

Beachlands Wastewater Scheme - Short list options

Option 4ae: Hauraki Gulf – Tāmaki Strait Mid
Locality map



Option 4ae Hauraki Gulf – Tāmaki Strait Mid

Stantec Short List Discharge Options Watercare

Legend

- Indicative Discharge Location
- Indicative Conveyance Pipeline and Ocean Outfall
- Beachlands WWTP Designation Boundary
- Beachlands WWTP Property Boundary
- Wastewater Catchments
- Plan Change 88 Area

Data Sources: NIWA, LINZ NZ, Stantec NZ Basemap Service Credits: Esri Community Maps Contributors, LINZ, Stats NZ, Esri, HERE, Garmin, Foursquare, METI/NASA, USGS, Stats NZ, Esri, HERE, Garmin, Foursquare, FAO, METI/NASA, USGS, Maxar
Coordinate System: NZGD 2000 New Zealand Transverse Mercator

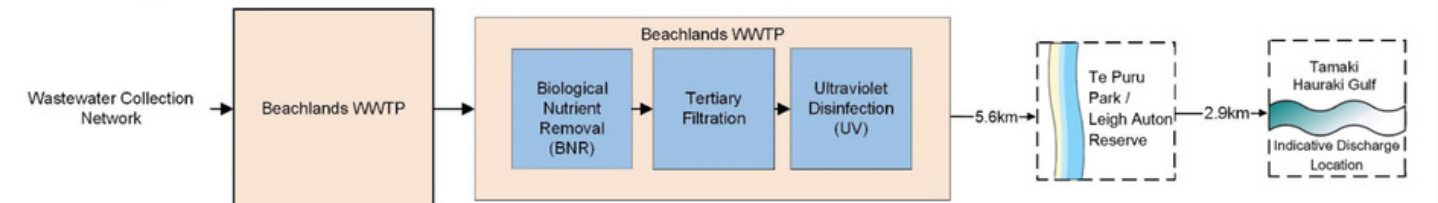
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Option 4ae: Hauraki Gulf – Tāmaki Strait Mid

Discharge location	Treatment option	Treatment location
Tāmaki Strait north of Te Puru Park / Leigh Auton Reserve, Beachlands.	<ul style="list-style-type: none"> Biological Nutrient Removal (BNR). Tertiary Filtration. Ultraviolet disinfection (UV). BNR + Tertiary Filtration + UV disinfection.	Existing Beachlands Wastewater Treatment Plant (WWTP) site.

Process diagram



Typical treated water quality

Population Equivalent	30,000
Average Daily Flow (ADF) m ³ /day	6,000
Parameter	Median Concentration mg/L
Biochemical Oxygen Demand (BOD)	5.0
Total Suspended Solids (TSS)	5.0
Total Nitrogen (TN)	10.0
Total Phosphorus (TP)	Monitoring only
Faecal Coliforms	<10 cfu/100ml

Key components

Item	Description
Conveyance system	Convey wastewater 5.6km to Te Puru Park / Leigh Auton Reserve and discharge via 2.9km ocean outfall..
Treatment system	Existing Beachlands WWTP site. BNR + Tertiary Filtration + UV disinfection.
Discharge system	Mid-length ocean outfall into the Tāmaki Strait.

Indicative costs

Capital	\$250M to \$360M	Operating and maintenance	\$52M	Whole of life	\$302M to \$412M
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