

Submission on measures for shore-based shellfish harvesting in the Auckland Coromandel area

To: Fisheries New Zealand

From: Stet Limited

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Support for Option 3: Full intertidal closure & daily limit reduction

We strongly advocate for **Option 3**, which implements a full intertidal closure and reduces the combined daily limit of "any other" shellfish species to ten.

- A full closure is the most effective way to address community and tangata whenua concerns regarding the increased intensity and broadening of shore-based harvesting.
- Lowering the daily limit from 50 to 10 for "any other" species outside the closure area is critical to mitigating the risk of shifted fishing effort to offshore islands or deeper subtidal habitats.
- Unlike partial closures, a full closure is easier to communicate to the public, facilitating better compliance and enforcement.

Rejection of species exceptions (Options 2 & 4)

We do not support making exceptions for named shellfish species within the intertidal closure area.

- Current shellfish populations are far too low to perform their ecological roles, such as water filtration and providing a primary food source for higher trophic levels.
- Ongoing monitoring suggests that intertidal species are suffering from "cumulative pressures (e.g. sedimentation, heavy metal contamination, pollution and marine heat waves) which are harder to manage.
- International research indicates that full no-take areas are significantly more effective at increasing the abundance and size of shellfish species than partial closures.



Kūtai / green-lipped mussels growing in the intertidal zone. Photo by Shaun Lee.

Restoring from the edges

Through our work with the Revive Our Gulf Trust¹, we have delivered numerous presentations to community groups across the Auckland region. Following these sessions, many residents shared historical accounts of immense abundance in intertidal areas, particularly regarding kūtai / green-lipped mussels.

It makes little sense to fund the restoration of a species while simultaneously allowing it to be harvested. This population was commercially wiped out sixty years ago and has yet to recover.

Protecting the intertidal is critical to developing large, high-fecundity adults. These large individuals serve as vital "seeding" engines, producing the larvae necessary to reseed subtidal areas and restore the broader ecological function of the Hauraki Gulf Marine Park².

Tāmaki Makaurau Auckland population increase

Since 1998, when Auckland's intertidal rules were set, the resident population has surged from 1.17 million to 1.82 million in 2025, currently tracking toward 2 million by 2033. This 56% increase—representing 650,000 additional people—places immense harvest and indirect ecological pressure on a coastline that will not change in size, while its biological capacity is pushed past breaking point (see 1973 study below).

¹ <https://www.reviveourgulf.org.nz/>

² <https://blog.shaunlee.co.nz/the-mussel-line/>



Tōrea and humans foraging at Coopers Beach. Photo by Shaun Lee.

Importance to shorebirds

The intertidal shellfish of Auckland and the Coromandel are the fuel for one of nature's greatest endurance feats.

- Migratory species, such as the bar-tailed godwit, fly thousands of kilometres from Alaska to feed on our intertidal shellfish.
- Embayment's like the Firth of Thames and Manukau Harbour are internationally significant strongholds where the abundance of shellfish (especially juvenile shellfish) and worms is the primary attraction for these migrants.
- Currently, approximately 82% of New Zealand's shorebird species are threatened with extinction or at risk of becoming threatened³.
- High prey availability is vital for these birds to meet their energy demands. When food is abundant, birds are more resilient to other stressors like introduced predators or human disturbance, which can otherwise lead to breeding failure.

³ <https://www.stats.govt.nz/indicators/extinction-threat-to-indigenous-marine-species/>



One of hundreds of Arabic Volutes in the intertidal zone at night on Rakiura / Stewart Island. Photo by Shaun Lee.

Shifting baselines

The concept of shifting baselines describes how each generation accepts the environmental conditions they first encounter as the natural "standard," masking the true scale of ecological decline over time. In the context of Auckland's intertidal zones, this means modern observers often mistake a recovering seagrass meadow for a healthy ecosystem, forgetting the immense shellfish populations that historically defined these waters. When Auckland Council and Fisheries New Zealand began collecting data shellfish habitats had already been significantly degraded. The pristine intertidal foreshores discovered by the first people to land in Aotearoa would be unrecognisable to us today.

In 1973 the Auckland Harbour Board commissioned M. GF. Larcombe to produce the Waitemata Harbour Study. The pages are littered with populations that are now extinct, here are some from areas I know well:

- *Okahu Bay: "Perna canaliculus [green-lipped mussel] occurs in small numbers near low water on the rocky shores and wharf piles."*
- *Okahu Bay: "Mactra ovata [surf clam] also occurs in small numbers in Okahu Bay"*

- *Mission Bay & Kohimarama: "A few mussels are taken from the low tidal areas of sandstone reefs but these are not abundant or particularly large."*
- *Mission Bay & Kohimarama: "Chione stutchburyi [cockles] - Populations attain a mean adult size of about 32 mm at St Heliers. These are often exploited. It appears that there has been a marked reduction in the abundance of Chione on St Heliers beach but there is no obvious cause. Recruitment at low tidal levels has occurred in the past two years"*
- *Mission Bay & Kohimarama - "Dosinea subrosea - Taken by Maoris and Islanders who detect the presence of this deep burrowing bivalve by siphonal marks on the surface of the sand. Common at Mission Bay and Kohimarama."*
- *Musick Point: "The pholads Anchomasa similis and Zelithophaga truncata bore into the rock near low water neap. Small mussels, Perna canaliculus [green-lipped mussel] also occur at this level."*
- *Musick Point: "Small numbers of mussels, Perna canaliculus [green-lipped mussel] and sea urchins, Evechinus chloroticus [kina], occur on the low tidal reefs, but are not often taken."*
- *Bucklands Beach: "From mid tide level to low water neap there is an increase in density of Amphidesma australe [pipi] with an extremely dense band with densities above 1,500 per square metre about low water neap."*
- *Bucklands Beach: Hard shores - Sandstone outcrops at both ends, and in the middle of the Beach support a flora and fauna similar to that described for Musick Point."*
- *Bucklands Beach: "Considerable quantities of the bivalve shellfish Amphidesma austral [pipi] and Chione stutchburyi [cockles] are taken from this area for human consumption."*
- *Glendowie Spit: "Extensive beds of Chione stutchburyi [cockles] occur on the southern side of the tip, with beds of Amphidesma austral [pipi] at the tip and to the north about low water spring. The starfish, Coscinasterias calamaria [eleven-armed sea star], feeds on low tidal Amphidesma [pipi] populations."*
- *Glendowie Spit: "Beds of Chione stutchburyi are widespread, and edible sized individuals are taken from low tidal beds near the end of the spit and along the northern side."*
- *Glendowie Spit: "The most sought shellfish in this region is the pipi, Amphidesma australe. Dense beds occur in the coarse low tidal sands at the end of the spit and these are exploited by large numbers of people. Access is gained by walking or riding horses from the western side of the estuary, or by boat from Bucklands Beach. High exploitation levels appear to have depleted the beds near the end of the spit, but it is probable that these will regenerate with successful spatfalls."*

- *Glendowie Spit: "Locals claim that the beds of Chione [cockles] have also become reduced in extent. There is no apparent reason for this, and there is a possibility that beds of edible sized Chione will become more extensive in future."*
- *Glendowie Spit to West Tamaki Head: "On the hard shores of this area there are small quantities of mussels, Perna canaliculus [green-lipped mussel], and oysters Crassostrea glomerata [New Zealand rock oyster]. These may be taken in small quantities for food."*
- *Farm Cove: "Amphidesma australe [pipi] of edible size is only found in small beds near shell accumulations. Few people seem aware of the presence of this species and it is not taken for food from this area."*
- *Point England to Panmure Bridge: "Small populations of Amphidesma australe [pipi] are found in shelly areas but only small numbers reach edible size. It is unlikely that these are exploited."*

By 1973, the Waitematā Harbour had reached a critical low point; the waters were heavily polluted, seagrass meadows had vanished, and the foreshore was choked with refuse. At the time, the environmental reality was bleak:

"The scallop is now almost completely absent from the Waitemata Harbour. Previously common on low tidal flats, a combination of the disappearance of Zostera, human exploitation for food, and perhaps deterioration of water quality have been responsible for the disappearance of this species. It appears unlikely that it will become re-established."

Today, we see a bittersweet transformation. While improved water quality has allowed the seagrass to flourish once more, the shellfish populations have failed to recover. This stagnation is largely driven by opportunistic harvesting, which prevents these species from reaching the critical mass needed to survive. To restore the harbour's true ecological function, we must move beyond the "new normal" and implement a full closure, giving these vital species the undisturbed time they need to truly thrive.

Support biosecurity exemptions

We support Point 79 (page 15), which ensures new regulations will not prevent the removal of invasive species managed under the Biosecurity Act 1993, such as the Asian paddle crab.



Intertidal kina barren. Photo by Shaun Lee.

Seaweed and kina

We strongly object to the exclusion of seaweed from this review. Beachcast seaweed is not merely debris; it provides the primary habitat for amphipods—a vital food source for our threatened shorebird species. If shellfish harvesting is restricted, harvesters are likely to shift their focus to seaweed. Removing this "living infrastructure" is arguably more damaging to the ecosystem than removing individual shellfish, as it results in total habitat loss.

At nuisance levels, recreational take of beachcast seaweed has no real impact. Commercial extraction of kelp from our beaches needs to be quantified. Our local subtidal forests have already been decimated by kina barrens. These barrens are the direct result of overfishing that was poorly managed by Fisheries New Zealand. Until these predator-prey balances are restored, we must protect every remaining scrap of seaweed and kelp as the lifeblood of our coastal productivity.

This is why we support the continued take of kina on offshore islands only.

Safety for harvesters

Promoting the idea that people should drive or boat further offshore to gather food is unsafe. The islands should have the same closures as the mainland with the exclusion of kina (see point above).

We also support a full closure around Te Hauturu o Toi to protect marine biodiversity and the threat of terrestrial incursions.



A knobbed triton snail (Charonia lampas) predating an eleven-armed sea star (Coscinasterias calamaria). Photo by Shaun Lee.

Protection high tropic level shellfish

Marine gastropods are also gathered for ornamental reasons. Many are long lived predators which manage populations of other predators like starfish. Left unmanaged starfish can have devastating impacts on ecosystems⁴. Removing one of these predators per month can have a devastating long-term effect on an ecosystem. Removing 10 per day is ridiculous. The review fails to acknowledge the ecosystem role of higher trophic level shellfish.

⁴ <https://www.nzherald.co.nz/bay-of-plenty-times/news/battle-to-protect-ohiwa-harbour-mussel-reefs-from-sea-star-invasion-discussed-at-marine-science-conference/GPWTGV5B34R67M37HU2PDFZGAQ/>



Wheke / octopus in Long Bay. MERC BioBlitz November 2025. Photo by Shaun Lee.

Sentience and the rights of wheke / octopus

We strongly advocate for the full protection of wheke / octopus, moving beyond mere "fisheries values."

- An octopus is not just a unit of harvest. Scientific evidence confirms they are highly sentient individuals⁵ with the capacity for complex feelings, including joy and distress.
- There is a profound, unquantifiable value in a human encountering an octopus in a rock pool—watching a creature of immense intelligence and individuality navigate its world. Such interactions foster a sense of multispecies responsibility that a "daily limit of one" completely fails to capture.
- Given their remarkable cognition, octopuses are recognised as sentient individuals deserving of moral consideration. Closing the intertidal zone to their harvest acknowledges our heightened responsibility to protect these "personalities" of the reef.

⁵ <https://www.gov.uk/government/news/lobsters-octopus-and-crabs-recognised-as-sentient-beings>

Area discrepancies

The rolling Ngāti Tamaterā (Te Mātā/Waipatukahu) and Ngāti Pāoa (Waiheke) rāhui explicitly request a protection zone extending 1 nautical mile offshore. Fisheries New Zealand should have used this spatial measure rather than the much smaller 200 meter area which leaves some intertidal and much subtidal and very accessible shellfish habitat vulnerable to over harvesting.

Double standards

FNZ explicitly states that *"The proposed options will not affect commercial fishing in the Auckland Coromandel area"*. This creates an equity and sustainability issue where commercial fishers may exploit species like packhorse lobster within the exact same intertidal and subtidal zones where recreational take is restricted or banned.

Thank you for considering our recommendations.

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