

Submission to: Hauraki Gulf Fisheries Plan

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About us

1. The Revive Our Gulf project is an initiative to restore the seabed kūtai / green-lipped mussel (*Perna canaliculus*) reefs of Tīkapa Moana / Te Moananui-ā-Toi / Hauraki Gulf.
2. The project vision is a Hauraki Gulf ecosystem with restored mauri / life essence and returned to a state of natural biodiversity and abundance.
3. The project has three core collaborative partners: the Mussel Reef Restoration Trust (MRRT), a NZ registered charity; The Nature Conservancy (TNC), a global environmental organisation; and the University of Auckland (UoA). We work in partnership with iwi / hapū across Tīkapa Moana / Te Moananui-ā-Toi / Hauraki Gulf on mussel reef restoration projects.
4. The opinions expressed in this submission are those of the MRRT backed up by science from the UoA Institute of Marine Science. This submission does not reflect the views of TNC or our Tangata Whenua partners.
5. MRRT is a member of The Hauraki Gulf Alliance – a collaboration of over 90 environmental and recreational fishing organisations – calling for an end to destructive mobile bottom contact fishing methods that impact the seabed in the Hauraki Gulf Marine Park (HGMP).

General comments

6. Broadly, MRRT supports the completion and implementation of the Hauraki Gulf Fisheries Management Plan as an area-based plan prepared under Section 11A of the Fisheries Act.
7. We acknowledge that Māori have commercial, recreational and customary fisheries interests, and support that Mana Whenua exercise their ancestral rights to harvest local kaimoana and participate in the management of ancestral places. We therefore support the Government's efforts to uphold the rights of Tangata Whenua in respect of fisheries.
8. We encourage the Minister to proceed as quickly as possible to implement this much needed plan and note that its success is dependent on the enactment also of the Marine Protection Proposals package to establish new marine and seafloor protection areas in the HGMP.
9. To that end, we urge the Minister of Oceans and Fisheries and Minister of Conservation to prioritise the preparation of the Hauraki Gulf Marine Protection Bill for the HGMP this parliamentary term. As it stands, it appears that this is not a priority and without firm commitments from political parties, risks languishing.

Bottom contact fishing methods, and why they should end in the HGMP

10. The seafloor is a crucial component of the ocean ecosystem as it provides a home for a diverse array of species, such as corals, sponges and shellfish, and plays a significant role in processes such as carbon and nutrient cycling, supporting the overall health of the ocean and the planet. Bottom trawling and dredging harm seafloor ecosystems and habitats. These practices severely disrupt and, in many cases, destroy delicate seafloor

habitats, killing and displacing marine habitat and altering important ecosystem processes.

11. The long-term effects of bottom trawling and dredging on the resilience of benthic habitats are still being studied, but there are indications that it results in permanent changes to the benthos.
12. History teaches us about the impact and true cost of bottom contact fishing. The HGMP once had over 600 sq. km of sub-tidal, soft-sediment mussel reefs which were once a fundamental biogenic habitat for the Gulf. From 1910-1965 these reefs were fished out for consumption, through bottom contact fishing in the form of dredging – until the fishery completely collapsed. Today, sub-tidal kūtai / green-lipped mussel beds are functionally extinct, and the same species is farmed extensively in various places in the Hauraki Gulf. In over 50 years since, these mussel reefs have not replenished on their own.
13. In 2017 the Southern Scallop Fishery (SCA7), which sits around the Nelson region, was fully closed following surveys confirming it had been depleted. It is now entering its sixth year of closure with the MPI website stating that “surveys have shown that scallop densities and recruitment are overall still too low to support sustainable fishing of scallops in SCA7.”
14. In December 2022, the then Minister of Oceans and Fisheries, David Parker, used emergency powers to close the two remaining Coromandel tipa / scallop fisheries near Little Barrier / Te Hauturu-o-Toi and in the Colville channel, because the scallop beds had shown a serious decline.
15. The damaging impacts of dredging, the predominant method used to harvest tipa, have no doubt contributed to the collapse of the scallop fishery in both the HGMP and the Southern Scallop Fishery.
16. Through Te Mana o te Taiao and this Fisheries Management Plan, the Government has committed to ecosystem-based management of fisheries (EBFM).
17. The sound management of the benthic habitat is a vital underpinning for EBFM.
18. There have now been multiple calls for an end to bottom contact fishing methods in the HGMP, as evidenced by the following:
 - a) The Sea Change Plan (prepared between 2013-2016) recognised the damaging impacts of bottom contact fishing methods on marine habitats and in response required a phase out of all bottom trawling, Danish seining and scallop dredging from the Hauraki Gulf, with all such methods excluded by 2025.
 - b) The Hauraki Gulf Forum has a goal to “remove from the Marine Park of all fishing methods that damage the seafloor”.
 - c) A survey commissioned by the Hauraki Gulf Forum in 2021 indicated 84% support for an end to bottom impact fishing in the HGMP.
19. The HGMP is a unique natural asset valued for generations and being adjacent to Auckland, New Zealand’s largest metropolis, it has had to, and continues to, endure intense pressure from urban development, sedimentation, pollution, and recreational and commercial extraction.
20. An end to all bottom contact fishing methods – along with the enactment of the Hauraki Gulf Marine Protection legislation – would be a clear signal that the Government could send to demonstrate that this Park is “nationally significant” (as stated in s.7 of the Hauraki Gulf Marine Park Act 2000).

21. A decision now to ban all bottom contact fishing methods in the HGMP would show political leadership and give the fishing industry a clear signal that dredging is not acceptable in the future, and ensure harvesters have ample time to adapt to new methods while the tipa population hopefully recovers.

More ambition in advancing Ecosystem Based Fisheries Management (EBFM)

22. Ecosystem-based fisheries management recognises the interconnectedness of marine ecosystems and balances economic, social, and environmental objectives for sustainable fish populations and the ecosystem.
23. By taking into account the broader ecological context of fisheries, and in this case, the complexities and stressors of the HGMP, the Fisheries Management Plan is an essential management tool to prevent overfishing, and support the health and resilience of marine ecosystems.
24. By contrast, the Quota Management System (QMS) is a single-species approach to fisheries management that sets individual catch limits for each commercially valuable species, with the aim of ensuring that these populations are maintained at sustainable levels.
25. Within the HGMP, the QMS has not been an effective management tool to account for the broader ecological context of fisheries, for several reasons including:
- a. Limited species coverage: The QMS only covers a limited number of commercially important fish species and does not account for non-commercial species or the broader ecosystem dynamics. As a result, the QMS can overlook the impact of fishing on non-target species and ecosystem-level effects.
 - b. Inadequate monitoring: The QMS relies on self-reporting by fishers and periodic stock assessments, which may not accurately reflect the state of fish stocks or ecological impacts.
 - c. Lack of integration with broader ecosystem management: The HGMP encompasses a range of marine ecosystems, including estuaries, reefs, islands and rock stacks. However, the QMS does not consider the broader ecological context of the HGMP or the interactions between different species and habitats.
26. As evidenced by the recent tipa closures, the Prime Minister's Chief Science Advisor, Juliet Gerrard, in her Fisheries Report¹ stated that "we tend to wait for adverse impacts to materialise before implementing management responses and often struggle to respond. Ideally, we would pre-empt negative impacts via a thorough understanding of how ecosystems function."
27. The Prime Minister's Chief Science Advisor also stated that to implement ecosystem-based approaches to fisheries management, we need to understand how ecosystems operate and be able to identify indicators to protect their function as part of fisheries management. This draft Fisheries Plan doesn't currently identify indicators to protect ecosystem functions.
28. The Hauraki Gulf Fisheries Plan includes high level Management Objectives that speak to an EBFM approach, however, we feel the Plan has missed the opportunity to set out a clear set of guiding principles for EBFM in a New Zealand context - principles that would inform both the Management Objectives and Management Actions.

¹ The Future of Commercial Fishing in Aotearoa New Zealand, February 2021

29. We submit that a new Management Objective and associated Management Actions be included as follows:

#	FNZ proposal	MRRT amendment
NEW Management Objective	-	Advancing Ecosystem Based Management
NEW Management Action 1	-	Develop and publish Ecosystem-Based Management Principles for the Hauraki Gulf Fisheries Plan, to provide guidance and direction for decision making within the context of the Fisheries Act 1996 and in a manner consistent with the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992.
NEW Management Action 2	-	Develop and publish an Ecosystem-Based Fisheries Management Framework (the existence of which is mentioned in 2.1.2)
NEW Management Action 3	-	Develop and publish meaningful indicators to monitor ecosystem functions.

30. The Sustainable Seas National Science Challenge has produced several publications on EBM and principles. A set of EBFM principles would provide a basis for consistency in both planning and implementing the Management Objectives and Actions. In a climate-changing world, these can be the anchor during changing contexts as the management objectives, by necessity may need to change.

31. EBFM needs to be underpinned by a precautionary approach, particularly where there is low data, or poor understanding of interdependencies and risks to ecosystem functions.

32. A live example of risk to ecosystem functions is the dispersal of Unwanted Organisms around the HGMP (such as Caulerpa). Currently, the draft Hauraki Gulf Fisheries Plan does not appear to address emerging or unknown risks to ecosystem functions, only current, known issues of degradation.

33. It is encouraging to see the inclusion of actions around research to mitigate impacts of fishing, providing for collaboration and collective decision making; and partnering with others (particularly around sedimentation) to improve the HGMP. These are all commendable actions to take and a good step toward EBFM.

Specific amendments to the proposed Management Objectives and Management Actions

Management Objective 1: Achieving healthy, functioning aquatic ecosystems that support sustainable fisheries:

34. We submit that bottom trawling, Danish seining, and scallop dredging be excluded from the HGMP, with amendments outlined below to Management Actions 1.1.1 and 1.1.2.

35. The Management Actions underpinning Management Objective 1.1 appear silent on actions to support “active restoration” and Management Actions 1.1.2 - 1.1.5 relate exclusively to the harvesting of tipa.

36. With a total tipa closure in the HGMP currently, there exists a unique opportunity to research scallop recruitment. Understanding scallop recruitment is vital to the replenishment of the scallop beds.
37. MRRT as part of the Revive Our Gulf project, and along with the projects' Tangata Whenua partners, are doing the expensive and challenging work of trying to restore kūtai / green lipped mussels in the Hauraki Gulf. This includes trying to learn how we support kūtai / green-lipped mussels to regenerate naturally.
38. We request a new management action be included to "fund research regarding tipa / scallop recruitment" and would argue that this is a greater priority than current actions 1.1.3 (to "fund research into alternative methods for scallop harvesting") and 1.1.5 (to "facilitate transition to alternative scallop harvest methods and enable innovation for other alternative harvest methods"). Without a viable fishery, there will be no harvesting and these two actions assume the recovery of the scallop fishery without active restoration.
39. There are linkages between our amendments to 1.1.3 – 1.1.5 and Management Action 2.1.4, which is to develop reference points for the Coromandel scallop fishery and development of a long-term management strategy.
40. MRRT would be happy to work with the Government on whether an active restoration programme around tipa is something that could be included in the scope of our future work.
41. We request a new Management Action be included to "fund research into restoration of biogenic habitats, including kūtai / green-lipped mussels, hururoa / horse mussels which have been impacted by mobile bottom contact fishing.
42. In 2014 The Ministry for the Environment provided some seed funding for mussel reef restoration – for which we are grateful. Since then, MPI/FNZ has also put in resources, created the biosecurity risk assessment and given guidance on mapping.
43. MRRT has a good understanding of most of the topics associated with habitat restoration however, over time, funding to build capacity for scale will be needed. In 2020, Australia's Federal Government invested \$20 million (AUD) in shellfish restoration².
44. The Sea Change Ministerial Advisory Committee report noted that "Our major concern with this part of the strategy is a complete lack of reference to funding sources for restoration. While identifying regulatory barriers is mentioned, there is no mention of funding barriers, which are arguably just as significant. **Active restoration efforts will require resources to implement and sources of funding should be identified.**"
45. Allocating funds for monitoring, research and reporting for the Hauraki Gulf, proportionate to the scale of the problem we are working with is essential to delivering on Management Objective 1.1 and 1.2.

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Management Objective 1.1 Protect marine benthic habitats from any adverse effects of bottom contact fishing methods, to enable passive and active restoration that support ecosystem services.

#	FNZ proposal	MRRT amendment
Management Action 1.1.1	Exclude bottom trawling and Danish seining from the Hauraki Gulf except within defined areas or “corridors”.	Exclude bottom trawling and Danish seining from the Hauraki Gulf except within defined areas or “corridors” .
Management Action 1.1.2	Exclude recreational scallop dredging from the Hauraki Gulf	Exclude recreational scallop dredging from the Hauraki Gulf
Management Action 1.1.3*	Fund research into alternative methods for scallop harvesting	Replace with “Fund research regarding tipa / scallop recruitment.”
Management Action 1.1.4	Exclude commercial scallop dredging from the Hauraki Gulf, except within defined commercial dredging access areas that are informed by the commercial dredging footprint	Management Action 1.1.4 should be deleted as a consequence of amendments proposed to 1.1.2.
Management Action 1.1.5	Facilitate transition to alternative scallop harvest methods and enable innovation for other alternative harvest methods	Should be deleted as a consequence of amendments proposed to 1.1.3.
NEW Management Action	-	Fund research into restoration of biogenic habitats, including kūtai / green-lipped mussels, and hururoa / horse mussels which have been impacted by mobile bottom contact fishing.

46. We support the intent of Management Action 1.2.1 (to “design and implement protection measures and a monitoring regime for habitats of particular significance for fisheries management in the Hauraki Gulf, prioritising according to estimated level of risk”) and submit that this be adjusted to “...habitats of particular significance for fisheries management and/or ecosystem function...”

Management Objective 1.2: Protect marine habitats that have been identified as having ecological importance, from any adverse effects of fishing.

#	FNZ proposal	MRRT amendment
Management Action 1.2.1	Design and implement protection measures and a monitoring regime for habitats of particular significance for fisheries management in the Hauraki Gulf, prioritising according to estimated level of risk.	Design and implement protection measures and a monitoring regime for habitats of particular significance for fisheries management and/or ecosystem function in the Hauraki Gulf, prioritising according to estimated level of risk.

47. An example of why this is pertinent is that kūtai / green-lipped mussels would unlikely be identified as a habitat of particular significance for fisheries management as kūtai are commercially farmed, however, the ecosystem function of wild kūtai (and shellfish and bivalves at large) have significant ecological importance.

48. Presently there are no protections in place (other than a rāhui around Waiheke Island, and Te Mātā and Tapu (Waipatukahu)) to protect wild kūtai. The remnant wild kūtai in the HGMP are crucial not only as brood stock, but also to allow research to build our knowledge around how these ecosystems operate and regenerate naturally.
49. Having adequate protection measures around the remnant wild kūtai of the HGMP and prohibiting destructive fishing practices is crucial for the long-term viability of restoration efforts, such as those undertaken by Revive Our Gulf. Allowing fishing activities in restoration areas and/or harvest of the species we are attempting to restore undermines the restoration efforts and creates a cognitive dissonance that jeopardizes the environmental and social benefits that these efforts aim to achieve.
50. To that end, we wholly support Management Action 3.4.3 (to “support active participation in habitat restoration efforts and assist with the protection of these restoration sites, incorporating Mātauranga Māori where appropriate), and would be pleased to work with you further in this pursuit.
51. We propose the following amendments to Management Objective 1.3 to align more closely with the principles of EBFM.

#	FNZ proposal	MRRT amendment
Management Objective 1.3	Mitigate the impacts of fishing on the marine food chain.	Mitigate the direct and indirect impacts of fishing on the marine food chain.
Management Action 1.3.4	Facilitate the co-development of a kina management plan, which will also address the environmental impacts of kina barrens.	Facilitate the co-development of a kina management plan, which will also addresses the causes and environmental impacts of kina barrens.

Management Objective 2: Working towards fisheries resources being at levels which meet the needs of treaty partners and stakeholders

52. How management actions under 2.2 work in with the Biodiversity Objectives for High Protection Areas and Customary Practice Management Plans (as stipulated in the *Revitalising the Gulf* Marine Protection Proposal information document) is not clear in the draft Hauraki Gulf Fisheries Plan.

#	FNZ proposal	MRRT amendment
Management Actions 2.2.1 – 2.2.3		We submit that the crossover between these management objectives and Marine Protection proposal approach to customary practices be contemplated and explained alongside these Management Actions.
Management Action 2.2.3	For stocks at risk of localised depletion, develop criteria on a per-species or species group basis. Develop approaches for more responsive management within the park	For stocks at risk of localised depletion, develop criteria on a per-species or species group basis. Develop and trial approaches for more responsive management within the park
Management Action 2.2.6	Review netting restrictions, to protect vulnerable reef species and other non-target species.	Review and promptly amend netting restrictions, to protect vulnerable reef species and other non-target species.
Management Action 2.5.2	Review management approach and settings of intertidal shellfish	Until FNZ has a confident baseline these areas should be protected.

	harvest on the hard- and soft-shore. This could include adoption of seasonal closures or novel approaches to better manage intertidal shellfish harvesting.	Immediately protect intertidal areas and review management approach to setting of intertidal shellfish harvest on the hard and soft-shore areas. This could include adoption of seasonal closures or novel approaches to better manage intertidal shellfish harvesting.
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53. We support Management Action 2.5.3 (to “support community efforts to monitor/restore intertidal species”) and would like to understand more about this intent, as there are likely learnings from our restoration efforts we could share.

Management Objective 3: Achieving inclusive and integrated regional participation in the governance of fisheries

54. To better advance EBFM and support the overarching Management Objective #3, we make the following amendments:

#	FNZ proposal	MRRT amendment
Management Action 3.1.2	Maintain a collaborative Hauraki Gulf Fisheries Plan Advisory Group to provide opportunities for regional participation in fisheries management in the Hauraki Gulf.	Maintain a collaborative Hauraki Gulf Fisheries Plan Advisory Group to provide opportunities for regional participation in ecosystem based fisheries management in the Hauraki Gulf.
NEW Management Action	-	Maintain, and make available a list of Tangata Whenua of the Hauraki Gulf, its islands and catchments.
Management Action 3.2.2	Explore ways to support mātauranga Māori researchers to conduct relevant research of their own determination	Explore ways to support mātauranga Māori researchers to conduct relevant research of their own determination
Management Action 3.3.1	Design a targeted outreach and communications strategy for fisheries stakeholders in the Hauraki Gulf.	Design a targeted outreach and communications strategy for fisheries stakeholders in the Hauraki Gulf, coordinating with the Department of Conservation and Auckland and Waikato Regional Councils.
Management Action 3.3.2	Establish a fisheries science and fisheries management education programme.	Establish a fisheries science and ecosystem based fisheries management education programme for the Hauraki Gulf Marine Park and its islands and catchments.
Management Action 3.3.3	Invite industry and iwi forum reps, kaitiaki and community stakeholders to attend the fisheries science education programme.	Invite industry and iwi forum reps, kaitiaki and community stakeholders to attend the ecosystem based fisheries science education programme.
Management Action 3.4.4	Encourage a whole-of-government approach to substantially reduce sedimentation and other contaminants that affect fisheries in the Hauraki Gulf.	Encourage a whole-of-government approach to substantially reduce sedimentation and other contaminants that affect fisheries functioning aquatic ecosystems in the Hauraki Gulf.

Conclusion

55. If implemented along with the marine protection proposals, the Hauraki Gulf Fisheries Plan has the potential to move the needle on ecosystem health for Tikapa Moana / Te Moananui ā-Toi / Hauraki Gulf and support more sustainable fisheries.
56. Along with many other organisations, including land-based restoration activities, Revive Our Gulf is working to build a healthier, more vibrant moana, but it is the Government that holds the keys to unlock the benefits that would result from more careful and scale-appropriate management of fisheries and marine ecosystems within the HGMP.