

<b>Name of wastewater treatment plant</b>	Richmond Wastewater Treatment Plant
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System Summary	Projected				
	2026	2031	2036	2046	2056
Richmond WWTP ADWF (ML/d)	3.3	3.9	3.9	3.9	3.9
Richmond load (EP <sub>COD</sub> )	22,989	26,423	26,658	26,864	26,987

Treatment capacity constraints for 2022 – 2036	Estimated year of exceedance
Richmond WWTP design capacity of 3.6 ML/d (18,000 EP) forecast to be exceeded.	2020/21
Nutrient removal capacity of treatment plant constrained – impact on growth servicing.	By 2024

Summary of servicing strategy for 2022 – 2036
Due to capacity constraints and asset condition issues at North Richmond, North Richmond WWTP is to be decommissioned and all flows transferred to Richmond WWTP for treatment. Richmond WWTP will be upgraded to increase capacity for growth in the combined catchment flows and loads. Upgrades will also be made to Richmond WWTP to improve effluent nutrient performance in response to EPL changes.

Anticipated augmentation and upgrades for 2020 – 2036			
Year commissioned	Description	Approximate capital cost (\$M)	Impact on servicing capacity
2025	At north Richmond A sewage transfer pumping station at North Richmond, transfer pipeline from North Richmond to Richmond and improvements to sewer network. At Richmond Conversion of existing two IDALs to sequential batch reactors (SBR) augmented with two additional SBRs, solids treatment in existing lagoons, sewer network improvements	156**	Project will facilitate growth servicing, including under proposed new EPLs, up to 2046.

\*\*combined cost for North Richmond and Richmond – project funding approved.

Further investigations
Upgrade project is in the Detail design and delivery phase.
Effluent discharge load limits and required treatment may also be modified depending on recycled water options from the Richmond WWTP.
Sludge loads are likely to be transferred to Riverstone for centralised processing in future, requiring additional investments for new sludge management investments. Potential for change in Biosolids guidelines makes future management of sludge uncertain.
Servicing of new growth areas in Richmond or North Richmond not included in the current growth projections will require additional infrastructure and funding.

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Date published: 30 June 2023