

Proposed Advanced Water Recycling Centre, Kemps Creek

Industry engagement - information memorandum

July 2021



An Advanced Water Recycling Centre to support the Western Sydney Parkland City vision.

Introduction

This information memorandum has been prepared to support the Advanced Water Recycling Centre (AWRC) industry engagement process by providing the market with an update on the project's proposed delivery strategy and procurement process.



AWRC Artist's Impression

Sydney Water

Our vision: Creating a better life with world-class water services.

Sydney Water is Australia's largest water utility.

We're a statutory State Owned Corporation, wholly owned by the New South Wales Government.

Our area of operations covers 12,700 km² and includes Sydney, the Illawarra and the Blue Mountains regions. This area is now set to expand.

Western Sydney is forecast to experience rapid population growth in coming years, spurred by the Western Sydney International Airport and a large investment in housing, job-creating industries, transport projects and other infrastructure.

Sydney Water is working closely with customers, the community and government partners to establish new water, wastewater and recycled water services for the West while supporting the NSW economy and the productivity, liveability and sustainability of the Western Parkland City.



Project overview

The AWRC will provide an essential wastewater service for the Western Sydney Aerotropolis and South West Growth Area. It will also be an important project for maintaining water within the catchment.

Located in the suburb of Kemps Creek, at the junction of Kemps Creek and South Creek, the AWRC is being planned in stages. The first stage will deliver capacity to treat up to 35 million litres daily by 2025. Future stages will see the plant grow to treat up to 70 million litres of wastewater daily by around 2036.

The AWRC will produce advanced quality recycled water suitable for release to the Nepean River in line with the Hawkesbury-Nepean nutrient removal framework. The treatment plan therefore needs to produce a very high quality of water, close to drinking water standard.

As a result, there is considerable opportunity for the AWRC to enable a recycled water supply to customers in and around the catchment of various uses including residential, commercial, agriculture and open space.

Sydney Water is looking to incorporate innovation and world-leading technologies that will support resource recovery and circular economy initiatives at the AWRC.

The site will play an important role in the development of the green spine through the South Creek corridor, and provide an opportunity to rediscover biodiversity, cultural and heritage values of the site.



AWRC Proposed Site Layout

AWRC Delivery Strategy

The delivery strategy for the Upper South Creek project has been shaped by extensive industry engagement and the need to:

- deliver a wastewater service by June 2025
- be adaptable to growth and changing requirements
- maintain flexibility for the future circular economy
- provide <u>value for money</u> across the asset lifecycle
- support a sustainable future for Sydney Water
- support the <u>economy</u>, <u>liveability</u> and <u>innovation</u> in the Western Parkland City.

The packages and procurement approach is detailed on the following page.



View of the Western Parkland City

Delivering the Circular Economy

While working towards achieving the first wastewater service by June 2025, we will also be pursuing opportunities to develop the site as a future circular economy hub, which could include incorporation of a Development Partner.

We will investigate technologies and commercial opportunities for energy generation and resource recovery, including potential incorporation of organic waste streams. We will work with tenderers to develop options for how opportunities will interface with or integrate into the AWRC foundation plant.

Any options beyond that of co-generation and typical biosolids recovery will require a new business case and additional approvals.



Packages and Procurement

There will be three 'Design and Construct' contracts. The AWRC will also include a 5-year operations period. All contracts will be based on the NEC4 suite.

AWRC (foundation plant) -

Sydney Water is seeking a consortium of a designer, constructor and operator to deliver a wastewater service by June 2025 and manage operations for a period of 5 years.

The consortium will develop a long-term view of the foundation plant and the overall site to enable growth and the management of interfaces to support future expansion and realisation of the circular economy.

Sydney Water will reimburse effort in the ECI phase.

Pipelines West and East -

Tendered as two separate packages, with the opportunity for participants to submit a combined offer. Participants tendering for the AWRC will not be precluded from also tendering for the pipelines.

Technical Advisor -

Sydney Water will be engaging a consultant design team to act as our Technical Advisor throughout the project. The successful firms will be excluded from joining a delivery consortia.

Development Partner (optional) -

Sydney Water will continue to explore potential options for developing commercial opportunities in the circular economy (page 2). Sydney Water will work with the AWRC consortia through the development of these opportunities to ensure the interfaces are managed and the approach adopted is the best outcome for our customers and Western Sydney.

Planning Approvals

Sydney Water is currently finalising the Environmental Impact Statement for public exhibition later this year. Approvals are expected in time for construction to commence in July 2022.

Delivery and operational conditions and environment licences will be informed by these approvals.

AWRC Transaction Timelines



Next Steps

- We will procure a Technical Advisor in July.
- We will seek Expressions of Interest (EOI) for the AWRC (foundation plant) in August 2021 and Pipelines in October 2021. Further market briefings will be provided prior to EOI releases.

Industry information



If you have a questions in the meantime, email: industry.uppersouthcreek@sydneywater.com.au