Quakers Hill Water Reclamation Plant Report

Name of wastewater treatment plant	Quakers Hill Water Reclamation Plant

System Summary	Projected				
	2026	2031	2036	2046	2056
Quakers Hill catchment ADWF (ML/d)	28.8	30.1	30.3	32.4	33.8
Quakers Hill load (EP_{COD})	180,620	188,630	189,870	201,930	210,130

Treatment capacity constraints for 2022 – 2036	Estimated year of exceedance
Reliability /structural integrity of existing IDALS and capacity constraints	2022

Summary of servicing strategy for 2022 – 2036
Lower South Creek Upgrade will see Quakers Hill plant capacity capped with 10 ML/d of raw influent transfer from Quaker Hill WRP to St Marys WRP. Quakers Hill IDALs will be replaced with Activated Granular Sludge (AGS) Process. will not be done at All sludges will be transferred with the 10ML/d partial influent transfer to St Marys for centralised biosolids processing. Treated effluent will cease being transferred to St Marys AWTP. Instead, effluent from the raw influent transferred to St Marys, treated there, along with St Mary treated effluent and Penrith WRP treated effluent will be fed to the AWTP. The Lower South Creek project has been completed now.

Anticipated augmentation and upgrades for 2022 – 2036			
Year commissioned	Description	Approximate capital cost ($M)	Impact on servicing capacity
2028	Upgrade/amplify for growth/	7.2	Continued servicing of growth beyond 2030.

Further investigations
Lowe South Creek Project commissioned and is in operation. Funding for decommissioning of the old IDAL plants may be required in the next ten-year horizon.
Impact of EPL changes (including nutrient load limits) being assessed – may lead to additionalr infrastructure investment within the ten-year horizon.

Date published: 30 June 2023