Neerabup Groundwater Treatment Plant Upgrade and Associated Works

Project overview
As Western Australia continues to experience the impacts of climate change, Water Corporation has been working with the Department of Water and Environment Regulation (DWER) on sustainable, future approaches to groundwater abstraction for potable water supply.

One approach is to increase the amount of treated wastewater being replenished into our groundwater system via the groundwater replenishment scheme. This is being complemented by increasing the number of abstraction bores from deeper aquifers in approved locations. This will enable increased operational flexibility of the Corporation’s abstraction bores within the Integrated Water Supply System (IWSS).

Parameters set by DWER have resulted in few sites being identified as suitable for bore construction. The sites must be close to existing bore mains, large enough to accommodate drilling rigs and also ensure minimal impact to residents and the environment.

To support abstraction from these additional bores, an upgrade of the Neerabup Groundwater Treatment Plant (GWTP) and Neerabup Transfer Pump Station (TPS) is also required.

The Neerabup GWTP currently treats some 100ML of groundwater a day for supply to Perth’s IWSS. The upgrade will increase treatment capacity to 150 ML/day and will involve expansion of existing aeration and filtration processes, upgrades to existing residuals handling systems and chemical dosing systems, installation of cooling towers, and construction of an additional sludge thickener, backwash holding tank and drying beds.

To transfer water from the new abstraction sites to the Neerabup GWTP, new bore collector mains and connection to existing bore collector mains will also be required. This will be completed under a separate contract to the expansion of the Neerabup GWTP, upgrade of Neerabup TPS and construction of bore site infrastructure.

Work on the project is expected to commence in 2019 and be complete in 2020.

Opportunities for contractors
Competitive Alliance RFP – terminated
Water Corporation issued an RFP for a competitive alliance contract for the Neerabup GWTP upgrade and associated works in 2018. After the RFP closed, the process was terminated due to York Civil going into administration.

Upcoming design and construct contract
The Water Corporation will issue tenders for a Design and Construct contract in late-2018. Tender documentation will be available on the Water Corporation public tenders website.

FAQs
Do you have any contractors on-board already?

Yes, a contractor to drill the new abstraction bores has been awarded as part of a larger scope of works to drill 22 bores across the Perth metropolitan area.

A contractor has also been engaged to undertake preliminary site work at the bore sites for drilling operations. This has also been awarded as part of a larger scope of works to drill 22 bores across the Perth metropolitan area.

Who is the project manager in charge of this project?

All enquiries in the first instance should be directed to groundwater.replenishment@watercorporation.com.au.