



Ministry for Primary Industries
Spatial Planning and Allocations
Fisheries Management
Fisheries New Zealand

Tēnā koe,

RE: Our support of the Ngāti Pāoa rāhui for Waiheke Island

The Mussel Reef Restoration Trust (MRRT) / Revive Our Gulf project are delighted to support Ngāti Pāoa's rāhui on Waiheke. We tautoko / support their leadership, and congratulate the wider community on their backing and support.

Referring to Figure 1, once a dominant biogenic habitat spanning some 1,200 - 1,500 sq.km, the subtidal mussel reefs of the Gulf were removed in the first half of the 20th century by unsustainable fishing practices (mass dredging). High growth in Tāmaki Makaurau and the Waikato has heaped more pressure on the Gulf due to sediment and nitrates from land development and farming flowing into waterways and out to the Gulf. The MRRT / Revive Our Gulf project is working in partnership with mana whenua and community groups to re-establish the sub-tidal mussel reefs of the Gulf, and bring back the essential biosystem services that large mussels reefs bring (filtration, denitrification, biodiversity, productivity).

Of direct relevance to our work, the rāhui helps in two ways:

Passive Restoration

The rāhui will provide protection to intertidal and subtidal green-lipped mussel (*Perna canaliculus*). To our knowledge, this will be the largest area of protected mussels in New Zealand. Recent research by the University of Auckland has found a positive relationship between wild and aquacultural populations of mussels¹. Therefore, It is likely that the rāhui will increase the abundance of mussels growing intertidally around the island, and the wild population will increase the abundance of spat in the water column - especially as the mussels get older, as commercial mussels are harvested very young. It is foreseeable that over many decades this will seed new naturally restored sub-tidal mussel beds, referred to as “passive restoration”.

Active Restoration

The rāhui has potential to facilitate our work in “active restoration” - re-establishing sub-tidal mussel beds by putting down large areas of shell and mussels (see figure 2). MRRT has a 35 yr consent with Auckland Council to undertake this activity around the Auckland Regional

¹ Norrie et al 2020. 18 June 2020. Spill-over from aquaculture may provide a larval subsidy for the restoration of mussel reefs.

boundaries of the Hauraki Gulf Marine Park. We are in discussions with Ngāti Pāoa and the Waiheke Marine Project and aiming to identify suitable sites for restoration that would come under the shelter and protection of the rāhui. Having this protection sends an important and strong signal to any recreational fishers to leave this restoration work alone.

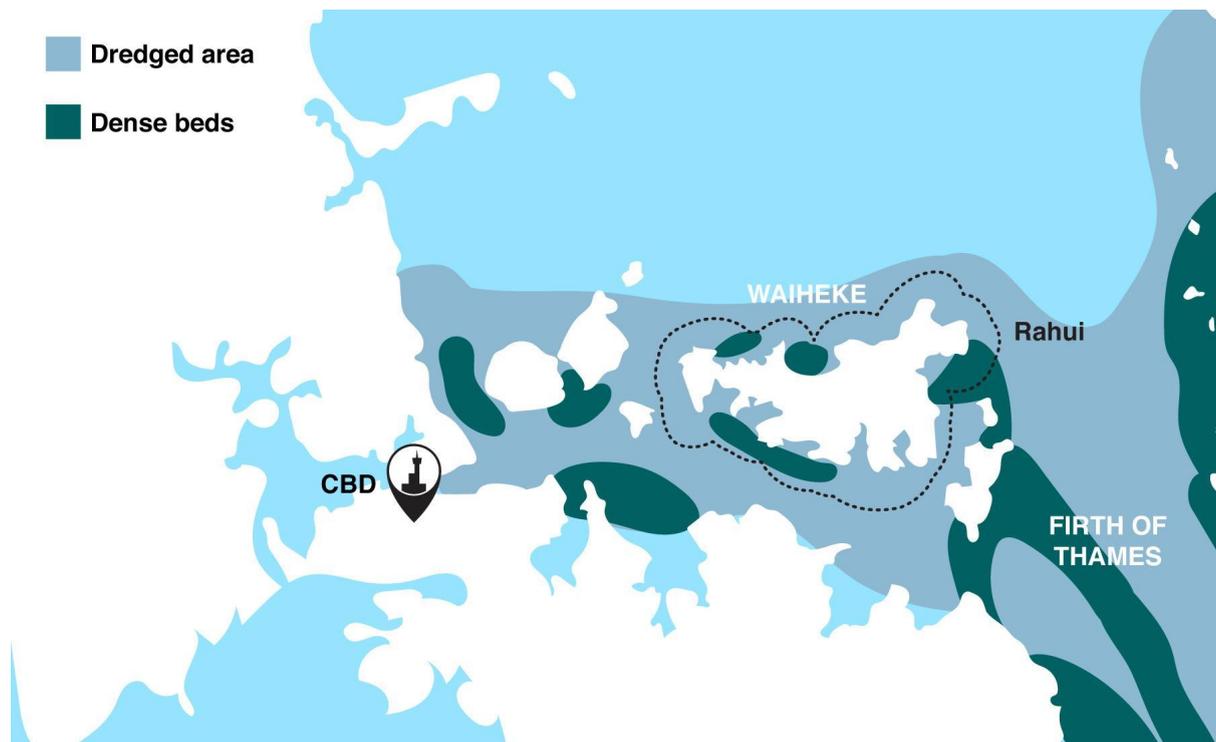
Our vision is for a *Hauraki Gulf enhanced with restored seabed mussel reefs, healthy ecosystems and a natural biodiversity of marine life*. We are very excited to support the rāhui as it aligns directly and indirectly with our restoration work.

Nāku iti noa, nā

s/ Peter Miles

Kaiwhakahaere / Programme Director

The Mussel Reef Restoration Trust / Revive Our Gulf project



*Figure 1: Dense beds of these mussels once carpeted the Hauraki Gulf / Tīkapa Moana / Te Moananui-ā-Toi. The beds were of significant size in a least four places around Waiheke Island. Sub-tidal mussel beds of *Perna canaliculus* are now functionally extinct in the Hauraki Gulf Marine Park (HGMP).*



Figure 2: A naturally restored mussel bed at the mouth of Whangārei Harbour (photo by Shaun Lee)