

Hornsby Heights Wastewater Treatment Plant Report

Name of wastewater treatment plant	Hornsby Heights Wastewater Treatment Plant
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System Summary	Projected					
	2026	2031	2036	2046	2056	
Hornsby Heights WWTP ADWF (ML/d)	5.8	6.0	6.1	6.1	6.1	
Hornsby Heights WWTP load (EP _{COD})	39,900	40,700	41,300	42,500	43,700	

Treatment capacity constraints for 2022 – 2036	Estimated year of exceedance	
No capacity constraints identified – only reliability and renewals issues which	2024	
impact performance and availability of process units.	2024	

Summary of servicing strategy for 2022 - 2036

Continued treatment of wastewater flows for waterway discharge.

The risk of meeting the nutrient load limits under the EPL licence and providing capacity for the growth, particularly with the EPL licence for the plant which requires meeting lower Total Nitrogen (TN) and Total Phosphorous (TP) loads from 2024. There is also a low risk of EPL exceedance for the 90%ile ammonia and TSS concentration limits due to bypass flows during wet weather.

Reliability and renewal works are proposed to ensure reliable operation and redundancy needs to take plant and equipment for maintenance keeping performance.

Biosolids (including thickened waste activated sludge from Brooklyn WWTP) processed and sent out for beneficial reuse.

Anticipated augmentation and upgrades for 2022 – 2036						
Year commissioned	Description	Approximate capital cost (\$M)	Impact on servicing capacity			
2027	New PST, sludge thickening, additional filters, grit system upgrade, odour control upgrade, manage hydraulic constraints	30.5**	Ensure the plant can service growth and meet Tn and TP load limits under EPL			

^{**} based on current options study underway

Further investigations

Licence variation application is underway for relaxation on TN, TP, Ammonia and TSS concentration and loads in extreme wet weather. Additional capital spending may be required if these applications are not successful and the completion of current options study

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