TE ŌHU KAIMOANA

FISHING AND FISHING IMPACTS WORK PROGRAMME INFORMATION PACK

for Mandated and Regonised Iwi Organisations and Asset Holding Companies

AUGUST 2026

NGĀ IHIRANGI

CONTENTS

SECTION 1.0

Te Kawa o Te Moana Analysis Framework and Paper Structure

TE ŌHU KAIMOANA

Te Kawa o Te Moana Analysis Framework and Paper Structure – Fishing and Fishing Impacts

Purpose

This Te Kawa o Te Moana Analysis Framework has been developed specifically to guide this kaupapa and is grounded in the Ngā Tohu o Te Ora within Te Kawa o Te Moana.

It provides the overarching structure for the Te Kawa o Te Moana analysis that will support the fishing and fishing impacts work programme information pack. The analysis will be developed and released in stages, with this document providing visibility of the framework, approach and paper structure for the work. The development of this mahi follows the March 2026 iwi wānanga and ongoing engagement with MIO's and AHC's, where iwi asked to see how Te Kawa o Te Moana had informed Te Ohu Kaimoana's thinking in relation to the discussion around bottom trawling.

The framework and paper structure have been informed by this engagement and are intended to explore fishing and fishing impacts through a Te Kawa o Te Moana lens, providing a principled foundation for the analysis.

Te Kawa o Te Moana Analysis Framework - Fishing and Fishing Impacts

<table>
<tr><th colspan="6">Tohu to reflect on our journey into the past</th></tr>
<tr><td colspan="3">Whakapapa
Our genealogical connection to our world, to Ranginui, to Papatūānuku to nature, our undeniable place within our world. Ensure we are respectful of our tuākana, knowing of our place in nature.

Ko Taku Māia
We have the courage to confront our practices as a collective to understand our impacts and their effects from a Te Kawa o te Moana lens.</td><td colspan="3">Ko Ngā Tikanga
Ritenga, Tapu, Noa, Ngākau Iti, Mauri, Mana

Ko Aku Tika
Transparency and Accountability: The establishment and adherence to standards aligned with our principles, providing clear metrics for progress and accountability, ensure that we remain true to our commitments and values.</td></tr>
<tr><th colspan="3">Tohu to help us understand the current state of Tangaroa and our fisheries</th><th colspan="3">Tohu to help us look forward into the future and understand our aspirations for Tangaroa and our fisheries</th></tr>
<tr><td>Te Toi Mauri | Environmental Health
A thriving moana and whenua, where the natural ecosystems are balanced, and the indigenous flora and fauna flourish, indicates that our actions are harmonizing with nature. Allowing bountiful and sustainable māhinga kai practice.</td><td>Oranga Tangata | Community Well-being
Strong, resilient communities where whānau, hapū, and iwi work collaboratively, support one another, and uphold collective values, signify that we are fostering connection and collectively.</td><td>Te Kaharoa | Cultural Revitalisation
The active preservation, practice, and transmission of our cultural traditions, language, and knowledge to future generations demonstrate that we are honouring our heritage and ensuring its continuity.</td><td>Ka Hao te Rangatira | Intergenerational Impact
Decisions that prioritise long-term sustainability and the welfare of future generations show that we are considering the cyclical nature of time and the interconnectedness of past, present, and future.</td><td>Ko te Ruawhetu | Innovation
Our gaze and vision is broadened. Our unique indigenous view of connection with Tangaroa shows us new opportunity and innovation seeing challenges as opportunities to develop our relationship with Tangaroa.</td><td>Te Oranganui | Holistic Success
A broader understanding of prosperity that includes the health of relationships of the taiao, the strength of communities, and the revitalization of culture over mere financial wealth indicates that we are redefining success through an indigenous lens.</td><td>Ko Aku Tika | Transparency and Accountability
The establishment and adherence to standards aligned with our principles, providing clear metrics for progress and accountability, ensure that we remain true to our commitments and values.

Ko Taku Māia
We have the courage to confront our practices as a collective organisation to understand our impacts and their effects from a Te Kawa o te Moana lens.</td></tr>
</table>

Te Kawa o Te Moana Analysis Paper Structure

1. Introduction – Tangaroa, Hinemoana and Our Fisheries (Whakapapa, Ko Aku Tika, Ko Taku Māia, Ko Ngā Tikanga)

Date for Section to be Complete: Approx Mid-Late August

This section grounds the analysis in the reciprocal whakapapa relationship between Māori, Tangaroa and Hinemoana. It notes fishing as being an expression of our relationship with Tangaroa and Hinemoana and traces how these practices and responsibilities have evolved over time, including through developments such as the Māori Fisheries Settlement.

2. Te Toi Mauri - The Current Cumulative Pressures on The Moana

Date for Section to be Complete: Approx Mid-Late August

Western Science Information Report – Types of Trawling Conducted by Moana New Zealand and Sealord

This section notes the Western Science Information Report on the types of trawling conducted by Moana and Sealord.

Land Based Impacts (ki uta ki tai)

This section explores (at a high level) the land-based activities that impact the health of the moana. It examines impacts such as sedimentation, stormwater runoff, pollution, coastal development, and other land use practices that impact coastal and marine environments. This section uses the Ngā Tohu o te Ora of Te Toi Mauri to analyse land-based impacts.

Climate Change

This section explores (at a high level) how climate changes is altering the conditions that support the marine life in the moana. This section examines impacts such as ocean warming, sea level rise, ocean acidification and marine heatwaves. This section uses the Ngā Tohu o te Ora of Te Toi Mauri to analyse climate change.

3. Oranga Tangata and Te Kaharoa - The Relationship Between Iwi and Their Fisheries

Date for Section to be Complete: Approx Mid-September

This section discusses the relationship between iwi and their fisheries, to explore how their connections to fishing and fisheries contribute and/or influence the wellbeing of whānau, hapū, and communities. This section uses the Ngā Tohu o te Ora of Oranga Tangata and Te Kaharoa to analyse this relationship.

4. Conclusion (Ka Hao Te Rangatira, Te Oranganui, Ko Te Ruawhetu, Ko Aku Tika, Ko Taku Māia)

Date for Section to be Complete: Approx Late September/Early October

This section begins to map out the future aspirations that iwi hold for Tangaroa and their fisheries. It is intended to be developed collaboratively with iwi, ensuring that their perspectives, priorities, and aspirations are reflected throughout this analysis.

SECTION 2.0

Types of Trawling Conducted by Moana New Zealand and Sealord (Report)

TE ŌHU KAIMOANA

Types of Trawling Conducted by Moana New Zealand and Sealord

An Introduction for MIOs, AHCs, and Iwi Decision-Makers

Prepared for: Te Ohu Kaimoana

August 2026

Produced with the support of Perplexity AI Enterprise Pro (subscription) from compiled reports, published references, and online sources.

Prepared by:

F.L.O.W. Collaborative
Fisheries. Livelihoods. Ocean. Well-being.

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About F.L.O.W. Collaborative

This briefing was prepared by F.L.O.W. Collaborative Ltd (Fisheries. Livelihoods. Ocean. Well-being.), a Wellington based marine conservation and blue economy consultancy founded, led and directed by Katherine Short. F.L.O.W. Collaborative supports Māori led coastal habitat regeneration with transitioning towards a regenerative blue economy in Aotearoa New Zealand, working across marine ecosystem restoration, sustainable finance, and community, policy and science collaboration.

Katherine Short brings three decades of international experience in marine conservation, ocean governance and sustainable seafood to this work. She spent nearly seventeen years with WWF International promoting the Marine Stewardship Council and developing ecosystem-based management of fisheries globally. She holds a Bachelor of Ecology from Victoria University of Wellington and a Masters of Conservation Science from Imperial College London, with postgraduate research focused on ecosystem services and seafood. From 2013 to 2024, she co-founded and co-led Terra Moana Ltd, a sustainability advisory partnership that served for a decade as sustainability adviser to Moana New Zealand. Through this work she gained sustained, first-hand experience of the trawl fisheries, governance structures and iwi interests discussed in this briefing. She currently sits on the 2026 Ocean Business Leaders' Summit Advisory Board and contributes regularly on marine conservation and blue economy topics in a range of national forums.

1. Understanding Tangaroa and Hinemoana's Realm - The Shape of the Seabed

New Zealand's marine environment is managed within the boundaries of its Exclusive Economic Zone (EEZ) which covers approximately 4 million sq/km of ocean. The EEZ defines the area within which New Zealand exercises its rights to manage and sustainably use marine resources. New Zealand's marine jurisdiction spans more than 30 degrees of latitude, from subtropical waters around Rangitāhua, the Kermadec Islands in the north to subantarctic waters around Campbell Island in the south, and the habitats, species and fisheries differ markedly across these zones.[120] **Figure 1** shows a map of our EEZ boundaries to provide the geographic context for the marine environments discussed throughout this report.

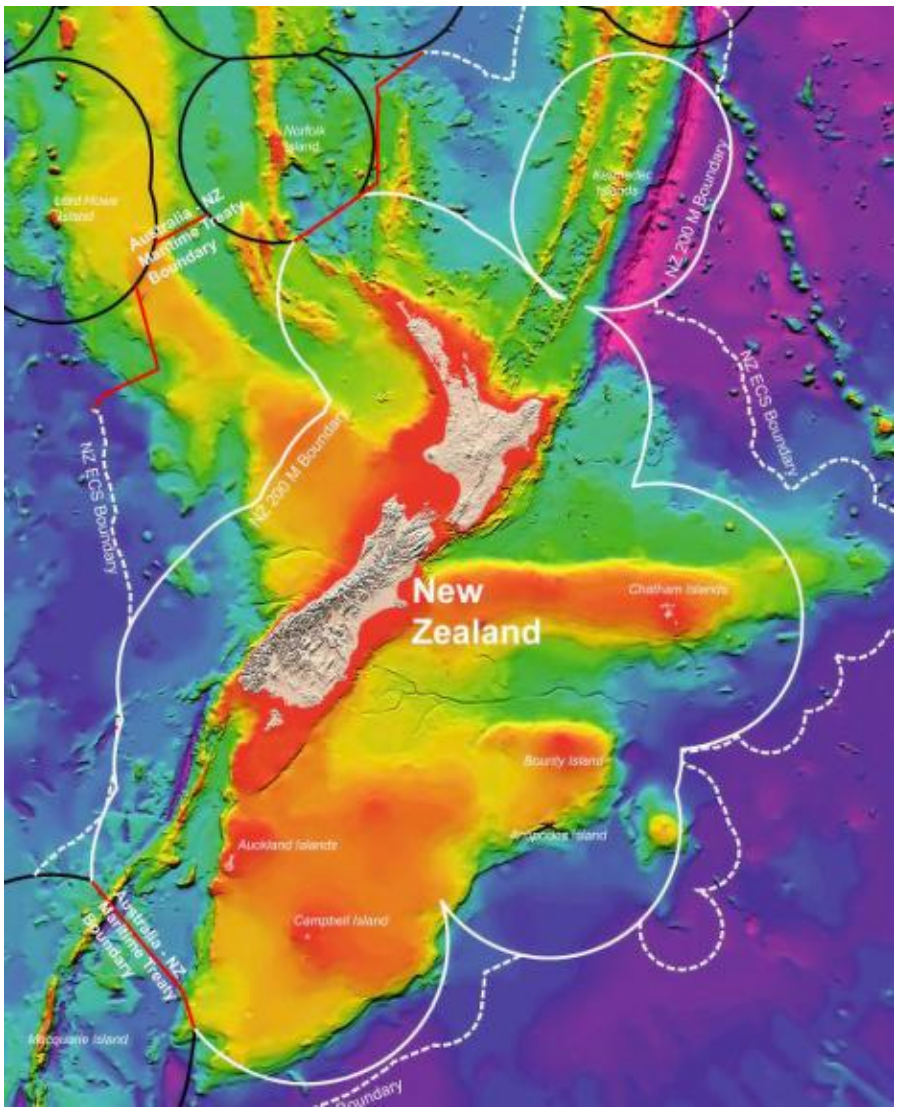


Figure 1. New Zealand Exclusive Economic Zone of 4 million sq/km (white line) and Extended Continental Shelf (dashed white line) and islands and island groups (Undersea New Zealand, NIWA, 2012).

The foundation of Tangaroa and Hinemoana's realm is the seabed, itself hugely diverse. It includes the continental shelf and slope as well as canyons, seamounts, ridges, banks, soft-sediment basins, rocky reefs, biogenic habitats, and abyssal plains. Each feature has different biological communities, exposure to fishing gear and recovery times.[18,4] The continental shelf is shallower and thus more productive (more light and nutrients) many inshore and demersal fisheries operating there.

The continental slope connects the shelf to deeper waters and often contains canyons and steep gradients that can concentrate nutrients, fish aggregations, corals, sponges and fishing effort. Seamounts and deep rocky features can be biodiversity hotspots, and their structure-forming corals and sponges are vulnerable to repeated gear contact.[18,17] **Figure 2** provides an illustrative overview of seabed profile showing some of the features beneath the sea.

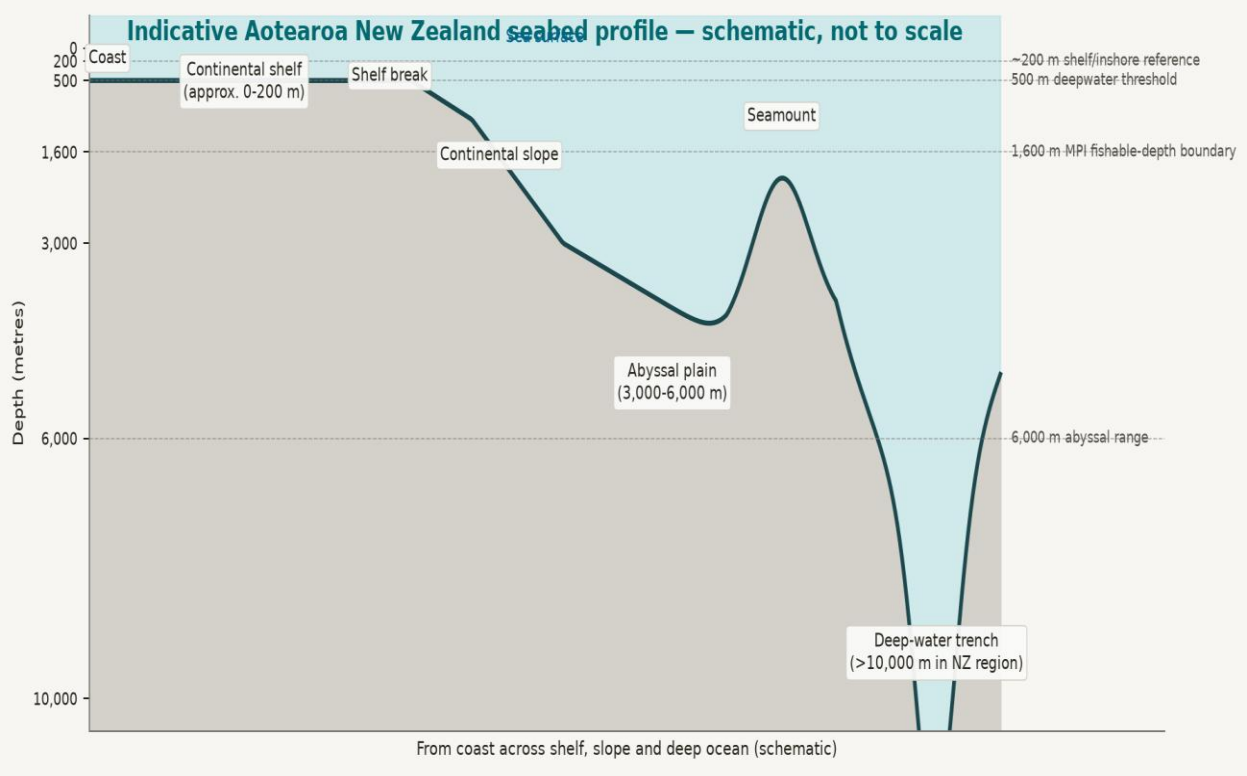


Figure 2. Indicative seabed profile from continental shelf to slope, abyssal plain, seamounts and trench; depth bands are schematic and not to scale.[2,5,49]

Figure 3 further illustrates these diverse features of the seabed and shows the bathymetric features of our EEZ. This figure maps the depths and terrain of our EEZ.

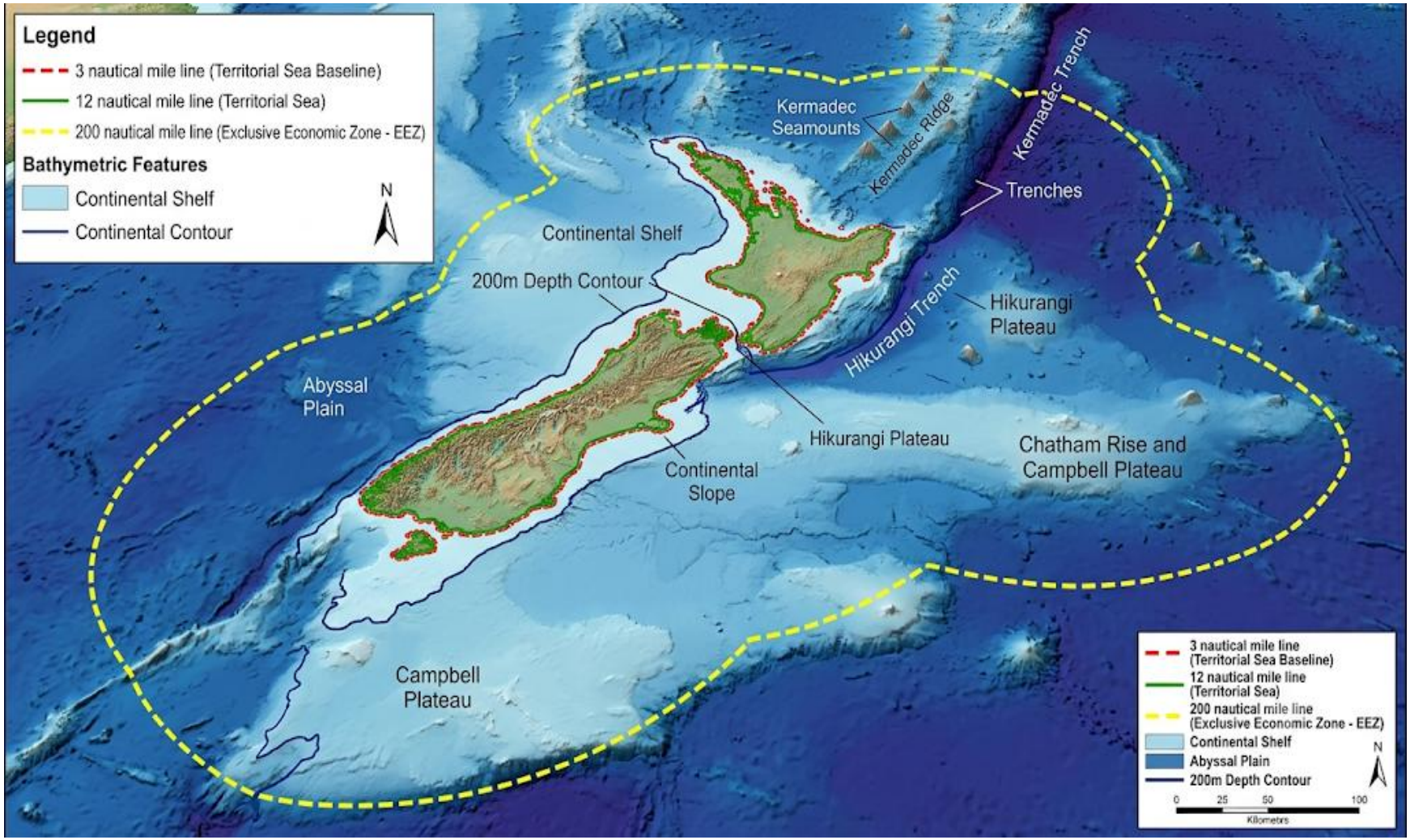


Figure 3. Major bathymetric features of New Zealand's Exclusive Economic Zone, including the continental shelf, slope, abyssal plain, seamounts, ridges and trenches relevant to bottom contact fishing depth zones.

2. Harvesting from Tangaroa and Hinemoana: Bottom Trawling

2.1 Bottom Trawling Explained

Trawling is a type of fishing method and involves towing a cone-shaped net through the sea from one or two vessels, with the net held open by gear such as trawl doors (often called otter boards overseas), beams, floats, weights, or two-vessel spread.[6] **Bottom trawling** is trawling where the net and associated ground gear are designed to fish on or very close to the seabed, usually to catch demersal species that live on, near, or just above the seafloor.[2]

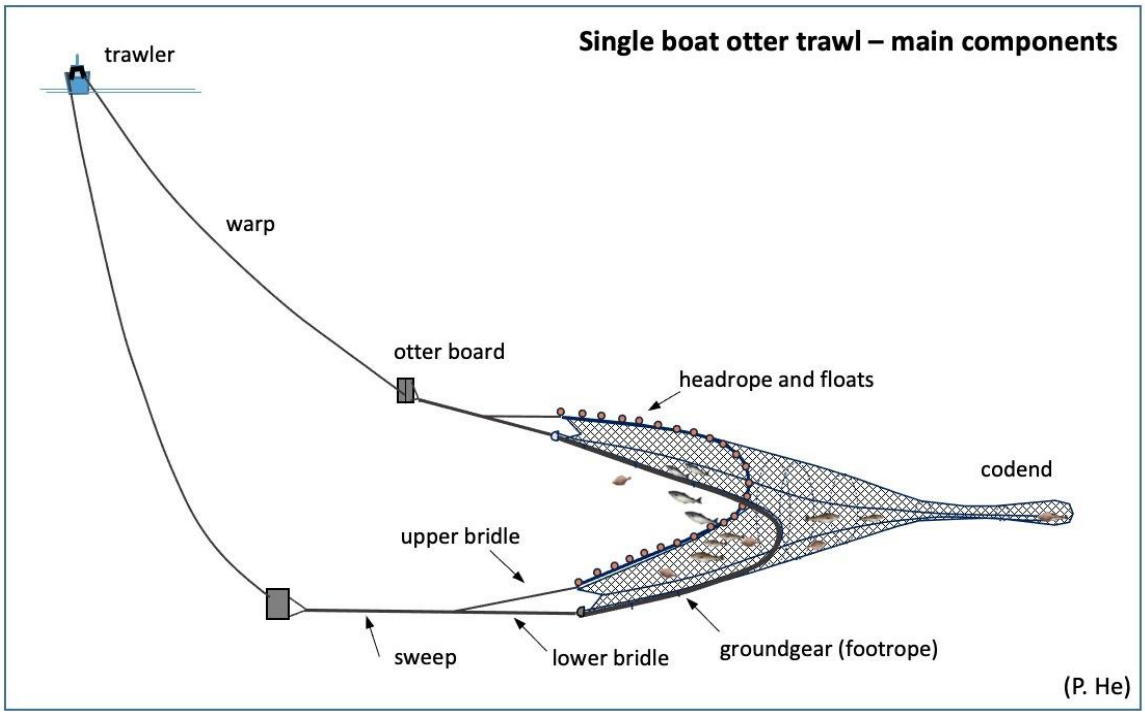


Figure 4. Single-boat bottom otter trawl components, including otter boards, bridles/sweeps and the trawl net; these components determine swept area and seabed-contact pathways.[6,37] Image credit: FAO, 2021; editorial use only, photo credit given

2.2 Why Bottom Trawling is used

Bottom trawling remains widely used because to date it is the only way to efficiently catch some New Zealand demersal fish and the most efficient way to catch large volumes of demersal fish that concentrate on or near the seabed. Because of this, decades of vessel, gear and processing infrastructure in New Zealand have been built around it.[7,5] Trawling uses the hydraulics of the water acting on paired doors to spread the net horizontally. Paired doors replaced earlier beam-trawls because they can be built lighter, towed faster, and adapted with sweeps, bridles, rubber bobbins and rockhopper discs to move over varied

ground.[6,5] Modern sensors reporting door spread, headline height, catch and depth make bottom trawling repeatable and increasingly targeted.[7,5]

2.3 Species Targeted by Bottom Trawling

New Zealand's bottom-trawl fleets target a wide range of demersal and middle-depth species. Inshore vessels, generally smaller than 28 metres and working mostly inside the territorial sea or to the 200 metre depth contour, target snapper, gurnard, trevally, and, on the east coast of the South Island also blue cod ((BCO 3) and which is most often taken as bycatch rather than as a directly targeted species,[121] and tarakihi, with some seasonal hoki and orange roughy taken in middle-depth fishing.[5] Larger deepwater trawlers target hoki, orange roughy, oreo, hake, ling, squid, jack mackerel, southern blue whiting and barracouta, and may also take snapper and trevally in offshore waters off the west coast of the North Island.[5] Sealord's target species across its fleet includes hoki, ling, dory, alfonsino, orange roughy, squid, southern blue whiting, mackerel and barracouta.[51]

2.4 Where Bottom Trawling Occurs

Inshore bottom trawling occurs on the continental shelf out to about the 200 metre depth contour; middle-depth fisheries occupy roughly 150–500 metres; and deepwater fisheries generally operate beyond 500 metres.[5] Fish are not distributed evenly or ubiquitously across these depth ranges. They tend to concentrate in locations where currents, seabed features and water properties bring together the food, temperature and shelter conditions each species needs. Fishers trawl only where the fish are and which are found and made visible by echo sounders. Fishers also cannot afford to lose or damage expensive trawl gear, so they generally avoid 'foul ground' (rocky, reef or otherwise obstructed seabed) where nets are likely to snag or tear. For these combined reasons, fishers generally trawl over soft-bottom habitat – sand, shingle and mud – as shown in the maps of trawl footprint in the following sections of this paper.

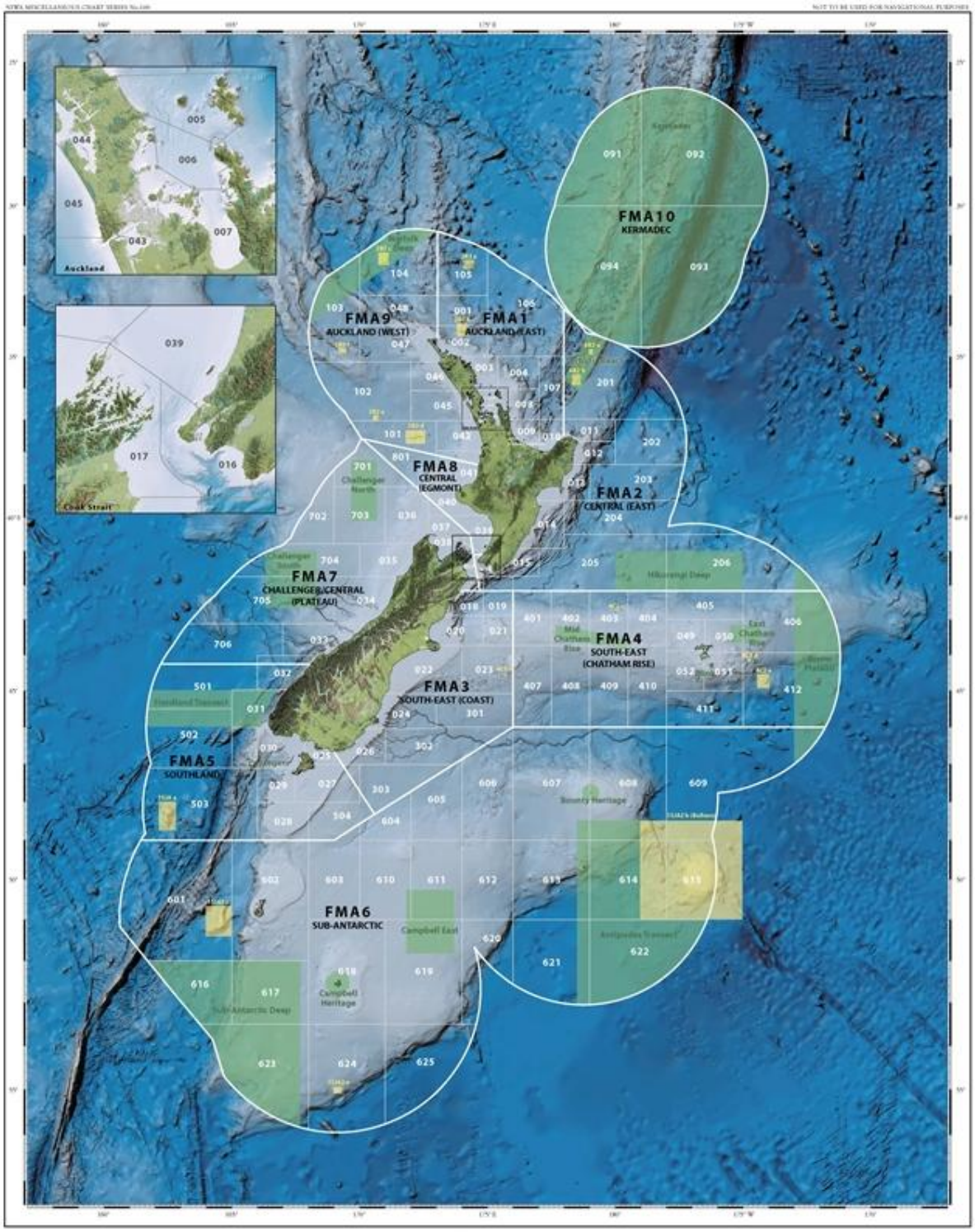


Figure 5: New Zealand Fisheries Management Areas. Mackay, K.A.; Mackay, E.J. (2017). *New Zealand Fisheries Management Areas, 1:5,000,000.* NIWA Miscellaneous Chart Series No. 100.

See over for map key.

Figure 5 New Zealand Fisheries Management Areas Map Key

Swatch	Meaning
Bold black label (e.g. "FMA6")	Fisheries Management Area — the large numbered/named regions like FMA1–FMA10. No fill color, just the black boundary line and bold label on the map.
White box with number (e.g. "014")	General Statistical Area — the fine-grained numbered sub-areas (001–052, plus unofficial 091–801) shown as thin outlined boxes with no fill.
Green	Benthic Protection Area — established under the Fisheries (Benthic Protection Areas) Regulations 2007.
Yellow	Seamount Closure — areas closed to commercial fishing around seamounts, established under various Fisheries Area Commercial Fishing Regulations (1986–2007).

MPI's trawl-footprint monitoring uses a deeper "fishable depth" boundary of 1,600 metres, beyond which commercial bottom trawling is largely absent.[2] New Zealand's major deepwater trawl grounds include the hoki fisheries around the Chatham Rise, Campbell Plateau/Sub-Antarctic, West Coast South Island and Cook Strait; the southern blue whiting fisheries on the Bounty Platform, Campbell Island Rise, Pukaki Rise and around the Auckland Islands; and orange roughy fisheries including the Chatham Rise, Challenger Plateau/Westpac Bank, the east coast, and other slope or underwater-feature grounds.[75,76,77,80,81]

Importantly, a single trawl management rule will not fit all of these habitats: the same gear may have very different consequences on a shallow muddy shelf, a canyon wall, a seamount edge or summit, a deep coral field, or a trench margin, so where trawling occurs matters as much as how much occurs.[15]

A lot of the anti-bottom trawling campaigning internationally and domestically relates to Orange Roughy which is a fish stock that New Zealand has played a major role in commercialising globally. There are many complex economic, sustainability, legal, ocean governance, management and science issues associated with orange roughy that are out of scope for this paper. Consideration could be given to developing a dedicated information paper about orange roughy.

Figure 7 (overleaf) highlights the major deepwater fishing areas in New Zealand.

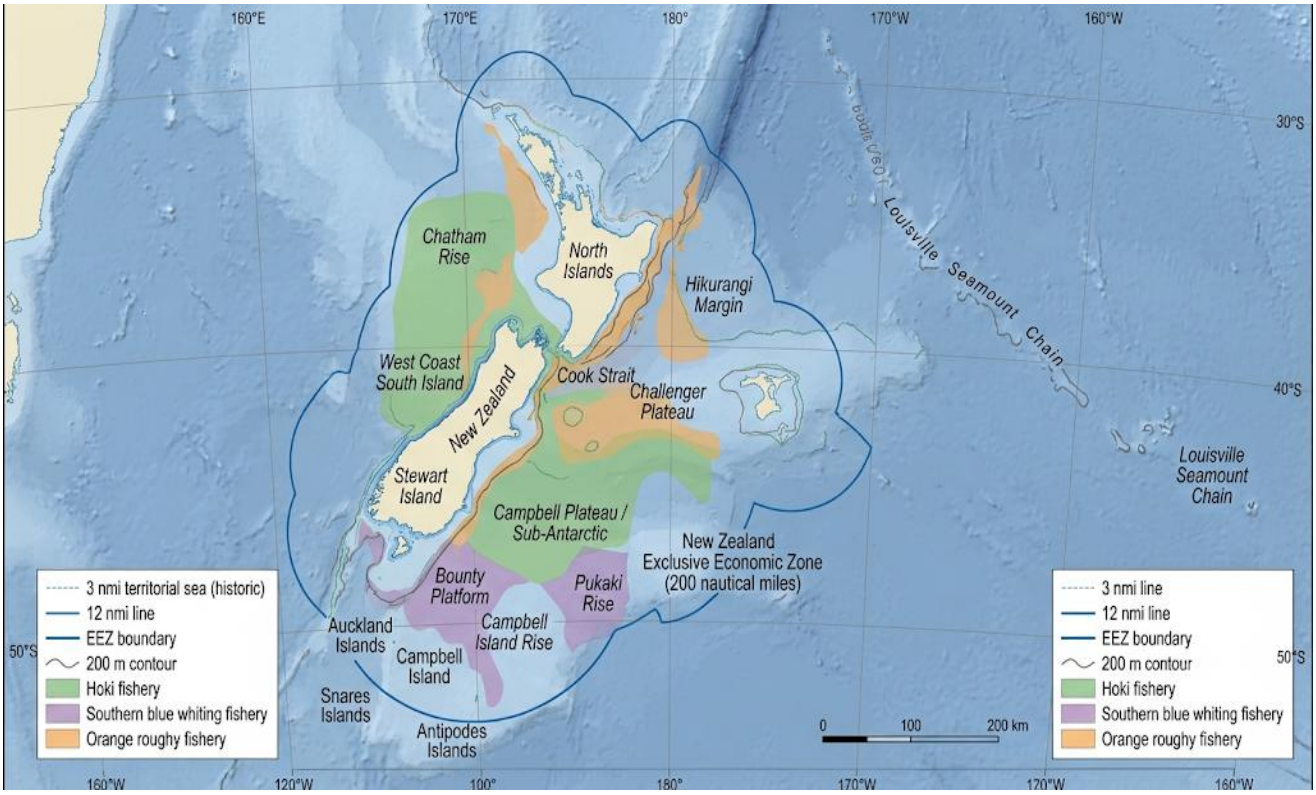


Figure 7. Major deepwater fishing areas. Generated by Gemini AI

3. Other ways we harvest from Tangaroa and Hinemoana - Midwater Trawling

3.1 Midwater Trawling Explained

Midwater trawling, also called pelagic trawling, is trawling where the net is towed through the water column rather than along the seabed, usually to intercept schooling fish rather than species that live on or near the seafloor.[6]

3.2 What Makes Mid Water Trawling Different from Bottom Trawling?

The practical difference is that there is no seabed contact: bottom trawl gear is heavier and designed for contact with the seafloor to catch demersal species, while midwater gear is designed to "fly" in the water column and target fish aggregations away from the bottom.[2,6] Because midwater gear does not carry the same heavy ground gear, it generally avoids the direct habitat disturbance, sediment resuspension and coral/sponge bycatch risk associated with bottom-contact gear. Importantly, however, New Zealand commercial fishing reporting treats midwater trawl gear used within 1 metre of the seabed as bottom-impact trawling for footprint purposes, because at that clearance the net and its associated gear can or may still contact the seafloor at some point in the trawl.[2] Fisher information also notes that some deepwater species, such as hoki (in season), can be caught in entirely clean

(no bycatch, no seabed contact) midwater aggregations, which is an important operational distinction for reform: the core question is not only the species being caught, but whether doors, sweeps, bridles, footrope and net contact sensitive benthic habitats during a tow.[2,5]

3.3 Why Midwater Trawling Is Used

Midwater trawling is used to intercept dense, off-bottom fish aggregations located by echo sounders and sonar, allowing vessels to target abundant schooling biomass efficiently while reducing gear wear, fuel burn and unwanted seabed contact compared with towing on the bottom.[7,5]

3.4 Species Targeted by Midwater Trawling

Midwater trawling in New Zealand is most closely associated with hoki, which forms large off-bottom aggregations during spawning and feeding, along with kahawai, jack and blue mackerel and southern blue whiting when schooling clear of the seabed.[5,76,78] Alfonsino and Ruby fish are other examples of fish that can also be taken in clean midwater shots .[2,5]

3.5 Where Midwater Trawling Occurs

Midwater trawling occurs over the same broad grounds as deepwater bottom trawling, namely the Chatham Rise, Campbell Plateau/Sub-Antarctic, Cook Strait, Bounty Platform and Campbell Island Rise, but the tow itself is usually conducted higher in the water column. A midwater net can only be towed along (or near) the bottom where it is known to be flat sand, gravel or muddy substrates.[75,76,78]

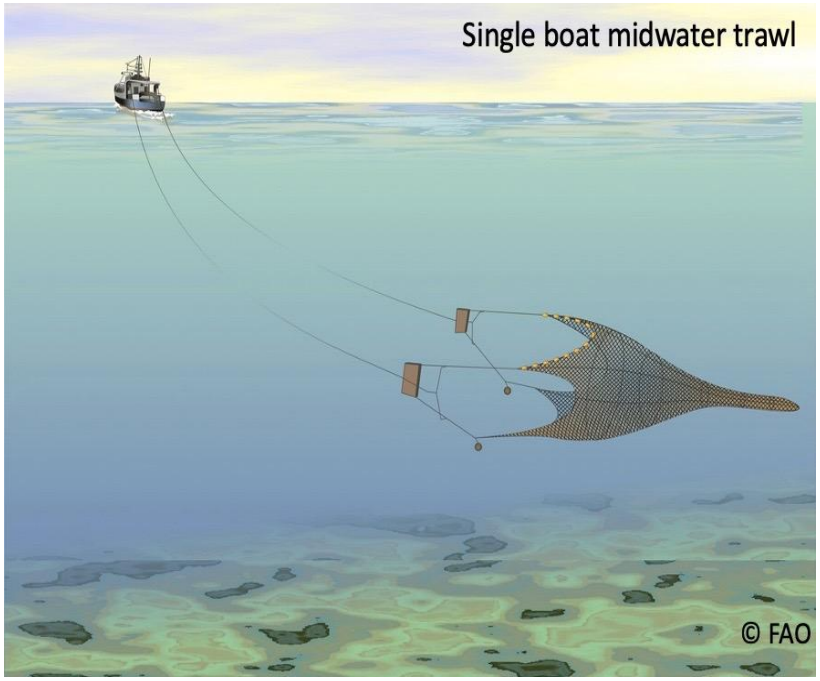


Figure 8. Single-boat midwater otter trawl, designed to operate in the water column rather than on the seabed.[39] Image credit: FAO, 2021; editorial use only, photo credit given.

4. Tangaroa and Hinemoana's Health - Environmental Impacts

A 2026 international review by 32 scientists and fisheries managers (which included a New Zealand representative) considered the challenges and opportunities for strengthening bottom-trawl fisheries sustainability. The review identified 30 specific evidence and management gaps spanning seafloor disturbance, bycatch and discards, management design, fishing operations, cross-sector conflicts, and public communication.[84] Readers should treat the figures below as the best currently available estimates, not final answers: spatial coverage of seafloor mapping is incomplete, habitat sensitivity and recovery rates vary enormously by depth, gear and substrate, and cumulative and carbon-related impacts are still being quantified.[84,15,19] This section sets out what is known, and flags where knowledge gaps remain.

4.1 Trawl Footprint Measurement and Change

Fisheries New Zealand uses the data provided by fishers to measures the trawl footprint as the cumulative and annual seabed area contacted by bottom trawling and dredging, distinguishing between the shallower, more heavily fished continental shelf and the deeper, less intensively fished slope and deepwater grounds.[3,4]

The Trawl footprint is calculated based on the entire net touching the seabed across the full line between the doors for the full length of the haul i.e. 100%. In practice the use of light gear along with rubber discs mean that there is substantially less contact. Investigations in Hawke's Bay showed it to be in the range between 57% (light gear) and 64% (heavier gear) of that full total.[122]

Two different measures matter, and should not be confused:

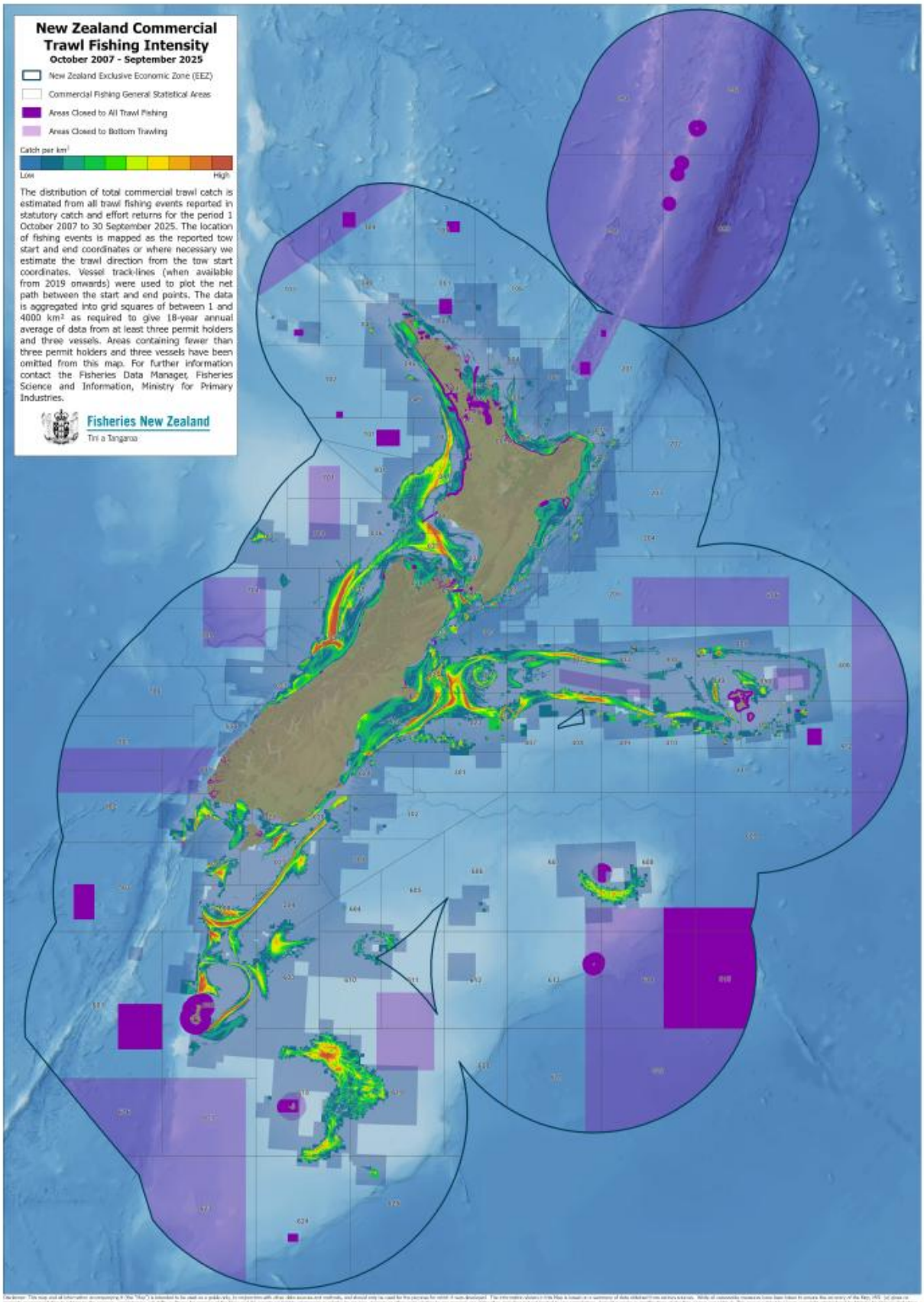
- **Cumulative footprint (1990–2025):** 467,863 km^2, equal to about 11 percent of New Zealand's combined Exclusive Economic Zone (EEZ) and territorial sea, or around 34 percent of the "fishable" area shallower than 1,600 metres.[2,123]
- **Annual footprint (2024–25 fishing year):** 70,056 km^2, or about 1.7 percent of the combined EEZ and territorial sea in that single year.[2,87]

The gap between these two figures is important for iwi decision-makers: the annual footprint is small relative to the whole EEZ, but the cumulative footprint shows that a larger area has been contacted at least once over 35 years, concentrated on the continental shelf and upper slope where fishable depths and target species are found.[2,3] Deepwater grounds beyond 1,600 metres are rarely trawled at all, both because few target species occur there and because gear and vessel economics make very deep tows impractical.[2] Independent, vessel-level monitoring gives a complementary picture: a Moana New Zealand mapping exercise estimated that its contracted inshore trawlers annually contacted on average less than 3 percent of the seafloor within 12 nautical miles and less than 1 percent of the seafloor

within the full EEZ[1].[48] These figures should not be read as a complete ecological-risk answer, because risk depends on habitat sensitivity, feature type and repeat intensity within the contacted area, not only its size, but they demonstrate the direction of travel toward vessel-specific, geospatially verified footprint reporting.[48]

It is further noted that there has been reporting requirements on deepwater fishing since approximately 1992, which has reported the position of deepwater vessels at least once every hour, under the Fisheries (Satellite Vessel Monitoring) Regulations 1993, and which also required automatic location communicators on foreign-licensed vessels, New Zealand vessels over 28 metres, and vessels targeting orange roughy, scampi, deepwater clams and black/blue/spiny dogfish. [125] However, at the time, inshore vessels had no such devices as they were too large and expensive for the range of inshore vessels in operation. In 2016, new technology was developed and inshore vessels eventually also had geospatial reporting fitted. These now record the position of vessels within 10meters every 10 minutes.[124] This inshore geospatial position-reporting requirement is distinct from, and preceded, Fisheries New Zealand's later Electronic Reporting (ER) programme, which progressively required electronic catch and position reporting from commercial fishing vessels between 1 October 2017 (vessels over 28 metres) and the end of 2019 (the remaining inshore fleet), and is a key reason cumulative inshore trawl-footprint data are less complete for the historical record than deepwater data.[124]

Figure 9. (Overleaf) The distribution of total commercial trawl catch is estimated from all trawl fishing events reported in statutory catch and effort returns for the period 1 October 2007 to 30 September 2025. The location of fishing events is mapped as the reported tow start and end coordinates, or where necessary, we estimate the trawl direction from the tow start coordinates. Vessel tracklines (when available from 2019 onwards) were used to plot the net path as straight lines between the start and end points. The data is aggregated into grid squares of between 1 and 4,000km^2 as required to give an 18-year annual average of data from at least 3 permit holders and 3 vessels. Areas containing fewer than 3 permit holders and 3 vessels have been omitted from this map. The data is improving each year. The 2026 report is the first to be able to use the recent positioning data to map the trawl path at 10-minute intervals so that the detail can now show fishers fishing around contours rather than assuming a straight line between start and finish


New Zealand Commercial Trawl Fishing Intensity
October 2007 - September 2025
New Zealand Exclusive Economic Zone (EEZ)
Commercial Fishing General Statistical Areas
Areas Closed to All Trawl Fishing
Areas Closed to Bottom Trawling
Catch per km²
Low
High
The distribution of total commercial trawl catch is estimated from all trawl fishing events reported in statutory catch and effort returns for the period 1 October 2007 to 30 September 2025. The location of fishing events is mapped as the reported tow start and end coordinates or where necessary we estimate the trawl direction from the tow start coordinates. Vessel track-lines (when available from 2019 onwards) were used to plot the net path between the start and end points. The data is aggregated into grid squares of between 1 and 4000 km² as required to give 18-year annual average of data from at least three permit holders and three vessels. Areas containing fewer than three permit holders and three vessels have been omitted from this map. For further information contact the Fisheries Data Manager, Fisheries Science and Information, Ministry for Primary Industries.
Fisheries New Zealand
Tini a Tangaroa

4.2 Seabed Impacts: Habitat Disturbance, Sediment and Corals

Bottom-contact gear can disturb seabed habitats by direct physical contact with the substrate, by resuspending fine sediment into the water column, and by damaging slow-growing, structure-forming species such as corals, sponges and bryozoans.[7,18] Global analyses show that depletion and recovery of seabed biota after bottom-trawling disturbance vary substantially with gear penetration depth, natural disturbance regimes, and ecological community composition i.e. soft-sediment habitats with naturally high disturbance can recover in months to a few years, while biogenic and deep-sea habitats can take decades or show little recovery even after 15 years without further fishing.[15,16] A global review of seamount trawl impacts found the fate of deep-sea coral reefs on repeatedly fished seamounts was generally poor, with limited recovery evidence at the fishery-seascape scale.[17,18] It is important to note that New Zealand does not fish across whole seamounts or entire seamount fields: of the 142 known true seamounts within New Zealand's EEZ, only 15 have ever been bottom trawled, and just 9 have been trawled in the past decade, meaning the great majority of New Zealand's seamounts (around 89 percent) have never been subject to bottom trawling.[91,128]

Different gear types create different seabed-contact profiles. Bottom trawls sweep a continuous corridor with doors, sweeps, lower bridles, ground gear and the net all interacting with the seabed, while lower-contact methods such as bottom longline and potting create more intermittent points and lines of contact rather than a continuous swept path – see Annex A.2 (Danish Seining). Danish seining is a lower-contact method similar in principle to a bottom trawl but using long ropes rather than a towed net to herd fish, and is described further in Annex A.2. Purse seining, by contrast, is a surface or midwater gear that encircles schooling fish with a net and does not make bottom contact, so it is not covered in this bottom-contact-focused Annex.[5,56,57,122]

A deep-water longline study in the Azores estimated that one deep-sea bottom trawl could have an impact similar to 296–1,719 longline sets, depending on the morphological complexity of the vulnerable species affected, while also noting that coral and sponge bycatch can still occur on longline gear and must be managed.[57] Research on commercial fish traps found almost no movement during soaking and a maximum swept area during retrieval of 2.04 square metres per trap. This is low compared with towed gear, though a wider review cautions that trap impacts can expand where gear is dragged during retrieval, where trap lines connect many pots, or where lost gear continues to move through storms or currents.[59,60]

research by Fisheries Inshore under the Sustainable Seas programme demonstrated that the percentage of contact behind a small inshore trawler was significantly less that the continuous 100% contact that regulators normally assume - it showed the range of touch to be between 57-64%.[122]

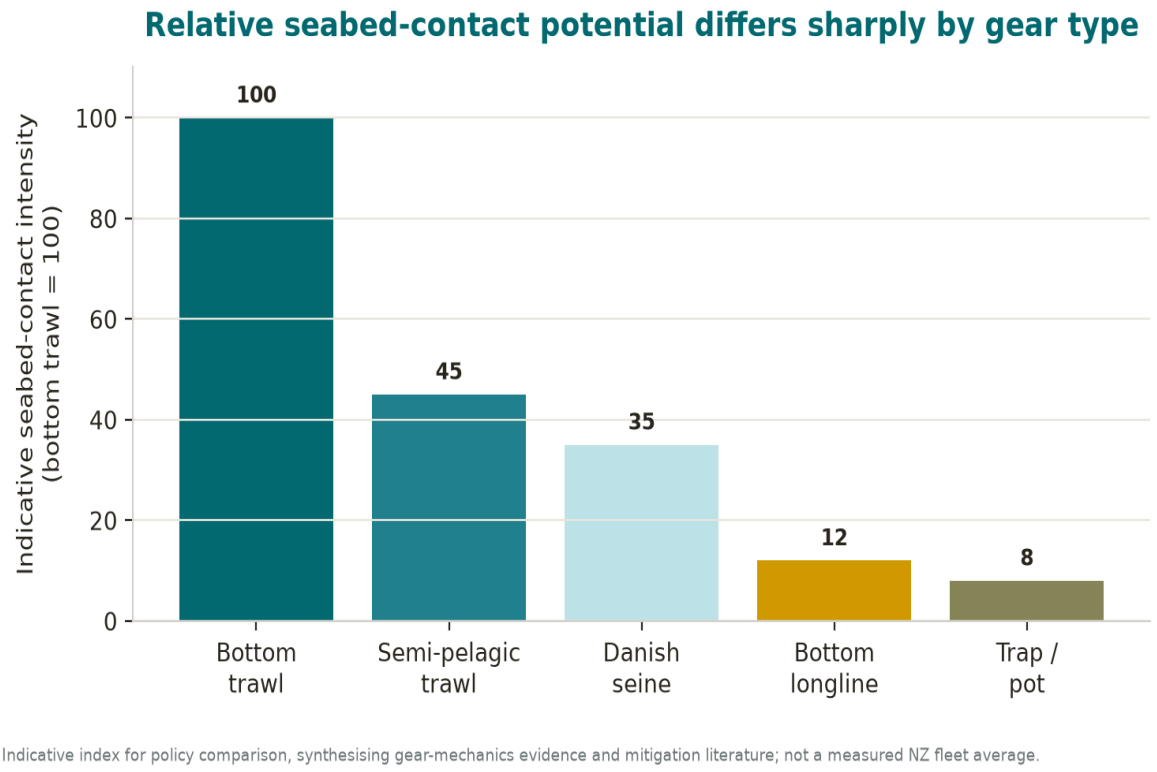


Figure 10. Indicative relative seabed-contact potential by gear type; values are a policy-comparison index, not measured fleet averages (Perplexity EnterprisePro Generated).[5,6]

4.3 Broader Environmental Impacts to Tangaroa and Hinemoana

Bycatch. Fishing can take non-target fish, invertebrates and, occasionally, protected species alongside the intended catch. The scale of bycatch is highly fishery-specific: a 2026 quantitative case study of the New Zealand orange roughy bottom-trawl fishery estimated a benthic footprint of roughly 2,616 km^2 and identified more than ten regularly encountered bycatch species, including spiky oreo, ribaldo, hake and corals, operating in deep-sea habitats where recovery times are poorly understood.[85] For comparison, the same study's Scottish king scallop dredge case study had a much smaller benthic footprint of roughly 1.17 km^2 but more than 60 bycatch species, illustrating that footprint size and bycatch diversity do not necessarily move together and both need to be assessed for each fishery. King scallops are a UK "non-quota" species not covered by an EU/UK Total Allowable Catch, which is a different regulatory regime from New Zealand's own Quota Management System (QMS); the comparison above is illustrative of methodology rather than a like-for-like regulatory comparison.[85,131] The 2026 international gap review identifies non-target catch accounting, discard mortality and unobserved mortality as three of its priority bycatch and discards gaps (its G9–G12 group), underlining that bycatch data across many bottom-tow fisheries worldwide, including in New Zealand, remains incomplete.[84] This international gap is distinct from New Zealand's own bycatch data completeness, which has improved considerably since Fisheries New Zealand's Electronic Reporting programme required electronic catch and position reporting from the commercial fishing fleet between 2017 and

2019, though historical (pre-ER) bycatch records for some inshore fisheries remain less complete.[124]

Carbon and climate change. There is growing scientific, yet still contested, interest in whether disturbing seabed sediments through bottom trawling releases previously stored carbon and reduces future carbon storage capacity. A widely cited 2021 global analysis argued that ending bottom trawling in currently unprotected areas could deliver meaningful climate and biodiversity co-benefits.[20] A 2023 study estimated the theoretical carbon benefits of ending bottom trawling globally, while a 2024 atmospheric analysis examined potential CO2 emissions and ocean acidification linked to bottom-trawling-disturbed sediment.[21,22] A separate 2024 study found long-term carbon storage in shelf-sea sediments can be reduced by intensive bottom trawling in some settings.[23] However, a 2024 systematic evidence review cautioned that the mechanisms, magnitude and persistence of any carbon released from trawled sediment into the atmosphere are still being investigated, and that findings vary by sediment type, depth and location.[19] The 2026 international gap review similarly flags seafloor carbon-stock maps and seafloor carbon-release models as unresolved evidence gaps (G7 and G8), meaning New Zealand-specific carbon figures for its own trawl grounds are not yet available and should not be assumed to mirror international headline estimates.[84] The Hiddink et al. (2023) reassessment referenced above already responds to the widely discussed critique that earlier headline estimates of bottom-trawling carbon emissions were overstated, producing substantially lower, more conservative carbon-benefit figures; independent commentary has likewise noted that a well-managed bottom-trawl fishery's carbon footprint compares favourably with many other animal protein sources.[129,130]

For iwi and associated company reporting, the responsible approach is to monitor this fast-moving science, avoid overclaiming either large carbon losses or the absence of carbon risk, and include sediment carbon considerations in future habitat and blue-finance work as the evidence matures.[19,20,21,22,23,84]

4.4 How Environmental Impacts Are Managed

New Zealand does not leave bottom-trawl impacts unmanaged. A combination of technology, spatial protection and habitat-specific rules already shapes where and how bottom trawling occurs, even though, as the gaps identified above show, the evidence base to fully verify and refine these measures is still developing and more could be done.

4.4.1 Technological Responses

New Zealand deepwater trawling has shifted toward more "aimed" fishing, where vessels use acoustic detection to target dense fish aggregations rather than towing long, less-directed shots over broad areas. Deepwater trawl nets for species such as orange roughy have used shorter sweeps and bridles, smaller net openings, net sounders, headline sensors, modern trawl doors, and rockhopper ground gear to improve control and reduce unnecessary contact.[5,3]

For inshore fisheries specifically, the same independent Moana New Zealand mapping exercise cited above found that its contracted inshore bottom-trawl vessels annually contacted, on average, less than 3 percent of the seafloor within 12 nautical miles of the coast and less than 1 percent of the seafloor across the full EEZ, reinforcing that inshore vessels, like their deepwater counterparts, contact only a small fraction of available seabed each year.[48]

A comprehensive 2020 Department of Conservation-commissioned review*[2] found that trawl gear seabed impact mitigation options include semi-pelagic trawl doors, elevated sweeps and bridles, removal or modification of ground gear, lighter components, shorter sweeps, and gear-audit processes to quantify actual seabed-contact risk. The same review cautioned that reducing seabed contact is difficult to verify because skippers cannot always precisely control and document how every component of the gear interacts with the seabed throughout a tow.[5]

Moana New Zealand established a Harvest Footprint Project in 2016 which focuses on where fishing occurs, how fishing occurs, future gear options, lighter benthic contact, and responsible fisher behaviour among contract fishers.[12,9] This is underpinned by a modern Power-BI/ArcGIS-linked spatial and business analysis tool that includes real-time spatial information on where fishing occurs and major habitat-type data layers, so that scenarios of any changes in fishing strategy (location, volume, species, avoidance of certain habitat

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* That review team of Katherine Short and Tony Craig of Terra Moana, and Dr Steve Eayrs of Smart Fishing (Australia) were the same team contracted to Moana New Zealand's Harvest Footprint Project. Katherine Short is now independent in F.L.O.W. Collaborative Ltd. Katherine has also worked extensively with the Plant and Food Research team that developed PSH/FloMo including 7 years in the Reimagining Aquaculture programme and several PSH published papers. She has a background of 27 years in working with trawl fisheries. Dr Steve Eayrs is a globally leading trawl gear technology specialist and Tony Craig is a seafood policy and finance leader with 40 years' experience in New Zealand commercial fisheries.

types) can be run to inform revenue projections and kaitiakitanga strategies to protect biogenic habitat. These scenarios could also inform any exploration of biodiversity credit markets to support Māori-owned fisheries to not fish in some areas.

As part of the Harvest Footprint Project, Eayrs and Craig reviewed Moana's contracted inshore harvesters and their vessels in 2023. The review covered 11 bottom-trawl vessels, two Danish seine vessels and two bottom-set longline vessels, and found that all participating bottom-trawl fishers had taken voluntary steps to modify gear at their own cost to reduce seabed contact, including lighter sweeps and bridles, modified ground gear, high-aspect-ratio doors, softer Dyneema warps and sweeps in place of steel wire, rubber discs to lift short sections of sweep clear of the seabed, pink towing warps to reduce seabird interactions, low-opening trawls to avoid snapper and trevally, and trawl designs that let some unwanted fish escape over the headline.[48] The review concluded that Moana's inshore contract fishers were "ahead of the game" in awareness of public expectations and practical mitigation effort, but that future gains need structured support. It recommended establishing a funded Seabed Impact Working Group, ongoing fisher training, low-risk gear trials, gear-loan or transition finance, and transparent communication in a coherent strategy rather than the current piecemeal, individual experimentation.[48]

Case Study – Precision Seafood Harvesting (FloMo)

Precision Seafood Harvesting, now commercialised internationally as FloMo, is important because it provides another tool to shift the reform conversation from "catch more volume" to "land better fish with less waste and more control." The original New Zealand partnership to develop it involved Plant & Food Research, Sealord, Sanford and Moana New Zealand, and was launched in 2012 after earlier technology development from 2005. It was supported by a NZ$42 million Primary Growth Partnership programme, with a later NZ$9 million Sustainable Food & Fibre Futures programme to continue development and commercialisation.[9,10] It is important to note that PSH modified only the trawl codend (the terminal, fish-holding section of the net) to improve catch selectivity, survivability and fish quality; it did not change bottom-contact gear such as doors, sweeps, bridles or ground gear, and so should be understood as a catch-quality and selectivity innovation rather than a seabed-contact or benthic-impact mitigation measure.

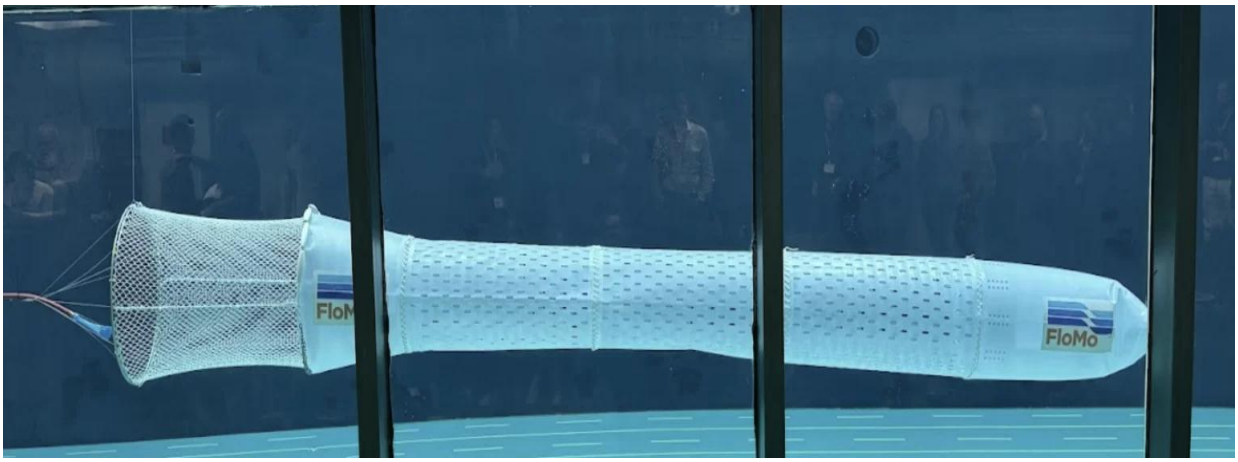

Figure 11. FloMo / Precision Seafood Harvesting technology development, illustrating the modular harvesting-system design pathway. Image credit: FloMo.[9,10]

The technology replaces conventional mesh cod-end handling with a flexible modular harvesting system designed to keep fish in water, reduce scale loss and bruising, allow small fish to escape through portals, and bring landed fish on board alive and in better condition. The system has resulted in significantly improved product quality and reduced small fish, as well as increasing survival of escaped fish.

Now being taken up around the world, FloMo is a breakthrough in quality and humane handling rather than a complete benthic solution. It can improve product value and release outcomes, including the practical ability to release some live animals before or during landing (e.g. marine mammals), but seabed-impact reduction still depends on whether doors, sweeps, bridles and ground gear are lifted, lightened, shortened, monitored and spatially managed.[5,9]

Sealord's new vessel Tokatū is equipped with Precision Seafood Harvesting technology and the Modular Harvest System has been approved for commercial rollout in specified deepwater and inshore fisheries; however, Moana New Zealand internal data indicates that PSH technology currently accounts for approximately 35 percent of all Moana landings, and approximately 45 percent of catch taken by Moana's own trawler fleet, giving an indicative sense of current uptake pending fuller public fleet-wide reporting for Sealord vessels[3]*.*[50,51,53,54]

4.4.2 Spatial Responses (Existing and Potential)

New Zealand's principal existing fisheries spatial tools are Benthic Protection Areas (BPAs), established under the Fisheries (Benthic Protection Areas) Regulations 2007, and seamount closures dating from 2000–2001.[64,65] Together, these close bottom trawling across roughly

[3] Figures supplied by Nathan Reid, Moana New Zealand (pers. comm., 2026); fleet-wide Sealord vessel uptake figures were not available for this briefing and would benefit from further public reporting.

31 percent of the EEZ and 21 percent of the territorial sea; combined with the deeper "fishable depth" restriction, around 15 percent of the combined territorial sea and EEZ at depths shallower than 1,600 metres is closed to bottom trawling, and around 40 percent of deeper water beyond 1,600 metres is closed.[2] These closures protect an estimated 28 percent of underwater topographic features, 52 percent of known seamounts, and 88 percent of active hydrothermal vents.[89,90]

It is important for iwi decision-makers to understand what these closures are and are not. BPAs and seamount closures are fisheries-management tools that prohibit a specific method (bottom trawling and, for BPAs, dredging) in a defined area. They are not formal, legally protected marine reserves under the Marine Reserves Act 1971, and while no bottom trawling can occur within them, other types of fishing e.g. pelagic (e.g. for tuna, kahawai, or mackerel) can occur and other deep-sea activities (e.g. deep sea mining or cable laying) may also still occur within them.[89]

Potential future coastal and/or offshore spatial responses discussed in wider ocean governance reform circles in Aotearoa New Zealand include:

- voluntary rāhui,
- blue regeneration zones,
- closures under the Habitats of Particular Significance for Fisheries Management (Section 9(c) of the Fisheries Act,
- further avoidance of fishing on seamounts (already largely avoided in practice: of New Zealand's 142 known seamounts, only around 15, roughly 11 percent, have ever been trawled, and just 9, roughly 6 percent, have been trawled within the past decade)[91,128],
- coral/sponge areas and nursery grounds,
- fine-scale habitat mapping to target closures at the habitats most in need of protection rather than using broad depth bands.[5]
- For the high seas, high seas marine protected areas have been mooted for twenty years and a new well-resourced, international campaign is beginning focused on the Tasman Sea deepwater fisheries.

4.4.3 Habitats of Particular Significance for Fisheries Management

Habitats of Particular Significance for Fisheries Management (HPSFM) are embedded in the Fisheries Act 1996 in Section 9(c). This requires that habitats of particular significance for fisheries management should be protected, and although work to apply this clause has only begun within the last five years, MPI now interprets these as areas or attributes of especially great importance in supporting life-history stages of fisheries resources.[61,63]

MPI's current guidance frames HPSFM around life-history function, including spawning, nursery, feeding, migration and aggregation habitats, and notes that identification should use scientific information alongside mātauranga Māori and work with tāngata whenua, especially for taonga species.[61,62] This connects directly to trawl reform because trawl rules based only on method or depth may miss the habitats that matter most for recruitment, ecological resilience and mahinga kai.

4.4.4 Spatial Capability

Both Moana New Zealand and Sealord have in-house ArcGIS-based spatial mapping capability linked to catch planning and harvest tracking. Moana's also has ecological habitat layer information. Scenarios can be run to determine what the bottom-line implications would be of any spatial responses.

5. Appendices

5.1 The Historical Extent of Trawling in New Zealand waters

Historical Background: Pre-1990 Trawling Extent

Trawling in New Zealand waters divides into two distinct eras. A small-vessel, domestic inshore trawl fishery, targeting snapper, tarakihi, gurnard and other shelf species, has operated since around 1900.[102] Deepwater trawling, by contrast, is a much more recent development. Distant-water fleets, chiefly Soviet and Japanese, with some Korean vessels, began exploiting New Zealand's offshore waters from the 1950s to the 1970s, before New Zealand had any jurisdiction over them.[103] Soviet vessels reportedly caught orange roughy incidentally as early as 1957 and developed a southern blue whiting and oreo dory fishery through the 1970s, with oreo catches peaking at roughly 26,000 tonnes in 1981, while Japanese trawlers took hoki in bulk off the South Island's West Coast from the late 1970s.[104,105,106]

New Zealand's declaration of a 200-nautical-mile Exclusive Economic Zone in 1978 was the pivotal turning point. Automatic foreign access ended, and joint ventures were struck between New Zealand companies, including Talley's, Sealord, Sanford, Solander and Fletcher Fishing, and foreign partners to rapidly develop the newly claimed deepwater grounds.[107] Orange roughy fishing began commercially on the Chatham Rise in 1979 and expanded to the Challenger Plateau from 1981. Annual catch rose from around 12,000 tonnes in the first season to a peak of roughly 54,000 to 57,000 tonnes by 1989.[108,109] Hoki catches similarly grew from around 35,000 tonnes in 1985 to a Total Allowable Catch of 250,000 tonnes by 1986.[107] Trawling in this period was overwhelmingly bottom trawling concentrated on flat seabed and slope-edge terrain during winter spawning aggregations. Targeted seamount, or "hill", fishing did not become dominant until GPS, net-monitoring sensors and swath mapping matured through the 1990s.[105,109]

Critically, no reliable spatial-extent (footprint) estimate exists for trawling before October 1989. New Zealand's official trawl-footprint monitoring series is built on Trawl Catch Effort and Processing Return (TCEPR) data, introduced only when the Ministry of Fisheries replaced the old Fisheries Statistics Unit paper forms with the new Catch and Effort reporting system on 1 October 1988. The resulting 1989/90 season record is itself acknowledged as incomplete.[110] Earlier catch-return forms recorded only aggregate catch by broad statistical area, not individual trawl positions, so pre-1990 catch data cannot be converted into a spatial footprint using standard methods.[110] From 1990 onward, the earliest period with usable spatial data, cumulative bottom-trawl footprint reached approximately 335,000 km^2, or about 24 percent of seabed shallower than 1,600 metres, with roughly 90 percent of the EEZ overall never bottom-trawled.[5] It is widely accepted among fisheries scientists that the most serious first-pass physical damage to previously unfished seabed habitat likely occurred early in each fishery's development, spanning the 1978–1990 build-up period, even though this cannot be quantified with any existing dataset.[5]

5.2 How Has Trawling Technology Changed Over Time?

Internationally, early mobile fishing gear included beam trawls, where a rigid wooden or metal beam kept a funnel-shaped net open as it was dragged over the seabed. Steam and diesel engines, deck winches, and larger vessel designs then allowed fishing vessels to tow larger gear faster and farther offshore, changing trawling from a local practice into an industrial harvest method.[7]

New Zealand trawling began around 1900 and grew from port-based, coastal operations into a more mechanised inshore fleet as engines, refrigeration, fish-finding and navigation improved through the twentieth century.[5,7] Industrial trawling in New Zealand expanded from coastal and shelf fisheries into deeper-water fisheries as engine power, refrigeration, offshore vessels, acoustic fish-finding and the Quota Management System changed the economics of harvest. From the late twentieth century, deepwater target species such as hoki, orange roughy, oreo, hake, ling, squid and southern blue whiting became central to the export-oriented trawl fleet.[18,2]

This matters because "inshore trawling" is not a separate ecological category from "bottom contact": it is the coastal-shelf expression of a method that has become more efficient and spatially precise, and it is where public concern, iwi interests (coastal and beyond), biogenic habitat, and localised depletion narratives most directly meet commercial harvest.

The same technology that made trawling more efficient also made effort more spatially precise: echo sounders and sonar locate fish aggregations; GPS and plotters make tow paths repeatable; sensors report door spread, headline height, catch, depth and gear symmetry; and modern trawl doors and rockhopper gear help vessels fish areas that earlier vessels could not work safely.[7,5] Otter trawls replaced many beam-trawl applications because paired doors or otter boards use hydrodynamic force to spread the net horizontally without a rigid beam. Later innovations included sweeps and bridles to herd fish toward the net, rubber bobbins and rockhopper discs to move over rough ground, and electronic sensors to monitor net depth, opening, symmetry, catch, and position relative to the seabed.[6,5]

That history matters for reform because "modern trawling" is not one single method. A heavily weighted bottom trawl on rough ground, an aimed deepwater tow on a known aggregation, a semi-pelagic configuration with doors off the seabed, a Danish seine shot, and a lighter inshore modification create different impact pathways and different potential transition opportunities.[5,3]

Sealord Group is central to this history because it is both a major deepwater operator and a Māori fisheries settlement asset, with ownership by Moana New Zealand and Nissui/Nippon Suisan.[1,50] Sealord operates six deep-sea vessels from New Zealand waters and the Will Watch from Mauritius in the southern Indian Ocean; in the context of the Independent Fisheries transaction, Sealord also owns a fleet of eight deepwater vessels, seven active in New Zealand waters.[50,51,52] Its sustainability position combines fisheries certification, spatial precision and gear innovation: the New Zealand hoki fishery is MSC-certified, southern blue

whiting has MSC certification for the Bounty Platform and Campbell Island Rise units that represent most catch, and New Zealand orange roughy certifications cover selected trawl units such as ORH 3B Northwest Chatham Rise and ORH 7A Challenger Plateau/Westpac Bank, noting certification status can vary by unit and surveillance outcome.[30,78,79]

6. Annexes (Supplementary Information): Other Commercial Fishing Methods

This Annex introduces four further commercial fishing methods relevant to Māori fisheries assets and reform discussions: long lining, Danish seining, potting, and dredging. Unlike bottom trawling and midwater trawling, none of these methods sweeps a broad continuous corridor of seabed, but each still carries its own habitat, bycatch and management considerations.

A.1 Bottom Long Lining

What is long lining? Bottom longline fishing sets a weighted mainline along or close to the seafloor, with branch lines and baited hooks left to soak before retrieval.[40,56] It is a bottom-contact method and can still affect benthic habitat through anchors, weights, hook lines and abrasion or snagging when gear moves across complex ground, particularly around corals, sponges, bryozoans and other emergent epifauna.[56,57]

Why is it used? Long lining allows targeted, selective capture of demersal and deepwater species with lower continuous-contact seabed disturbance than towed gear, and can access complex or rough ground that trawl gear cannot safely fish.[5,56]

What species are caught? Long lining in New Zealand and internationally targets species such as ling, hake, toothfish and other demersal deepwater fish; the Ross Sea toothfish longline fishery is a notable MSC-certified example.[83]

Where does it occur? Long lining occurs on both continental slope and deepwater grounds, including areas too rough or steep for trawl gear, and on the high seas for species such as toothfish.[57,83]

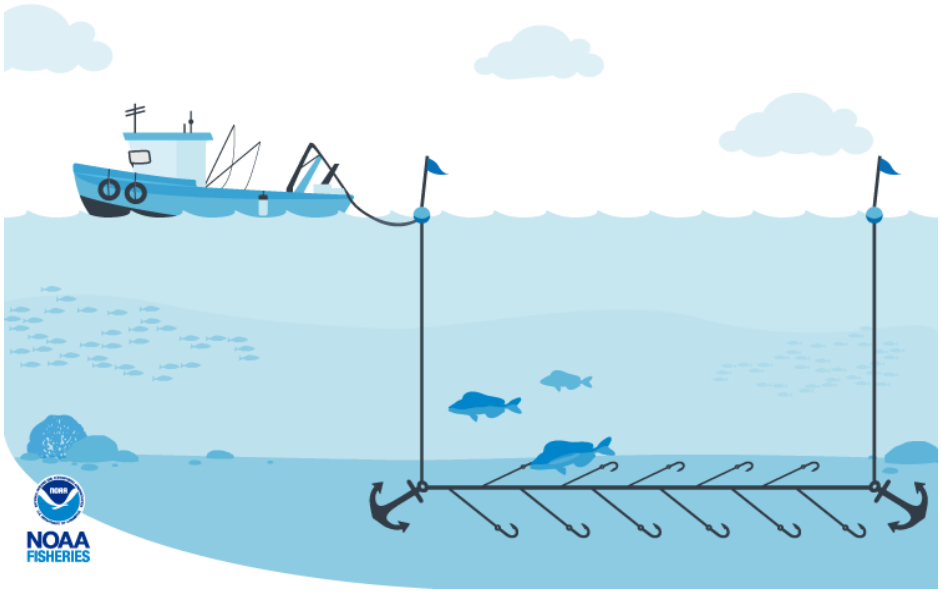

Figure 12. Bottom longline gear, with weighted mainline, buoy lines and baited hooks. This gear can contact the seabed but does not sweep a broad continuous corridor.[40] Image credit: NOAA Fisheries.

A.2 Danish Seining

What is Danish seining? Danish seine (boat seine) fishing deploys long ropes and a net near the bottom to herd fish toward a conical net, rather than towing the net continuously along the seabed as in bottom trawling.[38,6]

How does it differ from bottom trawling? The herding action of the ropes, rather than a continuously towed net and ground gear, gives Danish seining a different footprint, tow mechanics and intensity profile from otter trawling, generally with a smaller area of continuous ground contact per shot.[6,5]

Why is it used? It is a lower-contact alternative to bottom trawling for some inshore demersal species, and has been adopted by Moana-contracted inshore vessels as part of gear-mitigation efforts.[48]

What species are caught? Danish seining in New Zealand inshore fisheries targets demersal species such as snapper, gurnard, tarakihi and other shelf species also targeted by inshore bottom trawl.[48,5]

Where does it occur? It is used primarily on the continental shelf and territorial sea, where smoother ground allows the herding ropes and net to operate effectively.[5,48]

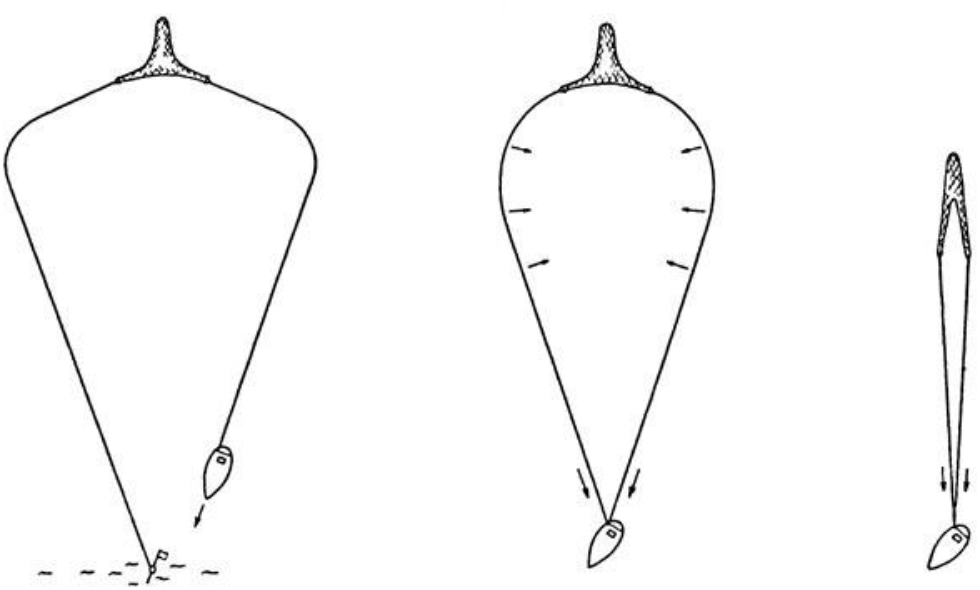

Figure 13. Boat seine / Danish seine configuration, showing the long ropes used to herd fish toward a conical net.[38] Image credit: FAO, 1990; editorial use only, photo credit given.

A.3 Potting

What is potting? Potting or trap fishing uses baited three-dimensional devices, usually attached to groundlines and vertical buoy lines, which are set on the seabed and later recovered.[41,58]

How does it differ from bottom trawling? Its seabed effects are generally localised around the footprint of the pot, groundline and retrieval path, rather than a swept continuous corridor, but impacts can include scuffing, dragging, crushing or entanglement of epifauna, plus ghost fishing or habitat damage from lost gear.[58,59,60]

Why is it used? Potting offers low-impact, selective capture of target species with generally low bycatch and low seabed-contact area compared with towed gear. Research on commercial fish traps found almost no movement during soaking and a maximum swept area during retrieval of just 2.04 square metres per trap.[59]

What species are caught? Potting typically targets crustaceans such as crayfish/rock lobster and some demersal finfish species, depending on region and target market.[41,58,60]

Where does it occur? Potting occurs across a wide range of depths and habitats, from inshore rocky reef to deeper continental-shelf ground, wherever target crustacean and finfish species are found.[58,60]

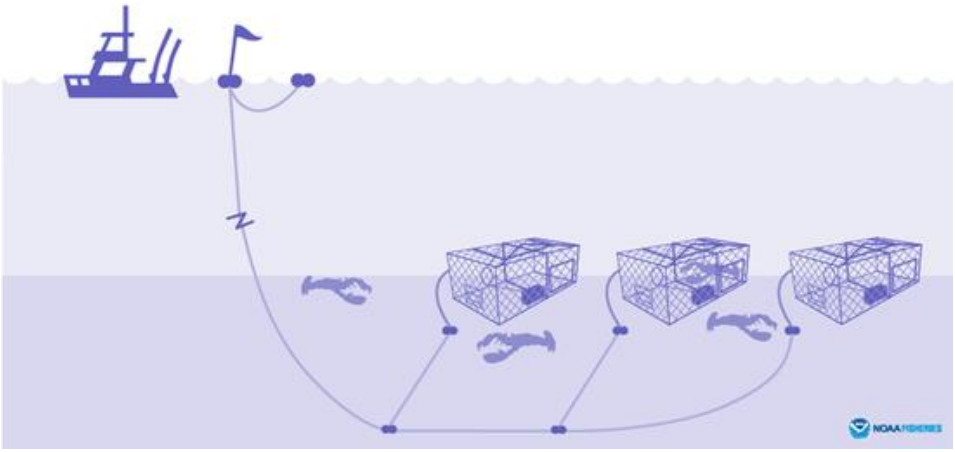

Figure 14. Trap and pot gear, shown for comparison as a lower-swept-area method that can still create seabed-contact and entanglement risks through pots, groundlines and vertical lines.[41] Image credit: NOAA Fisheries.

A.4 Dredging

What is dredging? Dredging drags a rigid, toothed or bladed frame and trailing net or bag across the seabed to dislodge and capture bivalves and other benthic target species, and is generally considered one of the more seabed-disturbing towed methods because of its direct, abrasive contact with the substrate.[7]

Why is it used? Dredging is the standard commercial method for harvesting scallops and other bivalves that live on or just beneath the seabed and cannot practically be caught with hook, net or trap methods.[85]

What species are caught, and where does it occur?

The **Foveaux Strait dredge oyster fishery** (Bluff oysters, Ostrea chilensis) is New Zealand's oldest and most iconic dredge fishery, with beds worked since the 1860s.[111] It has been managed through licence limitation, area controls and periodic closures in response to Bonamia parasite outbreaks, which devastated the population in 1986 to 1992 and again in the early 2000s. The Total Allowable Catch has been set at 14.95 million oysters since 1998, though commercial fishers have voluntarily harvested well below this limit in recent years to support stock recovery.[112,113]

Scallop dredge fisheries operate across several regional Quota Management Areas. The Southern/Challenger fishery (SCA 7) in Golden Bay, Tasman Bay and the Marlborough Sounds is New Zealand's largest scallop producer, using a low-impact ring-bag dredge. The Coromandel (SCA CS) and Northland (SCA 1) fisheries use box dredges on harder substrate, and a separate Chatham Islands scallop fishery lands dredge oysters as bycatch.[114,115,116]

Both the Northland and Coromandel scallop stocks have shown significant biomass declines in recent surveys, prompting proposed catch limit reductions.[117]

A historical dredge oyster fishery also operated in the Nelson/Marlborough (Challenger) area from 1845, initially as bycatch of a green-lipped mussel dredge fishery and later of the Challenger scallop fishery, before that scallop fishery closed in 1981 and operators shifted to directly targeting oysters.[118]

Dredge gear differs meaningfully from trawl gear in impact and scale. Research comparing dredge types found the Nelson ring-bag dredge causes less damage to scallops and benthic life than the box dredge, though the box dredge remains necessary for efficient fishing on harder Northland and Coromandel substrates.[119] Dredge fisheries are localised to specific shellfish beds in shallow coastal waters, distinct from the offshore, deeper-water footprint of the bottom-trawl fisheries discussed elsewhere in this paper.

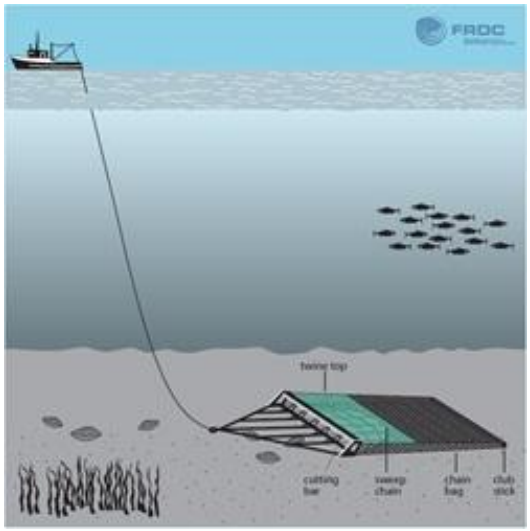

Figure 15. Dredge Fishing Gear. Fisheries Research Development Corporation (Australia)

A.5 Why These Methods Are Used, Species Caught, and Where They Occur

Across long lining, Danish seining, potting and dredging, the common reform logic is the same: each method trades some dimension of catch efficiency, cost or species selectivity for a generally smaller or less continuous area of seabed contact than mobile bottom trawling, while still carrying method-specific bycatch, entanglement, ghost-gear or abrasion risks that must be actively managed rather than assumed away.[5,48,57,59,60,85]

For Māori fisheries entities considering method substitution as part of a transition strategy, the opportunity is to test species-by-species substitution where catch quality, quota economics, crew safety, protected-species risk and benthic-risk reduction all line up and recognising that no commercial fishing method is entirely impact-free, but that impacts differ substantially in scale, continuity and manageability.[5,48,57,59,85]

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9. Glossary of Terms

This glossary explains technical, regulatory and te reo Māori terms used throughout this report, to support MIOs, AHCs and iwi decision-makers who may not be familiar with all of the fisheries-management and gear terminology involved.

Term	Definition
AEBR	Aquatic Environment and Biodiversity Report — Fisheries New Zealand's technical report series (e.g. AEBR 344, AEBR 329) used to publish trawl-footprint and benthic-impact assessments.
AHC	Asset Holding Company — the corporate entity many iwi use to hold and manage Treaty of Waitangi fisheries settlement assets, including quota shareholdings and interests in fishing companies.
Benthic	Relating to the seabed or the lowest level of a body of water; used to describe organisms, habitats and processes occurring on or near the seafloor.
Benthic Protection Area (BPA)	An area established under the Fisheries (Benthic Protection Areas) Regulations 2007 in which bottom trawling and dredging are prohibited to protect seabed habitat.
Biogenic habitat	Seabed habitat structure created by living organisms — such as corals, sponges and bryozoans — rather than by geology alone.
Bottom trawling	Trawling in which the net and associated ground gear are designed to fish on or very close to the seabed, usually to catch demersal species.
Bycatch	Non-target fish, invertebrates or, occasionally, protected species caught incidentally alongside the intended target catch.
Codend	The terminal, fish-holding section of a trawl net, where the catch accumulates before landing.
Continental shelf	The shallower, gently sloping seabed extending from the coast to the point where it drops away more steeply to the continental slope.
Continental slope	The steeper seabed gradient connecting the continental shelf to deeper water, often containing canyons and steep terrain.

Term	Definition
Danish seining (boat seining)	A fishing method that deploys long ropes and a net near the seabed to herd fish toward a conical net, rather than continuously towing the net as in bottom trawling.
Deepwater fisheries	Fisheries generally operating beyond 500 metres depth, targeting species such as hoki, orange roughy, oreo and southern blue whiting.
Demersal	Living on, near, or just above the seafloor.
Dredging	A fishing method that drags a rigid, toothed or bladed frame and trailing net or bag across the seabed to dislodge and capture bivalves such as scallops and oysters.
Electronic Reporting (ER)	Fisheries New Zealand's programme requiring commercial fishing vessels to report catch and position electronically, phased in between 2017 and 2019.
Exclusive Economic Zone (EEZ)	The area of ocean — approximately 4 million km^2 for New Zealand — within which a state exercises rights to manage and sustainably use marine resources.
FloMo	The commercial name under which Precision Seafood Harvesting (PSH) technology has been developed and marketed internationally. See Precision Seafood Harvesting.
Foul ground	Rocky, reef or otherwise obstructed seabed that fishers generally avoid because nets are likely to snag or tear.
Ground gear	The components of a trawl net — such as rubber bobbins and rockhopper discs — that make contact with the seabed.
Habitats of Particular Significance for Fisheries Management (HPSFM)	Habitats identified under Section 9(c) of the Fisheries Act 1996 as requiring protection because of their importance to fisheries life-history stages, such as spawning, nursery, feeding and migration.
Headline	The top rope of a trawl net, which helps determine the net's vertical opening.

Term	Definition
Hinemoana	The Māori personification of the ocean; used throughout this report alongside Tangaroa to frame the seabed and sea as a living realm rather than a resource alone.
ICES	International Council for the Exploration of the Sea — an intergovernmental marine science organisation that publishes peer-reviewed research on fishing gear impacts.
Iwi	A Māori tribal group; the largest social and political unit in traditional Māori society, often holding collective interests in fisheries settlement assets.
Kaitiakitanga	The Māori concept of guardianship and responsible, intergenerational management of natural resources.
Mahinga kai	Traditional food-gathering places and practices, and the food resources themselves.
Mandated Iwi Organisation (MIO)	An organisation formally recognised under the Māori Fisheries Act 2004 to represent an iwi in receiving and managing its fisheries settlement assets.
Mātauranga Māori	Māori knowledge and ways of knowing, encompassing traditional and contemporary understanding of the natural world.
Midwater trawling (pelagic trawling)	Trawling in which the net is towed through the water column rather than along the seabed, usually to intercept schooling fish away from the seafloor.
MPI	Ministry for Primary Industries — the New Zealand government department responsible for fisheries management, operating under the Fisheries New Zealand brand.
MSC	Marine Stewardship Council — an international certification and ecolabelling body for sustainably managed wild-capture fisheries.
NIWA	National Institute of Water and Atmospheric Research — New Zealand's Crown Research Institute for marine, freshwater and atmospheric science.
NOAA	National Oceanic and Atmospheric Administration — the United States' federal agency for ocean and atmospheric science, a source of gear-illustration material in this report.

Term	Definition
Orange Roughy (ORH)	A long-lived, slow-growing deepwater fish species of major commercial and conservation significance in New Zealand; ORH followed by a number/letter denotes a specific quota management area (e.g. ORH 3B, ORH 7A).
Otter boards / trawl doors	Paired devices attached to a trawl net that use hydrodynamic force to spread the net horizontally as it is towed.
Pelagic	Living in the open water column rather than on or near the seabed.
Potting	A fishing method using baited, three-dimensional traps set on the seabed and later retrieved, generally targeting crustaceans such as crayfish.
Precision Seafood Harvesting (PSH)	A New Zealand-developed catch-handling technology, commercialised internationally as FloMo, that modifies the trawl codend to improve catch selectivity, fish survivability and product quality without changing bottom-contact gear.
Quota Management System (QMS)	New Zealand's system for allocating and managing commercial fishing rights through Individual Transferable Quota linked to a Total Allowable Commercial Catch for each stock.
Rāhui	A Māori practice of placing a temporary prohibition or restriction on an activity or area, often for conservation, cultural or safety reasons.
Rockhopper gear	Ground gear fitted with large rubber discs that allow a trawl net to roll over rough seabed while reducing snagging.
Seamount	An underwater mountain rising from the seafloor, often a biodiversity hotspot supporting structure-forming corals and sponges. Also called underwater topographical feature (UTF) and includes knolls, banks, pinnacles and shoals.
South Pacific Regional Fisheries Management Organisation (SPRFMO)	An intergovernmental body that manages deepwater and pelagic fisheries on the high seas of the South Pacific, including waters adjacent to New Zealand's EEZ.

Term	Definition
Swept area	The area of seabed physically contacted by fishing gear during a tow.
Tāngata whenua	People of the land; Māori people holding customary authority over a particular area.
Tangaroa	The Māori atua (deity) of the sea and its creatures; used throughout this report alongside Hinemoana to frame the seabed and sea as a living realm rather than a resource alone.
Taonga	A treasured or valued object, resource or species, often carrying cultural and spiritual significance.
Total Allowable Catch / Total Allowable Commercial Catch (TAC/TACC)	The maximum quantity of a fish stock that may be caught in a fishing year under the Quota Management System; the TACC is the commercial share of the TAC.
Trawl Catch Effort and Processing Return (TCEPR)	The catch and effort reporting form/system introduced in 1988 that underpins New Zealand's official trawl-footprint monitoring series from the 1989/90 fishing year onward.
Trawl footprint	The cumulative or annual area of seabed contacted by bottom trawling and dredging, as measured from reported catch and effort data.
Trawling	A fishing method involving towing a cone-shaped net through the sea from one or two vessels, with the net held open by gear such as trawl doors, beams, floats or weights.
Vulnerable Marine Ecosystem (VME)	A seabed ecosystem — such as a deep-sea coral or sponge field — considered particularly susceptible to damage from fishing activity because of slow growth and recovery rates.

SECTION 3.0

Key Messages

TE ŌHU KAIMOANA

Key Messages *(in response to proposed restrictions of the banning of bottom trawling)*

Purpose

This year, we have been working closely with Mandated Iwi Organisations (MIO) and Asset Holding Companies (AHC) to understand what information and resources are needed to support informed discussions in relation to bottom trawling.

During this election year, proposals to restrict or completely ban bottom trawling have received increased political attention. In March 2026, we held an iwi wānanga on this topic, followed by regular online hui with MIO and AHC to explore this topic further.

A clear message emerged from these discussions - iwi wanted quick, accessible and easy to digest information to help understand what proposed changes to bottom trawling could mean for iwi, hapū and whānau.

This key message paper has been developed in response to that clear message and feedback. The intention of this document is to provide clear key messages and information that can support kōrero and help iwi to discuss this topic at all levels – governance, hapū and whānau.

Māori Fisheries Settlement

- From a Te Ao Māori perspective, our responsibilities as kaitiaki mean that when we harvest from the moana, we do so guided by our tikanga and kawa. Our responsibility is not only to maintain a reciprocal relationship with the moana, but also to ensure the health and abundance of Tangaroa for future generations. Protecting the marine environment and sustainably using its resources are not competing priorities, but rather complementary responsibilities that must be held in balance.

- Any policy changes in the oceans space must recognise, make provision for, and uphold the integrity of the Māori Fisheries Settlement. This includes ensuring Māori, through iwi, retain the 'meaningful ability' to exercise settlement rights, not just hold them in principle.

- Until there is a specific legislative proposal on the table proposing restrictions or bans to bottom trawling, it is not possible to determine whether Māori Fisheries Settlement rights would be impacted or whether there is any breach of the Settlement. That assessment will depend on the detail of the proposal, including the regulatory mechanisms and legal instruments used to implement it and the decision making process the Crown takes.

- While current discussions are focused on bottom trawling, Māori Fisheries Settlement interests extend beyond commercial fisheries alone. The Māori Commercial Aquaculture Claims Settlement is a significant part of the Settlement framework, and any discussion about the future of the marine environment should acknowledge the breadth of Māori interests across both customary non-commercial and commercial fishing as well as aquaculture.

- Oceans and Fisheries policy should be informed by robust evidence, reliable science and meaningful engagement rather than misinformation, personal opinion or lobbying. The Government has a responsibility to ensure legislative decisions are based on evidence and maintain a balanced consideration of environmental, economic and Treaty Settlement interests. Political parties need to better understand the full impacts of restrictions or bans to bottom trawling, including environmental, economic, and social.

Economy

- Iwi/Māori are the largest owners of commercial fishing quota in New Zealand across both inshore and deepwater fisheries (approx. 50% combined through the ownership of Moana New Zealand (100% iwi owned) and Sealord Group Limited (50% iwi owned)). As a result, Māori stand to be disproportionally impacted by any reforms that reduce the value or productivity of their fisheries settlement assets. This also has flow on impacts to employment, supply chains and regional economies that depend on the commercial fishing sector.

- Restrictions or bans on bottom trawling that diminish commercial returns will directly impact iwi. Reduced income impacts employment within iwi organisations and the ability for iwi to invest in initiatives that support their uri, including social, cultural, environmental and educational kaupapa.

- Sealord Group Limited is a deepwater fishing company that employs 1,300 permanent and seasonal workers, with an annual wage bill of approximately $90 million. 70% of Sealord Group Limited's catch is through bottom trawling (trawling that is within 1 metre of the seafloor). Sealord Group Limited also support approximately 1,389 secondary jobs, such as in engineering, stevedoring, electrical and packaging. Sealord's spend in the 2026 Financial Year with external companies is $158 million NZD. As an iwi-owned commercial fishing company, Sealord's commercial performance is directly linked to the dividends distributed to iwi shareholders at the end of each financial year.

- Moana New Zealand is an inshore fishing company that employs over 730 permanent and seasonal workers. This includes contract fishers/pāua divers, drivers, depot staff, temps, and factory staff (these figures are not inclusive of additional secondary roles supported through its operations such as cleaning staff; construction workers used during upgrades, packaging, distribution, export sales/distribution and other transport). 75% of Moana New Zealand's catch is through bottom trawling. As an iwi-owned commercial fishing company, Moana's commercial performance is directly linked to the dividends distributed to iwi shareholders at the end of each financial year.

- The New Zealand seafood industry generates approximately $5.2 billion in economic output annually, with seafood exports contributing close to $2.2 billion in 2024, making seafood one of New Zealand's largest export earners.[1]

- The New Zealand seafood industry supports the employment of around 16,500 people.[2]

- Iwi have significant and growing interests in the blue economy (fisheries, aquaculture, emerging sectors like blue carbon). 92% of Mandated and Recognised Iwi Organisations (as defined through the 'Maori Fisheries Act 2004') have stated that the financial returns from commercial fishing and aquaculture are important or very important to their operations.[3]

General

- The scale and impact of bottom trawling should be considered in context. Between the years of 1990 to 2025, around 11% of New Zealand's EEZ was trawled.[4]

- 31% of New Zealand's EEZ is closed to bottom trawling – which is equivalent to an area four and a half times the size of New Zealand.[5]

- Kaimoana is more than just an economic resource for Māori. Kaimoana underpins Māori identity, supports customary practices, strengthens food security through pātaka kai, and enables iwi to invest into the initiatives that are most important to them, including national hui and events.

[1] Seafood NZ - https://www.seafood.co.nz/resources/key-facts
[2] Seafood NZ - https://www.seafood.co.nz/resources/key-facts
[3] Te Ohu Kaimoana Iwi Engagement Survey (2025)
[4] Ministry for Primary Industries (2025) - https://www.mpi.govt.nz/fishing-aquaculture/sustainable-fisheries/strengthening-fisheries-management/bottom-trawling
[5] Fisheries NZ - https://www.mpi.govt.nz/fishing-aquaculture/sustainable-fisheries/strengthening-fisheries-management/bottom-trawling

- Kaimoana is more than just an economic resource for Māori. Kaimoana underpins Māori identity, supports customary practices, strengthens food security through pātaka kai, and enables iwi to invest into the initiatives that are most important to them, including national hui and events.

- Kaimoana is also an important source of healthy, low-carbon protein for everyday Kiwis. Any proposals impacting commercial fishing should consider the role the fishing industry plays in supporting sustainable food production, food security and consumers in New Zealand.

- Environmental impacts and the health of Tangaroa should never be ignored. We acknowledge that bottom trawling has damaged sensitive habitats in the past. We support robust management measures and appropriate accountability where companies damage sensitive marine habitats.

- We acknowledge that there are currently no economically viable alternatives to bottom trawling for harvesting many species at a commercial scale. However, we support ongoing innovation and investment, including by industry, to develop and adopt new and improved technologies and fishing methods that are environmentally, operationally and economically viable.

SECTION 4.0

Titiro Whakamuri: A brief history of the Māori Fisheries Settlement and the Quota Management System (QMS)

TE OHU KAIMOANA

Titiro Whakamuri: A brief history of the Māori Fisheries Settlement and the Quota Management System (QMS)

August 2026

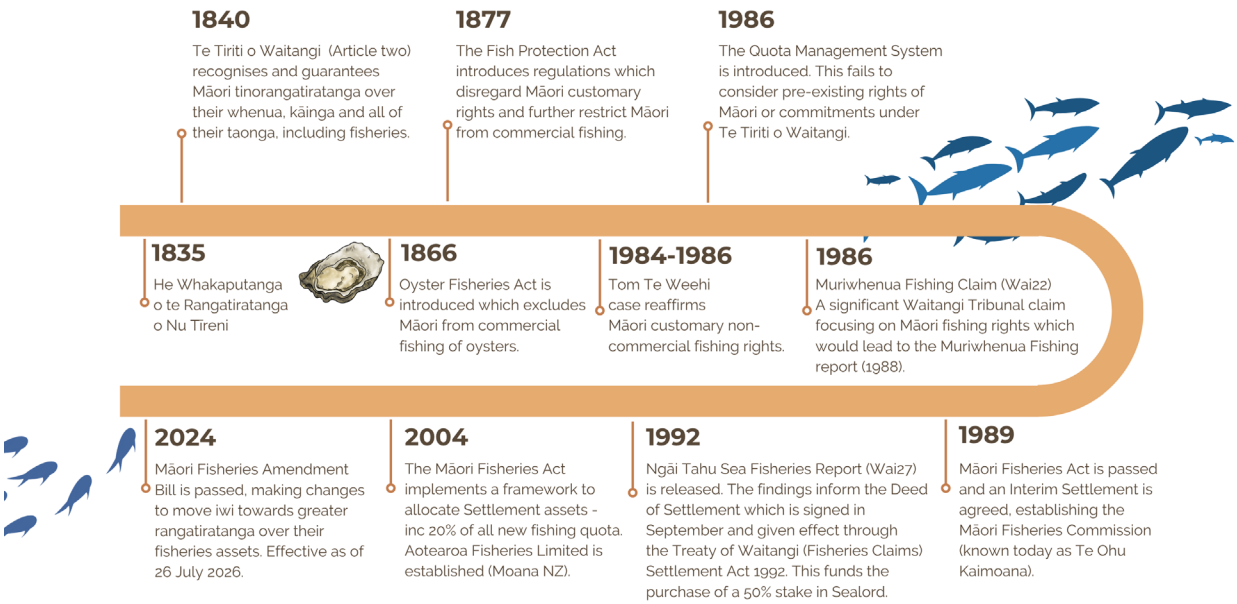

Image 1: The legislative pathway to our Māori Fisheries Settlements (note – this timeline focuses on *some* of the key events which led to the Māori Fisheries Settlement)

Purpose: This resource has been created in response to multiple requests from iwi for information on the history of the Māori Fisheries Settlement and the formation of the Quota Management System. It intends to provide an overview of the journey which led to the formal recognition of Māori fishing rights and interests following the signing of the Deed of Settlement.

The Māori Fisheries Settlement (the Settlement) was the outcome of a long battle led by rangatira of the motu seeking Crown recognition of Māori rights and interests in the moana and particularly fishing. These rights were recognised and guaranteed in Article Two of Te Tiriti o Waitangi (Te Tiriti). However, following 1840, successive governments and the legislation they passed effectively excluded Māori from control over their fisheries. Consequently, iwi, hapū and whānau were unable to carry out practices which had sustained them for generations. Within fishing, Māori were excluded from commercial fishing of oysters and were restricted from the harvesting of kaimoana for customary non-commercial purposes. In the early 1980s, the Crown also progressively removed the ability to commercially fish part-time and this affected large numbers of Māori fishers. This was further compounded with the removal of section 88(2) of the Fisheries Act 1983 and the introduction of the Quota Management System (QMS). This would change with the Muriwhenua Fishing Report in 1988, a Waitangi Tribunal Report (Wai 22) which would eventually lead to the interim fisheries settlement

through the passing of the Māori Fisheries Act 1989, and the Ngāi Tahu Sea Fisheries Waitangi Tribunal Report (Wai 27) followed by a Deed of Settlement in 1992. Almost 34 years later, iwi Māori continue to hold a strong presence within fishing in Aotearoa both commercially as operators and quota owners, and non-commercially as kaitiaki.

Pre-1840 - Fishing in Aotearoa

Prior to the signing of He Whakaputanga o te Rangatiratanga o Nu Tireni (the declaration of independence) in 1835 and Te Tiriti in 1840, iwi and hapū were heavily involved in trading commodities both domestically and internationally, with the fish trade being a key market. Evidence provided to the Waitangi Tribunal highlights exports to Sydney Australia and the supply of kaimoana to whaling settlements as examples of the well-established enterprise operated by Māori during the 1830s. Te Tiriti recognized and affirmed these rights or more specifically, guaranteed Māori 'tino rangatiratanga' over their 'whenua', 'kāinga', and all of their 'taonga'. However, this agreement was not honoured by the Crown and subsequent legislation began to erode the relationship between iwi, hapū and their taonga. This includes the Oyster Fisheries Act 1866[1] and the Fish Protection Act 1877[2] which were among the first set of laws imposed by government to disconnect and isolate Māori from their fisheries. This trend would continue well into the 1900s with the introduction of the QMS in 1986 excluding Māori from commercial fishing and removing provisions from the Fisheries Act 1983 which recognised customary non-commercial rights and interests.

1986 - The introduction of the Quota Management System (QMS)

The QMS was a response to a lack of regulation within the New Zealand fishing industry which resulted in serious sustainability concerns for many fisheries in the 1980s. It was provided for under the Fisheries Act 1983 which was designed to manage and regulate Aotearoa inshore and deepwater fisheries. The 1983 Act included an important provision for Māori customary fishing rights which would become a key reference point in a future landmark case against the Crown by Māori fisher, Tom Te Weehi. This was section 88(2) which stated that "nothing in the legislation shall affect any Māori fishing rights." However, this section was removed with the changes to implement the QMS. Although the intention to introduce a system to target overfishing and ensure sustainability was welcomed, the government not only failed to consider the pre-existing rights of Māori and its own commitments under Te Tiriti but also attempted to legally extinguish them.

The QMS introduced catch limits for certain fish stocks and allocated a portion of these catch volumes to commercial fishing in total and then to quota owners by way of individual transferable quota (ITQ). The recognition of commercial rights to quota involved fishers having to prove their recent catch volumes to receive quota. The earlier removal of fishing rights on a part-time basis immediately excluded Māori fishers who fished

[1] The Oyster Fisheries Act 1866 was one of the first pieces of fisheries legislation imposed by the government. This excluded Māori from commercial harvesting of oysters and the trading of a commodity that had sustained Māori for generations.
https://www.legislation.govt.nz/act/public/1866/57/en/latest/#LMS1269737

[2] The Fish Protection Act 1877 was the first law in Aotearoa to regulate finned fish stocks. It introduced a range of rules and regulations including the ability for the Governor to grant exclusive rights to fisheries through licenses, government-directed seasonal closures, and financial penalties for buying, selling, or possessing fish in contravention with the Act.
https://www.legislation.govt.nz/act/public/1877/45/en/latest/#LMS1299427

seasonally, part-time, or under customary practices. They therefore did not hold the documented catch history to meet Crown requirements. Overnight those few remaining Māori fishers were stripped of their ability to maintain any form of livelihood. In response to this, in 1986, the Muriwhenua Fishing Claim (Wai 22)[3], initiated by five northern iwi, was considered by the Waitangi Tribunal. This claim underscored the detrimental impact of commercial fishing on customary non-commercial fishing and emphasised the urgency to recognise and restore these rights. Other iwi, including Waikato-Tainui and Ngāi Tahu, along with the New Zealand Māori Council, also submitted claims that the QMS was in direct conflict with the promises made to Māori in Te Tiriti. During this period, a case arose that would lay the groundwork for customary fishing rights. Tom Te Weehi, a Māori fisherman, was charged with the unlawful possession of undersized pāua under the Fisheries Act[4]. Te Weehi pleaded not guilty and argued that he had a customary right to take pāua because he was fishing with the approval of tribal elders and was exercising rights guaranteed by the Fisheries Act. The court ruled in favour of Mr. Te Weehi on the grounds that his actions were protected by customary Māori rights. This case, alongside claims heard by the Waitangi Tribunal, laid the groundwork for further legislation and settlements which recognised Māori fishing rights and interests.

1988 – Waitangi Tribunal claim findings inform the Māori Fisheries Act 1989

The findings by the Waitangi Tribunal on the Muriwhenua fishing claim (Wai 22) in 1988 and the Ngāi Tahu fishing claim (Wai 27) in 1992 formed the basis for the Māori Fisheries Settlement. The legislative landscape would start to shift to better enable customary non-commercial fishing, while also cementing iwi as key shareholders within the QMS. The Tribunal's decision effectively established a property right in fisheries for Māori and resulted in the High Court granting an injunction on further implementation of the QMS pending settlement of the claims. In 1989, the Māori Fisheries Act was passed, and an interim settlement was agreed. This established the Māori Fisheries Commission (known today as Te Ohu Kaimoana) which was tasked to promote Māori involvement in the business and activity of fishing. The Commission also progressively received 10 percent of all fish species that were in the QMS from 1986 (or an agreed cash equivalent) and approximately $10 million to hold and manage on behalf of all Māori.

[3] The Muriwhenua Fishing Claim (WAI22) addressed grievances related to the loss of traditional Māori fishing rights due to colonial and government actions. This legal action spotlighted the significant cultural and economic losses experienced by Māori, prompting immediate calls for the protection and acknowledgment of their traditional fishing practises and rights. This claim was reported on by the Waitangi Tribunal in the Muriwhenua Fishing Report. https://irp.cdn-website.com/27c9ee14/files/uploaded/Muriwhenua_Fishing_Report_1988.compressed.pdf

[4] Tom Te Weehi (Ngāti Porou) was accosted by fisheries officers on Motunau Beach with 46 moderately undersized pāua. Before collecting the shellfish, he had asked Ngāi Tahu kaumātua Rikiihia Tau if he could go fishing to gather food for personal use and family consumption. The Fisheries Act of the time stated at section 88(2) that "nothing in this Act shall affect any Māori fishing rights". The court ruled in favour of Mr. Te Weehi on the grounds that his actions were protected by customary Māori rights. The court determined that these customary rights continued to exist unless explicitly extinguished by legislation.
https://forms.justice.govt.nz/search/Documents/WT/wt_DOC_68481238/Wai0015%20W.pdf

1992 - 2004 – Treaty of Waitangi (Fisheries Claims) Settlement 1992, the Māori Fisheries Act 2004 and the Māori Commercial Aquaculture Claims Settlement Act 2004

Dame Miraka (Mira) Szászy DBE JP, original Māori Fisheries Commissioner who gifted the name 'Te Ohu Kaimoana'

While an interim settlement was agreed, progress to finalise the settlement somewhat stalled until an opportunity arose for the Crown to assist the purchase of a 50% share in Sealord Group Limited. This was at the core of the Deed of Settlement which was signed by iwi representatives and the Crown on 23 September 1992 and given effect through the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992. The settlement required the Crown to provide $150M to fund the purchase of a 50 percent stake in Sealord Group Limited and to provide Māori with 20 percent of quota for all new species entering the QMS. Sealord Group Limited is one of the largest fishing companies in Aotearoa with significant holdings of deepwater quota. Now known as the "Sealord Deal", this deal also ensured that Māori could participate in Statutory Fisheries bodies and enabled the creation of regulations[5] to empower self-management of customary non-commercial fishing. Following this, the next 12 years were dedicated to developing a model to allocate the assets among iwi – a process which involved extensive engagement and resulted in 'He Kāwai Amokura' – an allocation model. The model allocated inshore quota based on the proportion of iwi coastlines relative to the each fishstock's quota management area (QMA) (necessitating iwi agreement on coastal boundaries). For deepwater quota, these shares were allocated according to both the percentage population of an iwi (according to the 2001 census) to all iwi and the percentage of coastline within the QMA that iwi claim and agree with their neighbouring iwi. The allocation of assets in line with He Kāwai Amokura was legislated as part of the Māori Fisheries Act 2004. The Act also established Māori fisheries settlement entities[6] including Aotearoa Fisheries Ltd (now trading as Moana NZ). In December 2004, the Māori Commercial Aquaculture Claims Settlement Act was also passed. This ensured iwi received a guaranteed 20 percent of new marine farming areas approved from the time of the Māori Fisheries Settlement in 1992. The Act has facilitated the active participation of Māori in the expanding aquaculture sector.

2024 - Māori Fisheries Amendment Act

In 2024, the Māori Fisheries Amendment Act passed into law. This responded to recommendations of an independent statutory review finalised in 2015. The review involved engagement with iwi entities to assess the Māori Fisheries Act 2004 governance arrangements and ownership structure. It identified a call from iwi for stronger control over all Fisheries Settlement assets, increased transparency, and governance arrangements which enabled greater iwi input. The result was a new legislative framework which enables iwi to have greater rangatiratanga over their assets. In practical terms, this greater authority was reflected in the shareholding in

[5] The Fisheries (Kaimoana Customary Fishing) Regulations 1998 and the Fisheries (South Island Customary Fishing) Regulations 1999 are designed to uphold Māori customary non-commercial fishing rights. Both enable the appointment of tangata kaitiaki/tiaki to issue permits for customary fishing as well as the implementation of other customary management tools.

[6] Alongside the implementation of He Kāwai Amokura (the model to allocate quota among iwi), the Māori Fisheries Act 2004 also established Māori fisheries settlement entities such as Aotearoa Fisheries Ltd (now trading as Moana NZ) as well as Te Wai Māori Trust, and Te Pūtea Whakatupu Trust (now operating as Tapuwae Roa. https://www.teohukaimoana.nz/about-us/history

Moana NZ being transferred from Te Ohu Kaimoana to all 58 Mandated Iwi Organisations (with shares being held by the Asset Holding Companies). This Act came into effect on 26 July 2026.

34 years on – Māori Fishing Rights and Interests in Aotearoa today

The fight for recognition of Māori rights and interests in the moana did not end with the Māori Fisheries Settlement. There have been various pieces of legislation introduced following the settlement. Some of these aim to progress those rights affirmed by Te Tiriti (such as the Māori Commercial Aquaculture Claims Settlement Act 2004), while others contribute to the alienation of Māori from their taiao and taonga (such as the repealed Foreshore and Seabed Act 2004, which declared ownership of the foreshore and seabed as vested in the Crown).

Almost 34 years following a hui at Parliament where iwi were presented with the proposals of the Fisheries Settlement, the fruits of the agreement are visible. There are over 80 rohe moana established across the motu with many kaitiaki appointed to enable iwi and hapū led management of their takutai moana.

Iwi also exercise greater authority over the governance of their Fisheries Settlement assets. Aotearoa Fisheries Ltd (Moana New Zealand) is owed by Mandated Iwi Organisations placing decision making directly in the hands of iwi and strengthening their rangatiratanga over their rights and interests established through the Fisheries Settlement. This marks an important evolution of the Settlement, shifting governance closer to those for whom the assets were intended and reinforcing iwi rangatiratanga over the future direction of iwi and their Fisheries.

Alongside this era of evolution, Te Ohu Kaimoana also experiences a move closer to iwi decision making, made possible by the Māori Fisheries Amendment Act 2024 which now allows for Mandated Iwi Organisations to play a key role in decisions – specifically the appointment of directors and approval of future strategic directions. Though what doesn't change is the purpose and responsibilities that established Te Ohu Kaimoana. Those being: stewarding the Māori Fisheries Settlement, protecting and advancing collective interests of iwi and Māori in fisheries, supporting iwi to realise the benefits of the Settlement, and exercising responsibilities and accountability in administering Settlement assets.

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