

PROJECT SUMMARY

Te Kia Ora Marae, Wastewater Scheme



Client:	Te Kia Ora Marae
Location:	Kaipara Coast Highway, Kakanui
Project Value:	Undisclosed
Sector:	Bicultural, 3 Waters
Completion:	2021

PROJECT DESCRIPTION

GWE was commissioned to design a wastewater treatment and disposal scheme and prepare a discharge consent application to cover the proposed activities on the Marae site. A secondary level submerged aerated filter (SAF) wastewater treatment plant and a surface laid PCDI disposal system was designed and installed using proprietary system components.

The design of the irrigation fields required a number of important parameters to be taken into account, namely:

- High groundwater
- Proximity to the CMA
- Location within a flood plain
- Presence of numerous streams and farm drains

The scheme was designed to treat the wastewater from whanau and visitors (240 day visitors and 100 overnight visitors). The system will only be used to its maximum infrequently. The wastewater system has been designed with a peak discharge flow of 3,800 litres/day, which provides a lot of flexibility to allow other activities to be carried out on the site such as weddings and tangis.

The Te Kia Ora Marae was a recipient of the Cultural Initiatives Fund that allowed the Trust to install a wastewater scheme and a fire sprinkler system and help the Trust complete work on the Marae.

SERVICES PROVIDED

- Wastewater treatment plant design
- Land irrigation scheme
- O&M manuals
- Engineer's estimate

GWE Consulting Engineers

Ground Floor Oceanbridge House
25 Anzac Street Takapuna Auckland 0622
P 09 445 8338

