



Wandering anemone on *Cystophora/Zigzag* seaweed (Zac Penman)

Report on the Kaikōura (Te Tai o Marokura) Marine Management Act 2014 Ministerial review

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Executive Summary

This report presents the statutory review required under section 8 of the Kaikōura (Te Tai o Marokura) Marine Management Act 2014 (the Act). The review assesses the operation and effectiveness of six management measures established by the Act and evaluates how they contribute to its purpose of preserving, protecting, and enabling the sustainable and integrated management of the Kaikōura Marine Area (KMA).

Context

The KMA is nationally and internationally significant for its unique biodiversity, deep-sea canyon system, marine mammal populations, and strong cultural associations with Ngāi Tahu, particularly Ngāti Kuri. It also underpins the local economy, especially tourism and fisheries, and has high social and recreational value.

The Act established a bespoke, integrated management framework informed by the Kaikōura Marine Strategy, including spatial protections, customary fisheries measures, and a statutory advisory body (the Kaikōura Marine Guardians). The requirement for a 10-year review reflects the expectation that these measures would be adaptively managed over time.

The marine environment and management system have also been shaped by significant external events, most notably the 2016 Kaikōura earthquake, which caused major ecological disturbance and disrupted management and monitoring activities.

Key findings

Kaikōura Marine Guardians

The Guardians function effectively as an advisory body with appropriate representation and strong local knowledge. They have influenced some key decisions, particularly relating to the 2016 earthquake recovery and fisheries management. Their effectiveness is constrained by limited resourcing, low visibility, and being largely reactive.

Hikurangi Marine Reserve

The marine reserve has contributed to protection of some of the key habitats and species in Kaikōura. Since 2021, there have been significant improvements in resourcing, as well as in monitoring and compliance systems, leading to more consistent management. Its overall effectiveness remains constrained by several factors, including the absence of a marine reserve-specific management plan, intermittent compliance effort and enforcement visibility, and ongoing concerns about its design, particularly in relation to habitat representation.

Te Rohe o Te Whānau Puha Whale Sanctuary

The whale sanctuary is a targeted and largely effective management tool for specifically addressing noise from seismic surveying and disturbance from seabed mining. Management of the whale sanctuary has required little input, which is proportionate to the type of restrictions in place. Improved communication with Te Rūnanga o Kaikōura, the Guardians and the public about the whale sanctuary's scope and any seismic surveying activity would enhance understanding.

Ōhau New Zealand Fur Seal Sanctuary

The fur seal sanctuary has functioned as a strong, location-specific protection tool. Its effectiveness is now more limited due to the expansion of the Ōhau Point fur seal breeding area and other changes in the distribution of fur seals at Kaikōura. It requires modification to ensure its original intent is restored, and additional measures are needed to manage visitor pressure at the Kaikōura Peninsula.

Mātaitai reserves and taiāpure

These areas remain important for recognising both customary rights (mana whenua and kaitiakitanga) and local customary-led community fisheries management. They protect traditional food gathering areas and areas of cultural and spiritual significance. Te Rūnanga o Kaikōura and Te Rūnanga o Ngai Tahu confirm the locations of the mātaitai reserves and taiāpure that were established under the Act remain appropriate in terms of their intended purpose. Governance and communication challenges have been identified through the review that, if addressed, would improve their effectiveness.

Contribution to the Act's purpose

Overall, the management measures have contributed, individually and collectively, to the 'preservation and protection' and 'integrated and sustainable management' of the marine environment and biological diversity of the KMA to a moderate extent.

The measures have been effective in reducing certain key pressures, within specific areas, thus providing strong protection from those pressures, but gaps remain in addressing other key pressures across the KMA.

Recommendations

The findings outlined above are translated into a set of targeted recommendations, summarised in Table 1, with further detail on their rationale and supporting analysis provided in the subsequent sections of this report.

Table 1: Findings and recommendations from the Kaikōura review.

Recommendation Type: Potential regulatory change Operational improvement No change

Management Measure	Evaluation questions	Key findings	Recommendations
Kaikōura Marine Guardians	How well has the Guardians' membership structure and appointments process operated?	The appointment process and membership structure has improved and works well but is not well understood.	1. Agencies to improve communication of the appointment process, particularly with the Kaikōura community. 2. Retain membership structure and appointment process set out in the Guardians' Terms of Reference.
	How well do the Guardians reflect areas of interest and expertise set out in the Act?	Membership on the Guardians reflects requirements of the Act.	3. Retain current membership requirements as set out in the Act. 4. Guardians to continue to use co-opting process to engage additional specific expertise and experience as relevant. 5. Agencies to ensure future appointment processes consider the merits of nominees who have areas of expertise that align with the Guardians' strategic direction, marine mammal expertise or who provide a youth perspective.
	How well have the Guardians' operational procedures functioned?	- Clearer and improved protocols would improve effectiveness of the Guardians. - Current resourcing and inadequate access to timely information is limiting effectiveness of the Guardians. - The roles of the Guardians and Te Korowai need to be clarified, and public visibility of the Guardians needs to improve.	6. Agencies and the Guardians to work together to develop clearer protocols for the development of meeting agendas, tracking of meeting actions, development of annual reports and annual work programmes. 7. Agencies to facilitate prompt publication of meeting minutes and planning documents. 8. Guardians to lead the development of a strategic plan for the KMA, with support from Agencies, setting out role, distinction from Te Korowai, and annual work programme (including research) priorities and outcomes sought. 9. Agencies and Guardians to work together to improve public communications on the Guardians' role, function and work programme. 10. Guardians Chair to undertake governance training specific for ministerial advisory committees. 11. Agencies to give the Guardians opportunity to input into research and monitoring plans relevant to the KMA. 12. Guardians to consider making their meetings open to the public.
	How effective has the Guardians' advice function been?	- Advice has been influential on specific issues but is largely reactive. - The advice process has not worked optimally.	13. Guardians to lead the development of a strategic plan, with support from agencies 14. Agencies to improve supply of information to the Guardians regarding agency-led activities, including planning processes or consultations, relevant to the KMA. 15. Agencies to adhere to the Guardians' Terms of Reference and operate a 'no surprises' approach to the sharing of information, including making it clearer to the Guardians how their advice has been used. Relevant agency advice should, wherever possible, be discussed with the Guardians and the Guardians should be advised of Ministerial decisions.
	How has the marine reserve been resourced and managed?	Management of the marine reserve is now broadly appropriate and effective, but the lack of a reserve-specific plan limits clarity, direction, and consistency over time.	16. DOC to formalise structured, early, and transparent engagement with Te Rūnanga o Kaikōura and the Guardians in both operational planning and ongoing annual priority-setting and strategic discussions.
			17. DOC to develop and implement a plan that describes and tracks the operational management of the marine reserve, and includes consideration of priorities identified by Te Rūnanga o Kaikōura and the Guardians.
			18. DOC to maintain dedicated and continuous Marine Reserve Ranger capacity and associated operational funding and align with delivery of the operational management plan.
	How have Te Rūnanga o Kaikōura and the Guardians been involved and engaged?	Regular engagement with Te Rūnanga o Kaikōura and the Guardians has improved, but greater involvement in forward planning is needed to strengthen transparency and partnership.	19. DOC to continue providing regular updates about the marine reserve at scheduled Te Rūnanga o Kaikōura and Guardians hui. 20. DOC to formalise structured, early, and transparent engagement with Te Rūnanga o Kaikōura and the Guardians in both operational planning and ongoing annual priority-setting and strategic discussions.
	How have education, compliance monitoring and enforcement activities been undertaken?	Current education, compliance monitoring and enforcement activities are broadly appropriate and proportionate. Immediate gains are best achieved through improved continuity, visibility, coordination, and communication, progressing toward a reserve-specific plan.	21. As an interim step, DOC to maintain the current level and focus of education, compliance monitoring, and enforcement activities. 22. DOC to improve consistency and use of operational reporting tools (marine reserve compliance app and monthly ranger reports). 23. DOC to include future education, compliance monitoring (including consideration of where and when to best target effort), and enforcement activities in the marine reserve plan, with input from Te Rūnanga o Kaikōura and the Guardians. 24. DOC to progress investigation of CCTV as a supplementary compliance tool.

Management Measure	Evaluation questions	Key findings	Recommendations
			25. Agencies to enhance engagement, to ensure each is appropriately informed and involved in enforcement actions.
			26. DOC to continue to involve volunteers, local businesses, and tourism operators in education and compliance activities.
			27. DOC to progress development of 'live report cards' or similar public-facing reporting tools that present compliance and enforcement data alongside biodiversity monitoring outcomes.
			28. DOC to maintain the existing amount of signage.
	What is the level of compliance with the marine reserve rules?	Despite improved systems, gaps in monitoring coverage, data recording, and inconsistent enforcement mean compliance levels remain uncertain and require more consistent patrols, recording, and deterrence.	29. DOC to ensure continuous ranger capacity and support in order to address gaps in effort and compliance data.
			30. DOC to ensure compliance and enforcement decisions are consistent with its national framework and best practice.
			31. DOC to record all patrol effort, interactions, and enforcement decisions in the appropriate systems, supported by regular checks.
			32. DOC to enhance deterrence and public awareness through targeted compliance messaging during high-risk seasons.
			33. DOC to work with MPI to strengthen coordination of compliance effort and focus, and information sharing.
	How has the marine reserve contributed to the Marine Reserves Act's purpose of 'scientific study of marine life'?	The marine reserve has been the subject of a moderate level of scientific study since its establishment but the systems for planning and permitting of scientific study could be improved.	34. DOC to improve its communication of marine reserve monitoring and research outcomes with the public, including progressing development of 'live report cards' or similar public-facing reporting tools, and publication of scientific reports.
			35. DOC to strengthen procedures to ensure the Guardians are automatically notified and consulted on scientific study permit applications for the marine reserve (and maintain the same for Te Rūnanga o Kaikōura).
			36. DOC to ensure reporting requirement for scientific study permits are met and reports shared and stored appropriately.
			37. DOC, Te Rūnanga o Kaikōura and the Guardians to promote a more co-ordinated and strategic approach to monitoring and research in the KMA, including the marine reserve.
			38. DOC to develop and implement a plan that describes and tracks the operational management of the marine reserve, including research and monitoring, and includes consideration of priorities identified by Te Rūnanga o Kaikōura and the Guardians.
	How has the marine reserve protected the representative and most biologically rich habitats of the KMA?	- Small examples of the habitats typical of the intertidal and nearshore environment in this region are protected. - Some canyon habitats and their associated communities are protected in the marine reserve, but not all.	39. DOC to engage with Te Rūnanga o Kaikōura and the Guardians to understand current aspirations for the marine reserve, particularly regarding its habitat and biodiversity representation and protection.
	How have taonga and other key species responded to marine reserve protection?	The marine reserve shows some benefits for less mobile species, but its small nearshore size limits its effectiveness; a lack of information on species inhabiting offshore areas highlights the importance of broader species monitoring.	40. DOC to develop and implement a plan that describes and tracks the operational management of the marine reserve, including a regular schedule of key species monitoring (including reef fish).
			41. DOC to engage with Te Rūnanga o Kaikōura and the Guardians to understand current aspirations for the marine reserve, particularly regarding its effectiveness for key species protection.
Te Rohe o Te Whānau Puha Whale Sanctuary	Has the whale sanctuary been implemented according to the provisions in the Act?	The whale sanctuary meets the Act's requirements; debate is about future strengthening, not implementation.	42. DOC to maintain the existing seismic surveying and seabed mining provisions of the whale sanctuary.
	How appropriate has the management of the whale sanctuary been?	The whale sanctuary has been managed appropriately, with minimal intervention reflecting its narrow focus and low activity.	43. DOC to improve clarity of public information to address misconceptions about what the whale sanctuary does and does not regulate, and that it is to benefit all marine mammals, but otherwise maintain current management settings.
			44. DOC to use existing liaison channels to notify Te Rūnanga o Kaikōura and the Guardians of proposed seismic surveys within the whale sanctuary.
	Do the whale sanctuary restrictions adequately manage impacts of noise and seabed disturbance on marine mammals?	The sanctuary restrictions effectively manage the key activities that generate high-intensity noise and seabed disturbance, and complement the broader regulatory framework that exists for managing noise and seabed disturbance.	45. Maintain the current whale sanctuary restrictions.
			46. DOC to continue monitoring the type, frequency and location of seismic surveying and petroleum permitting activity.
			47. DOC to periodically review the adequacy of current restrictions in light of changes in petroleum permitting, emerging activities, or new evidence on cumulative and long-range effects (e.g. noise propagation and sediment plumes).

Management Measure	Evaluation questions	Key findings	Recommendations
Ōhau New Zealand Fur Seal Sanctuary	Has the fur seal sanctuary been implemented according to the provisions in the Act?	The statutory mechanisms for establishing the fur seal sanctuary and its restrictions have been adequately implemented.	48. No change required.
	How has the fur seal sanctuary been managed since 2014?	Public awareness, engagement, and monitoring of the fur seal sanctuary are currently limited, and while compliance risks are low, there are clear opportunities to strengthen outreach, partner engagement, and research to better support its management.	49. DOC to improve accessibility to information on the fur seal sanctuary by installing on-site regulatory and educational signage, and publicising the fur seal sanctuary’s purpose, boundaries and rules on DOC’s website.
			50. DOC to increase the on-site presence of DOC staff or volunteers, to improve education about fur seals (in relation to the fur seal sanctuary and the wider KMA) and foster compliance and reduced levels of disturbance.
			51. DOC to increase the frequency of engaging with Te Rūnanga o Kaikōura and the Guardians about the fur seal sanctuary.
			52. DOC to continue engaging with Te Rūnanga o Kaikōura on permit applications for access to the fur seal sanctuary and start engaging with the Guardians on these applications.
	Has the fur seal sanctuary been effective at restricting human access to and minimising disturbance within the Ōhau Point fur seal breeding area?	- The level of human disturbance within the fur seal sanctuary has been low. - The fur seal sanctuary boundaries are erroneous post-earthquake. - There is value in maintaining protection at the Ōhau Point breeding area.	53. DOC to seek an amendment to the fur seal sanctuary (via section 14 of the Act) to correct the erroneous boundaries arising from the physical changes to the landform and State Highway 1 following the earthquake.
			54. DOC to initiate a process to amend the boundary of the fur seal sanctuary to better reflect the contemporary location of the Ōhau Point breeding area.
			55. DOC to monitor human visitation and/or disturbance to fur seals at the fur seal sanctuary to better inform the evaluation of its effectiveness and to allow adaptation of management actions.
			56. DOC to improve accessibility to information on the fur seal sanctuary.
			57. DOC to increase the on-site presence of DOC staff or volunteers.
	Has the fur seal sanctuary been effective at minimising human disturbance in the Kaikōura fur seal population overall?	Changing environmental pressures and increasing visitor use mean stronger, more coordinated management of human–fur seal interactions is needed.	58. DOC to strengthen its operational management of human-fur seal interactions at the Kaikoura Peninsula.
			59. DOC, with input from Te Rūnanga o Kaikōura and the Guardians, to develop a comprehensive KMA-wide management plan for fur seals, monitor implementation progress and effectiveness annually, and amend the management plan as required.
Customary fisheries management measures	How have the mātaihai reserves and taiāpure operated and how effective have they been?	- Customary Management Measures are aligned with their original purpose. - There are opportunities to improve governance and communication. - Insufficient information on mahinga kai stocks within customary management areas to determine effectiveness. - High levels of compliance. - Overall – customary management measures remain effective.	60. Te Rūnanga o Kaikōura to review and, where necessary, update representation on the committees established under the Act.
			61. Te Rūnanga o Kaikōura, FNZ and Te Rūnanga o Ngāi Tahu, consider facilitating more regular hui of Customary Managers, Tangata Tiaki/Kaitiaki and committees to improve communication and to ensure decisions are informed and timely.
			62. Te Rūnanga o Kaikōura, Customary Managers and Tangata Tiaki/Kaitiaki to look for ways to better integrate customary management and planning.
			63. FNZ, Te Rūnanga o Ngāi Tahu and Te Rūnanga o Kaikōura to identify opportunities and funding for a programme of more regular stock surveys to be undertaken in the mātaihai reserves and taiāpure established under the Act.
Act’s purpose of ‘preservation and protection’ and ‘sustainable and integrated management’ of the KMA	How have each of the management measures contributed to the ‘preservation and protection’ and ‘sustainable and integrated management’ of the KMA?	- Each management measure is contributing positively to the Act’s purpose, but in a targeted and partial way. Collectively, the measures provide important but incomplete protection, with greater integration likely to be attained by a more holistic and strategic approach between Agencies, Te Rūnanga o Kaikōura and the Guardians. - Current management of the KMA delivers valuable but fragmented protection, with important gaps in addressing climate pressures, key species and fisheries risks, data and monitoring, and integrated planning – limiting its effectiveness and highlighting the need for a more comprehensive and ecosystem-based strategic approach.	64. Agencies to support a more proactive and strategic role for the Guardians by enabling their development of a strategic plan for the KMA that sets long-term priorities and outcomes, identifies key information needs and supports them playing a more proactive and integrative role in the management of the KMA.
	What gaps remain in achieving the ‘preservation and protection’ and ‘sustainable and integrated management’ of the KMA?		65. Agencies and Guardians to establish a structured process for monitoring implementation of recommendations from the Review and for regularly assessing effectiveness of the management measures and progress towards the Act’s purpose.
			66. Agencies and Guardians to continuously strengthen the information base to better inform management responses and future management evaluations, while ensuring this information is regularly and transparently shared with the public.

1 Purpose

The purpose of this report is to fulfil the requirement set out in section 8 of the Kaikōura (Te Tai o Marokura) Marine Management Act 2014 (the **Act**) for a Ministerial review of the 'operation and effectiveness' of six management measures established by the Act.

This report contains the following:

- relevant background about the Kaikōura marine environment
- a description of how the review was conducted
- an evaluation of the 'operation and effectiveness' of each management measure
- a general evaluation of how the management measures have contributed to the Act's purpose.

2 Background

2.1 The Kaikōura marine environment

2.1.1 Treaty partner context

Te Whata Kai o Rākihōia i Te Tai o Marokura—Kaikōura Marine Area¹ (**KMA**) lies within the takiwā (territory) of Ngāi Tahu Whānui, who are represented by the tribal council Te Rūnanga o Ngāi Tahu (**TRONT**). The Crown has formally acknowledged the cultural, spiritual, historic, and traditional association of Ngāi Tahu to Te Tai o Marokura and to many taonga species found within this area.²

Ngāi Tahu has multiple sub-tribes, one of which is Ngāti Kuri. Ngāti Kuri hold mana whenua (authority over land) and mana moana (authority over the sea) in the Kaikōura region. Ngāti Kuri is administered by Te Rūnanga o Kaikōura, one of eighteen papatipu rūnanga identified under Te Runanga o Ngāi Tahu Act 1996.

While the KMA lies entirely within the takiwā of Ngāi Tahu, two other iwi, namely Ngāti Toa Rangatira and Rangitāne o Wairau, also have Areas of Interest adjacent to or overlapping the KMA. The Area of Interest of Ngāti Toa Rangatira extends northwards from Kaikōura,³ and thus is adjacent to or overlaps with that part of the KMA between Kaikōura and the northernmost boundary at Clarence Point. The Area of Interest of Rangitāne o Wairau extends northwards from the mouth of Waiau Toa/Clarence River,⁴ which is just south of the northernmost boundary of the KMA at Clarence Point. This means the Area of Interest of Rangitāne o Wairau is adjacent to or slightly overlaps the KMA.

2.1.2 Biological and ecological significance

The Kaikōura marine environment's biological and ecological significance stems from its unique physical and geological features. The Kaikōura Canyon is 60 km long and up to 1,200 m deep, with its canyon head just 500 m from shore.

The canyon is a known biodiversity hotspot, with canyon floor biomass estimated to be 100-times higher than similar deep-sea canyon habitats around the world.⁵ Burrowing sea cucumbers, worms, urchins and other invertebrates, along with an array of fish species, inhabit the canyon floor. Sponge gardens are known to occur on the northern edge of the canyon.

The intertidal and subtidal reefs of the nearshore portion of the KMA are notable for their rich seaweed forests and the diversity of invertebrate species. Pāua, kina and kōura/rock lobster are the most well-known macro-invertebrates inhabiting the reefs; numerous other mobile and non-mobile species are also present, including various molluscs, echinoderms, anemones and sponges. Rimurapa/Bull kelp forms a distinctive band with other large brown seaweeds and red algae forming a diverse understory.

Kaikōura is renowned for its marine mammal populations. This coastline is home to permanent breeding areas of kekeno/New Zealand fur seals, dusky dolphins are resident year-round and there are both resident and transient parāoa/sperm whales. Other marine

¹ Defined in Schedule 1 of the Act as the coastal marine area from Clarence Point in the north to the mouth of the Conway River in the south, and seaward to the outer limit of the Territorial Sea.

² Schedule 100 and section 288 of the Ngāi Tahu Claims Settlement Act 1998.

³ The historical Area of Interest agreed between Ngāti Toa Rangatira and the Crown in the Deed of Settlement signed on 7 December 2012 is documented on page 4 of the [Deed of Settlement Attachments](#)

⁴ As described on Map 1, page 5, of the Rangitāne o Wairau Deed of Settlement Attachments Schedule. [Te Arawhiti - Rangitāne o Wairau](#)

⁵ De Leo, F., Smith, C., Rowden, A., Bowden, D., Clark, M., 2010. Submarine canyons: hotspots of benthic biomass and productivity in the deep sea. *Proc. R. Soc. B: Biol. Sci.* 277, 2783–2792, [doi: 10.1098/rspb.2010.0462](#).

mammals that visit occasionally or pass through this area include Hector's dolphins, killer whales and paiea/humpback whales.

Kaikōura is also nationally and internationally important for many seabird species. For example, nesting of tītī/Hutton's shearwaters only occurs at two remaining colonies in the Seaward Kaikōura Range, and the Kaikōura Peninsula is a stronghold for tarāpunga/red-billed gulls, which are threat-classified as 'At Risk-Declining'.

2.1.3 Importance to the community and local economy

The Kaikōura marine environment underpins the local community and economy. It is integral to the tourism and fisheries sectors and has high social and recreational value.

Tourism is the dominant industry in the Kaikōura region. The globally recognised marine wildlife experiences attract around one million visitors annually, particularly whale-watching and dolphin and seal encounters. Consequently, it is one of Aotearoa New Zealand's premier nature-based destinations and tourism is essential to continued regional economic growth. Kaikōura contributes significantly to New Zealand's \$28 billion (in 2024) tourism sector. In 2025, the tourism sector in Kaikōura generated \$100 million and this figure is expected to grow.

The Kaikōura Canyon supports a diverse range of commercially and recreationally important fish species. Prior to the Act being passed, potential habitat degradation from fishing and other activities, inadequate recognition of customary fishing rights, sustainability concerns for the local fisheries and illegal fishing (poaching) were fishery related issues highlighted for the Kaikōura marine environment.

The Kaikōura marine environment also has significant social and recreational value, particularly for the local community. Fishing, diving and surfing are the key recreation activities that attract the local community and other New Zealanders to spend time in the coastal marine area.

2.2. Bespoke Kaikōura legislation and the requirement for a review

2.2.1 Te Korowai o te Tai ō Marokura and the Kaikōura Marine Strategy

In 2005, after a marine reserve application for the Kaikōura Peninsula stalled, and recognising the importance of the Kaikōura marine environment, the Minister of Conservation invited Ngāti Kuri to develop a formal plan for its future.⁶

Te Korowai o Te Tai ō Marokura – the Kaikōura Coastal Marine Guardians (**Te Korowai**) was established in 2005 as an initiative of Te Rūnanga o Kaikōura (representing Ngāti Kuri). Membership consisted of local groups directly involved with the coastal marine area, including Te Rūnanga o Kaikōura, TRONT, Kaikōura District Council, and those from the tourism, environment and recreational and commercial fishing sectors.⁶

The goal of Te Korowai was to provide leadership about use and protection of the marine environment, and to develop a strategy for managing the many issues and uses of this coastal area. This was in response to the recognised significance this area holds historically, culturally, spiritually, environmentally, and economically. Following extensive engagement and consultation with the public, in 2012 Te Korowai finalised the Kaikōura Marine Strategy⁶ (the **Strategy**) and presented it to government. The Strategy adopted a 'gifts and gains' approach to building a consensus, where one party was offered a 'gift' to achieve a 'gain' in

⁶ Te Korowai o Te Tai ō Marokura – Kaikōura Coastal Marine Guardians, 2012. [Kaikōura Marine Strategy – Sustaining our sea](#) 2012. 143 p.

another area, with the aim of sustaining the integrity of resources for the future. The Strategy's proposed measures put protections in place to manage localised depletion of fishery resources, traditional customary fishing areas and vulnerable habitats. The Strategy, in turn, informed bespoke legislation for the Kaikōura coastal environment.

2.2.2 Enactment of the Kaikōura (Te Tai o Marokura) Marine Management Act 2014

The Act was passed in August 2014 to recognise the local, national, and international importance of the coast and sea around Kaikōura due to its unique coastal and marine environment and distinctive biological diversity and cultural heritage. It established the KMA, and introduced specific measures to support the preservation, protection, and sustainable and integrated management of this important environment (section 3 of the Act) (Figure 1). These measures are:

- an advisory committee to provide advice regarding biosecurity, conservation, and fisheries matters within the area
- a marine reserve
- a whale sanctuary
- a New Zealand fur seal sanctuary
- three mātaītai reserves and two taiāpure-local fisheries (taiāpure)
- amendments to the Fisheries (Amateur Fishing) Regulations 2013 to provide specific regulation of amateur fishing in the marine management area.

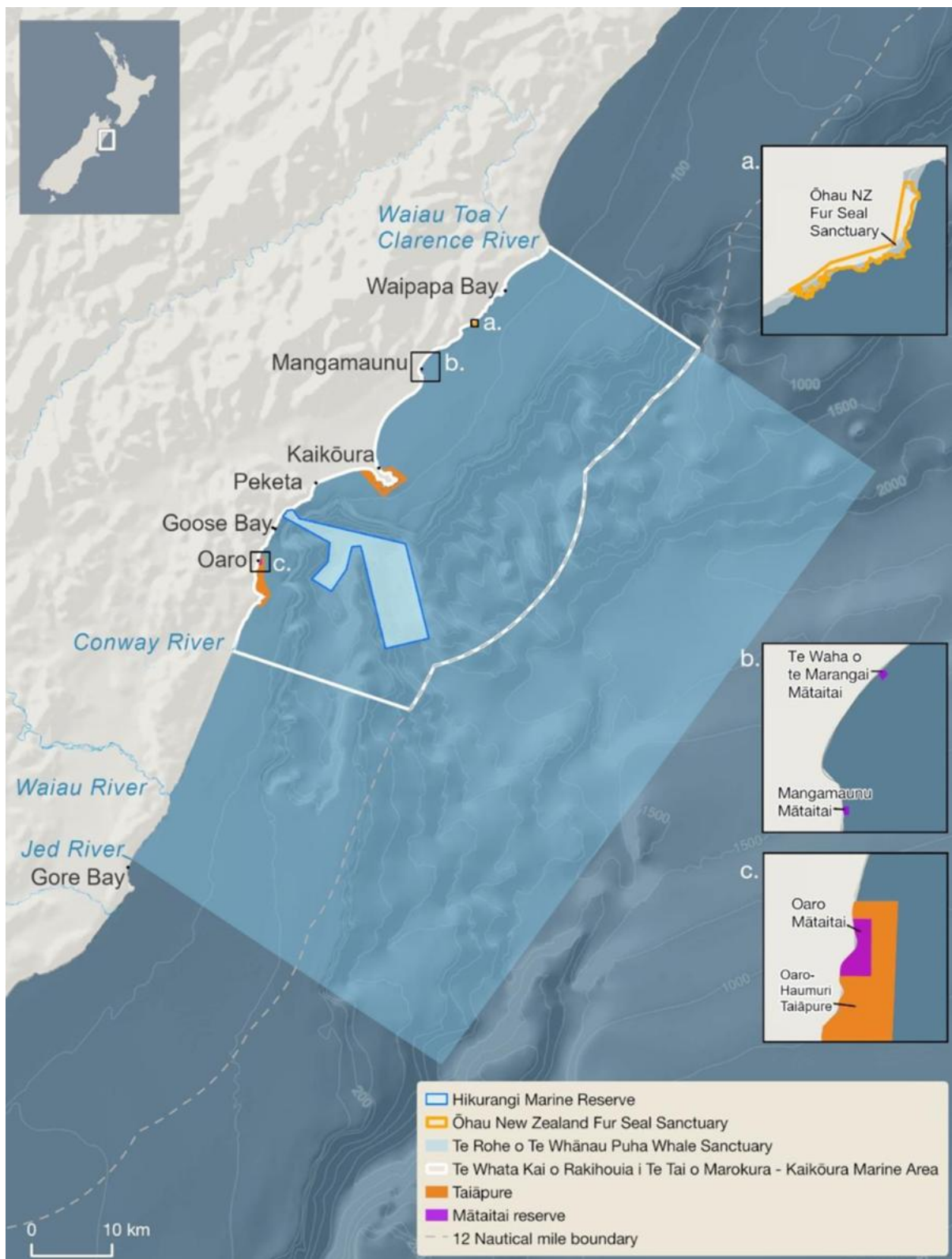


Figure 1: Kaikōura Marine Area and spatial management measures established by the Kaikōura (Te Tai o Marokura) Marine Management Act 2014.

2.2.3 The requirement for a review

Section 8 of the Act requires a Ministerial review (by the Minister of Conservation and the Minister responsible for the administration of the Fisheries Act 1996, the **Ministers**) to be initiated before the expiry of 10 years after the commencement of the Act (i.e. by 7 August

2024) (the **Review**). This review requirement was included in the Act following the Strategy's proposal to review implementation progress at regular intervals.⁷

Section 8 of the Act also states that the Review is of the 'operation and effectiveness' of six specific measures:

- Kaikōura Marine Guardians
- Hikurangi Marine Reserve
- Te Rohe o Te Whānau Puha Whale Sanctuary
- Ōhau New Zealand Fur Seal Sanctuary
- Mangamaunu Mātaitai, Oaro Mātaitai and Te Waha o te Marangai Mātaitai
- Te Taumanu o Te Waka a Māui Taiāpure and Oaro-Haumuri Taiāpure.

The Act states (in section 8(3)) that before initiating the Review, the Ministers must consult with the Kaikōura Marine Guardians (the **Guardians**) on a Terms of Reference (**TOR**) for the Review. Department of Conservation (**DOC**) and Fisheries New Zealand⁸ (**FNZ**) (the **Agencies**) engaged with Te Rūnanga o Kaikōura and the Guardians to develop a draft TOR. As a final step, Ministers then formally consulted with the Guardians to seek their feedback, which was ultimately incorporated into a final TOR⁹, and the review initiated on 7 August 2024.

2.3. Other Kaikōura marine management context

The Act and the management measures it established sit alongside several other management tools and initiatives operating in the KMA that are useful context for this Review.

2.3.1 Fisheries management

The KMA has its own area-specific daily bag limits for finfish, baitfish species and freshwater eels. There are minimum fish lengths, daily limits of shellfish species, spiny/red and packhorse rock lobster combined with minimum tail width measurements and a range of life stage and gathering method rules, and seasonal closures. There is also a rāhui (fishery closure) in place at Waiopuka (Wakatu Quay) and shorter-term rāhui are implemented from time to time (the full list of restrictions for the KMA can be found at www.mpi.govt.nz/fishing-aquaculture/recreational-fishing/fishing-rules/kaikoura-fishing-rules).

2.3.2 Marine mammal management under the MMPA and MMPR

The Marine Mammals Protection Act 1978 (**MMPA**) governs the protection, conservation and management of marine mammals throughout New Zealand. The Marine Mammals Protection Regulations 1992 (**MMPR**) specifically regulate human interactions with marine mammals. Of relevance to the KMA, these two pieces of legislation provide for the reporting of accidental death or injury, permitting of research, permitting of commercial tourism viewing, and prescribe required behaviour of all people around marine mammals.

⁷ The Strategy called for an integrated long-term monitoring programme to inform future reviews of the management measures it proposed. It was suggested that the Strategy itself be reviewed as and when needed, at least every ten years. For measures such as marine protected areas, reviews of at least twenty-five-year intervals were seen as appropriate for generational review as these mechanisms require a longer timeframe to show their effectiveness.

⁸ A business unit of the Ministry for Primary Industries (MPI).

⁹ Department of Conservation and Fisheries New Zealand, 2024. [Terms of Reference - Kaikōura \(Te Tai o Marokura\) Marine Management Act 2014: Ministerial Review 2024](#).

Additional specific marine mammal management measures in place in the KMA are moratoria on issuing new marine mammal viewing permits for sperm whales, dusky dolphins and New Zealand fur seals.^{10,11,12}

2.3.3 Other local marine environmental activities

In relation to the Kaikōura marine environment, Canterbury Regional Council and Kaikōura District Council have complementary roles under the Resource Management Act 1991 and related legislation. Canterbury Regional Council is primarily responsible for managing and monitoring coastal water quality, discharges to the marine environment, and the allocation and use of coastal space through its Regional Coastal Environment Plan. Kaikōura District Council focuses on land use and activities, including infrastructure, stormwater, wastewater, and land-based activities that can affect the coastal and marine environment through runoff and sedimentation.

Following the submission of the Strategy to government and subsequent passing of the Act, Te Korowai has continued as an organisation that ‘fosters a cooperative and integrated approach’ and who ‘engage the Kaikōura community in developing practices for improved management’¹³ of the Kaikōura marine environment. Te Korowai are actively pursuing UNESCO World Heritage status for Kaikōura, to recognise its unique combination of marine biodiversity, deep-sea canyon, and coastal mountains.

Two other important local marine environmental initiatives include the work of the Kaikōura Ocean Research Institute, a ‘network of marine researchers and educators who are committed to protecting Kaikōura’s marine environment and wildlife’, and the Hutton’s Shearwater Charitable Trust, which seeks to ‘encourage and promote the preservation, conservation, research, public education, and sustainable management of the endangered Hutton’s shearwater’.

2.3.4 The 2016 Kaikōura earthquake

The 2016 Kaikōura earthquake was a magnitude 7.8 event that struck near Waiau, North Canterbury, on November 14. It has been described as one of the most complex earthquakes ever studied, involving the rupture of at least 25 faults over approximately 180 km of coastline and lasting around two minutes. The earthquake caused widespread damage, including extensive landslides, isolation of the town of Kaikōura, and a locally generated tsunami. Significant ground deformation occurred, with parts of the South Island shifting up to 5 m horizontally and experiencing vertical uplift up to 6–8 m in some locations.

The economic cost of the earthquake was estimated at over NZ\$2 billion, with major impacts on tourism and primary industries, particularly seafood and dairy production. The coastal uplift resulted in extensive mortality of marine organisms, including bull kelp and pāua. In addition, sedimentation from landslides entered the marine environment, affecting sperm whale habitat and foraging and breeding areas for other marine species, including the alpine-nesting Hutton’s shearwater, which lost approximately 13% of its breeding area.

The recovery and infrastructure rebuild following the earthquake was immediately prioritised, with emergency recovery-related legislation passed within a month. For the marine environment, two key measures implemented were an emergency fisheries closure (restricting the take of all shellfish and seaweed, except for rock lobster and scampi), and a

¹⁰ [Marine Mammal \(Sperm Whales – Kaikōura\) Declaration Notice - 2025-go4216- New Zealand Gazette](#)

¹¹ [Marine Mammal \(Dusky Dolphins\) Kaikōura Declaration Notice - 2025-go6252 | New Zealand Gazette](#)

¹² [Marine Mammal \(Seals\) Kaikōura Declaration Notice - 2025-go6251 | New Zealand Gazette](#)

¹³ www.teamkorowai.org.nz

government-funded \$2 million research programme focussed on the earthquake's impacts on the marine environment.

The emergency closure was replaced by more permanent closures for some fisheries, which were sequentially lifted as scientific monitoring showed fishing could sustainably resume. For example, the pāua fishery required a 5-year closure to rebuild stocks before it could be reopened.

The impact of the earthquake on each of the management measures being evaluated as part of this Review is discussed in the respective sections below.

3 Review approach

This section describes how the Review was conducted. More detail on the evaluation approach used for each management measure is in sections 4.1–4.5 and section 5.

Section 8 of the Act requires that the Ministers ‘initiate’ the Review and ‘prepare a report’ on the Review. As part of initiating the Review, Ministers agreed that DOC and FNZ would undertake the Review according to the TOR and prepare the report. DOC led the evaluation of the conservation management measures (see sections 4.2–4.4), FNZ led the evaluation of the customary fisheries management measures (see section 4.5), and both agencies otherwise collaborated to deliver the Review.

Agencies contracted an external consultant, Allen + Clarke, to conduct an evaluation of the Guardians and subsequently used their report to inform the overall evaluation of the Guardians presented in section 4.1. This was to enable effective delivery of the Review within expected timeframes and to provide an independent evaluation given the Agencies’ close working relationship with the Guardians.

The TOR also described the roles of Te Rūnanga o Kaikōura and the Guardians in the Review, which was to provide information to inform the review and to provide advice to Agencies to assist with delivering the review. Agencies engaged with the TRONT and Te Rūnanga o Kaikōura representatives on the Guardians and other TRONT and Te Rūnanga o Kaikōura kaimahi throughout the review process, to ensure that Te Rūnanga o Kaikōura in particular had meaningful opportunities for input and participation. The involvement of both Te Rūnanga o Kaikōura and the Guardians in each of the three broad stages of the Review is described below.

Agencies also engaged with Te Rūnanga o Toa Rangatira and Te Rūnanga a Rangitāne o Wairau (the mandated iwi authorities for Ngāti Toa Rangatira and Rangitāne o Wairau, respectively), to understand how each iwi wanted to be involved. Te Rūnanga o Toa Rangatira advised that they ‘wish to be kept informed of the review’s progress and wish to support Te Rūnanga o Kaikōura and Ngāi Tahu to lead input on the review’.¹⁴ Te Rūnanga a Rangitāne o Wairau advised that ‘Rangitāne wish to be kept informed of the review’s progress but not otherwise involved.’¹⁴ Agencies have provided periodic updates on the Review’s progress to both iwi at key stages, including at the initiation of the Review, prior to public consultation and prior to finalising this report for Ministers.

The objective of the Review, as stated in the TOR, is:

to assess the “operation and effectiveness” of the six measures specified in section 8(2) of the Act, those measures being established to “assist the preservation, protection, and sustainable and integrated management of the coastal and marine environment and biological diversity of Te Tai o Marokura”.

The process to conduct the Review broadly comprised the following steps:

- development of evaluation questions
- public consultation
- evaluation of ‘operation and effectiveness’.

¹⁴ Page 3 of Review [Terms of Reference](#).

3.1. Evaluation questions

To structure the evaluation of 'operation and effectiveness', a set of evaluation questions for each management measure was developed. The terms 'operation' and 'effectiveness' are not defined in the Act. Agencies applied a broad interpretation of the terms. In general, we considered any matters relating to implementation, ongoing management and effectiveness of the measure against the purpose or objectives for which it was established, as being in scope for the evaluation.

As a first step to developing evaluation questions, a scan of relevant documents was undertaken to guide what matters were applicable when considering the 'operation and effectiveness' of each management measure. This scan included consideration of matters set out in the Act but also any other primary (e.g. Marine Reserves Act 1971) or secondary (gazette notices) legislation of relevance. Relevant historic documents such as the Strategy and the Regulatory Impact Statement¹⁵ (the agency analysis prepared to support a Cabinet decision on passing special legislation to implement components of the Strategy), and any planning or strategic documents that related to any of the management measures, were also examined. In terms of the Guardians, the committee's terms of reference were included, as these set out the Ministerially approved operational expectations of the committee.

Following this scan, Agencies sought the views of Te Rūnanga o Kaikōura and the Guardians on key focus areas for each of the management measures. Agencies then developed key evaluation questions to guide the evaluation. These questions are set out in the relevant sections below for each management measure.

Allen + Clarke's evaluation questions and approach to developing these are set out in section 2 of their report.¹⁶

In addition to the evaluation for each management measure, an overall evaluation was carried out to assess how the measures are 'assist[ing] the preservation, protection, and sustainable and integrated management of the coastal and marine environment and biological diversity of Te Tai o Marokura', as per the Act's purpose.

3.2. Public consultation

Section 8(4) of the Act states that the Ministers 'must ensure that, as part of the review, there is reasonable opportunity for interested persons to make submissions on the operation and effectiveness of the measures' being reviewed.

Agencies undertook this public consultation step part way through the evaluation so that the feedback received could inform the evaluation.

Firstly, Agencies developed a proposed consultation approach in line with the indicative approach set out in the TOR. Feedback from Te Rūnanga o Kaikōura and the Guardians on the consultation approach was sought and incorporated. Agencies then provided advice to Ministers on the proposed consultation approach.

Next, a discussion document with survey questions was developed by Agencies and feedback sought from Te Rūnanga o Kaikōura and the Guardians before being finalised.

The public consultation ran from 30 September to 11 November 2025. The public were informed of the consultation via DOC's website, direct email notification to a key stakeholder

¹⁵ Ministry for Primary Industries and Department of Conservation, 2013. [Implementing key components of the Kaikōura Marine Strategy: Regulatory Impact Statement](#). 74 p.

¹⁶ Allen + Clarke, 2025. [Evaluation of the Kaikōura Marine Guardians: Final Report](#). 31p.

group, and a media article released by Agencies. The discussion document and an online survey were published on DOC's website, and MPI provided a link to this page on its website. Interested members of the public could provide their views by responding to the questions in the online survey or by returning a written submission via email or post.

A total of 54 submissions were received. Forty of these were responses to the online survey form and 14 were emailed submissions. Submissions were received from:

- individual members of the public
- scientists and academic institutions
- an iwi organisation
- environmental and conservation organisations
- industry and fisheries sector bodies
- local users of the Kaikōura marine environment.

Submissions were analysed and summarised into key themes for each management measure. This summarised feedback is described in sections 4.1–4.5. General submission feedback that did not relate directly to one of the management measures is summarised in section 5. The submission feedback received was then considered as part of the evaluation (section 3.3).

3.3. Evaluation of 'operation and effectiveness'

Using the evaluation questions developed for each management measure as a guide, a range of relevant information was compiled and reviewed. This included, as applicable to each management measure, background material, scientific monitoring data, management reports and published research. In some cases, the information available was incomplete or had limitations, and this is noted where relevant as part of the evaluation.

Public consultation formed an important component of the evaluation. Feedback received was considered alongside the other information sources to ensure that contemporary perspectives on the successes or limitations of the management measures were reflected in the evaluation.

Using the available information and the public consultation feedback, conclusions were made in response to each evaluation question. Recommendations were developed based on the information available and an objective assessment and indicate where there was support for maintaining the status quo or where changes to create improvements were identified. Implementation of the recommendations will be subject to subsequent operational decisions, including consideration of resourcing constraints and other relevant context.

Where provided during engagement, feedback from Te Rūnanga o Kaikōura and the Guardians is described at the relevant parts of the evaluation in sections 4 and 5.

Section 4 contains the evaluation of each of the management measures requiring review (as per section 8 of the Act). For the purposes of this Review, the three mātaiai reserves and two taiāpure are evaluated collectively in section 4.5. A general evaluation of the contribution of the management measures to the Act's purpose is set out in section 5.

4 Evaluation of the ‘operation and effectiveness’ of each management measure

4.1. Kaikōura Marine Guardians

4.1.1 Background

4.1.1.1 Proposal for the Guardians in the Kaikōura Marine Strategy

Te Korowai recognised that implementing the Strategy might require special legislation and, drawing on the Fiordland model, recommended statutory functions for a legislated guardian group. These included advising management agencies and Ministers; promoting integrated management of Te Tai o Marokura; obtaining, sharing and disseminating information, including monitoring; supporting agencies with public information; monitoring the marine environment and biodiversity; planning for enforcement and compliance; and conducting reviews.

A 2013 Regulatory Impact Statement concluded that special legislation could enable Ministers to appoint, amend or discharge an advisory committee for the KMA. While noting there was no precedent for appointing an incorporated society to such a role, MPI and DOC considered it sensible to appoint Te Korowai in the first instance, recognising its role in developing the Strategy, its strong community support, and its local marine knowledge. Ultimately, however, the Act provided for an advisory committee whose members would be appointed by Ministers based on specified areas of interest and expertise.

4.1.1.2 Statutory role and membership of the Guardians

The Guardians are an advisory committee established under the Act and are appointed by the Ministers. The following interests and areas of expertise must be collectively represented by the Guardians:

- Te Rūnanga o Ngāi Tahu
- the Kaikōura community
- biosecurity, conservation, education, environment, fishing, marine science and tourism.

The role of the Guardians is to provide advice on any biosecurity, conservation or fisheries matter related to the marine and coastal environment within the KMA to any of the following:

- the Minister responsible for the administration of the Biosecurity Act 1993
- the Minister of Conservation
- the Minister responsible for the administration of the Fisheries Act 1996
- any person exercising a power or performing a function under the biosecurity, conservation, and fisheries legislation.

The Guardians may provide advice on request or on their own initiative. If the matter relates exclusively to the KMA, the person receiving the advice must take the advice into account. If the matter also relates to any area outside the KMA, then the person receiving the advice may, but is not required to, take the advice into account.

The Guardians may determine their own procedure, subject to any direction given to them by the Ministers.

4.1.1.3 Guardians Terms of Reference

The Guardians operate under a Terms of Reference¹⁷, agreed between Ministers, agencies, and the Guardians. This sets out how each party will work together to implement the Act and support the functions of the Guardians. The Terms of Reference expands on the Act's requirements for the Guardians by specifying matters such as:

- membership
- nomination and appointment process
- member expectations
- role of agencies
- term of appointment
- meeting frequency and process
- reporting
- fees and allowances.

The Terms of Reference specifies the Guardians will consist of up to 11 members:

- one representative of Te Rūnanga o Ngāi Tahu
- two representatives of Te Rūnanga o Kaikōura
- six representatives nominated by the public
- one representative of the Minister of Conservation
- one representative of the Minister for Oceans and Fisheries.

Members are required to take a whole marine and coastal environment view and not regard themselves as representatives or advocate for a particular sector or interest.

Agencies are to provide administrative support and inform and provide relevant information to the Guardians where appropriate on any biosecurity, conservation, and fisheries-related matter. They are required to assist the Guardians to prepare a 12-month work programme and Annual Report.

No more than four meetings may be held by the Guardians in any calendar year, unless exceptional circumstances arise.

Fees and allowances are paid for meeting attendance. The Chairperson has discretion to approve fees and allowances for any additional work, after discussion between the Chairperson and Agencies.

Ministers are to review the Terms of Reference every four years or as required in consultation with the Guardians and agencies.

4.1.1.4 The Guardians and Te Korowai

Section 2.2.1 describes the establishment of Te Korowai. Te Korowai are a non-statutory community-based group that seeks to ensure the long-term sustainability of the marine environment around Kaikōura. They include members from local organisations and interests involved with the coastal marine area, as well as local government agencies. Some of these members are also members of the Guardians.

¹⁷ [Kaikōura Marine Guardians Terms of Reference](#)

The Guardians are distinct from Te Korowai in that they have a statutorily defined advisory role under the Act. Evaluation of Te Korowai is beyond the scope of this review.

4.1.2 Evaluation approach

Further to the approach set out in section 3, evaluation of the operation and effectiveness of the Guardians was informed by:

- feedback received from public consultation
- an external evaluation report by Allen + Clarke¹⁶
- feedback from Te Rūnanga o Kaikōura and the Guardians.

Section 4.1.3 presents a summary of feedback from public consultation. Feedback from the public was obtained on:

- the effectiveness of the Guardians as a statutory advisory committee
- successes and challenges in relation to the Guardians
- suggestions for changes or improvements to the Guardians.

Agencies contracted consultant Allen + Clarke to evaluate the operation and effectiveness of the Guardians. They focused on three areas:

- The extent to which the group has included representation of relevant interests and expertise.
- How well the process of providing advice has worked and whether the advice was taken into account in decision-making.
- The extent to which the Guardians' operational processes have been delivered as intended.

Their evaluation used a combination of a document review and interviews with agency representatives, community stakeholders, and both former and current members of the Guardians to answer the following key evaluation questions:

- To what extent do the Guardians' appointments represent the interests and expertise stipulated in the Act?
- How well is the Guardians advice function operating?
- How well are the Guardians' operational procedures functioning?
- What lessons have been learned that can inform the ongoing operation and effectiveness of the Guardians?

Section 4.1.4 presents the Agencies' evaluation, which sought to assess the following questions:

- How well has the Guardians' membership structure and appointment process operated?
- How well do the Guardians reflect areas of interest and expertise set out in the Act?
- How well have the Guardians' operational procedures functioned?
- How effective has the Guardians' advice function been?

4.1.3 Summary of feedback received from public consultation

46 of the total 54 submitters responded in relation to the Guardians.

39 submitters responded to the question, ‘How effectively do you think the Kaikōura Marine Guardians have functioned as a statutory advisory committee?’ Figure 2 shows that 46% of the 39 respondents feel the Guardians are functioning adequately or better.

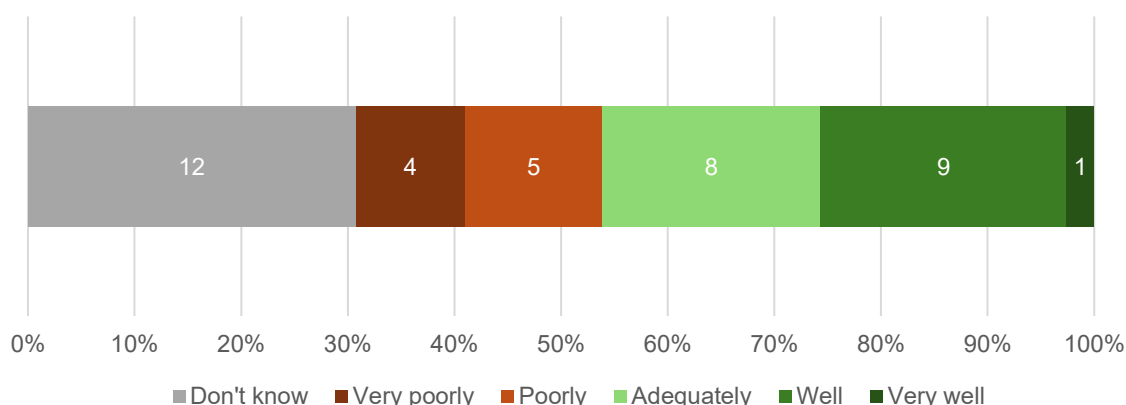


Figure 2: Responses from 39 survey submitters to the question, ‘How effectively do you think the Kaikōura Marine Guardians have functioned as a statutory advisory committee?’.

Feedback from all submitters has been summarised into three themes:

- Appointments process and representation on the Guardians
- Functions and operation of the Guardians
- Positive outcomes of the Guardians

4.1.3.1 Appointments process and representation on the Guardians

Approximately 28% (13) of submitters commented on the Guardians appointment process and representation on the Guardians.

About 31% (4) of submitters felt the group has adequate or good representation and meets requirements set in the Act.

About 15% (7) of submitters recommended the Guardians diversify representation. Suggestions included: youth, people who have marine experience, marine mammal expertise, a background in the fishing industry, recreational fishers, and more “professional representation”. Several raised the importance of all interests being considered in decision making.

Te Korowai suggested representation should reflect the Guardians’ strategic direction: “Appropriate representation from within the required representation needs to reflect the strategic plans and outcomes of KMG, to ensure that these can be met”.

Te Rūnanga a Rangitāne o Wairau advocated for improved iwi representation in decision-making (including “formal roles” on the Guardians) and for “continued shared governance” that blends rangatiratanga, science, and local stewardship.

One submitter believes there are some conflicts of interest amongst the members.

Three submitters raised the process for appointing members is not clear or well understood in the community.

The joint submission of the New Zealand Sport Fishing Council, the New Zealand Angling & Casting Association and the New Zealand Underwater Association raised the importance of ensuring the nomination process resulted in an independent and unbiased Chairperson. Their submission also recommends non-voting seats on the Guardians for both DOC and FNZ.

4.1.3.2 Functions and operation of the Guardians

Approximately 48% (22) submitters commented on the operation or functions of the Guardians.

Resourcing was a common theme. Ten submitters thought the Guardians needed greater resourcing and agency support. Feedback included:

- the breadth of work required in just four meetings per year
- the need for a dedicated budget for independent scientific advice
- the need for funding to support ongoing engagement with the community and for monitoring and adaptive management.

The Environmental Defence Society (**EDS**) agreed with the conclusions of Allen + Clarke that the Guardians should be better provided with scientific information and research on the state of the marine environment, species and habitats of interest.

EDS compared the Guardians' level of funding with the higher amount that is allocated to the Fiordland Marine Guardians. They raised this in the context of the challenges they see for the group to "gain momentum" and "proactively investigate issues".

Five submitters thought the Guardians operated reactively and supported a more proactive, strategic approach.

One submitter thought explicit integration of ecosystem-based management principles into governance structures would improve decision-making. They suggested that in addition to "rules-based approaches", governance should provide for Treaty partnerships and mātauranga Māori, consider ecological complexity and cumulative effects, and safeguard intergenerational wellbeing.

Te Korowai would like to see development of a detailed ecosystem-based research plan and strategy, to support proactive monitoring and management advice. Te Korowai raised that some issues highlighted in the Strategy still needed addressing by the Guardians. This included sustainable tourism, catchment impacts, world heritage status and potentially new spatial management tools.

Six submitters commented on the functions of the Guardians. One submitter suggests the Guardians should be advisory to DOC and FNZ, rather than Ministers, explaining that "agencies hold the mandate and institutional expertise to analyse advice within the context of national policy, science and regulation before briefing Ministers". They say this will maintain the independence of the Guardians.

Te Korowai recommended development of a strategic management plan and that Te Korowai remain as a "service provider", providing the link with community and support on the ground, while the Guardians remain as statutory advisors.

Other submitters recommended increased oversight and agency input.

Several submitters suggested the Guardians need more authority beyond their advisory role.

EDS said the Guardians should be given an expanded mandate to advise on resource management issues relevant to the marine environment. They considered that without this the Guardians are unable to take an integrated view. Additionally, they thought the role of the Guardians needed to be clarified.

68% (15) submitters commented on the low visibility of the Guardians and lack of community engagement, with some completely unaware of the Guardians and their function.

Suggestions to improve visibility and engagement include:

- more public meetings
- increased presence in, and communications with, the Kaikōura community
- improved information on the Guardians, their function and work programme
- prompt publication of meeting minutes, annual reports and website updates
- improved consultation on issues involving the Kaikōura community
- improved clarity on the role of the Guardians versus the role of Te Korowai
- increased sustained funding.

4.1.3.3 Positive outcomes of the Guardians

Approximately 33% of submitters (15) noted positive outcomes of the Guardians' operation since its commencement under the Act in 2014. Submitters acknowledged the important role the Guardians play in bringing interests together, providing a strong community and mana whenua voice in the management of the KMA, and contributing extensive local knowledge to issues arising.

Submitter Te Korowai believe the Guardians have provided a strong local voice to agencies and Ministers. PauaMAC¹⁸ commended the Guardians' efforts to protect the coastline and taonga while representing a range of stakeholders.

A key challenge for the Guardians, recorded by submitters, was their role in bringing together disparate interests and views and reaching consensus on management issues.

Six submitters consider the statutory protection measures put in place for the KMA by the Guardians was a success. However, some feel these do not go far enough to achieve the coastal and marine protection they think is required.

Several submitters raised specific issues they believe the Guardians successfully helped manage:

- 2016 earthquake recovery
- Pāua recreational fishery and post-earthquake reopening
- Hector's Dolphin Threat Management Plan
- Rock lobster fishery sustainability concerns
- Other fisheries management issues

4.1.4 Operation and effectiveness of the Guardians

This section summarises and evaluates the operation of the Guardians, focusing on membership, appointments and representation (sections 4.1.4.1 - 4.1.4.2). It then assesses

¹⁸ The Management Area Council for commercial pāua fishing in the relevant Quota Management Areas in the Canterbury region.

how effective the Guardian's procedures and advice function have been (sections 4.1.4.3 - 4.1.4.4). The review covers the period from enactment to late 2025, where possible.

4.1.4.1 How well has the Guardians' membership structure and appointments process operated?

Relevant information

The Guardians' membership structure and appointment process has changed since commencement of the Act in 2014. From 2015 to 2023, appointments were made according to the original Terms of Reference. This required the Guardians to consist of 11 members. Eight of these to be nominated by Te Korowai, one by TRONT, and two Ministerial appointments. The first set of 11 Guardians were appointed in December 2015, and a second round of appointments and reappointments occurred in 2024. The revised 2024 – 2028 Terms of Reference saw these changes in the membership structure and appointments process:

- the Guardians will consist of up to 11 members (it can include less)
- Te Korowai no longer hold an official appointing role
- the Guardians will include two representatives of Te Rūnanga o Kaikōura and six representatives nominated by the public
- for the two Ministerial appointments, one must be selected by the Minister of Conservation and the other by the Minister for Oceans and Fisheries.

These changes were made to improve efficacy of the appointment process, reduce Treaty risk, improve alignment with similar statutory bodies, and respond to feedback from the Guardians, Ministers and Treaty partners.

Under the current Terms of Reference, the appointment process involves:

- Ministers requesting appointments from TRONT and Te Rūnanga o Kaikōura
- Ministers calling for nominations from the public
- agencies assessing nominations against interests and areas of expertise required under the Act (nominees may represent multiple interests and areas of expertise)
- agencies providing analysis and recommendations to Ministers
- Ministers appointing the two Ministerial appointees and public appointees and announcing all appointments.

Ministers reserve the right to appoint a chairperson. If Ministers choose not to exercise that right, then the Chairperson shall be elected by the Guardians according to the Terms of Reference.

Appointments are for a maximum four-year term. Under the original Terms of Reference this was a maximum five-year term. The change was made for alignment with the Fiordland Marine Guardians (established under Part 3 of the Fiordland (Te Moana o Atawhenua) Marine Management Act 2005).

Evaluation

Key message: The appointment process and membership structure has improved and works well but is not well understood.

The current appointment process and membership structure has improved from the previous model.

While Te Korowai indicated their desire to continue as a nominating body, this was thought to fetter Ministerial decision-making under the Act. Te Korowai can participate in the public nomination process, which is seen as more transparent and fairer.

Te Rūnanga o Kaikōura are a papatipu rūnanga of Ngāi Tahu. The requirement for the Guardians' membership to now include two Te Rūnanga o Kaikōura appointees better satisfies the requirement under section 6 of the Act that the interests and areas of expertise of TRONT are represented.

The membership structure, appointment term, and process align with that of other statutory bodies. The appointment process, however, has not always been followed. In 2020 it was delayed due to COVID-19 and the need to reprioritise agency work and review the Guardians' Terms of Reference.

A review of the original Terms of Reference also did not occur until 2021, despite the Terms of Reference specifying a three yearly review.

The Allen + Clarke report found the appointment process worked well but was not well understood by those not directly involved. This was echoed in submitter feedback. Some Guardians and community stakeholders experienced the process as opaque and lacking transparency.

The lack of clarity felt around the appointment process and subsequent mistrust in the fairness of selection decisions led to concerns about appropriate representation on the Guardians, including management of conflicts of interest and ensuring the chairperson is independent and unbiased. Limited evidence suggests this is undermining trust in the Guardians, and concerns that their advice favoured commercial interests over others such as recreational fishing.

One submitter suggested non-voting seats on the Guardians for DOC and FNZ. This essentially happens in practice as both agencies attend Guardians meetings in an observer capacity but do not hold seats or voting rights.

Recommendations

- Agencies to improve communication of the appointment process, particularly with the Kaikōura community.
- Retain membership structure and appointment process set out in the Guardians' Terms of Reference.

4.1.4.2 How well do the Guardians reflect areas of interest and expertise set out in the Act?

Relevant information

Section 4.1.1.2 sets out the interests and areas of expertise that must be represented by the Guardians.

There have been two sets of Guardians appointed since commencement of the Act, with some overlap of members.

Evaluation

Key message: Membership on the Guardians reflects requirements of the Act.

The Allen + Clarke report and submitter feedback both found the Guardians' current membership meets the requirements of the Act. Membership includes representation of interests and areas of expertise from TRONT, the Kaikōura community, fishing, environment, education, tourism, conservation, biosecurity and marine science. The current membership also includes representation of Te Rūnanga o Kaikōura, Te Korowai, and fishing expertise is from across the commercial, customary and recreational sectors. In addition to the requirements of the Act, both Guardians and community stakeholders considered it important that the Guardians primarily consists of local representation, which is currently the case.

The Allen + Clarke report found representation on the Guardians has improved over time. Following appointment of the original set of the Guardians, representation from Te Rūnanga o Kaikōura and recreational fishing decreased over time due to some members no longer being able to remain on the group. Customary fishing interests were still represented through other Guardians but the absence of representation from Te Rūnanga o Kaikōura was felt as an important gap, both in terms of customary fishing and broader local customary knowledge and expertise. This was addressed in the 2023 review of the Terms of Reference.

The report finds some community stakeholders and a few Guardians feel recreational fishing is not represented as well as it could be. Although the Guardians included a recreational fishing representative, this was viewed as insufficient, both in terms of the number of representatives and that the person was viewed as representing national level interests rather than local. In contrast, other Guardians believed recreational fishing interests were adequately covered as most Guardians were involved in recreational fishing activities. They noted practical limits in the extent to which different interests could be represented and the importance of considering broader interests when developing advice. This is reflected in the Guardians' Terms of Reference, which states 'members are required to take a whole marine and coastal environment view and not regard themselves as representatives or advocate for a particular sector or interest'.

Some Guardians explained that when there was a gap in knowledge or expertise, they could bring in relevant people or expertise into a specific meeting. This was seen as advantageous in keeping the Guardians' advisory group to a manageable size while enabling the Guardians to access specific knowledge as required.

Some submitter feedback called for greater diversification in the Guardian's membership (see section 4.1.3.1). Some suggestions included areas of interest and expertise already required by the Act, highlighting a lack of knowledge by submitters. Other suggestions were for youth representation, marine mammal expertise, and representation that aligns with the future strategic direction of the Guardians. Agencies agree with these suggestions and consider they could be taken into account in future appointments processes under the existing framework provided by the Act and the Guardians' Terms of Reference.

Te Rūnanga a Rangitāne o Wairau advocated for improved iwi representation in decision-making (including formal roles on the Guardians) and shared governance that blends rangatiratanga, science, and local stewardship. Agencies will continue to seek clarification from Te Rūnanga a Rangitāne o Wairau on their expectations and consider how these can

be addressed, where appropriate, in future processes (e.g. appointments and governance arrangements).

Recommendations

- Retain current membership requirements as set out in the Act.
- Guardians to continue to use co-opting process to engage additional specific expertise and experience as relevant.
- Agencies to ensure future appointment processes consider the merits of nominees who have areas of expertise that align with the Guardians' strategic direction, marine mammal expertise or who provide a youth perspective.

4.1.4.3 How well have the Guardians' operational procedures functioned?

Relevant information

The Guardians operational procedures consist of:

- Terms of Reference protocols
- resourcing and access to timely information
- role clarity
- community engagement and visibility.

The Terms of Reference includes operating protocols for the Guardians (see section 4.1.1.3).

Resourcing consists of fees and allowances paid to members as per the Guardians' Terms of Reference and agency administrative support for meetings and reporting. Agencies are also responsible for providing the Guardians with access to relevant, timely information.

Evaluation

Terms of Reference protocols

Key message: Clearer and improved protocols would improve effectiveness of the Guardians.

Protocols covered below are meeting frequency, reporting, and fees and allowances.¹⁹

The requirement for the Guardians to meet no more than four times a year is considered by submitters (and the Guardians) as inadequate and limiting the Guardians' effectiveness. It makes it difficult for the Guardians to adequately respond to issues and provide proactive advice.

Agencies think clearer protocols for the development of meeting agendas, tracking of meeting actions, development of annual reports and annual work programmes would be useful. The Allen + Clarke report and submitter feedback recommended development of a strategic plan. This was thought to support efficient development of the annual work programme and annual report, if additional resourcing is provided. Agencies agree it would provide focus and help to guide meeting structure and are willing to support the Guardians in developing this. It could be added as an additional requirement to the Guardians' Terms of Reference when next reviewed.

¹⁹ Note: Protocols on membership and appointment process are discussed in section 4.1.4.1.

Resourcing and access to timely information

Key message: Current resourcing and inadequate access to timely information is limiting effectiveness of the Guardians.

The Allen + Clarke report and submitter feedback found current resourcing is limiting effectiveness of the Guardians. The view is that inadequate resourcing means they are unable to meet some of the operational expectations of their Terms of Reference, including the development of an annual work programme and an annual report. Despite attempts, only five annual reports and two annual work programmes have been produced.

The Allen + Clarke report found current resourcing levels, while sufficiently enabling them to meet four times a year, prevented strategic planning, which limited the ability for the Guardians to provide proactive advice.

Findings indicate that on several occasions, the Guardians requested more resource support, including research, from agencies or Ministers. This included a request for a discretionary annual research budget. Requested additional resourcing largely did not materialise. As a result, the Guardians are unable to commission independent scientific research and remain dependent on agency support.

The Allen + Clarke report further found that, although agencies provided some information to the Guardians when requested, this was not always sufficient or provided in a proactive or timely manner. Some research sought was unavailable to agencies, such as detailed information about the status of local fisheries.

Inadequate resourcing and a high level of dependence on the limited research capacity of Agencies is limiting the Guardians' ability to fulfil their advice function in a timely, independent and proactive manner. This could be remedied by facilitating the Guardians to input into relevant agency research and monitoring plans. Agencies see benefit in this and will support it but note that funding decisions and priorities are ultimately made centrally.

The Guardians have requested clarification on available budget and would like to see budget allocation and research priorities linked to a future strategic plan. Allen + Clarke considered development of a strategic plan will provide the opportunity to explore options for improving information access, including identification of gaps.

When the Guardians' Terms of Reference and membership were reviewed in 2021, agencies noted a trade-off: retaining 11 members meant resources were stretched across a larger group, rather than reducing membership and freeing up funding to support other needs, such as more frequent meetings. The Guardians preference was to retain 11 members, despite a comparable group, the Fiordland Marine Guardians, having eight members. Agencies are, however, keen to explore other mechanisms to support the Guardians, such as the development of a strategic plan.

A submitter compared resourcing of the Guardians with the higher level of budget allocated to the Fiordland Marine Guardians. Unlike when the Fiordland (Te Moana o Atawhenua) Marine Management Act 2005 was passed, there was no dedicated budget allocation for the implementation or ongoing management associated with the Act. Costs instead were to come from existing agency baseline funding. While there are some similarities between the statutory functions of the Kaikōura Marine Guardians and the Fiordland Marine Guardians, the latter are wider in scope. Both groups' fees are set according to the Cabinet fees

framework guidance for such bodies²⁰ and the difference in rates reflects a difference in the respective functions of the committees.

The Allen + Clarke report suggested governance training specific to ministerial advisory committees may be beneficial for the Guardians, presumably linked to assisting the Guardians to operate more strategically. Agencies consider that such training for the Chair role would be appropriate given budgeting constraints.

Role clarity

Key message: The roles of the Guardians and Te Korowai need to be clarified, and public visibility of the Guardians needs to improve.

The Allen + Clarke report highlighted confusion about the role of the Guardians versus Te Korowai. They found the distinction (described in section 4.1.1.4) not clearly understood by newer representatives on the Guardians or the broader community.

Some consider Te Korowai to be the execution arm for the Guardians, which has led the Guardians to rely on Te Korowai to consult and communicate with the community. Lack of clarity, awareness, and clear communication about the two groups has resulted in some confusion and misunderstanding about the role of the Guardians and their statutory obligations and limitations, including the fact the Guardians are an advisory body with no decision-making authority.

Te Korowai in their submission acknowledged the timing of appointing the first set of Guardians shortly before the 2016 earthquake meant formal structures between the two groups were not established. Te Korowai recommend development of a strategic management plan and that Te Korowai continue providing the link with community, while the Guardians remain as statutory advisors. The Guardians echo the use of a strategic plan in communicating the distinction between the two groups. Te Rūnanga o Kaikōura also agree on the importance of distinguishing the roles of the Guardians and Te Korowai.

Agencies agree that developing clarity on the role and functions of the two groups would be valuable and will support the Guardians working with Te Korowai to achieve this. Clear messaging around the Guardians' role in a strategic plan and in public communications would alleviate the current misunderstanding amongst stakeholders and the wider public. A Memorandum of Understanding could be an additional tool to ensure the two parties have clarity of roles and responsibilities.

Some submitters thought the Guardians should have more authority beyond being an advisory body or should be advisory to agencies rather than Ministers. Agencies consider their advisory role is appropriate and in line with other statutory bodies such as the Fiordland Marine Guardians or Conservation Boards. Also, the Act already provides for the Guardians to provide advice to Ministers (section 7(1)(a)-(c)) or agencies (section 7(1)(d)). As one submitter noted, the Guardians advisory role doesn't specifically relate to resource management issues. The clear and direct resource management advisory role that exists in legislation for the Fiordland Marine Guardians²¹ is not replicated in the Act. The Guardians can choose to still provide such advice; however, the impact of this advice may be lower or less direct.

²⁰ [Cabinet Office circular CO \(25\) 2: Cabinet Fees Framework for members appointed to bodies in which the Crown has an interest, July 2025](#)

²¹ The Fiordland (Te Moana o Aotawhenua) Marine Management Act 2005 refers to the regional council and the Resource Management Act 1991 in relation to the Fiordland Marine Guardians' advisory role.

The Allen + Clarke report and submitter feedback both concluded insufficient community engagement by the Guardians and low visibility of the Guardians' work. Confusion persists within the community as to the Guardians' role. Some believe all decisions made are reflective of the Guardians' advice. Others are aware of their statutory advisory role and the positive impact they have had on, for example, earthquake recovery or pāua fishery matters.

Mechanisms suggested for improving public visibility include:

- increased presence in, and communications with, the Kaikōura community
- improved information on the Guardians, their function and work programme, and sharing this directly with stakeholders
- Guardians, with support from agencies, to develop a strategic plan setting out role, distinction from Te Korowai, and work programme priorities
- improved resourcing to support community engagement and complete reporting obligations
- prompt publication of meeting minutes and planning documents
- public meetings.

The Guardians support increasing awareness of their role and work. Resourcing was noted as the key constraint limiting community engagement. They feel they have been limited to being purely advisory. The Guardians are comfortable publishing meeting minutes online (with any necessary 'in committee' parts redacted) and support publication of a future strategic plan and work plans once these are developed. Agencies' view is that the Guardians could consider making parts of their meetings public if they saw value in this.

DOC already publishes the Guardians' annual reports on its website and agencies are supportive of publishing meeting minutes and other planning documents. Agencies will consider additional means of improving communications and will assist the Guardians with development of a strategic plan.

Recommendations

- Agencies and the Guardians to work together to develop clearer protocols for the development of meeting agendas, tracking of meeting actions, development of annual reports and annual work programmes.
- Agencies to facilitate prompt publication of meeting minutes and planning documents.
- Guardians to lead the development of a strategic plan for the KMA, with support from Agencies, setting out role, distinction from Te Korowai, and annual work programme (including research) priorities and outcomes sought.
- Agencies and Guardians to work together to improve public communications on the Guardians' role, function and work programme.
- Guardians Chair to undertake governance training specific for ministerial advisory committees.
- Agencies to give the Guardians opportunity to input into research and monitoring plans relevant to the KMA.
- Guardians to consider making their meetings open to the public.

4.1.4.4 How effective has the Guardians' advice function been?

Relevant information

The Guardians' statutory advisory role is described in section 4.1.1.1. How they perform their advice function is further detailed in their Terms of Reference.

Evaluation

Impact of the Guardians' advice

Key message: Advice has been influential on specific issues but is largely reactive.

The Allen + Clarke report and submitter feedback found the Guardians' advice has made an important difference in managing Te Tai o Marokura. This is despite the 2016 earthquake and COVID-19 pandemic certainly having influenced the way the group has operated to date.

Between 2017 and 2023, the Guardians provided advice on the impact of the November 2016 earthquake on the marine environment. Their advice included management, protection and reopening of the pāua fisheries after the earthquake. The Guardians' advice also influenced decisions about Hikurangi Marine Reserve, a blue cod management strategy and Hector's dolphin protection measures.

A key strength of the Guardians' advice is believed to be the bringing together of expertise and interests and strong community and mana whenua voice. The Guardians were seen as having more influence than other advisory bodies because of their statutory role.

Although section 7(2) of the Act allows the Guardians to provide advice on their own initiative, advice provided has been largely reactive to agency priorities and requested by agencies, especially FNZ. The Allen + Clarke report noted discomfort amongst some Guardians because advice requested by FNZ was seen as coming with strong commercial and economic imperatives, whereas the Guardians' mandate related to sustainability more broadly. FNZ notes that sustainable use of fisheries is at the heart of the Fisheries Act.

The Allen + Clarke report and submitter feedback both recommend the Guardians adopt a more proactive approach to advice, informed by development of a strategic plan. Agencies support this, as do the Guardians. As set out in section 4.1.4.3, a strategic plan is likely to more effectively access and allocate resourcing (including for research and monitoring), better enabling the Guardians to fulfil their advisory function in a proactive timely manner. It would also allow the Guardians to take a more strategic and deliberate approach to their role, including incorporating ecosystem-based management principles as suggested by some submitters, and allow more visibility of the outcomes and impacts of their role. During input on this Review, the Guardians noted that as recreational fishing regulations were specifically not included in the Review (in accordance with section 8 of the Act), they felt this was an area they would want to have particular focus on when developing a strategic plan.

The Guardians have also requested better visibility of agency-led activities or consultations relevant to Te Tai o Marokura. This would allow them, and the wider community, to be better prepared to input.

Advice process

Key message: The advice process has not worked optimally.

The Allen + Clarke report found the advice process has not worked as well as it could have. It found Guardian representatives interviewed were not clear on how advice provided to

Ministers was treated. There was also a perception that Agencies have reinterpreted Guardians' advice or not always shared the advice with Ministers. Limited evidence was provided of times when advice should have been sought from the Guardians but was not. While there is no requirement in the Act for advice to be sought from the Guardians, in this case the Guardians deemed it was important and urgently requested the Ministers involved remedy the issue.

The Guardians agree with the findings in the Allen + Clarke report. Additionally, they raised the need for greater agency information support, including information regarding agencies' treatment of advice.

The recommendations set out in section 4.1.4.3 would also help improve the advice process and effectiveness of the Guardians.

Agencies have consistently tried to accurately represent the Guardians' advice to Ministers. There is an opportunity, however, for agencies to build greater trust with the Guardians and improve the advice process. This can be achieved by clearly showing the Guardians how their advice to Ministers has been used, and by keeping any agency advice separate. Wherever possible, relevant agency advice should be discussed with the Guardians, and the Guardians should be informed of Ministerial decisions. Agencies are required to act in good faith in line with the agreed Guardians' Terms of Reference.

Recommendations

- Guardians to lead the development of a strategic plan, with support from agencies (see also section 4.1.4.3).
- Agencies to improve supply of information to the Guardians regarding agency-led activities, including planning processes or consultations, relevant to the KMA.
- Agencies to adhere to the Guardians' Terms of Reference and operate a 'no surprises' approach to the sharing of information, including making it clearer to the Guardians how their advice has been used. Relevant agency advice should, wherever possible, be discussed with the Guardians and the Guardians should be advised of Ministerial decisions.

4.1.5 Conclusion

The evaluation indicates that the Guardians are functioning as intended in their core design, but their overall effectiveness is constrained by how they operate in practice. Membership and representation largely reflect the requirements of the Act, and the appointment process has improved, although it is not well understood and can affect trust and perceived legitimacy. Operationally, clear limitations remain – particularly restricted meeting frequency, limited resourcing, and insufficient access to timely information – which collectively reduce the Guardians' ability to function strategically and proactively.

The Guardians' advice function has had demonstrable influence, contributing to important management decisions and providing a strong local perspective. However, this influence is largely reactive and dependent on agency processes, and the advice process itself has not always operated optimally, with limited transparency around how advice is used. In addition, role clarity, community visibility, and engagement are ongoing challenges, reducing the Guardians' ability to fulfil their integrative and leadership role within the system.

Overall, the section shows that while the Guardians are a valuable and credible advisory body, their effectiveness is currently moderate rather than high, and is constrained by resourcing, processes, and the lack of a proactive, strategic approach. Addressing these

constraints through implementation of the recommendations outlined above presents a clear opportunity to strengthen their contribution to integrated marine management in Te Tai o Marokura.

4.2. Hikurangi Marine Reserve

4.2.1 Background

4.2.1.1 The marine reserve

Hikurangi Marine Reserve (the **marine reserve**) is located approximately 12 km south of the Kaikōura Peninsula (Figure 3). The marine reserve covers 1.89 km of coastline²² and extends approximately 23 km offshore over part of the Kaikōura Canyon, protecting a total area of 10,395 ha and making it the deepest and second largest mainland marine reserve in New Zealand.



Figure 3: Hikurangi Marine Reserve.

The marine reserve is home to diverse coastal and deepwater ecosystems including intertidal and subtidal reefs (cobble, boulder and bedrock), coastal sand and mud, and deepwater canyon habitats. The irregularly shaped offshore part of the marine reserve

²² The marine reserve excludes two small areas along its landward boundary where access slipways exist.

includes some of the Kaikōura Canyon and Conway Trough, which are important feeding areas for the various seabirds, seals, dolphins and whales that Kaikōura is renowned for.

The establishment of the marine reserve was in direct response to a proposal in the Strategy. The marine reserve was one of the Strategy's solutions to fulfil the objective "*that our marine treasures are protected and future generations can continue to experience the wonders that we have today*". Specifically, the marine reserve was proposed with the goal to "*protect the most biologically rich and special areas of the Kaikōura coast and also representative slices of typical coast in their natural state*".²³ The Strategy's reasoning for the location of the marine reserve was that it contains nearshore habitats typical of the wider coastline, has high domestic and international importance due to the canyon's biodiversity and landform, and that the canyon is a core area of sperm whale habitat.²⁴

The 2013 Regulatory Impact Statement then recommended the establishment of the marine reserve as part of a package of measures to be established by special legislation. It also described that the marine reserve would make a "*significant contribution to the percentage of marine and coastal area that is protected throughout New Zealand*" as marine reserves, but that the irregular shape and high edge to size ratio could reduce the ecological benefits and its enforceability.

The marine reserve was subsequently established in 2014 with the passing of the Act. Section 9 of the Act declared the marine reserve, and section 10 stated it is to be treated as if it were declared under the Marine Reserves Act 1971. Within the marine reserve, activities that involve taking or disturbance of marine life are prohibited, to enable the area to be 'preserved as far as possible in [its] natural state'.²⁵ Other activities that are prohibited include discharge of pollutants, souvenir collection, placement of structures and fishing. No additional restrictions or conditions were imposed with the marine reserve's declaration.

4.2.1.2 Effects of the 2016 earthquake

The 2016 earthquake significantly affected the marine reserve, particularly the Kaikōura Canyon. The earthquake initiated a large-scale submarine landslide and a complete canyon flushing event, displacing approximately 850 million tonnes of sediment along the Hikurangi Channel.^{26,27} This process buried benthic habitats, caused extensive mortality among deep-sea organisms, and altered sediment composition and water chemistry. Subsequent monitoring has shown that the ecosystem demonstrates notable resilience.²⁸

The earthquake also caused coastal uplift of 0.41 m (± 0.07 m SE) in the marine reserve, which was less than other parts of the coastline. The uplift caused displacement of the intertidal zone in a seaward direction, as previous intertidal habitat was lifted above mean high-water springs, which shifted seaward an average of 8.25 m (± 1.01 m SE), creating approximately 2.6 ha of new terrestrial land. The new habitat provided new space for some species, such as New Zealand fur seals, and has generally improved the accessibility of the marine reserve from land, particularly at high tide.²⁹

²³ Chapter 4, Te Korowai o Te Tai ō Marokura – Kaikōura Coastal Marine Guardians, 2012. [Kaikōura Marine Strategy – Sustaining our sea](#) 2012. 143 p.

²⁴ *Ibid*, section 4.4.4, pages 66-68.

²⁵ Marine Reserves Act 1971 purpose, section 3.

²⁶ The Kaikōura Canyon joins the southernmost reach of Hikurangi Channel, one of the longest continental margin sediment dispersal channels on Earth at over 1,500 km long.

²⁷ Mountjoy, J., Howarth, J., Orpin, A., Barnes, P., Bowden, D., Rowden, A., Schimel, A., Holden, C., Horgan, H., Nodder, S., Patton, J., Lamarche, G., Gerstenberger, M., Micallef, A., Pallentin, A., Kane, T., 2018. Earthquakes drive large-scale submarine canyon development and sediment supply to deep-ocean basins. *Science Advances* 4(3):8, [doi:10.1126/sciadv.aar3748](#).

²⁸ Bigham, K., Rowden, A., Bowden, D., Leduc, D., Pallentin, A., Chin, C., Mountjoy, J., Nodder, S., Orpin, A., 2023. Deep-sea benthic megafauna hotspot shows indication of resilience to impact from massive turbidity flow. *Frontiers in Marine Science*, 10, [doi:10.3389/fmars.2023.1180334](#).

²⁹ Falconer, T., Gerrity, S., Schiel, D., 2023. Hikurangi Marine Reserve – Intertidal Community Monitoring 2019-2023. A report for the Department of Conservation. 32 p.

The significant landslides and infrastructure damage caused by the earthquake also impacted heavily on public and visitor access along the coast, including to the marine reserve. This was also true for DOC's work in and around the marine reserve, which was significantly curtailed for approximately a year following the earthquake.

4.2.2 Evaluation approach

Further to the approach set out in section 3, evaluation of the operation and effectiveness of the marine reserve was informed by:

- feedback received from public consultation
- feedback from Te Rūnanga o Kaikōura and the Guardians
- research, monitoring and management information held by DOC and others.

Section 4.2.3 presents a summary of feedback from public consultation. Feedback from the public was obtained on:

- the effectiveness of the marine reserve in protecting marine life and habitats
- successes and challenges in relation to the marine reserve
- suggestions for changes or improvements to the marine reserve.

Section 4.2.4 presents DOC's evaluation, which sought to assess the following questions:

- How has the marine reserve been resourced and planned for?
- How have Treaty partners and stakeholders been involved and engaged?
- How have education, compliance monitoring and enforcement activities been undertaken?
- What is the level of compliance with the marine reserve rules?
- How has the marine reserve contributed to the Marine Reserves Act's purpose of 'scientific study of marine life'?
- How has the marine reserve protected the representative and most biologically rich habitats of the KMA?
- How have taonga and other key species responded to marine reserve protection?

4.2.3 Summary of feedback received from public consultation

49 of the total 54 submitters responded in relation to the marine reserve.

39 submitters responded to the question, 'How effective do you think Hikurangi Marine Reserve has been in protecting marine life and habitats?'. Figure 4 shows that 69% of the 39 respondents thought the marine reserve has been adequate or above at protecting marine life and habitats.

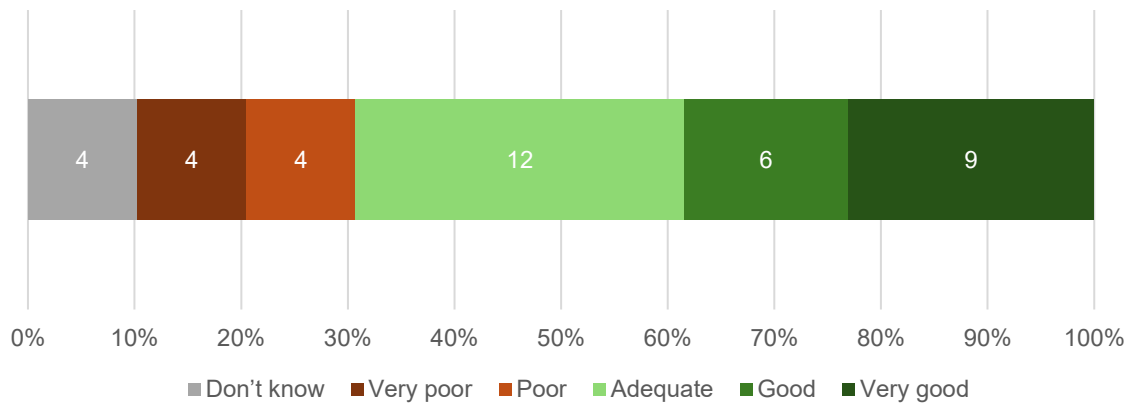


Figure 4: Responses from 39 online survey submitters to the question, 'How effective do you think Hikurangi Marine Reserve has been in protecting marine life and habitats?'.

Feedback from submitters in response to the three survey questions has been summarised into four themes:

- Acknowledgements of positive marine reserve outcomes
- Concerns regarding lack of demonstrated benefits or recovery
- Concerns and proposals to change the shape of the marine reserve
- Calls to strengthen management actions

4.2.3.1 Acknowledgements of positive marine reserve outcomes

29% (14) of submitters noted positive outcomes of the marine reserve. Two of these submitters mentioned benefits for whale populations from the protection, suggesting whale numbers had increased or that the marine reserve protected a high proportion (74%) of sperm whale summer habitat (although only 27% of their preferred winter habitat). Many of the submitters described general benefits of the marine reserve, such as it provides "protection" from harvesting and other human impacts, supports "overall health" of the marine environment, allows "regeneration", for marine life to "flourish" and have a "refuge", and supports a more "resilient ocean".

Seven submitters commented on the recovery or increase in abundance of specific species, mostly blue cod and other reef fish, rock lobster and pāua.

One submitter mentioned the benefit of the marine reserve as a tourist attraction, two noted the scientific study and research benefits, while another suggested there was greater educational opportunities because there is a marine reserve ranger employed.

4.2.3.2 Concerns regarding lack of demonstrated benefits or recovery

In contrast to the submission points above about benefits, 14% (7) of submitters noted a lack of demonstrated benefits from the marine reserve, with many citing its design and lack of enforcement as the drivers (see sections 4.2.3.3 - 4.2.3.4).

Submitters stated that the monitoring data available for key species do not show the expected signs of recovery, and where the data might suggest higher abundance inside compared to outside the marine reserve, this is likely due to this pattern existing regardless of marine reserve protection or that the difference is not statistically significant. Several submitters cited research from other marine reserves that found key species show signs of recovery on average approximately five years after protection is established.

4.2.3.3 Concerns and proposals to change the shape of the marine reserve

51% (25) of submitters raised matters relating to the shape or design of the marine reserve.

PauaMAC3 noted in their submission that changes to boundaries of the marine reserve may affect commercial pāua fishing operations and request early and direct consultation on any changes.

Five submitters simply called for the marine reserve to be made larger.

Four submitters said the shape should be changed or simplified to enable more effective enforcement of the marine reserve's rules or to create more readily identifiable boundaries for the public.

Many submitters raised concerns regarding the design and shape of the marine reserve. The submitters described the design as “complex” and “irregular” and that it contradicts “international best practice” and New Zealand research. One submitter, a marine science professor at Otago University, noted they previously used Hikurangi Marine Reserve as an example of how not to design a marine reserve given its design “violates several of the key principles”. Submitters described concerns of “edge-effects” with such a narrow coastal section of the marine reserve and suggest this would negate any potential benefit, particularly for mobile species. In addition, some submitters raised concerns that with such a narrow coastal section and a high perimeter to area ratio, ‘fish-the line’ behaviour of fishers further reduces the effective area of the marine reserve. Some suggested the results of key species monitoring that has been undertaken indicates these effects are real. Many submitters also raised that key habitat types were missing from the marine reserve, particularly canyon ridge, wall and rim habitats. Often submitters related the lack of protection of these habitats to the missed opportunity to protect the associated benthic communities but also important habitats for sperm whales. Research was cited demonstrating that the marine reserve overlaps with 74% of habitat considered of high suitability for the sperm whales’ summer distribution, but just 27% of their winter distribution.

Most submitters raising concerns about the design of the marine reserve also made suggestions for improvements to the design, including:

- Follow best practice guidelines
- Incorporate unrepresented canyon habitats (wall, ridge/gully, rim)
- Minimise the perimeter-to-area ratio, or create a “large and simple shape”
- Extend the boundaries to be a minimum of 5 km across at all points
- Include the Conway Ridge and Conway Trough in the marine reserve
- Increase the coastal extent
- Add a buffer zone around the marine reserve
- Create ‘pockets’ or specified areas within an expanded marine reserve area where fishing would be allowed

Some submitters suggested additional benefits that would be gained from changing the shape of the marine reserve, including:

- helping New Zealand to meet its marine protection goals
- reducing the risk of sperm whale entanglement in gillnet and longline fisheries
- increasing the potential for spillover effects

- mitigating species loss in a biodiversity and climate crisis
- countering other human-induced threats.

Several submitters were critical that the boundary design prioritised minimising impacts on commercial fishers over achieving biodiversity or conservation outcomes.

4.2.3.4 Calls to strengthen management actions

49% (24) of submitters raised perceived inadequacies, or suggested improvements, to management of the marine reserve.

Seventeen submitters believe that the marine reserve's rules are not being adequately enforced. Some said there is inadequate surveillance effort, and that this needs to be increased, particularly in all areas of the marine reserve rather than just the coastal portion, and at all times of the year rather than focussing on the recreational pāua fishing seasons. Submitters said that the limited enforcement is leading to unacceptable levels of poaching. One submitter said they have witnessed boats using a burley trail through the marine reserve in attempts to lure fish outside its boundaries. One submitter suggested that one marine reserve ranger is not enough. Some also called for harsher penalties and that infringements be issued more readily. One submitter called for better signage along State Highway 1 to increase awareness of the marine reserve.

Nine submitters emphasised the need for the continuation or expansion of monitoring and research efforts in the marine reserve. Several of these noted a lack of research and monitoring in the offshore part of the marine reserve, while others noted there should be greater effort spent on long-term monitoring studies (particularly, before-after-control-impact studies) on key coastal species, to better inform understanding of the marine reserve's effectiveness. Other suggestions for monitoring and research were a focus on benthic invertebrate megafauna, what effects the marine reserve has on marine mammals, and a focus on habitat changes, including silt flows in the canyon. One submitter raised the potential for kina barrens to form in the area in the future and that a better study design could be employed for monitoring kina. The submission of Te Korowai called for the development of a cross-ecosystem "strategic research management system" to co-ordinate across the various research and monitoring activities, also suggesting this could attract investment in marine science and technology development in the area.

Two submitters stated that there has been inadequate communication of monitoring and research results with the public, which limits the public's understanding of the marine reserve and their ability to comment on its effectiveness. Other submitters encouraged greater advocacy actions about the marine reserve.

A few submitters made suggestions for changing the rules of the marine reserve, with one suggesting allowing recreational tuna fishing (as this would have "no effect on the whales") and one suggesting allowing the harvest of kina and starfish due to them being "too abundant".

4.2.4 Operation and effectiveness of the marine reserve

This section summarises and evaluates the operation of the marine reserve, focusing on resourcing and management (section 4.2.4.1), Treaty Partner and stakeholder engagement (section 4.2.4.2), and education and compliance activities (section 4.2.4.3). It then assesses the effectiveness of the marine reserve, with emphasis on compliance levels (section 4.2.4.4) and how the purposes for which it was established are being achieved (sections 4.2.4.5 and 4.2.4.6). The review covers the period from enactment to late 2025, where possible.

4.2.4.1 How has the marine reserve been resourced and managed?

Relevant information

2014 to 2018: establishment and early management

DOC is responsible for administering the Marine Reserves Act 1971 and therefore the marine reserve. The Marine Reserves Act provides mechanisms to guide planning for marine reserve management. Section 8 of the Marine Reserves Act allows the development of conservation management plans for marine reserves; however, this mechanism has only been used a few times throughout New Zealand, and not for the marine reserve. More commonly, marine reserves may have a non-statutory operational plan, but no such plan was developed. Section 7 of the Marine Reserves Act requires that conservation management strategies (CMS) establish objectives for marine reserve management. The marine reserve falls within the area of the Nelson/Marlborough CMS, but because the most recent CMS for this area was published in 1996 – before the marine reserve was established – it contains no such objectives. As a result, no dedicated statutory planning document exists for the marine reserve, as planning effort was expected to be addressed through a future review of the CMS, which did not occur due to resourcing constraints.

Despite the absence of a documented plan with objectives or actions, key implementation work occurred after the marine reserve's establishment in 2014. This included installing signs and land-based boundary markers, distributing public information about the marine reserve and its boundaries, undertaking compliance patrols and conducting baseline biological monitoring. These activities were delivered using existing staff, including personnel from outside the region. It is not clear whether additional funding was provided, or existing baseline funding was reallocated to management in this initial period.

When the marine reserve was established, DOC did not have national performance measures or reporting requirements for marine reserves, and all related work was planned and budgeted locally rather than centrally. As a result, activities within the marine reserve were prioritised alongside other district work. No centralised system existed for tracking management actions, making it difficult to build a clear picture of how the marine reserve was managed during these initial years. The 2016 Kaikōura earthquakes further disrupted DOC's ability to carry out marine reserve management actions due to limited access along State Highway 1 and the reallocation of staff to post-earthquake response and rebuild activities.

Late 2018 to December 2025: marine reserve budget, system and capacity transformation

Between late 2018 and 2022, DOC underwent significant changes in systems, monitoring/reporting processes, and operational capacity regarding marine reserves. Although it took some time to flow through, these changes had a direct impact on how work was planned for the marine reserve, what work was able to be undertaken and how it was recorded and reported.

The key driver of this transformation was additional funding provided through the Vote Conservation Budget 2018 Biodiversity Contingency Drawdown. This allocation included \$76 million over four years as a contingency to support biodiversity initiatives across land, freshwater, and marine ecosystems.³⁰ Of this, DOC allocated \$7.36 million over four years for personnel and operational costs to deliver enhanced marine reserve management with a strong focus on compliance and biodiversity monitoring. This funding came with reporting

³⁰ <https://www.doc.govt.nz/news/issues/budget-2018/docs-budget-2018-explained/>

requirements, which meant DOC needed to develop systems and processes to capture the required data. Across New Zealand, over four years, this funding was to:

- increase compliance and monitoring effort and reporting across at least 18 priority marine reserves so that they were managed to the full extent possible, with 26 marine reserves to be partially managed
- employ an additional 12.5 full time equivalent Marine Reserve Ranger positions, supported by a National Compliance Advisor and Marine Technical Advisor.

Over this time DOC also:

- started to centrally fund, prioritise, support, and record monitoring and compliance work in marine reserves (rather than on a local basis)
- developed and began implementing a national system for long-term, consistent monitoring and reporting of marine reserves (the Marine Monitoring and Reporting Framework)
- developed and implemented a Marine Reserve Ranger app for in-field recording and reporting of ranger activities
- accessed additional funding via the International Visitor Levy, which increased compliance capacity and improved systems, processes and training.

For the marine reserve, these system and capability changes translated into tangible management impacts from the 2021/2022 Financial Year:

- In 2019, the marine reserve was identified tenth in the list of 18 priority marine reserves to be 'fully managed'³¹ in terms of compliance and biodiversity monitoring.
- A dedicated Marine Reserve Ranger was employed from March 2022 (their time originally split evenly between Hikurangi Marine Reserve and Long Island - Kokomohua Marine Reserve in the Marlborough Sounds).³²
- From this point, the Marine Reserve Ranger had improved support, tools and training to undertake and report monthly on their work, and to develop an annual monitoring and compliance plan to guide management activities.

During this period, work began on developing an annual compliance plan and a longer-term monitoring plan for the marine reserve; however, neither plan was finalised.

During the COVID-19 Level 4 restrictions (26 March–27 April 2020), DOC suspended all non-essential field operations, including work at the marine reserve, while offices closed. As restrictions eased to Level 3, DOC resumed limited fieldwork under strict health guidelines. A second nationwide lockdown in mid- to late-August 2021, triggered by the Delta outbreak, again halted travel and on-site work.

COVID-19 also significantly affected the \$7.36 million 2018 budget funding. Although allocations advanced beyond the second-year level, they never reached the full amount originally committed. COVID-19 affected funding and DOC's workforce needed to be

³¹ Additional funding was directed at increasing existing compliance and monitoring effort at these 18 marine reserves, by increasing the number of Marine Reserve Rangers and an additional National Compliance Advisor and Marine Technical Advisor.

³² In April 2025, the Marine Reserve Ranger role was reallocated to a 50/50 split between the marine reserve and other local marine and recreation work, aligning the role more closely with how ranger time was already being deployed in Kaikōura. This addressed the inefficiencies associated with regular travel to the Marlborough Sounds and, while overall ranger capacity did not increase, should enable more timely responses to priority issues in the marine reserve.

managed proactively and strategically. Delivery of the programme was affected by reduced capacity and funding and a delay in recruiting the Marine Reserve Ranger at Kaikōura.

Historically, funding associated with management of the marine reserve has not been ringfenced, but now some funding is tagged to support the marine reserve. Funding for marine reserve monitoring is available through a national pool and is allocated to prioritised monitoring work to address any shortfall in district funding.

Following COVID-19, and despite improvements in systems and processes, formal business planning for the marine reserve remained limited, with annual work programmes largely rolling over from previous years. More recently, the Marine Reserve Ranger's work has been planned in structured 90-day cycles, informed by national monitoring and compliance priorities, district priorities, and an annual planning meeting with the Marine Monitoring and Reporting Framework lead. The planned work is recorded at both national and local levels using bespoke spreadsheets, with completion tracked at a high level.

Evaluation

Key message: Management of the marine reserve is now broadly appropriate and effective, but the lack of a reserve-specific plan limits clarity, direction, and consistency over time.

Overall, the marine reserve has been operationally managed in a manner that reflects the capabilities, systems, and expectations in place at different points in time, rather than being guided by a clear, reserve-specific vision or plan. For much of its early life, management was constrained not by lack of intent, but by the absence of planning instruments, national performance frameworks, and dedicated resourcing. This resulted in delivery that was pragmatic and reactive rather than strategic.

At the time of enactment and the establishment of the marine reserve, there was no additional funding allocated to the local DOC office for implementation and management of the reserve. This meant that, between 2014 and 2018, the marine reserve was effectively managed as an 'add-on' to wider district activities. While key establishment tasks were delivered, the lack of an operational or strategic framework meant there was no clear articulation of priorities, expected effort, or success measures. This made management vulnerable to competing demands, staff turnover, and external shocks. The absence of systematic recording and reporting during this period has also limited DOC's ability to retrospectively assess whether management effort was proportionate to need or risk.

The introduction of nationally coordinated marine reserve funding, systems, and performance expectations from late 2018 marked a turning point. These reforms addressed longstanding structural weaknesses by centralising prioritisation, clarifying expectations, and investing in specialist capability. However, the benefits of this transformation reached the marine reserve slowly and were diluted by the combined impacts of COVID-19, funding reprioritisation, and recruitment constraints. As a result, there was a prolonged lag between national system reform and tangible local delivery.

By approximately 2022, these investments had materially improved management effectiveness. Dedicated ranger capacity, better tools, clearer reporting requirements, and structured planning cycles represent a significant maturation of operational practice compared with the early years. The shift to nationally aligned compliance and monitoring approaches has increased consistency and reduced reliance on individual knowledge or local workarounds.

Operational planning for the marine reserve has strengthened in recent times. The introduction of structured 90-day cycles, clearer alignment with national and district priorities, and targeted operational funding are all material improvements. However, most funding is still embedded within district baselines rather than being fully 'ring-fenced'. In addition, planned work continues to be recorded using bespoke spreadsheets that only track completion at a high level. This limits visibility of the scale and intensity of effort being delivered.

The absence of a reserve-specific monitoring and compliance plan is not, in itself, a failure, particularly given DOC's transition to BioInvest Outcome Plans.³³ The marine reserve has now been confirmed for 'full delivery' through BioInvest and is reflected in forward five-year planning, which provides greater confidence that national priorities will be resourced and advanced locally. However, there remains a degree of uncertainty in how these outcome frameworks will consistently translate into day-to-day operational delivery at the marine reserve level. Until this linkage is fully embedded, there is still a risk that on-the-ground activity may default to the status quo, rather than being deliberately shaped around national priorities alongside local pressures, opportunities, and relationships.

DOC's current level of engagement with Te Rūnanga and the Guardians is limited, and improved forward planning would provide opportunities to strengthen these relationships. The lack of visible, shared planning makes it harder to have transparent conversations about priorities, constraints, and change, even where relationships are constructive.

Recommendations

- DOC to formalise structured, early, and transparent engagement with Te Rūnanga o Kaikōura and the Guardians in both operational planning and ongoing annual priority-setting and strategic discussions.
- DOC to develop and implement a plan that describes and tracks the operational management of the marine reserve, and includes consideration of priorities identified by Te Rūnanga o Kaikōura and the Guardians.
- DOC to maintain dedicated and continuous Marine Reserve Ranger capacity and associated operational funding and align with delivery of the operational management plan.

4.2.4.2 How have Te Rūnanga o Kaikōura and the Guardians been involved and engaged?

Relevant information

As the responsible Crown agency, DOC is required to give effect to the principles of the Treaty of Waitangi³⁴ in its administration of the marine reserve. As described in section 2.2, the Act and current management arrangements for the KMA came about from a Te Rūnanga o Kaikōura-led community process which, started in 2005 and eventually produced the Kaikōura Marine Strategy in 2012. Since then, Te Rūnanga o Kaikōura have primarily been engaged and involved in the management of the KMA and therefore the marine reserve, as well as TRONT to a lesser extent. DOC and Te Rūnanga o Kaikōura hold regular hui to discuss local operational matters and management of the marine reserve is discussed at

³³ DOC is transitioning to BioInvest, a new national approach to prioritising and planning biodiversity work. Under this framework, BioInvest Outcome Plans will increasingly set monitoring and management priorities, and may remove the need for separate, site-specific monitoring and compliance plans.

³⁴ Section 4 of the Conservation Act requires that Act be interpreted and administered as to give effect to the principles of the Treaty of Waitangi. This also applies to Acts in the First Schedule (which includes the Marine Reserves Act 1971), as confirmed in the Whales case - *Ngai Tahu Māori Trust Board v Director-General of Conservation* [1995] 3 NZLR 533.

these on an 'as needed' basis. The appointment of a dedicated Marine Reserve Ranger in 2021 has enabled better communication and engagement with Te Rūnanga o Kaikōura.

The Guardians have a statutory role to advise (Ministers and persons exercising statutory powers and performing statutory functions) on any biosecurity, conservation, or fisheries matter related to the KMA, and therefore have a direct role with the marine reserve. As part of regularly attending their meetings, DOC has provided the Guardians with updates, including intentions or outcomes of monitoring activities and surveillance actions including any issues of non-compliance observed. Two work planning documents the Guardians have developed³⁵ include an intention to be actively involved in the management of the marine reserve. Actions listed are:

- advice to DOC on management of the marine reserve
- 'encourage timely collection and analysis of data on the marine reserve and adjacent areas' including biophysical and sociocultural trend monitoring and ecological surveying of the nearshore and canyon habitats
- understand the marine reserve's effectiveness and the 'pros and cons of changing boundaries or establishing complementary measures'.

As with Te Rūnanga o Kaikōura, DOC's ability to communicate and engage with the Guardians about the marine reserve was enhanced with the appointment of staff dedicated to its management from 2021 onwards. Minutes from the Guardian's quarterly meetings show that since at least 2021, there have been reasonably regular updates to the Guardians about any relevant matters relating to the marine reserve.

Evaluation

Key message: Regular engagement with Te Rūnanga o Kaikōura and the Guardians has improved, but greater involvement in forward planning is needed to strengthen transparency and partnership.

From the information available, it appears there has been semi-regular communication and engagement between DOC and both Te Rūnanga o Kaikōura and the Guardians, particularly in the last five years. This more regular communication should be maintained, using the regular hui DOC attends with both Te Rūnanga o Kaikōura and the Guardians as a means of ensuring both parties are well-informed of any relevant matters relating to the marine reserve.

Efforts to involve either party in DOC's forward planning for the marine reserve appear to have been more limited, however. Seeking input from Te Rūnanga o Kaikōura and the Guardians into DOC's annual or multi-year planning activities would enable greater connection and transparency for these partners and the wider community in relation to the work DOC undertakes in the marine reserve.

Recommendations

- DOC to continue providing regular updates about the marine reserve at scheduled Te Rūnanga o Kaikōura and Guardians hui.
- As per section 4.2.4.1, DOC to formalise structured, early, and transparent engagement with Te Rūnanga o Kaikōura and the Guardians in both operational planning and ongoing annual priority-setting and strategic discussions.

³⁵ Kaikōura Marine Guardians Work Programme to 30 June 2024 and Kaikōura Marine Guardians Action Plan 2017 to 2024.

4.2.4.3 How have education, compliance monitoring and enforcement activities been undertaken?

DOC's education and compliance work at the marine reserve is closely linked. Education activities often reinforce compliance messages, while compliance actions frequently involve explaining marine reserve rules. DOC often works with other agencies and groups to support education, compliance and enforcement activities. Effort across these activities is summarised below, presented in two periods reflecting significant changes in approach.

Relevant information

2014–2021: early implementation with limited resourcing and reporting

Public information about the then proposed Hikurangi marine reserve was released during the Kaikōura (Te Tai o Marokura) Marine Management Bill process in March 2014. In July 2014, DOC informed commercial fishing stakeholders that the Act was about to take effect, highlighted the marine reserve's ecological significance and that all fishing and harvesting within it would be prohibited.

Immediately following establishment, DOC undertook a programme of education and advocacy activities, including media releases, distribution of brochures to local dive and fishing outlets, preparation and installation of signage at boat ramps, and public messaging confirming joint enforcement by DOC and MPI. Actions were formalised when DOC developed a communications plan in early 2015 setting out a broad programme of education and advocacy actions, with an explicit emphasis on education over enforcement during the first two to three years.

Between 2014 and 2021, DOC district business plans scheduled combined education and compliance activities and hours (

Table 2). While planned hours declined over time, there is no reliable record of actual delivery, as recording of completed work was not required. Available evidence indicates that some key actions were delivered, including signage installation, ranger patrols, and brochure distribution, but documentation of the scale, frequency, and consistency of delivery is limited.

During this period, compliance and education activity was modest and often opportunistic, relying on existing DOC staff. Patrols were infrequent and often combined with other duties, such as marine mammal monitoring. MPI undertook some on-water patrols. In terms of enforcement, DOC issued a small number of warning letters for early offences. It is unclear what enforcement actions were undertaken by MPI.

The 2016 Kaikōura earthquakes and COVID-19 restrictions further constrained education, compliance and enforcement efforts.

Table 2: DOC Business Planning and Reporting System records of the work planned from 2014/2015 to 2020/2021 financial years for Hikurangi Marine Reserve – allocation of planned time between education/advocacy and compliance/law enforcement tasks was not specified.³⁶

Financial Year ³⁷	Planned Hours	Notes
2014/2015	0	Marine reserve established after business planning for this financial year
2015/2016	166	Allocation of hours across the year was not specified
2016/2017	95	Allocation of hours across the year was not specified
2017/2018	95	Allocation of hours across the year was not specified
2018/2019	70	Allocation of hours across the year was not specified
2019/2020	55	Planned hours between November 2019 and February 2020
2020/2021	40	Hours planned to be distributed evenly throughout the year

Late 2021 to December 2025: strengthened education and compliance effort, and reporting

From late 2021, DOC significantly strengthened education and compliance effort at the marine reserve, supported by additional funding, national systems, and improved reporting. A casual ranger was appointed in October 2021 ahead of the reopening of the seasonal recreational pāua fishery,³⁸ followed by the appointment of a permanent Kaikōura-based Marine Reserve Ranger in March 2022. The work of the casual ranger and Marine Reserve Ranger was supported by experienced DOC Rangers and Warranted Officers from Kaikōura as well as elsewhere in the region and from adjacent regions, and by the Programme Lead Marine Reserve role.

The effort undertaken within the marine reserve by DOC Rangers and Warranted Officers from October 2021 to December 2025 is shown in Table 3, Table 4, and Table 5. While methodologies and reporting approaches differed over time, the figures are broadly comparable.

Over this period, DOC recorded 221 shore and boat patrol days, totalling approximately 957 hours and almost 2,000 public interactions. More than half of these interactions occurred in January 2021, coinciding with the re-opening of the recreational pāua fishery after five years of closure and the resulting spike in activity in the area. Patrol effort peaked in 2023, and across these years intentionally targeted high-risk holiday periods and the recreational pāua fishery open season. Patrols combined education, compliance monitoring, and enforcement activities, making it challenging to robustly quantify time spent on each. Over this time DOC mostly maintained a clear record of the work undertaken and the outcomes achieved. During this period, DOC began using drone surveillance for compliance work.

³⁶ Some patrol time within Hikurangi Marine Reserve was allocated to marine mammal concession monitoring and related education/compliance tasks, as these activities occur in the same area.

³⁷ Financial Year – 1 July to 30 June.

³⁸ The recreational fishery for pāua was closed for five years following the November 2016 earthquake; reopening on 1 December 2021 under more restrictive rules and for a three-month period. The reopening generated exceptionally high public demand, requiring DOC to rapidly deploy additional funding and personnel to manage the situation as effectively as possible.

Education and advocacy messaging focused on reinforcing the no-take rules and preventing illegal harvesting. Activities included media releases ahead of seasonal recreational pāua fishery openings, updates to online resources (including interactive maps and the MarineMate app), distribution of brochures and other materials, installation of additional signage at high-risk access points, and participation in community events.

Complementary education also took place outside the marine reserve. For example, at South Bay – a key boat-launching site – DOC staff completed 32 patrol days between October 2021 and June 2022, engaging with more than 1,300 people before they entered the marine environment.

Table 3: Number of days per month spent by DOC Rangers on patrol within Hikurangi Marine Reserve between October 2021 and December 2025 ('-' indicates no records).

Year	January	February	March	April	May	June	July	August	September	October	November	December	Sub-total
2021	-	-	-	-	-	-	-	-	-	2	2	0	4
2022	8	8	0	5	8	3	-	-	-	-	-	2	34
2023	9	3	2	19	19	7	2	2	4	5	3	4	79
2024	9	1	1	10	19	12	4	0	0	0	1	3	60
2025	12	6	2	2	0	0	11	4	4	0	2	1	44
Total													221

Table 4: Number of decimal hours per month spent by DOC Rangers on patrol within Hikurangi Marine Reserve between October 2021 and December 2025 ('-' indicates no records).

Year	January	February	March	April	May	June	July	August	September	October	November	December	Sub-total
2021	-	-	-	-	-	-	-	-	-	4.2	4.7	0	8.8
2022	55.3	30.4	0	16.3	15.9	6.1	-	-	-	-	-	6.3	130.1
2023	31.5	5.3	8.5	157.0	175.0	28.0	7.5	3.8	11.5	12.5	6.3	10.3	457.0
2024	51.8	9.0	3.5	58.5	71.5	42.0	10.0	0	0	0	1.5	8.0	255.8
2025	16.8	15.3	6.0	4.0	0	0	17	11	24	0	5	6	105.0
Total													956.7

Table 5: Number of public interactions³⁹ per month by DOC Rangers on patrol within Hikurangi Marine Reserve between October 2021 and December 2025 ('-' indicates no records).

Year	January	February	March	April	May	June	July	August	September	October	November	December	Sub-total
2021	-	-	-	-	-	-	-	-	-	0	6	0	6
2022	1,045	162	0	157	91	36	-	-	-	-	-	0	1,491
2023	14	0	0	218	90	58	5	5	3	0	1	5	399
2024	9	0	0	65	9	6	0	0	0	0	0	4	93
2025	3	0	0	0	-	-	-	-	-	-	-	-	3
Total													1,992

External contributions and inter-agency collaboration

MPI Fisheries Officers have maintained a consistent compliance presence along the southern Kaikōura coast since 2014, including within the marine reserve. This includes regular shore-based patrols,⁴⁰ monthly vessel patrols (about 12 hours per year within the marine reserve), and frequent public engagement explaining local fishing rules and the marine reserve's no-take status (estimated at ~600 engagements per year).

While historical records are limited, information from January 2022 to December 2025 shows ongoing joint MPI/DOC patrols, surveillance, and information sharing, at times also involving Police and tourism operators. Collaboration typically increases during known high-risk periods such as the recreational pāua fishing season, with MPI often leading enforcement responses and DOC supporting investigation and follow-up.

MPI also leads enforcement for serious alleged breaches, including commercial and serious recreational fishing activity, reflecting its statutory responsibilities under the Fisheries Act 1996. MPI brings specialist capability through intelligence-led compliance tools, such as Automatic Identification System (AIS) vessel tracking and GPS-based electronic monitoring systems, which are analysed through the Waka Haurapa⁴¹ platform. These tools support detection, investigation, and prosecution of high-risk or complex offending that cannot be addressed through field patrols alone. MPI's monitoring tools have directly contributed to enforcement outcomes. DOC is not always involved in, or aware of, the decision-making processes or outcomes of MPI-led investigations regarding alleged offences within the marine reserve.

Accessing the offshore area of the marine reserve is challenging, so vessel activity was historically monitored through notifications from the National Maritime Coordination Centre when AIS equipped vessels entered the marine reserve. Since September 2024, this function has transitioned to the Starboard maritime domain awareness platform, which DOC now

³⁹ Note: These patrol interactions include activities focused on advocacy and education, as well as preventing breaches and enforcing compliance with the marine reserve rules.

⁴⁰ Vehicle patrols along the southern Kaikōura coast occur five days per week and generally require four hours per tide cycle, with the marine reserve receiving an unquantified share of this patrol effort. Fisheries Officers stop within the marine reserve only when activity is detected.

⁴¹ Waka Haurapa is an MPI maritime domain awareness tool for monitoring New Zealand-registered commercial fishing vessels, positions and tracks.

uses for routine monitoring. DOC's Programme Lead Marine Reserves reviews vessel movements weekly or fortnightly and assesses any tracks that may indicate fishing. Potential issues are referred to the local Marine Reserve Ranger for follow up, and commercial vessel activity is further checked with MPI (FNZ) Intelligence Analysts. While most AIS equipped vessels transiting the area are commercial, some recreational vessels also carry AIS, though less reliably. Most vessel movements observed through Starboard indicate normal transit rather than fishing activity.

Te Rūnanga o Kaikōura have supported no-take rules and biodiversity monitoring as Treaty partners. Local tourism businesses, community groups and residents act as guardians and provide on-the-ground observations that inform compliance management. Volunteers have assisted with brochure distribution at boat ramps.

DOC signage

Section 22 of the Marine Reserves Act 1971 allows (but does not require) the Director-General of Conservation to mark and maintain marine reserve boundaries. This may include beacons, buoys, lights, or other markers considered necessary for effective identification. DOC practice generally includes installing prominent regulatory signs at key access points and along major routes. Where practical, yellow triangle markers indicate landward boundaries, and buoys are installed to mark offshore boundaries.

When the marine reserve was established in August 2014, temporary corflute signs were installed. In December 2014, nine permanent regulatory signs and two boundary markers were installed. The signs were placed along State Highway 1 and at key access points and included a map of the marine reserve, permitted and prohibited activities, instructions for reporting offences, and sources for further information. Four additional signs were added in May 2016 to indicate shoreline distances to landward boundaries. Due to the Kaikōura earthquakes and highway rebuild, some signs were removed then reinstated in 2023 alongside new signage. Between 2021 and 2024, DOC installed nine 'no take' signs at high-risk pullover spots where previous offending had occurred. These signs specify penalties for illegal take.

Since late 2022, the Marine Reserve Ranger has undertaken monthly checks of signage and boundary markers, and maintenance as necessary. No formal records exist for earlier checks, although it is highly likely that such inspections occurred.

Currently, there are 24 land-based signs relating to the marine reserve. There are no sea-based markers because the sea conditions and seafloor of this area make buoys unsuitable and prone to frequent damage and replacement.

Evaluation

Key message: Current education, compliance monitoring and enforcement activities are broadly appropriate and proportionate. Immediate gains are best achieved through improved continuity, visibility, coordination, and communication, progressing toward a reserve-specific plan.

The available patrol and interaction data indicate that effort has been modest, intermittent, and variable over time, which helps explain submitter perceptions of limited public education, inconsistent monitoring, and inadequate enforcement. These perceptions may be influenced by DOC's initial education-first approach, which is standard for new marine reserves, and by enforcement settings in the early years, when infringement notices were unavailable and enforcement options were limited to warnings or prosecution.

In recent years, while patrols have at times generated high levels of engagement and visible presence, this has not been sustained consistently. Patrol coverage has not been continuous or uniform, meaning public experience is likely to depend on when and where people use the marine reserve. Overall declines in patrol hours and number of interactions are likely to reinforce perceptions of infrequent patrols and limited visibility, even where a baseline presence has remained.

Submitters raised concerns about ongoing poaching. While patrol data alone cannot confirm or rule this out, the use of targeted rather than regular patrols means illegal activity outside patrol times is less likely to be detected or deterred. Overall, although patrol effort may be reasonable on paper, it can feel inconsistent and sometimes insufficient to people using the marine reserve, particularly when enforcement is not regularly visible. This reflects the reality that DOC operates within finite resources and must prioritise patrol effort strategically, focusing on times and locations where it is most likely to have the greatest impact.

In this context, internal DOC feedback identifies closed-circuit television (CCTV) as a potential supplementary tool to strengthen compliance monitoring. CCTV is successfully used at other marine reserves in New Zealand. It could support shore-based surveillance at the marine reserve by providing continuous coverage and evidence for follow-up investigations. While the complex boundary and large offshore extent of the marine reserve limits CCTV's effectiveness for at-sea monitoring, it remains a potential component of a layered compliance approach and may help improve perceptions of enforcement visibility as technology becomes more affordable. DOC is currently investigating CCTV for the marine reserve.

Clear communication of the rules and boundaries is also important for supporting education and compliance. Signage messaging and distribution are considered adequate. While one submitter requested additional signage along State Highway 1, further roadside signs are unlikely to materially improve awareness or adherence. Some ongoing offending and boundary-related confusion have nevertheless been noted by staff. Four submitters suggested simplification of the boundaries to assist with compliance. As offshore boundary markers are impractical, fishers are expected to use readily available navigational tools, such as chartplotters or mobile applications, to identify boundaries and comply with associated rules. This expectation is consistent with long-standing requirements to understand and adhere to spatial restrictions, and advances in technology mean this information is now significantly more accessible than when the marine reserve was established. A boundary amendment for the purposes of compliance is, therefore, not recommended.

Overall, the level of education, compliance monitoring and enforcement activity appears broadly appropriate in scale for the marine reserve. However, because patrol effort is reducing, and is intermittent rather than regular, it does not provide consistent visibility or coverage. As a result, it can feel insufficient to users and is less likely to detect or deter activity outside patrol periods. Submitter concerns about poaching reflect this gap between the level of effort and how that effort is experienced on the ground. Maintaining the current level of effort is likely appropriate, but there is a clear need to improve its consistency across months and visibility to strengthen deterrence and address user perceptions over time.

With respect to elevating education, DOC is exploring 'live report cards' to share monitoring and research information for marine reserves in a more timely and accessible way. This should support transparency and respond to submitter concerns about access to information on the marine reserve.

Looking ahead, there is an opportunity to strengthen continuity, coordination, and transparency through a concise, forward-looking planning approach aligned with the BioInvest framework. Developed with Te Rūnanga o Kaikōura, the Guardians and MPI, this would help clarify priority outcomes, compliance and education focus areas, monitoring expectations, agency roles, and public reporting commitments within existing resource constraints. Ongoing and structured involvement of Te Rūnanga o Kaikōura and the Guardians in priority setting and strategic discussions would further support Treaty partnership, local knowledge input, and shared stewardship of the marine reserve. Tracking of the actions undertaken in the marine reserve is imperative to inform management decisions.

Monthly reporting by the Marine Reserve Ranger, supported by consistent use of the Marine Reserve Ranger app, should continue. The app provides a valuable way to record activity, and the monthly reporting helps track emerging trends and risk patterns. DOC is considering refinement of the app, including capture of drone effort. Maintaining this reporting regime will prevent the documentation gaps experienced and ensure robust information is available for future evaluations. In addition, biodiversity monitoring conducted within the marine reserve should be captured as patrol effort, recognising that staff may observe and respond to potential offences while monitoring.

Operational collaboration between DOC and MPI at the local level is strong. Internal DOC feedback indicates close working relationships support joint patrols, day-to-day compliance activity, operational coordination, and information sharing. MPI's intelligence-led tools have strengthened detection of serious offending, and local teams work constructively together to respond to emerging issues within the marine reserve.

Opportunity exists for DOC and MPI to work more closely around investigative processes, decision-making, and outcomes that each agency is leading. This will allow both Agencies to track outcomes, contribute where appropriate, and maintain a full picture of compliance within the marine reserve.

It is important to note that in some cases, it is appropriate for both agencies to have an interest in the same incident. For example, MPI may lead action on fisheries-related offences such as excess or undersized catch, while DOC is responsible for breaches of marine reserve rules. These are distinct statutory offences rather than duplication. Ensuring consistent information-sharing in such cases would support both agencies in meeting their respective responsibilities, regardless of which agency leads the investigation.

There is an opportunity to strengthen agency collaboration further through a clearer and more consistent framework for information-sharing and joint visibility, particularly for MPI-led investigations. This would help ensure DOC is routinely informed of marine reserve-related offending and able to contribute to decision-making where appropriate, while allowing for appropriate regional variation in operational approaches provided outcomes remain nationally consistent.

Finally, DOC should also continue to involve volunteers, local community and businesses, and tourism operators in distributing information and reporting suspicious activity. This extends compliance coverage at low cost and supports community stewardship.

Recommendations

- As an interim step, DOC to maintain the current level and focus of education, compliance monitoring, and enforcement activities.

- DOC to improve consistency and use of operational reporting tools (marine reserve compliance app and monthly ranger reports).
- DOC to include future education, compliance monitoring (including consideration of where and when to best target effort), and enforcement activities in the marine reserve plan, with input from Te Rūnanga o Kaikōura and the Guardians.
- DOC to progress investigation of CCTV as a supplementary compliance tool.
- Agencies to enhance engagement, to ensure each is appropriately informed and involved in enforcement actions.
- DOC to continue to involve volunteers, local businesses, and tourism operators in education and compliance activities.
- DOC to progress development of 'live report cards' or similar public-facing reporting tools that present compliance and enforcement data alongside biodiversity monitoring outcomes.
- DOC to maintain the existing level of signage.

4.2.4.4 What is the level of compliance with the marine reserve rules?

Relevant information

Compliance with the marine reserve rules reflects both public understanding of them and the effectiveness of monitoring and enforcement systems and effort. Because DOC's compliance data were initially fragmented and only became systematic after the introduction of CLEWorks software and other improvements from mid-2020, the strength of evidence varies significantly across the review period. For this reason, the assessment is presented in two phases:

- 2014–mid 2020, prior to nationalised systems
- Mid-2020 to 2025, when monitoring and reporting improved.

Offences under the Marine Reserves Act 1971 (Section 18I) include taking or disturbing marine life, depositing pollutants, introducing organisms, damaging natural features, and failing to comply with ranger instructions. Penalties include fines up to \$250,000 and imprisonment for up to three months. The implementation of the infringement system in 2020⁴² enabled DOC to apply proportionate penalties for lower-level offending (whereas previously, enforcement options were no action, formal warning or prosecution through the courts – with charges withdrawn for lower-level offending on completion of a diversion contract).

Compliance System Improvements

DOC's compliance records for the marine reserve were inconsistent prior to mid-2020 and were held across decentralised spreadsheets and emails. The introduction of CLEWorks established a centralised system for recording incidents, investigations and enforcement decisions and actions. This was supported by improved field reporting through a mobile app. Compliance capacity increased further with the engagement of a casual ranger (October 2021–June 2022) and the appointment of a permanent Marine Reserve Ranger in March 2022, both producing monthly reports. Adoption of the Marine Monitoring and Reporting

⁴² Via the Conservation (Infringement System) Act 2018, though infringement notices were not introduced by DOC until 2020 due to the need to establish supporting software, systems, processes and training to support their use.

Framework⁴³ in 2022 provided a consistent structure for tracking and evaluating compliance outcomes.

Level and type of offending

2014 to mid-2020: mostly minor recreational offences and limited commercial cases

Offence information for this period is sparse. Between 2014 and 2016, DOC issued 23 written warnings, primarily for low-level illegal recreational take of pāua (16 cases) and occasional spearfishing or fishing (6). One recreational craypot was found inside the marine reserve. A notable incident in December 2014 involved the take of 36 pāua (25 undersized), investigated by MPI but not prosecuted. Offenders commonly accessed the marine reserve from easy access points such as Rosy Morn Beach, Bullens Beach, and South Bay, and some were aware of the marine reserve but unsure of its boundaries. Where addresses are known, offenders were mainly from Christchurch, with others from Kaikōura, Blenheim, and Dunedin.

Commercial offending was rare but notable. In 2020, MPI prosecuted Amaltal Fishing Company for bottom trawling inside the marine reserve in 2018 and 2019. The 2018 charge was dropped due to lack of evidence, while the 2019 case⁴⁴ led to a conviction and \$27,600 fine for Amaltal Fishing Company, later overturned on appeal in 2021. The vessel's skipper was separately fined \$15,525, and DOC received \$489.58 (the market value of the fish).

Few offences were recorded from 2016–2020. This likely reflects disruption from the Kaikōura earthquake and closure of the seasonal recreational pāua fishery which reduced offending opportunities and enforcement activity, and absence of a national compliance database during this period.

The level of offending found in DOC's records is almost certainly an underrepresentation of the true level of offending during this period.

Mid-2020 to December 2025: variable offending patterns likely driven by monitoring levels

DOC data show 47 reports of offending⁴⁵ between 2021 and 2025 (Table 6) including 12 processed offences⁴⁶ (Table 7).⁴⁷ Offending rose from six in 2021 to 12 or 13 in 2022 through 2024 before falling sharply in 2025. Processed offences followed a variable pattern, ranging from two to four per year, with the highest count in 2024. No processed offences were recorded in 2025. The 2025 decline potentially reflects reduced DOC patrol capacity following a vacancy in the Marine Reserve Ranger role from April 2025, rather than a genuine reduction in offending. Overall, 25% of offending was processed.

The most common offence type was shore-based diving to take shellfish, including pāua, rock lobster and kina. Other offences included removal of shells and driftwood from the foreshore, setting of craypots within reserve boundaries (including drifting gear)⁴⁸, shore-based fishing, and spearfishing for reef species such as wrasse and butterflyfish. Most offending occurred during summer.

⁴³ <https://www.doc.govt.nz/contentassets/4f5439a4268f420b802a29562b112ce3/marine-monitoring-reporting-framework-2022.pdf>

⁴⁴ The 2019 offence occurred because the marine reserve was not marked on the vessel's electronic navigation devices, causing the skipper to inadvertently stray about 900 m into the marine reserve during a trawl.

⁴⁵ 'Offending' means all incidents that were reported as offences, whether or not any action was taken. It does not include reports that were later found not to be offences.

⁴⁶ 'Processed offences' are reported offences where enforcement action was taken.

⁴⁷ No offences were reported in 2020 – likely due to the newness of the CLE system.

⁴⁸ Note: the setting of craypots near the marine reserve boundary is a recurring issue, and limitations in GPS accuracy make precise placement difficult to verify, presenting challenges for compliance and enforcement.

From 2021 to 2025, offending was generally low-level: most offences involved small numbers of pāua, or other shellfish taken or attempted to be taken from shore, often one to a handful of individuals, alongside preventative interventions before removal occurred. However, this pattern was punctuated by a small number of higher-impact incidents, including one case in September 2023 involving take of 486 pāua (see following paragraph), meaning the overall picture is predominantly minor offending with occasional large-scale outliers rather than sustained mass harvesting.

MPI processed three incidents, totalling four compliance actions⁴⁹, under the Fisheries Act between 2021–2023 (Table 8). In March 2021, MPI issued a warning for the low-level take/possession of pāua and rock lobster. In September 2021, a similar warning was issued for the take/possession of pāua within the marine reserve. The most significant incident occurred in September 2023, involving removal of over 486 pāua. MPI took two parties to court in relation to this incident (i.e. two compliance actions), and both have since pleaded guilty. In 2026, one offender was sentenced to four months' home detention and required to complete a tikanga programme or counselling. The second offender received five months' community detention for their role in the offending.

DOC has 45 recorded compliance actions over this period (Table 8), most commonly 'onsite advocacy' followed by 'no further action' (due to insufficient evidence or insufficient DOC capacity). DOC issued six infringements, three warning letters and one education letter. No prosecutions were initiated by DOC under the Marine Reserves Act.

Table 6: Number of reports of offending in Hikurangi Marine Reserve (from multiple DOC data sources) between mid-2020 and December 2025 ('-' indicates no records).

Year	January	February	March	April	May	June	July	August	September	October	November	December	Sub-total
2020	-	-	-	-	-	0	0	0	0	0	0	0	0
2021	0	0	1	0	0	0	0	0	2	0	2	1	6
2022	9	1	0	0	0	0	0	0	0	0	2	1	13
2023	4	1	0	1	4	0	0	0	2	0	0	0	12
2024	3	2	0	0	2	0	0	0	0	1	0	4	12
2025	0	0	0	0	2	0	0	0	0	2	0	0	4
Total													47

⁴⁹ An incident may result in multiple compliance actions, where there is more than one offender and/or more than one type of action (e.g. under different legislation).

Table 7: Number of processed offences in Hikurangi Marine Reserve and lodged in CLEWorks between mid-2020 and December 2025 ('-' indicates no records).

Year	January	February	March	April	May	June	July	August	September	October	November	December	Sub-total
2020	-	-	-	-	-	0	0	0	0	0	0	0	0
2021	0	0	1	0	0	0	0	0	1	0	0	1	3
2022	2	1	0	0	0	0	0	0	0	0	0	0	3
2023	0	1	0	0	1	0	0	0	0	0	0	0	2
2024	0	1	0	0	0	0	0	0	0	1	0	2	4
2025	0	0	0	0	0	0	0	0	0	0	0	0	0
Total													12

Table 8: Number and type of compliance actions undertaken by DOC and MPI for offences committed in Hikurangi Marine Reserve between mid-2020 and December 2025.

Year	Compliance Action					
	No further action	Onsite advocacy	Education letter	Warning letter	Infringement	Prosecution
2020	0	0	0	0	0	2 (MPI) ⁵⁰
2021	3	0	1	2 (MPI)	2	0
2022	7	3	0	0	1	0
2023	1	7	0	0	2	2 (MPI)
2024	3	8	0	3	1	0
2025	3	0	0	0	0	0
Total	17	18	1	5	6	4

⁵⁰ In 2020, MPI prosecuted Amaltal Fishing Company Limited and the Amaltal Mariner skipper for fishing in the Marine Reserve in 2019. The skipper pled guilty and was fined, with Amaltal subsequently found guilty and fined. In late 2021 the prosecution against Amaltal was repealed.

Level of prevention

Prevention refers to actions that stop a likely offence before it occurs such as stopping individuals approaching the foreshore of the marine reserve with dive or fishing gear or someone at sea preparing fishing gear or baiting hooks.

2014 to mid-2020: prevention occurred but was not systematically recorded

No formal records of prevention interactions are available prior to mid-2020, though anecdotal evidence suggests rangers regularly prevented offending by intercepting people approaching the foreshore with diving or fishing gear. These activities were not systematically documented.

Mid-2020 to December 2025: first systematic prevention data in 2023

Prevention interactions were first systematically recorded in 2023, with 61 preventions, followed by 21 in 2024 (Table 9), totalling 82. These occurred almost exclusively between April and June, aligned with the seasonal recreational pāua fishery when risk is highest and patrols most frequent. No preventions were recorded in 2022 or 2025, likely due to staffing transitions and the time needed to adopt the Marine Reserve Ranger app.

Table 9: Number of prevention interactions on patrol in Hikurangi Marine Reserve January 2023 to December 2025 ('-' indicates no records).

Year	January	February	March	April	May	June	July	August	September	October	November	December	Sub-total
2022	-	-	-	-	-	-	-	-	-	-	-	-	0
2023	5	0	0	35	16	5	0	0	0	0	0	0	61
2024	0	0	0	21	0	0	0	0	0	0	0	0	21
2025	0	0	0	0	-	-	-	-	-	-	-	-	0
Total													82

Level of compliance with the rules

Compliance means the extent to which people adhere to the law.

DOC's Marine Monitoring and Reporting Framework⁵¹, calculates the level of compliance – i.e. the rate of compliance – by dividing the compliance effort (the time on patrol) by the number of offences (including prevented).

2014 to mid-2020: data insufficient to determine compliance levels

Planned patrol hours are available

⁵¹ Table 7.5, <https://www.doc.govt.nz/contentassets/4f5439a4268f420b802a29562b112ce3/marine-monitoring-reporting-framework-2022.pdf>

Table 2), but these do not necessarily reflect patrol effort that was carried out. Information on offences is limited to warning letters and anecdotal reports, and no comprehensive dataset is available. During this period, the 2016 earthquakes occurred, the seasonal recreational pāua fishery was closed, and a national compliance database was not in place. Compliance levels for this period cannot be reliably assessed.

Mid-2020 to December 2025: irregular evidence and significant data gaps

From mid-2020 onward, more structured data collection was introduced. However, no patrol-effort data were recorded between January and September 2021, and from October 2021 to December 2025 there are, sometimes extensive, gaps in patrol or interaction records. This includes instances where there are processed offences without corresponding DOC patrol records (see March, September and December 2021; Table 4 and Table 7). The Marine Reserve Ranger app was subsequently introduced to support recording of patrol effort and interactions.

Taken together, these data limitations and gaps mean that patterns in level of compliance over time cannot be interpreted with confidence.

Evaluation

Key message: Despite improved systems, gaps in monitoring coverage, data recording, and inconsistent enforcement mean compliance levels remain uncertain and require more consistent patrols, recording, and deterrence.

Monitoring and reporting systems improved from mid-2020 with the introduction of CLEWorks, other centralised systems and the later appointment of a dedicated ranger. However, patrol-effort and/or interaction records remain uneven, with significant gaps across months and years. This has resulted in insufficient data to reliably assess the level of compliance with the rules of the marine reserve.

Recorded offending is predominantly low-level and shore-based, particularly involving the take or attempted take of shellfish. A small number of higher-impact incidents are also recorded. The marine reserve benefits from high public visibility, short response times for rangers, and other protective factors such as seasonal pāua restrictions and winter weather conditions. Additional informal oversight is provided by commercial tourism operators, who regularly observe activity offshore. Offshore non-compliance is typically limited to craypot issues. Current offence data are constrained by inconsistencies in reporting tools and practices, and the number of offences reported should not be interpreted as a full reflection of actual offence behaviour.

Prevention interactions were recorded consistently only in 2023–2024 and mostly during the recreational pāua season, likely indicating monitoring gaps at other times of the year and in offshore areas. Addressing these gaps will require maintaining continuous ranger capacity and ensuring all patrol and prevention activity is consistently recorded in the Marine Reserve Ranger app to provide a reliable basis for assessing compliance in future.

Enforcement outcomes since 2020 have been weighted toward advocacy and warnings. DOC issued six infringements and undertook no DOC-led prosecutions. Internal compliance advice indicates that some offences met national thresholds for infringement but did not receive them, and that a more consistent approach to compliance responses – e.g. reducing reliance on verbal warnings – would strengthen enforcement consistency with other marine reserves in New Zealand.

Some public submissions are consistent with these limitations. Seventeen submitters reported low enforcement visibility, a seasonal focus on coastal surveillance, and direct observations of poaching or deliberate breaches. Several called for tougher penalties, more frequent use of infringements, year-round and offshore patrols, improved signage, and increased ranger capacity. Together with the available compliance data, this indicates potential under-detection of offences and a perceived credibility gap in enforcement, with inconsistent or lenient responses identified as weakening deterrence.

Addressing these issues will require a more consistent and visible enforcement presence, including year-round coastal and offshore patrols, clearer public messaging, and application of formal enforcement tools in line with the Enforcement Policy and Enforcement Decision-Making guidelines where thresholds are met. Strengthened coordination with MPI, including regular joint patrols targeting high-risk species such as pāua, would further support a more robust and credible compliance system.

Planned improvements to the Marine Reserve Ranger app, along with its consistent use, are expected to improve the completeness and reliability of patrol and compliance data over time. This, combined with sustained enforcement effort, will support improved confidence in future assessments of compliance at the marine reserve.

Recommendations

- DOC to ensure continuous ranger capacity and support in order to address gaps in effort and compliance data.
- DOC to ensure compliance and enforcement decisions are consistent with its national framework and best practice.
- DOC to record all patrol effort, interactions, and enforcement decisions in the appropriate systems, supported by regular checks.
- DOC to enhance deterrence and public awareness through targeted compliance messaging during high-risk seasons.
- DOC to work with MPI to strengthen coordination of compliance effort and focus, and information sharing.

4.2.4.5 How has the marine reserve contributed to the Marine Reserves Act's purpose of 'scientific study of marine life'?

Relevant information

The primary purpose of establishing marine reserves under the Marine Reserves Act 1971 is to maintain areas in as near to their natural state as possible, facilitating the scientific study of New Zealand's marine life. The value of New Zealand's marine reserves for scientific study can include: providing areas for experimental studies that are free from disruption from other users or visitors, providing populations of relatively unexploited species and as reference points for various management considerations.⁵²

Part of the basis for establishing the marine reserve was that contiguous protection of the habitats from the high tide mark to the depths of the Kaikōura Canyon would have significant

⁵² Willis, T., 2013. Scientific and biodiversity values of marine reserves: A review. [DOC Research and Development Series 340](#); Costello, M., 2014. Long live Marine Reserves: A review of experiences and benefits. [Biological Conservation 176](#) (289-296).

research value⁵³ and that the canyon's proximity to shore makes it accessible for undertaking research.⁵⁴

The coastal and marine environment of Kaikōura has historically attracted marine science researchers, likely because of the unique presence of deep-sea canyons so close to shore and the abundant marine mammal and seabird populations. The University of Canterbury built the first marine laboratory in Kaikōura in the 1960s and has had a long history of marine research there ever since. Similarly, Otago University has a long-running research programme on sperm whales in Kaikōura.

Since its establishment 12 years ago, a broad range of scientific study has occurred either partly or wholly in the marine reserve.

Compared to many of New Zealand's marine reserves, DOC has undertaken a relatively high number of surveys at the marine reserve over this time. This is largely due to it being one of 18 marine reserves prioritised for new funding for management, which came into effect from July 2021 for this marine reserve (see section 4.2.4.1). DOC commissioned a baseline ecological survey in November 2015, which was carried out by Davidson Environmental Ltd in March/April 2016 (after delays caused by weather). While this was some 20 months after the marine reserve came into effect, it was the first survey of reef fish, rock lobster and pāua. In addition to this, DOC has implemented several repeat long-term monitoring surveys for key species and has funded some key habitat mapping surveys of the marine reserve (Table 10).

Table 10: Monitoring of target species, intertidal community and ocean acidification, and habitat mapping at Hikurangi Marine Reserve 2016-2025. Sampling methodology UVC – underwater visual survey, POT = potting, Q = quadrat, DRO = aerial drone, pH = seawater pH, MBES = multibeam echo-sounder, DTIS = deep towed imaging system, BUUV = baited underwater video

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Reef fish		UVC									BUV
Rock lobster		UVC				POT	POT			UVC	
Kina								UVC		UVC	
Pāua		UVC	UVC					UVC		UVC	
Intertidal					Q	Q / DRO	Q	Q	Q		
Ocean acidification								pH	pH	pH	pH
Habitat mapping	MBES							DTIS			

Aside from studies that DOC undertakes or funds itself, DOC also administers a marine reserve permitting system for scientific research that involves the interference with or 'taking'

⁵³ Te Korowai o Te Tai o Marokura – Kaikōura Coastal Marine Guardians, 2012. [Kaikōura Marine Strategy – Sustaining our sea](#) 2012. 143 p.

⁵⁴ Ministry for Primary Industries and Department of Conservation, 2013. [Implementing key components of the Kaikōura Marine Strategy: Regulatory Impact Statement](#). 74 p.

of marine life or other marine resources.⁵⁵ Scientific research in a marine reserve that does not interfere with marine life or other resources may be undertaken without a permit.

Since the marine reserve was established, DOC has received 12 scientific research permit applications; eleven were approved and one was withdrawn by the applicant. This is approximately one permit application per year since the reserve was established; noting that four of these applications were to conduct research in relation to the 2016 earthquake.

As DOC must give effect to the principles of the Treaty of Waitangi in administering the marine reserve, and given the Guardians' statutory advisory role, it is expected that both Te Rūnanga o Kaikōura and the Guardians are informed and consulted on these permit applications. DOC or the applicant consistently attempted to consult with Te Rūnanga o Kaikōura over all eleven permit applications. Consultation with the Guardians was less consistent. Records indicate that two of the applications were received before the Guardians were appointed, DOC or the applicant consulted with the Guardians on four applications, and no consultation appears to have occurred for the other five applications.

Section 11 of the Marine Reserves Regulations 1993 requires that all permits for scientific study in marine reserves include a condition requiring the applicant to submit progress reports and a final report on the study to DOC. In practice, nationally this often does not occur. All eleven permits issued for the marine reserve included a condition (of varying nature) for the permit holder to report back to DOC on the work undertaken. It appears there have only been two instances where permit holders have provided DOC with a report about the study undertaken.

Four of the above permits were for research related to the 2016 earthquake. These were part of a wider surge in research and monitoring activity across the region, including within the marine reserve, to aid understanding of the effects of the earthquake on the marine environment, and rates of recovery. This research effort was supported by central Government funding, including a \$2 million funding package to investigate the impact of the earthquake on fisheries.

Other than earthquake-related studies or those undertaken by DOC, other research or monitoring in the marine reserve has included studies related to fisheries management (e.g. blue cod stock assessments undertaken by NIWA for FNZ), a study of seawater characteristics, and repeat of a long-term intertidal monitoring study to detect climate change effects.

Evaluation

Key message: The marine reserve has been the subject of a moderate level of scientific study since its establishment but the systems for planning and permitting of scientific study could be improved.

Some submission feedback noted the scientific study and research benefits of the marine reserve. Several submitters commented on the importance of continuing or expanding the longitudinal monitoring programme that has been set up, to enable a greater understanding of what effect the marine reserve is having. DOC agrees with these points and as the marine reserve continues to be one of a subset of New Zealand's marine reserves prioritised for greater management investment, priority monitoring activities are planned for the coming years. As described above, greater visibility of the planned monitoring activities (and other

⁵⁵ As required by Part 2 of the Marine Reserves Regulations 1993.

marine reserve management actions) would be achieved by developing a reserve-specific plan.

Some submitters criticised the lack of effort spent on furthering understanding of the ecology of the canyon part of the marine reserve, including any trends or habitat changes. DOC's monitoring has predominantly focussed on the coastal portion of the marine reserve due to the relative cost and practicality of such activities compared to working the canyon areas. Two studies done in partnership with NIWA (now Earth Sciences New Zealand) however, have yielded valuable information about the distribution of habitats and associated benthic communities in the offshore part of the marine reserve (further detail on these studies is set out in section 4.2.4.7).

Feedback from the Guardians indicates they support being more closely involved and aware of scientific study permit applications. They state this will enable greater oversight of research effort occurring in the area and that they may be able to make useful contributions to researchers' efforts. DOC agrees the Guardians should be aware when permit applications are made and feedback sought from the group. This process is already in place for Te Rūnanga o Kaikōura (and should be maintained) and so adding the Guardians to this process would be efficient and worthwhile. This will enable the Guardians to have greater visibility of the range of research and monitoring activities occurring in the KMA and allow them to provide valuable insight and context from the range of members on the committee.

The Guardians' view is that the permit reporting element is important from an information-sharing perspective, and they would like to receive as much information as possible after these studies are undertaken. DOC agrees that the intended requirement for permit holders to report back on the work undertaken is valuable and should not put undue burden on permit holders who are likely undertaking a range of reporting in relation to the research.

Related to this, some submissions indicated that more could be done to communicate the outcomes of research and monitoring activities. DOC recommends that those undertaking research or monitoring proactively share information about these activities through channels such as DOC's 'Hikurangi Marine Reserve' webpage, local newsletters, and the Guardians' annual report. This should include both technical reports and plain-language summaries.

In its submission, Te Korowai called for a "strategic research management system" for the KMA, to improve co-ordination and attract investment. Te Rūnanga o Kaikōura similarly noted the absence of a management plan for the marine reserve, identifying this as a key mechanism to support future monitoring – including for taonga species – and to strengthen public communications. DOC supports the development of a broader strategic plan by the Guardians (as set out in section 4.1.4.3) and considers that incorporating research and monitoring priorities for the marine reserve within this plan would be beneficial.

Recommendations

- DOC to improve its communication of marine reserve monitoring and research outcomes with the public, including progressing development of 'live report cards' or similar public-facing reporting tools, and publication of scientific reports.
- DOC to strengthen procedures to ensure the Guardians are automatically notified and consulted on scientific study permit applications for the marine reserve (and maintain the same for Te Rūnanga o Kaikōura).
- DOC to ensure reporting requirement for scientific study permits are met and reports shared and stored appropriately.

- DOC, Te Rūnanga o Kaikōura and the Guardians to promote a more co-ordinated and strategic approach to monitoring and research in the KMA, including the marine reserve.⁵⁶
- As per section 4.2.4.1, DOC to develop and implement a plan that describes and tracks the operational management of the marine reserve, including research and monitoring, and includes consideration of priorities identified by Te Rūnanga o Kaikōura and the Guardians.

4.2.4.6 How has the marine reserve protected the representative and most biologically rich habitats of the Kaikōura Marine Area?

The objective for the marine reserve was to '*protect the most biologically rich and special areas of the Kaikōura coast and also representative slices of typical coast in their natural state*'.⁵⁷ This closely links to the purpose of marine reserves under the Marine Reserves Act of '*preserving...areas of New Zealand that contain underwater scenery, natural features, or marine life, of such distinctive quality, or so typical, or beautiful, or unique, that their continued preservation is in the national interest*'. There was an intention to protect areas or habitats that are both *special* and *unique*, and *representative* and *typical*.

In order to assess its effectiveness, this section evaluates how well the marine reserve is meeting these objectives regarding protection of habitats.

Relevant information

Compared to when the marine reserve was established, there is now a much better understanding of the types and extent of habitats both within its boundaries and in adjacent areas. This information is described below, for both nearshore (from the intertidal to the 200 m depth contour) and offshore habitats.

Type and extent of nearshore habitats

Intertidal

The intertidal portion is a mix of rocky reef and boulder habitat, which are densely covered with diverse populations of macroalgae. In late 2020, DOC contracted NIWA (now Earth Sciences New Zealand) to capture aerial drone imagery to identify intertidal habitat-forming species, particularly the ecologically and culturally significant southern bull kelp (*Durvillaea* spp.).⁵⁸ Bull kelp has shown high vulnerability to marine heatwaves on both the east and west coasts of the South Island, and it has become increasingly important to monitor coverage over time. The NIWA study found the marine reserve has a large population of *Durvillaea willana* in the low intertidal and shallow subtidal zones, especially in the northern part of the marine reserve, and small populations of *Durvillaea antarctica/poha*. Other large brown algae (*Carpophyllum maschalocarpum* and several *Cystophora* species) are also abundant in those zones. A range of red algae and coralline turfs are present throughout the intertidal zone. Another study compared the marine reserve to intertidal areas north and south of the marine reserve and found no consistent differences in the algae and invertebrate communities present between marine reserve and non-marine reserve sites.⁵⁹

⁵⁶ This recommendation links to separate recommendations for the Guardians to develop a strategic plan, for the Guardians to be informed and consulted on scientific study permit applications, and for agencies to involve the Guardians in annual/multiyear planning processes.

⁵⁷ Chapter 4, Te Korowai o Te Tai ō Marokura – Kaikōura Coastal Marine Guardians, 2012. [Kaikōura Marine Strategy – Sustaining our sea](#) 2012. 143 p.

⁵⁸ Tait, L., 2021. Marine reserve monitoring, aerial imaging of rocky reef habitats. NIWA Report 2021314CH prepared for Department of Conservation. 50 p.

⁵⁹ Falconer, T., Gerrity, S., Schiel, D., 2023. Hikurangi Marine Reserve – Intertidal Community Monitoring 2019-2023. A report for the Department of Conservation. 32 p.

As mentioned, the 2016 earthquake caused some coastal uplift (approximately 0.41 m) in the marine reserve, resulting in the intertidal zone being displaced seaward. Monitoring of intertidal species and communities in the marine reserve does not show any lasting damage from the 2016 earthquake, likely due to the high wave energy of this environment and the relatively small amount of uplift compared with other areas.⁵⁸ This study showed that *Durvillaea antarctica* and *Durvillaea poha* were heavily impacted throughout the region by the 2016 earthquake, but small populations of these species remain in the marine reserve, along with extensive populations of the bull kelp *Durvillaea willana*, in the low intertidal and shallow subtidal zones. The abundance of bull kelp (*Durvillaea* spp.) has remained stable (between 2019 and 2023) within the marine reserve despite widespread declines of bull kelp around the South Island due to recent marine heatwaves.²⁹

Subtidal

Data from a 2015 multibeam survey was combined with data from two previous surveys to produce a single high quality bathymetric image over the full extent of the marine reserve (Figure 5).⁶⁰

The bathymetric data were also used to classify different physical habitats, based on the shape, depth and substrate type of the seafloor. This seafloor classification found that the nearshore portion of the marine reserve has the same geomorphic types and features as the coastline to the south and north (Figure 6). Notably, the rocky reef-platform within the marine reserve extends less distance offshore (200-400 m), compared to at least 600 m offshore both north and south of the reserve.

Hikurangi Marine Reserve - Regional Bathymetry (10 m sun-illuminated digital elevation model)

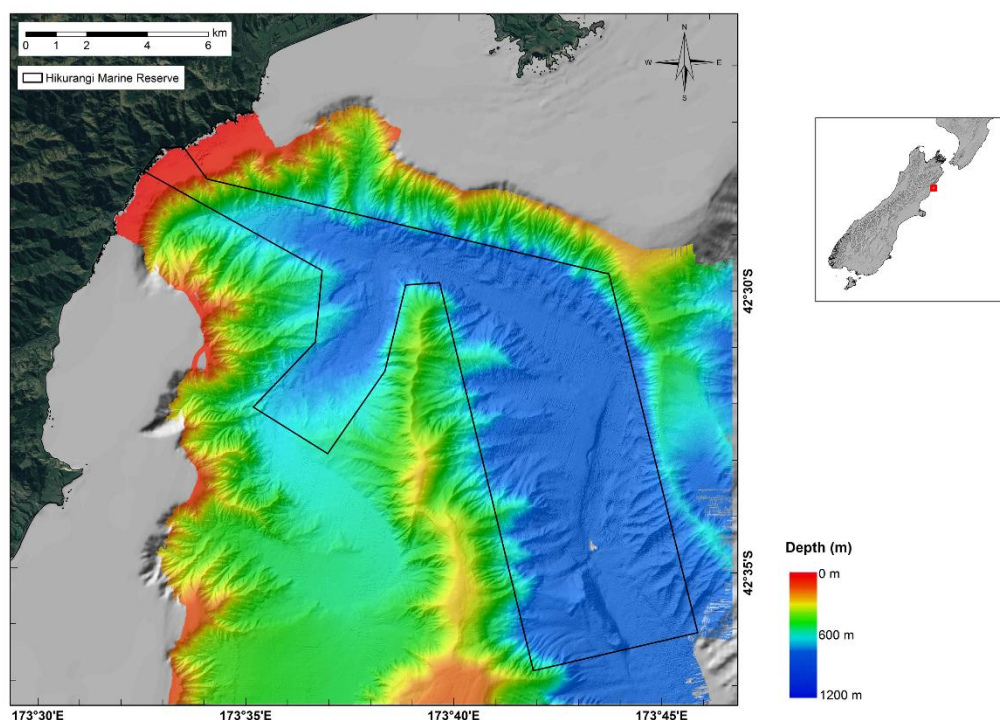


Figure 5: Bathymetric map of Hikurangi Marine Reserve and surrounding area (10 m sun-illuminated digital elevation model). From Neil et al 2015.

⁶⁰ Neil, H., Mackay, K., Mitchell, J., Pallentin, A., 2015. Multibeam echo-sounder mapping to identify seafloor habitat Hikurangi Marine Reserve. NIWA Client report prepared for Department of Conservation, WLG2015-55, Project DOC15305. 16 p.

Hikurangi Marine Reserve - Seafloor Classification

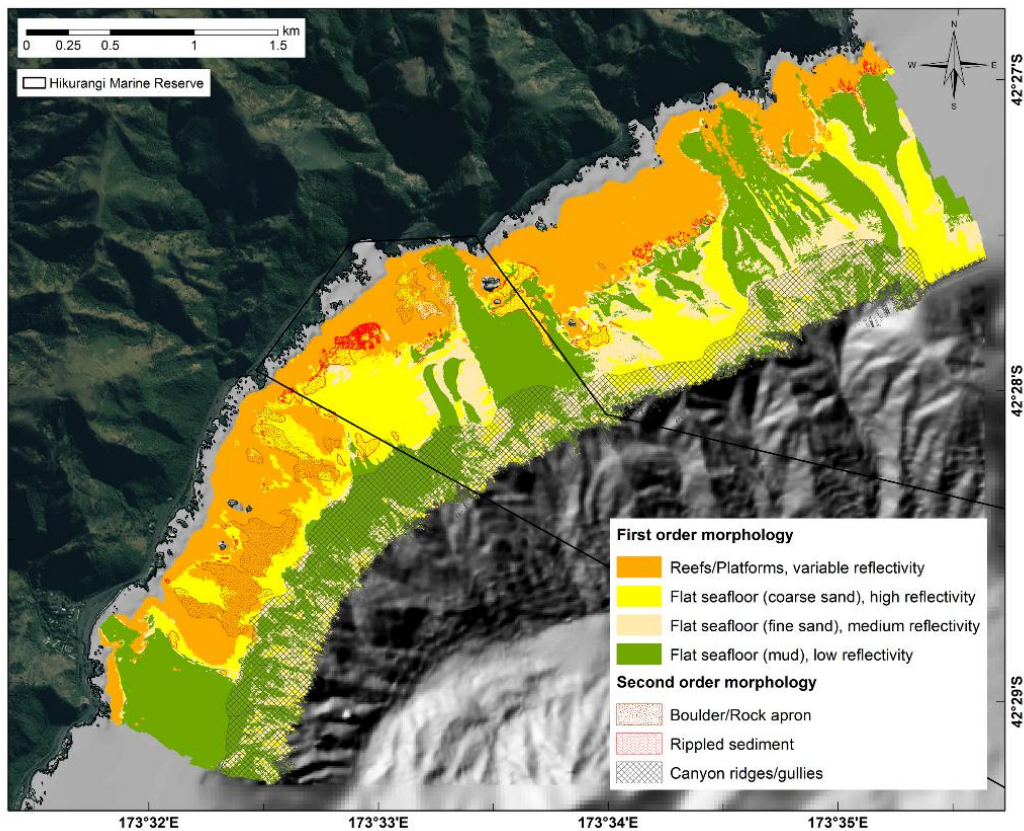


Figure 6: Seafloor classification for the nearshore portion (c. 5 – 200m depth) of Hikurangi Marine Reserve and adjacent nearshore coast. From Neil et al 2015.

Type and extent of offshore habitats

Classification of the offshore part of the marine reserve describes different seafloor zones (Figure 7), which are interpreted to have distinct environmental conditions, and by implication, distinct benthic ecosystems.⁶⁰

Overall, the bathymetric mapping and classification found that extensive areas of soft sediment canyon floor habitat, and the bottom sections of some deepwater ridges, are included in the marine reserve. However, the narrowness of the marine reserve near the coast and its shape and coverage offshore means very little canyon wall, canyon ridge/gully, or canyon rim habitat are included within the marine reserve.

Hikurangi Marine Reserve - Regional Benthic Terrain Model

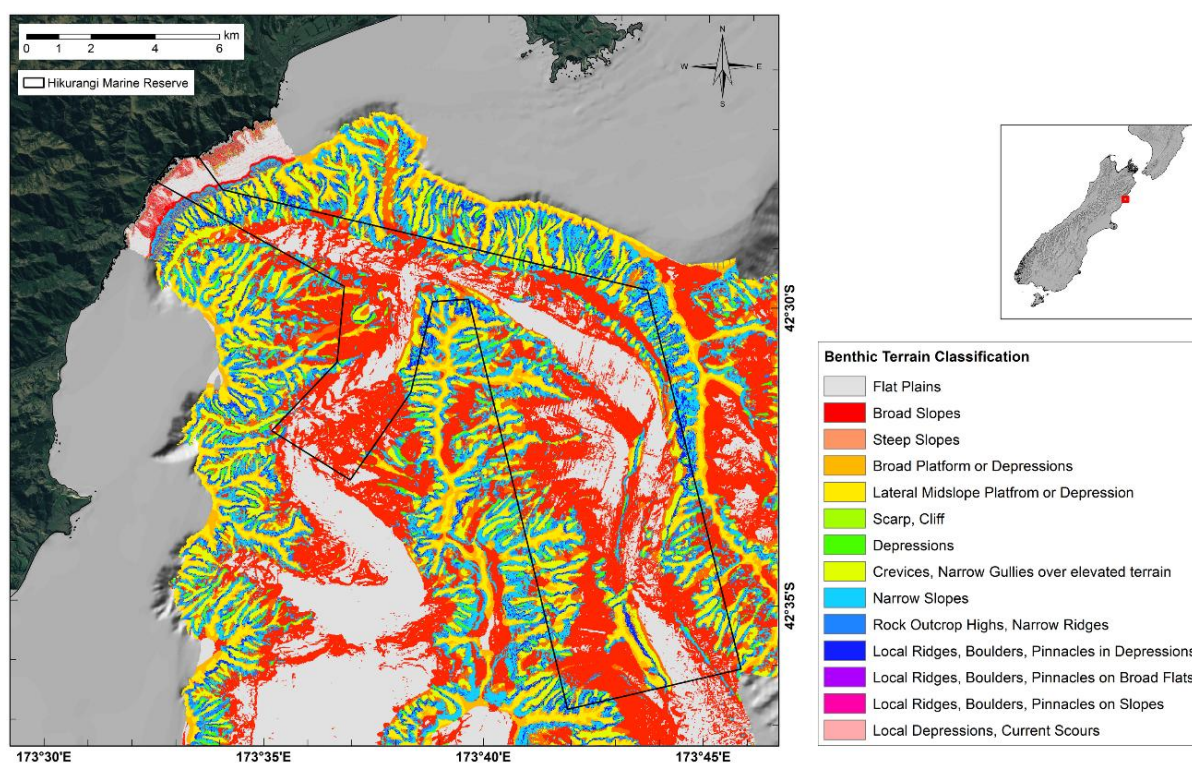


Figure 7: Regional benthic terrain model for Hikurangi Marine Reserve and surrounding area (Neil et al 2015).

To further improve understanding of the Kaikōura Canyon, DOC commissioned NIWA to analyse high-resolution seafloor imagery from video transects to provide quantitative data about the distributions of seafloor habitats and their associated invertebrate and fish communities.⁶¹ Their key findings were:

Seafloor habitats

- The seafloor in the marine reserve is predominantly muddy sediments, with mixed hard substrata only at the very head of the canyon and deeper canyon floor.
- Areas nearby the marine reserve, such as the ridge between the Kaikōura Canyon and Conway Trough and the northern rim of the Kaikōura Canyon, have a greater diversity of substrate types, including bedrock, boulders, gravel and sand.

Invertebrate communities

- Similarly, there is greater diversity of invertebrate taxa on the canyon rim compared to the canyon floor and lower walls.
- Analysis, which grouped transects by their invertebrate communities, identified four distinct community types (Figure 8).
- Within the marine reserve, all transects except one represented Community I. The exception was on the canyon rim at the head of the Kaikōura Canyon where the marine reserve connects to the nearshore zone, and was Community III.
- Except for that transect, the other three community types occur outside the marine reserve, on the walls of the Kaikōura Canyon and Conway Trough (Communities II

⁶¹ Bowden, D., Rowden, A., Chin, C., Carter, M., Hart, A., Bigham, K., 2023. [Hikurangi Marine Reserve DTIS video analysis](#). Report prepared for the Department of Conservation. National Institute of Water & Atmospheric Research Ltd, Wellington, New Zealand. 42 p + appendices.

and III) and on the shallow coastal shelf at the northern rim of the Kaikōura Canyon (Community IV).

- Community I is associated with fine sediments on the canyon floor and characterised by high densities of a tube-forming foraminifera⁶², sea stars and shrimps. Community IV was the most distinct from all others and was the most diverse, with high abundance and diversity of sponges and associated fauna on mixed hard substrata. A previous survey estimated the sponge habitat extends over 4.5 km² on the rim edge in depths of 80 m to 105m.⁶³

Fishes

- Rattails, including hoki, were the most frequently recorded fish, making up 87% of all observations.
- Rattails were present in all transects within the Kaikōura Canyon, Conway Trough and Kowhai Sea Valleys (offshore beyond the marine reserve boundary) and only absent from the coastal shelf.
- Juvenile hoki (an important commercially-caught species) were present in high densities in two rim transects near the head of the Kaikōura Canyon, one of which was inside the marine reserve and one outside.

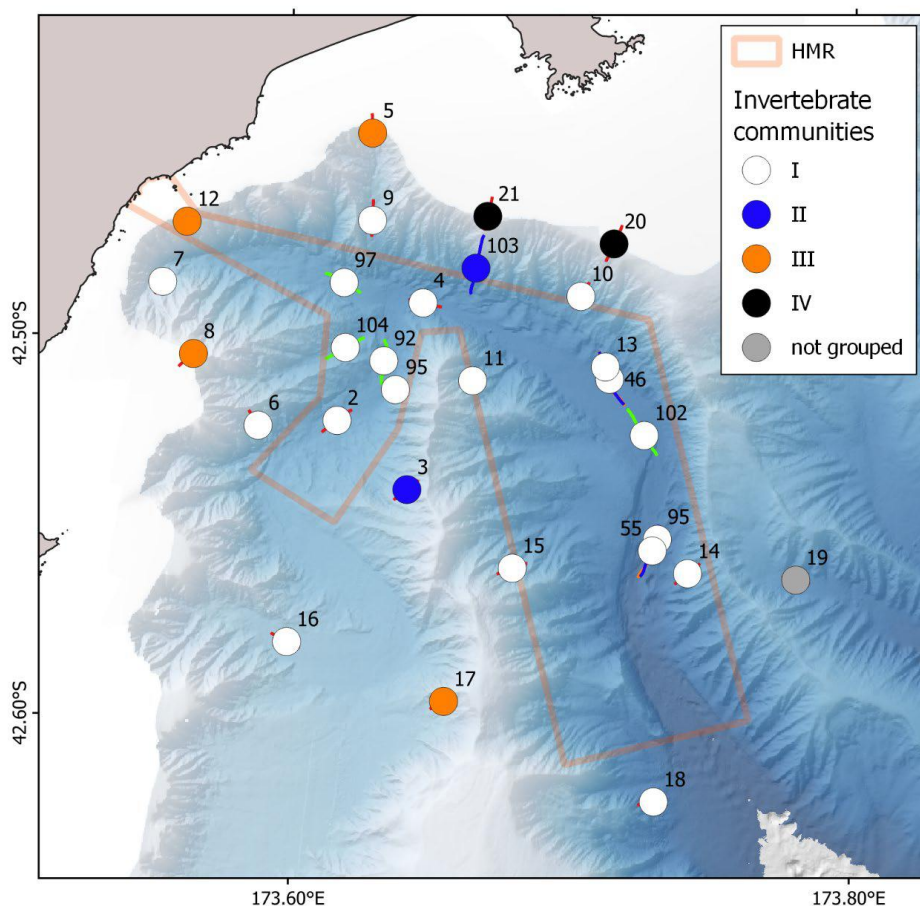


Figure 8: Distribution of seafloor invertebrate communities (Bowden et al 2023). Sites are grouped by the relative similarity of community composition (taxa present and relative abundances). Note, coloured lines under the circles represent which of the four surveys the transects were recorded on.

⁶² Foraminifera are single-celled organisms that typically have a shell or test.

⁶³ Page, M., Battershill, C., Murdoch, R., 1993. A preliminary biological survey on the effects of dredging on the continental shelf sponge community off the Kaikōura Peninsula. National Institute of Water and Atmospheric Research, 29.

The 2016 earthquake effects and recovery in the canyon

The 2016 earthquake triggered a major canyon flushing event that transported an estimated 850 megatonnes of sediment from the canyon into the deep ocean Hikurangi Channel, and had profound effects on the seafloor faunal communities existing at the time.²⁷ The earthquake shaking caused sediment to be removed from a 30 km length of canyon rim, changing them from smooth mud-draped slopes to rugged, eroded head scarps of recent landslides. Within the upper canyon, the seafloor of the two main reaches of the canyon head, Kaikōura and Haumuri, deepened by up to 50 m in places, as sediment was eroded by the flushing event. Erosion through the middle reach of the canyon averaged a depth of 5.6 m. Sediment waves present in the lower 35 km of the canyon were substantially modified; for example, the waves moved down the canyon in some places by up to 560 m distance. Three months after the earthquake, seafloor imagery showed a drape of soft sediment and an absence of the previous exceptionally high-biomass benthic communities.

Surveys in the marine reserve have provided insight into habitat resilience and recovery. Photographic surveys were undertaken by NIWA at the head of the canyon 10 years before the earthquake in 2006, and 10 weeks (Feb 2017), 10 months (Sept 2017) and 4 years (Oct 2020) after the earthquake.²⁸ This showed the canyon benthic community was recovering but was not identical to the pre-disturbance community. The study authors concluded the canyon community appears resilient to the event, with models estimating full recovery to occur within 4.5 to 12 years. They suggest that the canyon's dynamic environment, which has historically experienced episodic disturbances, has contributed to the adaptive capacity of resident species. The event has provided valuable insights into the response and recovery mechanisms of deep-sea ecosystems following large-scale natural perturbations.

Evaluation

Nearshore habitats

Key message: Small examples of the habitats typical of the intertidal and nearshore environment in this region are protected.

The marine reserve protects small examples of the habitats typical of the intertidal and nearshore environment of rocky coast in the KMA. The nearshore part of the marine reserve is very narrow in lineal distance along the coast (1.89 km) and only extends approximately 1 km offshore where the nearshore habitats transition to the canyon ridges and gullies of the offshore habitats. This is relevant to assessing whether the area of habitat protected is large enough for certain species of interest, or if it is too small and 'edge effects' play a role in how effectively species are protected. This can be important for mobile species, especially rock lobster and fish.

Submitters raised similar concerns, leading to suggestions for changes, including a minimum width of 5 km and simplifying the shape to minimise the perimeter-to-area ratio. Because these issues largely relate to the ability of the protected habitats to support the species inhabiting them, we discuss this further in section 4.2.4.7. Prior to the marine reserve's establishment, the risk of edge effects was acknowledged by Te Korowai in the Strategy; the 2013 Regulatory Impact Statement also highlighted this as a constraint to the marine reserve's effectiveness.

Offshore habitats

Key message: Some canyon habitats and their associated communities are protected in the marine reserve, but not all.

The marine reserve is the deepest and second largest of New Zealand's mainland marine reserves, and the only one that protects a substantial part of a deep-sea canyon. Because of these unique features, it usefully contributes to New Zealand's goal of having an 'effective network of marine protected areas and other protection tools'.⁶⁴ The earthquake had major impacts on these habitats, however, but as mentioned above, we can expect the seafloor community to have recovered, or nearly recovered, by now, over nine years after the event.

To help inform this Review, DOC commissioned NIWA to evaluate three aspects related to the boundary design of the offshore, canyon part of the marine reserve.⁶¹

1. How well are the region's habitats and faunal communities represented in the marine reserve?

As stated above, NIWA's work shows that only one of the four categorised community types is well-represented in the marine reserve. Importantly, the community types not encompassed by the marine reserve contain more diverse invertebrate taxa, including sponges, anemones and corals.

2. What boundary designs would improve habitat and community representativity?

NIWA presented five alternate boundaries to demonstrate how better habitat and invertebrate community representation could be achieved (Figure 9). Four of these (Options A-D) were designed to increase representation of canyon community types not currently (or not well) represented in the marine reserve. The fifth (Option E) was provided as an option to include part of the Kowhai Sea Valleys to the east of the Kaikōura Canyon as this area is thought to have a further distinct community type and may be subject to different geological processes than the canyon itself.

3. How does the marine reserve influence adjacent seafloor habitats and fauna and vice versa?

The canyon system is known to influence productivity of the area and transport organic material to depth. The observation of high abundance of rattail fishes within the canyon suggests the marine reserve protects a central part of the ecosystem that supports this productivity. NIWA hypothesises that the Conway Trough may be a key source of population recovery in the Kaikōura Canyon (following the periodic flushing that occurs), as it hosts many of the same communities as the canyon but appears to be less susceptible to disturbance from flushing events. The lower (northern) part of Conway Trough is already included in the marine reserve, but if the source population hypothesis is correct, it would argue for further extension to include more of the trough (Figure 9, Line F).

⁶⁴ Goal 10.6.2 of [Te Mana o Te Taiao: Aotearoa New Zealand Biodiversity Strategy 2020](#). Department of Conservation, p73.

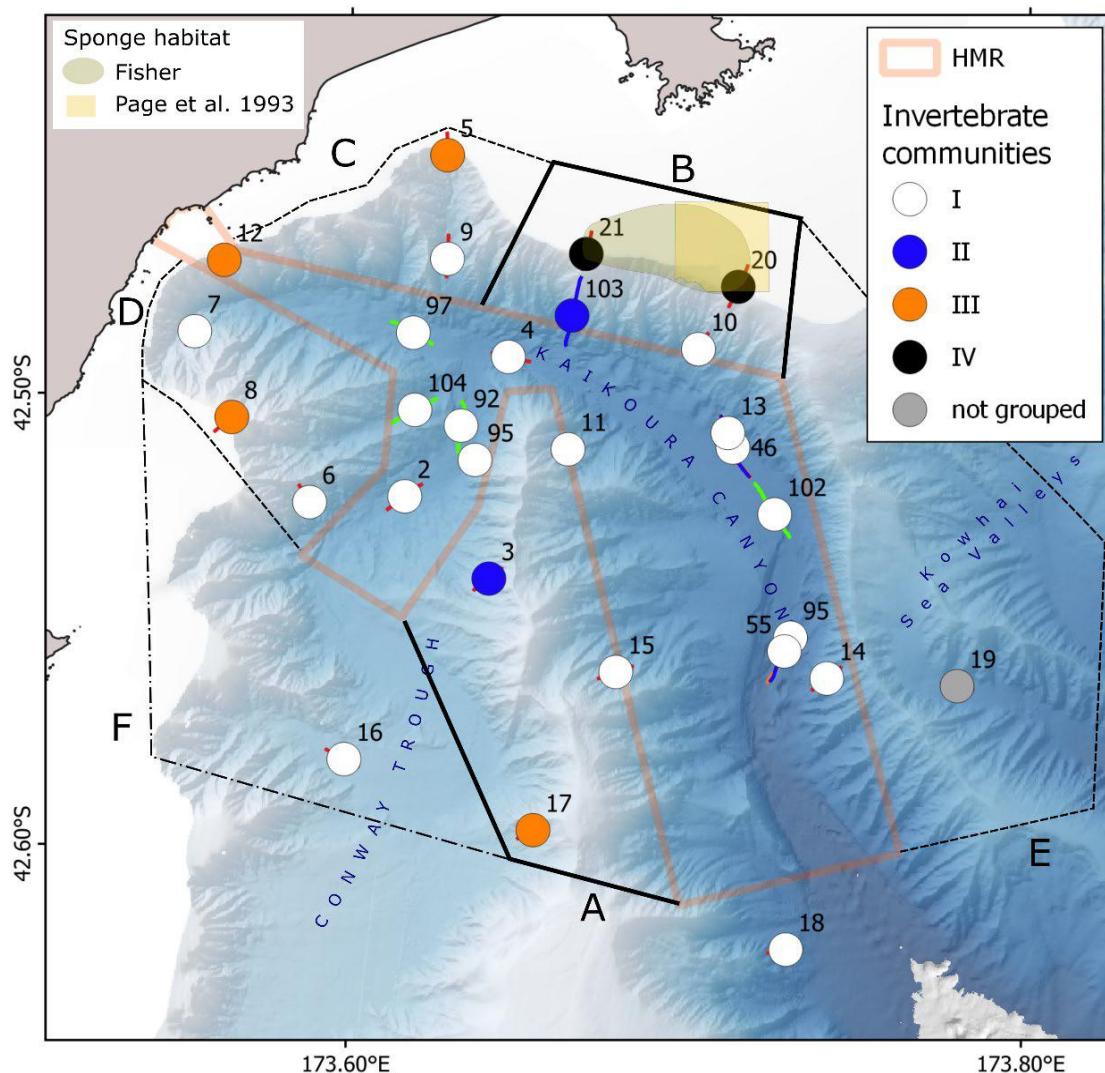


Figure 9: Five potential boundary modifications (Lines A-E) proposed by Bowden et al 2023 to improve representation of benthic habitats and invertebrate communities in the canyon portion of Hikurangi Marine Reserve.
 Note: Line A modifies the boundary by joining the southern ends of the Conway Trough and main Kaikōura Canyon arms; Line B modifies the northern boundary to include the full height of the wall and some of the coastal rim (and the previously identified sponge-dominated rim community) ; Line C includes Line B and extends westwards to include shallow rim habitat; Line D is presented as an alternative or addition to the Line C modification; Line E adds to the Line B modification by also including some of the Kōwhai Sea Valleys habitat; Line F is to encompass more of the Conway Trough.

From this analysis, it is clear the offshore portion of the marine reserve does not encompass a full representation of both the 'typical' and 'special' deep-sea habitats and communities of the Kaikōura Canyon area. One canyon habitat type (predominantly found on the canyon floor, but also on some parts of the canyon walls) is effectively protected by the marine reserve. Another habitat type at the canyon head is arguably less effectively protected due to the small area of it within the reserve, which could limit whether it is viably represented. The reserve does not protect the other two canyon habitat types found on the canyon walls, canyon rim, and on the adjacent coastal shelf.

DOC agrees with submitters who highlighted the complex shape and that certain canyon habitats are not protected within the marine reserve, and that there would be greater biodiversity benefits if they were. DOC also acknowledges that the marine reserve was originally designed, with both its irregular shape and exclusion of some canyon habitats, to achieve a compromise between protecting biodiversity and minimising impacts on existing users.

The new information described above, however, demonstrates that the different habitats within and outside the marine reserve also have different invertebrate communities associated with them, with those outside the marine reserve generally being more diverse. The marine reserve is, therefore, arguably not protecting all the ‘most biologically rich and special areas’ as intended in the Strategy.

For the marine reserve to adequately protect canyon wall, canyon rim and coastal rim habitats, changes to the current boundary would need to be explored. Submitters suggested simplifying the shape, minimising the perimeter-to-area ratio and ensuring a minimum width of 5 km at all points. The boundary modifications proposed in NIWA’s analysis of canyon seafloor habitats and community composition were presented as a starting point, based on empirical data. They seek to better encompass all types of seafloor community classifications and a fuller range of the canyon’s biodiversity.

Based on the above information on habitat representation, and if the goal remains to protect the most biologically rich and representative habitats, further consideration of the adequacy of the current boundary is warranted. This should start with discussions between DOC, Te Rūnanga o Kaikōura and the Guardians about aspirations for the marine reserve now, 12 years on from its establishment. Public consultation carried out to inform this review provides some indication of views on the current boundary, although submitters were not asked about it directly. Submitter feedback indicates some level of public support for amending the boundary, with around half of submitters calling for a simpler shape, to increase representation of habitats and to better reflect best practice design. A subsequent step, therefore, would be a targeted investigation into the wider community’s views on the potential benefits and impacts of a revised boundary.

Recommendations

- DOC to engage with Te Rūnanga o Kaikōura and the Guardians to understand current aspirations for the marine reserve, particularly regarding its habitat and biodiversity representation and protection.

4.2.4.7 How have taonga and other key species responded to marine reserve protection?

Relevant information

One expectation of a marine reserve is that previously-harvested species will become more abundant and attain greater size and age inside the marine reserve. DOC surveys several commonly fished coastal species at many of New Zealand’s marine reserves to understand these changes. To understand the extent to which this is happening for the marine reserve, DOC has monitored pāua, rock lobster, kina and reef fish inside and outside of the marine reserve between 2016 and 2024, using a range of survey methods.⁶⁵ The results from this monitoring, as well as some undertaken by others, are described below.

Prior to the start of this Review, Te Rūnanga o Kaikōura shared a framework for assessing the health of the Kaikōura marine environment. This included a preliminary list of 22 taonga species that could be investigated, for their status, harvest rates and population parameters. This list represents a range of taxa, from marine mammals to shellfish, algae and coastal and offshore fish species. From the list, DOC is only aware of information from the marine reserve for the following species: New Zealand fur seal, pāua, bull kelp, blue cod, rock

⁶⁵ Gerrity, S., Virgin, S., Ladds, M., 2025. [Hikurangi Marine Reserve: Assessing the effects of protection on key subtidal reef species and the intertidal reef community, 2016 - 2024](#). Department of Conservation, Wellington, New Zealand.

lobster, kina and karengo (a species or group of species of intertidal red algae). Tohorā, referring to all whales, was also listed, however information only exists in relation to sperm whales for the marine reserve. Information on these additional species relevant to the marine reserve is also provided below.

Population status and trend of intertidal communities and algal species

Intertidal species can face different pressures to those in the wider marine ecosystem. At low tides, they are exposed to changes in air temperature and in accessible areas can have extra harvesting and trampling pressures.

Intertidal reef quadrat surveys were undertaken at two sites in the marine reserve annually from 2019 to 2023 to assess changes to species and habitats.^{59,65} Abundance of intertidal reef algae and invertebrates was variable across tidal zones and through time. High and mid shore areas were dominated by snails and limpets (*Austrolittorina*, *Cellana*), barnacles (*Epopella*, *Chaemosiphonia*), mussels (*Limnoperna*, *Perna*), and turfing algae. The grouping of seasonal blooming, ephemeral red algal *Pyropia/Porphyra* species, or karengo (Te Rūnanga o Kaikōura taonga species), were found in the high shore area, albeit representing less than 1% cover.⁵⁹ The low shore had the highest number of species and was dominated by various red and brown algae. Large canopy-forming algae species, notably flapjack (*Carpophyllum maschalocarpum*) and bull kelp (*Durvillaea*), were the most abundant on the low shore, and several grazing invertebrates (snails and pāua) were present in low numbers. Notably, cover of the important habitat-forming bull kelp (*Durvillaea spp.*) in the low zone of the intertidal was stable at 10-20 mean percent cover per m² over the five-year sampling period.⁵⁹

Population status and trend of mobile invertebrates – rock lobster, pāua and kina

Rock lobster have been surveyed using both potting and diver underwater visual surveys. Potting surveys in 2020 and 2021 found that female rock lobster were more abundant inside than outside the marine reserve, but the abundance of male rock lobster did not differ between inside and outside the marine reserve. Males decreased in abundance in the marine reserve between 2020 and 2021, but did not outside it. Female abundance decreased significantly over time in both marine reserve and non-marine reserve sites. Both male and female rock lobster were larger inside than outside the marine reserve, and females were significantly larger than males at all sites and years. Results from diver surveys are not as conclusive. Rock lobster were more abundant inside than outside the marine reserve in both 2016 and 2024 but the difference was not statistically significant due to high variability among sites. Identification of sex is not always possible during diver surveys, so males and females are combined in analysis. In 2016, rock lobster were slightly larger outside the marine reserve, and in 2024 slightly larger inside, but not statistically significant either year.⁶⁵

Pāua were surveyed by divers in 2016, 2017, 2022 and 2024. The number of pāua varied widely across all sites but was generally higher outside the marine reserve than inside, except in 2017. Pāua numbers increased at both marine reserve and non-marine reserve sites between 2016 and 2022, but then declined in 2024, although there were no significant differences over time. On average, pāua were larger inside the marine reserve than outside, but again this was not statistically significant.⁶⁵ Wadeable depth pāua were surveyed before and after the December 2021 reopening of the Kaikōura recreational pāua fishery, which had been closed for five years following the 2016 earthquake.⁶⁶ The size range of pāua in the

⁶⁶ Gerrity, S., Schiel, D., 2023. [Recreational fishing effects on wadeable pāua populations along the Kaikōura coast, 2021-22](#). New Zealand Fisheries Assessment Report, FAR2023/01.

marine reserve did not change over the three-month fishing season. In contrast, at fished sites surveyed (outside the marine reserve), the size range shifted towards smaller animals, indicating a strong effect from fishing.⁶⁶

Kina were surveyed by divers in 2022 and 2024.⁶⁵ Kina were found in low numbers across the sites monitored, but were more abundant inside than outside the marine reserve in 2022 and 2024. The size and number of kina increased from 2022 to 2024 both inside and outside the marine reserve.

Population status and trend of reef fish

Diver surveys in 2016, after just 20 months of protection, found densities of several common reef fish were significantly greater inside the marine reserve than in nearby fished areas. All species sampled were at least twice as abundant inside than outside the marine reserve, the most marked difference being blue moki, which was 16 times more abundant inside the marine reserve. Blue cod and butterfly were also significantly larger on average inside the marine reserve compared to fished areas, with about 2.5 times more blue cod above the legal-size limit inside the marine reserve.⁶⁷

Blue cod fisheries potting surveys have included sites within the nearshore (<100 m depth) part of the marine reserve as part of a wider Kaikōura survey. Survey results from 2017, 2019, and 2023 indicate that abundance within the marine reserve has remained relatively stable over time.⁶⁸ In 2017 and 2019, catch rates of blue cod were significantly higher inside the marine reserve than directly outside.⁶⁹ Size comparison was limited by low catches directly outside the marine reserve, but in 2019 mean length was 3 cm larger inside the marine reserve. The largest fish (over 40 cm) were caught inside the marine reserve and the proportion of fish 33 cm (legal size) and over was 23% higher inside the marine reserve.⁶⁹ In 2023, abundance inside the marine reserve was greater than at immediately adjacent sites, but only one quarter of that at sites further away. The highest catch rates are off the end of Kaikōura Peninsula, which is the area with the most comprehensive rocky reef habitat, indicating that the amount of suitable habitat and oceanography plays a significant role in blue cod abundance. Too few fish were caught in the sites immediately adjacent to the marine reserve to compare size, but blue cod in the marine reserve were not larger than in other parts of the Kaikōura survey area, however the fish were of better condition in the marine reserve.⁶⁸ The only other fish caught in the marine reserve were banded wrasse, which were much more abundant compared to the wider survey area.⁶⁸

New Zealand fur seals and sperm whales

DOC has not undertaken routine monitoring for either New Zealand fur seals or sperm whales in relation to the marine reserve. Population studies of these species by others, while not directly related to the effect of the marine reserve, have provided some relevant information.

New Zealand fur seals

Information about fur seal abundance and distribution along the wider Kaikōura coastline is set out in section 4.4.1.2. In relation to the marine reserve, prior to the 2016 earthquake there was a small breeding area at Barneys Rock, a small island within the marine reserve.

⁶⁷ Davidson, R., Laferriere, A., 2016. Hikurangi Marine Reserve, Kaikōura: baseline biological study. Prepared by Davidson Environmental Limited for Department of Conservation. Research, survey and monitoring report number 841.

⁶⁸ Beentjes, M., Page, M., 2024. [Relative abundance, size and age structure, and stock status of blue cod off Kaikōura in 2023](#). New Zealand Fisheries Assessment Report 2024/78. 61 p.

⁶⁹ Beentjes, M., 2024. Are marine reserves and temporary closed areas effective in enhancing blue cod (*Parapercis colias*) sub-populations? New Zealand Journal of Marine and Freshwater Research, 58(4): 541-576, [doi: 10.1080/00288330.2023.2277766](#).

Post-earthquake, a much larger breeding area now exists south of Kaikōura Peninsula, spread along 3.8 km of coastline. This encompasses the previous breeding area at Barneys Rock, a new area within the marine reserve, and an area extending across the northern boundary of the marine reserve.⁷⁰

The highly productive Kaikōura Canyon, some of which is protected by the marine reserve, is within easy foraging range of fur seals from all colonies along the Kaikōura coast. Researchers have proposed its presence may explain why Kaikōura fur seal pups have previously been shown to be in better condition than those born in other parts of New Zealand. It has also been suggested that the productivity of the Kaikōura Canyon likely provides local fur seal colonies some buffer against the changing environmental and biological conditions associated with El Niño Southern Oscillation events that can cause low-productivity breeding seasons elsewhere.⁷¹

Sperm whales

The University of Otago's marine megafauna research group has had a long-running research programme studying sperm whales at Kaikōura. In relation to the marine reserve, a study of sperm whale preferred habitat found strong seasonal differences.⁷² In summer, preferred sperm whale foraging habitat overlaps with 74% of the marine reserve area. There were also large areas of high habitat suitability outside the marine reserve. In winter, there was generally little overlap with the whales' predicted preferred habitat (~27% of the marine reserve area). This is because in summer the whales forage in the Kaikōura Canyon, and in winter they shift to the Conway Trough and sides of the Conway Ridge, areas not inside the marine reserve.

The researchers consider the value of the marine reserve for the protection of sperm whales relates mainly to reducing the risk of entanglement with fishing gear and reducing the effects of fishing pressure on the whales' prey. They state, however, that since most fishing used to take place outside the marine reserve boundaries anyway, the marine reserve has done little to remove or displace fishing effort, and conclude that overall it seems that the current marine reserve is not a particularly useful management measure for sperm whales at Kaikōura.

Evaluation

Key message: The marine reserve shows some benefits for less mobile species, but its small nearshore size limits its effectiveness; a lack of information on species inhabiting offshore areas highlights the importance of broader species monitoring.

The available information on taonga and other key species largely focusses on a small number of commonly fished coastal species. As a result, this evaluation of responses of key species to protection is mostly limited to the nearshore part of the marine reserve. While this aligns with DOC's Marine Monitoring and Reporting Framework and current budget, expanding this focus would improve understanding of the marine reserve's effectiveness for a more diverse range of species across its varied habitats. Input from Te Rūnanga o Kaikōura and the Guardians should be incorporated into future planning for monitoring and research to ensure a wide range of perspectives are considered. Any additional priority species identified could be included in the recommended marine reserve-specific plan (as

⁷⁰ Hall, A., Chilvers, B., Weir, J., Boren, L., 2024. Earthquake impacts on a protected pinniped in New Zealand. *Aquatic Conservation: Marine and Freshwater Ecosystems* 34(1), doi.org/10.1002/aqc.4055.

⁷¹ Boren, L., Muller, C., Gemmell, N., 2006. Colony growth and pup condition of the New Zealand fur seal (*Arctocephalus forsteri*) on the Kaikōura coastline compared with other east coast colonies. *Wildlife Research*, 33(6), 497–505, doi.org/10.1071/WR05092.

⁷² Guerra, M., Dawson, S., Somerford, T., Slooten, E., Rayment, W., 2022. Fine-scale habitat use of foraging sperm whales is driven by seafloor topography and water column structure. *Marine Mammal Science* 38(2):626-652, doi.org/10.1111/mms.12881.

set out in 4.2.4.1) or the Guardians' KMA-wide strategic plan (as set out in section 4.1.4.3), potentially encouraging wider uptake of these priorities by other agencies and researchers.

The effectiveness of the marine reserve for protecting taonga and other key species is strongly tied to the size, location and shape of the marine reserve, and the life history and movement patterns of species. There will be movement of mobile species, including invertebrates and fish, in and out of the marine reserve, meaning individuals are exposed to fishing capture risk when outside. The likelihood of individuals moving out of the marine reserve depends on their proximity to the boundary and how big their movements are. For the key species DOC monitors in the nearshore portion of the marine reserve, the size of the marine reserve is critical. The nearshore (≤ 200 m depth) area is approximately 2 km across and approximately 170 ha area. This relatively small size means more individuals of a population inside the marine reserve are potentially within movement distance of the boundary. Advice from Dr Nick Shears (University of Auckland) to DOC at the time of the marine reserve creation stated that a 500 m edge effect was a sensible measure to understand the edge impact on the proposed marine reserve. Noting that this effect is variable across species, a 500 m wide area on both the north and south sides of the marine reserve would restrict the protection afforded to some species to a significantly smaller area.

Submitters shared opposing views about the benefits of the marine reserve for key species, with some saying it had been successful at enabling recovery or increases in abundance and others describing a lack of evidence of this, which they would have expected.

Many submitters also shared their view that improvements could be made to the shape and design of the marine reserve to make it more beneficial and effective for species protection. As described below, the very small amount of nearshore habitat included within the marine reserve means its effectiveness is likely limited for many key species.

Intertidal communities and algal species

At this stage of the marine reserve's maturity, intertidal species richness and abundances were comparable inside and outside the marine reserve and were reflective of a rocky reef ecosystem typical of the wider Kaikōura coastline. Importantly, there was no obvious residual damage from the 2016 Kaikōura earthquake, likely due to the marine reserve's high wave exposure and the relatively small uplift that occurred along these southern shores compared to areas further north.⁵⁹ The similarity of intertidal communities inside and outside the marine reserve is consistent with what would be expected when there are no significant pressures affecting those communities that are managed by marine reserve protection.

Mobile invertebrates

The marine reserve would be expected to have limited effectiveness for protecting more mobile species with home ranges wider than 1-2 km, and the monitoring data suggests this is true for rock lobster. Rock lobster are known to have complex and variable movement patterns, including long distance migration and shorter distance seasonal movements, and can also remain resident on reefs for years at a time. Movement patterns of rock lobster at the marine reserve are not known, but at Cape Rodney-Okakari Point Marine Reserve (Goat Island) in northeastern New Zealand, around 30% of tagged rock lobster resighted over a two-year period moved 0.25-6 km from their tagging site.⁷³

The marine reserve may have some effectiveness for protecting rock lobster, as indicated by the potting survey results described above, and therefore may provide some refuge for

⁷³ Kelly S., MacDiarmid A., 2003. Movement patterns of mature spiny lobsters *Jasus edwardsii*, from a marine reserve. New Zealand Journal of Marine and Freshwater Research 37:149-158, doi.org/10.1080/00288330.2003.9517153.

broodstock. However, due to the complex nature of the rock lobster lifecycle and their large spatial ranges, the effects of marine reserves on the productivity of rock lobster populations, including larval export and juvenile recruitment, are not fully understood.⁶⁵ Further work would be needed to clarify the effects of the marine reserve on rock lobster populations beyond its boundaries.

Marine reserve effectiveness for rock lobster can be limited by factors outside the marine reserve boundaries, and the decreases in abundance described are likely indicators of that. The declines could be due to movement of adult rock lobster outside the marine reserve and subsequent capture, or factors related to the long dispersal distances of the larval stages (e.g. oceanic or climatic changes affecting larval supply to the marine reserve habitats).

The effectiveness of three relatively small marine reserves in northern New Zealand for protecting rock lobster was evaluated using over 40 years of monitoring data.⁷⁴ The marine reserves assessed are approximately 4-8 km² in area, which is larger than the nearshore portion of Hikurangi Marine Reserve at approximately 1.7 km². In all three marine reserves, rock lobster density increased by at least a factor of three following protection, but over the last 10 years there has been large population decline in all three marine reserves. Similarly, there have been large-scale declines in the regional fishery in the last decade. This research concluded that marine reserves of that size do not fully protect lobsters from fishing, likely due to direct harvest of individuals that move beyond the marine reserve boundaries during offshore seasonal movements.

At Hikurangi Marine Reserve, the nearshore portion does not have an offshore boundary as such, rather the marine reserve continues over the physical boundary of the canyon rim into the deep-sea canyon habitat. For offshore movement to be a mechanism of rock lobster decline here, they would have to first move north or south out of the marine reserve and then move offshore. Edge effects (where the edges of a protected area experience increased fishing pressure) along the shore boundaries could also expose lobsters to fishing at the marine reserve. When boundaries intersect reefs, rock lobster are more vulnerable to 'fishing the line' behaviour of fishers.⁷⁵ This is the case at both the northern and southern boundaries of the marine reserve (Figure 6) likely increasing the overall edge effects and exposure of lobsters to fishing. For the marine reserve to provide more effective protection for rock lobster, its nearshore portion would need to be larger. This was suggested by several submitters who expressed concerns about effectiveness and edge effects due to the marine reserve's size.

Pāua are sedentary, given they only move very small distances. The marine reserve size and shape can be expected to give effective protection to individuals within the boundaries of the marine reserve. Pāua is a heavily fished species on the Kaikōura coast, and there has been confirmed poaching within the marine reserve, including some significant incidents (see section 4.2.4.4). Stable size distribution before and after the three-month pāua fishing season over the 2021-2022 summer indicates the marine reserve has effectively limited harvest. In contrast, fishing outside the marine reserve had a strong effect on reducing pāua size before, and even more so, after, the three-month fishing season.

While kina were significantly more abundant inside the marine reserve than outside, they are still considered to be in low abundance in the marine reserve, on average at <0.5 kina per m². DOC notes a submitter's concern about kina barren formation, but this has not yet been

⁷⁴ LaScala-Gruenewald, D., Grace, R., Haggitt, T., Hanns, B., Kelly, S., MacDiarmid, A., Shears, N., 2021. Small marine reserves do not provide a safeguard against overfishing. *Conservation Science and Practice*, e362, doi.org/10.1111/csp2.362.

⁷⁵ Freeman, D., MacDiarmid, A., Taylor, R., 2009. Habitat patches that cross marine reserve boundaries: consequences for the lobster *Jasus edwardsii*. *Marine Ecology Progress Series*, 388:159-167, doi.org/10.3354/meps08122.

observed in the marine reserve. Fishing pressure on kina does not seem to be significant in the Kaikōura region, as past recreational and commercial fishing allowances show it as one of New Zealand's smaller kina fisheries.⁶⁵ Nonetheless, the marine reserve may provide some effective protection from fishing for kina, indicated by the greater abundance inside than outside the marine reserve.

Reef fish

The marine reserve would be expected to have limited effectiveness for more mobile fish species with home ranges wider than 1-2 km, including blue moki and many pelagic species. This makes the finding that blue moki was 16 times more abundant inside the marine reserve than outside in 2016 (after 20 months of protection) particularly interesting. To have a more robust understanding of trends, and ultimately effectiveness of the marine reserve for reef fish species, more frequent monitoring needs to occur.

Blue cod are known to have restricted home ranges (typically less than 1 km across). Potting surveys indicate that despite its small size, the nearshore portion of the marine reserve is moderately effective in restoring blue cod to pre-fishing levels, as fish are more abundant in the marine reserve than adjacent fished areas.^{68,69} Blue cod were larger inside the marine reserve, although low catches of blue cod directly outside the marine reserve (suggested to be due to high fishing pressure) limited statistical analyses of size. Although blue cod have restricted movement, there is likely to be some movement in and out of the marine reserve, especially of those near the boundaries where fishing occurs.

The finding of better condition blue cod within the marine reserve has also been observed in Long Island – Kokomohua Marine Reserve in Marlborough Sounds. It is suggested these differences may relate to more productive ecosystems following the exclusion of fishing or to some physiological differences related to the sex change some blue cod undergo, which may not be occurring to the same extent within the marine reserve.⁶⁸

The potting survey data were also used to assess the effectiveness of four South Island marine reserves in enhancing blue cod sub-populations. It found that the portion of Hikurangi Marine Reserve that blue cod occupy, being the nearshore portion and less than 2% of the entire marine reserve, was the smallest effective marine reserve for blue cod of the four studied. So although it is not as effective as other marine reserves, particularly Long Island – Kokomohua Marine Reserve, the authors conclude it is having the desired effect for blue cod through increases in abundance and size.⁶⁹ As for rock lobster, to increase the effectiveness of the marine reserve for protecting blue cod, and other more mobile fish species, enlarging the nearshore portion of the marine reserve would need to be considered.

New Zealand fur seals and sperm whales

Fur seals are known to use the marine reserve, both for foraging at sea and breeding along the shoreline. If the Kaikōura Canyon is in fact buffered against environmental variability associated with the El Niño–Southern Oscillation, then the marine reserve may be helping to support prey availability for fur seals in the portion of the canyon it covers.

Submitters from the University of Otago marine megafauna research group stated that inshore canyon ridge, canyon gully and canyon rim habitats are known to be important for sperm whales at Kaikōura. Those submitters and a 2022 research paper⁷² suggested modifying the boundaries of the marine reserve to cover more foraging habitat (Conway Trough and Conway Ridge) to account for habitat use over all seasons. It is suggested that this could be beneficial by reducing entanglement risk and competition for prey. The importance of the marine reserve boundary for sperm whales would be an additional factor to

consider, alongside potential benefits for other key species and habitat representation (see section 4.2.4.6), if future consideration is given to alternative boundaries.

Recommendations

- As per section 4.2.4.1, DOC to develop and implement a plan that describes and tracks the operational management of the marine reserve, including a regular schedule of key species monitoring (including reef fish).
- As per section 4.2.4.6, DOC to engage with Te Rūnanga o Kaikōura and the Guardians to understand current aspirations for the marine reserve, particularly regarding its effectiveness for key species protection.

4.2.5 Conclusion

The evaluation of the marine reserve shows that early management was largely reactive and limited by the absence of a reserve-specific plan, dedicated resourcing, and national systems. Since around 2022, however, significant improvements in funding, staffing, and operational systems have strengthened education, compliance, and monitoring, resulting in more consistent and structured management. There remains room for improvement, which is reflected in some submitter feedback and perceptions about DOC effort, focus and presence.

The marine reserve provides high-level spatial protection and supports scientific research. There is evidence of positive outcomes for certain species, particularly less mobile reef and benthic species. Public feedback also recognises these benefits, with most submitters considering the marine reserve to be at least moderately effective in protecting marine life and habitats. However, the marine reserve's small nearshore extent limits its ecological effectiveness, especially for mobile species. The shape of the offshore part of the marine reserve means some canyon habitats are not protected, including their more diverse marine life.

In summary, the marine reserve is a valuable and increasingly well-implemented measure that provides meaningful conservation benefits. Areas for improvement include greater consistency with compliance and enforcement actions, continuing to increase the knowledge base through monitoring and research, and involving Te Rūnanga o Kaikōura and the Guardians in forward planning for the management of the marine reserve.

4.3. Te Rohe o Te Whānau Puha Whale Sanctuary

4.3.1 Background

4.3.1.1 The whale sanctuary

Te Rohe o Te Whānau Puha Whale Sanctuary (the **whale sanctuary**) covers approximately 4,700 km² of the coastal and offshore environment near Kaikōura. It extends from the northern boundary of the KMA at Clarence Point, south to near Gore Bay and offshore to a maximum distance of 56 km (Figure 10). Within its boundaries, seismic surveying is restricted (with greater restrictions in an 'inner sanctuary' zone) and seabed mining (other than petroleum mining) is prohibited.

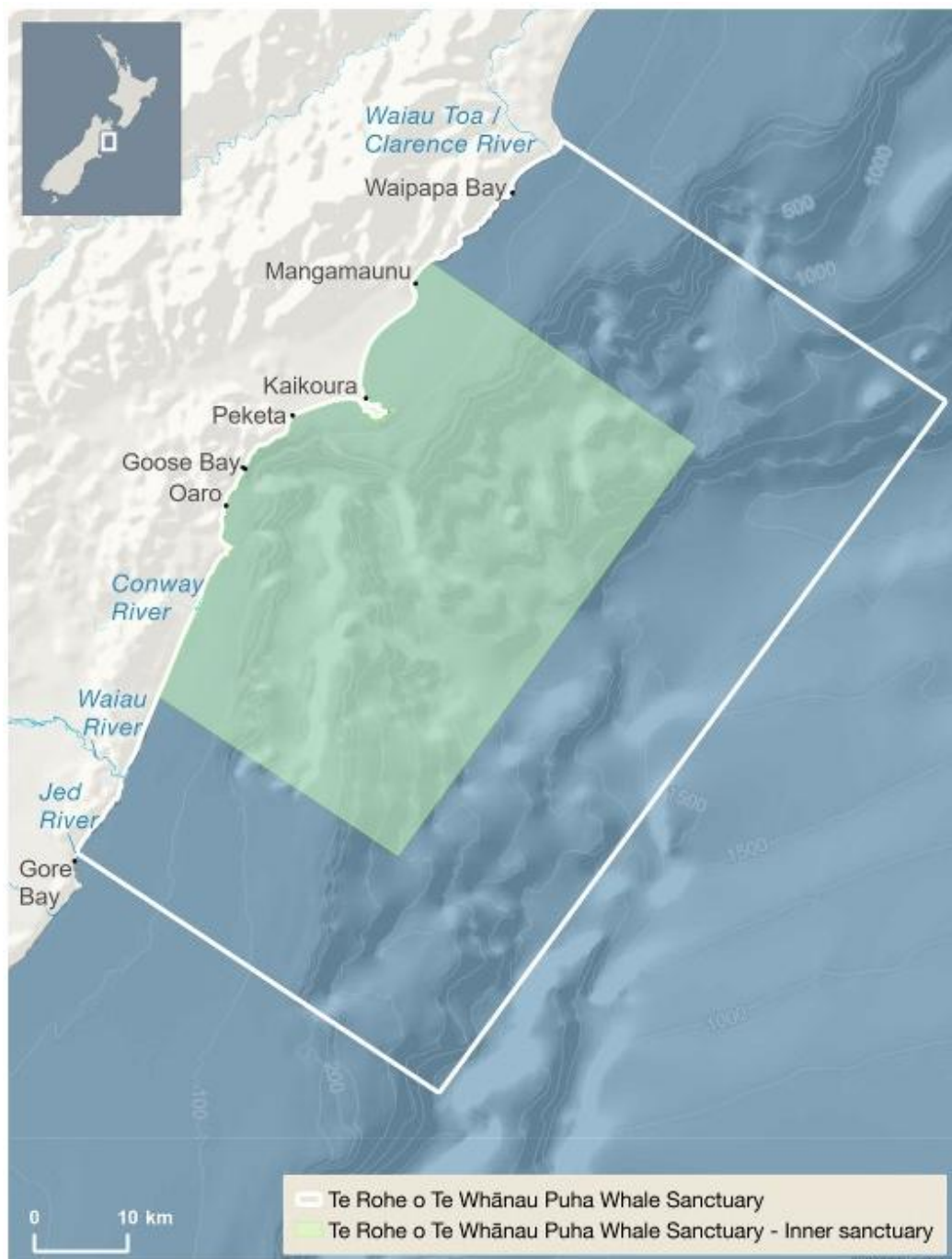


Figure 10: Te Rohe o Te Whānau Puha Whale Sanctuary.

The establishment of the whale sanctuary (with the seismic surveying restrictions) was in response to a proposal for such a sanctuary in the Strategy. Alongside Hikurangi Marine Reserve, it was another solution suggested in the Strategy to fulfil the objective 'that our marine treasures are protected and future generations can continue to experience the wonders that we have today'. Specifically, a marine mammal sanctuary was proposed with the goal to 'protect the habitat of whales and dolphins from future disturbance', and because they can be 'harmed or disturbed by the loud noises generated by seismic airgun surveys used in the oil and gas industry'.⁷⁶

The 2013 Regulatory Impact Statement stated that the purpose of the whale sanctuary was to 'reduce or eliminate residual risk⁷⁷ of effects from seismic survey activities on marine mammals' in the area.

Subsequently, the whale sanctuary was established in 2014 under section 11 of the Act, with restrictions on seismic surveying within the whale sanctuary implemented as required by section 16(1)(a) of the Act.

The prohibition on seabed mining⁷⁸ in the whale sanctuary was introduced in 2020 following the Government's review of the Hector's and Māui Dolphin Threat Management Plan and associated public consultation. This is discussed further in section 4.3.4.1.

The whale sanctuary is a management tool that sits alongside a wider national framework for managing marine mammals under the MMPA and MMPR, as set out in section 2.3.2.

In the KMA, additional local marine mammal management measures also apply, including:

- moratoria on issuing new marine mammal viewing permits for sperm whales and dusky dolphins in much of the area of the whale sanctuary until 2031^{79,80}
- a South Island Hector's Dolphin Bycatch Reduction Plan that includes restrictions on set netting and trawling and sets Fishing-Related Mortality Limits for Hector's and Māui dolphins in the KMA.

The evaluation below focusses on the whale sanctuary itself and the restrictions it establishes, rather than marine mammal protection and management generally.

4.3.1.2 Whale and dolphin populations in Kaikōura

The Kaikōura submarine canyon is one of the few places worldwide where male sperm whales feed close to shore all year. The proximity of deep water to the coastline enables typically offshore foraging behaviour to occur in near-shore waters.

Long-term photo-identification studies show that while individuals may remain in the area for weeks or months, no whales are truly resident; instead, Kaikōura is used by a recurring but mobile aggregation of males. Capture-recapture analyses from earlier research estimated 60-108 whales present in a given season, with a mix of long-term returnees and transient individuals.⁸¹ More recent analyses of 27 years of monitoring data demonstrate a significant long-term decline – almost a halving – in the number of male sperm whales visiting Kaikōura

⁷⁶ Chapter 4, Te Korowai o Te Tai ō Marokura – Kaikōura Coastal Marine Guardians, 2012. [Kaikōura Marine Strategy – Sustaining our sea](#) 2012. 143 p.

⁷⁷ 'most risk resulting from seismic surveying is avoided, remedied or mitigated by the conditions set out within the Code however further restrictions are proposed at this site to avoid the remaining minor residual risks given its particular mix of values and the importance of reliable behavioural patterns for the tourism industry.'

⁷⁸ In New Zealand, seabed mining proposals have mainly targeted ironsands off the west coast of the North Island and phosphate nodules on the Chatham Rise, with key concerns being permanent damage to seabed habitats, sediment plumes affecting wider ecosystems, noise, vibration and vessel effects on animals, including marine mammals, and high uncertainty about long-term and irreversible environmental effects.

⁷⁹ [Marine Mammal \(Sperm Whales – Kaikōura\) Declaration Notice - 2025-go4216- New Zealand Gazette](#)

⁸⁰ [Marine Mammal \(Dusky Dolphins\) Kaikōura Declaration Notice - 2025-go6252 | New Zealand Gazette](#)

⁸¹ Childerhouse, S., Dawson, S., Slooten, E., 1995. Abundance and seasonal residence of sperm whales at Kaikoura, New Zealand. Canadian Journal of Zoology, 73: 723-731, doi:[10.1139/z95-084](#).

over the past three decades.⁸² The causes are uncertain but may relate to changing oceanographic or ecological conditions that influence prey distribution and foraging suitability.^{82,83}

Consistent with these trends, sperm whales are classified globally as *Vulnerable* under the IUCN Red List.⁸⁴ Within New Zealand waters, the species is further classified as *At Risk – Declining* under the New Zealand Threat Classification System, reflecting a precautionary approach based on the documented decline in Kaikōura, but noting uncertainty about whether this is indicative of a decline elsewhere in New Zealand.⁸⁵

Sperm whales at Kaikōura also exhibit well-documented seasonal shifts in spatial distribution, likely responding to prey dynamics and canyon processes, with whales more commonly found closer to shore and in shallower canyon areas during winter, and further offshore in deeper waters during spring and summer.^{82,86} Stable-isotope and dietary studies indicate corresponding seasonal changes in prey, with summer foraging dominated by squid and winter diets more varied, reflecting shifts in prey communities and oceanographic structure.^{82,87}

Dusky dolphins make extensive and consistent use of the Kaikōura marine environment and are closely associated with the Kaikōura Canyon. Long-term shore-based, vessel-based, and tourism-derived datasets demonstrate that the area forms an important habitat for the wider, mobile population of dusky dolphins along the east coast of the South Island.^{88,89,90}

Dusky dolphins are present year-round, with clear seasonal and diel (i.e. 24-hour period) shifts in distribution likely reflecting prey availability and behavioural requirements. In summer, dusky dolphins are primarily distributed close to shore during daylight hours, forming smaller groups associated with resting, calving, and social behaviour, before moving offshore later in the day to forage.^{86,88,89,91} In winter, dolphins are predominantly found farther offshore and in deeper water throughout the day, with larger, more mobile groups concentrated in and around the canyon.^{86,88,89,90}

Dusky dolphins in New Zealand are classified as *Not Threatened* under the New Zealand Threat Classification System⁸⁴ and as *Least Concern* on the IUCN Red List, reflecting the size and broad distribution of the global population⁹².

4.3.1.3 Effects of the 2016 earthquake

The Kaikōura earthquake triggered hundreds of small, shallow failures that rapidly reshaped the canyon head, fed a massive sediment flow, and resulted in an underwater sediment

⁸² Somerfield, T., Dawson, S., Slooten, E., Guerra, M., Childerhouse, S., Richter, C., van der Linde, M., Rayment, W., 2022. Long-term decline in abundance of male sperm whales visiting Kaikōura, New Zealand. *Marine Mammal Science*, 38(2): 606-625, doi:[10.1111/mms.12886](https://doi.org/10.1111/mms.12886).

⁸³ Guerra, M., 2019. *Foraging ecology of sperm whales at Kaikōura*. PhD Thesis, University of Otago.

⁸⁴ <https://www.iucnredlist.org/species/41755/50382216>

⁸⁵ Lundquist, D., Boren, L., Childerhouse, S., Constantine, R., van Helden, A., Hitchmough, R., Michel, P., Rayment, W., Baker, S., 2025. *Conservation status of marine mammals in Aotearoa New Zealand 2024*. New Zealand Threat Classification Series 48. Department of Conservation.

⁸⁶ Sagnol, O., Richter, C., Field, L., Reitsma, F., 2014. Spatio-temporal distribution of sperm whales (*Physeter macrocephalus*) off Kaikōura, New Zealand, in relation to bathymetric features. *New Zealand Journal of Zoology*, 41(4): 234-247, doi: [10.1080/03014223.2014.936474](https://doi.org/10.1080/03014223.2014.936474).

⁸⁷ Guerra, M., Sabadel, A., Rayment, W., Dawson, S., Wing, L., 2023. Seasonal variation in the use of food resources by sperm whales in a submarine canyon. *Deep Sea Research Part I: Oceanographic Research Papers*, 200: 104149, doi: [10.1016/j.dsr.2023.104149](https://doi.org/10.1016/j.dsr.2023.104149).

⁸⁸ Dahood, A., 2009. Dusky dolphin (*Lagenorhynchus obscurus*) occurrence and movement patterns near Kaikōura, New Zealand. MSc Thesis. Texas A&M University.

⁸⁹ Würsig, B., Duprey, N., Weir, J., 2007. *Dusky dolphins (Lagenorhynchus obscurus) in New Zealand waters: present knowledge and research goals*. DOC Research & Development Series 270. Department of Conservation.

⁹⁰ Lundquist, D., 2012. *Behaviour and movement patterns of dusky dolphins off Kaikōura, New Zealand: Effects of tourism*. PhD Thesis, University of Otago.

⁹¹ Markowitz, W., 2012. *Comparative socioecology of the dusky dolphin (Lagenorhynchus obscurus) in New Zealand*. PhD Thesis, Massey University.

⁹² <https://www.iucnredlist.org/species/11146/175604493>

avalanche that travelled hundreds of kilometres down the canyon.⁹³ This substantially modified canyon morphology and removed or smothered benthic invertebrate communities that underpin local food webs.⁹⁴ Seafloor mapping and oceanographic studies indicate that these physical changes were among the largest directly observed in a submarine canyon globally, with implications for nutrient pathways and prey availability in the years following the earthquake.⁹⁴

The effects of the Kaikōura earthquake on sperm whales, which rely on the canyon as a year-round foraging ground, are comparatively well documented. Long-term behavioural datasets show that whales were not displaced from the region but exhibited measurable changes in foraging behaviour and habitat use for at least 12 months after the earthquake.⁹⁵ In particular, whales spent around 25% longer at the surface between dives and shifted their core foraging areas away from the upper canyon, consistent with increased effort to locate prey following habitat disruption.⁹³ Stable isotope analyses did not detect a change in diet, suggesting behavioural adaptation rather than prey switching.⁹⁵ By approximately one year post-earthquake, whale behaviour largely returned to pre-event patterns, indicating a degree of resilience alongside temporary ecological impact.⁹⁵

In contrast, there has been no targeted research on post-earthquake effects on dusky dolphins. There is currently no clear indication of a dramatic change in dusky dolphin presence following the earthquake, however, the absence of dedicated studies means that potential changes in foraging behaviour, habitat use, or population-level effects have not been assessed.

4.3.2 Evaluation approach

Further to the approach set out in section 3, evaluation of the operation and effectiveness of the whale sanctuary was informed by:

- feedback received from public consultation
- feedback from Te Rūnanga o Kaikōura and the Guardians
- research, monitoring and management information held by DOC and others.

Section 4.3.3 presents a summary of feedback from public consultation. Feedback from the public was obtained on:

- the effectiveness of the whale sanctuary in reducing disturbance to marine mammals
- successes and challenges in relation to the whale sanctuary
- suggestions for changes or improvements to the whale sanctuary.

Section 4.3.4 presents DOC's evaluation, which sought to assess the following questions:

- Has the whale sanctuary been implemented according to the provisions in the Act?
- How appropriate has the management of the whale sanctuary been?
- Do the whale sanctuary restrictions adequately manage impacts of noise and seabed disturbance on marine mammals?

⁹³ Gnesko, L., Stahl, T., Mountjoy, J., Carey, J., 2025. Transient evidence of shallow coseismic submarine landslides shaping canyon head geomorphology: Insights from the 2016 Kaikōura earthquake, New Zealand. *Geology*, 53(12): 1029-1034, doi: [10.1130/G53867.1](https://doi.org/10.1130/G53867.1).

⁹⁴ [Kaikōura earthquake provides world-first insight into submarine canyons | Earth Sciences New Zealand | NIWA](#).

⁹⁵ Guerra, M., Dawson, S., Sabadel, A., Slooten, E., Somerford, T., Williams, R., Wing, L., Rayment, W., 2020. Changes in habitat use by a deep-diving predator in response to a coastal earthquake. *Deep-Sea Research Part I* 158 103226, doi: [10.1016/j.dsr.2020.103226](https://doi.org/10.1016/j.dsr.2020.103226).

4.3.3 Summary of feedback received from public consultation

48 of the total 54 submitters responded in relation to the whale sanctuary.

38 submitters responded to the question, ‘How effective do you think Te Rohe o Te Whānau Puha Whale Sanctuary has been in reducing disturbance to marine mammals?’. Figure 11 shows that 45% of the 38 respondents thought the whale sanctuary has been adequate or better at reducing disturbance to marine mammals.

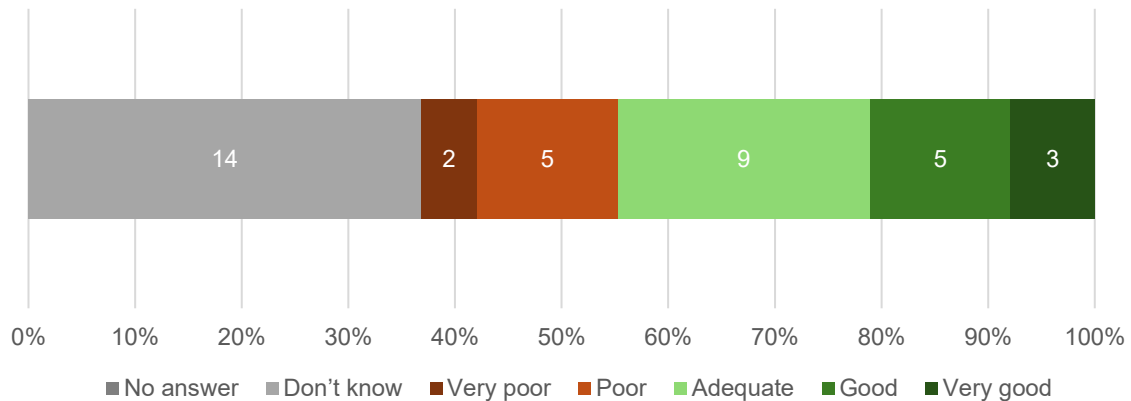


Figure 11: Responses from 38 online survey submitters to the question, ‘How effective do you think Te Rohe o Te Whānau Puha Whale Sanctuary has been in reducing disturbance to marine mammals?’.

Feedback from submitters in response to the three survey questions has been summarised into five themes:

- Concern for declining sperm whale population
- Increase the size of the whale sanctuary
- Strengthen mining or seismic surveying restrictions
- Add vessel speed and noise restrictions
- Strengthen management actions.

Note: The whale sanctuary was established to mitigate the effects of seismic survey noise on marine mammals and subsequently additional restrictions added to minimise the ecological and noise impacts of seabed mining (excluding petroleum mining). Many matters raised in submissions extend beyond this narrow focus and are addressed in section 5.4.2, which considers these broader pressures on marine mammals in the context of overall effectiveness of the Act’s management measures.

4.3.3.1 Concern for declining sperm whale population

19% (9) of submitters expressed concern about the documented decline in the local sperm whale population and, as a result, recommended strengthening the whale sanctuary to increase protection for this population. Research presented in submissions from the University of Otago’s long-running study of the Kaikōura sperm whale population describes a significant decline in estimated annual abundance, with preliminary (unpublished) research indicating a reduction from 88 individuals in 1991 to 17 individuals in 2024; a decline of 80%. Submitters set out that drivers of decline are not well understood, and some raised concern that sperm whale deaths have increased unusually since 2018, including multiple whales regularly seen in Kaikōura.

4.3.3.2 Increase the size of the whale sanctuary

27% (13) of submitters commented in relation to the whale sanctuary's size or boundary. Many stated that there is a mismatch between the area that the whale sanctuary covers and the area that is known to be used by the sperm whale population. Most recommended increasing the size of the whale sanctuary to cover the area from Cook Strait (north of the current sanctuary) to Pegasus Canyon (south of the current sanctuary) and following the 2,000 m depth contour. Submitters explained that this would protect the population from detrimental impacts of seismic surveying over a greater portion of the population's range. Ten of these submissions were made by experts in the field of marine mammal conservation and ecology.

PauaMAC3 noted in their submission that changes to boundaries of the whale sanctuary, fur seal sanctuary or the marine reserve may affect commercial pāua fishing operations, and they requested early and direct consultation on any changes.

4.3.3.3 Strengthen mining and/or seismic surveying restrictions

29% (14) of submitters raised points relating to the existing mining and seismic surveying restrictions.

Three of these highlighted the value in the existing provisions and called for them to be maintained.

Eleven submitters highlighted risks to the sperm whale population from allowing petroleum mining in the whale sanctuary and/or called for petroleum mining to be prohibited in the whale sanctuary. Reasons cited by submitters, with evidence from scientific studies, include: impacts from increased vessel traffic associated with mining activities (acoustic pollution, vessel strikes) and oil spill impacts (death, distribution shifts, pollutant exposure).

Eight submitters also called for strengthening of the seismic surveying restrictions that are currently in place. Submitters cited a lack of rationale or biological justification for having a distinction between the 'inner' part and the rest of the whale sanctuary, and said that all seismic surveying, except 'Level 3' surveys when essential (e.g. emergency use or to enhance scientific understanding), should be prohibited. Submitters backed up these suggestions by citing research demonstrating that seismic surveys have far-reaching noise propagating effects and recent research that the whales are likely spending more time beyond the Kaikōura Canyon.

4.3.3.4 Restrict vessel speed and noise

31% (15) submitters raised points relating to impacts of vessels on whales, particularly around vessel speed and noise.

Two submitters provided the view that commercial whale watching from vessels in Kaikōura should be prohibited. The remainder recommended that vessel speed restrictions should be put in place due to impacts on the sperm whale population or migrating humpback whales. These impacts include vessel strike (which can cause injury or death) and underwater noise (producing sub-lethal effects such as masking acoustic signals and increasing stress). Many of those submitters referred to instances of dead or injured whales with signs of ship collisions or propellor damage.

Many of the submitters recommended that vessel speed be restricted to 10 knots for vessels larger than 70 m length, within the whale sanctuary. One submitter referenced the success of

restricting large vessel speed in the Hauraki Gulf to reduce collisions with Bryde's whales. Some also suggested that speed restrictions for smaller vessels were warranted.

4.3.3.5 Strengthen management actions

19% (9) submitters raised other matters that relate to the operational management of the whale sanctuary. Concern was raised at the lack of information available to support management decisions, with calls for additional resources for research and monitoring, including for acoustic information, tourism impacts, fishing impacts and potential causes of the population decline. Some submitters called for prohibiting tourism operations around the whales (both by boat and from the air) or for greater enforcement of boating regulations. One submitter highlighted there is insufficient public communications about the whale sanctuary.

4.3.4 Operation and effectiveness of the whale sanctuary

This section summarises and evaluates the operation of the whale sanctuary, focusing on implementation and management (section 4.3.4.1 and 4.3.4.2, respectively). It then assesses how effectively the whale sanctuary is achieving its original purpose (section 4.3.4.3). The review covers the period from enactment to late 2025, where possible.

4.3.4.1 Has the whale sanctuary been implemented according to the provisions in the Act?

Relevant information

Implementation of section 16 of the Act – impose seismic surveying restrictions

Section 16 of the Act required the Minister of Conservation, within one month of the Act's commencement, to impose restrictions on seismic surveying within the whale sanctuary. *Te Rohe o Te Whanau Puha Kaikoura Whale Sanctuary (Restrictions) Notice 2014*⁹⁶ was gazetted 13 days after the Act's commencement. It restricts seismic surveying in the whale sanctuary by:

- requiring all surveys to comply with DOC's 2013 Code of Conduct for Minimising Acoustic Disturbance to Marine Mammals from Seismic Survey Operations⁹⁷ (the Code of Conduct)
- prohibiting Level 1 surveys unless necessary for an urgent hazard assessment
- prohibiting Level 2 surveys in a part of the whale sanctuary referred to as the 'inner sanctuary' unless approved by the Director-General of Conservation for specified purposes.

The Code of Conduct describes three levels of surveys⁹⁸ based on the operational capacity of the acoustic source used in the survey – Level 1 surveys have the greatest capacity and therefore are expected to be the 'loudest', while Level 3 surveys have the lowest capacity and nominal noise levels that are generally no louder than other sources of noise in the marine environment, e.g. commercial shipping.

Three acoustic surveys have been undertaken within the whale sanctuary since its establishment (in 2018, 2020 and 2025). All were geological research surveys undertaken by

⁹⁶ [Te Rohe o Te Whanau Puha Kaikoura Whale Sanctuary \(Restrictions\) Notice 2014 - 2014-go5215- New Zealand Gazette](#)

⁹⁷ Department of Conservation, 2013. [Code of Conduct for Minimising Acoustic Disturbance to Marine Mammals from Seismic Survey Operations](#), 36 p.

⁹⁸ The Code of Conduct defines the three survey types by the total combined operational capacity of the acoustic source used: Level 1 surveys – in excess of 7 litres/427 cubic inches capacity, Level 2 surveys - between 2.50–6.99 litres/151–426 cubic inches capacity, and Level 3 surveys - less than 2.49 litres/150 cubic inches capacity or the use of sparkers, pingers and boomers.

NIWA (now called Earth Sciences New Zealand) and domestic/international partners, and all were classified as Level 3 under the Code of Conduct. Level 3 surveys are considered such low risk that no reporting, monitoring, or mitigation is required.

No Level 1 or 2 surveys have been proposed or undertaken in the whale sanctuary since its creation and therefore the gazette notice provisions for these types of surveys have not been exercised. Level 1 surveys are those generally used during oil and gas exploration. During the development of the proposal for the whale sanctuary set out in the Strategy, the Petroleum Exploration and Production Association of New Zealand (now Energy Resources Aotearoa) advised that the prospectivity of this area is low for both oil and gas. Further, in 2018 the Government introduced a ban on issuing any new offshore oil and gas exploration permits. This was repealed in 2025, restoring the ability to grant new exploration permits. No existing permits are held for the area of the whale sanctuary.

Application of section 15 of the Act – imposing additional restrictions

Section 15 of the Act allows the Minister of Conservation to impose restrictions in the whale sanctuary after seeking and considering public submissions on proposed restrictions and obtaining the consent of any other Minister whose responsibilities would be affected by the proposal.

Section 15 has been used once since the whale sanctuary was established. The Gazette notice, *Te Rohe o Te Whānau Puha Whale Sanctuary (Restriction) Notice 2020*⁹⁹, prohibits seabed mining (except for petroleum mining) within the whale sanctuary.

A 2018-2019 review of the Hector's and Māui Dolphin Threat Management Plan led to decisions to amend five existing marine mammal sanctuaries¹⁰⁰, including to prohibit seismic surveying and seabed mining (with some exemptions) in the sanctuaries. These restrictions were intended to help protect Hector's and Māui dolphins against impacts from the noise of both activities, as well as direct seabed disturbance and sedimentation associated with seabed mining. To provide consistency with these five marine mammal sanctuaries, and to extend protection for marine mammals along the east coast of the South Island, the then Minister of Conservation consulted the public, the Guardians and Te Korowai and ultimately decided to also prohibit seabed mining (except for petroleum mining)¹⁰¹ in the whale sanctuary.

In the period between the whale sanctuary being established in 2014 and the seabed mining restriction being implemented in 2020, no seabed mining permits existed in the area. The prospectivity of the area for seabed mining is considered low and no minerals permits have ever been issued in the whale sanctuary area.

Implementation of other relevant sections of the Act

Sections 17 to 20 of the Act also apply to the whale sanctuary. Section 17 provides for the recovery of costs by DOC where an application is made for an exemption to restrictions imposed under section 15. No such application has been made.

Sections 18 and 19 relate to offences and enforcement, however no offences have been committed nor any enforcement required. Due to the nature of the activities subject to

⁹⁹ [Te Rohe o Te Whānau Puha Whale Sanctuary \(Restriction\) Notice 2020 - 2020-g04493- New Zealand Gazette](#)

¹⁰⁰ West Coast North Island Marine Mammal Sanctuary, Banks Peninsula Marine Mammal Sanctuary, Clifford and Cloudy Bay Marine Mammal Sanctuary, Catlins Coast Marine Mammal Sanctuary and Te Waewae Bay Marine Mammal Sanctuary.

¹⁰¹ Petroleum mining was excluded because it was already regulated nationally under the Crown Minerals Act, with no new offshore exploration permitted at the time, and was assessed as posing a lower risk to marine mammals. This exclusion applies for all other marine mammal sanctuaries in New Zealand.

restrictions imposed within the whale sanctuary, it would be obvious if they were occurring without being authorised.

Section 20 of the Act applies sections 3A to 3H of the MMPA 1978 to the whale sanctuary. Sections 3A-3C require DOC to administer marine mammal sanctuaries, and therefore the whale sanctuary, in accordance with the Conservation General Policy and the Nelson Marlborough Conservation Management Strategy 1996 (the CMS). However, neither the Conservation General Policy nor the CMS include objectives or provisions specific to marine mammal sanctuaries. In particular, the CMS was published in 1996, prior to the establishment of the whale sanctuary. DOC's management planning system is challenged, with many statutory planning documents overdue for review. As a result, the CMS contains no objectives or direction relevant to the whale sanctuary.

Section 3D provides a mechanism for a conservation management plan to be developed in respect of managing a marine mammal sanctuary. No conservation management plan exists for the whale sanctuary, nor for any of New Zealand's other eight marine mammal sanctuaries. Since the restrictions for the whale sanctuary are straightforward, a conservation management plan was not deemed necessary for its effective management.

Sections 3E and 3H relate to approval of, and procedures for preparing, population management plans, respectively. Sections 3F and 3G relate to determining levels of fishing-related mortality of marine mammals. None of these sections have been exercised in relation to the whale sanctuary.

Evaluation

Key message: The whale sanctuary meets the Act's requirements; debate is about future strengthening, not implementation.

The whale sanctuary has been implemented in line with the requirements and structure of the Act. The Act's mandatory provisions have been given effect, and the discretionary powers it provides have been exercised, or not exercised, in a manner consistent with their design.

Statutory requirements to impose restrictions were met, with seismic surveying restrictions introduced under section 16 and additional seabed mining restrictions imposed under section 15 following consultation. DOC administers the whale sanctuary as a marine mammal sanctuary in accordance with section 20 of the Act. Enforcement, offence, exemption, and cost-recovery provisions have not been required, reflecting the absence of unauthorised activities or applications rather than any gap in implementation.

Several enabling provisions within the Act and associated MMPA – including conservation management plans, population management plans, and fisheries-related mortality mechanisms – have not been exercised in relation to the whale sanctuary. These provisions are discretionary and contingent, and their non-use does not, in itself, indicate a failure to implement the Act.

Several submitters questioned whether the current seismic surveying and seabed mining provisions are sufficient to protect marine mammals, rather than whether they were implemented. Some expressed concern that the Act's regulatory scope is narrow and focused on a limited set of industrial activities and does not address a wider range of pressures affecting marine mammals in the Kaikōura region. Within this context, the Environmental Law Initiative drew attention to fishing-related marine mammal deaths occurring within the whale sanctuary and noted that additional statutory tools could, in principle, be applied, including further restrictions under section 15 of the Act. While this is correct, DOC notes that the whale sanctuary was not established for the purpose of reducing

fishing interactions with marine mammals, and that other mechanisms exist (such as under the Fisheries Act) to reduce these.

Overall, the whale sanctuary has been implemented consistently with the Act. Issues raised by submitters relate primarily to the scope and future use of discretionary powers and are considered further in the assessment of effectiveness.

Recommendations

- DOC to maintain the existing seismic surveying and seabed mining provisions of the whale sanctuary.

4.3.4.2 How appropriate has the management of the whale sanctuary been?

The whale sanctuary is established under the Act and is administered and managed by DOC under the authority of the Minister of Conservation, within the wider framework of the MMPA.

Relevant information

Planning and resourcing

As set out in section 4.3.4.1, the regional CMS has no provisions specific to the whale sanctuary, and no management plan has been developed for the sanctuary.

Minimal DOC operational budget has been spent on managing restrictions within the whale sanctuary since it was established. Initially, there was a small cost for printing and distributing a public brochure communicating the new rules and management measures established for the KMA, including the whale sanctuary.

DOC staff time spent on managing the whale sanctuary relates to administering the Code of Conduct generally, liaising with NIWA for the three seismic surveys that have been conducted, and supporting the then Minister of Conservation's proposal and subsequent decision to prohibit seabed mining.

Public awareness and outreach

In 2014, Agencies, in conjunction with Te Korowai, developed and distributed a brochure to communicate to the public about the passing of the Act and the establishment of the new management measures, including the whale sanctuary. This brochure was published online and printed copies distributed to several local and regional outlets.

DOC similarly updated its website with information about the passing of the Act and the establishment of new management measures. The new restrictions implemented in 2020 for seabed mining were included in a broad public consultation on changes to the Hector's and Māui dolphin Threat Management Plan and were also communicated on DOC's website. Information on the whale sanctuary on DOC's website was updated and consolidated in 2025. It appears few other public communication actions have been undertaken in relation to the whale sanctuary.

Engagement with Treaty partners and stakeholders

DOC does not regularly or routinely engage with Treaty partners, the Guardians, or other stakeholders regarding the management of the whale sanctuary specifically.

In terms of the seismic survey restrictions, DOC has no direct responsibility for engagement between seismic survey proponents and stakeholders or iwi (under the Code of Conduct). Nonetheless, through NIWA's engagement with DOC prior to the three Level 3 seismic

surveys within the whale sanctuary, DOC asked NIWA to contact the Guardians, local rūnanga and tourism operators to discuss their plan and coordinate activities where required.

Regarding the seabed mining restrictions, the Guardians submitted in support of the 2020 proposal. DOC spoke to the Guardians at a November 2020 meeting acknowledging the Guardians' submission and to report the seabed mining restriction had now been gazetted and was in force.

The Guardians' meeting minutes do not record any other instances of DOC discussing the management of the whale sanctuary with them.

DOC notified iwi groups of the Minister of Conservation's proposal to prohibit seabed mining within the whale sanctuary and offered the opportunity for discussion on the proposal.

Compliance/law enforcement effort

Only Level 3 seismic surveys have been undertaken in the whale sanctuary since its establishment. Level 3 surveys are considered such low risk that no reporting, monitoring, or mitigation is required under the Code of Conduct. As such, no compliance monitoring or law enforcement actions have been needed by DOC in relation to seismic surveying. Proponents intending to conduct Level 3 surveys are not required to notify DOC, but it is considered very unlikely that surveys have been undertaken without prior notification. In all three instances where surveys have occurred this notification has taken place, likely due to established relationships between DOC and the survey proponent NIWA, plus internal requirements at research institutes to communicate their activities in advance.

Regarding the seabed mining restrictions, it has not been necessary for DOC to carry out any compliance monitoring or law enforcement as mining activities first need to be authorised under the Crown Minerals Act 1991 (and potentially environmental legislation) and no such authorisations have been issued in the whale sanctuary area.

Evaluation

Key message: The whale sanctuary has been managed appropriately, with minimal intervention reflecting its narrow focus and low activity.

The whale sanctuary has been managed in line with its limited purpose and the low level of regulated activity. Its rules apply only to seismic surveying and seabed mining. No seabed mining has taken place, and only three low-risk seismic surveys have been undertaken. DOC's management has therefore been light-touch and largely responsive, which is appropriate for the whale sanctuary as established.

DOC's role has focused on administering the restrictions, maintaining operational relationships with research organisations, and supporting Ministerial decision-making where required. Active monitoring or intervention has not been needed, and the level of staff time and resources applied has been proportionate to the risks being managed.

Public submissions raised issues relating to the management of the whale sanctuary that are outside the scope of its purpose. These are considered further in section 5.4. DOC is aware there is a broader public misconception that New Zealand's marine mammal sanctuaries provide comprehensive protection to marine mammals. This perception does not affect management of the whale sanctuary, but it helps explain why expectations of its role can extend beyond its statutory function. A recent update to information about the whale sanctuary on DOC's website may help with public understanding of its function.

Engagement with stakeholders, including the Guardians, has been limited and mostly responsive, reflecting the low level of activity requiring management. The Guardians have indicated they would like to be directly informed when seismic surveys are proposed within the area. While DOC does not have a formal role in approving or coordinating these surveys, if it becomes aware of proposed activity through operational contacts, sharing advance notice via existing liaison channels would help maintain good working relationships without creating new or ongoing management responsibilities.

The Guardians have also emphasised that the reason for the sanctuary being proposed originally was to provide protection to all marine mammals, not just whales as the sanctuary's name suggests. The Guardians would like this wider purpose to be communicated to the public more effectively in the future.

Recommendations

- DOC to improve clarity of public information to address misconceptions about what the whale sanctuary does and does not regulate, and that it is to benefit all marine mammals, but otherwise maintain current management settings.
- DOC to use existing liaison channels to notify Te Rūnanga o Kaikōura and the Guardians of proposed seismic surveys within the whale sanctuary.

4.3.4.3 Do the whale sanctuary restrictions adequately manage impacts of noise and seabed disturbance on marine mammals?

Relevant information

Seismic survey restrictions

Seismic surveying within the whale sanctuary is regulated under the 2014 Restrictions Notice. All marine seismic surveys must comply with the Code of Conduct. Level 1 surveys are prohibited except for urgent hazard assessments, while Level 2 surveys are restricted within parts of the whale sanctuary and require approval.

The Code of Conduct has a tiered system of management measures based on survey level and enables the Director-General of Conservation to impose additional, site-specific requirements where a survey is proposed in a sensitive area, including within the whale sanctuary.

Since the whale sanctuary was established in 2014, the seismic surveys undertaken within its boundaries have been limited to low-powered Level 3 surveys.

Seabed mining restrictions (excluding petroleum)

Mining the seabed for minerals is prohibited within the whale sanctuary under a 2020 gazette notice. This prohibition applies to activities involving disturbance of the seabed for mineral extraction.

No seabed mining activities have been authorised or undertaken within the whale sanctuary since the prohibition was introduced. There have never been minerals exploration or prospecting permits, or applications for them, covering the whale sanctuary area.

During consultation on the proposal to establish the seabed mining prohibition, the Guardians expressed support for the restriction, noting its alignment with the objectives of the Strategy, and their disappointment that petroleum mining would not be prohibited.

Petroleum exploration and mining

As set out above, petroleum mining is not prohibited within the whale sanctuary. Petroleum exploration and mining are managed under the Crown Minerals Act 1991 and associated regulatory frameworks.

In 2018, amendments to the Crown Minerals Act prohibited the issuing of new petroleum exploration permits. That prohibition remained in place until it was repealed in 2025, restoring the ability to grant new exploration permits.

There are currently no petroleum exploration, prospecting or mining permits, or applications for them, covering the whale sanctuary, nor have there ever been such permits. Petroleum exploration would generally require seismic surveying to identify potential deposits, and any such activity would also be subject to applicable whale sanctuary restrictions and regulatory approvals. Petroleum mining would require further permits and consents under relevant legislation.

Seismic surveying outside the whale sanctuary

At a national level, commercial seismic surveying associated with petroleum exploration has been limited since the establishment of the whale sanctuary.

In 2016, a Level 1 seismic survey for petroleum exploration was undertaken in the broader Kaikōura region. The closest point of this survey was approximately 20 km east of the whale sanctuary. As part of its assessment process, the proponent considered potential effects on marine mammals within the whale sanctuary and undertook long-range acoustic modelling. The modelling estimated received noise levels within the whale sanctuary would be significantly less than the noise levels required for compliance with the Code of Conduct.

Since 2018, there have been three commercial seismic surveys nationally – two in the North Taranaki Bight and one in the Great South Basin. All were carried out well outside the Kaikōura region and farther from the whale sanctuary than the 2016 survey, so received sound levels within the whale sanctuary are expected to have been lower, although they were not directly measured.

The acoustic landscape in the whale sanctuary

Aside from seismic surveying, other sources of noise may cause acoustic disturbance to marine mammals in the whale sanctuary. No specific data was found to quantify the levels of human-caused underwater noise in the whale sanctuary. However, given the general lack of industrial noise sources in this open ocean environment, it is reasonable to infer that most human-caused underwater noise will be from vessels.

The primary source of this noise is likely to be commercial and recreational vessels, typically interacting with animals multiple times a day at relatively close distances and throughout the year. These potential impacts are addressed using the MMPR, including the permitting of commercial operations (Part 1) and general rules for behaviour around marine mammals (Part 3). Vessel presence in the whale sanctuary is likely to have been variable since 2014, with typically frequent activity punctuated by periods of substantially reduced vessel use following the 2016 earthquakes and during the 2020-21 COVID-19 restrictions, when travel was significantly curtailed. Commercial tourism vessel activity around marine mammals has been restricted to existing permit holders since 1998 and 1999 (for sperm whales and dusky dolphins respectively), via the moratoria on issuing new viewing permits over most of the area that is now within the whale sanctuary.

There was some use of explosives to remove rock and re-open a channel to South Bay following the 2016 earthquakes. The use of explosives is normally regulated under the *Canterbury Regional Coastal Plan*¹⁰², but was approved in this case as part of the earthquake emergency response, under the *Hurunui/Kaikōura Earthquakes Emergency Relief Act 2016*. DOC was asked for advice on mitigating potential impacts on protected species (including marine mammals), but due to the urgency of these works it is uncertain what mitigation protocols were used.

Evaluation

Key message: The sanctuary restrictions effectively manage the key activities that generate high-intensity noise and seabed disturbance, and complement the broader regulatory framework that exists for managing noise and seabed disturbance.

The whale sanctuary restrictions provide effective control over the primary activities known to generate high-intensity underwater noise and direct seabed disturbance. Restrictions on seismic surveying have limited activity within the whale sanctuary to low-powered surveys, and non-petroleum seabed mining is prohibited. There is no evidence of these activities occurring in a way that would undermine the whale sanctuary's intent.

Petroleum exploration and mining remain permissible in principle. However, there are currently no petroleum exploration applications or permits covering the whale sanctuary, and any future activity would be subject to seismic survey restrictions and broader regulatory and consenting requirements. While the repeal of the ban on new petroleum exploration permits in 2025 has reopened this pathway in law, no change in activity within or near the whale sanctuary has occurred to date. Some submitters nevertheless expressed concern about the potential future risk associated with petroleum activities and called for petroleum mining to be explicitly prohibited within the whale sanctuary. During engagement, the Guardians also raised concerns about whether existing restrictions were sufficient given the repeal of the ban on new permits. DOC considers the existing prohibition on Level 1 seismic surveys (via the gazette notice) is likely to serve as a de facto prohibition on petroleum exploration, and therefore that it is not warranted to investigate further regulatory restrictions for the whale sanctuary.

The Guardians also raised a risk from seabed mining outside of the whale sanctuary, should that occur, noting the potential for sediment plumes to reach Kaikōura from over 1,000 km away. Some submitters raised a similar concern, calling for the whale sanctuary to be extended to better reflect the known range of the sperm whale population. DOC notes that for seismic surveys outside the whale sanctuary, compliance with the Code of Conduct is voluntary within the territorial sea but mandatory in the EEZ. However, as described above, seismic survey activity has been infrequent in this region, and it is not expected to increase due to the low prospectivity potential of the area. DOC considers these settings are currently adequate but would revisit them if this situation changes.

Other submitters called for the distinction between the 'inner' and the rest of the whale sanctuary to be removed, noting the potential for noise to travel long distances. This would have the effect of restricting Level 2 surveys across the entire whale sanctuary to only those approved by the Director-General of Conservation for specified purposes. DOC considers the current settings are appropriate as they significantly restrict permission for Level 2 surveys in the area of highest use by sperm whales – particularly the nearshore canyon

¹⁰² Environment Canterbury, 2020. [Regional Coastal Environment Plan for the Canterbury Region](#). 244p.

where whales are consistently present, forage and are repeatedly recorded over time – to research or public good purposes.

The whale sanctuary restrictions do not address other sources of underwater noise and disturbance, particularly vessel-generated noise, which is managed through separate regulatory frameworks. Some submitters raised concerns that these sources of noise are not directly managed through the sanctuary's restrictions and considered this a limitation of the current approach. These matters sit outside the specific focus of the restrictions on seismic surveying and seabed mining and so are further discussed in section 5.4.

Taken together, the whale sanctuary restrictions adequately manage the different and specific noise and seabed disturbance risks they were designed to address. Their effectiveness is supported by the absence of high-intensity seismic surveying and seabed mining within the whale sanctuary, while reliance on complementary regulatory regimes reflects the targeted role of the whale sanctuary within a broader marine management framework.

Recommendations

- Maintain the current whale sanctuary restrictions.
- DOC to continue monitoring the type, frequency and location of seismic surveying and petroleum permitting activity.
- DOC to periodically review the adequacy of current restrictions in light of changes in petroleum permitting, emerging activities, or new evidence on cumulative and long-range effects (e.g. noise propagation and sediment plumes).

4.3.5 Conclusion

The evaluation of the whale sanctuary shows that it is a targeted and largely effective management tool for addressing specific, high-risk pressures on marine mammals—particularly noise from seismic surveying and disturbance from seabed mining. The regulatory framework has been implemented as intended, with strong restrictions preventing high-intensity activities within the sanctuary and only low-risk activities occurring since its establishment. In this respect, the sanctuary is achieving its core purpose, providing a meaningful safeguard against some anthropogenic threats to marine mammals.

Management of the sanctuary has generally been proportionate to the low level of regulated activity, but it remains relatively light-touch, with limited resourcing, outreach, and structured engagement. This has contributed to low public awareness and some misunderstanding about the sanctuary's role and scope. There are also opportunities to strengthen engagement and transparency about activities in the sanctuary with Te Rūnanga o Kaikōura and the Guardians.

In conclusion, the whale sanctuary is a valuable and effective component of the wider regulatory framework for managing marine mammals in the area, particularly for managing high-intensity disturbance risks.

4.4. Ōhau New Zealand Fur Seal Sanctuary

4.4.1 Background

4.4.1.1 The fur seal sanctuary

Ōhau New Zealand Fur Seal Sanctuary (the **fur seal sanctuary**) includes the intertidal area between mean low water springs and State Highway 1, from just south of Ōhau Stream and south along the coast for approximately 800 meters (Figure 12). It was established by section 12 of the Act with the intent to minimise human disturbance by prohibiting public access (with some limited exceptions) to the area where most fur seals were breeding and raising pups at that time.

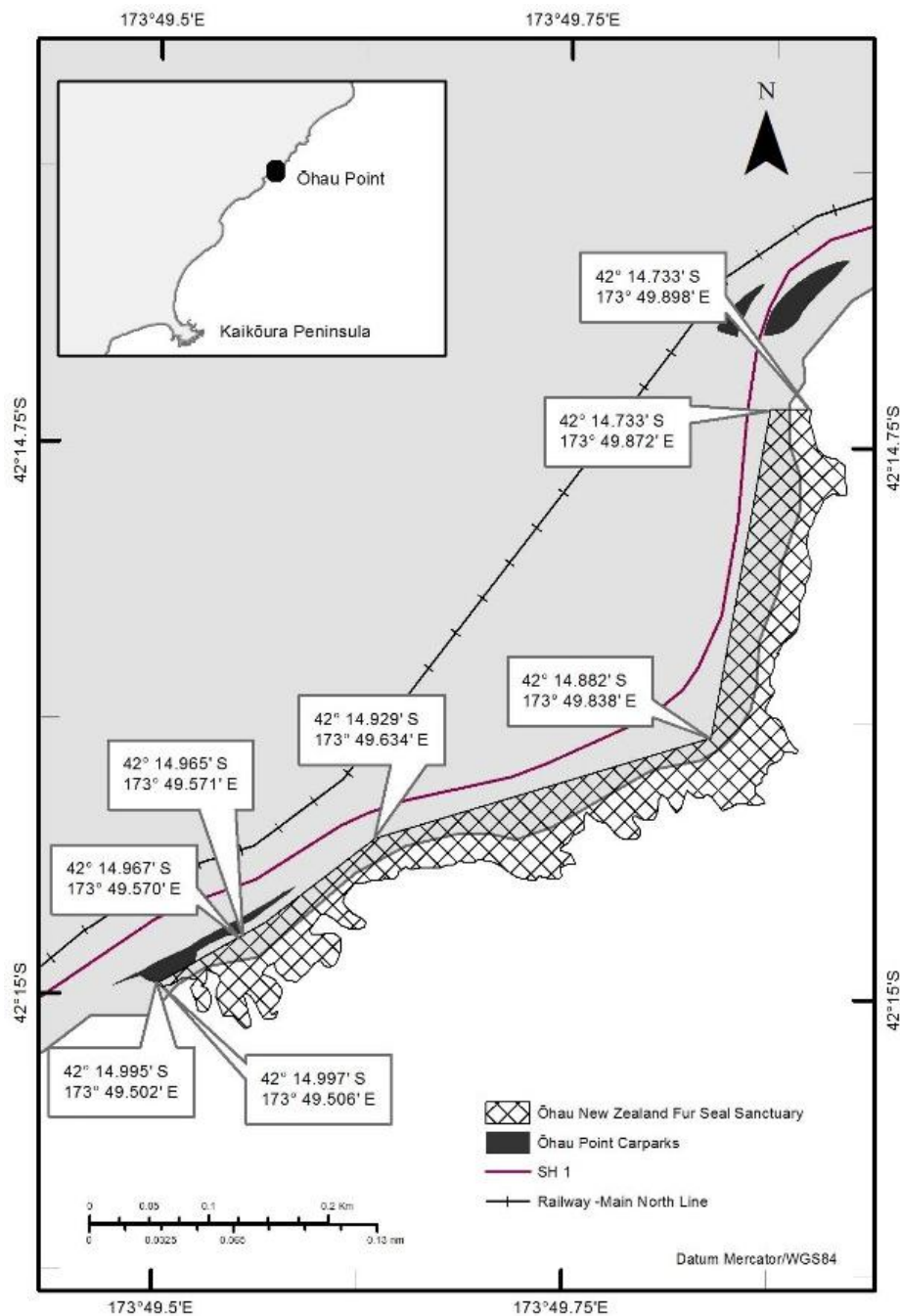


Figure 12: Map of Ōhau New Zealand Fur Seal Sanctuary, from Schedule 3 of the Kaikōura (Te Tai o Marokura) Marine Management Act 2014.

The opportunity to view fur seals is a major attraction for both domestic and international tourists to the Kaikōura area. This includes those who view them opportunistically alongside State Highway 1, at the Kaikōura Peninsula or at the designated viewing area built after the earthquake at Ōhau Point Lookout, and also those who choose to go on a paid viewing or swim-with tour.

The establishment of the fur seal sanctuary (with restrictions on access) was in response to a proposal in the Strategy for a marine mammal sanctuary. As described in section 4.3.1.1, the Strategy proposed a marine mammal sanctuary to achieve the objective ‘that our marine treasures are protected and future generations can continue to experience the wonders that we have today’. The Strategy envisaged that one sanctuary would provide for both the seismic surveying restrictions over the wider area (as were implemented by the whale sanctuary) and public access restrictions at Ōhau Point.¹⁰³

The 2013 Regulatory Impact Statement subsequently recommended the establishment of one marine mammal sanctuary that included both seismic surveying restrictions and restrictions on public foot access to the Ōhau Point fur seal breeding area. It described the Ōhau Point colony as the ‘*largest single fur seal breeding colony along the east coast of the South Island*’ and possibly the largest in New Zealand. It described the potential inadvertent negative impacts on fur seals of people walking amongst the colony, as well as instances of deliberate harm to fur seals at this location. The Regulatory Impact Statement anticipated that a benefit of establishing the access restrictions in this specific area would be simplifying compliance and enforcement. Enforcement under the MMPR can be complex as there is a need to prove ‘harassment’ or ‘disturbance’, whereas under the fur seal sanctuary rules, any unauthorised person inside the restricted area would be committing an offence.

Ultimately, however, two sanctuaries were established by the Act - the fur seal sanctuary (with access restrictions) and the whale sanctuary (with seismic surveying restrictions).

The fur seal sanctuary is a management tool that sits alongside several other management tools for managing marine mammals that apply at the national and regional scale, as set out in section 2.3.2. The MMPR regulates the behaviour of all people around fur seals but does not set any minimum distance requirements; DOC instead provides guidance to stay at least 20 m from fur seals.

The MMPR also regulates the permitting of commercial activities for viewing and swimming with fur seals. Existing permits for vessel-based viewing or swimming with fur seals along this part of the coastline exclude the area within 500 m of Ōhau Point. This is to reduce human disturbance to the colony that otherwise may be caused by approaches from the sea. Since 2003 there has been a moratorium on issuing new permits (that is, other than those that already exist) for viewing fur seals throughout the Kaikōura coast. Up until 2015, this moratorium was for permits for viewing fur seals within 500 m of Ōhau Point and for swimming with seals between the Clarence River and Conway River out to one nautical mile offshore.¹⁰⁴ In 2015, the area that the moratorium applied to was changed; it was reduced to within 200 m of the fur seal sanctuary. The 2015 moratorium was extended in October 2025 until August 2031.¹⁰⁵

DOC and the New Zealand Transport Authority (**NZTA**) have worked together to reduce risks to drivers and fur seals by deterring fur seals from accessing State Highway 1, through the

¹⁰³ Section 4.4.3, Te Korowai o Te Tai ō Marokura – Kaikōura Coastal Marine Guardians, 2012. [Kaikōura Marine Strategy – Sustaining our sea](#) 2012. 143 p.

¹⁰⁴ [Declaration Notice - 2015-go7485- New Zealand Gazette](#)

¹⁰⁵ [Marine Mammal \(Seals\) Kaikōura Declaration Notice - 2025-go6251 | New Zealand Gazette](#)

installation of motorcycle protection rails at key sites identified along the Kaikōura coastline.¹⁰⁶

4.4.1.2 The Kaikōura fur seal population

Prior to the 2016 earthquake, Ōhau Point was the most significant breeding area for fur seals in the Kaikōura area, with other breeding areas, albeit much smaller, existing at Lynch's Reef (Kaikōura Peninsula) and Barney's Rock (approximately 10 km southwest of Kaikōura Peninsula).¹⁰⁷

The first comprehensive study of Kaikōura fur seals since the earthquake was conducted across the 2021-2022 and 2022-2023 breeding seasons.¹⁰⁷ Despite there being fur seal mortality associated with the earthquake itself and the post-earthquake construction activities, this study found that, overall, while the number of pups born around Ōhau Point had remained relatively constant, the fur seal population along the wider Kaikōura coastline has increased since the 2016 earthquake.

This trend matches that of many populations of fur seals nationwide, which are increasing in size, as would be expected for a species that was hunted to the brink of extinction by the 1800s and then has been under legal protection since 1978. Two recent estimates of the nationwide abundance of fur seals are 131,338–168,269 and 181,646–239,473,¹⁰⁸ or approximately 10-20% of the estimated pre-human population in New Zealand. While the trend is increasing or stable in most places, long-term DOC monitoring at three main fur seal sites on the West Coast of the South Island has identified a significant decline since the 1990s.¹⁰⁹

The 2021-2023 study showed that since the earthquake, the Ōhau Point breeding area has become narrower (due to the geological changes and new placement of State Highway 1), and while it previously occupied approximately 800 m of the coast, now stretches further north and south to cover approximately 3.3 km of coastline. Consequently, most breeding at this site now occurs outside the fur seal sanctuary.

This study also showed that the area used by fur seals at Lynch's Reef on the Kaikōura Peninsula has increased significantly (although not all for breeding), now being approximately 20 times larger than observed in 2006. South of the Kaikōura Peninsula, there is now more breeding spread along a 3.8 km stretch of coast, including the previous breeding area near Barney's Rock and area within Hikurangi Marine Reserve, and further breeding at Otumatu.

Since that study however, there has been notable variability in the number of pups produced each year. At the Ōhau Point breeding area, the numbers in 2023 were similar to pre-earthquake, however, in 2024 following the high mortality event from starvation, the number was approximately half (DOC, pers. comm.).

DOC is monitoring other potential threats to the Kaikōura fur seal population. This follows a large mortality event over the spring and summer of 2023/24, where over 1,000 fur seals were found to have died from starvation, most of these within a small stretch of the area just north of Ōhau Point. While it is not known exactly what caused this starvation event, it is

¹⁰⁶ Hall, A., Chilvers, B.L., Weir, J.S., Vidulich, A., Godfrey, A., 2023. Post-earthquake highway reconstruction: Impacts and mitigation opportunities for New Zealand pinniped population. *Ocean & Coastal Management* 245, doi: [10.1016/j.ocecoaman.2023.106851](https://doi.org/10.1016/j.ocecoaman.2023.106851).

¹⁰⁷ Hall, A., Chilvers, B., Weir, J., Boren, L., 2024. Earthquake impacts on a protected pinniped in New Zealand. *Aquatic Conservation: Marine and Freshwater Ecosystems* 34(1), doi: [10.1002/aqc.4055](https://doi.org/10.1002/aqc.4055).

¹⁰⁸ Hall, A., Chilvers, B., Weir, J., 2025. Towards an Abundance Estimate for New Zealand Fur Seal in New Zealand. *Aquatic Conservation: Marine and Freshwater Ecosystems* 35(4), doi: [10.1002/aqc.70142](https://doi.org/10.1002/aqc.70142).

¹⁰⁹ Hall, A., Neale, D., Roberts, J., Chilvers, B., Weir, J., 2026. Declining Abundance and Variable Condition of Fur Seal (*Arctocephalus forsteri*) Pups on the West Coast of New Zealand's South Island. *Animals* 16(1): 121, doi: [10.3390/ani16010121](https://doi.org/10.3390/ani16010121).

likely to have been a combination of continued changes to climate, sea temperatures and prey abundance and distribution. It is expected that such an event is likely to recur in the future. Another high mortality event that began in spring of 2024 and continued through 2025 has been attributed to a new type of canine distemper virus not previously detected anywhere in the world¹¹⁰. DOC and MPI are collaborating closely with universities to understand more about this virus including where else it is affecting fur seals and possible transmission risk to other marine mammals.¹¹¹ There is also the potential for large-scale mortality from other new diseases, such as Highly Pathogenic Avian Influenza (avian influenza), which, while not yet present in New Zealand, is causing significant mortality in marine mammal and marine bird populations globally. In particular, the disease is now a more significant threat to pinniped populations than it was previously known.¹¹²

4.4.1.3 Effects of the 2016 earthquake

The fur seal sanctuary was significantly affected by the 2016 earthquake. The largest landslide from this event occurred at Ōhau Point, which is in the middle of the fur seal sanctuary. Approximately 200,000 m³ of material fell over State Highway 1, across the foreshore of the fur seal sanctuary and into the sea.

The earthquake and associated land and debris movement around the coast had an immediate and direct impact on the Ōhau Point fur seal colony, causing disturbance, loss of habitat and mortality.¹⁰⁷ The earthquake also caused terrestrial and marine habitat loss for fur seal populations throughout the Kaikōura region as a result of the more than 10,000 landslides that occurred. The loss of an estimated 39,000 metric tons of biomass from a sediment flushing event in the Kaikōura Canyon is also thought to have disrupted the marine food chain.

A major road and infrastructure rebuild period followed the earthquake. This process in itself, firstly through requiring the removal of huge amounts of landslip material and secondly significant engineering and construction works, also created impacts to fur seals through disturbance and at times, mortality.

The physical changes at Ōhau Point because of the earthquake have also changed the shape of the fur seal sanctuary (Figure 13). Co-ordinates are used to legally define both the landward boundary and the northern and southern extents of the fur seal sanctuary, and so these points remain the same. The seaward boundary, however, is legally defined with reference to mean low water springs, which is now further southeast, due to the uplift that occurred. This results in the fur seal sanctuary being wider than prior to the earthquake. Also, the realignment of State Highway 1 following the earthquake further to seaward means that the road now runs through the fur seal sanctuary.

¹¹⁰ Wilson, A., Gias, E., Little, A., Jauregui, R., Low, Y.S., Pulford, D., Steyn, A., Sylvester, K., Green, D., O'Keefe, J., McCulley, M., 2025. Genome sequence of a divergent strain of canine distemper virus detected in New Zealand fur seals. *Microbiology Resource Announcements* 14(6), doi: [10.1128/mra.00151-25](https://doi.org/10.1128/mra.00151-25).

¹¹¹ Taylor, H., Eames, M., Bestbier, M., Hunter, S., Weir, J., O'Connell, J., Wilson, A., Little, A., Hall, A., Waller, S., Geoghegan, J., Foxwell, J., Hunt, H., Buckle, K., Green, D., Uddstrom, L., Roe, W., 2026. A large mortality event in New Zealand fur seals (*Arctocephalus forsteri*) caused by a divergent canine distemper virus. *Veterinary Microbiology* 316, doi: [10.1016/j.vetmic.2026.111000](https://doi.org/10.1016/j.vetmic.2026.111000).

¹¹² Ashley, E., Vanstreels, R., Barbieri, M., Puryear, W., Gulland, F., Field, C., Johnson, C., Uhart, M., 2026. High pathogenicity avian influenza in pinniped conservation. *Philosophical Transactions of the Royal Society B* 381, doi: [10.1098/rstb.2024.0320](https://doi.org/10.1098/rstb.2024.0320).



Figure 13: Ōhau New Zealand Fur Seal Sanctuary satellite imagery from before (June 2016) and after (2022) the Kaikōura earthquake and subsequent rebuild of SH1, with original boundary shown (orange) and post-earthquake boundary (yellow).

4.4.2 Evaluation approach

Further to the approach set out in section 3, evaluation of the operation and effectiveness of the fur seal sanctuary was informed by:

- feedback received from public consultation
- feedback from Te Rūnanga o Kaikōura and the Guardians
- research, monitoring and management information held by DOC and others.

Section 4.4.3 presents a summary of feedback from public consultation. Feedback from the public was obtained on:

- the effectiveness of the fur seal sanctuary in minimising human disturbance to fur seals
- successes and challenges in relation to the fur seal sanctuary
- suggestions for changes or improvements to the fur seal sanctuary.

Section 4.4.4 presents DOC's evaluation, which sought to assess the following questions:

- Has the fur seal sanctuary been implemented according to the provisions in the Act?
- How has the fur seal sanctuary been managed since 2014?
- Has the fur seal sanctuary been effective at restricting human access to and minimising human disturbance within the Ōhau Point fur seal breeding area?
- Has the fur seal sanctuary been effective at minimising human disturbance in the Kaikōura fur seal population overall?

4.4.3 Summary of feedback received from public consultation

46 of the total 54 submitters responded in relation to the fur seal sanctuary.

40 submitters responded to the question, 'How effective do you think the Ōhau New Zealand Fur Seal Sanctuary has been in minimising human disturbance to fur seals in the Kaikōura area?'. Figure 14 shows that 65% of the 40 respondents thought the fur seal sanctuary has been adequate or better at reducing disturbance to fur seals.

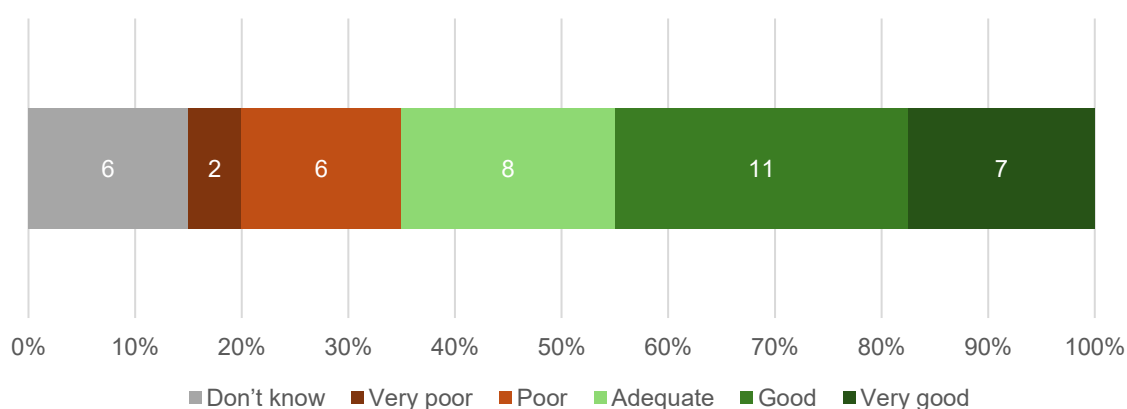


Figure 14: Responses from 40 online survey submitters to the question, 'How effective do you think the Ōhau New Zealand Fur Seal Sanctuary has been in minimising human disturbance to fur seals in the Kaikōura area?'.

Feedback from submitters in response to the three survey questions has been summarised into five themes:

- Benefits of the fur seal sanctuary
- Concerns the fur seal sanctuary does not address cumulative threats and/or unusual mortality events
- Calls to change the size and/or shape of the fur seal sanctuary
- Calls to create additional restrictions or fur seal sanctuaries
- Calls to strengthen management actions

4.4.3.1 Benefits of the fur seal sanctuary

35% (16) of submitters described their support for, or their view of the benefits of, the fur seal sanctuary. Most referred positively to the separation between humans and fur seals that it creates, particularly since the earthquake and physical barrier that now exists at Ōhau Point. One submitter highlighted the educational benefits of the fur seal sanctuary restrictions in increasing awareness of the disruption and risks to fur seals from human interactions.

4.4.3.2 Concerns the fur seal sanctuary does not address cumulative threats and/or unusual mortality events

37% (17) of submitters expressed concern about cumulative pressures affecting the fur seal population or the unusual mortality events in recent years. The following pressures were mentioned by submitters: historic losses from hunting, tourism impacts, climate change, prey availability, disease, intentional shooting/disturbance events and earthquake disruption.

One submitter's view was that overpopulation of fur seals and the effects of commercial fishing mean there is not enough food to sustain the population. Another suggested overpopulation was the reason for the starvation event and disease outbreaks. This submitter and one other suggested controlling or culling the population.

4.4.3.3 Calls to change the size and/or shape of the fur seal sanctuary

33% (15) of submitters commented in relation to the fur seal sanctuary's size or boundary.

As for the whale sanctuary, PauaMAC3 noted in their submission that changes to boundaries of the sanctuaries may affect commercial pāua fishing operations and request early and direct consultation on any changes.

The other fourteen submitters highlighted that the boundaries are no longer relevant to the current fur seal distribution and called for them to be extended or re-evaluated to better reflect the Ōhau Point breeding area. Some of these submitters added that a precautionary approach is needed as well as consideration of cumulative impacts when reconsidering the boundaries of the fur seal sanctuary.

4.4.3.4 Calls to create additional restrictions or sanctuaries for fur seals

22% (10) of submitters raised points about the creation of additional restrictions or sanctuaries in the KMA. Nine of these called for additional fur seal sanctuaries at other areas where there are high levels of interactions between fur seals and humans, with particular emphasis given to the popular Kaikōura Peninsula ("millions of visitors per year"). One submitter highlighted that additional sanctuaries for fur seals would "spread the risk of natural events and human disturbance, and provide resilience to changing distributions". Another submitter suggested increased signage at the popular tourist spot of Point Kean about

behaviour around seals, minimum distance requirements when observing or approaching seals, and using roped off areas or boardwalks to manage seal viewing.

4.4.3.5 Calls to strengthen management actions

28% (13) of submitters raised other matters that relate to the operational management of the fur seal sanctuary or the seal population more generally. A key issue raised was the need for greater effort on research and monitoring to better understand population abundance and distribution and inform decisions to manage cumulative impacts.

Another key issue raised was the need for greater surveillance for compliance with the fur seal sanctuary rules. Some submitters called for better management of human interactions with seals at the Ōhau Stream waterfall, such as the presence of volunteers to talk to visitors about appropriate behaviours around seals or restricting access altogether.

4.4.4 Operation and effectiveness of the fur seal sanctuary

This section summarises and evaluates the operation of the fur seal sanctuary, focusing on implementation and management (section 4.4.4.1 and 4.4.4.2, respectively). It then assesses how effectively the fur seal sanctuary is achieving its original purpose (sections 4.4.4.3 - 4.4.4.4). The review covers the period from enactment to late 2025, where possible.

4.4.4.1 Has the fur seal sanctuary been implemented according to the provisions in the Act?

Relevant information

Implementation of section 16 of the Act – impose access restrictions

As with the whale sanctuary, section 16 of the Act required the Minister of Conservation, within one month of the Act's commencement, to impose restrictions on access to the fur seal sanctuary. This requirement was met with the *Ohau New Zealand Fur Seal Sanctuary (Restrictions) Notice 2014*¹¹³ being gazetted 13 days after the Act's commencement. The notice restricts access to the fur seal sanctuary by prohibiting people from entering unless they:

- enter the sanctuary from the water and don't enter the land part of the sanctuary (clause 3(a))
- are a member of the emergency services or enter the sanctuary as a consequence of an emergency (clause 3(b))
- hold a permit under section 6 of the MMPA authorising them to enter the sanctuary (clause 3(c))
- are authorised to enter the sanctuary for work on State Highway 1, for surveying purposes, or for performing a function under the Maritime Transport Act 1994 or conservation or fisheries legislation (clauses 3(d) to 3(g))
- are otherwise authorised by the Director-General of Conservation (clause 3(h)).

Kaikōura earthquake emergency legislation

Special legislation¹¹⁴ was passed on 12 December 2016 to 'assist the earthquake-affected area and its councils and communities to respond to, and recover from, the impacts' of the

¹¹³ [Ohau New Zealand Fur Seal Sanctuary \(Restrictions\) Notice 2014 - 2014-go5216- New Zealand Gazette](#)

¹¹⁴ Hurunui/Kaikōura Earthquakes Recovery Act 2016.

earthquake which had occurred two months prior. As provided for under section 7 of this legislation, the Hurunui/Kaikōura Earthquakes Recovery (Coastal Route and Other Matters) Order 2016 (the Order) was made. The Order was revoked in March 2018.

Clause 24 of the Order related to authorisations requested under clause 3(h) of the *Ohau New Zealand Fur Seal Sanctuary (Restrictions) Notice 2014*. In relation to these authorisations, it removed the ability of the Director-General to recover costs for assessing applications, removed the application of sections 3A to 3H of the MMPA, prescribed a maximum timeframe of five working days for providing the authorisation, and prescribed what conditions could be imposed.

Authorisations given for access

DOC's records indicate that five authorisations were granted under Clause 24 of the Order, one to the NZTA and four to both NZTA and KiwiRail, enabling the necessary road and rail rebuild work to proceed. All were processed and approved within five working days and no costs were recovered.

A further six permits granted under the MMPA have also authorised access to the fur seal sanctuary (four for fur seal research and two for filming). A further permit for filming within the fur seal sanctuary was granted not long before the 2016 earthquake, but it seems likely the permit was not exercised at this location.

Implementation of other relevant sections of the Act

As for the whale sanctuary, section 15 of the Act allows the Minister of Conservation to impose additional restrictions to the fur seal sanctuary. No additional restrictions, other than those required by section 16 of the Act, as described above, have been imposed since the fur seal sanctuary was established.

Sections 17 to 20 of the Act also apply to the fur seal sanctuary. Section 17 provides for the recovery of costs by DOC where an application is made for an exemption to restrictions imposed under section 15. The earthquake recovery Order prohibited DOC from recovering the costs of processing those authorisations. For the other six authorisations DOC has granted, it recovered the costs of processing the two filming permits. DOC's policy is to not recover the costs of processing permit applications for research.

Sections 18 and 19 of the Act relate to offences and enforcement and are covered in section 4.4.4.3.

As for the whale sanctuary, Section 20 of the Act applies sections 3A to 3H of the MMPA to the fur seal sanctuary. As set out in 4.3.4.1, neither of these documents set any specific requirements in relation to marine mammal sanctuaries, including this fur seal sanctuary.

Section 3D of the MMPA provides a mechanism for a conservation management plan to be prepared by DOC to establish objectives for the management of a marine mammal sanctuary. No conservation management plan has been prepared for the fur seal sanctuary, nor for any of New Zealand's other eight marine mammal sanctuaries.

Section 3E relates to approval of population management plans, and sections 3F and 3H relate to determining levels of fishing-related mortality of marine mammals. None of these sections have been exercised in relation to the fur seal sanctuary.

Evaluation

Key message: *The statutory mechanisms for establishing the fur seal sanctuary and its restrictions have been adequately implemented.*

The above information indicates that the fur seal sanctuary was implemented according to the requirements of section 16 of the Act, and subsequent regulatory requirements imposed by the earthquake recovery legislation were also implemented adequately.

The mechanism for authorising access to the fur seal sanctuary in limited circumstances has been used infrequently. Regarding research permits that have been issued, any impacts to fur seals from these activities, particularly where handling has occurred, have been minimised by DOC working closely with permit holders during the design, and often also fieldwork, stages of the research. As part of this involvement, DOC ensures that its *New Zealand sea lion and fur seal pup tagging and sampling SOP* is adhered to. DOC considers the authorised access for filming has resulted in low disturbance activities, in keeping with the purpose of the fur seal sanctuary. Note, that for projects that DOC has led or been involved in, a research permit is not required.

In terms of implementation of other relevant sections of the Act, DOC considers this has been appropriate and there has been no cause to utilise section 15 of the Act, which allows additional restrictions to be imposed. DOC considers the way the specified sections of the MMPA have been applied is also adequate, including that a conservation management plan for the fur seal sanctuary has not been needed because the management objective for the sanctuary is already clear. As set out in section 4.4.4.4, however, incorporating key management actions for the fur seal sanctuary into a wider management plan for fur seals in the KMA would be beneficial.

Recommendations

There are no recommendations in relation to the way the fur seal sanctuary has been implemented according to the provisions in the Act.

4.4.4.2 How has the fur seal sanctuary been managed since 2014?

The fur seal sanctuary is established under the Act and administered and managed by DOC under the authority of the Minister of Conservation, within the wider framework of the MMPA.

Relevant information

Public awareness and outreach

Following gazettal of the fur seal sanctuary in 2014, DOC installed signs informing the public that entry to the fur seal sanctuary is prohibited. Two signs were installed in March 2015 at either end of the fur seal sanctuary, where parking and viewing lookout areas existed prior to the earthquake, informing the public that entry into the sanctuary is prohibited. Additional signage also existed prior to the earthquake for the popular Ōhau Stream walk (outside the fur seal sanctuary) where fur seal pups could be viewed in the stream and waterfall.

The general KMA brochure produced in 2014 also included information about the fur seal sanctuary, including noting that public access is prohibited. Some limited information has also been provided on DOC's website about the fur seal sanctuary.

A public education programme, the 'Seal Deal', was initiated in 2012 in the Kaikōura area. This programme was based on research findings that demonstrated greater efficacy of the presence of 'official-looking' observers, as compared to signage, on the likelihood of visitors

disturbing fur seals.¹¹⁵ Another key driver of the programme was an incident involving 23 fur seals, including 8 pups, being clubbed to death at Ōhau Point. The programme ultimately operated at Ōhau Point and the Kaikōura Peninsula until the earthquake in 2016 and still operates at the Kaikōura Peninsula on a smaller scale, subject to volunteer availability.

Due to the significant earthquake damage that this part of the coastline suffered, fur seal sanctuary signs were removed while the road was rebuilt. No signs informing the public about the fur seal sanctuary were reinstalled. There is now one carpark and lookout area near (but not within) the fur seal sanctuary. This area does not have any signs about the fur seal sanctuary but does have cultural narrative and artwork installations developed by Te Rūnanga o Kaikōura and NZTA.

Since the earthquake, DOC has undertaken some outreach and education activities at the new carpark and lookout area (immediately north of the fur seal sanctuary). This area can receive hundreds of visitors per day during the busier months, including peaks of more than 50 people at one time. At times, DOC has stationed staff, volunteers or students here to talk to visitors about fur seals and the breeding area.

Engagement with Treaty partners and stakeholders

DOC provides periodic updates to Te Rūnanga o Kaikōura and the Guardians about what is happening with fur seals along the Kaikōura coast. The frequency of these updates has mostly related to the allocation of staff time to marine mammal work, with particular emphasis on fur seal management between 2014 and 2016 and from 2021 onwards. Since 2021, DOC has also been advising and meeting regularly with Te Rūnanga o Kaikōura and the Guardians to provide updates on fur seal research projects in Kaikōura. This has been particularly useful to relay the latest on projects and to introduce university researchers and students who collaborate with DOC in this space.

Te Rūnanga o Kaikōura were consulted on all six applications for research and filming in the fur seal sanctuary – on two occasions by the applicant themselves and on the other occasions by DOC. No consultation was undertaken with the Guardians for any of the applications. Two of the applications were made either before or soon after the Guardians were appointed, and the applicant instead consulted with Te Korowai.

Research and monitoring

DOC has not funded or carried out any research or monitoring specific to assessing the effectiveness of the fur seal sanctuary. DOC has, however, undertaken or provided funding or staff time for several research projects relating to Kaikōura fur seals more generally. Key projects, described below, have helped inform DOC's understanding and management of fur seals in the fur seal sanctuary also.

DOC provided logistical support and was closely involved for a PhD study focussed on determining the first population estimates of Kaikōura fur seals since the 2016 earthquake and investigating the threat of the nearby highway to the population.

Also, since 2023, DOC has led annual mark-recapture¹¹⁶ surveys of fur seals along the Kaikōura coast, including within the fur seal sanctuary, to better understand and track abundance, pup survival and health measures (weight and length). The four years of

¹¹⁵ Acevedo-Gutierrez, A., Acevedo, L., Boren, L., 2010. Effects of the Presence of Official-Looking Volunteers on Harassment of New Zealand Fur Seals. *Conservation Biology* 25(3), doi: [10.1111/j.1523-1739.2010.01611.x](https://doi.org/10.1111/j.1523-1739.2010.01611.x).

¹¹⁶ A method used to estimate a species' population size where it is impractical to count the entire population.

consecutive monitoring data are not yet showing trends, underscoring the importance of regular and long-term monitoring investment to enable detection of trends over time.

DOC has also led investigations into the high levels of fur seal mortality from both the starvation event and the new canine distemper virus. DOC surveillance, including sites within the fur seal sanctuary, and subsequent confirmation by Massey University and MPI pathologists through necropsies is how both causes of mortality were detected and identified.

Compliance/law enforcement effort

In the first two years following establishment of the fur seal sanctuary, DOC undertook irregular visits to the sanctuary, often associated with other work in the area, and responded to specific concerns raised by the public.

Since the 2016 earthquake, there has been little requirement for DOC to undertake compliance monitoring of the fur seal sanctuary's restrictions, due to the physical barrier that is now in place with the new road layout and seawall.

Since November 2021, DOC has had dedicated staff patrolling and monitoring Kaikōura coastal areas both onshore and by boat (as described in section 4.2.4.3). While this has mostly focussed on Hikurangi Marine Reserve, it has led to increased staff presence and capacity for marine mammal management work also.

Evaluation

Key message: Public awareness, engagement, and monitoring of the fur seal sanctuary are currently limited, and while compliance risks are low, there are clear opportunities to strengthen outreach, partner engagement, and research to better support its management.

In terms of public awareness and outreach, overall, there has been limited activity by DOC and currently there is very little information available to the public about the fur seal sanctuary or its restrictions. This is not necessarily presenting a problem in terms of the public's ability to comply with the fur seal sanctuary restrictions, as the physical nature of the road and seawall since the earthquake rebuild largely (although not completely) deter public access. However, there would be education and advocacy benefits in having some signage informing the public that the fur seal sanctuary is there, why it is there and its rules. The Ōhau Point carpark, while not within the fur seal sanctuary but immediately adjacent to it, receives a high number of visitors each year. Signage about the fur seal sanctuary would promote understanding about human interactions with fur seals and enhance the visitor experience.

In terms of engagement with Treaty partners and the Guardians in relation to management of the fur seal sanctuary, DOC considers it would be valuable to establish stronger mechanisms to keep these parties informed. This includes on matters such as planned management activities, compliance and enforcement and relevant research findings.

In terms of permit applications, the engagement DOC undertook with Te Rūnanga o Kaikōura is appropriate and should be continued. While the Act does not require DOC to consult with the Guardians, it clearly anticipates the Guardians having an advisory role in conservation matters of relevance to the KMA.¹¹⁷ For permit applications for entry to the fur seal sanctuary, the Guardians could not be reasonably expected to know of these applications without being

¹¹⁷ Section 7 of the Act states: "The Kaikōura Marine Guardians may provide advice on any biosecurity, conservation, or fisheries matter related to the marine and coastal environment within Te Whata Kai o Rakihiouia i Te Tai o Marokura—Kaikōura Marine Area...If the matter relates exclusively to Te Whata Kai o Rakihiouia i Te Tai o Marokura—Kaikōura Marine Area, the person receiving the advice must take the advice into account."

informed by DOC. Given the Guardians' statutory role, it is recommended DOC reviews its process regarding consulting the Guardians on such applications.

As described above, there has been no specific research or monitoring undertaken to understand the effect of the fur seal sanctuary's restrictions on Ōhau Point fur seals. A number of submitters called for increased effort on research and monitoring to better understand the fur seal population more generally. DOC is carrying out annual mark-recapture surveys to better understand the broader population trends.

Submitters also raised the need for greater compliance surveillance. Due to the road layout and seawall limiting most visitors' access to the fur seal sanctuary, this site is not a priority for frequent DOC surveillance. Instead, DOC recommends continuing opportunistic surveillance during other management activities and responding to reported incidents as they arise.

Recommendations

- DOC to improve accessibility to information on the fur seal sanctuary by installing on-site regulatory and educational signage, and publicising the fur seal sanctuary's purpose, boundaries and rules on DOC's website.
- DOC to increase the on-site presence of DOC staff or volunteers, to improve education about fur seals (in relation to the fur seal sanctuary and the wider KMA) and foster compliance and reduced levels of disturbance.
- DOC to increase the frequency of engaging with Te Rūnanga o Kaikōura and the Guardians about the fur seal sanctuary.
- DOC to continue engaging with Te Rūnanga o Kaikōura on permit applications for access to the fur seal sanctuary and reviews its process for engaging with the Guardians on these applications.

4.4.4.3 Has the fur seal sanctuary been effective at restricting human access to and minimising human disturbance within the Ōhau Point fur seal breeding area?

As described above, the fur seal sanctuary was established to reduce human disturbance to fur seals at this important breeding site. The 2016 earthquake is a critical consideration for evaluating the fur seal sanctuary's effectiveness due to the resulting significant changes to the physical landscape and the distribution of fur seals in this area. The sections below therefore consider the effectiveness of the fur seal sanctuary and its rules, both before and after the earthquake.

Relevant information

Authorised entry

As described above, access to the fur seal sanctuary has been authorised via six permits for research or filming, and via five authorisations related to the earthquake recovery and subsequent road and rail rebuild work.

While the level of activity and disturbance authorised for earthquake recovery was significant, it was associated with restoring a critical infrastructure link. Despite all efforts being made to minimise disturbance, it could not be avoided altogether.

The level of activity authorised via the six research or filming permits was variable, ranging from one study, which required human presence in the colony for a few hours for water sample collection, to another study involving approximately 1,000 pups being captured, weighed and non-invasively marked, three times during the course of a year.

Acknowledging the disturbance from earthquake recovery-related work, authorised entry to the fur seal sanctuary for other reasons has been infrequent, approximately biennially.

In addition to the above permitted entry to the fur seal sanctuary, DOC has undertaken management activities within the fur seal sanctuary, primarily for research purposes:

- Each February between 2023 and 2026, DOC staff and research assistants have spent 2-4 days within the fur seal breeding area around Ōhau Point as part of the mark-recapture monitoring.
- DOC staff and veterinarians from MPI or Massey University entered the fur seal sanctuary approximately 15 times to count dead fur seals or carry out necropsies following the unusual mortality events that occurred between 2023 and 2025.
- Since early 2025, DOC has periodically collected faecal samples or swabs from dead animals for surveillance for canine distemper virus within the fur seal sanctuary.

Compliance with fur seal sanctuary rules

DOC did not undertake routine monitoring of the fur sanctuary during its first two years and therefore does not hold robust information about the level of compliance with the fur seal sanctuary restrictions for this time. DOC staff did record some instances of breaches of the fur seal sanctuary rules during this period however, including members of the public touching or harassing fur seals within the fur seal sanctuary and an instance of pups being pulled out from under rocks to have photos taken of them.

As mentioned above, the 2016 earthquake significantly changed the physical landscape. The largest landslide caused by the earthquake occurred at Ōhau Point, with approximately 200,000 m³ of material falling over State Highway 1, across the foreshore and into the sea. State Highway 1 was subsequently closed for just over a year. As the road had previously provided the only practical access to the fur seal sanctuary from the land, there was consequently no public access during this time.

Since the earthquake rebuild, the ability for the public to access the fur seal sanctuary has also reduced markedly due to the nature of the new road. The road throughout the length of the fur seal sanctuary now sits upon an 8-10 m high seawall and is approximately 20 m seaward of its previous location. Observations by DOC staff and fur seal researchers indicate this post-earthquake layout provides a significant deterrent to the public attempting to enter the fur seal sanctuary. However, Ōhau Point receives high volumes of visitors due to the carpark and lookout area and the ability to view seals close to an elevated vantage point. While visitors are largely restricted from accessing the foreshore and causing disturbance, there have been reports of people disturbing fur seals from the lookout, and in some cases accessing the colony via the culvert to retrieve dropped belongings. More seriously, in spring of 2021 there was an incident where multiple fur seals within the fur seal sanctuary were shot from the roadside walkway above.

Since the earthquake, DOC has not recorded any non-compliance with the fur seal sanctuary rules. There have been, however, five alleged offences under the MMPA or Wildlife Act 1953 relating to fur seals in or near the fur seal sanctuary.

The fur seal sanctuary rules allow people to enter the fur seal sanctuary from the water provided they don't enter the land within the sanctuary; DOC is not aware of compliance issues in this respect.

Level of human disturbance

Little information exists on the level of public visitation or disturbance to the Ōhau Point breeding area prior to the fur seal sanctuary's establishment. Information from a study conducted across 27 days during the summer of 1997/1998 (i.e. prior to the establishment of the fur seal sanctuary) estimated that most visitors to Ōhau Point were transiting through the area, stopped on average for just under six minutes, and that most people kept to the viewing platform above the colony with only a few people ignoring signage and approaching seals directly in the colony.¹¹⁸ Another study conducted between 2009 and 2011 found that people were present within the Ōhau Point breeding area 24% of the time.¹¹⁹ It also found there was a measurable change in behavioural state of the seals with people present, with 'resting' and 'active' behaviours increasing, and 'social' actions and 'time in the water' decreasing.

It is anticipated that the level of human visitation within the area of the fur seal sanctuary has reduced since the fur seal sanctuary's establishment. The primary factor driving this is the post-earthquake design and placement of State Highway 1 and the seawall. It is not possible to determine what level of reduction in human disturbance may have occurred had the earthquake not happened.

As mentioned above, the Ōhau Point breeding area now extends well beyond the fur seal sanctuary boundaries to the north and south. This means the fur seal sanctuary no longer covers the extent of this breeding area, as was the original intent. Some of the breeding area that is outside the boundaries of the fur seal sanctuary does receive some protection by proxy due to the presence of the high seawall that significantly deters public access. Access to these areas is still technically possible by people motivated to go around the end of the seawall. Other areas, however, are more accessible, such as Paparoa Point to the north where a rest area and carpark exist and human disturbance of fur seals has been witnessed. It is predicted that human interactions with fur seals are likely to become more frequent due to the increasing fur seal population and changing distribution along the coast.¹⁰⁷ It is also relevant to note that since the completion of the road rebuild, the COVID pandemic had a major impact on travel and tourism. It is estimated the 2025-2026 summer was the first-time post-earthquake that 'regular' numbers of people have been visiting and driving past the fur seal sanctuary.

Evaluation

Key message: The level of human disturbance within the fur seal sanctuary has been low.

Human disturbance within the fur seal sanctuary is a combination of that arising from non-compliance and entry authorised by clause 3 of the fur seal sanctuary gazette notice (including permit holders and DOC staff. Authorised access to the fur seal sanctuary has been infrequent and, for the most part, for activities that have had a low-level of disturbance to fur seals.

Compliance with the fur seal sanctuary rules is likely mostly due to the physical barrier to access that now exists at the site. No signage for the fur seal sanctuary has been installed since the earthquake, no proactive surveillance or staff presence is in place, and little material exists to educate the public about the fur seal sanctuary's existence or rules.

¹¹⁸ Barton, K., Booth, K., Ward, J., Simmons, D., Fairweather, J., 1998. [Visitor and New Zealand Fur Seal Interactions Along the Kaikoura Coast](#). Tourism Research and Education Centre (TREC) Report No. 9, Lincoln University, New Zealand.

¹¹⁹ Cate, J., 2013. [The effects of tourism on the behaviour of the New Zealand fur seal \(*Arctocephalus forsteri*\)](#). Doctor of Philosophy (Ecology) Thesis, University of Canterbury.

However, DOC considers the level of disturbance from non-compliance with the fur seal sanctuary rules to be low.

Key message: *The fur seal sanctuary boundaries are erroneous post-earthquake.*

As described in section 4.4.1.3, the geological changes resulting from the 2016 earthquake and the post-earthquake position of State Highway 1, mean that the fur seal sanctuary now includes the road and a generous area of land on the landward side of the road. These boundaries no longer relate well to the physical nature of the site, may confuse the public, and are impractical to enforce. Also, parts of the fur seal sanctuary are no longer suitable habitat for fur seals.

This issue could be remedied by a minor amendment to the legal definition of the fur seal sanctuary boundary described in Schedule 3(3) of the Act. This would involve updating the co-ordinates, which define the landward boundary and also the northern and southern extents of the fur seal sanctuary such that State Highway 1 is excluded from its boundaries and the new extent of the foreshore and intertidal area is included. This change would simply adjust the legal boundary to better align with the new physical landscape and would not extend the fur seal sanctuary north or south. Because of the nature of these changes, it would not be expected to have any impacts on visitors to the fur seal sanctuary, those wishing to access the foreshore on either side of the fur seal sanctuary, or the wider public. This amendment could be achieved using section 14 of the Act, which allows the Minister of Conservation to vary the fur seal sanctuary 'if the variation has no more than a minor effect or corrects errors or makes minor technical changes'.

The Guardians acknowledged this issue but noted that remedying it would not generate any benefit for fur seals and was simply a 'human fix'.

Key message: *There is value in maintaining protection at the Ōhau Point breeding area.*

The Kaikōura region has the highest level of human interactions with fur seals of anywhere in New Zealand due to the relatively high numbers of fur seals and their proximity to State Highway 1. Minimising disturbance from these interactions is important for managing any short or long-term impacts on the fur seal population. This will consequently also be of benefit to the commercial and recreational visitor fur seal viewing experience, now and into the future. Many submitters commented positively about the physical separation between visitors and fur seals that the fur seal sanctuary creates, and one noted the educational benefits of making people aware of the potential disruption humans can cause.

The presence of the fur seal sanctuary likely serves as an asset for tourism operators, enhancing marketing of their services and strengthening the reputation of Kaikōura as a centre for wildlife-based and ecotourism experiences. The fur seal sanctuary has provided a straightforward mechanism to implement easy to follow rules, simplifies enforcement, and does not appear to have detracted from public viewing of seals at Ōhau Point.

The changes to fur seal distribution at this breeding area, coupled with the foreshore within the fur seal sanctuary now being very narrow and thus less suitable as breeding area, limit the effectiveness of the fur seal sanctuary. DOC considers it is warranted to investigate options for amending the boundary to restore the original intent of the fur seal sanctuary, which was to minimise human disturbance across this breeding area. Currently, only a small portion of the Ōhau Point breeding area (approximately 25% of its linear extent) is within the fur seal sanctuary.

The Guardians provided the view that maintaining a fur seal sanctuary at this breeding area has value, that the current fur seal sanctuary is no longer achieving its original purpose, and that a boundary amendment should be considered in light of these points. They noted educational and tourism benefits of having a fur seal sanctuary, and support exploration of an amended boundary. They did, however, note that impacts on users of an expanded area would need to be carefully considered, particularly recreational shore fishers or free divers, assuming the mean low water springs mark was proposed for any amendment.

Te Rūnanga o Kaikōura raised that having better information is critical to inform future management or decisions about the fur seal sanctuary. A lack of information made it difficult to assess whether controlling human interactions at the site was still important. The use of the fur seal sanctuary as a buffer, to create resilience, and as a research site for investigating issues such as disease and starvation events were highlighted as beneficial reasons for retaining and potentially extending the fur seal sanctuary.

Submitters' suggestions to alter the fur seal sanctuary were largely related to better reflecting the current extent of this breeding area, noting the current boundary as no longer fit for purpose, and the need to take a precautionary approach in light of other apparent pressures.

Those most likely to be adversely affected if the fur seal sanctuary boundary were to be extended are those who wish to access the foreshore for activities such as fishing or sightseeing. It is understood that no commercial fishing operations access the sea from land in this area. We consider such a change is unlikely to affect PauaMAC3 fishers' operations, a concern raised in their submission, as entry to the water within or adjacent to the fur seal sanctuary is unaffected by the sanctuary rules. Their views and those of others who have an interest in this area would, however, be sought and considered through any future process for a boundary change.

The Ōhau Point breeding area now extends from Paparoa Point to Halfmoon Bay (approximately 3.3 km of coastline), so aligning the fur seal sanctuary boundary with all or most of this greater distribution would restore the original aim of minimising human disturbance across this breeding area. The fur seal sanctuary currently covers approximately 800 m of lineal distance along the coast.

Such a boundary amendment would fall outside the scope of having 'no more than a minor effect' (section 14 of the Act) and therefore would require a separate regulatory process. DOC's preliminary assessment is that there are two avenues for progressing a boundary amendment:

- Amending the Act – As the boundary is legally defined in the Act, amending the boundary could be achieved through an amendment bill, with associated consultation, impact analysis and Cabinet processes.
- Creating a second, adjacent fur seal sanctuary – An 'extension' to the fur seal sanctuary could be achieved by creating a second fur seal sanctuary via section 22 of the MMPA that abuts the existing fur seal sanctuary.

Either of these processes would entail a full assessment of options for modifying the boundary, including balancing coverage of the new breeding area extent with other values and uses of the area. It would likely be most efficient to incorporate the minor boundary amendment arising from the earthquake effects (as discussed above) into any process for progressing the broader boundary change to include some or all of the new breeding area.

Regardless of whether the fur seal sanctuary boundary is amended, re-installing signage and updating communications materials so the public can be fully informed about the fur seal

sanctuary and its rules is seen as beneficial. These actions will also highlight the significance of the area to fur seals and therefore aid education and awareness.

The value of the presence of DOC staff or uniformed volunteers for educational purposes was also demonstrated during a study comparing people's behaviour around fur seals at the Ōhau Stream waterfall.¹¹⁵ It found that while most people did not read the signs that were installed, they were significantly less likely to disturb fur seals when there was an 'official-looking observer' present.

Recommendations

- DOC to seek an amendment to the fur seal sanctuary (via section 14 of the Act) to correct the erroneous boundaries arising from the physical changes to the landform and State Highway 1 following the earthquake.
- DOC to initiate a process to amend the boundary of the fur seal sanctuary to better reflect the contemporary location of the Ōhau Point breeding area.
- DOC to monitor human visitation and/or disturbance to fur seals at the fur seal sanctuary to better inform the evaluation of its effectiveness and allow adaptation of management actions.
- As per section 4.4.4.2, DOC to improve accessibility to information on the fur seal sanctuary.
- As per section 4.4.4.2, DOC to increase the on-site presence of DOC staff or volunteers.

4.4.4.4 Has the fur seal sanctuary been effective at minimising human disturbance in the Kaikōura fur seal population overall?

As described above, the original purpose of the fur seal sanctuary was to minimise human disturbance at what was, in 2014, the region's most significant breeding area for fur seals. The context for the fur seal sanctuary and fur seals in the region has changed significantly since 2014, so it is important to consider the contemporary role and effectiveness of the fur seal sanctuary in minimising disturbance to the important breeding areas for Kaikōura fur seals more generally.

Relevant information

Other areas have high levels of human-fur seal interactions

As set out in section 4.4.1.2, research between 2021 and 2023 demonstrated that the main breeding areas for fur seals are different from when the fur seal sanctuary was established in 2014. While Ōhau Point is still an important breeding area for the region and has the highest pup production rates, breeding areas on the Kaikōura Peninsula and south of the peninsula, were found to also have significant pup production rates.¹⁰⁷

Visitors may view fur seals at several locations in the Kaikōura area due to the proximity of State Highway 1 to haulout locations. Outside of Ōhau Point, the Kaikōura Peninsula (hereafter, the **peninsula**) and the Ōhau Stream waterfall have been particularly popular. Visitor numbers to the region have steadily increased following significant disruption from the 2016 earthquake and then from travel restrictions in 2020-2022 due to the COVID-19 pandemic; they are now thought to be approaching or even greater than those prior to the earthquake. Ōhau Point, the peninsula and, to a lesser extent, the waterfall, feature frequently in social media posts as favourable places to view fur seals. Tour buses are

regularly observed at both the Ōhau Point and peninsula carparks, leading visitor numbers to peak at certain times to in the hundreds.

Kaikōura Peninsula

The peninsula provides visitors with simple access to areas with relatively high numbers of fur seals within a short walking distance of a large carpark. Uplift from the 2016 earthquake has also made some areas more accessible to walkers than previously.

A 2013 study commissioned by DOC found that a minimum distance of 10 m for land approaches is insufficient for protecting fur seals on the Kaikōura Peninsula and recommended that this distance be increased to 40 m or that access to breeding areas be restricted.¹²⁰

DOC undertakes opportunistic surveillance and education activities regarding fur seals at the peninsula. Over the 2025/26 summer, local staff received an unusually high number of reports (at least once a day during the peak visitor time month of January) of inappropriate behaviour towards fur seals; this is approximately five times higher than in preceding years. This is likely in part due to the increased number of visitors, primarily via tour buses, a trend expected to continue.

Nine submitters called for a new fur seal sanctuary to manage human disturbance at the peninsula, with one highlighting that an additional sanctuary would help create resilience against natural events or human disturbance. Others urged extra management effort at the peninsula, such as increased signage about appropriate behaviour and minimum distances or roped off areas. A number of submitters also raised concerns about the cumulative pressures on the fur seal population.

During engagement, the Guardians encouraged stronger action to manage visitor interactions with fur seals at the peninsula. They felt that an approach of broadly restricting access (like at Ōhau Point) would be impractical and wouldn't align with the importance of access to this area for the local community. Instead, they urge a focus on increased signage, promoting awareness and education, and increased presence of DOC staff or volunteers.

Ōhau Stream waterfall

A waterfall at Ōhau Stream (adjacent but not within the fur seal sanctuary) was particularly popular for tourists to view fur seal pups playing, prior to the earthquake. Research undertaken at the waterfall in 2009 and 2011 (prior to the earthquake) demonstrated that pup behavioural changes occurred when people were present, and that only a quarter of visitors to the waterfall 'quietly watched' the seals.¹¹⁹ Following earthquake-related damage, DOC closed the track to the waterfall (which crosses conservation and private land) and installed signage indicating the closure at the start of the track, just off State Highway 1. DOC has also since corrected inclusion of the waterfall area on marine mammal viewing permits. Despite these actions, there are still visitors attempting to reach the waterfall.

During consultation, some submitters raised concerns about the waterfall, calling for greater restrictions and education. The Guardians also raised concerns about disturbance and suggested DOC explore further avenues for discouraging people accessing the track.

¹²⁰ Hale, K., 2013. Effects of tourism on New Zealand fur seals at Kaikoura and the Abel Tasman National Park. Report prepared for the Department of Conservation, Nelson.

Evaluation

Key message: *Changing environmental pressures and increasing visitor use mean stronger, more coordinated management of human–fur seal interactions is needed.*

As described above, the context regarding fur seals in Kaikōura has shifted since 2014. The distribution of breeding areas throughout the KMA has changed significantly and visitor pressure appears to be increasing. Recent years have also seen the fur seal population suffer unusual mortality events which have a likelihood of occurring again. There are other emerging pressures, such as an avian influenza outbreak.

DOC is required to ensure that human interactions with fur seals (and other marine mammals) are ‘managed to avoid or minimise adverse effects on populations and individuals’.¹²¹ Further, section 18 of the MMPR prescribes behaviours of all people around fur seals, including prohibiting any actions that ‘disturb’, ‘harass’, or cause separation or scattering. DOC has considered options to best achieve management of human interactions outside the fur seal sanctuary.

While the number of visitors accessing the pup nursery area at the Ōhau Stream waterfall is significantly lower than prior to the earthquake, some additional management effort could help minimise any residual adverse impacts. Increased DOC staff presence at the Ōhau Point lookout could be used to also advise people of the waterfall track closure and appropriate behaviour around fur seals, especially pups. The Guardians support actions that would deter people from accessing the waterfall area and support increasing education about appropriate behaviour around fur seals more generally.

Two main approaches for managing human-fur seal interactions at the peninsula have emerged during this review process, including from feedback during public consultation and engagement with Te Rūnanga o Kaikōura and the Guardians. One approach is to strengthen operational management of the site and the other is regulatory management of visitor access (which could be similar to the restrictions at the fur seal sanctuary).

Strengthening operational management through a number of actions would aim to increase visitors’ awareness and understanding of the adverse impacts of inappropriate behaviour around fur seals, thus driving greater compliance with the MMPR. Increasing the presence of staff or uniformed volunteers is thought to be one of the most impactful actions. Research has shown that the presence of an official-looking observer decreased the frequency of people harassing fur seal pups at the Ōhau Stream waterfall.¹¹⁵ Another study found that signage alone was ineffective at increasing compliance with minimum distance guidance for tourists viewing seals at the peninsula, suggesting other measures are necessary.¹²²

Greater staff or volunteer presence would enable education of a greater proportion of visitors and allow direct relaying of MMPR rules and DOC’s minimum distance guideline of 20 m. Having staff more regularly on site would also likely deter potential MMPR offences to an extent and enable more timely and efficient surveillance and enforcement.

Although new walkway infrastructure on the peninsula is not being developed specifically for this purpose, it may also help guide visitors to suitable viewing areas and reduce disturbance to fur seals. A second stage of this development (if it occurs) would focus more on managing

¹²¹ Section 3A of the Marine Mammals Protection Act, and Conservation General Policy, policy 4.4(j).

¹²² Acevedo-Gutierrez, A., Acevedo, L., Belonovich, O., Boren, L., 2010. How effective are posted signs to regulate tourism? An example with New Zealand fur seals. *Tourism in Marine Environments*, 7(1), doi: [10.3727/154427310X12826772784874](https://doi.org/10.3727/154427310X12826772784874).

walking access at the shore level (rather than the elevated part of the peninsula) and could provide a further opportunity to manage human-fur seal interactions.

Improvements could be made to printed and online communications material about fur seals in Kaikōura, how humans can impact them, and how to interact appropriately to minimise these impacts. A comprehensive management plan describing the above actions would enable DOC to better plan the future management of this area and to communicate this with the public. This could be site-specific or expanded to document management of fur seals throughout the KMA.

The second approach of exploring management of visitor access through regulatory means, such as access restrictions similar to the fur seal sanctuary, would aim to create specific areas on the peninsula that are essentially free from human disturbance.

The peninsula is a highly popular and important tourism site for Kaikōura and has high value to the community for recreational and cultural use. As such, any regulatory access restrictions would need to be practical to implement and enforce while recognising those values. While establishing regulatory access restrictions could work well if implemented alongside the above approach of strengthening operational management, DOC considers the latter is likely to have a significant impact on managing human-fur seal interactions and should be implemented as a first step. We recommend documenting a clear plan for implementing these management actions, as part of a broader KMA fur seal management plan and building in an annual operational review of the extent to which the management is having the desired effect. This plan should include:

- the KMA-specific statutory fur seal management actions in place, including spatial protections measures and management of commercial marine mammal viewing interactions
- planned advocacy and education activities to support the above management actions, including messaging, signage and printed materials, aimed at schools, tourism providers, tourists and the public
- planned compliance monitoring and law enforcement of the above management actions
- staff FTE requirement to fulfil the management plan, including consideration of using volunteers
- how the effectiveness of the management plan will be monitored.

The peninsula is also important habitat for other protected species, notably the largest colony of red-billed gulls in New Zealand which have a threat status of 'At Risk-Declining', and the additional focus on managing human-fur seal interactions is likely to have concurrent benefits for other species.

Both Te Rūnanga o Kaikōura and the Guardians provided the view that implementing access restrictions at the peninsula would be unpopular with the local community as this is an important area used by many currently. It was suggested that different kinds of restrictions may be needed for the peninsula, compared to Ōhau Point, and that in any case there would be benefit in having a broader management plan for fur seals to assist in managing the pressures being seen at the peninsula. DOC's recommendations below align with these views.

Recommendations

- DOC to strengthen its operational management of human-fur seal interactions at the Kaikoura Peninsula.
- DOC, with input from Te Rūnanga o Kaikōura and the Guardians, to develop a comprehensive KMA-wide management plan for fur seals, monitor implementation progress and effectiveness annually, and amend the management plan as required.

4.4.5 Conclusion

The evaluation of the fur seal sanctuary indicates that it can be an effective and well-implemented measure for achieving its primary objective: restricting human access to the Ōhau Point breeding area and reducing direct disturbance at this key site. The fur seal sanctuary functions as a strong, location-specific protection tool, providing important benefits for breeding fur seals by creating a relatively undisturbed environment.

However, the effectiveness of the fur seal sanctuary is now more limited due to the expansion of the Ōhau Point breeding area and other changes in the distribution of the Kaikōura fur seal population. More effective management of human disturbance would be achieved by expanding the fur seal sanctuary to cover a greater extent of the Ōhau Point breeding area and by strengthening operational management of human-fur seal interactions at the other key visitor site, the Kaikōura Peninsula.

Management of the fur seal sanctuary has generally been appropriate and proportionate, with ongoing efforts in public awareness, stakeholder engagement, and compliance monitoring. Nonetheless, there are now clear opportunities to strengthen management, particularly through improved monitoring of disturbance levels, clearer communication with visitors, and more coordinated engagement with Te Rūnanga o Kaikōura and the Guardians. Submitter feedback also points to the need for a more strategic approach that recognises cumulative pressures on fur seals and considers how the fur seal sanctuary sits within a broader management framework.

In conclusion, the fur seal sanctuary requires modification to ensure its original intent as an effective site-based protection measure is restored, and additional measures are needed to manage visitor pressure at the Kaikōura Peninsula.

4.5. Customary Fisheries Management Measures in the Act – Mātaitai Reserves and Taiāpure

4.5.1 Background

The customary measures within the Act aim to restore and maintain key traditional food-gathering areas of special significance to Ngāti Kuri by applying their knowledge and customs to protect local fisheries and provide them with direct control over key food-gathering areas, which also protects customary rights.

Significant mahinga kai areas were originally identified through the Ngāi Tahu Customary Fishing Protection Areas project in 2008, prior to development of the Strategy. Ngāi Tahu Tangata Tiaki and tribal fishing experts assessed the sites where the mātaitai and taiāpure are located, with the lead Kaikōura Tangata Tiaki confirming them as priority traditional food-gathering areas for Ngāti Kuri. The Strategy proposed five customary management measures and recommended establishing three mātaitai reserves and two taiāpure-local fisheries (taiāpure), collectively referred to as 'Customary Management Areas' in this report.

There are various roles involved with the management of mātaitai reserves and taiāpure, with the term 'Customary Manager' referring collectively to the appointed managers of the mātaitai reserves and taiāpure. Not all Customary Managers are Tangata Tiaki/Kaitiaki and not all Tangata Tiaki/Kaitiaki are Customary Managers.

4.5.1.1 The 2016 earthquakes significantly altered the Kaikōura coastline

From Marfell's Beach to the Conway River, the earthquake raised the seabed by several metres in some places. Several mātaitai reserves and taiāpure, particularly in the northern part of the KMA, were affected. In response, an emergency closure was implemented along the Kaikōura coastline, from Marfell's Beach to the Conway River and extending four nautical miles offshore. This closure prohibited harvesting of all shellfish and seaweed, except rock lobster and scampi.

Emergency closure regulations were gradually replaced with sustainability measures, guided by a FNZ research programme monitoring post-earthquake recovery. The Kaikōura recreational pāua fishery, was closed under emergency measures and reopened in the 2021/22 summer, except within the mātaitai reserves and Te Taumanu o Te Waka a Māui Taiāpure.

4.5.1.2 Mātaitai reserves

A mātaitai reserve identifies a customary food-gathering site and allows for its management by tangata whenua to protect traditional food gathering areas. They recognise and provide for the special relationship between tangata whenua and their traditional fishing grounds, and non-commercial customary fishing.

The three mātaitai reserves established through the Act are at Mangamaunu, Mussel Rock (Te Waha o te Marangai), and Oaro. Under the Act, mātaitai reserves are managed by appointed Tangata Tiaki/Kaitiaki. Currently, Te Waha o te Marangai and Mangamaunu Mātaitai each have six managers, and Oaro has eight.

Sections 21-23 of the Act declared the three mātaitai reserves and specified the areas that they cover. Section 24 of the Act states that Te Rūnanga o Kaikōura may nominate Tangata Tiaki/Kaitiaki ((guardians) for each mātaitai reserve and the Minister must appoint them within 20 working days of receiving the nominations. Upon implementation of the Act Tangata Tiaki/Kaitiaki were appointed under this provision.

While this provision applied for the initial appointment of Tangata Tiaki, future Tangata Tiaki appointments are made under the relevant parts of the South Island Customary Fishing Regulations 1999.

Mātaimai reserves allow:

- customary fishing
- recreational fishing.

Mātaimai reserves do not:

- allow commercial fishing (unless explicitly specified when established or if reinstated through regulation)
- allow landing of commercial catch or holding pots (unless explicitly specified, when established or if reinstated through regulation)
- affect commercial fishing vessel activities like transiting and mooring
- affect recreational fishing unless bylaws are approved by the Minister
- control whitebait fishing
- affect access to beaches and rivers
- change restrictions on access to private land.

Tangata Tiaki/Kaitiaki are able to make bylaws for non-commercial fishing, subject to Ministerial approval. Non-commercial fishing remains permitted unless bylaws restricting it are made by the Tangata Tiaki/Kaitiaki and approved by the Minister. Any bylaws apply to all people fishing in a mātaimai reserve.

The three mātaimai reserves established under the Act are:

- Mangamaunu Mātaimai Reserve
- Oaro Mātaimai Reserve
- Te Waha o te Marangai Mātaimai Reserve.

Mangamaunu Mātaitai Reserve

Mangamaunu Mātaitai Reserve covers the reef area immediately in front of Mangamaunu Marae north of the rail crossing and urupa, marked with white and red pou. Includes all the inshore reef structure covering a 200 m section of the shoreline to a point 100 m offshore, protecting a total area of 1.97 km² (Figure 15).

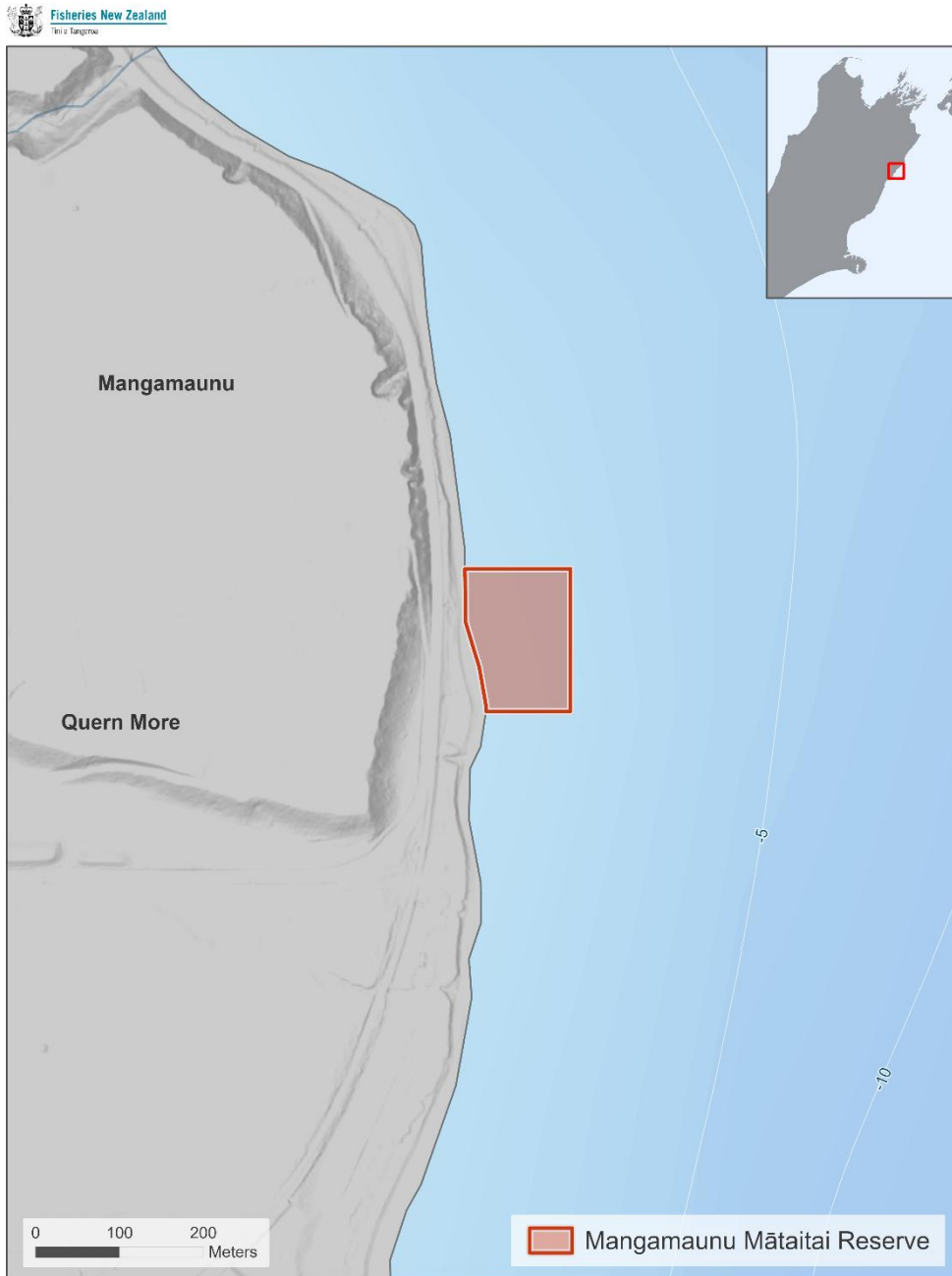


Figure 15: Mangamaunu Mātaitai Reserve.

Oaro Mātaitai Reserve

Oaro Mātaitai Reserve covers an area of reef immediately south of the Oaro River (also includes the catchment of the Oaro River). Encompassing approximately 1 km² area of shoreline 100 m south of the Oaro overbridge, easterly to a point 200 m offshore, then south for 700 m to a point directly off the Limestone Cliffs. Then in an easterly direction back to the shoreline at the southern end of The Blocks (Figure 16).

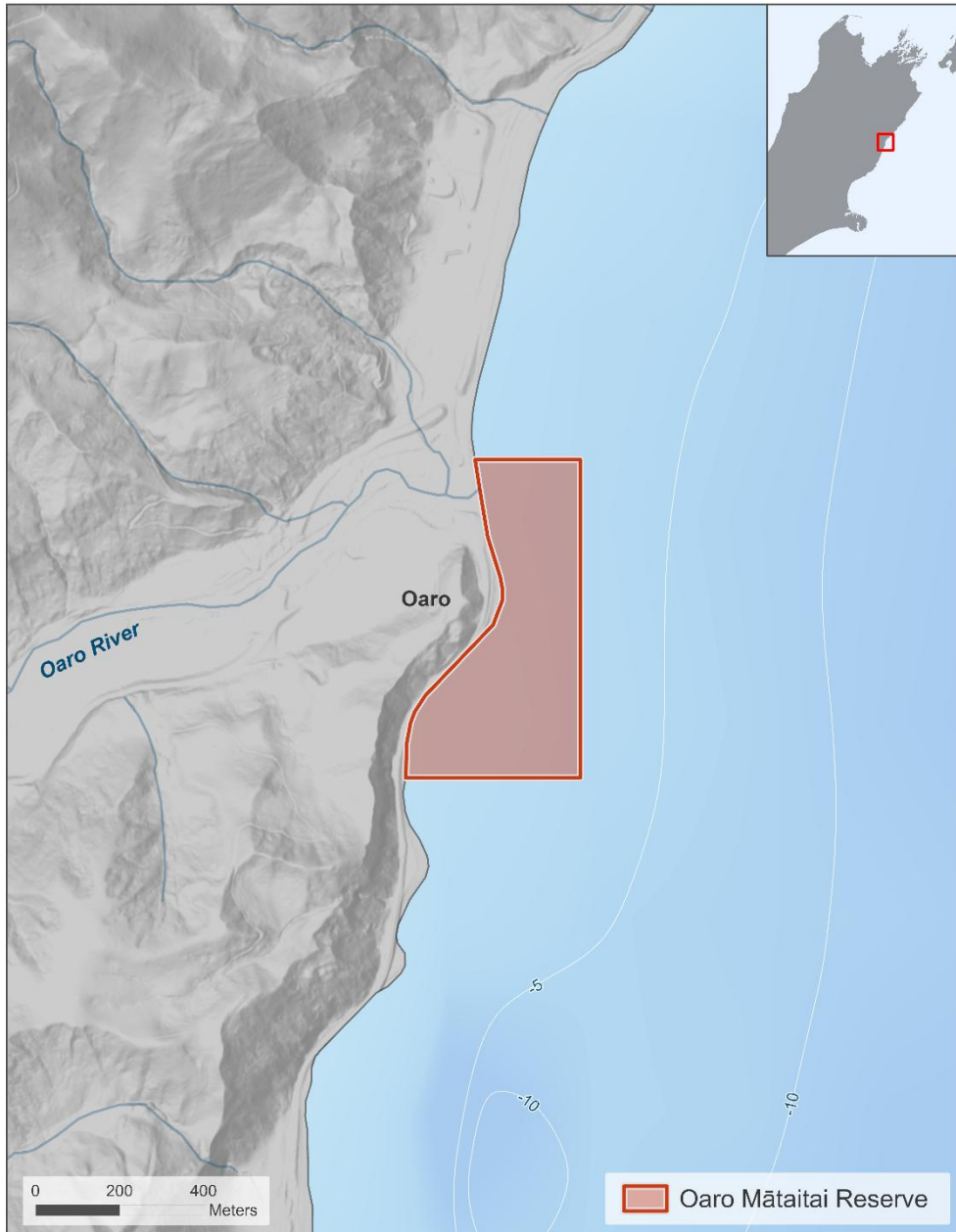


Figure 16: Oaro Mātaitai Reserve.

Te Waha o te Marangai Mātaitai Reserve

Te Waha o te Marangai Mātaitai Reserve covers an area of reef to the south of Blue Duck stream that encompasses the inshore rocky reef structure located 100 m north and south around the Mussel Rock area to a point 200 m offshore, protecting a total area of 2.15 km² (Figure 17).

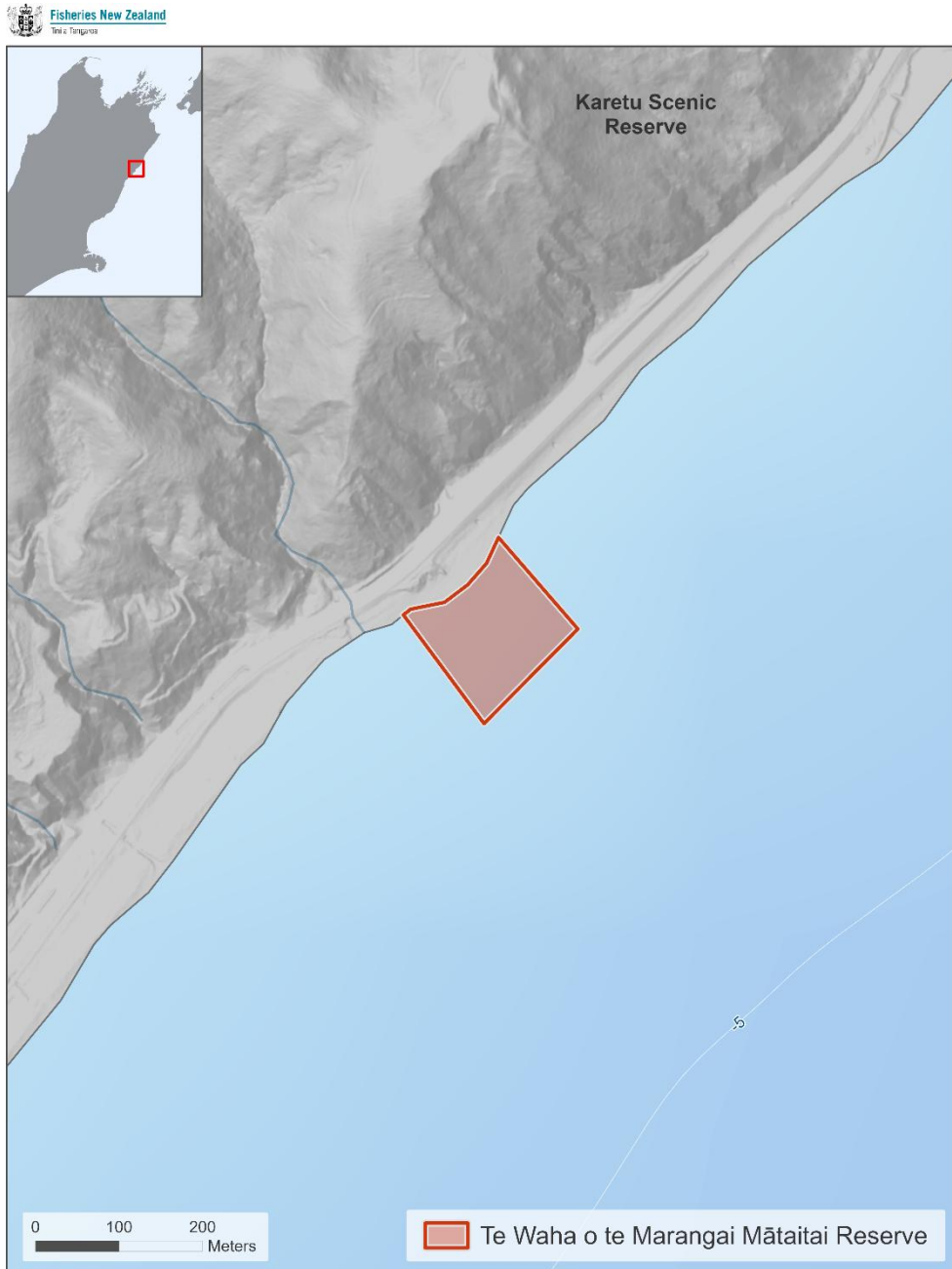


Figure 17: Te Waha o te Marangai Mātaitai Reserve.

Kahutara Mātaitai (Fisheries (Declaration of Kahutara Mātaitai Reserve) Notice 2018), the Oaro Mātaitai freshwater extension and Tūtaeputaputa Mātaitai (Fisheries (Declaration of Tūtaeputaputa Mātaitai Reserve) Notice 2018) are also within the KMA but were not established under the Act and are not covered by this review.

Current Mātaitai Reserve bylaws

There are no bylaws currently for the three mātaitai reserves established under the Act, however, a closure is in place under section 11 of the Fisheries Act for the Oaro Mātaitai Reserve to most seaweed and shellfish gathering (except for specific, exempted species like rock lobster and kina). In addition, all three mātaitai reserves are closed to recreational pāua gathering under section 11 of the Fisheries Act (in addition to commercial gathering).

4.5.1.3 Taiāpure

A taiāpure identifies an area (of estuarine or coastal waters) that has special significance to an iwi or hapū as a source of food or for spiritual or cultural reasons. A taiāpure may be established in coastal waters of special significance to an iwi or hapū, whether for food, spiritual, or cultural reasons. When established, existing fishing activities remain unchanged until the Minister appoints a management committee and approves any changes to fishing regulations recommended by that committee. Unlike mātaitai reserves, commercial fishing is not prohibited, however, the Taiāpure Management Committees can recommend regulations to the Minister that relate to commercial fishing.

The two taiāpure established through the Act aim to protect the traditional food gathering areas around the Kaikōura Peninsula and Oaro Blocks/Haumuri Bluff. Under the Act, taiāpure are overseen by appointed committees, collectively referred to in this report as Customary Managers. Currently, the two taiāpure each have eleven Customary Managers, many of whom manage both.

Sections 26 and 27 of the Act declare the two taiāpure and specify the area that they cover. Section 28 of the Act states the effect of declarations of taiāpure to be that declaration is to be treated as if it were declared by an Order in Council made under section 175 of the Fisheries Act 1996 in accordance with that Act.

The two Taiāpure established under the Act are:

- Te Taumanu o Te Waka a Māui Taiāpure
- Oaro-Haumuri Taiāpure.

Te Taumanu o Te Waka a Māui Taiāpure

Te Taumanu o Te Waka a Māui Taiāpure covers the Kaikōura Peninsula roughly from the 'Lions Pool' reef on the north side to racecourse reef (Caves restaurant) on the south side. From the Lions Pool, proceeds in an eastern direction to the Nine Pin Rock, then in a southeasterly direction to 400 m southeast of Lynch Reef, then to its southernmost point 600 m south of Atia Point, before proceeding to the shore in a northwesterly heading to a point outside the Caves, protecting a total area of 6.97 km² (Figure 18).

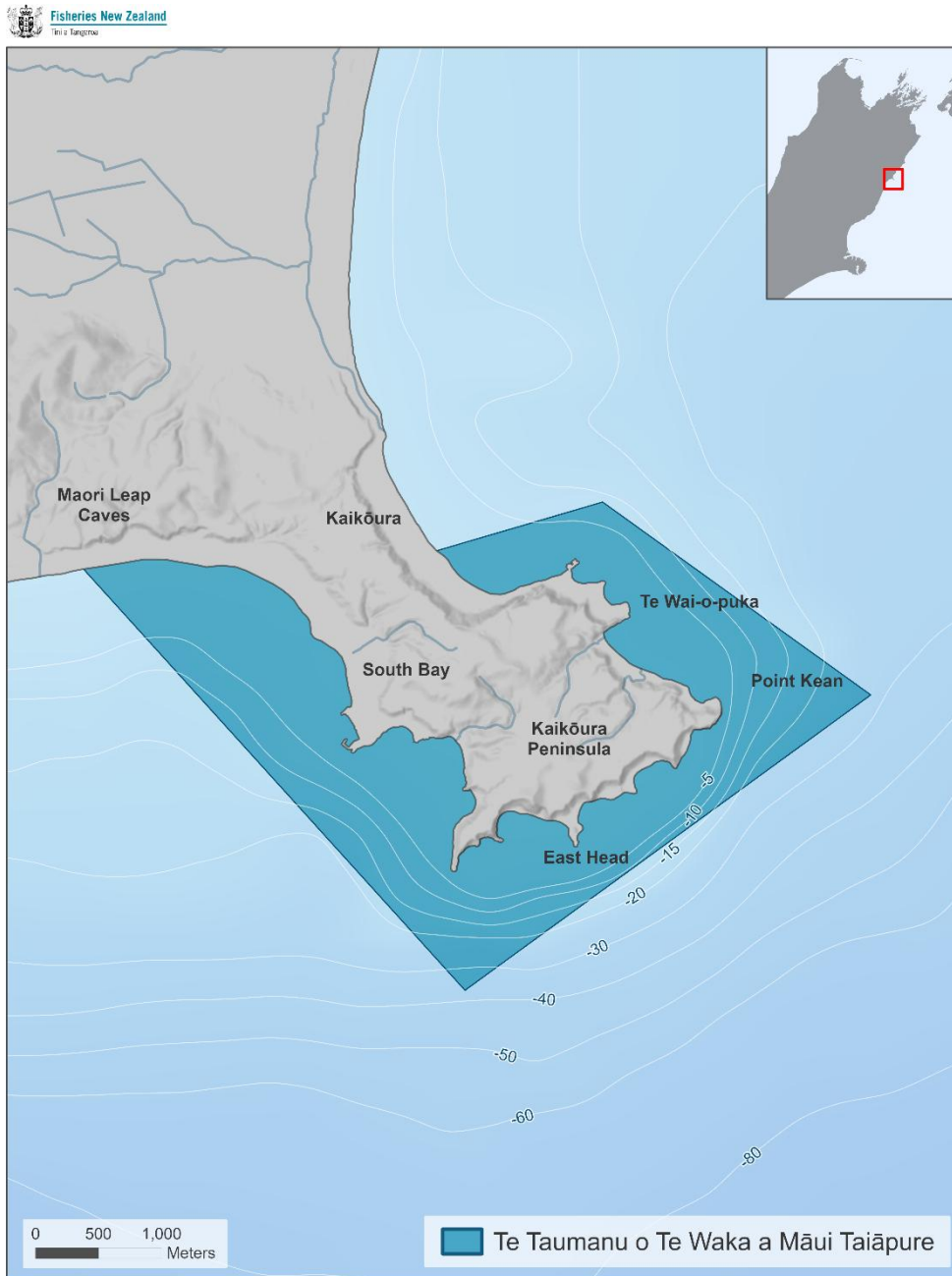


Figure 18: Te Taumanu o Te Waka Taiāpure.

Oaro-Haumuri Taiāpure

Oaro-Haumuri Taiāpure covers an area from north of the Oaro River to south of the Haumuri Bluffs (Claverley) and includes the marine section of the Oaro Mātaitai, heading from shore 100 m north of the Oaro Overbridge, easterly to 600 m offshore. Then proceeds south for 2.6 km to a point 900 m off the Kumara Gardens, bearing southeasterly to a point 700 m off the Spyglass Point. Proceeding south southwest 300 m east of the Haumuri Bluffs back to the shoreline at the Okarahia Viaduct, protecting a total area of 5.66 km² (Figure 19).

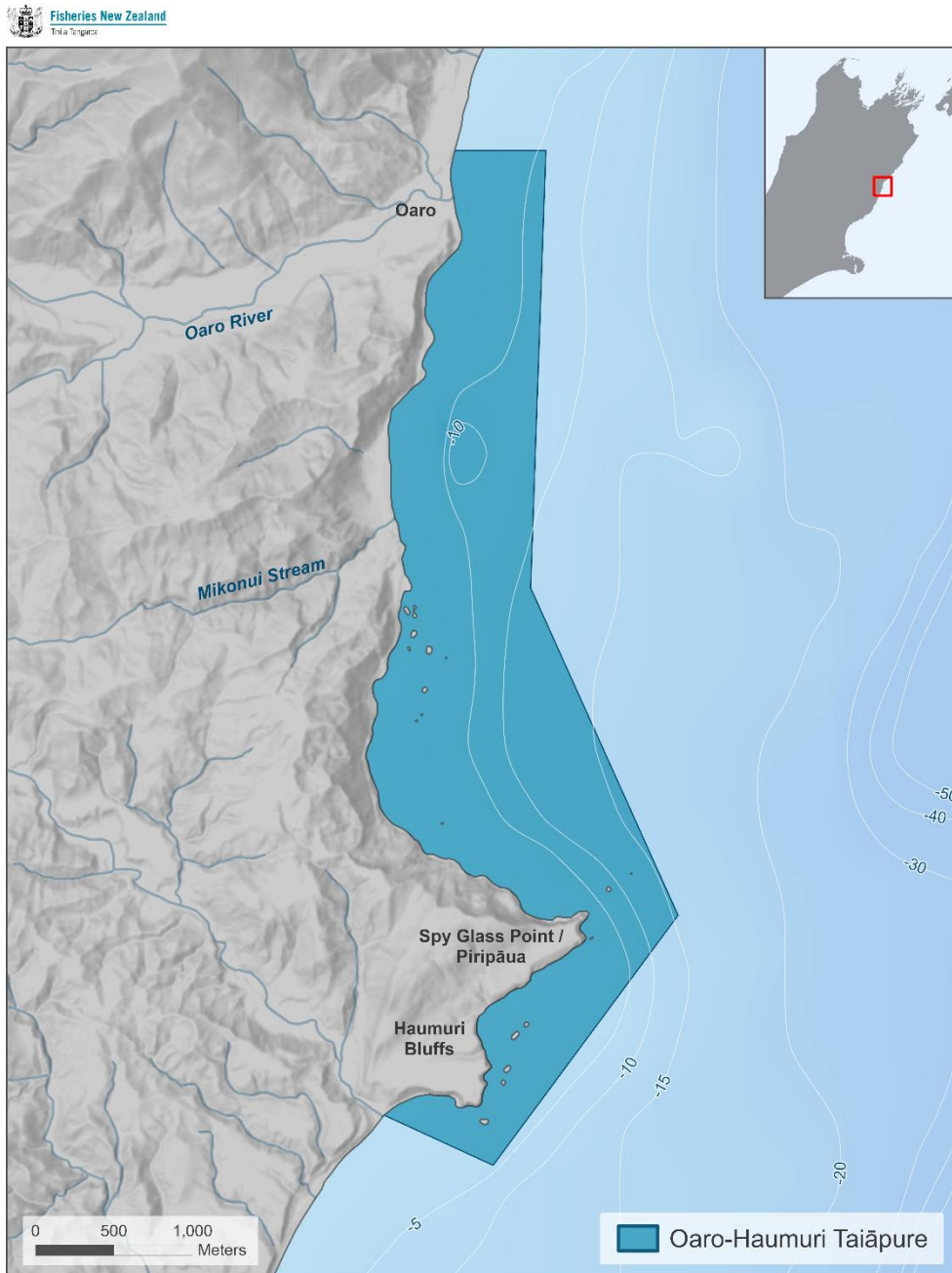


Figure 19: Oaro-Haumuri Taiāpure.

Current Taiāpure regulations

The following regulations have been put in place for these taiāpure:

Te Taumanu o Te Waka a Māui Taiāpure

- Blue Cod: A recreational daily limit of two blue cod per fisher
- Pāua: closed for all commercial and recreational pāua gathering.

Oaro-Haumuri Taiāpure

- Pāua: A daily limit of two pāua per fisher applies and a minimum legal size of 135 mm.

4.5.2 What is the level of compliance for the Customary Management Areas?

There are three FNZ Kaikōura-based fisheries officers performing compliance inspections, with extra staff brought in from other areas at critical times. Fishery officers patrol the coastline on a daily basis and also conduct numerous on-sea vessel patrols when conditions allow.

In the year May 2025 – May 2026, there were 662 inspections in the general Kaikōura area, including 150 sea patrols. While inspections relating to customary management measures and areas are only a subset of these, they show a high adherence to customary fisheries rules, with overall compliance rates of around 92 percent between 2019 and 2025.

Examples of recent prosecutions this year include three pāua gathers who pled guilty in court to obstructing fishery officers and possession of 422 pāua, of which 232 were under the minimum legal size limit. One offender received a \$6000 fine, another received 100 hours community service, and the third is still waiting to be sentenced.

Table 11 indicates the number of inspections at Customary Management Areas between 1 July 2016- 1 July 2026.

Table 11: Number of inspections at Customary Management Areas between 1 July 2016 – 1 July 2026.

Location	Inspections
Te Taumanu o Te Waka a Māui Taiāpure	749
Oaro-Haumuri Taiāpure	608
Mangamaunu Mātaitai	18
Te Waha o te Marangai Mātaitai	2

4.5.3 Evaluation approach

Evaluation of the operation and effectiveness of the Customary Management Areas was informed by:

- feedback received from the Customary Managers
- feedback received from public consultation

- Te Runanga o Ngāi Tahu assessment report on Ministerial Review of the operation and effectiveness of the Kaikōura (Te Taio Marokura) Marine Management Act 2014 customary measures.

Public feedback was obtained via an online consultation on:

- the effectiveness of the Customary Management Areas
- successes and challenges in relation to the Customary Management Areas
- suggestions for changes or improvements to the Customary Management Areas.

Customary Managers' feedback was obtained via two online meetings and focussed on the following questions:

- Key concerns and drivers in selection of sites for the Mātaitai reserves and Taiāpure? Are the concerns/drivers still the same today?
- Is the Customary Protection Area (CPA) management Plan being actively used for these Mātaitai reserves and Taiāpure? Are objectives being achieved? What could be improved?
- Are the Mātaitai reserves and Taiāpure in the right areas today?
- Taiāpure management was put on hold in 2018. What is required to recommence?
- Are the restrictions set up under the Mātaitai reserves achieving the desired outcomes? What changes would you like to see to improve them?
- Have objectives, actions and key issues of the CPA Management Plan been achieved?
- What communications/advocacy/education is there about the Mātaitai reserves and Taiāpure?
- What surveys and/or habitat mapping have been completed since the baseline survey?
- What regulations/research/monitoring would you like to see in place for the future in the Mātaitai reserves and Taiāpure?
- Are the customary management committees meeting regularly? Are they working? If not why and what would you like to see changed?
- Do you feel well supported by the Agencies? If not what could be done better?
- Is the customary working relationship with the Guardians working well? If not what would you like to see changed?

4.5.4 Summary of feedback received from consultations

4.5.4.1 Te Rūnanga o Ngāi Tahu Assessment Report

In June 2024, TRONT staff reviewed the operation and effectiveness of the Act's Customary Fisheries Management Measures. First drafted in 2024 and finalised in 2026, the review confirmed that existing mātaītai reserves and taiāpure are in priority areas and recommended the reserves be retained over these traditional fishing grounds.¹²³

¹²³ Ministerial Review of the operation and effectiveness of the Kaikōura (Te Taio Marokura) Marine Management Act 2024 customary measures Te Rūnanga o Ngāi Tahu assessment report 2026.

The report also noted that the areas identified for protection, in the Ngāi Tahu Customary Fishing Protection Areas Project, at Oaro and Mangamaunu were larger than the subsequent reserve areas set aside for them in the Act. The mātaihai established through the Act cut through reefs rather than encompassing them such that the outer reefs are outside of protection. However, the report goes on to state that without baseline and regular monitoring it would be difficult to make judgements on any effect that the reserve design may have had on the long-term delivery of customary fishing outcomes.

Key recommendations from the TRONT report included:

- conduct benthic surveys every five years
- map critical customary fisheries habitats inside and outside boundaries
- re-initiate taiāpure management hui
- FNZ to engage with tangata whenua and committees to develop policies recognising Māori customary non-commercial fishing.

4.5.4.2 Te Rūnanga o Kaikōura feedback

In December 2025 Te Rūnanga o Kaikōura confirmed that the established customary sites are well appreciated by Te Rūnanga and agreed that they are fulfilling their purpose. However, they suggested that extensions or changes to boundaries may be sought in the future.

They acknowledged that the management approach needs to be reviewed with a focus on representation:

- Address representation on the committees (e.g. membership changes where needed in a mana affirming way).
- Ensure management is active, communication and integration is maintained e.g. committees, tangata tiaki, hapū and Te Rūnanga.
- Review the management plan for customary areas to ensure it is still fit for purpose.

4.5.4.3 Customary manager's feedback

Many of the Customary Managers are appointed to more than one of the Customary Management Areas. Five of the 13 Customary Managers, one Te Rūnanga o Kaikōura Tangata Tiaki and one Ngāi Tahu representative, provided feedback.

Key themes include:

- Governance and Communication Issues
 - Customary management on hold since 2018.
 - Communication between Rūnanga and Customary Managers.
 - Communication with whānau and Guardians; hopes for improvement with new representatives.
- Information Gaps and Monitoring
 - Data sharing, lack of surveys and uncertainty around effectiveness due to lack of evidence
- Customary Management Measures and Effectiveness
 - Mātaihai and taiāpure remain in correct locations and appear effective.
 - Customary areas are well used (customary authorisations indicate activity).

- Areas do not need relocation but require future effort and active management.
- Bylaws and regulations needed to restore biodiversity
- Suggested Improvements
 - Heat mapping and traffic-light reporting for tangata tiaki use (for example of customary authorisations).
 - Resume regular meetings and education/outreach programs.
 - Agency support and consultation with all affected parties.
 - Encourage teaching mahinga kai practices to youth and women.

Customary Managers raised governance and communication challenges, and perceived limited engagement between Te Rūnanga, Customary Managers, and the wider community. While customary areas are seen to be effective, the lack of a regular programme of surveys of these areas, and limited sharing of information has undermined trust and awareness. Respondents would like more active management and improved communication supported by monitoring tools, education initiatives, and inclusive decision-making to ensure long-term resilience of customary fisheries and community confidence.

4.5.4.4 Public consultation feedback

Effectiveness of customary management areas uncertain

38 of the 54 submitters responded to the question: How effective do you think the Customary Management Measures (mātaihai reserves and taiāpure) are at protecting traditional food gathering areas?

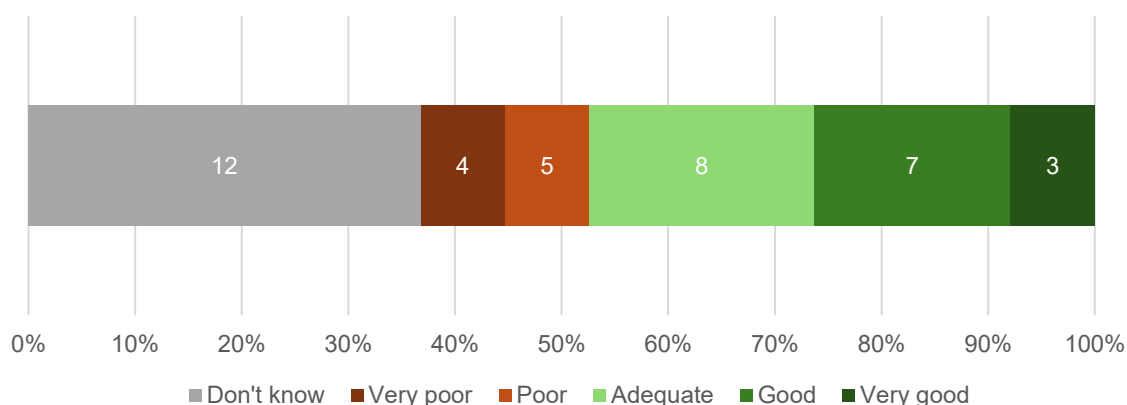


Figure 20: Responses from 38 survey submitters to the question, 'How effective do you think the Customary Management Measures (mātaihai reserves and taiāpure) are at protecting traditional food gathering areas?'.

Feedback from submitters in relation to the effectiveness of the customary management measures suggests a high level of uncertainty (Figure 20). 36.8% of submitters responded with 'I don't know' when asked about the effectiveness of the Customary Fisheries Management Measures. This indicates limited awareness or insufficient evidence among respondents to judge effectiveness, which was alluded to as being an issue by a number of respondents in later responses.

Majority of submitters not aware of successes within customary management

39 of 54 submitters responded to the Question: Are you aware of any successes in relation to the Customary Fisheries Management Measures.

With 87.2% of submitters selecting no they were not aware of any successes, this suggests limited communication or visibility of positive outcomes. Of the 39 responses, 5 submitters provided highlights of the successes they were aware of, with key successes being:

- Empowerment of tangata whenua: Several respondents highlighted that a key success of Customary Management Measures was enabling local iwi and hapū to manage areas within their rohe, reinforcing tino rangatiratanga and iwi-led decision-making.
- Protection of mahinga kai and cultural values: Responses emphasised that mātaihai and taiāpure are essential tools for safeguarding highly significant mahinga kai areas and upholding customary rights.
- Adaptive management and sustainability measures: Examples include timely changes to address sustainability concerns, such as increasing pāua minimum harvest size from 125 mm to 135 mm in the Oaro Mātaihai and other reduced bag limits and increased size limits in response to declining abundance.
- Commercial fishing restrictions: Specific mention of Customary Management Areas being closed to commercial fishing.
- Perceived ecological benefits: One respondent noted anecdotal evidence of pāua numbers rebuilding, though expressed concern about enforcement and consistency of closures.

Submitters note that the successes of Customary Management Measures under the Act are primarily seen in empowering tangata whenua to exercise kaitiakitanga and manage their own rohe, protecting highly significant mahinga kai areas, and enabling responsive, locally driven sustainability actions.

Three submitters voiced their opposition to what they see as customary privilege, raising equity concerns. One respondent questioned the ability of customary take when areas are closed to fishing for everyone else.

With 87.2% of submitters selecting no they were not aware of any successes, this highlights the benefits of improved communication and sharing of information with the local community.

Majority of submitters not aware of customary management challenges

40 of the 54 submitters responded to the question: *Are you aware of any challenges in relation to the customary management measures*, with 65% having no awareness of the challenges. Of the 40 submitters, 14 provided feedback on the challenges perceived including:

- limited ongoing monitoring
- breakdown in management processes
- compliance concerns and enforcement limitations
- customary permit issues
- difficulties balancing cultural, commercial, and ecological priorities
- kina management
- impacts on commercial fishing operations.

Respondents noted challenges they were aware of included limited monitoring of fish stocks in customary areas, unresolved governance issues, and limitations in terms of enforcement capacity.

Stock-specific issues included kina not being managed sufficiently, with commercial harvesting suggested to prevent barren formation. One respondent noted that any changes to customary area boundaries would affect commercial fishing dynamics and catch-spreading efforts. Two respondents noted concerns around issuing customary permits, and another noted concerns over the volume of customary take. Another questioned customary take being enabled while fisheries are otherwise closed. However, 65% of submitters indicated they had no awareness of customary management challenges.

Suggestions for improvements

40 of the 54 submitters responded to the Question: Do you have any suggestions for improvements to the Customary Management Measures? Of the 40 submitters, 18 provided feedback on areas for potential improvement including:

- more scientific and evidence-based management
- improved governance and leadership
- re-activation of customary management
- more consultation with tangata whenua on policy development
- better community awareness and education
- ensure equity and inclusivity to maintain fishing access to all.

4.5.5 Evaluation

Key message: Customary Management Measures are aligned with their original purpose.

This review of the Customary Management Measures indicates that these remain aligned with their intended purpose and appropriate in their locations.

Ngāti Kuri and Te Rūnanga o Kaikōura have affirmed the cultural significance and continued relevance of the Customary Management Areas, acknowledging that the existing spatial boundaries still protect priority mahinga kai sites of high importance to iwi and hapū. Their feedback confirms that these sites are valued and are perceived to be fulfilling their purpose, although future adjustments to boundaries may be considered as knowledge and needs evolve.

The review conducted by TRONT similarly concluded that the locations remain appropriate, though some original reef areas are only partially captured in final statutory boundaries, limiting the ability to fully compare ecological outcomes without adequate monitoring data.

Key message: There are opportunities to improve governance and communication.

Feedback suggests that the effectiveness of the management measures established under the Act has been reduced by governance, communication, and monitoring challenges. The collaborative governance arrangements established when the Act was implemented have not always been sustained with some customary management functions suspended within the rohe following the earthquakes in 2018.

Customary Managers in particular identified communication challenges between Te Rūnanga o Kaikōura, TRONT, Customary Managers, Tangata tiaki, the Guardians and fisheries stakeholders. These have reduced coordination and engagement and have impeded progression of some management actions such as bylaws and regulatory changes within Customary Management Areas.

Key message: *Insufficient information on mahinga kai stocks within customary management areas to determine effectiveness.*

While baseline surveys of some customary areas were conducted by TRONT and the Otago University in 2017, there have been few follow-up surveys. Feedback identified a lack of monitoring, limited evidence of species recovery, and uncertainty about the status of mahinga kai as impediments to assessing effectiveness or guiding improvements.

Many respondents recommended improved monitoring and more regular scientific assessments of the customary management areas established by the Act, along with strengthened collaboration regular hui, education and outreach, and better visibility of how decisions are made and outcomes communicated.

Key message: *High levels of compliance*

Compliance monitoring shows generally positive results, with high adherence to customary rules and a high level of compliance among fishers, indicating that public willingness to follow customary regulations is strong when they are well understood. Concerns were identified around enforcement capacity and clarity of customary authorisation processes.

Key message: *Overall – customary management measures remain effective*

Overall, the review concludes that the Customary Management Measures continue to hold strong legitimacy as protecting traditional food gathering areas and supporting hapū-led management. Their effectiveness could be improved by better governance and monitoring, greater communication, more active management and investing in regular surveys of mahinga kai within the Customary Management Areas established under the Act.

4.5.6 Recommendations

- Te Rūnanga o Kaikōura to review and, where necessary, update representation on the committees established under the Act.
- Te Rūnanga o Kaikōura, FNZ and Te Rūnanga o Ngāi Tahu, consider facilitating more regular hui of Customary Managers, Tangata Tiaki/Kaitiaki and committees to improve communication and to ensure decisions are informed and timely.
- Te Rūnanga o Kaikōura, Customary Managers and Tangata Tiaki/Kaitiaki to look for ways to better integrate customary management and planning.
- FNZ, Te Rūnanga o Ngāi Tahu and Te Rūnanga o Kaikōura to identify opportunities and funding for a programme of more regular stock surveys to be undertaken in the mātaihai reserves and taiāpure established under the Act.

4.5.7 Conclusion

The customary fisheries management measures, mātaihai and taiāpure established under the Act are operating as intended and make a distinct and important contribution to the use and protection of fisheries resources in Te Tai o Marokura. Feedback received during the review acknowledged these measures are important for recognising both customary rights (mana whenua and kaitiakitanga) and local community-led customary fisheries management.

There have been insufficient surveys of mahinga kai in the customary management areas to quantitatively assess their status and their operational effectiveness in terms of restoring and maintaining these traditional food-gathering areas. Feedback supported more investment in regular surveys of mahinga kai within the areas established under the Act.

There are opportunities to improve governance, integration and communication, and to more actively manage these areas. Many respondents considered that some aspects of customary management had been put on hold following the earthquakes and need re-activation. FNZ, Te Rūnanga o Kaikōura, Te Rūnanga o Ngai Tahu, the Guardians all have a role to play in this and in ensuring the continued effectiveness of the customary management measures established under the Act.

5 Contribution of management measures to achieving the Act's purpose

5.1. Background

Part of the Act's purpose (section 3(b)) is that the management measures it established would 'assist the preservation, protection, and sustainable and integrated management of the coastal and marine environment and biological diversity of Te Tai o Marokura'.

At the initiation of the Review, Te Rūnanga o Kaikōura highlighted the importance of taking such a whole of Te Tai o Marokura view in conducting this assessment:

The purpose of the Act requires a coast and sea wide review; this includes the overall wellbeing of all the marine ecosystems that make up Te tai o Marokura. It is important to Te Runanga o Kaikoura to highlight this holistic view as focusing on the micro measurements of the instruments above does not accurately assess the status and wellbeing of the coast and seas of Te tai o Marokura.¹²⁴

As set out in section 3, the objective of the Review was to evaluate each management measure but also how the measures have contributed to the Act's purpose as it relates to the management of the KMA more broadly.

5.2. Evaluation approach

Further to the approach set out in section 3, evaluation of how the management measures have contributed to achieving the Act's purpose regarding preservation and protection and sustainable and integrated management of the KMA was informed by:

- feedback received from public consultation
- feedback from Te Rūnanga o Kaikōura and the Guardians
- the evaluation of each management measure individually.

Section 5.3 presents a summary of feedback from public consultation. Feedback from the public was obtained on the following questions:

- How effective do you think the management measures have been in protecting and sustaining the Kaikōura Marine Area?
- What successes or challenges are you aware of in relation to the management of the Kaikōura Marine Area?
- Do you have any suggestions for changes or improvements to the management of the Kaikōura Marine Area?
- Is there anything else you would like to share about the Kaikōura Marine Area or its management?

Section 5.4 presents Agencies' evaluation of the contribution of the management measures to the 'preservation and protection' and 'sustainable and integrated management' of the KMA, through the following questions:

- How have each of the management measures contributed to the 'preservation and protection' and 'sustainable and integrated management' of the KMA?

¹²⁴ Te Rūnanga o Kaikōura, 2024. Te Runanga O Kaikoura / Treaty Partner Context. Document prepared to support development of the Terms of Reference for the Ministerial Review of the Kaikōura (Te Tai o Marokura) Marine Management act 2014.

- What gaps remain in achieving the ‘preservation and protection’ and ‘sustainable and integrated management’ of the KMA?

5.3. Summary of feedback received from public consultation

49 of the total 54 submitters responded to questions about the overall operation and effectiveness of the KMA.

Feedback from all submitters has been summarised into five themes:

- Species and ecosystem decline
- Fisheries management
- Tourism and human pressure
- Inadequate monitoring, data and science
- Compliance and enforcement gaps.

5.3.1 Species and ecosystem decline

5.3.1.1 Sperm whale decline and ecosystem pressures

Several submitters highlight the importance of sperm whales as taonga and their key ecological role as top predators influencing nutrient cycling. Their importance to the local economy was also frequently cited.

The magnitude and acceleration of sperm whale decline was expressed by many as a serious concern. Several submissions referenced long-term research estimating an approximate 80% decline in local sperm whale abundance since the early 1990s, with an increased rate of decline since 2014.

Many submissions linked sperm whale decline to broader ecosystem stress, including disrupted food webs, reduced prey availability, and declining ocean productivity. Other drivers were thought to include commercial fishing, changing oceanographic conditions (including reductions in the flow of cold nutrient-rich subantarctic water and warmer surface temperatures), and disturbance from recreational and/or commercial tourism (repeated targeting of dwindling population), vessel noise, and earthquakes.

Several submitters noted the Act, and associated measures, were developed before the scale of decline was fully understood. The review is believed to be an opportunity for considering the cumulative impacts on the sperm whale population and identifying means of helping the population recover.

Submissions raised questions about whether existing protections adequately mitigate cumulative pressures on sperm whales and the wider ecosystem. The uncertainty around causes of decline lead some to question whether a more precautionary approach is required. Two precautionary measures already in place, which some consider could be modified to better protect the sperm whales, are the Hikurangi Marine Reserve and Te Rohe o Te Whānau Puha Whale Sanctuary. Increasing their area is recommended.

5.3.1.2 Hector's dolphin bycatch

Ongoing Hector's dolphin bycatch in commercial set nets is also a concern of submitters. Several submitters consider the effectiveness of the commercial set netting ban along the Kaikōura coast needs to be reviewed. One submitter recommends the set net prohibition should be extended to 12 nm from shore and that commercial trawling should be prohibited

within Hector's dolphin habitat. Another submitter recommends a complete halt to all netting and that more sustainable methods such as long lining would be more suitable. EDS recommends the commercial set net ban be expanded to protect all Hector's dolphin habitat.

5.3.1.3 Whale entanglement

The entanglement of whales in fishing pots is noted by EDS as an increasing issue. The most frequent occurrence cited is entanglement of Humpback whales in rock lobster pot lines. EDS would like to see more effective measures to address this threat.

5.3.1.4 Fur seal and bird starvation

The importance of an ecosystem-based approach to management of fisheries is recommended by EDS. The starvation of close to 1,000 fur seals during the 2023/24 summer is highlighted as a result of the reduction in the health and productivity of the marine area. This is compounded by a new emerging threat, canine distemper virus.

Another submitter highlighted mass seabird starvation over the past decade, due to decreased ocean productivity in relation to climate change impacts on prey availability, compounded by overfishing. Red-billed gulls for example, were cited as severely at risk, with the main offshore breeding colonies suffering losses of 80-100%. Losses are seen to extend across inshore and pelagic species (e.g. gulls, cormorants, penguins, shearwaters, petrels, albatrosses). Introduced predators such as cats and dogs and visitor disturbance were raised as additional threats.

Ongoing direct aid to affected species (rescue, rehabilitation and release) is considered critical from an animal welfare perspective but also to safeguard future breeding potential and halt population loss.

5.3.1.5 Fish stock declines

One submitter is concerned at stock declines for species such as rock lobster and blue cod and considers commercial fishing and recreational take are driving prey depletion. This submitter believes the Guardians could contribute to lifting public understanding, effective stewardship and policy change and that agencies could facilitate improved coastal management (i.e. fishery quota reviews, increasing marine reserves, effective biodiversity protection measures, climate action plans). The existing package of management measures is seen as critical and valuable but insufficient in providing necessary ecosystem-scale protection. More regional measures are seen as required to build ocean resilience and protect an impaired ecosystem and a community that relies on the marine environment.

PauaMAC3 suggest collaborative funding for monitoring of key species and significant habitats according to agreed success metrics would better inform management decisions.

5.3.2 Fisheries Management

Fisheries management was a prominent theme across submissions, particularly in relation to sustainability, extraction pressure, and marine mammal bycatch.

Many submissions raised concerns about the sustainability of fisheries management for key species including rock lobster, pāua, blue cod, butterfish and hāpuku. For example, several submissions reported declines in rock lobster abundance, based on long-term local observation.

Many submissions identified recreational fishing pressure as a key issue, noting that daily limits without annual caps allows repeated extraction. The absence of reporting requirements

was also seen as problematic. PauaMAC3 for example were supportive of the tailored pāua measures (i.e. reductions in daily bag and accumulation limits, controlled seasons, and increased minimum legal sizes for pāua) but noted the absence of recreational catch reporting as a major gap. They recommend enacting licensing or reporting systems to improve recreational catch data. Another submitter recommended increasing minimum size limits for rock lobster.

Several submissions raised concern about commercial fishing impacts nearshore, including trawl and set net activity within sensitive habitats and possible impacts of gillnet and longline fishing. Ongoing marine mammal bycatch was cited as evidence existing controls are not fully effective. Additionally, the Environmental Law Initiative questioned whether fisheries activity within marine mammal sanctuaries is consistent with statutory objectives given marine mammals continue to be killed.

The current set net ban was seen by one submitter as effective in increasing the butterflyfish population. Several submitters recommend this ban be extended.

The need for more participation in managing local wet fish and rock lobster fisheries within the KMA was also voiced.

A combined submission by the New Zealand Sport Fishing Council, LegaSea, New Zealand Angling & Casting Association and the New Zealand Underwater Association recommended the Minister for Oceans and Fisheries designate the KMA a separate Fisheries Management Area given its unique oceanography, biodiversity and post-earthquake recovery. This would enable adaptive ecosystem-based fisheries management decisions.

EDS recommended the Guardians be tasked with preparing a regional fisheries plan, for approval by the Minister for Oceans and Fisheries under section 11A(1) of the Fisheries Act 1996, to provide an ecosystem-based framework for the management of fisheries in the area. Another submitter recommends greater use of rāhui for temporary restrictions.

Submitters suggested the following improvements to fisheries management:

- A review of whether fisheries management settings are sufficiently integrated with marine management objectives and whether additional tools are required to manage cumulative impacts
- Increasing minimum size limits
- A review of set netting along the Kaikōura coast
- A review of longline fisheries
- Prohibiting commercial trawling
- More effective measures to address entanglement of cetaceans in fishing pots
- Licensing or reporting systems to improve recreational catch data
- Designating the KMA as a Fisheries Management Area
- Regional ecosystem-based fisheries plan
- Greater use of rāhui

5.3.3 Tourism and human pressure

Tourism and associated human pressures were recognised as growing contributors to cumulative impact on coastal and marine species. Several submissions raised concerns about vessel congestion and disturbance around marine mammals with some observing unsafe or disruptive behaviour, including high-speed approaches.

One submitter observed individual whales viewed repeatedly by multiple vessels and aircraft during a single surfacing period, expressing concern that the impact of tourism (recreational and commercial) on species is increasing due to repeated targeting of dwindling populations.

Another submitter expressed concern that there has been insufficient planning for future increases in visitor numbers. As an example, they note the absence of controls on visitor flows at the Kaikōura Peninsula, where people can easily access wildlife, risking detrimental impacts.

Submissions suggest a need to consider whether tourism management is sufficiently aligned with ecological limits and marine protection objectives.

Climate change is seen as a significant human-induced threat. Submitters say it is driving a change in oceanographic patterns. Species and ecosystems within the KMA depend on cold nutrient-rich subantarctic waters, the flow of which is reducing. Warmer surface temperatures and a decrease in cool nutrient rich waters is leading to reduced prey availability, starvation events, species and ecosystem decline.

One submitter raises the importance of investing in nature-based solutions and reducing fossil-fuel-based emissions to reduce impacts of the climate crisis. They recommend a climate action plan and regional measures to build ocean resilience, protect an impaired ecosystem and a community that relies on the marine environment. They are a proponent of increasing marine reserve coverage and propose a new one at the Kaikōura Peninsula.

5.3.4 Inadequate monitoring, data and science

Concerns about monitoring, data sufficiency and lack of scientific evidence were widely expressed.

Many submissions stated that the effectiveness of management measures cannot be properly assessed due to insufficient data. For example, PauaMAC3 said, “It is not possible to gauge the effectiveness of many management measures without more scientific information.” They note the Hikurangi Marine Reserve has been well-studied, but data are limited or absent for the sanctuaries and customary fisheries management areas.

Several submissions highlighted the absence of clear baselines, indicators or measurable objectives. PauaMAC3 point out there are no clearly defined parameters for gauging success of the management measures. They call for success metrics for each management measure to improve assessments and inform decision-making. The Environmental Law Initiative refer to the purpose of management measures under the Act as the core objective for assessment: “assist the preservation, protection, and sustainable and integrated management of the coastal and marine environment and biological diversity of Te Tai o Marokura.” They submit, however, that assessment extend beyond the management measures to include marine mammal protection.

Current information gaps are seen to limit effective management. One submitter summarised this concern as: “The management process is a social success but a conservation failure.” Several submitters have provided scientific research, including preliminary unpublished research, to address data gaps.

Many submissions called for proactive, long-term, funded scientific monitoring at an ecosystem scale. PauaMAC3 acknowledge the expense of such research and recommend commercial stakeholders, universities and government agencies collaborate.

Te Korowai consider the KMA needs to be actively managed rather than relying on a legislative review every 10 years. They consider the management measures and Act part of a suite of tools and that their effectiveness cannot be measured without funding and implementing research, education and reporting. According to Te Korowai, reactivity to the Kaikōura earthquake and Covid have affected effective management. They recommend the KMA be placed under World Heritage status, to leverage international support, research and funding.

Te Korowai see the KMA as “an incredible community achievement that reflected best practice at the time”. They consider that “through Kaikōura Marine Guardians and Te Korowai, the community need to have continued support through funding and research to ensure that it continues to be managed utilising best practices, technology, and adaptive management processes.” They believe Te Korowai should also be funded as a service provider to the Guardians. Funding should stem from a Strategic Marine Research Strategy, a KMA Strategic Management Plan and annual work plans.

Te Rūnanga a Rangitāne o Wairau highlight the importance of blending rangatiratanga, science and local stewardship to safeguard the KMA for future generations. The importance of utilising local knowledge and experience is a common theme.

Several submissions sought improved transparency and public reporting. One submitter expressed the presence of misconceptions around species status and threats, for example that there are “too many” fur seals or red-billed gulls, when in fact they are in severe decline and that mass starvation is not the result of natural selection or over-population. They believe the Guardians can contribute to lifting public understanding. Raising awareness through improved public reporting is seen as critical for improving community guardianship and marine protection.

5.3.5 Compliance and enforcement gaps

Compliance and enforcement issues were frequently raised, particularly in relation to visibility and resourcing.

Many submissions reported limited enforcement presence within the KMA, especially during weekends and peak periods and further out to sea. Several submitters cited illegal harvesting of pāua and rock lobster, fishing in prohibited areas, and fishing exceeding limits. One submitter expressed their concern around the lack of follow up on information given to the poacher hotline, and that they seldom see interactions between recreational fishers and fisheries officers. Another submitter believes MPI do a fantastic job but would like to see more officers patrolling and protecting the KMA. The call for more fisheries patrols is a common theme.

One submitter expressed concerns regarding non-compliance with rāhui, particularly during summer months by divers and fishers.

Some submitters argued that weak enforcement undermines confidence in the regulatory framework. A commonly expressed view was that rules lack credibility if enforcement is insufficient. One submitter stated “rules are only effective if they are enforced. A lack of visible enforcement undermines confidence in the system.”

Many submissions called for increased compliance resourcing and stronger penalties. Submissions suggest the review should consider whether current compliance arrangements are adequate to support the Act’s objectives.

5.4. Evaluation of how the management measures contribute to the 'preservation and protection' and 'sustainable and integrated management' of the KMA

5.4.1 How have each of the management measures contributed to the 'preservation and protection' and 'sustainable and integrated management' of the KMA?

Key message: Each management measure is contributing positively to the Act's purpose, but in a targeted and partial way. Collectively, the measures provide important but incomplete protection, with greater integration likely to be attained by a more holistic and strategic approach between Agencies, Te Rūnanga o Kaikōura and the Guardians.

5.4.1.1 Kaikōura Marine Guardians

The Guardians support the Act's purpose indirectly through their advisory, coordination, and integrative functions rather than regulating activities or pressures themselves.

The Guardians contribute to preservation and protection mainly by influencing regulatory decisions and management responses across the KMA. Their advice has been particularly impactful in areas like post-earthquake recovery and fisheries management. However, because their input is often reactive and guided by agency priorities, their contribution has not been systematic and is difficult to link directly to environmental outcomes.

In sustainable and integrated management, the Guardians' contribution is strong. They bring together mana whenua, community voices, sector expertise, and agencies, enabling a more holistic, cross-sector view of marine management in the KMA. By facilitating dialogue, sharing information, and advising across conservation, fisheries, and biosecurity, they play a key integrative role. This potential is limited, though, by the operational and structural constraints outlined in section 4.1.

Overall, the Guardians make a moderate contribution to achieving the Act's purpose. With the recommendations set out in section 4.1, they could shift from a largely reactive advisory body to a more influential driver of system-level outcomes.

5.4.1.2 Hikurangi Marine Reserve

The marine reserve makes an important contribution to the preservation and protection of the Kaikōura marine environment. As a marine reserve, it provides the highest level of spatial protection among the management measures, directly removing extractive pressures and disturbance across a large offshore area and smaller nearshore habitats.

Evidence suggests it is having some benefit for less mobile inshore species; information gaps mean its effectiveness for species in the offshore area is uncertain. The contribution this protection therefore makes to the wider KMA is also difficult to determine. The marine reserve's contribution to broader preservation outcomes is likely lessened by its design, as certain key habitats are not represented in the marine reserve, and the coastal area is small and likely subject to edge effects, limiting its effectiveness for more mobile species.

In terms of sustainable and integrated management, the marine reserve is a complementary component of the wider management framework and may have greater importance than other measures given its partial protection of the Kaikōura Canyon, an influential component of the KMA and surrounding area. It supports sustainability by safeguarding biodiversity,

enabling scientific research, and contributing to ecosystem-based understanding of the marine environment.

However, the marine reserve's contribution to integration has been constrained by the lack of a clear, reserve-specific management plan, and therefore limited strategic direction. The marine reserve's management has also not been able to align with a long-term plan for the KMA and its management measures, as this has not been developed.

Overall, the marine reserve makes a moderate contribution to the Act's purpose. It is the most direct and powerful tool for preservation and protection of the marine environment and its biodiversity and plays an important role in sustainable management through the high level of protection provided and its value as a site of monitoring and research.

5.4.1.3 Te Rohe o Te Whānau Puha Whale Sanctuary

Overall, the whale sanctuary makes a moderate but highly specific contribution to the Act's purpose, reflecting its specific design to address high-intensity noise and seabed disturbance. Because the whale sanctuary fully covers the KMA and extends beyond its boundaries, its restrictions are considered effective across the entire KMA.

However, the whale sanctuary's contribution to broader protection and preservation outcomes is constrained by its scope. Evidence presented in the report highlights ongoing concerns about declining sperm whale presence and broader ecosystem stress, with drivers that are uncertain but likely extend beyond the pressures managed by the whale sanctuary. In addition, other significant sources of disturbance – particularly vessel noise, tourism pressure, fishing interactions, and cumulative ecosystem change – are not addressed by the whale sanctuary's regulatory framework. Consequently, while the whale sanctuary is effective within its defined purpose, its overall contribution to preserving ecological condition is partial and limited to a narrow subset of pressures, meaning it does not on its own secure the long-term protection of marine mammal populations.

In terms of sustainable and integrated management, the whale sanctuary functions as a specific component within a broader management system, complementing national marine mammal regulations, fisheries measures, and other spatial tools. The whale sanctuary has operated with limited engagement, monitoring, or adaptive management processes, and its narrow focus means it does not actively integrate with wider management responses to cumulative effects or ecosystem change. As a result, its contribution to integrated management is supportive but limited, rather than driving a cohesive, ecosystem-based approach.

5.4.1.4 Ōhau New Zealand Fur Seal Sanctuary

The fur seal sanctuary provides a targeted contribution to the preservation and protection of fur seals at Ōhau Point by reducing a key localised pressure (human disturbance) through its restriction on human access to the breeding area. While making a positive contribution within its boundaries, its effectiveness beyond this is likely constrained due to changes in the distribution of fur seal breeding areas since the 2016 earthquake and due to other emerging threats. These include climate-driven changes in prey variability, disease outbreaks, and large mortality events. While these issues sit entirely outside the fur seal sanctuary's regulatory scope, they mean the fur seal sanctuary's contribution to preservation and protection is partial and spatially constrained.

In terms of sustainable and integrated management, the fur seal sanctuary exists within a broader management framework that includes marine mammal regulations, tourism controls, and wider research and monitoring programmes. Its integration with this broader framework

has been limited in practice with it operating more as a standalone control, partly due to its limited regulatory scope and partly due its management being relatively 'light-touch'.

Overall, the fur seal sanctuary has made a moderate contribution to the Act's purpose by managing a key pressure at an important fur seal breeding site. Its broader contribution to protection and preservation, and sustainable and integrated management, is now limited by outdated spatial coverage and its narrow focus relative to wider ecological pressures.

5.4.1.5 Customary Management Measures

The Customary Management Measures (mātaihai reserves and taiāpure) make a distinct and important contribution to the preservation and protection of Te Tai o Marokura, primarily through allowing localised stewardship of key habitats and species. Mātaihai reserves for preservation and protection provide by removing commercial fishing impacts (when established) and bylaws (when made by tangata tiaki), and taiāpure through regulations.

These areas contribute to sustainable and integrated management, through inclusion of kaitiakitanga and mātauranga Māori in marine management. They enable tangata whenua to exercise customary authority and actively participate in decision-making about marine resources, supporting a place-based and culturally grounded approach to sustainable management. As with the other spatial management measures, their impact is spatially limited to site-specific protection and so their contribution to the management of the KMA is best described as one component of a broader system.

In terms of the Act's intention of integrated management, the Customary Management Measures established under the Act have strong potential for integrating ecological, cultural, and social objectives, linking resource use with long-term stewardship and intergenerational wellbeing, once active management is reinstated. The extent to which this is achieved depends on the effectiveness of the governance arrangements in place; feedback during the review suggests there are opportunities to improve these arrangements.

Overall, their contribution to the preservation, protection and sustainable and integrated management of the KMA is qualitatively assessed as being moderate to high. A programme of regular surveys of the marine environment and biodiversity within the mātaihai reserves and taiāpure established under the Act would assist this assessment by providing quantitative data.

5.4.2 What gaps remain in achieving the 'preservation and protection' and 'sustainable and integrated management' of the KMA?

Key message: Current management of the KMA delivers valuable but fragmented protection, with important gaps in addressing climate pressures, key species and fisheries risks, data and monitoring, and integrated planning – limiting its effectiveness and highlighting the need for a more comprehensive and ecosystem-based strategic approach.

While the management measures established under the Act have made a meaningful contribution to the preservation and protection and sustainable and integrated management of the KMA, their spatial and functional coverage means they do not address all pressures or activities. These gaps limit the ability of the current management measures to fully achieve the Act's purpose of 'preservation and protection' and 'sustainable and integrated management', particularly in the context of increasing environmental pressures. A consistent theme across both our assessment in section 5.4.1 and public consultation feedback (section 5.3) is that the existing measures tend to provide targeted and partial protection, rather than

a comprehensive, ecosystem-based approach. The gaps identified would provide a useful starting point for future planning exercises of the Guardians and/or Agencies.

5.4.2.1 Gaps in addressing pressures on key species and ecosystems

Climate change and associated ecosystem pressures are increasingly influencing the KMA, yet current management arrangements do not explicitly address these pressures. Submitters identified climate-driven changes in prey availability, marine heatwaves, and broader changes in oceanographic patterns as contributing to species declines and unusual mortality events (e.g. New Zealand fur seals). Submitters urged that climate change impacts are prioritised in future strategic planning and management of the KMA. With this, submitters also called for increasing spatial marine protection to provide greater protection to key fisheries resources (such as rock lobster and blue cod) and also to build greater resilience to the pressures on the marine environment more generally arising from climate change impacts.

Consultation feedback also highlighted concerns about the sustainability of key fisheries, the impacts of both recreational and commercial fishing, and issues such as bycatch (particularly for Hector's dolphins) and whale entanglement. The issues raised are considered as part of wider fisheries management strategies that are in place, and processes that operate under the Fisheries Act 1996 and other legislation and are not part of this review. One example is that Agencies jointly implement a Threat Management Plan for Hector's and Māui dolphins, which addresses all known human-induced threats to these species.¹²⁵ For fisheries-related threats, FNZ operates a South Island Hector's Dolphin Bycatch Reduction Plan that includes restrictions on set netting and trawling and sets Fishing-Related Mortality Limits for limits on subpopulations of Hector's and Māui dolphins, including for Kaikōura.¹²⁶ The impacts of fishing on the wider environment, such as the effect on associated or dependent species, the diversity of the aquatic environment and habitats of particular significance for fisheries management are taken into account in sustainability and other decisions made under the Fisheries Act 1996. The Guardians have highlighted that as recreational fishing regulations were outside the Review's scope, this is a priority area to focus on when developing a future strategic plan.

Despite the specific measures established by the Act, and the wider regulatory framework for managing marine mammals, pressures on them still exist in the KMA, a concern raised by many submitters also. Sperm whales are arguably the most iconic species in the Kaikōura region, a taonga species for Ngāi Tahu and highly important to the tourism industry. As described in section 4.3.1.2, however, research shows a significant decline in the number of sperm whales visiting Kaikōura over the past three decades. Submitters (some of whom have conducted the research demonstrating the decline) expressed concern at this decline and suggested various causes, including food availability, disruption from vessels and effects of the 2016 earthquake. While the 2016 earthquake caused temporary changes to the sperm whales' foraging behaviour and habitat use, the pre-earthquake patterns had largely returned after approximately 12 months. Photographic surveys of the Kaikōura Canyon before and after the 2016 earthquake also estimated that the benthic habitats would fully recovery to occur within 4.5 to 12 years.

Another key source of potential disruption to sperm whales and other marine mammals is from commercial marine mammal viewing activities. These activities are managed via a

¹²⁵ <https://www.mpi.govt.nz/fishing-aquaculture/sustainable-fisheries/managing-the-impact-of-fishing-on-protected-species/protecting-hectors-and-maui-dolphins>

¹²⁶ <https://www.mpi.govt.nz/fishing-aquaculture/sustainable-fisheries/managing-the-impact-of-fishing-on-protected-species> <https://www.mpi.govt.nz/fishing-aquaculture/sustainable-fisheries/managing-the-impact-of-fishing-on-protected-species>

permitting regime prescribing the number and duration of encounters and monitoring of compliance with the MMPR and permit conditions. As set out in section 2.3.2, longstanding moratoria on issuing any new permits for viewing sperm whales and dusky dolphins exist for the KMA. These moratoria restrict any expansion of the level of tourism-based interactions with these species until 2031 when a decision to retain or lift the moratoria will be made. In the interim, DOC is developing and will implement research plans for both species to inform those decisions. Engagement between DOC and the Guardians would allow this research and the recommended strategic plan of the Guardians to align where possible.

Public feedback also highlighted concerns about marine mammal fisheries bycatch in the KMA and in the whale sanctuary. In terms of the whale sanctuary, there seems to be a discrepancy between perception of the sanctuary's purpose and its relatively narrow regulatory scope. There are ongoing efforts, using a range of regulatory and non-regulatory measures, to reduce the incidence of marine mammal bycatch throughout New Zealand, including but not limited to some of the existing marine mammal sanctuaries.

5.4.2.2 Limitations in monitoring, data and knowledge

A key gap identified consistently by the Guardians, and also raised in public feedback, is the lack of a comprehensive information base to support decision-making and evaluation. Across all management measures, and the wider KMA, there are limitations in baseline and longer-term data to assess ecological outcomes.

Submitters consistently noted that the effectiveness of management measures is difficult to determine due to inadequate monitoring and limited public reporting. This is a constraint to responsive management and contributes to differing perceptions about whether measures are working. The ability to understand the cumulative effects and broader ecosystem trends is critical for achieving integrated management but is currently limited.

Feedback from the review highlights a clear theme around developing a stronger information base, directed by clearer forward planning (at both strategic and operational levels), that takes a whole of KMA view. The Guardians have urged that this Review is not a one-off, and that periodic reviews in the future, including undertaking a '25-year generational review' as originally envisaged in the Strategy, are undertaken. The Guardians view the development of a longer-term strategic plan and annual work programmes that ensure priority information is collected, is critical to any future reviews of management of the KMA. Agencies can support the plan and work programme development, however, implementation of extra information collection would require additional resourcing and funding.

5.4.2.3 Integration and implementation gaps

Although the Act was designed to promote integrated management, integration remains limited and instead management continues to largely operate on a single management measure, species or issue basis, rather than through a coordinated, system-wide approach. As described above, the Guardians provide an important mechanism for integration, but their role is partially constrained and the absence of a shared strategic plan amongst the Guardians, Agencies and others is a key gap.

A lack of community awareness and engagement also exists. Feedback indicates that many members of the public are unclear about the role and effectiveness of management measures, and that communication of monitoring outcomes could be improved.

Submitters also identified ongoing concerns about illegal harvesting, limited enforcement presence, and a lack of deterrence, which may be affecting public confidence in the overall management of the KMA. Ensuring high compliance with the range of regulatory measures

in place for the KMA is critical for enabling their effectiveness. Aside from compliance monitoring in relation to the specific management measures (as described in sections 4.2 - 4.5, Agencies also monitor adherence to the full suite of Fisheries Act measures (FNZ) and compliance with the MMPA and MMPR (DOC) throughout the KMA. For example, fishery officers patrol the Kaikōura coast daily and conduct vessel patrols when conditions allow. FNZ data indicate that in the year May 2025 – May 2026, the three Kaikōura fisheries officers performed 662 inspections, of which 150 were conducted on sea patrols. In addition, officers come into Kaikōura from other areas to assist when required, e.g. at the opening of the recreational pāua fishing season. Persons found to be offending are charged and sentenced, with a recent fine being \$6,000 for being in possession of excess and under sized pāua.

5.5. Recommendations

There is significant overlap in the issues identified across these two KMA-wide questions, and accordingly a single, consolidated set of recommendations has been developed.

- Agencies to support a more proactive and strategic role for the Guardians by enabling their development of a strategic plan for the KMA that sets long-term priorities and outcomes, identifies key information needs and supports them playing a more proactive and integrative role in the management of the KMA.
- Agencies and Guardians to establish a structured process for monitoring implementation of recommendations from the Review and for regularly assessing effectiveness of the management measures and progress towards the Act's purpose.
- Agencies and Guardians to continuously strengthen the information base as resourcing and funding allow. This would better inform management responses and future management evaluations. Agencies and Guardians to ensure information is regularly and transparently shared with the public.

5.6. Conclusion

Overall, the management measures have contributed, individually and collectively, to the preservation and protection and integrated and sustainable management of the marine environment and biological diversity of the KMA to a moderate extent.

There is evidence the measures have been effective in reducing certain key pressures, within specific areas, thus providing strong protection from those pressures, but gaps remain in addressing other key pressures across the KMA.

Public feedback indicated that consensus is lacking on whether the Act's measures combined have resulted in 'sustainable and integrated management'. There is broad support for the purpose and intent of the Act, yet strong concern its effectiveness is limited without more active, integrated, and science-based management. Current settings are perceived as reactive, under-resourced, and not keeping pace with ecological change.

The physical effects of the 2016 earthquake had a significant effect on both the implementation and effectiveness of most of the management measures and have also ultimately made it difficult to fully assess their effectiveness. The Guardians have emphasised the importance of reviewing the effectiveness of the management measures, and management of the KMA more generally, at regular intervals, including upholding the original proposal for a '25-year review'. They also highlighted the importance of the development of a strategic plan and annual work programmes for allowing more regular assessment and adaptive management.