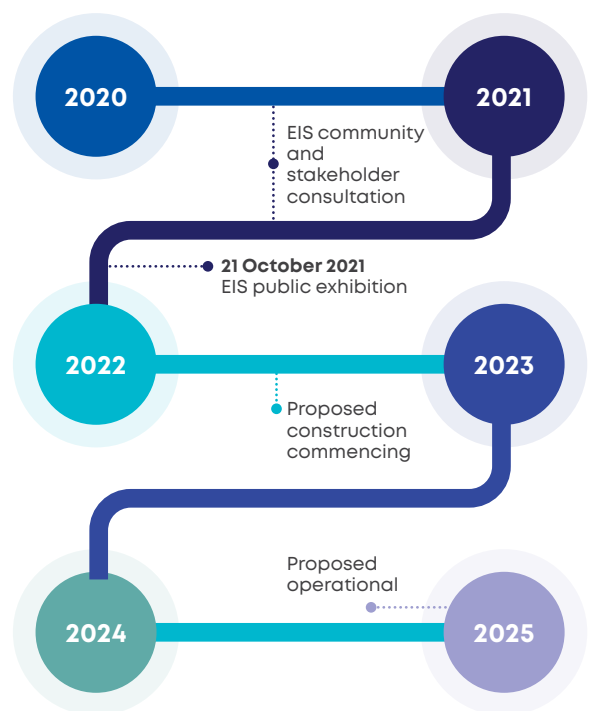
It will collect wastewater from homes and businesses across Western Sydney and treat it to produce high-quality water suitable for a wide range of non-drinking uses in homes, industrial and business use, agriculture and for greening public open spaces.

Given its high quality, the water can also be released to local waterways such as the Nepean and Warragamba rivers to help sustain our important river ecosystems that continue to come under significant pressure from extreme weather events.

Construction is expected to begin in mid-2022 and will include:

- 1 New AWRC to collect wastewater from businesses and homes and treat it, producing high-quality treated water, renewable energy and biosolids for beneficial reuse.
- 2 New treated water pipeline, running 17km west from the AWRC to the Nepean River at Wallacia.
- 3 New environmental flows pipeline, running 4.5km from the treated water pipeline to the Warragamba River.
- 4 New brine (a by-product of the reverse osmosis process) pipeline, running 24km east from the centre, connecting to our existing Malabar wastewater system at Lansdowne.

Project timeline



Strategic context

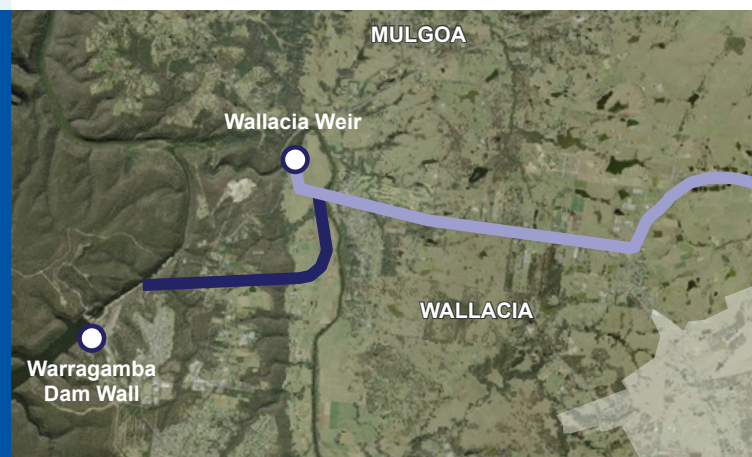
The project is state significant infrastructure and will help achieve a range of Commonwealth, NSW, local government and Sydney Water objectives relating to economic development, growth, water resilience and environmental protection.

It supports the vision for the Western Parkland City, to create quality places for the community, keep water resources in the catchment to support greening and reduce heat island effects and values Aboriginal and non-Aboriginal heritage.

The AWRC will also play a vital role in building a sustainable, thriving, circular economy in Western Sydney by recycling organic waste to produce electricity, as well as biosolids for use in landscaping or as fertiliser.

Project footprint/map

- Environmental flows pipeline (optional)
- Treated water pipeline
- Advanced Water Recycling Centre
- Brine Pipeline



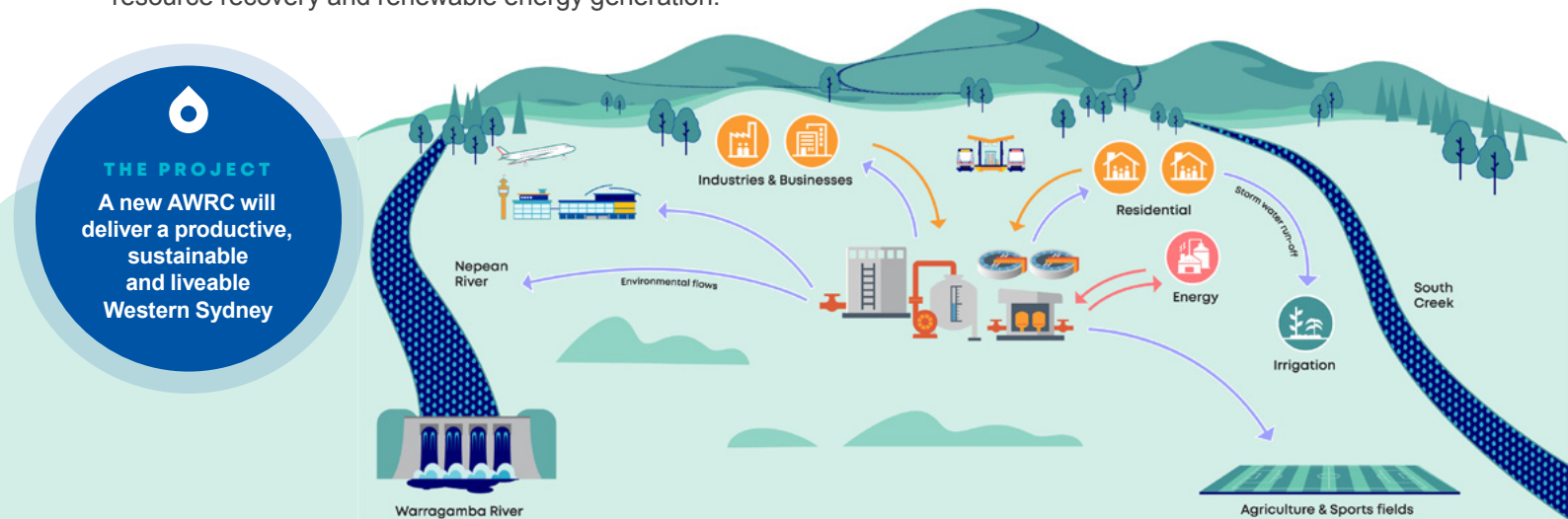
Project benefits

This project will deliver sustainable wastewater treatment and high-quality recycled water to create a cooler, greener Western Parkland City, with a wide range of benefits for the entire community.

- 1 Providing efficient and cost-effective wastewater services
- 2 Producing high-quality, recycled water for a range of reuses
- 3 Harnessing organic waste to generate gas and electricity
- 4 Helping to protect local waterways and aquatic ecosystems via environmental flows
- 5 Producing biosolids for an alternative to chemical fertilisers in agriculture
- 6 Enhancing biodiversity by greening Western Sydney with recycled water
- 7 Generating renewable energy within the AWRC and through solar
- 8 Building a centre that can respond to changes in demand as our community grows

The AWRC is our largest investment in infrastructure for Western Sydney and provides a foundation for a circular economy hub in the Parkland City.

We are also investigating the opportunity to develop a future bioenergy hub at the AWRC for waste collection, reuse, resource recovery and renewable energy generation.



- | | | | |
|------------------------------------|-------------------------------------|--|------------------------------------|
| Cooling | Protecting waterways | More green spaces | Circular economy |
| Water for agriculture and industry | Development of industry and jobs | Local employment opportunities | Cost-efficient wastewater services |
| Liveability and sustainability | Supporting rapid growth in the area | Potential to generate renewable energy | Protecting aquatic systems |





- ▲ Trenched pipeline construction with benching
- ▶ Trenched pipeline construction with shoring in constrained contexts


All pipelines will be built underground, mostly using open trenching.



How we're going to build it

Beginning mid-2022, we expect this project will take about three years to complete. While the AWRC at Kemps Creek will require work over the whole period, other project elements, such as the pipelines, will be built in stages.

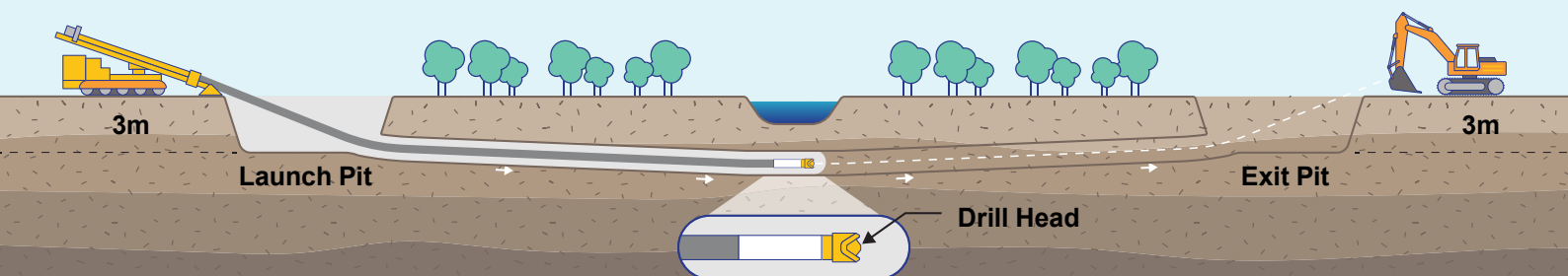
This gives us the flexibility to build certain sections when they have the least impact on the local community.

Some pipelines will be built using tunnelling methods, such as horizontal directional drilling. This method will be used to cross the Nepean River, Prospect Creek, Upper Canal, the railway line at Cabramatta, M7 Motorway and some other roads and creeks.

When tunnelling, we will require additional space for an entry trench from where the pipe is drilled. At the other end there will be an exit trench where the pipe arrives. From this point, open trenching can continue safely.

As parts of the pipeline are completed, we will restore the disturbed areas so our construction has minimal visual impact on the local community.

Horizontal Directional Drilling



What we've learned from you

We've already undertaken a range of community and stakeholder activities since December 2019 including doorknocks, community information sessions (in person and online), meetings, workshops, newsletters and social media promotions.

During our pop-up information sessions in February 2021, you told us how you would like to see the high-quality recycled water used.

We've also spoken to NSW and Commonwealth government agencies, councils, interest groups, local communities including culturally and linguistically diverse groups, and directly impacted landowners.

This input has already informed and influenced the project.



WATCH THE VIDEO



We're committed to continuing this conversation as we progress into detailed design and construction **to ensure any impacts on you are minimised.**



KEY THEMES FROM

COMMUNITY AND STAKEHOLDER FEEDBACK TO DATE



Traffic management during construction to minimise disruption, especially in densely populated areas



Potential availability of water for businesses



Potential impacts to terrestrial biodiversity and heritage



Cumulative impacts (traffic, noise and dust) with multiple other major projects being constructed in Western Sydney at the same time



Impacts to waterways from construction of pipelines and water releases during operation



Potential for flooding around South Creek and Wallacia



Opportunities to influence final design of alignments and construction approach

How we'll minimise construction impacts on you

The EIS includes detailed reports by specialist consultants on a wide range of environmental issues from waterways, biodiversity and heritage (both Aboriginal and non-Aboriginal) to air quality, noise and traffic.

These reports identify impacts, their significance and how we will minimise them. Most impacts will be short term and related to construction.

We are committed to working with communities and stakeholders throughout detailed design and construction and encourage everyone to provide feedback on how we can minimise the impacts of this project on them.



Putting noise and light mitigation measures in place



Consulting early and frequently with local communities



Preparing detailed construction and traffic management plans



Notifying impacted residents of all scheduled work including any potential night works



Timing construction to avoid peak times, and community and memorial events



Ensuring safe pedestrian routes



Changing pipeline alignments where possible

We will **do everything** we can **to avoid or minimise impacts**

How to navigate the EIS

In total, all the documentation in our EIS submission to the NSW Department of Industry, Planning and Environment is over 1,000 pages long.

So, to help you easily find your way to the sections and topics that are most important to you, we've created the below ready reference guide.

Topic	EIS section with more information
Aboriginal heritage	10.1
Biodiversity	9.1
Circular economy	3.5
Community engagement	6.0
Brine pipeline	4.0
Flooding	9.3
Greater Sydney Water Strategy	2.7
Growth and servicing	2.3
Non-Aboriginal heritage	10.2
Purified recycled water for drinking	3.5
Recycled water uses	3.5
Traffic	11.4
Treated water	4.5
Urban design	4.4
Water release locations	3.4
Waterways	8.0

How to get involved

Sydney Water is hosting information sessions during the 28-day EIS exhibition period to provide communities and stakeholders with an opportunity to meet the project team, find out more and ask questions.

To ensure everyone's safety, these sessions will be held online. To register your interest to attend one of these online sessions, scan the QR code.

If you would like to make a submission to the NSW Department of Industry, Planning and Environment about this project, please visit planningportal.nsw.gov.au/major-projects



For further information:



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