

Rouse Hill Water Reclamation Plant Report

Name of wastewater treatment plant	Rouse Hill Water Reclamation Plant

System Summary	Projected					
	2026	2031	2036	2046	2056	
Rouse Hill catchment average dry weather flow (ML/d)	30.3	33.9	35.7	36.4	36.8	
Rouse Hill catchment load (EP _{COD})	202,318	225,783	238,259	242,394	245,357	

Treatment capacity constraints for 2022 – 2036	Estimated year of exceedance	
Liquid stream hydraulic and load capacity exceeded; aerobic digestion capacity	2020	
exceeded (without influent diversion to Riverstone WWTP)	2020	

Summary of servicing strategy for 2022 - 2036

Temporary wastewater transfer to Riverstone WWTP followed by liquid treatment facility upgrade and sludge transfer to Riverstone.

Meet the requirements of the pollution reduction program (PRP) in a timely manner. This consists of a new inlet works, RE upgrades, the OCF, and reinstating the wet weather PST by 2024 in an expedited manner. Increase treatment capacity to 40 ML/d, meet new nutrient load limits for compliance with the revised EPL and Hawkesbury Nepean Regulatory Framework, and provide dedicated sludge transfer to Riverstone WWTP (by 2024/25).

	Anticipated augmentation and upgrades for 2022 – 2036					
Year commissioned	Description	Approximate capital cost (\$M)	Impact on servicing capacity			
2024	Expedited Phase 2 works: New Inlet works, RE upgrades, the OCF, and the reinstating the wet weather PST.		Required to meet the requirements of the pollution reduction program			
2025 r	Phase 2 works: Increase treatment capacity to 40 ML/d, meet nutrient load limits with revised EPL, and sludge transfer to Riverstone WWTP.	32.5**	(PRP) and EPA standards. Plant capacity increased to 40 ML/d.			
2032	Phase 3 works: Addition of a 2.5 ML/d MBR and UF equipment	237	Cater for projected growth to 2033/34 and maintain EPL compliance.			

^{**} in progress, remaining expenditure for completion

Further investigations	
Phase 1 works delivery being completed	
Phase 2 works are in detail design and delivery phase – Delivery timeframes may vary.	

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