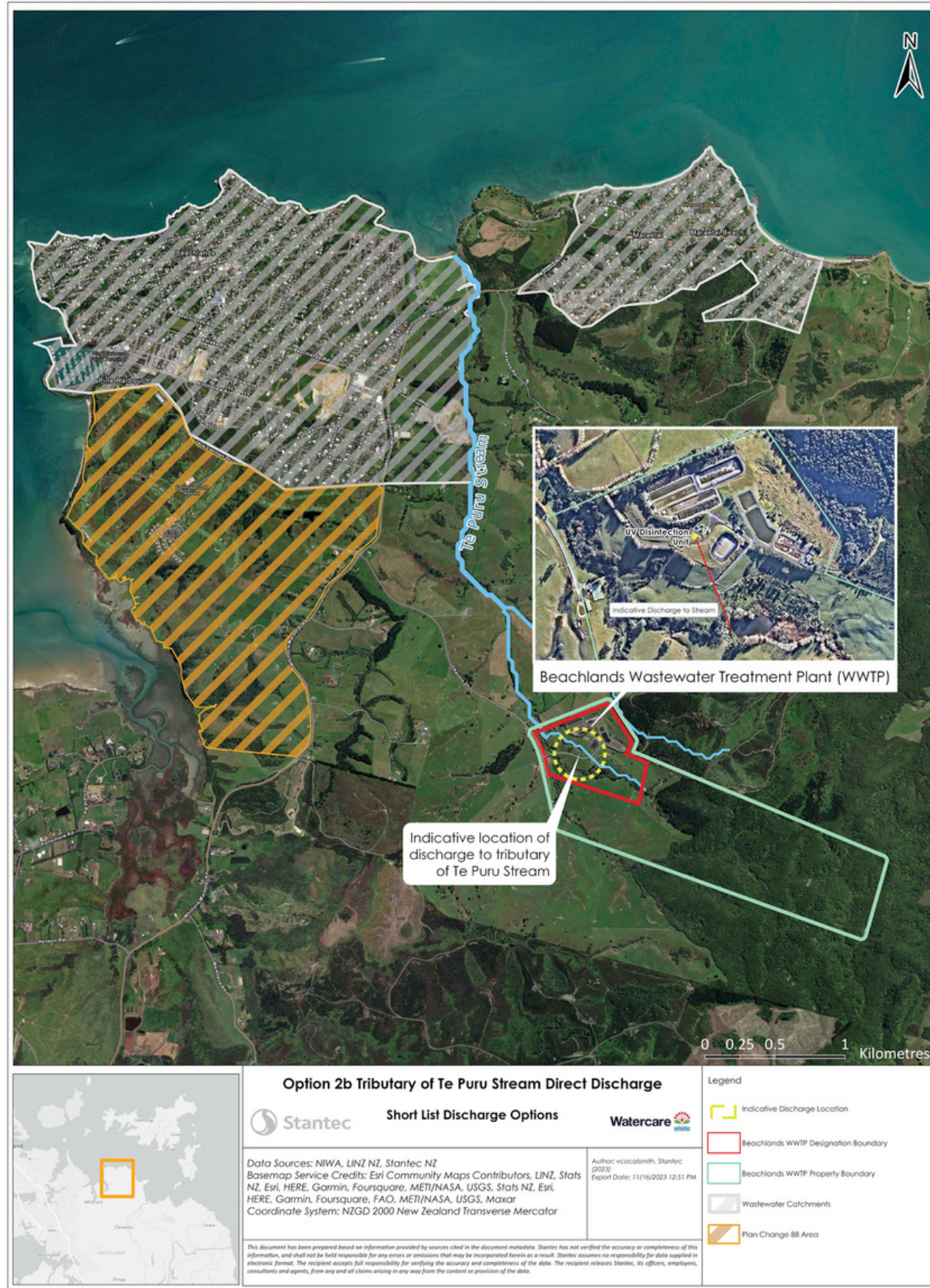


Beachlands Wastewater Scheme - Short list options

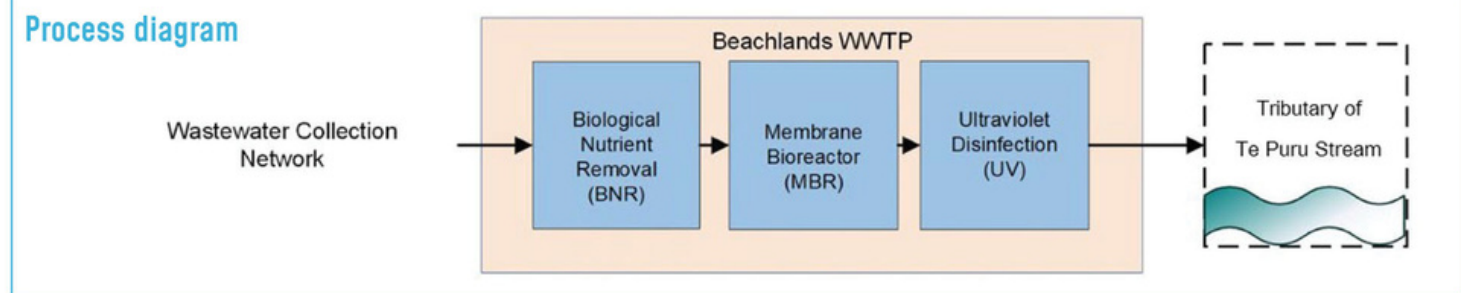
Option 2b: Tributary of the Te Puru Stream - Direct discharge
Locality map



Beachlands Wastewater Scheme - Short list options

Option 2b: Tributary of the Te Puru Stream - Direct discharge

Discharge location	Treatment option	Treatment location
Tributary of Te Puru Stream.	<ul style="list-style-type: none"> Biological Nutrient Removal (BNR). Membrane Bioreactor (MBR). Ultraviolet disinfection (UV). BNR + MBR + UV disinfection.	Existing Beachlands Wastewater Treatment Plant (WWTP) site.



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)	5.0
Total Phosphorus (TP)	1.0
Faecal Coliforms	<10 cfu/100ml

Key components

Item	Description
Conveyance system	Conveyance to a new discharge structure, potentially downstream of current discharge.
Treatment system	Existing Beachlands WWTP site. BNR + MBR + UV disinfection.
Discharge system	Direct discharge to Tributary of Te Puru Stream with a new discharge structure.

Indicative costs

Capital	\$210M to \$310M	Operating and maintenance	\$52M	Whole of life	\$262M to \$362M
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