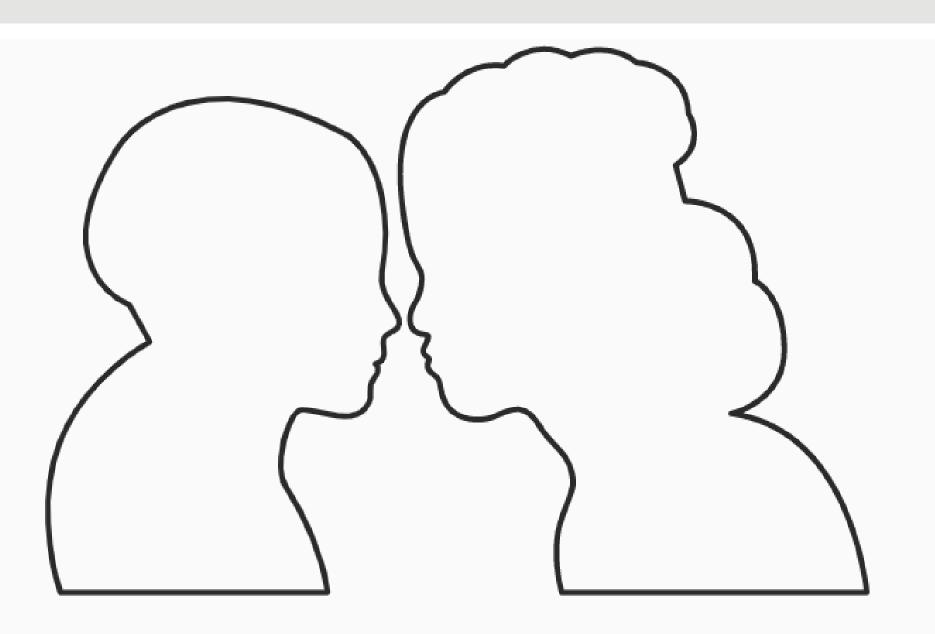
Using Wastewater Upgrades to Empower Cultural and Ecological Visions

Tanvir Bhamji, Watercare Garrett Hall, Beca Limited 19 September 2019





Embracing Cultural Visions



The Old



Existing and New







Pukekohe WWTP Consent Project

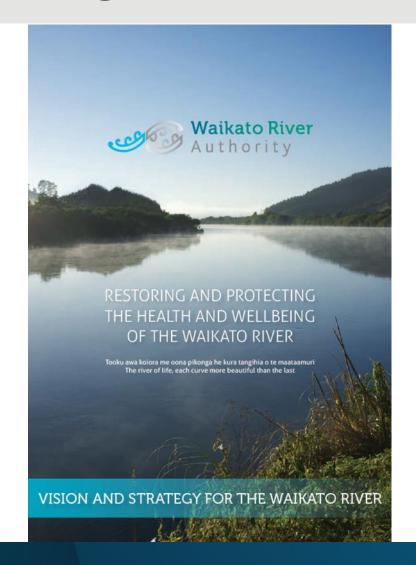
- WWTP services areas of Pukekohe, Pokeno and Tuakau
- Major growth projected over 35-years – 27,500 population to 85,000
- State of the art
 Membrane Bioreactor
 treatment plant
 proposed



Legislation Changes

Waikato-Tainui
 Raupatu Claims
 (Waikato River)
 Settlement Act 2010

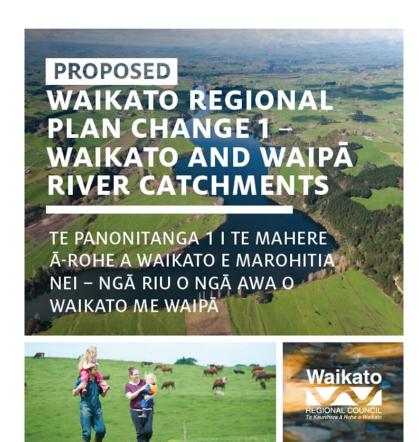
Te Ture Whaimana o
 Te Awa o Waikato The
 Vision and Strategy for
 the Waikato River



"Our Vision is for a future where a healthy Waikato River sustains abundant life and prosperous communities who, in turn, are all responsible for restoring and protecting the health and wellbeing of the Waikato River, and all it embraces, for generations to come".

Regional Plan Changes

- Proposed Plan Change 1 (PPC1) to the Waikato Regional Plan
- Gives effect to the National Policy Statement for Freshwater Management and the Vision and Strategy for the Waikato River
- Includes short-term (10 year) and long-term (80 year) water quality targets
- Primary focus on 'diffuse dischargers' but 'point sources' also subject to strict provisions



Pukekohe Wastewater Treatment Scheme ORIGINAL PROPOSAL (2015) Upgrade to 1. DRINKING STANDARD Upgrade to Advance Membrane Bioreactor Advanced plant with discharge **MBR** MBR into Parker Lane stream Treatment via existing discharge Treatment Construction of a new pipeline and outfall for a (\$45 million) location. Consent (\$60 million) Advanced duration 35 years. 7 year consent duration. Treated wastewater to then **MEMBRANE** This revision is based on feedback from Te BIOREACTOR integrate into the Waikato Taniwha O Waikato Advanced nutrient removal followed by River via a mid-channel Extra MBR component diffuser membranes for micro-filtration of bacteria (2016 proposal) Proposed MBR MEMBRANE BIOREACTOR Pond 1 Conventional nutrient removal followed by Historic pond 2 membranes for micro-filtration of bacteria Discharge location (2015 proposal) Wetland Historic pond 3 SEQUENCING BATCH REACTOR Conventional nutrient removal followed by Water channel settling tanks (Current treatment) Parker Lane Stream OXIDATION Basic form of treatment (treatment type Waikato River 1960's - 2009) \$ = capital expenditure.

PUKEKOHE WASTEWATER DISCHARGE APPLICATION

Cultural Impact Assessment – Values, Uses and Statutory Obligations in and around the Waikato River



Prepared on behalf of Te Taniwha o Waikato
By

GMD Consultants

"Te Taniwha o Waikato consider that the best option for the health and wellbeing of the Waikato River is to have no discharge at all.

However, taking a pragmatic and practical view of the situation, Te Taniwha o Waikato are prepared to accept a discharge to the Waikato River where the quality of that discharge would not be detrimental to the objective of restoring the health and wellbeing of the Waikato River.

Te Taniwha o Waikato recognise that the use of MBR and UV technologies will result in a discharge that is of a quality that will not further adversely affect the values and uses that Te Taniwha o Waikato hold for the Waikato River.

Therefore, Te Taniwha o Waikato support the preferred option described in Part C of this CIA, over the alternatives proposed".

...the proposed discharge will improve water quality in the Parker Lane stream and its life supporting capacity compared to the status quo, under which a discharge is occurring. Importantly, we also find there will be improved water quality in the stream, and its life supporting capacity, as compared to an environment in which there was no WWTP discharge

Southwest Sub-Regional Wastewater Scheme

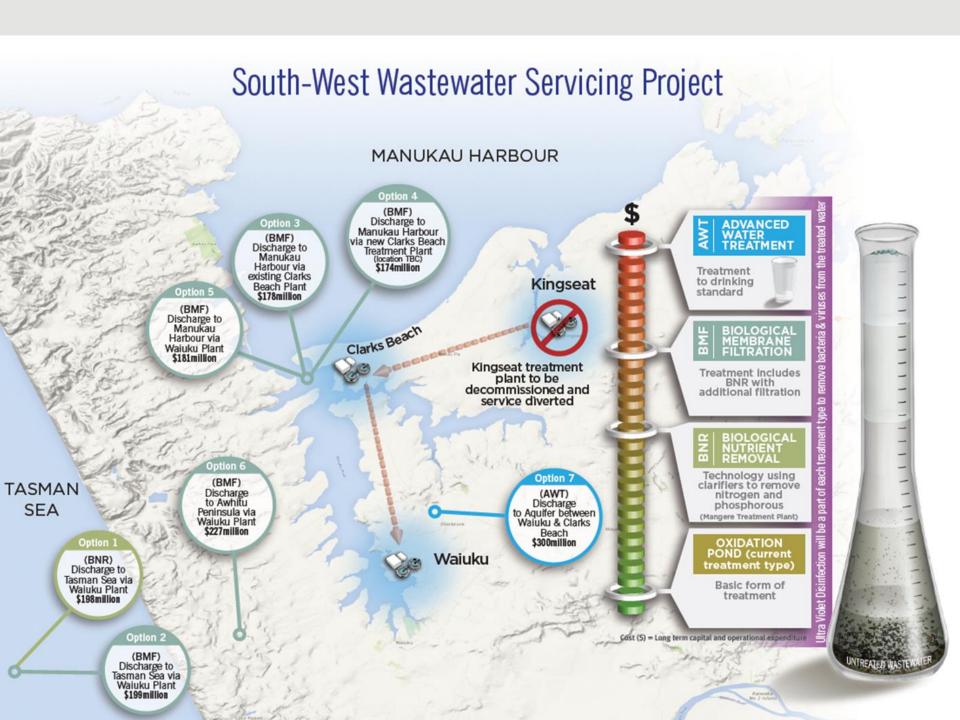
- Four existing WWTP's servicing Kingseat, Kingseat Hospital, Clarks Beach and Waiuku
- Significant growth projected and current consents expiring
- Manukau Harbour scheduled as 'degraded waters' in the Auckland Unitary Plan
- Iwi aspiration to remove treated wastewater discharges from the Harbour



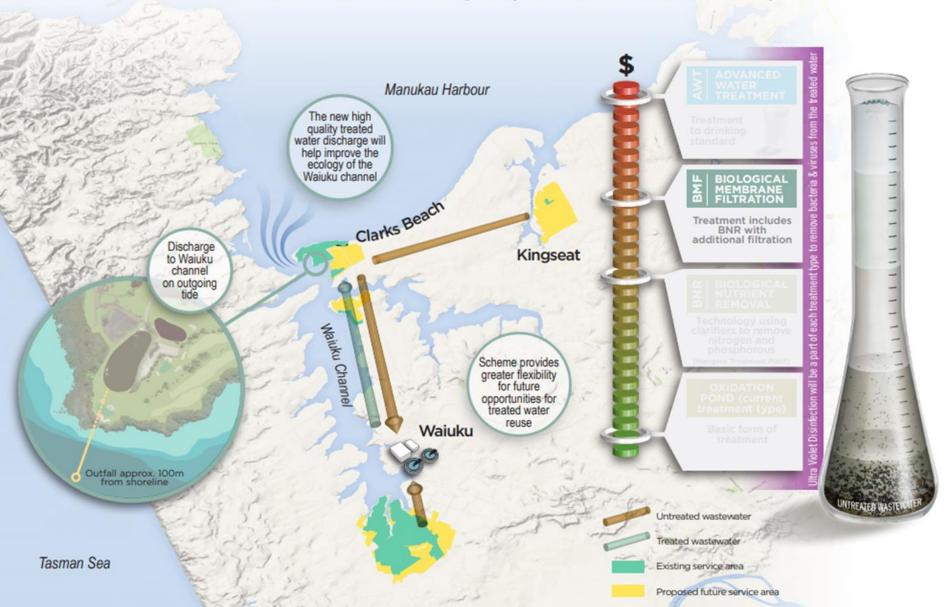
Project Objectives

"The aim of the project is to work in partnership with the community and mana whenua to identify the best practicable option to provide wastewater services for the Waiuku, Clarks Beach, Glenbrook Beach and Kingseat communities. In doing this we aim to:

- Keep our communities healthy;
- Protect our environment, particularly the water quality and ecology of the Manukau Harbour;
- Provide a solution that caters for planned growth that keeps the overall costs of service to customers (collectively) at sustainable levels;
- Recognise the significance of the Manukau Harbour to Mana Whenua and, where possible, provide for local Mana Whenua's cultural and spiritual objectives; and
- Retain flexibility for future, sustainable, longer-term solutions."



South-West Wastewater Servicing Project - Best Practicable Option



Clark's Beach Development:

Ngāti Tamaoho Cultural Values Assessment

Ngāti Tamaoho Trust

December 2016



This material is confidential.

Please contact Tamaoho if you want to copy anything or share it with others (info@tamaoho.maori.nz)



CULTRAL IMPACT ASSESSMENT

Watercare Services Clarkes Beach Treated Wastewater Discharge Application



Address for service:

Roimata Minhinnick CEO Ngati Te Ata 11 Queen Street, Waiuku; P.O Box 451, Waiuku, Tamaki Makaurau

Lessons Learnt

- Listen and incorporate different perspectives
- Let the iwi and kaitiaki "tell us"
- Consultation never ends
- Always aim to leave the environment better than when you found it
- Customise project visions and approaches



Using Wastewater Upgrades to Empower Cultural and Ecological Visions

Thank you – Feel free to reach out

Tanvir Bhamji, Watercare Garrett Hall, Beca Limited



