

Regulatory Impact Statement: Marine protection proposals from Revitalising the Gulf: Government action on the Sea Change Plan

Coversheet

| Purpose of Document | |
|---|---|
| Decision sought: | Analysis produced to inform final Cabinet decisions on the implementation of the marine protection proposals and the provision of customary practices in Revitalising the Gulf: Government action on the Sea Change Plan. |
| Advising agencies: | The Department of Conservation (DOC) (lead) Ministry for Primary Industries – Fisheries New Zealand (FNZ) |
| Proposing Ministers: | Minister of Conservation Minister for Oceans and Fisheries |
| Date finalised: | 28 November 2022 |
| Problem Definition | |
| <p>The Hauraki Gulf / Tīkapa Moana / Te Moananui-ā-Toi (the Gulf) is recognised as a taonga of natural, economic, recreational, and cultural importance. However, State of the Gulf reports¹ over the last twenty years have found the Gulf is in an ongoing state of environmental decline due to pressures from economic, urban, and recreational activities on land and at sea.</p> <p>Marine protection is required to help reverse the documented decline by limiting the continuation of impactful marine-based activities. 'Revitalising the Gulf: Government action on the Sea Change Plan' (Revitalising the Gulf) proposes a marine protection package utilising two new marine protection tools to allow for the restoration of some of the most biodiverse regions in the Gulf. The proposed areas for protection have been agreed to by Cabinet [ENV-21-MIN-0032]. The implementation of the package of marine protection requires bespoke legislation.</p> | |
| Executive Summary | |
| <p>In the absence of Government action, the reported decline in the ecological condition of the Gulf will continue to adversely impact the wellbeing of those who work, live, and recreate there. <i>Revitalising the Gulf</i> proposes initiatives across marine protection, fisheries management, aquaculture, active habitat restoration, marine biosecurity, protected species, research monitoring and reporting, and ahu moana (localised marine management by local communities and mana whenua) to improve the health and mauri of the Gulf.</p> | |

¹ Every three years, the Hauraki Gulf Forum produces a report on the state of the Hauraki Gulf environment. The reports can be found at <https://gulfforum.org.nz/state-of-the-gulf/>.

The focal point for this document is the implementation of the proposed 19² new protected areas. The marine protection proposals comprise:

- twelve high protection areas (**HPAs**) that will prohibit activities impactful to the marine environment, to protect and enhance marine habitats and ecosystems while providing for the customary practices of mana whenua in alignment with site-specific biodiversity objectives;
- five seafloor protection areas (**SPAs**) that will prohibit activities harmful to the sea floor to protect sensitive habitats while continuing to allow for activities in the water column; and
- two protected areas adjacent to the Whanganui-A-Hei³ and Cape Rodney-Okakari Point marine reserves. *Revitalising the Gulf* stated that these two areas would be established as either HPAs or marine reserve extensions. Ministers will decide what the extensions will be based on feedback received during engagement.

Implementation options

The decisions in the paper refer to the legislative options for implementation, how customary activities will be defined, how customary activities will be managed, prohibitions in Seafloor Protection Areas, and compliance and enforcement mechanisms.

Legislation options for implementation

Officials considered three options for implementing marine protection of the nature proposed in *Revitalising the Gulf*:

- Option A: bespoke legislation (preferred);
- Option B: the Marine Reserves Act 1971; and
- Option C: the Resource Management Act 1991

Bespoke legislation (Option A) is preferred because:

- it is likely to provide the quickest protection of areas with high ecological value which is favourable given the need for rapid action to reverse biodiversity decline in the Gulf;
- it will best deliver the Government's commitment to provide for the expression of customary practices; and
- it provides an opportunity to deliver integrated marine protection in the Gulf through a single piece of legislation.

Implementing marine protection through bespoke legislation required officials to work through four further policy decisions.

A.1: Defining customary practices in HPAs:

- Option A.1.1 (preferred): Define customary practices broadly according to the traditions and values important to Hauraki Gulf mana whenua, explicitly providing for non-commercial customary practices, and explicitly excluding commercial and recreational fishing activities;

² *Revitalising the Gulf* proposed 18 marine protection areas and noted the potential to include additional protection around the Noises Islands. This has subsequently been included in the marine protection package to bring the total to 19 areas.

³ Note work is underway to rename the Whanganui-A-Hei (Cathedral Cove) marine reserve to Te Whanganui-O-Hei (Cathedral Cove) Marine Reserve.

- Option A.1.2: Explicitly list customary practices activities which may occur; and
- Option A.1.3: Draw on existing definitions for customary practices used in other legislation.

Option A.1.1 is preferred as it provides for customary non-commercial fishing rights. It also responds to mana whenua feedback by offering flexibility and by supporting the evolution of customary practices over time.

A.2: Managing non-commercial customary fishing in HPAs:

- Option A.2.1 (preferred): customary fishing in HPAs is managed under existing regulations and a legislative mechanism whereby Ministers can apply additional management activities; and
- Option A.2.2: customary fishing in HPAs is managed under a bespoke permitting system made under the Hauraki Gulf Marine Protection Act.

Option A.2.1 is preferred as existing regulations give effect to obligations set out under the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992. It will also avoid the development of a regulatory system for customary fishing that would run parallel to the current fisheries regulations and the requirement for authorised representatives to process customary fishing authorisations under multiple Acts.

A.3: Options for managing activities in Seafloor Protection Areas (SPAs)

- Option A.3.1 (preferred): Uniform prohibitions across all SPAs with further prohibitions at the Mokohīnau Islands SPA;
- Option A.3.2: Uniform prohibitions across all SPAs; and
- Option A.3.3: Site-specific prohibitions for each SPA.

Option A.3.1 is preferred as it is likely to reduce impacts on commercial and recreational fishers, and result in better biodiversity outcomes for SPAs. Option A.3.1 is also relatively easy to implement as additional restrictions are only required at one site. There may be increased compliance challenges associated with having additional restrictions at the Mokohīnau Islands SPA site. However, this risk can be mitigated by providing additional communication materials to users around the different restrictions in the Mokohīnau Islands SPA.

A.4: Options for compliance and enforcement in HPAs

- Option A.4.1 (preferred): DOC Warranted Officers are able to exercise limited enforcement powers in relation to customary take; and
- Option A.4.2: DOC Warranted Officers have more extensive enforcement powers in relation to customary take.

Option A.4.1 is preferred as officials consider that it balances the need for DOC Warranted Officers to enforce some activities relating to customary fishing within HPAs, and the sensitive nature compliance activities with respect to customary fishing.

The preferred options are reflected in the Cabinet paper.

Costs of the preferred options:

- All options would have costs to central government associated with the initial establishment of marine protection areas (approximately \$950,000) and ongoing management costs (approximately \$1,590,000-\$3,160,000 per annum). Bespoke

legislation has the additional resource and capacity costs of establishing new legislation. These costs are difficult to quantify as they mostly consist of time for lawyers, Parliamentary Council Office, Ministers etc.

Benefits of the preferred options:

- Marine protection will support the passive recovery of at-risk, high ecological value, and representative habitats and ecosystems in the Gulf. HPAs and SPAs will provide protection from directed take of targeted organisms, bycatch mortality of non-target organisms, and habitat damage from fishing activities.
- The restoration of marine habitats will enhance the mauri of the Gulf and provide for the continued expression of customary practices.

Mana whenua, key stakeholders, and public views of the issue

Since January 2020, the Department of Conservation (DOC) and the Ministry for Primary Industries – Fisheries New Zealand (FNZ) have conducted several rounds of targeted engagement with mana whenua and stakeholders.

During early engagement, mana whenua expressed support for further marine protection in the Gulf but noted concerns that defining customary practices could limit their existing rights or require them to justify their practices in the future. Feedback from recent engagement (14 September – 28 October 2022) on the marine protection proposals has included support from a range of stakeholders for the progression of the proposed marine protection. DOC also received some opposition to the proposals for reasons including not supporting the use of spatial protection tools, not supporting the location or size of the proposals, and opposition to the allowance of customary practices within HPAs. Mana whenua have remained generally supportive of the proposals and how we have proposed to define customary practices.

Limitations and Constraints on Analysis

Several factors informed the marine protection proposals in *Revitalising the Gulf*, including the independent development of the Sea Change Tai Timu Tai Pari Marine Spatial Plan (the Sea Change Plan), subsequent analysis of the Sea Change Plan's proposals, consultation with mana whenua and stakeholders, and previous Ministerial decisions.

Design of marine protection areas

The marine protection proposals in *Revitalising the Gulf* evolved from those included in the Sea Change Plan. The Sea Change Plan was developed by an independent Stakeholder Working Group (SWG) that consisted of representatives for mana whenua, community, environmental groups, fishing, and aquaculture. Among other initiatives, the Sea Change Plan proposed 26 marine protected areas (MPAs) across 15 locations in the Hauraki Gulf Marine Park. DOC and FNZ provided technical advice to the SWG during the development of the Sea Change Plan but did not have a role in final decision-making or drafting of the marine protection proposals.

In 2018, Cabinet agreed there was value in progressing a central Government response to the Sea Change Plan.⁴ In 2019, the Sea Change Tai Timu Tai Pari Ministerial Advisory Committee (MAC) was appointed to support the Government's response. In 2020, the MAC produced a report for Ministers recommending the Sea Change Plan's original proposals for

⁴ ENV-18-MIN-0044.

marine protection be progressed in *Revitalising the Gulf*. In 2021, technical experts from DOC and FNZ assessed the Sea Change Plan's proposals to ensure they provided adequate protection and had positive biodiversity outcomes.

Revising current governance arrangements is out of scope

In 2018, officials advised Cabinet that determining a new governance arrangement in the Gulf was out of scope, noting that such arrangements would be progressed in future Treaty negotiations. Reiterating this advice, and limiting the scope of *Revitalising the Gulf*, the MAC Terms of Reference stipulated that the discussion of governance matters should be confined to gathering information and views about governance.

Targeted engagement

There was no formal consultation on the Sea Change Plan, however, local communities had the opportunity to engage on the proposals through public meetings, surveys, publicly available information, and roundtable sessions. A report by the Controller and Auditor General found that the Plan's proposals would have benefited from more communication, and support from significant stakeholder groups such as commercial and recreational fishers.

Officials conducted three rounds of targeted engagement on the *Revitalising the Gulf* marine protection proposals. The degree to which affected groups had the opportunity to engage varied depending on the subject matter concerned.

Previous Cabinet commitments & prior legislative decisions

Cabinet commitments in 2018, 2021, and 2022 refined the scope of *Revitalising the Gulf*. Notably, in 2021, Cabinet agreed to *Revitalising the Gulf* package including the proposed marine protection areas. The actions in it⁵ include:

- the use of legislative measures to implement new marine protection;
- the overarching purpose of the two new marine protection tools; and
- the provision for the expression of customary practices in High Protection Areas.

Specific Cabinet decisions have been referenced at relevant points in this paper.

Responsible Manager(s) (completed by relevant manager)

Sam Thomas

Manager

Marine Policy Team

Department of Conservation - Te Papa Atawhai

s 9(2)(a)

29 November 2022

Quality Assurance (completed by QA panel)

Reviewing Agency:

⁵ ENV-21-MIN-0032

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|-----------------------------|--|
| Panel Assessment & Comment: | <i>Department of Conservation - Te Papa Atawhai Fisheries New Zealand – Tini a Tangaroa</i> |
| Panel Assessment & Comment: | <p><i>The Regulatory Quality Panel with representatives from the Department of Conservation and Ministry for Primary Industries has reviewed the Regulatory Impact Assessment (RIA) “Marine protection proposals from Revitalising the Gulf: Government action on the Sea Change Plan” produced by the Department of Conservation and Ministry for Primary Industries – Fisheries New Zealand, dated 25 November 2022. The review Panel considers that it partially meets the Quality Assurance criteria.</i></p> <p><i>The RIA demonstrates a convincing problem definition and clearly sets out a range of options and evaluation criteria. However, the Panel believe that analysis of options presented under A.3 and A.4 are constrained. A.3.1 (preferred option) lacks a thorough assessment of the Economic Impact of further prohibitions at the Mokohīnau Islands Seafloor Protection Areas (SPAs) on commercial and recreational fishing and this option has not been tested with stakeholders and mana whenua. A.4.1 (preferred option) relies on the assumption that it presents the least risk to already established relationships with Kaitiaki in the Gulf. There will be an opportunity to test both preferred options A.3.1 and A.4.1 with mana whenua and stakeholders during the Select Committee phase.</i></p> |

Section 1: Diagnosing the policy problem

What is the context behind the policy problem?

Context behind the policy problem

Marine protection is being proposed to address the deterioration of the health and mauri of the Hauraki Gulf. Cabinet has previously agreed to 18 proposed marine protected areas which are to be implemented using two new tools created through bespoke legislation [ENV-21-MIN-0032]. Officials are working through how these proposed marine protected areas will be implemented using bespoke legislation, including how customary practices will be managed in the proposed High Protection Areas.

The need for marine protection in the Hauraki Gulf

The Hauraki Gulf / Tīkapa Moana / Te Moananui-ā-Toi (**the Gulf**) is a taonga of natural, economic, recreational, and cultural importance. It covers 1.2 million hectares of coastal area between Mangawhai and Waihi and is used for aquaculture, fishing, tourism, shipping, and transport, among other activities. The Gulf is valued by mana whenua and others who work, live, and recreate there. Each year, the Gulf generates more than \$2.7 billion in economic activity through tourism, recreational activities, ports, aquaculture, cruises etc, supporting the livelihood of around one third of New Zealand's population.

The Gulf is recognised for the quality and diversity of its biology and landscape. Its islands and waters are valued as the habitats of plants and animals, including whales, dolphins, and seabirds. The Gulf is one of the few places in the world where the critically endangered Bryde's whale is found in coastal waters. It is also an internationally significant seabird habitat. 27 species of seabirds breed in the Gulf, four of which are regionally endemic.⁶ Other protected species occurring within the Gulf are marine turtles, sea snakes, black corals (order Antipatharia), gorgonians (order Gorgonacea) and stony corals (order Scleractinia).

Due to its national significance, the Gulf was designated New Zealand's first marine park under the Hauraki Gulf Marine Park Act 2000. The Hauraki Gulf Marine Park Act established the Hauraki Gulf Forum (**the Forum**)⁷ whose functions include triennial reporting on the state of the Gulf's environment. Successive reports over the last twenty years have found the Gulf is in an ongoing state of environmental decline.⁸ Environmental decline is attributable to cumulative pressures from climate change, and human activities on land and at sea.

Climate change presents a long-term disturbance to marine ecosystems. Environmental changes associated with climate change include oceanic warming and acidification, sea-level rise, and changes to the frequency and intensity of storms. These changes are predicted to impact the distribution and abundance marine biodiversity across Aotearoa.⁹ The impacts of climate change are being addressed using tools such as the National Adaptation Plan and the Emissions Reduction Plan.

⁶ Regionally endemic means the entire global population breeds within the Gulf region.

⁷ Hauraki Gulf Forum members include representatives from the Ministry of Conservation, Ministry of Fisheries, and Te Puni Kōkiri; elected representatives of Auckland Council, Waikato Regional Council, Thames-Coromandel, Hauraki, Waikato, and Matamata-Piako District Councils; and representatives of the tangata whenua of the Hauraki Gulf/Tīkapa Moana and its islands.

⁸ Hauraki Gulf Forum, State of the Gulf Reports index. Retrieved from: <https://gulfforum.org.nz/state-of-the-gulf/>.

⁹ Ministry for the Environment, 2019. Retrieved from: <https://environment.govt.nz/publications/our-marine-environment-2019/issue-4-climate-change-is-affecting-marine-ecosystems-taonga-species-and-us/>.

Impactful land-based activities include forestry, farming, mining, and urban development. These activities can alter the marine environment by increasing the sedimentation that enters waterways and harbours. When suspended in the water column, sediments can directly impact populations by making filter feeding less efficient and by reducing the visual foraging abilities of finfish such as snapper. Urban development has also made fundamental changes to the coastal fringe of the Gulf. Changes to the marine habitat during urban development is likely to affect the adjacent ecology and biodiversity. These, and other, land-based impacts are being addressed through reform in the resource management and freshwater space.

Marine-based activities such as recreational and commercial fishing, dumping, and mining also contribute to the degradation of the Gulf. Mobile bottom-contact fishing methods including dredging, bottom trawling, and Danish seining¹⁰ are particularly harmful.¹¹ These fishing methods affect non-target species and impact benthic (seafloor) habitats in the Gulf. The potential damage that these methods can cause when combined with other stressors, is evidenced by ecosystem changes, habitat loss and population depletion. The decline in the abundance and biomass of scallops in the Northland and Coromandel area between 1991 and 2022 is one example.¹² Once highly productive, scallop fisheries are now operating at historical lows in many areas. It is these marine-based pressures that this package seeks to alleviate.

The development of the marine protection proposals



¹⁰ Danish seining is a fishing method whereby a trawl net is rigged to herd finfish with ropes prior to netting.

¹¹ Hauraki Gulf / Tikapa Moana / Te Moananui-ā-Toi State of the Environment Report 2020. Retrieved from: <https://www.aucklandcouncil.govt.nz/about-auckland-council/how-auckland-council-works/harbour-forums/docsstateofgulf/state-gulf-full-report.pdf>.

¹² FNZ, Review of Sustainability Measures for New Zealand scallops (SCA 1 & SCA CS) for 2022/23, December 2021. Retrieved from: <https://mpi.govt.nz/dmsdocument/49072/direct>.

Stakeholder driven response to environmental decline

To address environmental decline in the Gulf, a Stakeholder Working Group (**SWG**), consisting of representatives from mana whenua, industry, and community, developed the Sea Change Tai Timu Tai Pari Hauraki Gulf Marine Spatial Plan (**the Sea Change Plan**).¹³ The Sea Change Plan contains over 180 proposals spanning land, freshwater, and the sea intended to reverse the decline of the Gulf's mauri.

The SWG identified areas in the Gulf that would benefit from protection from overfishing and/or activities harmful to the ocean floor. Accordingly, the SWG proposed 26 marine protected areas (**MPAs**) across 15 locations within the Hauraki Gulf Marine Park in the Sea Change Plan. While the Sea Change Plan had substantial public support, there was no formal consultation on the proposals.

Government response to the Sea Change Plan

In 2018, Cabinet agreed there was value in progressing a central Government response to the Sea Change Plan.¹⁴ The Government response was approved by Cabinet and released by Ministers in June 2021 as 'Revitalising the Gulf: Government action on the Sea Change plan' (**Revitalising the Gulf**).¹⁵

Ministerial Advisory Committee

The Sea Change Tai Timu Tai Pari Ministerial Advisory Committee (**the MAC**) provided independent expert feedback to inform the development of *Revitalising the Gulf*. The MAC's membership brought together diverse viewpoints. Its members comprised 50% mana whenua, and members had expertise in areas such as tikanga Māori, science, environmental issues, law, economics, and fisheries management.

The advice of the MAC culminated in their September 2020 report to the former Ministers of Conservation and Fisheries (then Hon Eugenie Sage and Hon Stuart Nash).¹⁶ Their advice included a test of the proposals against their desired outcomes and several recommendations on the *Revitalising the Gulf* marine protection proposals including:

- that there should be provisions for the continuation of customary practices in the new protected areas, and that officials should engage with mana whenua about how customary practices should be defined;
- the need for a robust impact analysis, addressing the costs, benefits, and impacts of the proposals on commercial and recreational fishers; and
- that special legislation should be used to create the protected areas as a package, noting that existing protection should be maintained.

The above recommendations were addressed in the final marine protection package included in *Revitalising the Gulf*. Officials engaged with mana whenua between October 2021 and April 2022, to determine definitions for customary practices in HPAs and how any customary

¹³ Sea Change Tai Timu Tai Pari Hauraki Gulf Marine Spatial Plan, April 2017. Retrieved from: <https://gulffjournal.org.nz/wp-content/uploads/2022/01/5086-SCTTTP-Marine-Spatial-Plan-WR.pdf>.

¹⁴ ENV-18-MIN-0044.

¹⁵ Department of Conservation (DOC), Fisheries New Zealand (FNZ) and Ministry of Primary Industries (MPI), Revitalising the Gulf: Government Action on Sea Change, June 2021 [Revitalising the Gulf]. Retrieved from: <https://www.doc.govt.nz/globalassets/documents/our-work/sea-change/revitalising-the-gulf.pdf>.

¹⁶ Report of the Sea Change-Tai Timu Tai Pari Ministerial Advisory Committee, September 2020. Retrieved from: [Report from the Sea Change Tai Timu Tai Pari Ministerial Advisory Committee \(doc.govt.nz\)](https://www.doc.govt.nz/globalassets/documents/our-work/sea-change/revitalising-the-gulf-report.pdf).

practice permitting system could be administered. Feedback from this engagement informed the approach to providing for customary practices in HPAs. Government also commissioned a two-stage economic impact assessment of the *Revitalising the Gulf* marine protection proposals. Stage one assessed the impact of the marine protection proposals on the commercial fishing sector. Stage two includes an assessment of the impacts on recreational fishers, and a wider assessment of impacts and benefits to society, the economy and environment. These impacts are described in *Section Two*.

Development of marine protection proposals for Revitalising the Gulf

In 2021, DOC and FNZ officials analysed the marine protected area proposals in the Sea Change Plan. The analysis included an initial biodiversity assessment and an impact analysis of the proposed protection on commercial and recreational fishers.¹⁷ Technical experts¹⁸ then altered the Sea Change Plan's proposals where the assessment indicated such changes would enhance biodiversity outcomes or reduce the potential impact on users. This analysis resulted in three of the Plan's proposals being excluded due to their inability to deliver meaningful biodiversity outcomes.¹⁹

In 2021, Cabinet agreed to *Revitalising the Gulf* and the actions in it, including 18 marine protection proposals comprising:²⁰

- eleven high protection areas (HPAs) to protect and enhance marine habitats and ecosystems while providing for the expression of customary practices of mana whenua;
- five seafloor protection areas (SPAs) to protect sensitive sea floor habitats while continuing to allow for activities in the water column; and,
- two protected areas adjacent to Whanganui A Hei (Cathedral Cove) and Cape Rodney-Okakari Point (Goat Island) marine reserves. *Revitalising the Gulf* stated that these two areas will be established as either HPAs or extensions of the existing marine reserves (under the Marine Reserves Act 1971). This is a decision that has been put up to the Ministers.

Revitalising the Gulf noted that the Noises Marine Restoration Project (**The Noises Project**) could be included as an additional (19th) protected area in the marine protection package.²¹ In May 2022, the Minister for Oceans and Fisheries and former Minister of Conservation agreed to progress the Noises as an HPA and include this in the final package of marine protection proposals. The analysis throughout this paper assumes that the Noises HPA is included in marine protection package.

¹⁷ DOC and FNZ, Sea Change – Tai Timu Tai Pari Plan marine protected area (MPA) proposals: agency analysis and advice on selection of MPAs towards development of the Hauraki Gulf Marine Park MPA network. May 2021. Retrieved from <https://www.doc.govt.nz/globalassets/documents/our-work/sea-change/marine-protection-technical-document.pdf>.

¹⁸ The workshop included technical advisors from the DOC, FNZ and the National Institute of Water and Atmospheric Research (NIWA).

¹⁹ *Revitalising the Gulf*, at 65.

²⁰ ENV-21-MIN-0032.

²¹ *Revitalising the Gulf*, at 62.

How is the status quo expected to develop?

What is the status quo?

Environmental state

As outlined above, marine-based human activities are contributing to environmental decline in the Gulf. Such activities include recreational and commercial fishing, dumping, and mining. Mobile bottom-contact fishing methods including dredging, bottom trawling, and Danish seining are particularly harmful. These fishing methods affect non-target species and impact benthic (seafloor) habitats in the Gulf.

The current coverage of marine protection is considered inadequate for protecting biodiversity in the face of these activities.²² This is evidenced by ecosystem changes, habitat loss and population depletion.²³ It is estimated that since human arrival there has been a 56% loss in key fish stocks.²⁴ Impacted populations include kōura (crayfish), tāmure, hāpuku (groper), and intertidal shellfish. Research suggests losses in kōura and tāmure are causing kina barrens to develop.²⁵ There has concurrently been a 67% loss in seabird and shorebird populations in the Gulf.²⁶ Impacted species include the New Zealand fairy tern and Tāiko (black petrels).

Societal expectations

Since the release of *Revitalising the Gulf*, there has been mounting public pressure to address the degradation of the Gulf's marine environment. Community-led marine protection initiatives indicate a growing sense of the need to act, and a keenness from non-government parties to do so in the absence of government action. Such initiatives include rāhui applications under the Fisheries Act 1996 by Ngāti Tamaterā, Ngāti Hei, Ngāti Paoa and Ngāti Manuhiri,²⁷ habitat restoration initiatives funded by Foundation North, and a marine reserve application for an area on the north coast of Waiheke Island/Hākaimangō Matiatia. Some of the latter initiatives have had support from local stakeholders and mana whenua.

Recently, Stuff released a seven-part docuseries 'Seasick - Saving the Hauraki Gulf' capturing the insights of a range of commercial operators, iwi, eNGOs, recreational users, advocacy groups, and academic researchers on key issues affecting the Hauraki Gulf.²⁸ Interest in this docuseries is indicative of public support for additional measures to protect the Gulf from further degradation.

²² 0.28% of the Gulf is contained in a type 1 marine reserve.

²³ Noting that other factors including land-based activities and climate change also contribute to these phenomena.

²⁴ Hauraki Gulf / Tīkapa Moana / Te Moananui-ā-Toi State of the Environment Report 2020. Retrieved from: <https://www.aucklandcouncil.govt.nz/about-auckland-council/how-auckland-council-works/harbour-forums/docsstateofgulf/state-gulf-full-report.pdf>.

²⁵ Kina barrens are shallow areas of rocky reef where there is an over population of kina because their natural predators have been depleted. The grazing of the rock surfaces by the kina prevents the development of new kelp forests that are needed to sustain marine life.

²⁶ Hauraki Gulf / Tīkapa Moana / Te Moananui-ā-Toi State of the Environment Report 2020. Retrieved from: <https://www.aucklandcouncil.govt.nz/about-auckland-council/how-auckland-council-works/harbour-forums/docsstateofgulf/state-gulf-full-report.pdf>.

²⁷ A list of all current rāhui can be retrieved from: <https://www.mpi.govt.nz/fishing-aquaculture/maori-customary-fishing/customary-fisheries-management-areas-rules-and-maps/>.

²⁸ Seasick – Saving the Hauraki Gulf. Can be accessed from: <https://interactives.stuff.co.nz/2022/seasick-saving-hauraki-gulf/>.

How is the status quo expected to develop if no action is taken?

In the absence of central Government action, ad hoc attempts to protect the marine environment are likely to continue in a delayed and uncoordinated manner under existing regulatory instruments including the Fisheries Act 1996, the Marine Reserves Act 1971, and the Resource Management Act 1991.

Fisheries Act 1996

Māori and/or community groups could continue to apply for temporary area closures and/or restrictions/prohibitions on fishing methods under section 186A of the Fisheries Act 1996. While this approach establishes a sustainable management system in the short-medium-term, long-term management approaches are required to maintain any benefits to biodiversity.

Given the localised interests of applicant groups, and their reduced ability to consider matters at the regional scale, there is a risk that measures implemented under the Fisheries Act 1996 are sub-optimally designed. This risk is compounded by challenges associated with resourcing and the public availability of good information.

Marine Reserves Act 1971

The community could continue to submit applications for new marine reserves, or for any changes to marine reserve boundaries, under the Marine Reserves Act 1971 (**MRA**). DOC is required to process any application made under the MRA, regardless of their merits or level of support. However, community-driven proposals tend to take an ad-hoc approach, meaning they are unlikely to deliver protection in all the same areas as the marine protection proposed in *Revitalising the Gulf* and may not necessarily result in optimal protection. Marine reserves also limit the expression of customary practices with take only permitted for scientific or knowledge (mātauranga) purposes.

The Waiheke Island/Hākaimangō Matiatia marine reserve application by the Friends of the Hauraki Gulf is currently being assessed by DOC. Final advice to the Minister of Conservation is anticipated by the end of 2022. This proposed area of protection does not overlap with the marine protection included in *Revitalising the Gulf*.

Resource Management Act 1991

Auckland Regional Council and Waikato Regional Council could use the regional coastal planning process established under the Resource Management Act 1991 (**RMA**) to implement marine spatial protection.

Status of the 'Auckland Unitary Plan Operative in part'

The Auckland Regional Coastal Plan sits within the Auckland Unitary Plan and was made fully operative in 2019. The current Auckland Unitary Plan does not contain any marine protection of the nature proposed in *Revitalising the Gulf*.

Under the current resource management system, Auckland Council is not required to review the coastal component of their Unitary Plan until 2029. They may, however, opt to advance a plan change before this time. Through this process the Council could advance an area of marine protection. While plan changes are common, progressing a plan change relating to marine spatial protection would likely to come at an economic, and possibly political, cost. These costs would have to be considered, and protection deemed a priority, before Auckland Council would initiate a plan change.

Status of the 'Waikato Regional Coastal Plan'

The Waikato Regional Coastal Plan is currently under review. During this review process, Waikato Regional Council is publicly testing a policy to protect 'Ecologically Significant Marine Areas Vulnerable to Disturbance activities' (**Ecologically Significant Areas**).²⁹ To date Waikato Regional Council has suggested one Ecologically Significant Area, the Mercury Islands.³⁰ This area does not overlap with the marine protection package included in *Revitalising the Gulf*. That said, approximately five areas that have been identified as 'Suggested Significant Indigenous Biodiversity Areas' overlap with the protection proposed in *Revitalising the Gulf*. These areas may be deemed Ecologically Significant Areas in the future if they are found to require protection.

Waikato Regional Council is considering rules that may limit commercial and/or recreational activities within Ecologically Significant Areas. Waikato Regional Council has sought public feedback on four rule options:

- no new rules;
- prohibition of disturbance of the seabed or foreshore in Ecologically Significant Areas;
- prohibition of the taking of all plants and animals in Ecologically Significant Areas; and
- some activities, such as anchoring, are allowed in Ecologically Significant Areas.

Public feedback will inform the draft Regional Coastal Plan. Waikato Regional Council anticipates the plan will be notified for public submission in 2023. Given the status of the coastal plan, there is uncertainty about the location and nature of protection that will ultimately be progressed by Waikato Regional Council. Based on previous experience, it is likely that marine spatial protection included in the regional coastal plan will face litigation meaning protection could take several years to implement.³¹

Impact of the status quo

Proposals for additional marine protection are limited and there is a high degree of uncertainty about the protection that will ultimately be progressed. Given the cumulative pressures on the marine ecosystem it's expected that environmental degradation and its associated impacts will continue in the absence of further marine protection.

What is the policy problem or opportunity?

Without government action, the reported decline in the ecological condition of the Hauraki Gulf will continue to adversely impact the social and spiritual wellbeing of those who work, live, and recreate in the Gulf. In particular, environmental decline will likely:

- negatively impact the well-being of mana whenua, given the mauri of the Gulf is intrinsically linked to their cultural well-being;
- perpetuate long term trends of marine biodiversity loss; and

²⁹ Waikato Regional Council defines 'Ecologically Significant Marine Areas Vulnerable to Disturbance activities' as significant indigenous biodiversity areas requiring additional protection.

³⁰ The Mercury Islands could include Kawhitu (Stanley Island), Moturehu (Double Island) and Whakau (Red Mercury).

³¹ The interaction between the Fisheries Act 1996 and the Resource Management Act 1991 continues to be explored through regional coastal planning processes and the Courts. Until these issues are resolved, these interactions are likely to result in court appeals like those relating to the Bay of Plenty Regional Coastal Environment Plan and the Northland Regional Plan.

- negatively impact the economy. In the short term, environmental decline is unlikely to induce significant economic impacts. However, continued ecological decline is likely to have an economic impact on the fisheries, tourism, and recreational sectors.

Expeditious marine protection is required to help reverse the reported environmental decline in the Gulf by limiting the continuation of impactful marine-based activities. However, local, community-led marine protection initiatives can be limited in their effectiveness, often due to lack of resources, access to information, and the inability to coordinate with others.

Revitalising the Gulf proposes a marine protection package comprising two new marine protection tools, to restrict impactful activities, and allow for the restoration of some of the most biodiverse regions in the Gulf. The proposed package of marine protection requires legislative implementation.

Size of the problem: stakeholders and principal groups affected

Due to the national significance of the Gulf, the impacts of the status quo are anticipated to be far ranging. As outlined above, many groups are likely to be impacted. This is described in further detail in the table below.

Table 1: Groups affected by the status quo (primarily non-monetised)

| Group affected | Description of impact |
|--|--|
| Mana whenua | <p>The mauri of the Gulf is intrinsically linked to the wellbeing of mana whenua. Based on a desktop analysis, 28 iwi have been identified as having spiritual, cultural, historical, and traditional values in relation to the Hauraki Gulf. Engagement with iwi has emphasised the importance of customary practices (some of which are associated with the moana) for the wellbeing of iwi.</p> <p>Many iwi maintain spiritual and ancestral connections to the Gulf through certain traditions and practices.</p> <p>Continued degradation of the mauri of the Gulf will impact the wellbeing of mana whenua. Mātauranga Māori may also be impacted by the environmental decline of the Gulf as traditional knowledge (e.g., maramataka, language, rituals etc.) is lost over generations.</p> |
| People who work, live, and recreate in the Gulf | <p>People's physical and mental wellbeing may be impacted if they are no longer able to enjoy spending time in the Gulf. This scale of this impact will vary depending on location and the rate of environmental decline.</p> |
| Tourism | <p>Each year, the Gulf generates more than \$2.7 billion in economic activity. The ongoing degradation of the marine environment may have economic implications for the tourism sector (local and international) depending on the rate of environmental decline.</p> |
| Other groups with interests in the Gulf | <p>Other groups that may be impacted include environmental groups, schools, volunteer groups etc. This impact will vary depending on the group's interest in the Gulf and interactions with the Gulf.</p> |

Treaty partner and stakeholder views

Between January 2019 and October 2022, officials conducted three rounds of engagement with mana whenua and stakeholders including recreational and commercial fishers, divers, researchers, and community groups. Officials asked for feedback on:

- *Revitalising the Gulf* as a package;
- the marine protection proposals in *Revitalising the Gulf* (including the Noises and the Whanganui-A-Hei and Cape Rodney-Okakari Point marine reserves);
- customary practices; and
- how the package will impact on key stakeholders.

On *Revitalising the Gulf* as a package, officials heard:

- agreement with the principles, objectives, and key actions within *Revitalising the Gulf*;
- the most significant areas of interest are the fisheries plan and marine protection elements of the *Revitalising the Gulf*;
- mana whenua concerns about the potential impact of the marine protection proposals on their right to exercise kaitiakitanga;
- mana whenua concerns with respect to the marine protection proposals affecting their rights in the Gulf (including Treaty settlement rights, Marine and Coastal Area (Takutai Moana) Act 2011 applications, and Treaty claims);
- fisheries sector interest in marine protected areas being based on biodiversity values; and
- support for new marine protection measures in the Gulf and using bespoke legislation for implementation.

On the marine protection proposals, officials heard:

- concerns about the impacts of commercial and recreational fishing on the marine environment, and the desire for greater marine protection in the Gulf;
- fisheries sector concerns about the impact of marine protection on their livelihood;
- initially mixed views from mana whenua on the inclusion of the Noises HPA proposal. The latest round of engagement had mana whenua deferring to those who had rohe moana in the area. From these iwi we heard general support for the HPA, but a noted preference from Ngāti Paoa Iwi Trust that this was a mana whenua-led process; and;
- mixed views about whether the extensions to Cape Rodney – Okakari Point and Whanganui-A-Hei marine reserves should be a marine reserve extension or an HPA. Mana whenua generally supported the extensions to be HPAs whereas other feedback received supported marine reserve extensions;

In response to feedback on the marine protection proposals:

- Officials recommended the Noises proposal be included as a 12th HPA in the marine protection package. It is expected that the HPA will enhance important ecological linkages between terrestrial and marine habitats. The proposed HPA contains a variety

of physical and biogenic habitats including mussel beds, dog cockle beds, and rhodolith beds.

- Officials recommended the protected areas adjacent to Whanganui-A-Hei and Cape Rodney-Okakari Point be put to Ministers for decision.

On customary practices, officials heard:

- officials initially heard that customary practices differ between groups of mana whenua and that there is no set definition and/or criteria for what customary practices involve;
- in later engagement, mana whenua supported a broad definition of customary practices that allowed for what is included as customary practices to evolve over time;
- it is important to give effect to Treaty principles and ensure that the marine protection proposals do not undermine Treaty settlement rights and ongoing negotiations;
- generally, mana whenua supported the development of biodiversity objectives for each HPA in partnership;
- some concern that these marine protected areas infringe on customary commercial rights; and
- a large number of public submissions opposing customary fishing in HPAs, calling for 'equal rights for all New Zealanders'.

On how the proposals will impact key stakeholders, officials heard:

- several small-scale commercial fishers felt they would be disproportionately impacted by the proposals;
- concerns about the displacement of fishing effort, particularly for rock lobster fishers;
- concerns that the proposals will impact on livelihoods; and
- concern that these protection tools are focussing on management of particular water-based threats when the focus should be on land-based threats.

Marine and Coastal Area (Takutai Moana) Act 2011 (te Takutai Moana Act)

Te Takutai Moana Act provides legal recognition and protection of customary interests in the common marine and coastal area, including through protected customary rights (**PCRs**) and customary marine title (**CMT**). There are 63 te Takutai Moana Act applicants recorded as seeking CMT or PCR within the Gulf. As of October 2022, no applications for customary marine title or for the recognition of protected customary rights have been approved in the Gulf under te Takutai Moana Act.

The marine protection proposals will not affect rights sought and attained under te Takutai Moana Act. The Hauraki Gulf Marine Protection Act (the Bill) will explicitly state that the rights and interests recognised under te Takutai Moana Act, such as protected customary rights and customary marine title, will not be affected. The Bill will also state that applications under that Act will not be affected.

Between September 2022 and October 2022 officials circulated engagement materials with 63 applicants under te Takutai Moana Act. No applicants requested to meet with officials in relation to their te Takutai Moana Act application.

What objectives are sought in relation to the policy problem?

The following objectives are sought through the *Revitalising the Gulf* marine protection proposals:

- 1) **Ecosystem Protection** – Expedient protection of at-risk, high ecological value, and representative habitats and ecosystems in the Gulf to support their recovery. Expedient protection is favourable given the need for rapid action to reverse the decline in biodiversity.
- 2) **Māori rights and cultural values** – Deliver on the Government's Treaty commitments by recognising mana whenua as rangatira and kaitiaki, Treaty rights, and ongoing Treaty settlement processes. Ensure the protections provided by the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992 can be exercised.
- 3) **Ease of Implementation** – Implementable in an efficient and cost-effective manner.

These objectives are informed by:

- the marine protected area objectives identified in the Sea Change Plan;
- advice from the MAC;
- feedback from the Cross-Agency Implementation Group;³² and
- DOC's statutory obligations under section 4 of the Conservation Act 1987.

³² Revitalising the Gulf proposed the establishment of a Cross-Agency Implementation Group comprising officials from DOC and MPI/FNZ, Ministry for the Environment and Te Arawhiti. The Group was established to ensure direction, cross-agency oversight and ownership.

Section 2: Deciding upon an option to address the policy problem

What criteria will be used to compare options to the status quo?

Options for marine protection will be evaluated against the status quo using the following criteria. The criteria directly relate to the objectives identified in *Section One*.

The weighting has been applied to give Criteria 1 (protection of ecological value) and Criteria 2 (giving effect to Treaty of Waitangi) equal weight. Both criteria are critical for effectively achieving the purpose of the protected area. Criteria 3 (implementable) was given a slightly lower weighting as this can evolve and develop overtime e.g., if/when more resources become available.

Note that impacts on commercial and recreational fishers is applied as a criterion for the decision on the prohibitions for the Seafloor Protection Areas only. For the other decision points, we anticipate that the impacts on fishers will be the same regardless of the option taken and have therefore not included it as a criteria. An analysis of the economic impact of the proposals is provided in Appendix One.

| Criteria | Description | Weighting |
|---|--|--|
| Criteria 1: Expeditious protection of areas with high ecological value (Objective 1) | This criterion assesses the extent to which each option protects at-risk, high ecological value, and representative habitats and ecosystems in the Gulf quickly. | *** Primary purpose of intervention is to protect marine habitats. |
| Criteria 2: Gives effect to Treaty of Waitangi obligations and provides for customary rights and interests (Objective 2) | This criterion assesses the extent to which each option gives effect to the principles of the Treaty of Waitangi (Treaty) and recognises Treaty rights and Treaty settlement processes. Where appropriate, this criterion also considers mana whenua feedback and the commitment in <i>Revitalising the Gulf</i> to provide for the expression of customary practices within HPAs. | *** Consistency with the Crown's obligations (Section 4 of the Conservation Act and the Crown's obligations as Treaty partner). |
| Criteria 3: Implementable (Objective 3) | This criterion assesses the extent to which each option is implementable. As appropriate, it considers feedback received from engagement and the ease of compliance and enforcement. | ** Ensures policy viability. |
| Criteria 4: Impact on commercial and recreational fishers | This criterion assesses the extent to which commercial and recreational fishers are impacted. It considers the feedback received during engagement. | * |

Table 2: Criteria used to assess options to determine their relative strength in delivering the marine protection outcomes of *Revitalising the Gulf*.

What scope will the options be considered within?

Statutory regulation is the preferred approach to managing human-induced, marine-based activities in the Gulf due to the:

- breadth of people/communities/industries that may be affected by protection measures for the Gulf's marine ecosystem; and the
- geographic spread of protection required.

Implementing marine protection that accounts for these variables requires effective co-ordination and enforcement mechanisms to be successful. This context means non-regulatory options, such as education and voluntary measures, were considered infeasible. As such, officials assessed the legislative options available for establishing marine protection in the Gulf. Three were deemed feasible and worth assessing further:

- **Option A:** bespoke legislation;
- **Option B:** the Marine Reserves Act 1971; or
- **Option C:** the Resource Management Act 1991.

Two were discarded as they were found to be unfeasible:

- the Hauraki Gulf Marine Park Act 2000 - the Hauraki Gulf Marine Park Act does not provide the statutory basis required to implement the marine protection proposed in *Revitalising the Gulf*; and
- the Fisheries Act 1996 - the Fisheries Act is designed to provide for the utilisation of fisheries resources while ensuring sustainability. There are Fisheries Act tools that could achieve similar outcomes to those envisaged in an SPA. Critically, however, the Fisheries Act could not deliver the restrictions on non-fishing activities proposed in *Revitalising the Gulf*. Such activities include mining, dumping and the discharge of sewage.

What options for establishing marine protection are available?

Option A – Implementing *the Revitalising the Gulf* marine protection proposals through bespoke legislation (Preferred)

This option involves implementing the marine protection below through bespoke legislation:

- 12 new high protection areas (**HPAs**), including an HPA around Ōtata/the Noises Islands.
- 5 new seafloor protection areas (**SPAs**); and
- 2 marine reserve extensions (either as marine reserve extensions or as HPAs).

Under this option, DOC would be the administering body for the marine protected areas.

High Protection Areas

The purpose of an HPA is to protect, enhance, and restore the full range of marine communities and ecosystems and outstanding, rare, distinctive, or nationally important marine habitats, to protect the mauri of the Gulf. To do so, HPAs will provide high-level protection extending from the sea floor to the water column. Each HPA will be managed according to site-specific biodiversity objectives. These objectives will be developed based on the biodiversity values requiring protection at each site.

Customary practices will continue, subject to customary fisheries regulations, to ensure the rights provided by the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992 are able to be exercised.³³ Other low impact activities will be provided for within HPAs including swimming, snorkelling, diving, journeys through an HPA, small scale removal of non-living marine life such as shells and stones, and habitat restoration initiatives. Impactful activities, such as mining, dumping, commercial, and recreational fishing, will be prohibited.

Seafloor Protection Areas

SPAs are designed to maintain, restore, and protect ecologically important benthic habitats while allowing for compatible use. SPAs will be complemented by management actions in the draft Hauraki Gulf Fisheries Plan to protect marine benthic habitats from the adverse effects of bottom-contact fishing. Activities permitted in SPAs include commercial and recreational fishing (without bottom-contact fishing methods), recreational activities (such as snorkelling and diving), and the customary practices of mana whenua. Activities that disturb, damage, or destroy the seafloor will be prohibited including but not limited to dredging, bottom trawling, Danish seining, sand extraction, mining, and dumping.

Marine Reserve Extensions as marine reserves or HPAs

The *Revitalising the Gulf* marine protection package included protected areas adjacent to Whanganui A Hei (Cathedral Cove) and Cape Rodney-Okakari Point (Goat Island) marine reserves. Technical analysis determined that there is ecological benefit to extending protection around these two existing marine reserves. The extensions will either be no take areas (marine reserves) or HPAs which will allow for customary practices. We consider that there are merits to both options and are waiting Ministerial decision to determine the protection tool applied to the extensions

Option B – Implementing the *Revitalising the Gulf* marine protection proposals through the Marine Reserves Act (Not preferred)

Marine reserves are designed to preserve areas in a natural state, as far as possible, for the purpose of scientific study. Protection extends from the seafloor to the water column, with all activities involving the take or disturbance of marine life or the marine environment largely prohibited.³⁴ Given these protections, the MRA could be used to implement the twelve HPAs and two marine reserve extensions included in *Revitalising the Gulf*. That said, the scope for the expression of customary practices would be significantly more limited than envisioned in *Revitalising the Gulf*, with take of marine living or non-living resources only permissible for scientific or knowledge (mātauranga) purposes.

SPAs could not be progressed under the MRA. Instead, seafloor protection would likely have to be implemented using a second legislative tool. Drawing on different pieces of legislation would create complexity and fragmentation in the regulatory environment. Such fragmentation would not align with the integrated management of the Gulf sought in both *Revitalising the Gulf* and the Sea Change Plan.

Under this option, DOC would be the administering body for the marine protected areas.

Option C – Implementing the *Revitalising the Gulf* marine protection proposals through the RMA (Not preferred)

³³ Noting some additional management measures may be implemented under customary fisheries regulations to ensure alignment with the site-specific biodiversity outcomes.

³⁴ Some exceptions are permitted for the purposes of monitoring and research.

Under the RMA, regional councils are provided flexible tools to control marine resources to protect biodiversity, and related values, provided those controls are not for Fisheries Act 1996 purposes (i.e., core functions such as allocations and catch settings). Under the RMA, regional councils would be the administering body for the marine protected areas.

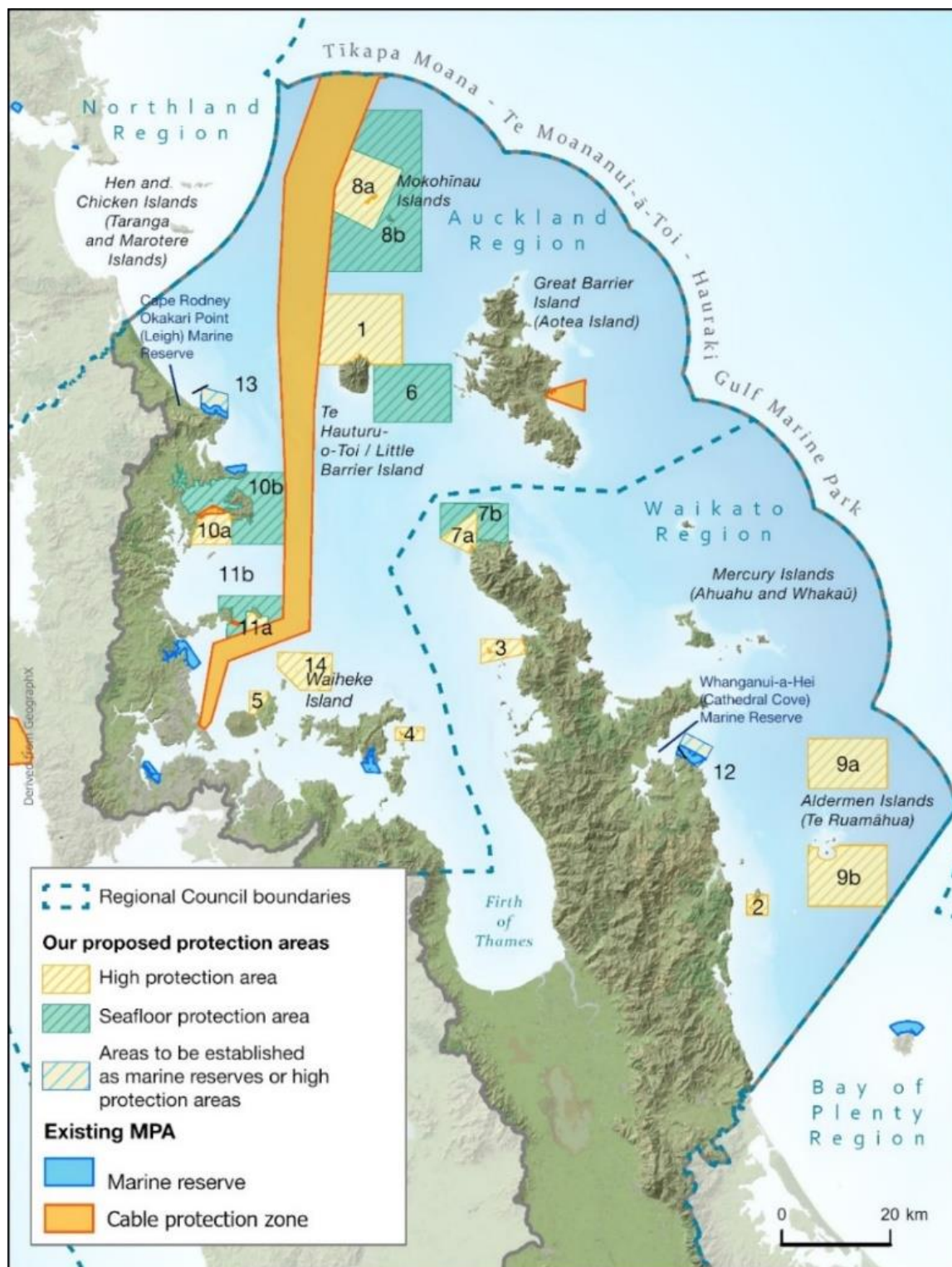
Given twelve of the proposed marine protection areas are in the Auckland region and seven are in the Waikato region, Auckland Council and Waikato Regional Council would need to cooperate to progress the proposed package of marine protection.³⁵ Despite being at different stages of the coastal planning process, the two councils could jointly implement the marine protection included in *Revitalising the Gulf*.³⁶ It is likely, however, that the statutory process will subject the areas of protection to renegotiation, undermining social process that informed the development of the Sea Change plan and *Revitalising the Gulf*. It is possible for the Crown/DOC to initiate a private plan change with the proposals as they are. However, this would still carry the same risk described above of these proposals needing to go through a statutory process that will subject the areas of protection to renegotiation.

If the extensions to existing marine reserves are progressed as marine reserves, regional councils could submit an application proposing the marine reserve extensions adjacent to the Whanganui-A-Hei (Cathedral Cove) and Cape Rodney-Okakari Point (Goat Island) marine reserves. These areas would, however, ultimately need to be progressed by DOC, who would then be the administering body. The resultant fragmentation in administration and enforcement would not align with the integrated management of the Gulf sought in both *Revitalising the Gulf* and the Sea Change Plan.

³⁵ See Figure 1,

³⁶ The Auckland Regional Council would need to progress a plan change. The Waikato Regional Council would need to progress a plan variation.

Figure 1: Map showing the proposed location of the 19 new marine protection areas in the Hauraki Gulf (see the corresponding list of marine protected areas in Appendix 2)



Multi-Criteria Analysis: How do the options compare to the status quo/counterfactual?

| | Status quo | Option A (preferred): Implementing the <i>Revitalising the Gulf</i> marine protection proposals through bespoke legislation | Option B: Implementing the <i>Revitalising the Gulf</i> marine protection proposals through the Marine Reserves Act 1971 | Option C: Implementing the marine protection proposals through the Resource Management Act 1991 |
|--|------------|---|--|--|
| Criteria 1: Expedient protection of areas with high ecological value | 0 | <p>++</p> <p>HPAs and SPAs protect areas with high ecological value. In HPAs all activities that disturb, damage, or destroy the marine environment are prohibited, with managed exceptions for the expression of customary practices. In SPAs all activities that disturb, damage, or destroy the seafloor are prohibited.</p> | <p>++</p> <p>Marine reserves are widely recognised as an effective tool for protecting areas of high ecological value. In marine reserves, activities that disturb, damage, or destroy the marine environment are prohibited.</p> | <p>+</p> <p>Has the potential to achieve good biodiversity outcomes using flexible, site-responsive, tools. However, due to the statutory process required to move forward with this option, it cannot be guaranteed that the final package of marine protection will offer the same level of protection for ecological values as options A and B.</p> |
| Criteria 2: Gives effect to Treaty of Waitangi obligations and customary rights and interests | 0 | <p>++</p> <p>All non-extractive customary practices would continue unaffected in marine protection areas.</p> <p>Customary fishing would continue under existing fisheries regulations, subject to the biodiversity objectives, upholding the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992.</p> <p>The proposed Act would include a clause to preserve any rights recognised under the Marine and</p> | <p>+</p> <p>Permits could only be issued to allow take for scientific or knowledge (mātauranga) purposes, meaning the expression of customary practices within marine reserves would be more limited than envisioned in <i>Revitalising the Gulf</i>.</p> <p>As the Marine Reserves Act is listed in schedule 1 of the Conservation Act, there is a requirement to give effect to the principles of the Treaty of Waitangi.</p> | <p>+</p> <p>All persons exercising functions and powers under the RMA, in relation to managing the use, development, and protection of natural and physical resources, shall take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi).</p> <p>RMA controls in the marine protection areas should recognise the continuation of customary fishing rights provided for in regulations made under the Fisheries Act 1996.</p> |

| | | | | |
|--|------|---|--|--|
| | | Coastal Area (Takutai Moana) Act 2011 (te Takutai Moana Act) and confirm the establishment of SPAs and HPAs will not affect the status of applications made under te Takutai Moana Act. | Under Subpart 1 of Part 3 of te Takutai Moana Act, affected iwi, hapū, or whānau have the right to participate in conservation processes, including those progressed under the Marine Reserves Act 1971. | |
| Criteria 3: Ease of Implementation | 0 | ++ Compliance and enforcement mechanisms would be developed based on existing regulatory regimes, facilitating implementation. | + SPAs could not be established under the Marine Reserves Act, meaning a second legislative tool would be required to progress the proposed marine protection package. Drawing on different pieces of legislation would complicate implementation. | + Progressing the proposed marine protection package would rely on significant cooperation between Waikato Regional Council and Auckland Council. The respective councils could jointly undertake a plan variation/plan change, sharing the costs of necessary engagement. However, to be effective both councils would need to prioritise marine spatial protection and commit adequate resources which is uncertain. The marine protection extensions could not be progressed through council plans. A second legislative tool would be required. |
| Criteria 4: Impact on commercial and recreational fishers | N/A* | N/A* | N/A* | N/A* |
| Overall Assessment | 0 | +++++ | ++++ | +++ |

* This option is not assessed according to Criteria 4, as we consider the impact would be uniform across all options.

Key:

- ++** much better than doing nothing/the status quo/counterfactual
- +** better than doing nothing/the status quo/counterfactual
- 0** about the same as doing nothing/the status quo/counterfactual
- worse than doing nothing/the status quo/counterfactual
- much worse than doing nothing/the status quo/counterfactual

What option is likely to best address the problem, meet the policy objectives, and deliver the highest net benefits?

Officials recommend implementing the *Revitalising the Gulf* marine protection proposals through bespoke legislation (Option A) because:

- Bespoke legislation is likely to provide the quickest protection of areas with high ecological value. While all options could offer protection, delays are likely if progressed under the MRA or RMA due, respectively, to public opposition and potential renegotiation.
- Implementing marine protection under the RMA would rely on significant resourcing and cooperation between regional councils. The prospect of both regional councils prioritising, and fully resourcing marine protection is uncertain.
- Bespoke legislation will best deliver the Government's commitment in *Revitalising the Gulf* to provide for the expression of customary practices. Under bespoke legislation, customary practices, compatible with the site-specific biodiversity goals, could continue to be expressed. Comparatively customary take under the MRA would be limited to take for scientific or knowledge (mātauranga) purposes.
- The Sea Change Plan and *Revitalising the Gulf* sought integrated management of the Hauraki Gulf. The MRA could not be used to implement SPAs. Similarly, the RMA could not be used to implement the marine reserve extensions. Drawing on different pieces of legislation would complicate implementation.

Sub-options for implementing Option A

A.1: Defining Customary Practices in HPAs

Revitalising the Gulf committed to provide for the expression of customary practices in HPAs. On the assumption that bespoke legislation is used to implement the marine protection proposals, three options for defining customary practices were considered:

- **Option A.1.1 (preferred):** Define customary practices broadly according to the traditions and values important to Hauraki Gulf mana whenua, explicitly providing for non-commercial customary practices, and explicitly excluding commercial and recreational fishing activities;
- **Option A.1.2:** Explicitly list permitted customary practices; and
- **Option A.1.3:** Draw on existing definitions of customary practices used in other legislation.

Options for defining customary practices in HPAs

| | Option A.1.1 (preferred): Define customary practices broadly | Option A.1.2: Explicitly list permitted customary practices | Option A.1.3: Drawing on existing definitions for customary practices used in other legislation |
|--|---|---|--|
| Criteria 1: Expedient protection of areas with high ecological value | <p>+</p> <p>Defining customary practices may create uncertainty about the nature and extent of customary take within HPAs. This uncertainty would largely be mitigated by the concurrent application of regulations under the Fisheries Act 1996 which would ensure that customary take aligns with the site-specific biodiversity objectives.</p> | <p>++</p> <p>Forming an exhaustive list of permitted customary practices would likely facilitate the development of targeted management measures. Such measures could increase the protection of areas with high ecological value.</p> | <p>0</p> <p>Existing definitions of customary activities are unlikely to explicitly consider the areas of high ecological value in the Hauraki Gulf. Such definitions may provide for activities that conflict with the purpose of HPAs/SPAs.</p> |
| Criteria 2: Gives effect to Treaty of Waitangi obligations and customary rights and interests | <p>++</p> <p>Responds to feedback from mana whenua that customary practices differ between iwi and hapū, and there is no single definition of what customary practices involve.</p> | <p>-</p> <p>An exhaustive list of customary activities could give effect to the Treaty of Waitangi if it was developed, and supported, by mana whenua. Gaining mana whenua support is unlikely in this context given their concerns about listing customary practices.</p> <p>Permitted activities would likely be limited to a subset of customary practices.</p> | <p>-</p> <p>Existing legal definitions may not be relevant to mana whenua in the Hauraki Gulf.</p> |
| Criteria 3: Ease of Implementation | <p>++</p> <p>The Crown would not need to expend significant resources engaging with mana whenua to understand, and define in legislation, the full spectrum of customary practices.</p> <p>Due to the nature of activities permitted in HPAs and SPAs, and the concurrent</p> | <p>-</p> <p>It is unlikely mana whenua could agree a single definition of customary activities to be put into legislation without significant resourcing as customary practices vary across and within iwi and hapū, and evolve over time.</p> | <p>0</p> <p>Existing definitions could be easily transferred into the proposed Act. However, such definition is unlikely to adequately respond to mana whenua interests so opposition from mana whenua may delay the legislative process.</p> |

| | | | |
|--|--|-------------|-------------|
| | application of regulations under the Fisheries Act 1996, broadly defining customary practices is unlikely to have any significant compliance and enforcement challenges. | | |
| Criteria 4: Impact on commercial and recreational fishers | N/A* | N/A* | N/A* |
| Overall Assessment | +++++ | 0 | - |

*This sub-option is not assessed according to Criteria 4, as no commercial or recreational fishing can take place within HPAs thus all options are the same

What option is likely to best address the problem, meet the policy objectives, and deliver the highest net benefits?

Officials recommend defining customary practices broadly (Option A.1.1) because doing so:

- provides for customary non-commercial fishing rights, in accordance with the requirements of the 1992 Fisheries Deed of Settlement and the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992;
- specifically excludes commercial and recreational fishing, and is, therefore, compatible with the overall purpose of the HPAs;
- responds to mana whenua feedback by being flexible and supporting the evolution of customary practices over time; and
- does not need an exhaustive and precise legal definition, and, therefore, accommodates information gaps on these activities (some groups of mana whenua did not want to share details of their customary practices publicly).

Option A.1.2 and Option A.1.3 were discarded as they were impractical and unlikely to receive mana whenua support. Developing an exhaustive list of permitted customary practices (Option A.1.2) would be impractical as customary practices vary across, and within, iwi and hapū, and evolve over time. This option is also problematic as some groups of mana whenua have expressed that they are unwilling to publicly disclose details of their customary practices. Drawing on existing definitions of customary practices (Option A.1.2) is also impractical as they are unlikely to account for the unique ecological and cultural context of the Gulf. Throughout Aotearoa the marine ecology changes with different species found in different areas. This often results in differing cultural practices occurring in areas to reflect the ecology at place. Each place also has unique cultural context in reference to the number of iwi with overlapping interests, or iwi who have settlement agreements. This means that customary practices from any one area in Aotearoa cannot be appropriately transferred to another area. Using an existing definition of customary practices may inadvertently permit activities that conflict with the purpose of HPAs/SPAs.

Given officials' preference for Option A.1.1, officials propose the following definition of customary practices for inclusion in the new Hauraki Gulf Marine Protection Act:

“Customary activities undertaken by mana whenua in high protection areas which:

- *align with the purpose of high protection areas; and*
- *are consistent with tikanga, and/or support mana whenua to develop and express mātauranga and wānanga; and*
- *do not include recreational or commercial fishing but provide for customary non-commercial fishing.”*

A.2: Managing Non-Commercial Customary Fishing in HPAs

The *Revitalising the Gulf* marine protection package set out that customary fishing will be regulated in line with site specific biodiversity objectives. These biodiversity objectives are to be developed in partnership with mana whenua. Cabinet agreed to this in 2021³⁷. Under both options proposed below, customary fishing will be managed in alignment with the biodiversity objectives for the HPA. These biodiversity objectives will be developed in partnership with mana whenua during 2023 and early 2024. This will be done in parallel with the drafting and

³⁷ ENV-21-MIN-0032

passage of the Bill and will be implemented through subsequent regulations, rather than through the Act itself.

Officials have explored two options for managing customary fishing in line with biodiversity objectives within HPAs. These are:

- **Option A.2.1 (preferred):** customary fishing in HPAs is managed under existing regulations and a legislative mechanism whereby Ministers can apply additional management activities.
- **Option A.2.2:** customary fishing in HPAs is managed under a bespoke permitting system made under the Hauraki Gulf Marine Protection Act (**the Bill**).

Option A.2.1 (preferred) – Customary fishing in HPAs is managed under existing regulations and a legislative mechanism whereby Ministers can apply additional management activities.

Only customary fishing that is both consistent with the biodiversity objectives agreed for each HPA and conducted in accordance with regulations made under s 186 of the Fisheries Act 1996 will be permitted.

Using existing regulations under s186 of the Fisheries Act 1996

There are currently two sets of regulations under the Fisheries Act 1996 that apply to customary fishing in the Hauraki Gulf:

- Fisheries (Amateur Fishing) Regulations 2013 (**Amateur Fishing Regulations**)
- Fisheries (Kaimoana Customary Fishing) Regulations 1998 (**Kaimoana Regulations**)

Under this option, the existing customary permitting systems will continue within HPAs. As such, any persons wanting to customary fish within an HPA will require an authorisation/permit issued by an authorised representative of mana whenua (**tangata kaitiaki**). Tangata kaitiaki will be required to issue permits that are consistent with the biodiversity objectives of the HPA. *Legislative mechanism whereby Ministers can apply additional management activities*

There remains a risk that customary fishing and the site-specific biodiversity objectives do not align. Under this option, the Bill would include a mechanism that enables Ministers to apply additional management actions in HPAs in the event that customary fishing threatens significant and substantive risk to the biodiversity objectives. This would apply if the Minister considered, after fulsome consultation with mana whenua, that customary fishing are not being managed in a manner consistent with the biodiversity objectives. This would be similar to existing powers Ministers have under regulation 34 of the Kaimoana Regulations. To date there has been no case of this power being utilised.

Option A.2.2 – Customary fishing in HPAs is managed under a bespoke permitting system

Agencies issue customary fishing permits, regulating the nature and extent of customary fishing. The permitting scheme would likely reflect that which is implemented under the MRA and administered by DOC, albeit with greater scope for customary take (i.e., not limited to take for scientific or knowledge (mātauranga) purposes). The current process requires applicants to fill out a form that can be found online and email this form and relevant documents to permissions@doc.govt.nz. The permissions team at DOC processes the application with 40 days, or longer if the request is more complicated. This option would require additional resourcing and capacity for DOC to carry out the permitting process. It would also create unnecessary delays for mana whenua to access permits. For example, an iwi that want to

collect for a tangi might have to wait up to 40 days for the permit to be processed which is inappropriate, not fit-for-purpose, and creates a barrier for mana whenua to practice kaitiakitanga. Under this option there would be no need for a legislative mechanism for Ministers to apply additional management activities as DOC would be regulating the customary activities.

More work would need to be done to understand the resourcing implications for this option. This has not been undertaken as the option was disregarded early due to the Crown's Treaty of Waitangi obligations.

Options for managing non-commercial customary fishing in HPAs

| | Option A.2.1 (preferred): customary fishing in HPAs is managed under existing regulations and a legislative mechanism whereby Ministers can apply additional management activities | Option A.2.2: customary fishing in HPAs is managed under a bespoke permitting system made under the Bill |
|--|---|--|
| Criteria 1: Expedient protection of areas with high ecological value | <p>++</p> <p>The Bill would set out that only customary fishing that is consistent with the biodiversity objectives agreed for each HPA will be permitted. This provides legislative certainty that the ecological values of HPAs will be protected. Additionally, the legislative mechanism enabling Ministers to apply additional management activities provides further certainty that the biodiversity objectives will be upheld.</p> | <p>++</p> <p>Agency issued permits would provide certainty and control over activities occurring within protected areas. Permit conditions could be used to ensure areas of high ecological value are protected from impactful activities by, for example, specifying acceptable methods of take.</p> |
| Criteria 2: Gives effect to Treaty of Waitangi obligations and customary rights and interests | <p>++</p> <p>This option empowers mana whenua to manage customary fishing as kaitiaki of their rohe moana. Mana whenua who want to customary fish within HPAs can apply for customary fishing permits/authorisations through local marae committee.</p> <p>Using existing fishing regulations under s 186 of the Fisheries Act 1996 is consistent with agreements set under the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992.</p> | <p>--</p> <p>Mana whenua would have to request permits from the Crown to engage in customary fishing. Doing so would be less consistent with kaitiakitanga than Option A.2.1. Permitting customary fishing under the Bill is inconsistent with the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992.</p> |
| Criteria 3: Ease of Implementation | <p>+</p> <p>Using existing regulations negates the need to create a new permitting system.</p> <p>This permitting system is already used in the Hauraki Gulf for authorising fishing for tangi and hui. Marae committees and some mana whenua will be familiar with the process.</p> | <p>--</p> <p>A new permitting process would be required. In practice this would create a regulatory system for customary fishing that runs parallel to existing fisheries regulations. This would likely prove contentious, and development would be time-consuming.</p> |

| | | |
|--|-------|------|
| Criteria 4: Impact on commercial and recreational fishers | N/A* | N/A* |
| Overall Assessment | +++++ | -- |

*This sub-option is not assessed according to Criteria 4, as no commercial or recreational fishing can take place within HPAs thus all options are the same.

What option is likely to best address the problem, meet the policy objectives, and deliver the highest net benefits?

Officials recommend Option A.2.1 to manage non-commercial customary activities in HPAs because:

- Using the existing regulatory system under s 186 of the Fisheries Act 1996 gives effect to Treaty rights relating to customary fishing. These treaty rights were secured by the Treaty of Waitangi (Fisheries Claims) Settlement Act. As such, regulations under the Bill would be in breach of these. Under existing regulations mana whenua will apply for customary fishing authorisations through local marae committees rather than DOC (Option A.2.2). This supports mana whenua as kaitiaki and gives effect to Treaty of Waitangi obligations.
- using existing regulations negates the need for DOC to create a bespoke permitting system, and duplicating resources unnecessarily; and
- providing a legislative mechanism whereby Ministers can apply additional management activities provides assurance that customary fishing will align with the biodiversity objectives, while not being overly restrictive.

A.3: Managing activities in Seafloor Protection Areas

The marine protection proposals under *Revitalising the Gulf* include five Seafloor Protection Areas (**SPAs**). The purpose of the SPAs is to maintain, restore and protect ecologically important habitats while allowing for compatible uses. This means prohibiting any activity that significantly impacts the seafloor (e.g., dredging) while allowing for activities that do not impact the seafloor (e.g., non-bottom contact fishing methods).

The management objectives of the SPAs are to:

- allow for the recovery of sensitive benthic habitats in seafloor protection areas.
- allow for the recovery of protected, rare, threatened, declining, or sensitive benthic species in seafloor protection areas.

The *Revitalising the Gulf* proposals did not specify what activities would be prohibited in each of the proposed SPAs. These decisions were to be informed by an Economic Impact Analyses (**EIA**) for commercial and recreational fishers, a technical assessment of the proposed marine protection carried out by DOC staff, and feedback received during engagement. Of note, several commercial fishers expressed concerns that a total prohibition on bottom longlining, potting, and set netting within SPAs, particularly the SPA at the Mokohīnau Islands would incur substantial additional costs on the fishing industry.

Officials have explored three options for prohibiting activities within SPAs. These are:

- **Option A.3.1 (preferred):** Uniform prohibitions across all SPAs with further prohibitions at the Mokohīnau Islands SPA.
- **Option A..3.2:** Uniform prohibitions across all SPAs including the Mokohīnau Islands SPA.
- **Option A.3.3:** Site-specific prohibitions for each SPA.

Under all three options, the same baseline of prohibitions on activities will occur across all five sites. In addition, habitat restoration initiatives will be regulated across all five sites through existing RMA processes. These prohibitions exclude activities that will have a negative impact on the seafloor and will therefore conflict with the purpose of the SPAs. The prohibitions are based

on a technical analysis of the sites, as well as informed by feedback received during engagement.

The prohibitions that will occur across all five SPAs, regardless of which option, are:

- Prohibitions on all dredging, bottom trawling, and Danish seining fishing methods as well as on sand extraction, mining, dumping and aquaculture.

Option A.3.1 (preferred): Uniform prohibitions across all SPAs with further prohibitions at the Mokohīnau Islands SPA

In addition to the baseline prohibitions across all five SPAs, this option would include further prohibitions at the Mokohīnau Islands SPA.

Additional prohibitions on set netting, potting, and bottom longlining are required in the Mokohīnau Islands (8b) SPA due to the presence of protected black corals and other sensitive marine species living on deep reefs in this SPA. As such, this option prohibits

- potting and bottom longlining beyond specified areas with minimal biodiversity risk; and
- set netting within the entire SPA.

This option responds to feedback we received from a group of small-scale commercial fishers who said they would be significantly impacted by the proposed further prohibitions at the Mokohīnau Islands SPAs. These fishers stated that the Economic Impact Assessment ((EIA) Appendix 1) did not adequately capture their long term fishing patterns and as such had not captured this impact on their businesses. This limitation is acknowledged in the EIA. In response to this feedback, we undertook further technical analysis and from that, we consider the threat to sensitive benthic environments can be mitigated by restricting bottom longlining and potting to areas with a depth of less than 50 meters, as these species occur on deep reefs. Thus we can strike a balance between protecting the sensitive biogenic ecosystem and mitigate undue impacts on commercial fishers. We are continuing to test the precise distance and areas at which bottom-long lining and potting would be allowed to occur within the SPA during the drafting phase of the Bill.

Option A.3.2: Uniform prohibitions across all SPAs including the Mokohīnau Islands SPA

Under this option, the baseline of prohibitions would be in place with no further prohibitions in place for any of the five SPAs.

While this option would be simpler from a compliance perspective, it would leave the fragile benthic species found in the area of the Mokohīnau Islands SPA susceptible to impact from bottom longlining, potting and set netting activities. These species are very fragile and often slow-growing so are susceptible to damage and slow to recover.

Option A.3.3 – Site-specific prohibitions for each SPA

Under this option, the baseline of prohibitions would be in place with further site-specific prohibitions in place for each SPA, based on the biodiversity values that require protection.

In practice the prohibitions look similar across all sites with some additional restrictions at particularly sensitive sites. For instance, additional protections could be implemented at Cape Colville, Mokohīnau Islands, Kawau Bay due to the presence of certain assemblages (scallops, sponges, horse mussels, etc.) requiring protection at these SPAs. Additional restrictions for each site would be based on new survey and/or monitoring information gathered during implementation.

Options for managing activities in Seafloor Protection Areas

| | Option A.3.1 (preferred): Uniform prohibitions across all SPAs with further prohibitions at the Mokohīnau Islands SPA | Option A.3.2: Uniform prohibitions across all SPAs including the Mokohīnau Islands SPA | Option A.3.3: Site-specific prohibitions across each SPA |
|--|--|--|--|
| Criteria 1: Expeditious protection of areas with high ecological value | <p>++</p> <p>Additional restrictions in the Mokohīnau Islands SPA would effectively protect areas of high ecological value, in particular black corals and gorgonians which are present in the SPA. There remains a minor risk for a small area of habitat to be impacted by bottom-long lining and potting. Officials consider this risk to be minimal based on known reef distribution.</p> | <p>+</p> <p>This option would largely protect the benthic values found in these SPAs but would leave particularly fragile species within the Mokohīnau SPA susceptible to damage.</p> | <p>++</p> <p>This option would protect sensitive benthic habitats and species as prohibitions could be tailored to each site based on the individual species and/or habitats that require protection in each SPA.</p> |
| Criteria 2: Gives effect to Treaty of Waitangi obligations and customary rights and interests | <p>0</p> <p>All of these options give the same effect to the Treaty of Waitangi obligations.</p> <p>Specific customary rights and interests might vary in place based on the degree of prohibition, but we consider that this would be minor.</p> | <p>0</p> <p>All of these options give the same effect to the Treaty of Waitangi obligations.</p> <p>Specific customary rights and interests might vary in place based on the degree of prohibition, but we consider that this would be minor.</p> | <p>0</p> <p>All of these options give the same effect to the Treaty of Waitangi obligations.</p> <p>Specific customary rights and interests might vary in place based on the degree of prohibition, but we consider that this would be minor.</p> |
| Criteria 3: Ease of Implementation | <p>++</p> <p>This option is relatively simple to implement as additional restrictions are only required for one site. There may be increased compliance challenges associated with having additional restrictions at the Mokohīnau Islands SPA</p> | <p>++</p> <p>The consistent approach to restricting activities would be easier to understand by the public and therefore simpler to implement. This option is likely to be less expensive to</p> | <p>--</p> <p>The costs associated with enforcing different restrictions across different sites are likely to be significant due to an increased likelihood of non-compliance. This option would be complex to implement. It is likely that a public</p> |

| | | | |
|---|--|---|--|
| | <p>site. However, this risk can be mitigated by making use of spatial tools and/or through additional communication to users around the restrictions within the Mokohīnau Islands SPA.</p> | <p>implement due to the reduced level of complexity.</p> | <p>education campaign would also be required which may take time and result in increased costs.</p> |
| <p>Criteria 4: Impact on commercial and recreational fishers</p> | <p>++</p> <p>This option is likely to reduce the impacts on commercial and recreational fishers as they will continue to be able to fish in areas that are shallower than 50meters within the Mokohīnau Islands SPA.</p> | <p>++</p> <p>This option will have less impact than the other options as it is the least restrictive on commercial and recreational fishing activities.</p> | <p>-</p> <p>The prescriptive nature of the approach to restricting activities may result in greater impacts on commercial and recreational fishers. This is dependent on the information gathered on sensitive species and habitats during the implementation phase.</p> |
| <p>Overall Assessment</p> | <p>+++++</p> | <p>+++++</p> | <p>-</p> |

What option is likely to best address the problem, meet the policy objectives, and deliver the highest net benefits?

Option A.3.1 is the preferred option, as it effectively provides for the protection of areas of high ecological value and sensitive benthic species (e.g. black corals and gorgonians) present within SPAs. Option A.3.1 is also simple to implement as additional restrictions are only required at one site (noting that additional communication may be required to inform users of the various restrictions in the Mokohīnau Islands SPA). Lastly, this option will result in fewer impacts on commercial and recreational fishers as they will still be able to undertake potting and bottom-long lining in areas less than 50m depth.

While we have not tested this option with stakeholders and mana whenua, we anticipate strong support for this option as it responds to concerns raised by commercial and recreational fishers. There will be further opportunity to test this and for stakeholders to provide feedback during the Select Committee process.

A.4: The role of agencies regarding compliance and enforcement in High Protection Areas

The proposed HPAs are no-take, except for customary practices, including customary take as defined in the Fisheries Act 1996. Activities within HPAs will be regulated by both the Hauraki Gulf Marine Protection Act (**the Bill**) and the Fisheries Act 1996, therefore, enforcement will be undertaken by both DOC Warranted Officers and MPI Fishery Officers/Honorary Officers.

Currently, DOC Warranted Officers are not empowered in legislation to undertake compliance activities relating to customary fishing offences. These powers are only held by MPI Fishery Officers. However, given the new protection tools allow for customary fishing, officials consider it is highly impractical for MPI Fisheries Officers to be the sole agency enforcing the Fisheries Act within HPAs, and for DOC Warranted Officers to enforce some activities but not others within HPAs.

Note that DOC Warranted Officers will have full powers in relation to non-customary fishing in HPAs. Compliance and enforcement in Seafloor Protection Areas (**SPAs**) is much more straight-forward than HPAs, as there are fewer restrictions in place. As such, activities are regulated only by the Bill, and therefore compliance and enforcement in SPAs does not require consideration of the Fisheries Act 1996.

Officials considered and dismissed two approaches to the delegation of enforcement powers:

1. DOC Warranted Officers are appointed Honorary³⁸ Fishery Officers. In their capacity as Honorary Fishery Officers, DOC Warranted Officers could enforce offences under the Fisheries Act 1996 relating to customary fishing. This was dismissed as was considered a workaround. It also presented challenges regarding agency accountability, critically whether MPI/FNZ or DOC would be accountable for the safety of DOC rangers while acting in their capacity as Honorary Fisheries Officers.
2. DOC Warranted Officers are empowered to exercise the full powers and duties of Fisheries Officers. This option was dismissed as officials considered that MPI/FNZ should continue to have primary responsibility for investigating and taking further action in relation to customary take. MPI/FNZ are best placed to undertake such compliance functions given they hold relationships with kaitiaki in the Gulf by virtue of their role under the Fisheries Act 1996. These relationships are critical, as a relational approach is used to undertake compliance activities relating to customary take.

³⁸ Honorary rangers and honorary fishery officers are volunteers who work alongside and carry out similar functions to rangers and fishery officers.

Officials explored two options for managing compliance and enforcement activities, in relation to customary take, in HPAs:

- **Option A.4.1 (preferred):** DOC Warranted Officers are able to exercise limited enforcement powers in relation to customary take. DOC Warranted Officers exercise powers of entry and examination, questioning, and the requirement of documents;
- **Option A.4.2:** DOC Warranted Officers have more extensive enforcement powers in relation to customary take. DOC Warranted Officers exercise powers of entry and examination, questioning, and the requirement of documents. In instances of clear offending, and with MPI/FNZ approval where possible, DOC Warranted Officers may ask someone to refrain or desist from an act and/or seize take.

Option A.4.1 (preferred): DOC Warranted Officers are able to exercise limited enforcement powers in relation to customary take

Under this option, in relation to customary take within HPAs, DOC Warranted Officers exercise powers of entry and examination, questioning, and the requirement of documents. DOC Warranted Officers will be granted enforcement powers in certain circumstances relating to customary take where activities are in breach of the Bill rather than (or as well as) the Fisheries Act. Activities that would be considered a breach of the Bill include circumstances where an authorisation holder does not follow the conditions set out in their authorisation, and when there is due cause to suspect a customary authorisation is fraudulent or been issued contrary to the biodiversity objectives. These powers diverge from the current regulatory regime whereby DOC Warranted Officers are not empowered to undertake compliance activities relating to customary fishing offences.

This option is most similar to the status quo and, therefore, presents the least risk to relationships with kaitiaki in the Gulf. This option would, however, restrict DOC Warranted Officers ability to ask offenders to refrain/desist from offending and seize take. Such a restriction will prevent DOC Warranted Officers from acting in the moment, potentially allowing for continued environmental damage.

A standard operating procedure or memorandum of understanding will be developed between DOC and MPI/FNZ to determine how this works in practice. This agreement will also cover how agencies will work together to enforce activities within SPAs, however this is much simpler as they are only regulated by the Bill.

Option A.4.2: DOC Warranted Officers have more extensive enforcement powers in relation to customary take

This option is likely to provide for better biodiversity outcomes as DOC Warranted Officers could take measures to prevent continued environmental damage. That said, Option A.4.2 is more likely to risk damaging relationships with kaitiaki. It is possible these risks could be mitigated by clearly communicating how DOC Warranted Officers intend to utilise their enforcement powers.

Options for the role of agencies regarding compliance and enforcement in High Protection Areas

| | Option A.4.1 (preferred): DOC Warranted Officers are able to exercise limited enforcement powers | Option A.4.2: DOC Warranted Officers have more extensive enforcement powers |
|--|---|--|
| Criteria 1: Expedient protection of areas with high ecological value | <p>0</p> <p>This option prevents DOC Warranted Officers from acting in the moment, potentially allowing for continued environmental damage. For example, if it was clear that someone engaged in customary take had exceeded their catch limit (as set out in their authorisation), the DOC Warranted Officers could not require the offender to desist from further take, nor could they seize the excess take.</p> | <p>+</p> <p>DOC Warranted Officers can take measures to prevent continued environmental damage if it is clear that take is not in accordance with an authorisation issued under regulations made under section 186 of the Fisheries Act 1991.</p> <p>Providing greater enforcement powers for DOC Warranted Officers may result in opposition and delays/lack of establishment meaning protection may not be expeditious.</p> |
| Criteria 2: Gives effect to Treaty of Waitangi obligations and customary rights and interests | <p>+</p> <p>Due to the nature of customary practices, a relational approach is used to undertake any compliance activities relating to customary take. MPI/FNZ hold relationships with kaitiaki in the Gulf by virtue of their enforcement role under the Fisheries Act 1996. This option is most similar to the status quo, and therefore, best allows for the continued maintenance of MPI/FNZ relationships with kaitiaki.</p> | <p>-</p> <p>Due to the nature of customary practices, a relational approach is used to undertake any compliance activities relating to customary take. MPI/FNZ hold relationships with kaitiaki in the Gulf by virtue of their enforcement role under the Fisheries Act 1991. If DOC warranted officers are granted greater enforcement powers, there is a risk of undermining existing MPI/FNZ relationships with kaitiaki.</p> |
| Criteria 3: Ease of Implementation | <p>+</p> <p>This option would require minimal additional training for DOC Warranted Officers. Enforcement officers would have a clear sense of their powers as they will be articulated in a standard operating procedure or a memorandum of understanding.</p> | <p>-</p> <p>Additional training required for DOC Warranted Officers.</p> |
| Criteria 4: Impact on commercial and recreational fishers | N/A* | N/A* |
| Overall Assessment | ++ | - |

*This sub-option is not assessed according to Criteria 4, as no commercial or recreational fishing can take place within HPAs thus all options are the same.

What sub-option is likely to best address the problem, meet the policy objectives, and deliver the highest net benefits?

Officials consider that DOC Warranted Officers should exercise limited enforcement powers with respect to customary fishing (Option A.4.1) because:

- officials consider that it is highly impractical for MPI Fisheries Officers to be the sole agency enforcing the Fisheries Act within HPAs, and for DOC Warranted Officers to enforce some activities but not others within HPAs;
- it best accommodates of the sensitive nature of compliance activities in relation to customary take. Under this option it is recommended that DOC Warranted Officers exercise limited enforcement powers with respect to customary fishing (collect evidence to pass on to MPI); and
- it recognises the need for DOC to play a greater enforcement role in instances where a customary authorisation has been issued contrary to the co-developed biodiversity objectives (offence under the Bill).

DOC and MPI consider that it would be necessary for DOC Warranted Officers to be granted limited enforcement powers relating to customary fishing within HPAs. DOC Warranted Officers would primarily collect customary permit details and other evidence to pass on to MPI for investigation and further action regarding take authorised under the Fisheries Act. A standard operating procedure or memorandum of understanding will be developed between the agencies to articulate how this works in practice.

There will be an opportunity to test this approach with mana whenua and stakeholders during the Select Committee phase.

What are the marginal costs and benefits of the preferred options

| Affected groups | Comment | Impact | Evidence Certainty |
|---|--|------------------------------|--------------------|
| Additional costs of all the preferred options compared to taking no action | | | |
| Regulated Parties | Recreational Fishers – Recreational take will be prohibited in HPAs, and methodological restrictions will apply in SPAs. The impacts on recreational fishers will be greater for HPAs due to the prohibition of all recreational fishing activities in these areas. HPAs are most likely to restrict recreational catch for snapper, kingfish, kahawai, and trevally. Other areas that are likely to be impacted include the Kawau Bay SPA and HPA, the Noises HPA, and the Tiritiri Matangi SPA due to the high numbers of individual vessels operating in these areas ³⁹ . The impacts on individual operators will depend on several factors such as their ability to transfer their fishing effort to other areas, how much of their activity is inside the proposed protected areas, and whether/how much competition for fishing space increases | Low (SPAs)- Medium (HPAs) | Low-Medium |

³⁹ These areas recorded the highest numbers of individual vessels, with 28, 27, and 21 vessels respectively for the 2020/21 October fishing year.

| | | | |
|--|---|--|--------------------|
| | <p>in the remaining unprotected parts of the Hauraki Gulf.</p> <p><i>Impact certainty is based on economic impact assessment carried out by Martin Jenkins (Appendix 1, refers). The assessment considered current amateur fishing data on harvest estimates for snapper in SNA 1 and kahawai in KAH 1 to determine the potential impact of the Revitalising the Gulf marine protection proposals. The report does not assess the financial impacts on individual amateur charter vessel businesses due to the lack of available information on sales income and business expenses.</i></p> | | |
| | <p>Commercial Fishers – Commercial take will be prohibited in HPAs, and methodological restrictions will apply in SPAs. The impact (in port price revenue) on individual permit holders will vary, dependent on what proportion of their total fishing activity occurs within proposed protected areas. Fishing in the proposed areas is ranges from 0.05% to 53.8% of individual fishers’ total activity in New Zealand’s EEZ.</p> <p><i>Impact certainty is based on economic impact assessment carried out by Martin Jenkins (Appendix 1, refers). The assessment considered current commercial fishing activity within the proposed protection areas to determine the potential impact of the Revitalising the Gulf marine protection proposals. The report does not represent a broader assessment of the potential impact of the Revitalising the Gulf marine protection proposals on the wider commercial sector.</i></p> | <p>Annual revenue loss of \$4.2-5.2m (in market price)</p> | <p>Medium-High</p> |
| | <p>Mana Whenua – There will be time, travel, and resource costs associated with mana whenua engagement in the development of biodiversity objectives for each HPA. There will also be ongoing costs associated with the support, development and periodic review of how customary practices are managed.</p> <p><i>Impact certainty based on past engagement experiences.</i></p> | <p>Medium</p> | <p>Low-Medium</p> |
| | <p>Mana Whenua – Potential impact on cultural well-being if the site-specific biodiversity objectives oblige mana whenua to modify their expression of customary practices.</p> <p><i>Impact certainty is based on inter-agency technical analysis of biodiversity values within the proposed protection areas. From these values, inferences about the extent of customary practices requiring management can be made. Impact certainty limited by a</i></p> | <p>Low</p> | <p>Low-Medium</p> |

| | | | |
|--|---|---|-------------|
| | <i>lack of available data on the nature and extent customary practices in the Gulf.</i> | | |
| Government | Central Government - Initial establishment costs for the marine protection areas including survey office plans, ecological baseline surveys, signage). <i>Impact certainty based on past costs of establishing marine protection areas.</i> | \$950,000 | Medium-High |
| | Central Government – Ongoing management costs for the marine protection areas including 3 FTE, compliance, enforcement, science, and management. <i>Impact certainty based on past costs of establishing marine protection areas.</i> | \$1,590,000-3,160,000 annually | Medium-High |
| | Central Government – Time and resource costs will be required for the design of site-specific biodiversity objectives. In some areas, multiple groups of mana whenua may claim rights. This is likely to take time to work through and may require substantive resourcing. <i>Impact certainty based on previous experiences of remuneration and travel.</i> | \$50,000 annually | Medium-High |
| | Central Government – Time and resource costs will be required to support mana whenua to manage customary practices by making data available. <i>Impact based on estimations of the levels of resourcing needed. Estimated to be low as it is a mana whenua led process.</i> | Low | Low-Medium |
| Total monetised costs | | Initial costs: \$950,000 Annual costs: \$4,409,000-8,410,000 | Medium-High |
| Non-monetised costs | | Low | Medium |
| Additional benefits of the preferred options compared to taking no action | | | |
| Environment | Marine protection will support the passive recovery of at-risk, high ecological value, and representative habitats and ecosystems in the Gulf. HPAs and SPAs will provide protection from directed take of targeted organisms, bycatch mortality of non-target organisms, and habitat damage from fishing activities. Marine protection also contributes to climate resilience. | Medium | Low-Medium |

| | | | |
|--------------------------|---|---------------|------------|
| | <i>Impact certainty informed by inter-agency technical analysis of the biodiversity found within the marine protection areas.</i> | | |
| Regulated Parties | Recreational and Commercial Fishers – The spill over of fish larvae from marine protected areas will likely contribute to fisheries sustainability and abundance. For example, it is estimated adult snapper in the Cape Rodney-Okakari Point Marine Reserve contribute 10.6% of newly settled juveniles to the surrounding 400 km ² area. <i>Impact informed by data from existing marine reserves. Impact certainty limited by the constraints of inferring impacts from data taken from another area.</i> | Low | Medium |
| | Mana Whenua – The restoration of marine habitats will enhance the mauri of the Gulf and provide for the continued expression of customary practices; The connection between nature and cultural wellbeing is maintained. <i>Impact certainty based on engagement with mana whenua.</i> | Medium – High | Medium |
| | Mana Whenua – Mana whenua are empowered as kaitiaki, playing an active role in the management of marine protection areas. Mātauranga Māori and tikanga Māori are better incorporated into marine management. <i>Impact certainty based on engagement with mana whenua.</i> | Medium – High | Medium |
| | Marine Ecotourism Operators – Potential increases in the tourism value of the Gulf because of passive biodiversity restoration, and/or, avoided loss of tourism value by maintaining current levels biodiversity. Affected operators could include those that run wildlife cruises or dive and snorkel businesses. <i>Impact certainty based on qualitative analyses of marine reserves in New Zealand. Impact certainty limited as the proposals differ in location, marine protection type to those analysed.</i> | Medium-High | Low-Medium |
| | Recreational users – Passive restoration will facilitate a healthy environment for recreational users to engage in activities including snorkelling, diving. The scale of this impact will vary depending on location, the size of the passive restoration area, the distance from other passive restoration sites within the network and the effectiveness of the network at restoring/maintaining healthy ecosystems. | Low-medium | Low-medium |

| | | | |
|---------------------------------|---|-------------|------------|
| | <i>Impact certainty based on qualitative analyses of marine reserves in New Zealand. Impact certainty limited as the proposals differ in location, marine protection type to those analysed.</i> | | |
| | <p>Recreational users – restored/maintained ecosystem services linked to healthy ecosystems such as water quality can attract other type of users such as sailing, windsurfing, surfing</p> <p><i>Impact certainty based on qualitative analyses of marine reserves in New Zealand. Impact certainty limited as the proposals differ in location, marine protection type to those analysed.</i></p> | Low-medium | Low-medium |
| | <p>Community – Marine protection areas will provide places for New Zealanders and visitors to experience and learn about healthy marine ecosystems.</p> <p><i>Impact certainty based on qualitative analyses of marine reserves in New Zealand. Impact certainty limited as the proposals differ in location, marine protection type to those analysed.</i></p> | Medium-High | Low-medium |
| | <p>Community – Healthy ecosystems help connect people with nature and improve physical, mental and spiritual wellbeing</p> <p><i>Impact certainty based on qualitative analyses of marine reserves in New Zealand. Impact certainty limited as the proposals differ in location, marine protection type to those analysed.</i></p> | Low-Medium | Low-medium |
| | <p>Central Government – The protected areas would also bring New Zealand a step closer to achieving global goals and targets under the United Nations Convention on Biological Diversity (CBD). The CBD is seeking to adopt a new global biodiversity framework, including new global goals and targets. One target being proposed (Target 3) aims for 30% protection of the global ocean by 2030.</p> | Low-Medium | High |
| Government | Economic benefits have not been monetised due to poor evidence certainty. Most benefits are indirect as they relate to the outcomes from marine protection the option would enable. | Low-Medium | Low |
| Total monetised benefits | | N/A | N/A |
| Non-monetised benefits | | Medium | Low-Medium |

Section 3: Delivering an option

How will the new arrangements be implemented?

The 19 proposed marine protection areas will be implemented through the creation of the Hauraki Gulf Marine Protection Act (**the Bill**). The new legislation will establish 12 HPAs, 5 SPAs and 2 extensions to marine reserves.

To implement the HPAs, the Bill will create strict liability offences for activities that disturb, damage, or destroy marine life or the marine environment. Many will likely be similar offences to those under the Marine Reserves Act 1971. Exceptions will exist for customary practices, and the Bill will expressly permit the expression of customary practices under the appropriate Fisheries Act 1996 regulations.⁴⁰

To implement the SPAs, the Bill will create strict liability offences for defined activities that disturb, damage, or destroy the benthic environment.

The Bill will be administered by DOC, who will also have primary responsibility for compliance. MPI will play a supporting compliance role. DOC rangers, DOC honorary rangers, fishery officers, honorary fishery officers and constables will be granted the powers required for enforcement.

Officials propose to enact the Bill and begin implementation in 2024. The actions below will be completed prior to the establishment of the marine protected areas.

- Survey plans of the HPA/SPA boundaries will be drawn digitally and lodged with Land Information New Zealand's survey office. Boundaries will be displayed on nautical charts and the 'MarineMate' app;
- Demarcation buoys will be installed in priority areas. Priority areas include those where HPAs/SPAs are adjacent to land or other areas of marine protection, especially in sheltered/high use areas;
- Signage and interpretation panels will be erected in high use areas;
- Rangers and Fishery Officers will be trained on new operational guidelines;
- Educational campaign and clear communications explaining rule changes will be rolled out around the Gulf; and
- Officials will engage with those empowered to issue authorisations for customary fishing. Engagement will explore the possible implications of the initial biodiversity objectives on their scope for authorisation.

Additional engagement is required with district and regional councils

Councils have raised concerns about the impact of the marine protection on the carrying out of critical infrastructure activities such as stormwater discharge or maintenance of existing pipes. Officials will continue to work with councils during the development of the proposed Bill to ensure the proposed protection does not interfere unduly with these activities.

Additional engagement is required to develop the initial biodiversity objectives

Following the final Cabinet decisions on the marine protection included in *Revitalising the Gulf*, officials intend to work with mana whenua to develop the site-specific biodiversity objectives

⁴⁰ Subject to additional management measures where required, to ensure alignment with the site-specific biodiversity objectives.

for each HPA. The biodiversity objectives will primarily be drawn from the biodiversity analysis that informed *Revitalising the Gulf*. Officials intend to consult mana whenua on the objectives for each site and identify any additional management measures necessary to mitigate any substantive risks to the biodiversity objectives.⁴¹ The biodiversity objectives will be included in the proposed Bill. We do not anticipate their development will affect delivery timelines as this process can be undertaken during drafting. We acknowledge that the process for developing biodiversity objectives may take longer than the time until implementation of the protected areas. In this case, interim biodiversity objectives can be established which will continue to be refined following implementation.

Potential implementation risks and their proposed mitigation

Development of biodiversity objectives and associated customary management

Over time, biodiversity objectives for individual HPAs may be refined in partnership with mana whenua. In areas where several mana whenua groups have overlapping rohe, it is possible that reaching agreement on the biodiversity objectives will be a protracted process. Government resourcing, including technical and scientific support, is intended to facilitate this process and reduce the risk of significant delay. Biodiversity will be protected in the interim as the Bill will stipulate that the existing customary fisheries regulations will give effect to the biodiversity objectives.

Accidental non-compliance

The expression of customary practices will be permitted under the Bill. There is a risk that uninformed members of the public may see mana whenua engaged in customary fishing and, not realising there is a marine protection area in place, engage in recreational fishing. This risk is likely to be particularly acute in offshore areas where signage and boundary markers have not been used.⁴² To mitigate this challenge, officials will:

- utilise demarcation buoys in high use areas; and
- develop clear messaging on the new protection areas' rules. This messaging will be used on signage and in public education campaigns.

Extensions to Marine Reserves

Whether the extensions to marine reserves are implemented as marine reserves or HPAs is yet to be decided. Note that if an HPA is established next to a marine reserve, this creates a risk that mana whenua will accidentally commit an offence under the Marine Reserves Act 1971. The Marine Reserves Act deems take greater 3 times the amateur limit 'commercial.' As customary fishing can exceed this limit, there is a significant risk that a person may accidentally commit a commercial-level offence, believing they are engaged in legal customary take within an HPA. This challenge is likely to be particularly acute in the Cape Rodney-Okakari Point area where the marine reserve boundary is not straight, see *figure 1*, meaning demarcation buoys cannot be used. Those without GPS on their vessel would be at risk of accidentally taking from the marine reserve. This risk will be mitigated by:

- straightening the marine reserve boundary;
- ensuring the boundaries are marked on the 'MarineMate' app;
- increasing ranger capacity to enable presence in each area; and

⁴¹ See page 25 for further information.

⁴² Noting physical markers will be prioritised in high use areas, and land/marine protection adjacent areas.

- developing clear web materials and online tools.

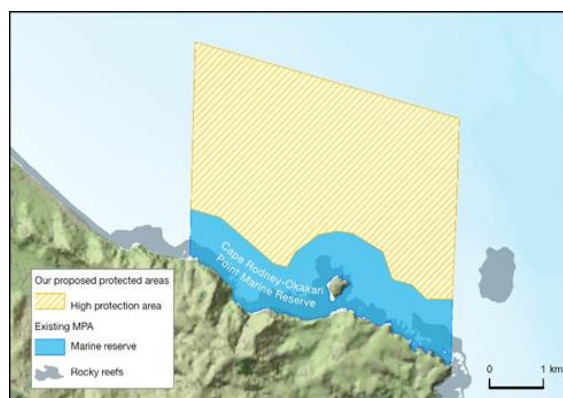


Figure 1: Cape Rodney-Okakari Point HPA proposal

How will the new arrangements be monitored, evaluated, and reviewed?

Officials intend to implement a monitoring and reporting programme (**the programme**) to evaluate the impacts of marine protection in the Gulf. DOC will have primary responsibility for the programme, though some data may be collected by FNZ. DOC leads the reporting and monitoring for other DOC administered marine protection areas such as marine reserves. That will also be the case for the *Revitalising the Gulf* marine protected areas. This applies for all options put forward in this paper.

The programme will be informed by DOC's Marine Monitoring and Reporting Framework.⁴³ This framework provides guidance on methods for monitoring different values within marine protected areas and ensures consistency that allows for temporal and spatial comparisons to be made. By using this framework, we can ensure that monitoring of these proposed protected areas is aligned with the monitoring of existing protected areas such as marine reserves. The results of this monitoring will inform reports such as the triennial 'State of the Gulf report'. The monitoring will also inform future management of the protected areas. It will be implemented through a monitoring plan designed to reflect the site-specific biodiversity objectives. The programme will form part of the wider Monitoring and Reporting Framework included in *Revitalising the Gulf*. The broader monitoring and reporting programme will be responsible for reviewing the network and considering the need for changes to or additional marine protection.

⁴³ Department of Conservation, Marine Monitoring and Reporting Framework, 2022. Can be accessed at: <https://www.doc.govt.nz/contentassets/4f5439a4268f420b802a29562b112ce3/marine-monitoring-reporting-framework-2022.pdf>.

Appendix One

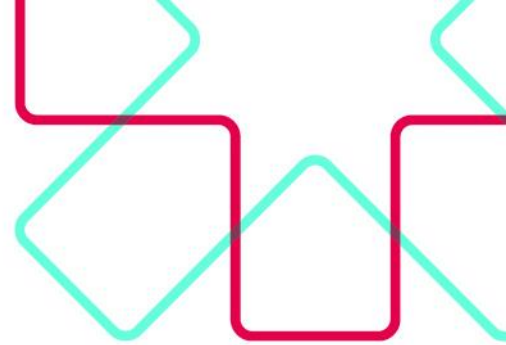
Economic Impact Assessment by Martin Jenkins, Stage 1

REVITALISING THE GULF STAGE 1 – IMPACT OF THE MARINE PROTECTION PROPOSALS ON COMMERCIAL FISHERS

Final Report

11 August 2022





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PREFACE

This report has been prepared for the Department of Conservation by Jason Leung-Wai and Roshen Kulwant from MartinJenkins (Martin, Jenkins & Associates Limited).

For 30 years MartinJenkins has been a trusted adviser to clients in the government, private, and non-profit sectors in Aotearoa New Zealand and internationally. Our services include organisational performance, employment relations, financial and economic analysis, economic development, research and evaluation, data analytics, and public policy and regulatory systems.

We are recognised as experts in the business of government. We have worked for a wide range of public-sector organisations from both central and local government, and we also advise business and non-profit clients on engaging with government.

Kei te āwhina mātau ki te whakapai ake i a Aotearoa. We are a values-based organisation, driven by a clear purpose of helping make Aotearoa New Zealand a better place.

Established in 1993, we are a privately owned New Zealand limited liability company, with offices in Wellington and Auckland. Our firm is governed by a Board made up of executive directors Kevin Jenkins, Michael Mills, Nick Davis, Allana Coulon, Richard Tait, and Sarah Baddeley, as well as independent director Sophia Gunn and chair David Prentice.

Caveats and restrictions

We have prepared this report solely for the purposes stated in it, and it should not be relied on for any other purpose.

We accept no duty of care or liability to any third party in relation to us providing this report, other than any duty or liability that we already have under the law. If a third party relies on this report when they are deciding to do or not do something, we are not responsible or liable for the consequences.

Our brief for this report did not require us to independently verify the accuracy of the information that the client or others provided to us for the report, and we did not attempt to do so. We therefore do not express any opinion on how accurate, reliable, or complete that information is.

We have made the statements in this report in good faith, and on the basis that all the information we relied on is materially true, accurate, and not misleading, whether by omission or otherwise.

We reserve the right to change this report if we later become aware of additional relevant information that existed at the date of the report, but we do not have any obligation to change it.



KEY FINDINGS

The brief

MartinJenkins has been commissioned by the Department of Conservation (DOC) to carry out an economic assessment of the Hauraki Gulf protected area proposals in “Revitalising the Gulf: Government action on the Sea Change Plan”, the Government’s strategy in response to the call for action made by the 2017 Sea Change – Tai Timu Tai Pari Hauraki Gulf Marine Spatial Plan.

This report presents Stage 1 of the economic assessment. The objective of Stage 1 is to understand the current level of commercial fishing activity within the proposed protected areas, in order to determine the potential impact on commercial fishers of the marine protection proposals in “Revitalising the Gulf”.

Our analysis considers the current commercial fishing activity within the proposed areas relative to the commercial fishing activity for all fish stocks with quota management areas that include the Hauraki Gulf, and relative to the permit holders’ activity across all of New Zealand.

The findings

The level of commercial fishing activity in the proposed protected areas varies by place and time

We found that there is variation in the level of commercial fishing activity across the proposed protected areas and across fishing years.

For some permit holders, the amount of fish caught within the proposed protected areas and its relative commercial value also varied across fishing years.

Fishing in the proposed protection areas accounts for 1%–3% of total greenweight in all Hauraki Gulf quota management areas

The level of commercial fishing activity within the proposed protected areas represents approximately 1% to 3% of the total greenweight caught across all quota management areas that includes the Hauraki Gulf. This suggests that most commercial fishing activity in these quota management areas happens outside the areas proposed for protection.

Fishing in the proposed protection areas generates annual revenue of \$4.2–5.2 million

The annual revenue (measured by market price) generated by fish caught within the proposed protected areas was between \$4.2 million and \$5.2 million¹ over the last two years. This represents approximately 2.0%–3.5% of the revenue generated by the catch across all quota management areas that include some or all of the Hauraki Gulf.

¹ This is an estimate which combines the revenue from the October and the April fishing years.



Fishing in the proposed areas is concentrated in Te Hauturu-o-Toi / Little Barrier Island and Te Ruamaahu / Aldermen Islands

In the proposed protected areas and across all of the fishing years studied, just under three-quarters of the commercial fishing activity (measured by greenweight) is concentrated in Te Hauturu-o-Toi / Little Barrier Island High Protection Area and the Aldermen Islands / Te Ruamaahu (south) High Protection Area.

These two areas make up 12% and 10%, respectively, of the total area of all the proposed protected areas (in square kilometres).

12%–14% of Hauraki Gulf permit holders fish in the proposed protected areas

Around 12%–14% of the total number of permit holders who fished in quota management areas that include some or all of the Hauraki Gulf also fished in the proposed protected areas.

However, the level of fishing activity of these permit holders varies from year to year. Approximately a third of permit holders caught more greenweight in the second year, and half of permit holders caught less greenweight, with the remaining permit holders fishing only in one of the two years.

For most Hauraki Gulf fishers, their catch in the proposed areas is under 10% of their total catch

For the majority of permit holders who fish in Hauraki Gulf quota management areas, the catch in the proposed protected areas represents less than 10% of their total catch (see Figure 7 and Figure 8 on page 33).

Fishing in the proposed areas is anywhere from 0.05% to more than half of individual Hauraki Gulf fishers' total activity in New Zealand's EEZ

The commercial fishing activity of permit holders (in port price revenue) within the proposed protected areas ranges from 0.05% to 53.8% of their total fishing activity within New Zealand's exclusive economic zone.

Key figures for October and April fishing years

Table 1 and Table 2 below give a summary of the commercial fishing activity within the proposed protected areas and the quota management areas that include the Hauraki Gulf.

Fish stocks are managed under either an October or April fishing year,² in that changes to the total allowable catch or fisheries management measures take effect on either 1 April or 1 October for the fish stocks that fall under that fishing year. This is reflected in the tables.

² Fisheries Act 1996, section 19(1).



Table 1: Commercial fishing activity summary, by study area, October fishing years

| 2019-2020 (Oct) fishing year | All fish stocks that include the Hauraki Gulf | Within the proposed protected areas | Proportion of total activity within the proposed protected areas |
|------------------------------|---|-------------------------------------|--|
| Number of permit holders | 316 | 40 | 13% |
| Number of fish stocks | 44 | 24 | 55% |
| Greenweight (tonnes) | 32,717 | 906 | 3% |
| Port price revenue (\$m) | 59.02 | 1.15 | 2% |
| Market price revenue (\$m) | 165.12 | 3.91 | 2% |

| 2020-2021 (Oct) fishing year | All fish stocks that include the Hauraki Gulf | Within the proposed protected areas | Proportion of total activity within the proposed protected areas |
|------------------------------|---|-------------------------------------|--|
| Number of permit holders | 288 | 40 | 14% |
| Number of fish stocks | 44 | 24 | 55% |
| Greenweight (tonnes) | 37,979 | 530 | 1% |
| Port price revenue (\$m) | 66.31 | 1.37 | 2% |
| Market price revenue (\$m) | 183.34 | 4.59 | 3% |

Table 2: Commercial fishing activity summary, by study area, April fishing years

| 2020-2021 (Apr) fishing year | All fish stocks that include the Hauraki Gulf | Within the proposed protected areas | Proportion of total activity within the protected areas |
|------------------------------|---|-------------------------------------|---|
| Number of permit holders | 33 | 4 | 12% |
| Number of fish stocks | 2 | 2 | 100% |
| Greenweight (tonnes) | 124 | 3 | 2% |
| Port price revenue (\$m) | 8.83 | 0.23 | 3% |
| Market price revenue (\$m) | 14.08 | 0.34 | 2% |

| 2021-2022 (Apr) fishing year | All fish stocks that include the Hauraki Gulf | Within the proposed protected areas | Proportion of total activity within the protected areas |
|------------------------------|---|-------------------------------------|---|
| Number of permit holders | 38 | 5 | 13% |
| Number of fish stocks | 2 | 1 | 50% |
| Greenweight (tonnes) | 129 | 4.5 | 3% |
| Port price revenue (\$m) | 7.76 | 0.30 | 4% |
| Market price revenue (\$m) | 16.90 | 0.59 | 3% |



INTRODUCTION AND APPROACH

The brief and its context

“Revitalising the Gulf: Government action on the Sea Change Plan” is the Government’s strategy in response to the call for action made by the 2017 Sea Change – Tai Timu Tai Pari Hauraki Gulf Marine Spatial Plan. It sets out an integrated package of marine conservation and fisheries management actions to improve the health and mauri of the Hauraki Gulf. This includes establishing new high protection areas and seafloor protection areas, and extending the area of protection adjacent to two existing marine reserves in 2024 (see next page for protection area definitions).

MartinJenkins has been commissioned to perform a staged economic assessment of the protected area proposals.

This report presents Stage 1 of this assessment, in which we have estimated the current level of commercial fishing activity within the proposed protected areas, as a proportion of overall commercial fishing activity.

Stage 2 will assess the wider economic impacts that may result from the new and extended protected areas.

A Microsoft Excel workbook with a breakdown of the analysis for each of the proposed protected areas has been provided to DOC alongside this report. This report summarises the estimated commercial fishing activity at an aggregate level.

Acronyms used in this report

MPI – Ministry for Primary Industries

ACE – Annual catch entitlement

LFR – Licenced fish receiver

Fishing methods

PS – Purse seining

BLL – Bottom long-line

BT – Bottom trawl

DS – Danish seining

DV – Diving Combined (snorkel, scuba and surface supplied)

HL – Handlining

PRB – Precision bottom trawl

RN – Ring net

SN – Set netting (including Gill nets)

RLP – Rock lobster pot.



Protection area definitions

High Protection Areas offer site-specific management objectives based on the biological values requiring protection in each area.

Seafloor Protection Areas protect seafloor habitats and communities susceptible to damage from activities such as fishing (particularly dredging, bottom trawling and Danish seining), sand extraction and mining. They will allow activities, such as commercial and recreational fishing, where they are compatible with the management objectives of each protected area.

Marine Reserves established under the Marine Reserves Act 1971 offer the highest possible level of marine protection. As designated areas that are completely protected from the sea surface to the seafloor, the entire area is strictly 'no take', including marine life, shells, rocks and driftwood.

Overview of the approach

For this economic assessment, we:

- identified the proposed protected areas and the reference areas to be studied
- defined “commercial fishing activity” for this study by asking “who”, “what”, “how”, “where”, and “when”
- measured the levels of commercial fishing activity in the proposed protected areas and compared that activity with total landings for quota management areas that contain the Hauraki Gulf, and also with all activity, anywhere within New Zealand and in any fish stock, of those permit holders who operated within the proposed protected areas.

We defined “commercial fishing activity” in terms of greenweight³ landings (kgs) and revenue by permit holders and fishing method across two October fishing years (2019/20 and 2020/21) and two April fishing years (2020/21 and 2021/22).

The analysis shows the importance of measuring commercial fishing activity through a number of measures, including as greenweight and port prices, and comparing this to the overall commercial fishing activity. Although the greenweight catch for a particular fish stock within the proposed protection areas may be greater than for other fish stocks, the relative commercial value of that fish stock could be lower or higher than others.

The potential decrease in a permit holder’s catch because of new protected areas may be a large proportion of their overall greenweight catch for the fishing year. However, this may not significantly affect revenue if the fish stock has a lower port price than the rest of the permit holder’s catch.

³ Greenweight is the weight of fish before any processing has happened or before any part of the fish is removed.



“Commercial fishing activity” was defined in this study through asking “who”, “what”, “how”, “where”, and “when”

Whose commercial fishing activity are we studying?

In commercial fisheries, there are three main market operators:

- **Quota owners** provide annual catch entitlements for permit holders to operate in the market
- **Permit holders** are commercial fishers who catch fish to sell in the market
- **Licensed fish receivers** buy and process fish from permit holders to sell either at a wholesale or retail level.

This analysis focuses on permit holders, as it is mainly their activity that will potentially be restricted by the proposed protected areas.

What measures do we use for the activity we are studying?

We have defined commercial fishing activity in terms of greenweight (kgs) of fish caught, by fish stock, and by commercial value.

“Commercial value” itself has different meanings depending on where in the supply chain or value chain a market operator sits. Annual catch entitlements are leased or sold to permit holders at agreed prices. Permit holders receive port prices for each kg of fish that they land. Licensed fish receivers receive wholesale or retail market prices.

For example, a permit holder may pay for annual catch entitlement for snapper in quota management area 8. This allows them to fish commercially for snapper and land that fish to a licensed receiver for a port price. That licensed fish receiver would then process the fish and on-sell to consumers, either domestically or through exports.

How is the activity carried out?

Commercial fishing activity includes various fishing methods, such as bottom trawling, purse seining, and potting, among many others.

Where does the activity happen?

Our analysis is primarily concerned with commercial fishing activity in the proposed protection areas. To provide useful comparisons, the analysis also considers total landings for quota management areas that include the Hauraki Gulf, and all activity, anywhere within New Zealand and in any fish stock, of those permit holders who operate within the proposed protected areas (see “Identifying wider sets of fishing activity as comparators to provide baselines” on page 15).

When has the activity happened?

There are two main management periods for New Zealand fisheries, April–March and October–September, as defined by the Fisheries Act 1996.

The two most recent fishing years for each of those two management periods are used for this study. This is because the electronic reporting and global position requirements for commercial fishers was



rolled out in stages across all remaining commercial fisheries during 2019 and represents “best available” data for the study. Previous years would see a difference in reporting requirements.

This study used the 2020/21 and 2021/22 fishing years for April–March, and the 2019/20 and 2020/21 fishing years for October–September. Some permit holders also may not be represented in both fishing years.

The proposed protected areas in the Hauraki Gulf

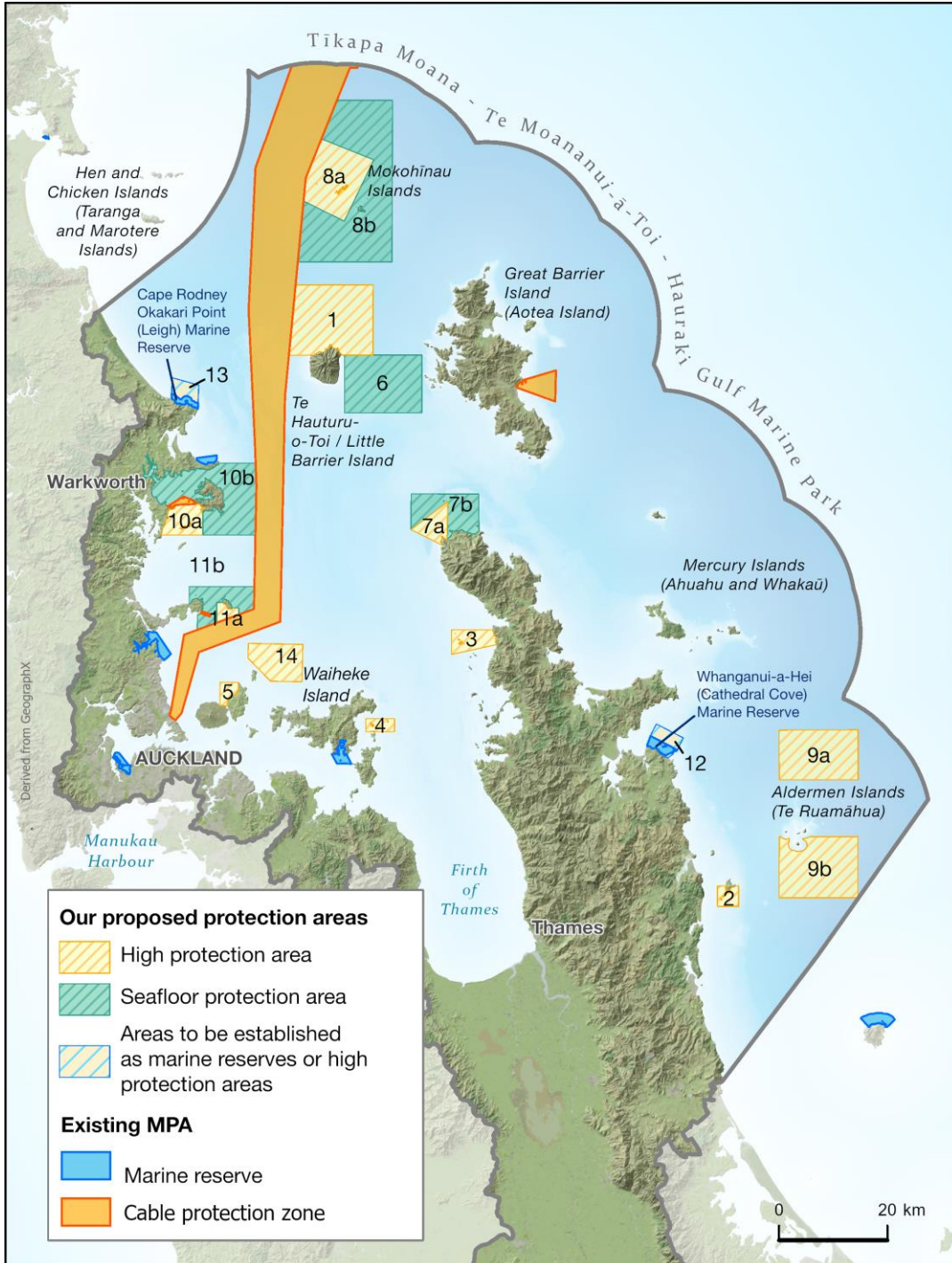
“Revitalising the Gulf: Government action on the Sea Change Plan” proposes a set of new or extended protection areas – see Table 3 and Figure 1.

Table 3: Proposed new areas for protection in the Hauraki Gulf

| Map reference | Site | Type of protection proposed | Area km ² |
|---------------|--|--|----------------------|
| 1 | Te Hauturu-o-Toi / Little Barrier Island | High Protection Area | 195.25 |
| 2 | Slipper Island / Whakahau | High Protection Area | 13.31 |
| 3 | Motukawao Islands | High Protection Area | 29.11 |
| 4 | Rotoroa Island | High Protection Area | 12.35 |
| 5 | Rangitoto and Motutapu | High Protection Area | 10.60 |
| 6 | Craddock Channel | Seafloor Protection Area | 151.99 |
| 7a | Cape Colville | High Protection Area | 26.61 |
| 7b | Cape Colville | Seafloor Protection Area | 68.03 |
| 8a | Mokohinau Islands | High Protection Area | 118.24 |
| 8b | Mokohinau Islands | Seafloor Protection Area | 325.99 |
| 9a | Aldermen Islands / Te Ruamaahu (north) | High Protection Area | 133.75 |
| 9b | Aldermen Islands / Te Ruamaahu (south) | High Protection Area | 154.85 |
| 10a | Kawau Bay | High Protection Area | 40.93 |
| 10b | Kawau Bay | Seafloor Protection Area | 158.38 |
| 11a | Tiritiri Matangi | High Protection Area | 9.49 |
| 11b | Tiritiri Matangi | Seafloor Protection Area | 53.68 |
| 12 | Whanganui-a-Hei (Cathedral Cove) Marine Reserve | High Protection Area or Marine Reserve | 14.61 |
| 13 | Cape Rodney-Okakari Point (Leigh) Marine Reserve | High Protection Area or Marine Reserve | 15.17 |
| 14 | Ōtata / Noises Islands | High Protection Area | 59.51 |



Figure 1: Locations of the protected area proposals



Source: Department of Conservation, 2022.



Identifying wider sets of fishing activity as comparators to provide baselines

Some of a permit holder's catch may come from outside the proposed protected areas, and the quota management area for a particular fish stock may be larger than just the Hauraki Gulf. Accordingly, we identified two wider sets of fishing activity to provide baselines for assessing the levels of commercial fishing activity within the proposed protected areas:

- Total landings for quota management areas that contain some or all of the Hauraki Gulf
- All activity, anywhere within New Zealand and in any fish stock, of those permit holders who operate within the proposed protected areas.

We compared the level of commercial fishing activity within the proposed protected areas to those two wider sets of activity. This allows us to answer two key questions:

- 1 What proportion of each fish stock caught within the proposed protected area boundaries could potentially be displaced?
- 2 What is the potential impact on each permit holder if they can no longer fish within the proposed protected areas, relative to their overall commercial fishing activity?

The first comparator set of activity: Total landings for quota management areas that contain the Hauraki Gulf

We analysed the commercial fishing activity, for any fish stock, in quota management areas that include the Hauraki Gulf.

In the case of some quota management areas, such as rock lobster management area 1 (CRA1 – see Figure 2 below), the Hauraki Gulf accounts for only a small portion of that area, and we therefore did not include those quota management areas in our comparator activity set.

If we studied only the fish stocks that are caught within the proposed protected area boundaries, this would provide an incomplete view of the total level of commercial fishing activity that may include the Hauraki Gulf. An example of the differences between quota management area boundaries is shown in Figure 2.

Another reason for using the Hauraki Gulf as the central location for this first comparator set of fishing activity is that we assumed that it is more economically efficient for a permit holder to shift their effort to other fishing locations within a quota management area than it is to source new quota shares or annual catch entitlements for other quota management areas.



The second comparator set of activity: All activity, anywhere within New Zealand and for any fish stock, of those permit holders who operate within the proposed protected areas

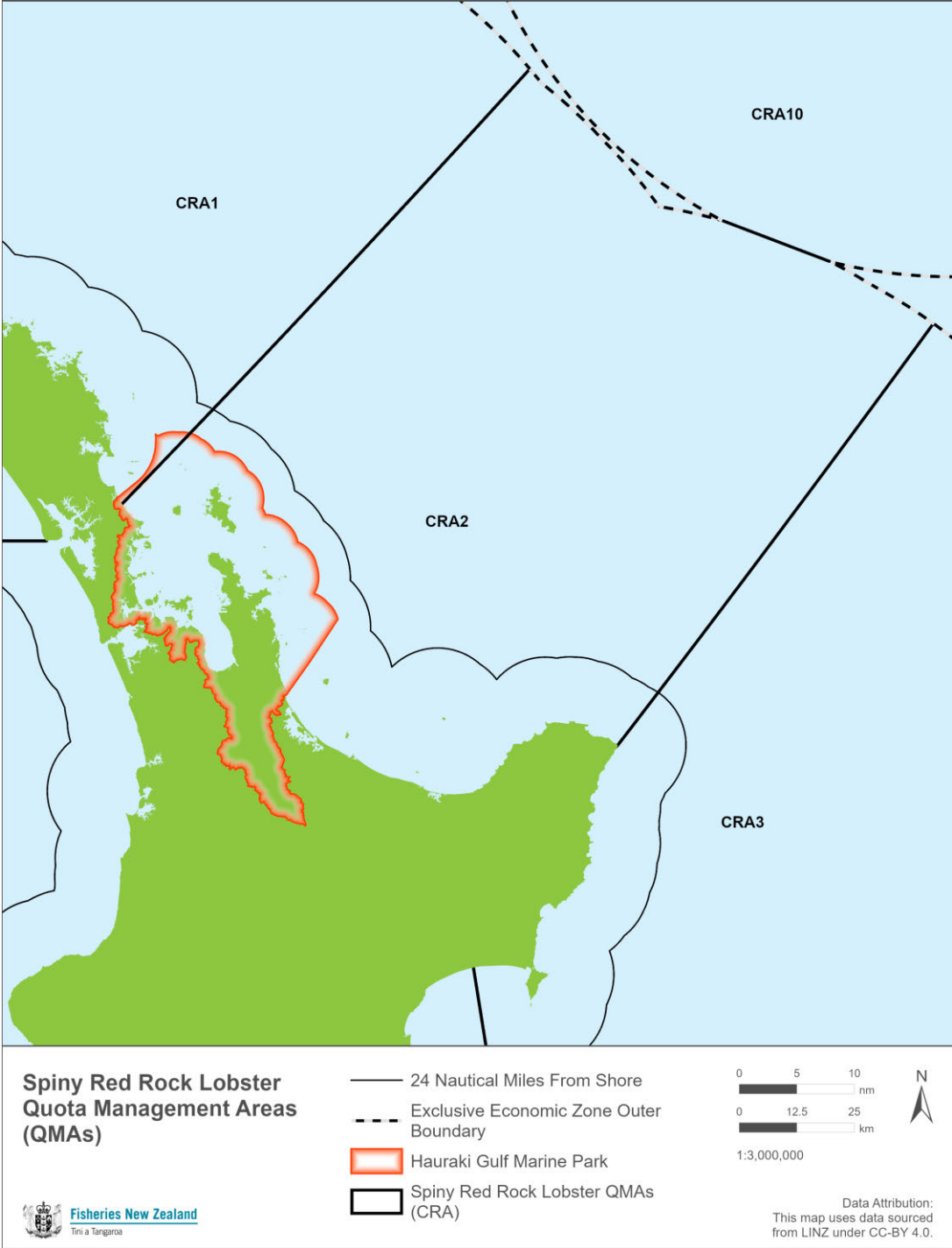
We analysed the commercial fishing activity of permit holders that have fished inside the proposed protected areas in any of the fishing years. This included each permit holder's total activity across all quota management areas and in any fish stock. Permit holders are not restricted to fishing only in the Hauraki Gulf or within the proposed protected areas boundaries.

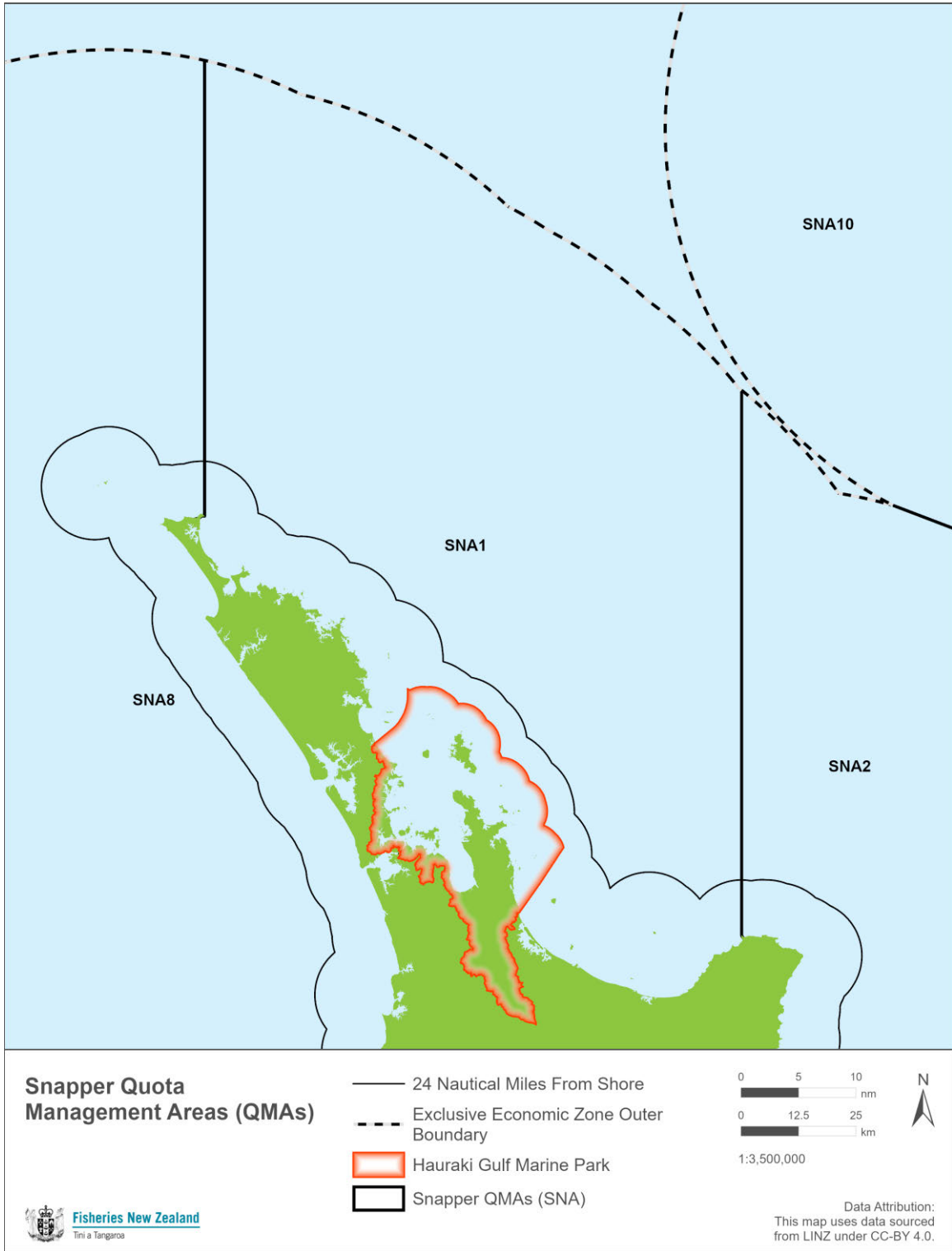
Commercial catch activity can also have seasonal variations, where some permit holders operate in different quota management areas across New Zealand's Exclusive Economic Zone at different times of the year.

By doing this, we are able to estimate the proportion of each permit holder's activity that occurs within the proposed protected areas.



Figure 2: Spatial differences across quota management areas





Source: Ministry for Primary Industries, Fisheries New Zealand



Data and assumptions

All datasets have been provided to MartinJenkins by Fisheries New Zealand/the Ministry for Primary Industries (MPI). The analysis has been performed using datasets on port prices, export prices, annual catch entitlement (ACE) prices, total allowable catch, fish stock, species, permit holder, fishing method, location of fishing activity, total landings/monthly harvest returns, and reported catch effort.

A list of the measures used in this report, and their caveats, is as follows.

Commercial catch information

We have compared the level of commercial fishing activity to overall landings using catch effort information and monthly harvest returns. Catch effort utilises both electronic reporting and global position reporting to provide an indication of the spatial position, fishing method, time, permit holder, and fish stocks included in the activity. However, this information does not capture the total amount of fish that is caught by permit holders. Monthly harvest returns provide an accurate description of the total amount of fish that is caught by a permit holder within a month and is used to balance total catch with total ACE, but does not include detailed information such as global positioning or fishing method.

The fishing effort estimates within the proposed protected areas have been generated using a combination of electronic reporting and global positioning reporting vessel positions by MPI and provided to MartinJenkins. The estimated catch was produced by measuring the proportion of a fishing event inside an area, then applying that proportion to the reported catch from the event. Only fish stocks within the Quota Management System are included within this study.

The process that MPI used to produce these estimates is as follows:

- 1 map the fishing effort for the 2019/20 and 2020/21 October fishing years and the 2020/21 and 2021/22 April fishing years
- 2 intersect the effort polygons with areas of interest
- 3 calculate the area inside the areas of interest vs. the total mapped area for each event
- 4 use the proportion of the area inside the areas of interest to apportion the estimated catch for each event (for example, if 50% of the event area was inside the areas of interest, then 50% of the catch from that event was impacted)
- 5 tally up the estimated catch totals
- 6 use the estimated catch totals to estimate the proportion of a fisher's landings which originated inside the areas of interest.

These estimates are then compared to the total amount of fish caught by permit holders using the monthly harvest returns.

It is important to note that the commercial fishing data used within our analysis may be influenced by challenges arising from the COVID-19 pandemic and the associated alert level restrictions. Although commercial fishing was permitted to continue over the last couple of years, some disruptions to supply chains and fishing capacity may be present. We have not analysed the associated impacts and challenges due to the COVID-19 pandemic within this report.



ACE prices per fish stock

- ACE prices are calculated by FishServe and are derived from the total number of ACE transfers in the selected periods. The prices associated are presented as:
 - The lowest price paid for an ACE transfer included in the price calculations.
 - The average price paid for an ACE transfer included in the price calculations.
 - The highest price paid for an ACE transfer included in the price calculations.

The average price has been used with our analysis.

- Not all fish stocks have an ACE price and no other price was generated to mitigate this issue. ACE prices are not available where fewer than three ACE transfers are included in a selected reporting period.

Port prices per fish stock

- Not all fishing years and fish stocks have a port price. No other price was generated to mitigate this issue as it was deemed minimal.
- Port prices are an average across all fishing methods and Licenced Fish Receivers, generated by MPI for cost recovery purposes.
- The original purpose of determining the port prices is to create an index for allocation of costs in determining the fish stock levies for fisheries and conservation services. Other parties use port prices for other purposes (such as setting deemed values and commercial revenue estimates). However, these uses are not considered when determining port prices and the reliability of the port price for this purpose has not been determined.
- The annual process of determining the port prices is governed by the Fisheries (Cost Recovery) Rules 2001 (SR 2001/229). A voluntary survey is sent to licensed fish receivers (LFR) whereby the LFR enters the landed price (port price), this price is the price for a particular day and not an average, for example, of the whole year. The fishing method is not included in the survey even though a particular method may receive a higher landed price. The same is true for any onboard processing; any increase in landed price due to onboard processing is ignored.
- Many LFRs do not reply to the survey and there are usually significant gaps in the data from the survey (i.e. no returns for both stocks and species in total).



Market prices per species

- Export prices were used to determine the market price. These were provided at a species level and matched to fish stocks using MPI's concordance list.
- Not all fishing years and species have an export price. Where there was no export price, the port price was used as proxy. Doing so ensures that market prices are not completely discounted where some pricing information exists in the form of a port prices.
- However, as port prices are the landed price for fish between a permit holder and LFR, there is the potential to underestimate the overall market value of fish stocks when using port prices as a proxy for market prices.
- Not all fish is exported, however, this measure is used as a proxy for the retail or wholesale price of fish. This represents the relative value to the overall commercial fishing industry, rather than an accurate description of fish exports.

Greenweight (kgs)

- Greenweight has been provided at the permit holder level for each fish stock, fishing method, and proposed protected area.
- The total greenweight landed for each fish stock has been provided at the fish stock level.
- The total greenweight landed for each permit holder has been provided at the fish stock level, via monthly harvest returns.



THE ANALYSIS

Establishing a baseline: Analysis of commercial fishing activity in all Hauraki Gulf fish stocks

Table 4 below shows total numbers of permit holders and fish stocks for fish stocks with quota management areas that include the Hauraki Gulf, for the last two fishing years for the April and October management periods. These figures form the baseline for assessing the level of commercial fishing activity within each of the proposed protected areas.

The 46 fish stocks included in the management periods are listed in the Appendix to this report.

The number of permit holders is the total number of individual permit holders who have operated across the two-year period. Different permit holders operated across each fishing-year period, which shows variability in the level of commercial fishing activity over time and across the proposed protected areas. For example, 316 permit holders reported catch against the 44 fish stocks in the October 2019/20 fishing year, compared to 288 permit holders in the October 2020/21 fishing year.

However, although there was a fall in the number of permit holders across the two October years, the total number of fish stocks caught did not change.

Table 4: Commercial fishing activity for Hauraki Gulf fish stocks

| Fishing year | Number of permit holders | Number of fish stocks |
|------------------------------|--------------------------|-----------------------|
| 2020-2021 (Apr) Fishing Year | 33 | 2 |
| 2021-2022 (Apr) Fishing Year | 38 | 2 |
| Apr Total | 43 | 2 |
| 2019-2020 (Oct) Fishing Year | 316 | 44 |
| 2020-2021 (Oct) Fishing Year | 288 | 44 |
| Oct Total | 343 | 44 |

Table 5 and Table 6 show the level of commercial fishing activity for the top 10 fish stocks. The results show that snapper made up 44% and 42% of the total port price revenue generated across the October fish stocks for the two October fishing years. For the April fish stocks, only two were identified as containing the Hauraki Gulf – rock lobster and pack horse lobster.⁴

⁴ SCC1B was removed from the analysis due to issues with ACE prices and port prices.



Table 5: Hauraki Gulf commercial fishing activity by fish stock, top 10 and other, October fishing years

| Oct 2019 – Sep 2020 | Fish stock | Species name | Greenweight (tonnes) | ACE revenue (\$m) | Port revenue (\$m) | Market revenue (\$m) |
|---------------------|------------|---------------|----------------------|-------------------|--------------------|----------------------|
| 1 | SNA1 | Snapper | 4,462 | \$17.8 | \$26.1 | \$48.2 |
| 2 | GMU1 | Grey Mullet | 821 | \$0.5 | \$3.9 | \$8.4 |
| 3 | FLA1 | Flats | 405 | \$0.4 | \$3.0 | \$3.2 |
| 4 | EMA1 | Blue Mackerel | 7,169 | \$0.6 | \$2.9 | \$14.2 |
| 5 | TAR1 | Tarakihi | 822 | \$0.0 | \$2.4 | \$5.6 |
| 6 | SCI1 | Scampi | 123 | \$2.0 | \$2.1 | \$5.4 |
| 7 | JMA1 | Jack Mackerel | 6,478 | \$0.5 | \$2.0 | \$12.8 |
| 8 | GUR1 | Gurnard | 745 | \$0.7 | \$1.9 | \$7.6 |
| 9 | TRE1 | Trevally | 1,300 | \$0.0 | \$1.8 | \$5.7 |
| 10 | BAR1 | Barracouta | 5,603 | \$0.5 | \$1.7 | \$12.7 |
| | All Others | | 4,790 | \$3.2 | \$11.1 | \$41.3 |
| Total | | | 32,717 | \$26.1 | \$59.0 | \$165.1 |

| Oct 2020 – Sep 2021 | Fish stock | Species name | Greenweight (tonnes) | ACE revenue (\$m) | Port revenue (\$m) | Market revenue (\$m) |
|---------------------|------------|---------------|----------------------|-------------------|--------------------|----------------------|
| 1 | SNA1 | Snapper | 4,579 | \$18.0 | \$28.1 | \$49.7 |
| 2 | GMU1 | Grey Mullet | 829 | \$0.5 | \$4.0 | \$8.1 |
| 3 | FLA1 | Flats | 392 | \$0.3 | \$3.9 | \$2.8 |
| 4 | EMA1 | Blue Mackerel | 8,002 | \$0.7 | \$3.6 | \$17.2 |
| 5 | BAR1 | Barracouta | 8,918 | \$0.8 | \$2.7 | \$21.9 |
| 6 | TRE1 | Trevally | 1,664 | \$0.0 | \$2.6 | \$6.2 |
| 7 | TAR1 | Tarakihi | 919 | \$0.0 | \$2.5 | \$5.0 |
| 8 | GUR1 | Gurnard | 847 | \$0.9 | \$2.5 | \$9.1 |



| | | | | | | |
|--------------|------------|-----------|---------------|---------------|---------------|----------------|
| 9 | SCI1 | Scampi | 127 | \$1.7 | \$2.2 | \$6.1 |
| 10 | JDO1 | John Dory | 287 | \$0.2 | \$1.7 | \$3.7 |
| | All Others | | 11,416 | \$3.1 | \$12.6 | \$53.3 |
| Total | | | 37,979 | \$26.2 | \$66.3 | \$183.3 |

Table 6: Commercial fishing activity by fish stock, April fishing years

| Reporting Period | Fish stock | Species name | Greenweight (tonnes) | ACE revenue (\$m) | Port revenue (\$m) | Market revenue (\$m) |
|---------------------|------------|------------------------|----------------------|-------------------|--------------------|----------------------|
| Apr 2020 – Mar 2021 | CRA2 | Rock Lobster | 83.9 | \$2.62 | \$6.71 | \$9.53 |
| | PHC1 | Packhorse Rock Lobster | 40.1 | \$0.98 | \$2.13 | \$4.55 |
| Total | | | 124.0 | \$3.60 | \$8.83 | \$14.08 |

| Reporting Period | Fish stock | Species name | Greenweight (tonnes) | ACE revenue (\$m) | Port revenue (\$m) | Market revenue (\$m) |
|---------------------|------------|------------------------|----------------------|-------------------|--------------------|----------------------|
| Apr 2021 – Mar 2022 | CRA2 | Rock Lobster | 79.7 | \$2.73 | \$5.44 | \$10.48 |
| | PHC1 | Packhorse Rock Lobster | 48.8 | \$1.27 | \$2.32 | \$6.42 |
| Total | | | 128.6 | \$4.00 | \$7.76 | \$16.90 |

Although there were fewer permit holders operating in the 2020/21 October fishing year (288 compared with 316 the previous year), a greater amount of fish (greenweight) was landed (38,000 tonnes compared with 32,700 tonnes), generating higher port price revenue (\$66.3 million compared with \$59.0 million) across the same total number of fish stocks (44).

This again shows both the variability and the seasonality of the commercial fishing activity within the quota management areas that were analysed, as there were fewer permit holders, catching more fish, and generating higher revenues in the second of the two October fishing years. However, that is not the case for the April fishing years, which had a higher number of permit holders operating and higher greenweight catches. Total port price revenue decreased but market revenue increased, and this is due to decreases in the port price and increases in the export or market price for each year.



Comparing activity in the proposed protected areas to activity for all Hauraki Gulf fish stocks

Table 7 below shows the level of commercial fishing activity in the proposed protected areas in relation to activity in all quota management areas that encompass the Hauraki Gulf.

For the October stocks, the seasonality of the fishing activity becomes evident once more, with an almost halving of the total greenweight caught within the proposed protected areas, but an increase in the port price revenue generated. This is because of a decrease in the catch of fish stocks with a relatively lower port price value such as blue mackerel in EMA1 (between \$0.40/kg to \$0.46/kg) and an increase in higher value stocks such as snapper in SNA1 (between \$5.86/kg to \$6.13/kg) across the two fishing years.

Table 7 also shows that, although the greenweight activity within the proposed protected areas decreased between the two fishing years, total greenweight activity increased across all fish stocks in the wider study area. This suggests opportunities to transfer fishing effort to areas outside the proposed protected areas.

Table 7: Commercial fishing activity in proposed protected area vs Hauraki Gulf fish stocks

| October years | Values | 2019-2020 (Oct) Fishing Year | 2020-2021 (Oct) Fishing Year |
|-------------------------------------|----------------------------|---------------------------------|---------------------------------|
| Proposed protected areas | Greenweight (tonnes) | 906.07 | 530.23 |
| | Port price revenue (\$m) | 1.15 | 1.37 |
| | Market price revenue (\$m) | 3.91 | 4.59 |
| All Hauraki Gulf fish stocks | Greenweight (tonnes) | 32,716.85 | 37,979.49 |
| | Port price revenue (\$m) | 59.02 | 66.31 |
| | Market price revenue (\$m) | 165.12 | 183.34 |
| April years | Values | 2020-2021 (Apr) Fishing Year | 2021-2022 (Apr) Fishing Year |
| Proposed protected areas | Greenweight (tonnes) | 2.96 | 4.47 |
| | Port price revenue (\$m) | 0.23 | 0.30 |
| | Market price revenue (\$m) | 0.34 | 0.59 |
| All Hauraki Gulf fish stocks | Greenweight (tonnes) | 124.00 | 128.56 |
| | Port price revenue (\$m) | 8.83 | 7.76 |
| | Market price revenue (\$m) | 14.08 | 16.90 |



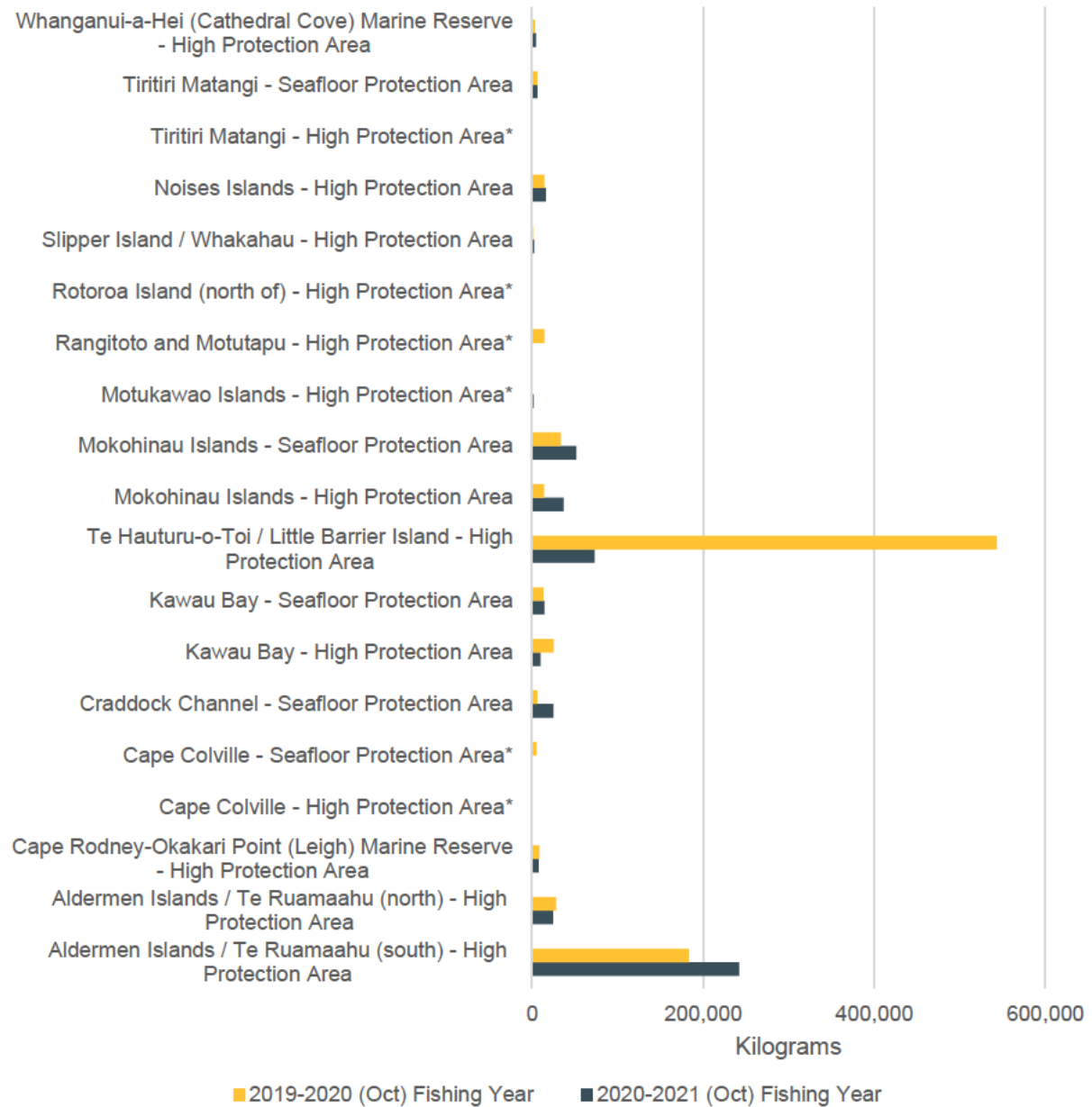
The Te Hauturu-o-Toi / Little Barrier Island – High Protection Area had the highest greenweight commercial fishing activity in three of the four fishing years. The exception was the October 2020/21 year, where almost half the greenweight activity across all of the proposed protected areas occurred in the Aldermen Islands / Te Ruamaahu (south) – High Protection Area. This is shown in Figure 3 and Figure 4.

However, Figure 5 and Figure 6 show the difference in the proportion of commercial fishing activity across the proposed protected areas when considering the relative commercial value of each fish stock caught through the port price revenue generated. Whereas greenweight activity was concentrated within one or two of the proposed protected areas, port price revenue is more spread out.

These sets of figures show that there is a difference between the amount of greenweight caught in an area and the relative commercial value of each fish stock. While a specific area may seem to have a relatively higher impact on commercial fishing activity because more fish is caught than in other areas, we need to consider the value of that fish to the commercial fishing industry in order to get an overall view of that activity.



Figure 3: Total greenweight commercial fishing activity for each proposed protected area, October fishing years



Some information in Figure 3 of this report has been redacted and cannot be released publicly due to commercial sensitivity. It contains low number of commercial fishers operating in the protected areas, and they could be identified from the data in this report. The "*" shows which areas have had either one or both fishing years redacted.

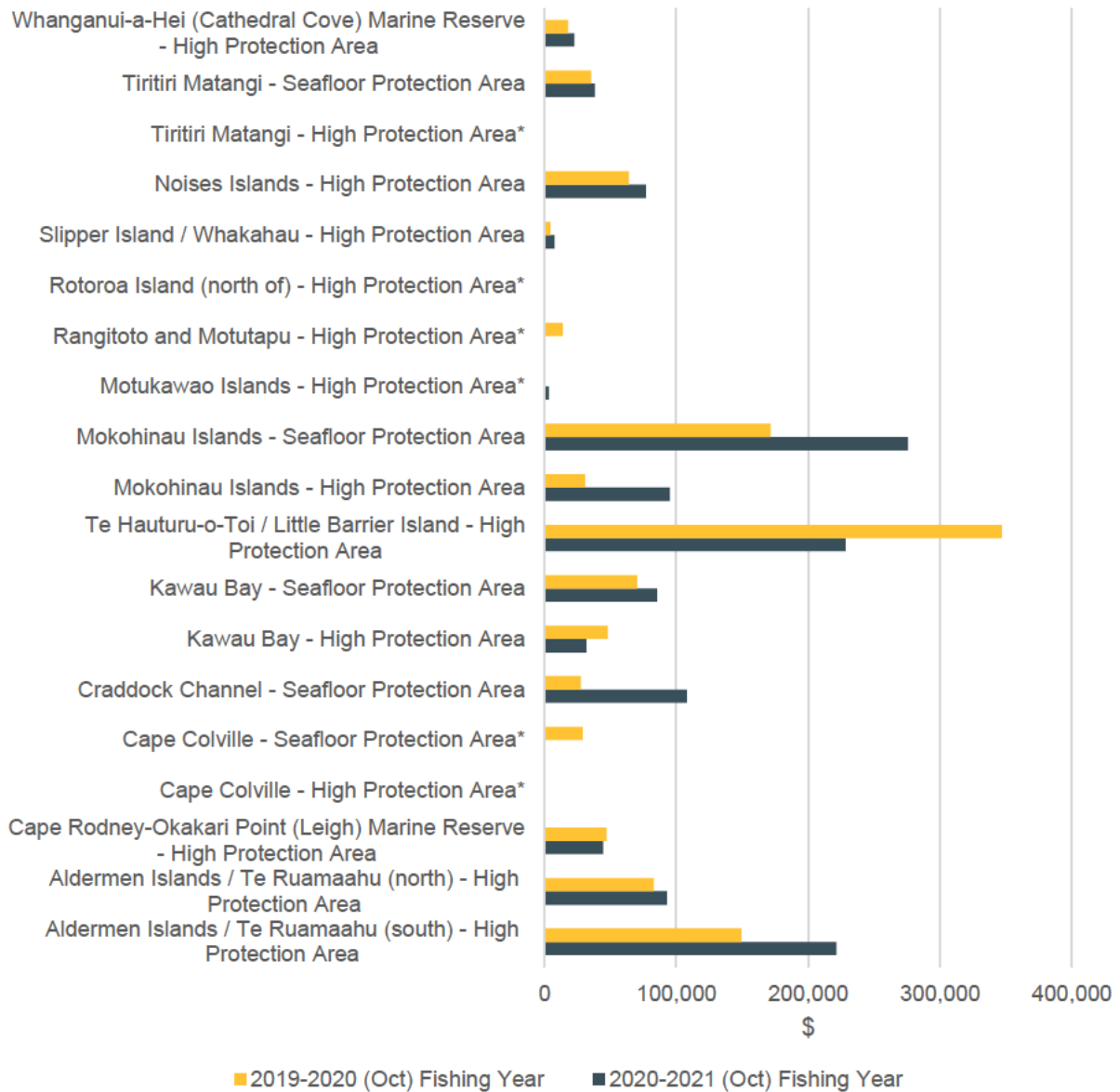


Figure 4: Total greenweight commercial fishing activity for each proposed protected area, April fishing years

Figure 4 of this report cannot be released publicly due to commercial sensitivity. It contains low number of commercial fishers operating in the protected areas, and they could be identified from the data in this report.



Figure 5: Total port price revenue commercial fishing activity for each proposed protected area, October fishing years



Some information in Figure 5 of this report has been redacted and cannot be released publicly due to commercial sensitivity. It contains low number of commercial fishers operating in the protected areas, and they could be identified from the data in this report. The “*” shows which areas have had either one or both fishing years redacted.



Figure 6: Total port price revenue commercial fishing activity for each proposed protected area, April fishing years

Figure 6 of this report cannot be released publicly due to commercial sensitivity. It contains low number of commercial fishers operating in the protected areas, and they could be identified from the data in this report.



Analysis of all fishing by permit holders who fish in the proposed protection areas

The number of permit holders fishing in the proposed areas

The number of individual permit holders fishing in the proposed protected areas varies across fishing years and across the proposed protected areas. This is because a permit holder does not necessarily operate in the same area each year.

For the October fishing years, 40 individual permit holders fished in the proposed protected areas each year. However, a total of 48 permit holders fished in either of the two years, because different individual permit holders fished in different years.

For the April years, the number varies between four and five individual permit holders within the proposed protected areas.

This suggests that permit holders' fishing activity within the proposed protected areas varies across different fishing years.

Table 8: Number of individual permit holders operating in the proposed protected areas, October years

| Number of permit holders | 2019-2020 Oct Fishing Year | 2020-2021 Oct Fishing Year | Total across both years |
|---|----------------------------|----------------------------|-------------------------|
| Aldermen Islands / Te Ruamaahu (south) – High Protection Area | 12 | 12 | 17 |
| Aldermen Islands / Te Ruamaahu (north) – High Protection Area | 9 | 10 | 12 |
| Cape Rodney-Okakari Point (Leigh) Marine Reserve – High Protection Area | 7 | 5 | 8 |
| Cape Colville- High Protection Area | 1 | 1 | 2 |
| Cape Colville – Seafloor Protection Area | 4 | 2 | 5 |
| Craddock Channel – Seafloor Protection Area | 3 | 3 | 3 |
| Kawau Bay – High Protection Area | 10 | 6 | 11 |
| Kawau Bay – Seafloor Protection Area | 4 | 5 | 5 |
| Te Hauturu-o-Toi / Little Barrier Island – High Protection Area | 14 | 14 | 16 |
| Mokohinau Islands – High Protection Area | 5 | 9 | 9 |
| Mokohinau Islands – Seafloor Protection Area | 11 | 13 | 14 |



| Number of permit holders | 2019-2020 Oct Fishing Year | 2020-2021 Oct Fishing Year | Total across both years |
|--|----------------------------|----------------------------|-------------------------|
| Motukawao Islands – High Protection Area | 2 | 3 | 4 |
| Rangitoto and Motutapu – High Protection Area | 3 | 2 | 3 |
| Rotoroa Island (north of) – High Protection Area | 2 | 2 | 3 |
| Slipper Island / Whakahau – High Protection Area | 5 | 7 | 8 |
| Noises Islands – High Protection Area | 6 | 5 | 6 |
| Tiritiri Matangi – High Protection Area | 2 | | 2 |
| Tiritiri Matangi – Seafloor Protection Area | 3 | 3 | 3 |
| Whanganui-a-Hei (Cathedral Cove) Marine Reserve – High Protection Area | 4 | 4 | 6 |
| Total across all proposed protected areas | 40 | 40 | 48 |

Table 9: Number of individual permit holders operating in the proposed protected areas, April years

| Number of permit holders | 2020-2021 Apr Fishing Year | 2021-2022 Apr Fishing Year | Total across both years |
|--|----------------------------|----------------------------|-------------------------|
| Aldermen Islands / Te Ruamaahu (south) - High Protection Area | 1 | 1 | 1 |
| Te Hauturu-o-Toi / Little Barrier Island - High Protection Area | 1 | 3 | 3 |
| Mokohinau Islands - High Protection Area | | 1 | 1 |
| Mokohinau Islands - Seafloor Protection Area | 1 | 1 | 2 |
| Slipper Island / Whakahau - High Protection Area | 1 | 1 | 1 |
| Whanganui-a-Hei (Cathedral Cove) Marine Reserve - High Protection Area | 1 | 1 | 1 |
| Total across all proposed protected areas | 4 | 5 | 5 |



Permit holders' activity, by port price and by greenweight

October fishing years: Activity by port price and by greenweight

Figure 7 and Figure 8 show the port price revenue generated for each permit holder and the percentage of their total greenweight commercial fishing activity which occurred in the proposed protected areas.

For example, in the October 2019/20 fishing year, one permit holder's port price revenue was higher than all others in absolute terms, at just over \$280,000. However, that made up around just 4% of that permit holder's total greenweight activity across all stocks for that fishing year.

These figures show that permit holders vary in how much they rely on the fishing grounds in the proposed protected areas, and that this also varies by fishing year. Although the majority of permit holders generated less than \$50,000 in port price revenue within the proposed protected areas, for different permit holders this represents very different proportions of their total commercial fishing activities.

Figure 7: Permit holders' port price revenue and greenweight percentage, October 2019/20

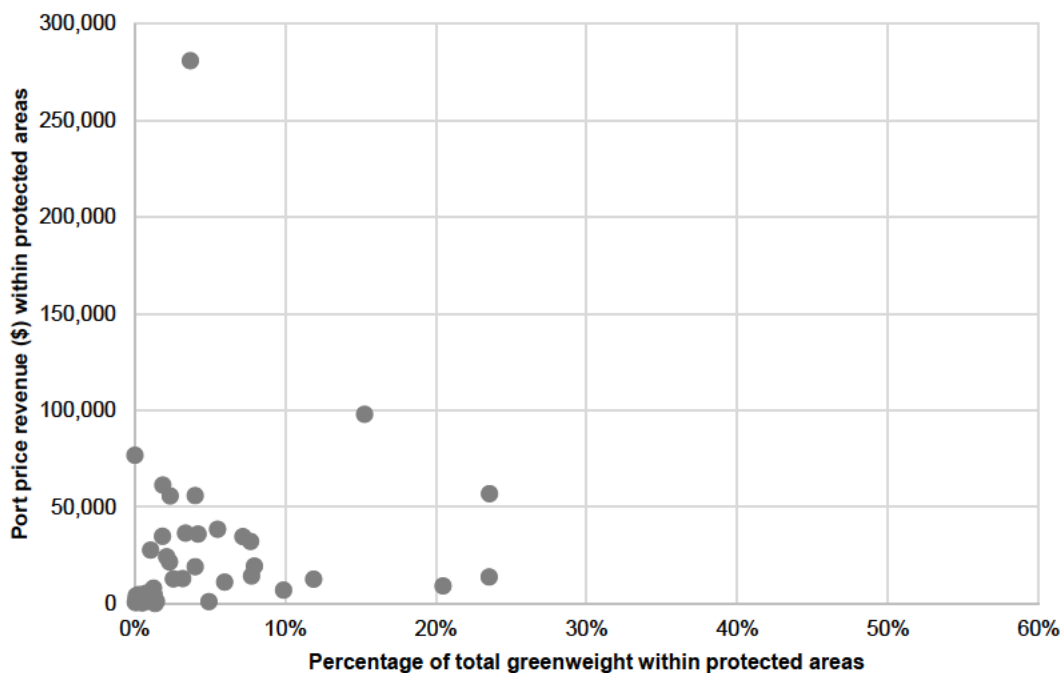
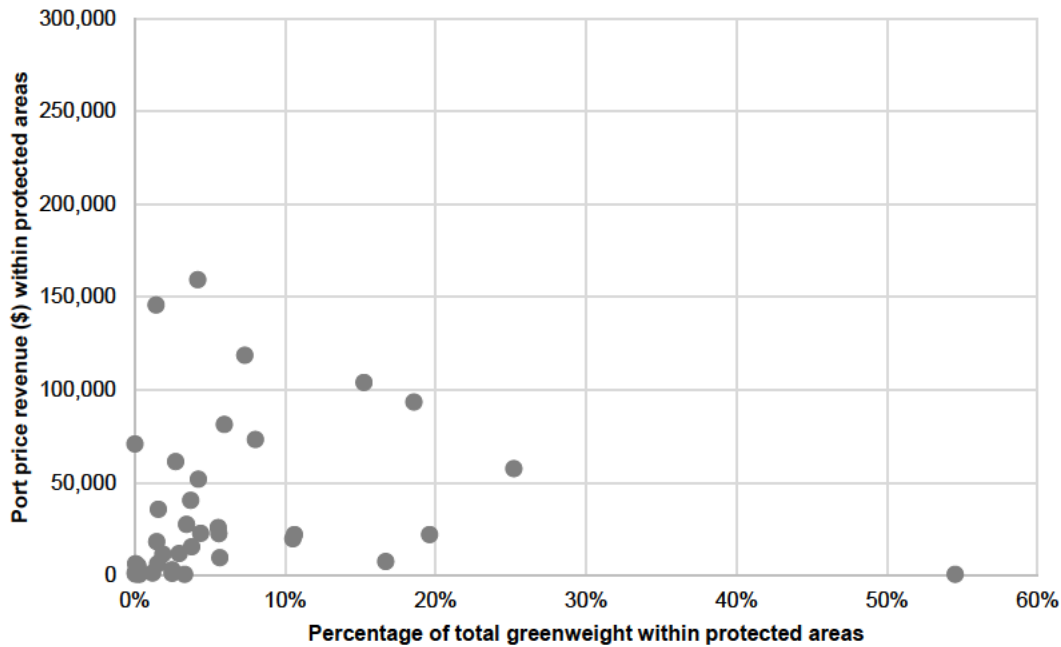


Figure 8: Permit holders' port price revenue and greenweight percentage, October 2020/21



April fishing years: Activity by port price and by greenweight

Figure 9 and Figure 10 show a more even distribution of permit holders' reliance of the commercial fishing activity within the protected areas for the April fishing years.

Where the permit holders were grouped along lower port price revenues for the October fishing years, the April years observed increasing percentages of each permit holder's overall greenweight fishing activity in line with increases in port price revenue. This suggests that there is a higher reliance on the proposed protected areas for some permit holders and their commercial fishing activity.



Figure 9: Permit holders' port price revenue and greenweight percentage, April 2020/21

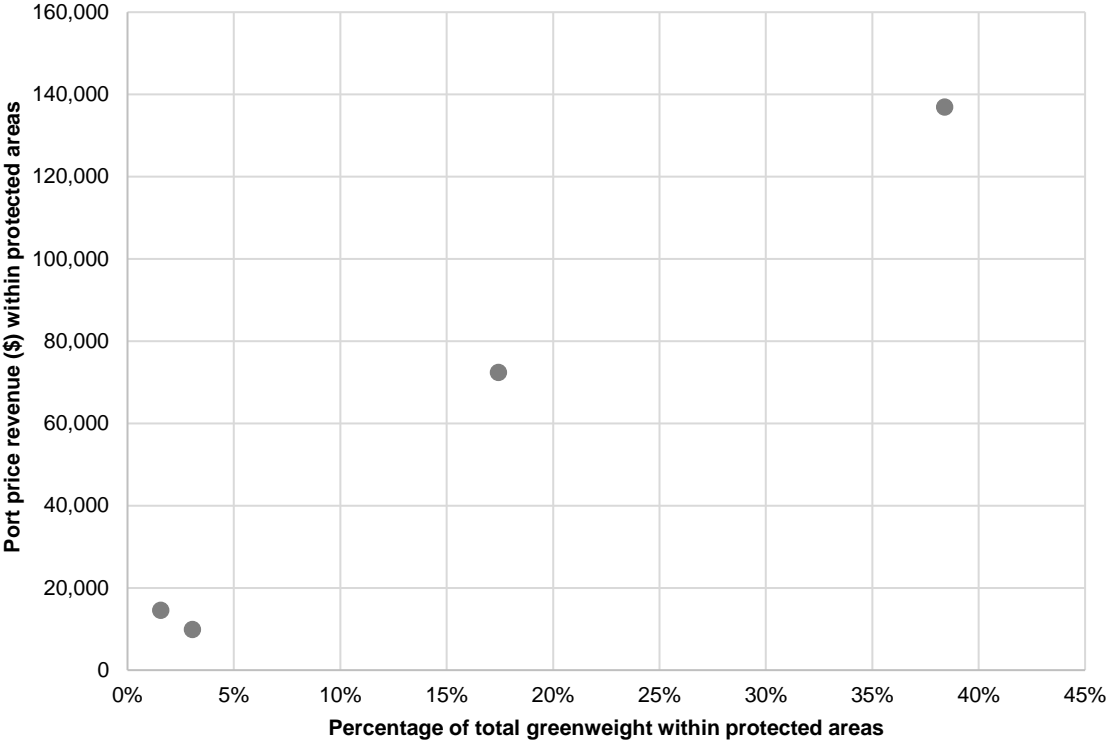
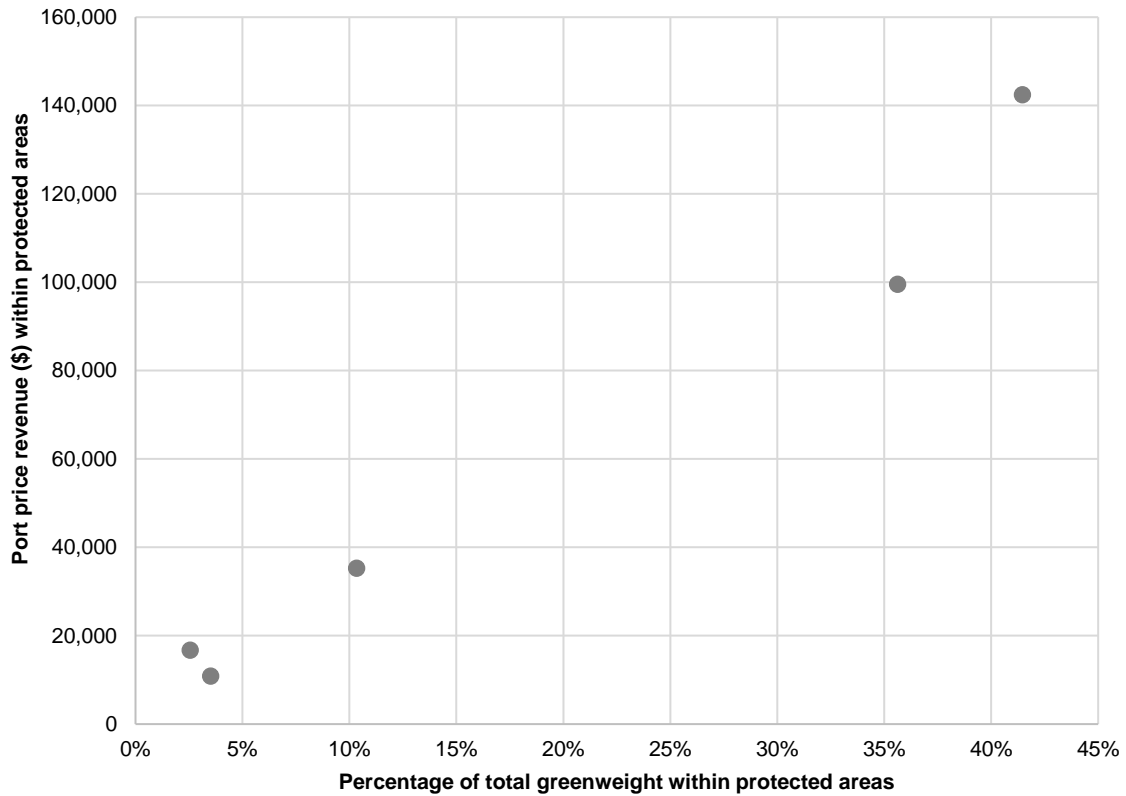


Figure 10: Permit holders' port price revenue and greenweight percentage, April 2021/22



Analysis of fishing activity in the proposed areas by fish stock

This section provides context for understanding the relative importance of the proposed protected areas to the commercial fishing industry for each fish stock. This is done by estimating the level of commercial fishing within the proposed protected areas and comparing this to the activity in other areas not being proposed for protection.

For each year, we compared the amount of commercial fishing activity for each fish stock within the proposed areas to total landings for that fish stock across all permit holders. For this purpose, the total landings were capped at the total available ACE.

In the absence of retail price data we used export prices to show the respective market value (market price revenue) of each fish stock.

Overall, 27 October fish stocks and two April fish stocks were caught in the proposed protected areas during the two fishing years studied.



October fishing years: Analysing activity in the proposed areas by fish stock

The significance of the proposed protected areas for commercial fishing activity varies by fishing year and fish stock.

Across the October fishing years, snapper (SNA1), kina (SUR1B), and blue mackerel (EMA1) generated the highest market price revenue within the proposed protected areas.

The SNA1 catch within the proposed protected areas amounted to approximately 2.6% and 3.4% of total landings, respectively, for the 2019/20 and 2020/21 fishing years. For blue mackerel in EMA1, this proportion is higher at 7.2% for the 2019/20 year and lower at 2.7%, for the 2020/21 year.

Table 10: Market price revenue and proportion of total greenweight from within proposed protected areas, October years

| Species name | Fish stock | Market price revenue (\$) | | Proportion of total greenweight landed (capped at total available annual catch entitlement) | |
|---------------|------------|------------------------------|------------------------------|---|------------------------------|
| | | 2019-2020 (Oct) Fishing Year | 2020-2021 (Oct) Fishing Year | 2019-2020 (Oct) Fishing Year | 2020-2021 (Oct) Fishing Year |
| Barracouta | BAR1 | * | * | * | * |
| Blue Cod | BCO1 | - | * | - | * |
| Blue Mackerel | EMA1 | * | * | * | * |
| Frostfish | FRO1 | * | * | * | * |
| Grey Mullet | GMU1 | * | 31,879 | * | 0.4% |
| Ghost Shark | GSH1 | * | * | * | * |
| Gurnard | GUR1 | 25,817 | 47,148 | 0.3% | 0.5% |
| Hāpuku & Bass | HPB1 | * | * | * | * |
| John Dory | JDO1 | 125,683 | 166,109 | 3.7% | 4.5% |
| Jack Mackerel | JMA1 | 330,238 | 51,573 | 2.6% | 0.4% |
| Kahawai | KAH1 | 47,674 | 34,653 | 2.9% | 2.4% |
| Kingfish | KIN1 | 10,625 | 13,340 | 1.9% | 2.0% |
| Leatherjacket | LEA1 | * | 3,896 | * | 2.5% |
| Ling | LIN1 | * | - | * | - |
| Parore | PAR1 | * | * | * | * |
| Pilchard | PIL1 | * | - | * | - |
| Pōrae | POR1 | - | 2,756 | - | 1.7% |
| Rough Skate | RSK1 | * | - | * | - |
| Red Snapper | RSN1 | * | 29,607 | * | 12.1% |
| School Shark | SCH1 | 39,056 | 49,686 | 0.6% | 0.8% |



| | | | | | |
|-----------|-------|-----------|-----------|------|------|
| Gemfish | SKI1 | * | * | * | * |
| Snapper | SNA1 | 1,257,131 | 1,682,150 | 2.6% | 3.4% |
| Sea Perch | SPE1 | - | * | - | * |
| Rig | SPO1 | 35,973 | 28,915 | 2.3% | 1.6% |
| Kina | SUR1B | * | * | * | * |
| Tarakihi | TAR1 | 42,728 | 28,819 | 0.8% | 0.6% |
| Trevally | TRE1 | 108,635 | 161,452 | 1.9% | 2.6% |

* Data cannot be published due to commercial sensitivity. It displays catch and revenue information related to fewer than three permit holders.

April fishing years: Analysing activity in the proposed areas by fish stock

The permit holder analysis for the April years in the earlier section showed an increasing proportion of each permit holder's fishing activity coming from within the proposed protected areas. However, this activity represents between 3.4% and 5.6% of total greenweight landed for rock lobster in the CRA2 management area and 0.3% for packhorse lobster in the PHC1 management area across the two April fishing years.

For fish stocks in the April fishing years, rock lobster represents almost all the commercial fishing activity generated within the proposed protected areas. Commercial fishing activity is, therefore, geared more towards rock lobster for the April year permit holders.

That finding helps to shed light on permit holders' ability to shift their fishing effort to areas not being proposed for protection, with approximately 95% of rock lobster in CRA2 not being caught within the proposed protected areas.

Table 11: Market price revenue and proportion of total greenweight from within proposed protected areas, April years

| Species name | Fish stock | Market price revenue (\$) | | Proportion of total greenweight landed confined to total available ACE | |
|------------------------|------------|------------------------------|------------------------------|--|------------------------------|
| | | 2020-2021 (Apr) Fishing Year | 2021-2022 (Apr) Fishing Year | 2019-2020 (Oct) Fishing Year | 2020-2021 (Oct) Fishing Year |
| Rock Lobster | CRA2 | 323,252 | 586,910 | 3.4% | 5.6% |
| Packhorse Rock Lobster | PHC1 | * | - | * | - |

* Data cannot be published due to commercial sensitivity. It displays catch and revenue information related to fewer than three permit holders.



Analysis of fishing in the proposed areas by fishing method

The marine protection proposals in the “Revitalising the Gulf” strategy designate each proposed protected area as either a High Protection Area or a Seafloor Protection Area, with different restrictions on which fishing methods can be used in the relevant area.

This section sets out in what proportions the different fishing methods are used in the proposed protected areas.

October fishing years: Analysis of activity by fishing method

A number of different fishing methods are used by permit holders within the proposed protected areas and across the different fish stocks.

Figure 11 and Figure 12 show the use of each method in terms of greenweight and port price revenue. Across all the proposed protected areas, most of the activity by greenweight involves the purse seine (PS) method. The greenweight catch by purse seine was higher in the first October fishing year than in the second, and that difference can mostly be attributed to the difference in blue mackerel catch between those two years (see Table 10).

However, the port price revenue generated within the proposed protected areas is more spread out across the fishing methods compared to greenweight activity, because of different port prices for different fish stocks.

A ban on bottom long-line (BLL) or bottom trawling (BT) in the proposed protected areas would not be as restrictive as a ban on PS fishing, in terms of total greenweight. However, in terms of port price revenue, we would expect a ban on BLL or BT to be as or more restrictive than a PS ban.

There has also been a decrease in the use of the PS fishing method, and an increase in the use of most other methods, over the two years. However, this is not enough data to conclude that there has been a shift across the commercial fishing industry in the preferred fishing methods.



Figure 11: Greenweight commercial fishing activity by fishing method inside the proposed protected areas

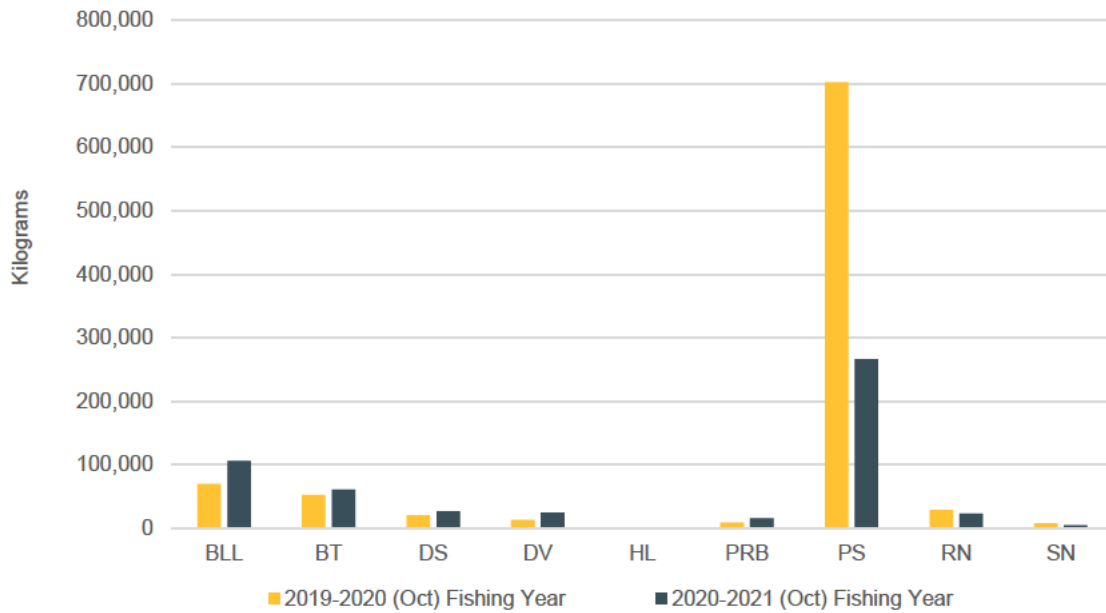
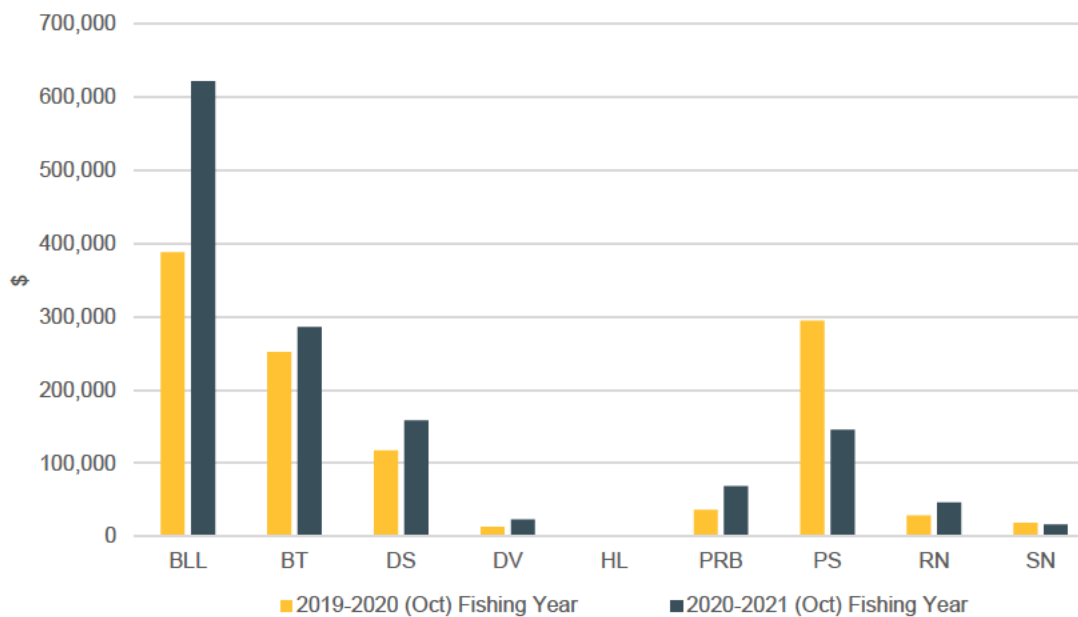


Figure 12: Port price revenue commercial fishing activity by fishing method inside the proposed protected areas



April fishing years: Analysis of activity by fishing method

The fish stocks managed in the April fishing years were caught only by the rock lobster pot (RLP) method. This is expected given that the two fish stocks caught in the proposed protected areas are rock lobster (CRA2) and pack horse lobster (PHC1).

Table 12: Commercial fishing activity by fishing method inside the proposed protected areas, April fishing years

| April fishing year | Fishing method | Greenweight (kgs) | Port price revenue (\$) |
|------------------------------|----------------|-------------------|-------------------------|
| 2020-2021 (Apr) Fishing Year | RLP | 2,963 | 233,678 |
| 2021-2022 (Apr) Fishing Year | RLP | 4,466 | 304,725 |



NEXT STEPS

Stage 2 of this assessment will estimate the economic impact of the proposals

This report on Stage 1 of our economic assessment of the proposed protection areas has focused on determining the current level of commercial fishing activity within those areas, in relation to our comparator sets of fishing activity (total landings for quota management areas that include the Hauraki Gulf; and all activity, anywhere within New Zealand and in any fish stock, of those permit holders who operate within the proposed protected areas).

Stage 2 will assess the economic impacts of the proposed protected areas, based on permit holders being unable to transfer their catch to other areas. We will also evaluate the extent to which this commercial fishing activity will be able to transfer to other areas. These economic impacts will be discussed relative to the overall social, environmental, and economic wellbeing generated by protections, which will be identified with reference to available literature.



APPENDIX 1: QUOTA MANAGEMENT AREAS THAT INCLUDE THE HAURAKI GULF

October-year fish stocks

| Stock | Species name | Total landings reduced to total ACE (kgs) | ACE revenue (\$) | Port revenue (\$) | Market revenue (\$) |
|---------------------|---------------|---|------------------|----------------------|------------------------|
| Oct 2019 - Sep 2020 | | | | | |
| BAR1 | Barracouta | 5,602,569 | \$491,345 | \$1,730,917 | \$12,656,147 |
| BCO1 | Blue Cod | 8,445 | \$6,451 | \$46,201 | \$141,313 |
| BNS1 | Bluenose | 198,800 | \$418,653 | \$1,533,473 | \$2,598,867 |
| BUT1 | Butterfish | 3,194 | \$4,224 | \$15,960 | \$15,960 |
| BWS1 | Blue Shark | 112,288 | \$5,536 | \$14,056 | \$807,509 |
| EMA1 | Blue Mackerel | 7,169,043 | \$597,898 | \$2,885,229 | \$14,192,943 |
| FLA1 | Flats | 404,508 | \$371,338 | \$3,011,147 | \$3,247,277 |
| FRO1 | Frostfish | 46,713 | \$0 | \$31,166 | \$31,166 |
| GAR1 | Garfish | 22,543 | \$23,623 | \$209,678 | \$209,678 |
| GMU1 | Grey Mullet | 820,744 | \$503,362 | \$3,908,635 | \$8,448,509 |
| GSH1 | Ghost Shark | 22,336 | \$3,473 | \$5,717 | \$62,853 |
| GUR1 | Gurnard | 745,065 | \$744,543 | \$1,889,159 | \$7,611,841 |
| HPB1 | Hāpuku & Bass | 225,808 | \$265,257 | \$1,504,913 | \$1,504,913 |
| JDO1 | John Dory | 254,922 | \$218,953 | \$1,615,282 | \$3,369,820 |
| JMA1 | Jack Mackerel | 6,478,329 | \$493,001 | \$2,037,027 | \$12,825,499 |
| KAH1 | Kahawai | 998,014 | \$428,647 | \$721,161 | \$1,657,683 |
| KIN1 | Kingfish | 78,427 | \$218,074 | \$407,363 | \$572,491 |
| LEA1 | Leatherjacket | 78,559 | \$8,037 | \$66,088 | \$297,840 |
| LIN1 | Ling | 371,458 | \$439,101 | \$1,128,953 | \$3,802,381 |
| MAK1 | Mako Shark | 29,598 | \$1,631 | \$8,643 | \$212,851 |
| MOK1 | Moki | 384,259 | \$261,796 | \$808,871 | \$4,002,077 |
| PAR1 | Parore | 60,733 | \$17,552 | \$124,935 | \$124,935 |
| PIL1 | Pilchard | 128,744 | \$0 | \$180,234 | \$180,234 |
| POR1 | Pōrae | 43,147 | \$36,364 | \$170,398 | \$170,398 |
| PRK1 | Prawn Killer | 2 | \$0 | \$7 | \$7 |
| RBM1 | Rays Bream | 218,833 | \$16,281 | \$168,894 | \$168,894 |
| RCO1 | Red Cod | 5,111 | \$581 | \$2,469 | \$16,403 |



| | | | | | |
|----------------------------|--------------------|-----------|--------------|--------------|--------------|
| RSK1 | Rough Skate | 70,830 | \$8,974 | \$14,518 | \$323,335 |
| RSN1 | Red Snapper | 22,553 | \$24,066 | \$154,852 | \$243,641 |
| SCH1 | School Shark | 536,704 | \$532,464 | \$942,161 | \$6,240,433 |
| SCI1 | Scampi | 123,029 | \$1,963,986 | \$2,096,553 | \$5,358,459 |
| SKI1 | Gemfish | 210,245 | \$232,699 | \$416,320 | \$643,001 |
| SNA1 | Snapper | 4,461,628 | \$17,793,865 | \$26,127,071 | \$48,199,180 |
| SPD1 | Spiny Dogfish | 157,810 | | \$91,792 | \$455,876 |
| SPE1 | Sea Perch | 42,197 | | \$23,521 | \$131,703 |
| SPO1 | Rig | 217,513 | | \$449,162 | \$1,564,225 |
| SSK1 | Smooth Skate | 23,958 | | \$5,135 | \$109,367 |
| STA1 | Giant Stargazer | 21,171 | | \$32,872 | \$198,753 |
| SUR1A | Kina | 35,053 | | \$4,475 | \$2,217,824 |
| SUR1B | Kina | 143,693 | | \$137,849 | \$9,091,541 |
| TAR1 | Tarakihi | 821,759 | | \$2,435,072 | \$5,585,036 |
| TRE1 | Trevally | 1,300,458 | | \$1,816,382 | \$5,675,634 |
| WAR1 | Common Warehou | 3,031 | | \$4,296 | \$16,909 |
| YEM1 | Yellow-eyed Mullet | 13,027 | | \$45,251 | \$134,096 |
| Oct 2020 - Sep 2021 | | | | | |
| BAR1 | Barracouta | 8,917,862 | \$812,417 | \$2,683,773 | \$21,916,847 |
| BCO1 | Blue Cod | 8,200 | \$5,131 | \$49,382 | \$217,355 |
| BNS1 | Bluenose | 182,949 | \$325,174 | \$1,400,767 | \$2,367,391 |
| BUT1 | Butterfish | 1,551 | \$1,946 | \$7,750 | \$7,750 |
| BWS1 | Blue Shark | 93,587 | \$3,762 | \$11,715 | \$746,793 |
| EMA1 | Blue Mackerel | 8,002,034 | \$678,572 | \$3,622,148 | \$17,208,302 |
| FLA1 | Flats | 392,122 | \$305,816 | \$3,856,668 | \$2,831,329 |
| FRO1 | Frostfish | 43,405 | \$1,129 | \$21,683 | \$21,683 |
| GAR1 | Garfish | 13,652 | \$11,937 | \$145,319 | \$145,319 |
| GMU1 | Grey Mullet | 829,012 | \$496,993 | \$3,953,634 | \$8,093,361 |
| GSH1 | Ghost Shark | 22,146 | \$3,388 | \$11,781 | \$46,014 |
| GUR1 | Gurnard | 846,795 | \$851,452 | \$2,480,858 | \$9,105,344 |
| HPB1 | Hāpuku & Bass | 180,416 | \$204,574 | \$1,469,480 | \$1,469,480 |
| JDO1 | John Dory | 286,560 | \$243,547 | \$1,664,131 | \$3,720,625 |
| JMA1 | Jack Mackerel | 6,776,884 | \$412,712 | \$1,513,562 | \$14,573,628 |
| KAH1 | Kahawai | 1,016,792 | \$396,651 | \$1,509,684 | \$1,460,611 |
| KIN1 | Kingfish | 89,277 | \$231,040 | \$547,091 | \$674,541 |
| LEA1 | Leatherjacket | 64,233 | \$6,584 | \$48,892 | \$157,258 |
| LIN1 | Ling | 318,876 | \$361,159 | \$1,002,339 | \$2,765,938 |
| MAK1 | Mako Shark | 29,166 | \$1,665 | \$8,516 | \$232,735 |
| MOK1 | Moki | 280,084 | \$218,718 | \$664,161 | \$3,580,628 |



| | | | | | |
|-------|--------------------|-----------|--------------|--------------|--------------|
| PAR1 | Parore | 55,872 | \$14,264 | \$135,891 | \$135,891 |
| PIL1 | Pilchard | 257,337 | \$0 | \$360,256 | \$360,256 |
| POR1 | Pōrae | 40,883 | \$34,260 | \$163,634 | \$163,634 |
| PRK1 | Prawn Killer | 24 | \$0 | \$82 | \$82 |
| RBM1 | Rays Bream | 405,365 | \$23,349 | \$312,857 | \$312,857 |
| RCO1 | Red Cod | 11,240 | \$1,100 | \$7,728 | \$34,701 |
| RSK1 | Rough Skate | 57,336 | \$7,408 | \$26,977 | \$233,985 |
| RSN1 | Red Snapper | 22,560 | \$22,901 | \$210,337 | \$245,114 |
| SCH1 | School Shark | 517,730 | \$528,136 | \$1,063,311 | \$6,334,033 |
| SCI1 | Scampi | 127,429 | \$1,723,885 | \$2,171,534 | \$6,120,848 |
| SKI1 | Gemfish | 252,001 | \$275,765 | \$674,735 | \$657,901 |
| SNA1 | Snapper | 4,578,508 | \$18,018,718 | \$28,085,301 | \$49,745,356 |
| SPD1 | Spiny Dogfish | 147,001 | | \$85,505 | \$318,490 |
| SPE1 | Sea Perch | 40,736 | | \$53,526 | \$88,434 |
| SPO1 | Rig | 233,797 | | \$829,316 | \$1,865,623 |
| SSK1 | Smooth Skate | 23,543 | | \$10,319 | \$96,078 |
| STA1 | Giant Stargazer | 17,946 | | \$36,578 | \$172,534 |
| SUR1A | Kina | 41,919 | | \$63,803 | \$2,975,739 |
| SUR1B | Kina | 150,628 | | \$136,004 | \$10,692,756 |
| TAR1 | Tarakihi | 918,926 | | \$2,519,122 | \$5,046,583 |
| TRE1 | Trevally | 1,664,389 | | \$2,631,546 | \$6,231,839 |
| WAR1 | Common Warehou | 3,047 | | \$4,451 | \$12,652 |
| YEM1 | Yellow-eyed Mullet | 15,665 | | \$54,415 | \$152,932 |

April-year fish stocks

| Stock | Species name | Total landings reduced to total ACE (kgs) | ACE revenue (\$) | Port revenue (\$) | Market revenue (\$) |
|----------------------------|------------------------|---|------------------|-------------------|---------------------|
| Apr 2020 - Mar 2021 | | | | | |
| CRA2 | Rock Lobster | 83,896 | \$2,615,743 | \$6,705,540 | \$9,525,919 |
| PHC1 | Packhorse Rock Lobster | 40,104 | \$982,183 | \$2,125,264 | \$4,553,584 |
| Apr 2021 - Mar 2022 | | | | | |
| CRA2 | Rock Lobster | 79,740 | \$2,728,272 | \$5,441,013 | \$10,479,555 |
| PHC1 | Packhorse Rock Lobster | 48,822 | \$1,273,483 | \$2,320,595 | \$6,416,263 |



Appendix Two

List of areas for marine protection in the Gulf.

| Map reference | Site | Type of protection |
|---------------|--|--|
| 1 | Te Hauturu-o-Toi / Little Barrier Island | High Protection Area |
| 2 | Slipper Island / Whakahau | High Protection Area |
| 3 | Motukawao Islands | High Protection Area |
| 4 | Rotoroa Island | High Protection Area |
| 5 | Rangitoto and Motutapu | High Protection Area |
| 6 | Craddock Channel | Seafloor Protection Area |
| 7a | Cape Colville | High Protection Area |
| 7b | Cape Colville | Seafloor Protection Area |
| 8a | Mokohinau Islands | High Protection Area |
| 8b | Mokohinau Islands | Seafloor Protection Area |
| 9a | Aldermen Islands / Te Ruamāhua (north) | High Protection Area |
| 9b | Aldermen Islands / Te Ruamāhua (south) | High Protection Area |
| 10a | Kawau Bay | High Protection Area |
| 10b | Kawau Bay | Seafloor Protection Area |
| 11a | Tiritiri Matangi | High Protection Area |
| 11b | Tiritiri Matangi | Seafloor Protection Area |
| 12 | Whanganui-A-Hei (Cathedral Cove) Marine Reserve | High Protection Area or marine reserve |
| 13 | Cape Rodney-Okakari Point (Leigh) Marine Reserve | High Protection Area or marine reserve |
| 14 | Ōtata / Noises Islands | High Protection Area |