

Orchard Hills Water Filtration Plant Report

Name of water treatment plant	Orchard Hills Water Filtration Plant

System Summary		Projected			
System Summary	2026	2031	2041	2046	2051
Total Equivalent Population (EP)	316,251	362,354	417,329	443,481	469,634
Average day demand (ADD) ML/d	67.6	78.0	91.0	95.1	99.3
Max day demand (MDD) ML/d	157.5	181.7	212.0	221.7	231.4

Current treatment capacity	(ML/d)
Treatment / filtration - normal raw water quality	173
Treatment / filtration - poor raw water quality	99

Treatment capacity constraints for 2022 – 2036	Estimated year of exceedance
The plant will not have capacity for the MDD up to 2025 even though it can meet the ADD up to 2046.	2025
Raw water pumping and supply main capacity constraints.	2031

Anticipated augmentation and upgrades 2022-2036				
Year commissioned Description		Approximate capital cost (\$M)	Impact on servicing capacity	
2031	Reliability upgrades	Funded	Capacity increased to 255 ML/d	

Further investigations
Furter capacity upgrade to filters will be required by 2041 to increase capacity to 244 ML/d.