



Spatial Planning and Allocations
Fisheries Management
Fisheries New Zealand
PO Box 2526
Wellington 2526

By Email: FMSubmissions@mpi.govt.nz

18 March 2021

RE: Proposed temporary closure around Waiheke Island to the harvest of scallops, mussels, rock lobster and pāua.

SUBMITTER DETAILS

Full name: Environmental Defence Society Incorporated
Address for service: PO Box 91736, Victoria Street West, Auckland 1142
Contact: Tracey Turner
Telephone: 09 302 2972
Email: tracey@eds.org.nz

1. Introduction

- 1.1. This is a submission on the request by Ngāti Pāoa for a temporary closure of the nearshore marine area¹ around Waiheke Island to the harvest of scallops, mussels, rock lobster and pāua (**the request**).²
- 1.2. The Environmental Defence Society (**EDS**) is a not-for-profit organisation dedicated to achieving good environmental outcomes for all New Zealanders. It has a track record that demonstrates a long-standing commitment to the improvement of marine species and ecosystem management within the Hauraki Gulf / Tikapa Moana;³ and is

¹ The proposed temporary closure area covers all *New Zealand fisheries waters* within 1 nautical mile offshore from the mean high-water mark of Waiheke Island. In accordance with section 2 of the Fisheries Act 1997 the definition of “New Zealand fisheries waters” includes *inter alia* all waters in the territorial sea of Aotearoa New Zealand. Consequently, we understand the coverage of the proposed closure area to be complete.

² Skipper, H. (2021) *Request for Rāhui to be Enforced by the Minister of Oceans and Fisheries*. Prepared on behalf of Ngāti Pāoa, dated 25 January 2021. Available at: <https://www.mpi.govt.nz/dmsdocument/43921-Waiheke-Island-application>

³ Recent publications of relevance to the issues raised by this submission include: Peart, R. and Cox, B. (2019) *Governance of the Hauraki Gulf: A review of options*. Environmental Defence Society. Auckland, NZ; and Peart, R. (2018) *Voices from the Sea*. Environmental Defence Society. Auckland, NZ. Both publications are available at: <https://www.eds.org.nz/our-work/publications/>

actively involved in litigation and research programmes that seek to improve oceans management in Aotearoa New Zealand.

2. Summary of submission

- 2.1. EDS supports Ngāti Pāoa's request for the Minister of Oceans and Fisheries (**the Minister**) to exercise his powers under section 186A(1)(a) of the Fisheries Act 1996 (**the Act**) to establish a temporary closure area around Waiheke Island.
- 2.2. EDS submits that tāmure (snapper) should be included as an additional species in the temporary closure notice to facilitate the achievement of the outcomes sought by Ngāti Pāoa.
- 2.3. EDS commends Ngāti Pāoa for taking an active role as kaitiaki over the important customary resources located in the waters around Waiheke Island. It is hoped that the request will draw attention to the dire state of important marine taonga in the Hauraki Gulf. EDS supports the temporary closure as a minimum requirement. It is pressing that an integrated ecosystem-based governance approach, such as the Sea Change Marine Spatial Plan – Tai Timu Tai Pari, be adopted to improve the long-term management of the Hauraki Gulf marine ecosystem.

3. The request

- 3.1. By letter dated 25 January 2021, Ngāti Pāoa advised the Minister of their intention to place a rāhui on the harvest of scallops, mussels, crayfish, and pāua from the nearshore marine area⁴ surrounding Waiheke Island.
- 3.2. Ngāti Pāoa concurrently requested that the Minister exercise his powers under section 186A(1)(a) of the Act to temporarily close the area covered by the rāhui for a period of 2 years. The purpose of the temporary closure is to enable enforcement of the rāhui. Under section 186A(8) of the Act, the taking of any fish, aquatic life, or seaweed in contravention of a closure notice is an enforceable offence. On conviction, a person may be fined up to \$5,000 for non-commercial takes⁵ or \$100,000 for commercial takes.⁶
- 3.3. In the request for a temporary closure, Ngāti Pāoa raised urgent concerns about the degraded state of kaimoana beds and the declining abundance of taonga species in the marine area around Waiheke Island:⁷

“Kōura are now regarded as functionally extinct, tipa beds have been destroyed from recreational dredging, anchoring and overharvesting. Kūtai are emaciated and few in numbers. Pāua are rarely seen and are harvested undersize and therefore unable to replenish their stocks.”

⁴ Above n 2, described as “from the foreshore to 1 nautical mile offshore.”

⁵ Fisheries Act 1996, s 252(6).

⁶ Fisheries Act 1996, s 252(5).

⁷ Above n 2, at page 3.

- 3.4. Ngāti Pāoa advised the Minister that the purpose of the rāhui and temporary closure is to replenish populations of taonga species to enable the continuation of customary harvest practices for present and future generations; and to provide an opportunity for tamariki and mokopuna to develop stronger relationships with key species.⁸
- 3.5. On 31 January 2021, Ngāti Pāoa laid the rāhui at Oneroa Bay, Waiheke Island. The rāhui applies seaward of the mean high tide mark and extends offshore to an outer limit of one nautical mile (i.e., the rāhui has a breadth of approximately 1.9 km).

4. The scope of the request and proposed closure area

- 4.1. The request seeks to prohibit the harvest of four species: scallops, mussels, rock lobster, and pāua from the nearshore marine area around Waiheke Island.
- 4.2. At present, the status of scallop populations located within the Hauraki Gulf is unknown.⁹ Scallop beds located in the waters around Waiheke Island form part of the Coromandel scallop fishery (**SCA CS**). The last stock assessment of SCA CS was undertaken by the Ministry for Primary Industries (**MPI**) in 2009¹⁰ and an assessment of the abundance of scallops in Northland and Coromandel recreational fishing areas was published in 2012 (based on data collected in July 2009 and June 2010).¹¹ The assessments demonstrate there is a high degree of inter-annual variability in scallop biomass, making it difficult to decipher long-term trends. Further, there is a lack of understanding of the drivers of fluctuations in scallop abundance.¹²
- 4.3. More recent studies have reported observations of scallop beds in shallow nearshore areas dominated by sandy substrates off the north coast of Waiheke Island.¹³ However, these studies do not provide information on the spatial extent of existing beds or the local scallop biomass.
- 4.4. There is a similar paucity of information on the status of pāua populations within the Hauraki Gulf (the PAU1 fishery).¹⁴
- 4.5. The most recent stock assessment for rock lobster populations in the Hauraki Gulf was completed in 2017. The findings of the assessment indicated that the abundance

⁸ Above n 2, at page 3.

⁹ As identified by the Hauraki Gulf Forum (2020) "State of our Gulf 2020: Hauraki Gulf / Tikapa Moana / Te Moananui-ā-Toi State of the Environment Report 2020". Available at: <https://www.aucklandcouncil.govt.nz/about-auckland-council/how-auckland-council-works/harbour-forums/docsstateofgulf/state-gulf-full-report.pdf>

¹⁰ MPI (2009) Working Group Plenary Report – Stock Assessment of the Scallops Fishery (SCA CS). Available at: https://fs.fish.govt.nz/Doc/21783/85_SCA-CS_09.pdf.ashx

¹¹ Williams, J. (2012) *Abundance of scallops (Pecten novaeezelandiae) in Coromandel recreational fishing areas, 2009 and 2010*, New Zealand Fisheries Assessment Report 2012/24 Prepared for the Ministry for Primary Industries. 32p. Available at: <https://legasea.co.nz/wp-content/uploads/2021/01/SCA-abundance-Coromandel-2009-MPI-2012.pdf>

¹² Above n 10, at page 799.

¹³ Haggitt, T (2016) *Ecological survey of Waiheke Island north-west coastline – December 2016*. Report prepared by eCoast marine consulting and research 2016/2017 for Waiheke Island Local Board and Hauraki Gulf Conservation Trust. Available at: <https://www.aucklandcouncil.govt.nz/about-auckland-council/how-auckland-council-works/local-boards/all-local-boards/waiheke-local-board/docswaihekeplans/waiheke-north-western-coastline-ecological-survey.pdf>; and Kerr, V.C. and Grace, R.V. (2013) Subtidal and intertidal habitats of the North Coast of Waiheke Island, Hauraki Gulf. Available at: <https://kerrandassociates.co.nz/completed-works.html>

¹⁴ The most recent assessment of the pāua fishery (including PAU1) was published by MPI in 2008 and includes limited comment on the status of the PAU1 fishery.

- of legally harvestable rock lobsters had declined to 21% of the agreed reference level; and that a rebuilding plan was required to replenish stocks to more sustainable levels.¹⁵ The State of the Gulf Report 2020 describes rock lobster as “*functionally extinct*” in heavily fished areas.¹⁶ This statement is consistent with the findings of ecological surveys undertaken at sites located along the north-western coastline of Waiheke Island in 2016; where no rock lobsters were observed despite rigorous searching across suitable habitat.¹⁷
- 4.6. The demise of mussel beds throughout the Hauraki Gulf has been widely reported;¹⁸ and the focus is now on ecosystem restoration by the re-introduction of live mussels in degraded areas.
- 4.7. In summary, there is significant uncertainty as to the current state of scallop and pāua populations around Waiheke Island. Further, it is accepted that action is required to rebuild rock lobster populations and the spatial extent of mussel beds in the Hauraki Gulf. For these reasons, EDS supports the request by Ngāti Pāoa as a minimum requirement.
- 4.8. EDS considers that more substantive action is required to achieve the replenishment of scallop, mussel, rock lobster, and pāua stocks, in the waters off Waiheke Island.
- 4.9. An ecological survey undertaken by eCoast in 2016 identified urchin barrens at sites located at mid-depths (5 - 8 m) in Enclosure Bay, off the north-western coastline of Waiheke Island.¹⁹ The study cites unpublished research that reports an increase in the spatial extent of urchin barrens with increasing distance east from Oneroa Bay, and a prevalence of urchin barrens between Enclosure Bay and Thompson’s Point.²⁰ The study reported that urchins located within urchin barrens habitats displayed “exposed behaviour”; which indicates a shift from cryptic grazing practices to more intensive grazing of exposed substrates.
- 4.10. The formation of urchin barrens has been associated with the loss of mature snapper and rock lobster by fishing in Aotearoa New Zealand.²¹ As the abundance of reef predators declines, there is a corresponding increase in the abundance of the dominant urchin grazer *Evechinus chloroticus* (kina). Over time, algal forests are diminished, along with their important ecosystem functions.
- 4.11. Although the areal extent of urchin barrens habitat has not been accurately mapped in the nearshore marine environment of Waiheke Island; confirmation of their

¹⁵ Refer to the information available at the Ministry for Primary Industries website in relation to the review of the CRA2 rock lobster fishery. Available at: <https://www.mpi.govt.nz/fishing-aquaculture/sustainable-fisheries/review-of-the-cra2-rock-lobster-fishery/>

¹⁶ Above n 9, at page 13.

¹⁷ Haggit, above n 13, at page 34.

¹⁸ For a comprehensive review of the mussel fishery refer to: Paul, L.J. (2012) A history of the Firth of Thames dredge fishery for mussels: use and abuse of a coastal resource. *New Zealand Aquatic Environment and Biodiversity Report No 94*. 27p.

¹⁹ Haggit, above n 13, at page 39.

²⁰ Haggit, above n 13, at page 39.

²¹ As summarised in Kerr, V.C. (2016) Urchin barrens and algal community zonation; a transect based study, Maunganui Bay and Cape Brett. Prepared by Kerr and Associates for Fish Forever, Bay of Islands Maritime Park Inc. Available at: <https://www.fishforever.org.nz/images/ff/documents/reports/Kerr-2016-Urchin-Barren-Study.pdf>

presence off the north-western coastline is of concern. The finding is more alarming given the reported declines in the population of rock lobsters throughout the Hauraki Gulf. Rock lobsters have been observed to feed on larger urchins, while snapper and blue cod feed on small urchins.²²

- 4.12. The rehabilitation of urchin barrens to kelp forests is essential to achieve the outcomes sought by Ngāti Pāoa. As previously outlined, the status of pāua stocks is unclear based on publicly available scientific data. Kina and pāua are both herbivorous species and therefore compete for food. The current imbalance in kina numbers will act as a barrier to the replenishment of pāua stocks in the nearshore marine environment around Waiheke Island and undermine the effectiveness of the rāhui.
- 4.13. These findings demonstrate that mature snapper will play a critical role in the restoration and maintenance of benthic kelp forests at mid depths around Waiheke Island. Snapper populations are being actively rebuilt in the Hauraki Gulf following indications that the stock was being overfished and depleted.²³ To optimise the potential for the replenishment of macroalgal beds as an important habitat and food source for taonga species of importance to Ngāti Pāoa, EDS supports the inclusion of snapper in the temporary closure area requested.

5. Effectiveness of the proposed closure area

- 5.1. EDS supports the areal extent of the proposed closure area for practical reasons and considers it will enable effective enforcement of the rāhui.
- 5.2. It is acknowledged that the proposed closure is sought for an initial period of 2 years, which aligns with the maximum duration prescribed by s 186A(5) of the Act. Studies undertaken in marine protected areas suggest a longer closure period will be necessary to achieve the desired outcomes of stock replenishment.²⁴ The Act provides for the issuing of further notices in respect of any species or area subject to an existing notice. Therefore, EDS considers the temporary closure mechanism will provide an effective starting point for the development of long-term solutions (i.e., the establishment of permanent no-take areas and implementation of the Sea Change Marine Spatial Plan) to address the pressures facing the Hauraki Gulf marine ecosystem.

²² Shears, N.T., Babcock, R.C. (2002) Marine reserves demonstrate top-down control of community structure on temperate reefs. *Oecologia* 132: 131,142

²³ Hartill, B., Bian, R., Rush, N., and Armiger, H. (2013) *Aerial-access recreational harvest estimates for snapper, kahawai, red gurnard, tarakihi and trevally in FMA 1 in 2011–12*. Wellington, New Zealand: Ministry for Primary Industries. Available at: https://fs.fish.govt.nz/Doc/23491/FAR_2013_70_2650_MAF2011-02%20Obj1%20and%20%20.pdf.ashx

²⁴ For example, refer: Cole, R.G., Ayling, T.M., and Creese, R.G. (1990) Effects of marine reserve protection at Goat Island, northern New Zealand, *New Zealand Journal of Marine and Freshwater Research*, 24:2, 197-210, DOI: 10.1080/00288330.1990.9516415