Sydney WATER

Name of wastewater treatment plant	Bondi Wastewater Treatment Plant
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System Summary	Projected					
System Summary	2026	2031	2036	2046	2056	
Bondi catchment average dry weather flow (ML/d)	126.9	131.4	134.4	137.9	140.0	
Bondi catchment load (EPCOD)	822,400	852,243	872,354	896,179	909,723	

Treatment capacity constraints for 2022 – 2036	Estimated year of exceedance	
Inlet works and preliminary treatment capacity insufficient	2026	

Summary of servicing strategy for 2020 – 2036

Continued primary treatment of liquid stream for deep ocean outfall, and anaerobic stabilisation of biosolids for disposal by land application. Various reliability upgrades are currently underway at Bondi including inlet works upgrades and an upgrade to the grit and screenings handling area are set to be commissioned before 2026.

The Bondi solids stream is planned to have a new, re-located out-loading facility, raw sludge pumps and gravity thickener. The solids stream upgrade involves pumping thinner sludge from the PSTs, increasing capture of oil & grease (O&G) in the future. These non-growth upgrades and major process enhancements will both help to create a safer, cleaner, and more maintainable facility. The relaxation of the environmental regulation requirements for the 50th percentile effluent limit for O&G have recently been approved, and so no investment is required to the liquids stream for pollution reduction purposes.

Anticipated augmentation and upgrades for 2022 – 2036					
Year commissioned	Description Approximate capital cos (\$M)		Impact on servicing capacity		
2024	Inlet Works upgrade	R & R Project	Reliability improvement to provide a safer, cleaner, and more maintainable facility with an increased capacity.		
2031	Solid Stream Upgrades (new out loading, raw sludge pumps and gravity thickener)	154.1	Provide sludge storage and out loading capacity beyond 2046		

Further investigations		
Solid stream upgrade preferred option has not yet been approved, costs and augmentation pathways may vary with further		
refinement.		
Multiple other Renewal and Reliability projects underway/planned at Bondi WWTP.		
Other enhancements to remove oil & grease will only be necessary in the future if the catchment characteristics change or the		
licence condition is once again tightened.		

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