

<b>Name of wastewater treatment plant</b>	Picton Water Reclamation Plant
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System Summary	Projected				
	2026	2031	2036	2046	2056
Picton WRP ADWF (ML/d)	5.1	5.6	5.7	5.8	5.8
Picton WRP load (EP <sub>CO<sub>D</sub></sub> )	31,430	34,620	35,210	35,790	35,850

Treatment capacity constraints for 2020 – 2030	Estimated year of exceedance
Nutrient removal capacity	2021
Effluent management constraints	2023
Treatment capacity for growth	2025

Summary of servicing strategy for 2020 – 2046
<p>The growth servicing strategy for Picton WRP was informed by the Process Capability Assessment. Management of the effluent TN load is central to the servicing strategy for this plant as the existing effluent load limits have de-rated the capacity of the plant from 4 ML/s ADWF to between 2.5 – 3.0 ML/d.</p> <p>There are two projects that underway at the plant. Both projects improve the effluent quality to target effluent management and facilitate effluent disposal: tertiary denitrification filters to achieve effluent quality of 3 mgTN/L; and effluent management – including wetlands treatment, dry weather effluent discharge to the Nepean River and increased effluent recycling. Furthermore, a third treatment stage will be required by 2025. This upgrade will address the growth demand and includes capacity augmentations to the inlet works, secondary treatment, and sludge storage. It is assumed that the effluent disposal capacity will be addressed by former projects.</p> <p>There is negotiation going on for a licence variation and the future strategy and investment is dependent on the outcome of this negotiation.</p>

Anticipated augmentation and upgrades for 2020 – 2030			
Year commissioned	Description	Approximate capital cost (\$M)	Impact on servicing capacity
2024	Upgrade to tertiary denitrification and effluent disposal.	4.3	Facilitate growth servicing by ensuring compliance within effluent nutrient load limits.

Further investigations
<p>Changes to the effluent load limits driven by the Hawkesbury Nepean load limit work may infer a greater need to remove nutrients at Picton WRP. Further investigation required to inform the capital spending needs with a varied EPL licence as a result of a successful negotiation with EPA</p> <p>Due to smaller plant size of WRP, stricter effluent load limits can have significant impact on the plant's servicing strategy.</p>