

Meeting of the Regional Planning Committee

Date: Wednesday 14 May 2025
Time: 11.30am
Venue: Council Chamber
Hawke's Bay Regional Council
159 Dalton Street
NAPIER

Attachments excluded from the Agenda

Item	Title	Page
6.	Hawke's Bay Marine and Coastal Group: Assessment of progress on the Research Roadmap	
	Attachment 1: Hawke's Bay Marine and Coast Stocktake Review Report 2025	2

Hawke's Bay Marine and Coast Group Progress Report 2025

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April 2025

Hawke's Bay Regional Council

Final draft pending minor amendments

Introduction

The Hawke's Bay Marine and Coastal Group (HBMaC) is a collaborative multi-stakeholder group established in 2016. It includes government agencies, tangata whenua, and customary, recreational and commercial fishing interests.



Hawke's Bay Marine and Coastal Group (HBMaC) was formed to address concerns about localised depletion of inshore finfish stocks and environmental degradation in the coastal marine area. Achieving the goal of a healthy and functioning marine ecosystem is a task that is greater than any single authority with a role in management of the coastal marine area. The group recognises that only through a collaborative effort will progress be made.

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Vision and approach

Hawke's Bay Marine and Coastal Group's vision is to achieve a healthy and functioning marine ecosystem in Hawke's Bay that supports an abundant and sustainable fishery.

To achieve the vision, HBMaC focuses on targeted research that will provide a strong foundation of knowledge for better environmental management and decision-making.

This approach enables organisations to retain independent views and decision-making while having access to wider perspectives and knowledge:

- Diverse members bring different perspectives and challenges to the discussion.
- Sharing data and research efforts provides decision makers and communities with a holistic research base to inform their management decisions.
- Regular project information sharing helps identify cross-interests or support/collaboration potential.
- Provides of a mature forum for ideas-testing by decision-makers and researchers.

Research Roadmap 2018

HBMaC released a Research Roadmap in 2018 for the local marine area¹. The aim of the roadmap was to guide future coastal and marine research promoting the restoration and ongoing health of the Hawke's Bay coast and marine area.

The Research Roadmap addressed three core research themes:

- Terrestrial and Coastal Linkages
- Ecosystems and Habitats
- Fisheries

These research areas were identified as crucial for informing and supporting future research and monitoring priorities, communication and education, decision making and policy settings, sustainable management for future generations, and regional initiatives for coastal and marine health.

This report addresses the progress made since the release of the Roadmap, including the research outcomes achieved and next steps for HBMaC.



¹ Roadmap available here: <https://www.hbrc.govt.nz/assets/Document-Library/Reports/HBMaC-Roadmapv17digital>

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Key Research Outcomes

HBMaC has been working towards fulfilling the information needs outlined in the roadmap. The following summarises the progress HBMaC has made to date. As we improve our understanding of the marine environment, including the effects of land-use, the impacts on it can be managed more effectively.

Terrestrial and coastal linkages



Adopting a holistic (integrated) view of the Hawke's Bay coastal environment and recognising the sea is inextricably linked to the land are essential steps towards sustainable management for the region.

The research in this topic areas has given the group a better understanding of the nature and effects of sediments and

contaminants entering the coastal marine area from high rainfall and acute weather events, and the impact of activities on the marine environment.

This research aims to enhance the understanding of land-based effects by quantifying contaminant and sediment loads to support sustainable practices and informed decision-making.

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Research highlights

- Provision of insights into the baseline conditions of the marine environment.
- Understanding the sediment impacts from Cyclone Gabrielle 2023 on marine environments.
- Hydrodynamic modelling developed to assess transport and fate of contaminants.
- Environmental impacts of Napier Port dredging and disposal activities.
- Tangata whenua monitoring support, including for pāua management, and habitat creation on the newly created reef east of Pānia.

Please see Appendix 1 for a full list of completed and in progress research.

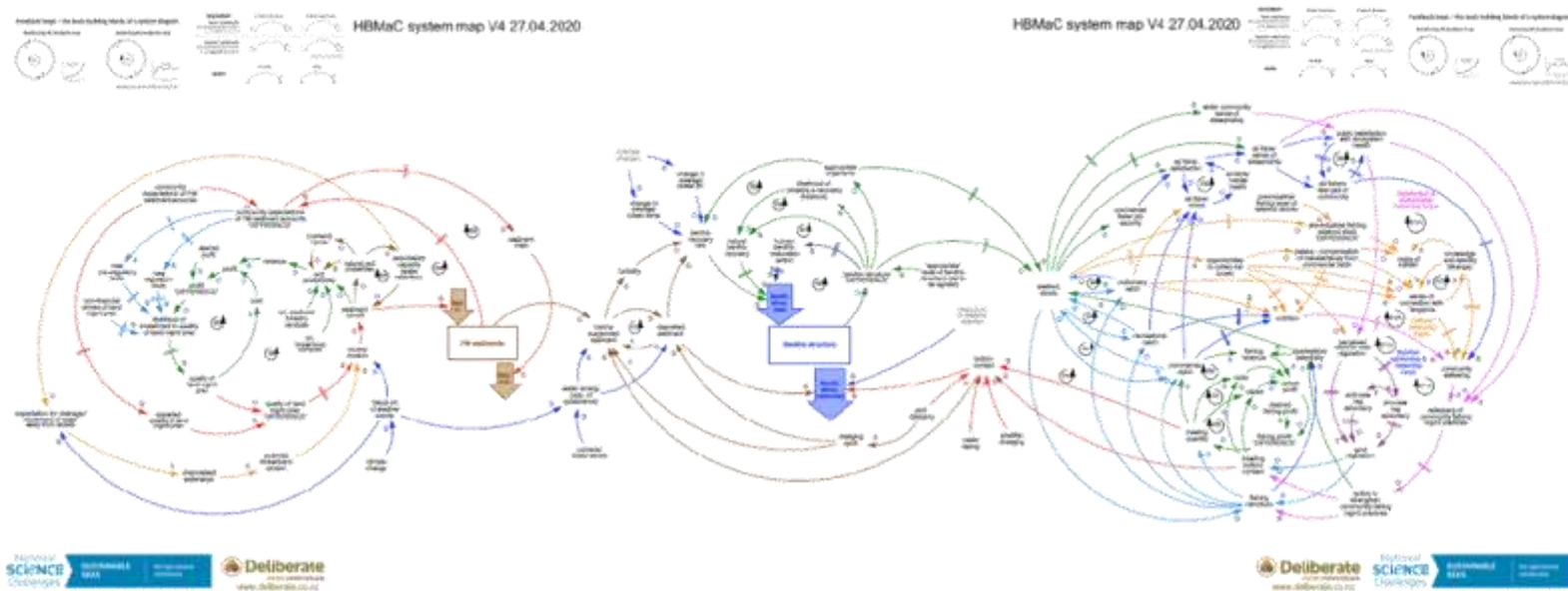
Key outcome 1: To underpin integrated management for better environmental outcomes.

Research goals achieved:	Research projects in progress or ongoing	What outcomes will this research support?
<ul style="list-style-type: none"> • Setting environmental baselines and conditions for land use that would reduce or mitigate impacts of sedimentation on the coastal marine area. • Better understanding of contaminant fates and impacts. • Hydrodynamic modelling of transport and contaminant fates • Supported tangata whenua monitoring and species management. • Supported sustainable land management (Appendix 2). 	<ul style="list-style-type: none"> • State of Environment reporting: next report due mid 2025 (HBRC). • Our Estuaries hub (DoC): an online information platform that is continuously updated. • Land management programmes (HBRC). 	<ul style="list-style-type: none"> • Inform policy on effective baselines for land-based impacts and environmental thresholds. • Provide information for integrated coastal management plans. • Provide information for state of the environment and tangata whenua monitoring and research. • Inform conservation and restoration efforts across catchments, estuaries, and the wider coastal domain.

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Terrestrial and coastal linkages case study: System mapping exercise by Sustainable Seas

The Sustainable Seas National Science Challenge worked directly with the HBMaC to explore the enabling of Ecosystem Based Management (EBM) and help understand the impacts of increased sedimentation on the benthic structure in the Hawke's Bay region. As a result, a conceptual system map was developed, which demonstrated the interlinked influences of the two main stressors, freshwater sediments and disturbance of the seabed. This map provided a framework for working with multiple stakeholders and was used to explore the dynamics of the system over time and under different scenarios.



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Ecosystems and habitats



Understanding wider ecosystem functioning informs where efforts need to be directed to ensure a healthy, functioning ecosystem that supports sustainable fisheries.

This research topic focused on bridging substantial knowledge gaps in habitat types, quality, vulnerability, connectivity and their role in wider ecosystem functioning.

This research aims to collectively enhance our understanding of marine ecosystems, inform conservation strategies, and support sustainable management practices in Hawke's Bay.

Research highlights

- Identification of key ecological areas for Hawke's Bay.
- Detailed mapping through multibeam surveys gave an insight into the coastal marine area's structure and biodiversity in subtidal habitats.
- First comprehensive survey of coastal birds provided baseline data on populations and habitats.
- Understanding the impact of Cyclone Gabrielle on bird populations.
- Habitat and nesting activity monitoring of kororā to understand and minimize construction impacts.
- Developed methods to estimate risks to protected species from fishing and other threats and monitored the impact of commercial fishing on these species.

Please see Appendix 1 for a full list of completed and in progress research.

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Key outcome 2: To underpin the understanding of habitat types and their state for better environmental outcomes.

Research goals achieved	Research projects in progress/ongoing	What outcomes will this research support?
<ul style="list-style-type: none"> Set benchmarks in terms of biodiversity and the distribution and state (quality) of subtidal marine habitats and other coastal species across Hawke’s Bay. Identified factors and processes limiting habitat extent and state. Identified where restoration efforts can be best directed. Identified where conservation efforts may be the most effective. 	<ul style="list-style-type: none"> Kororā / Blue penguin surveys (Napier Port). Conservation Services Programme (DoC) monitoring commercial fisheries impacts on protected species. 	<ul style="list-style-type: none"> Assist with the Hawke’s Bay Biodiversity Forum and Cape to City project through provision of biodiversity and abundance data. Help inform regional plans and policy. Help inform marine spatial planning. Help inform conservation strategies.

Ecosystems and habitats case study: Key Ecological Areas (KEA) of the Hawke’s Bay Coastal Marine Area by HBRC

A report was produced to identify KEAs in the coastal marine area (CMA) of the Hawke’s Bay region and help achieve the Council’s strategic goals of healthy, functioning and climate-resilient biodiversity. Areas of high ecological value were determined based on national and regional datasets, to produce modelled species distribution and richness layered maps.

The information obtained in the KEA report will assist HBRC to identify areas where ecosystem restoration may enhance environmental outcomes in the CMA, may inform the identification of additional areas for significant conservation status for plan development and future seabed surveys under the Marine Enhancement and Protection project.

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Fisheries



on species and biodiversity, monitoring of tools used to manage stock (Appendix 3), and explore restoration and enhancement opportunities. These efforts aim to enhance fisheries management, promote sustainable fishing practices, and protect marine ecosystems in Hawke's Bay.

The Hawke's Bay region has traditionally supported a vibrant customary, recreational, and commercial inshore fishery. To ensure this continues we need to remain committed to improving our understanding of the fisheries dynamics.

This research topic has focused on understanding the effects of fishing

Research highlights

- Identified areas with high abundance of juvenile tarakihi, leading to voluntary closures to rebuild abundance.
- Developed methods for recreational fishing groups to record and report catch.
- Te Angiangi Marine Reserve review completed.
- Recorded and assessed the cultural health and environmental state of the Ahuriri marine environment using traditional knowledge and historical catch data.
- Created an artificial reef to support the recovery of fish populations and promote marine biodiversity.
- Analysed changes in commercial fishing gear use and promoted innovation through workshops.
- Reviewed changes in fish distribution based on commercial catch data following Cyclone Gabrielle.
- Developed and implemented an ongoing fishery-independent trawl survey in Area 2.
- Post-Cyclone Gabrielle Mapping of high-risk areas and seafloor hazards to ensure safe re-entry to key fishing grounds and support for fishermen.

Please see Appendix 1 for a full list of completed and in progress research.

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Key outcome 3: To underpin management towards increased abundance of fish species and sustainable fisheries.

Research goals achieved	Research projects in progress/ongoing	What outcomes will this research support?
<ul style="list-style-type: none"> • Improved understanding of the biology of commonly fished species. • Improved understanding of the habitats crucial to the survival, growth and productivity of key species, and variables that impact them. • Identify where conservation efforts may be most effective. • Improved understanding of catch and effort of the Hawke’s Bay fisheries (Appendix 4). • Improved understanding of the effects of fishing activities on the seafloor benthos. 	<ul style="list-style-type: none"> • Snapper spawning/nursery identification project (SNZ). • Twofold Bay artificial reef proposal (LegaSea HB.) • Litter Intelligence programme. Ongoing (Sustainable Coastlines). • Customary harvest information (MPI). • Moana sensor project (SNZ). • Industry trawl project -due mid 2025 (SNZ) 	<ul style="list-style-type: none"> • Informing fisheries management, changes to stock catch settings and the National Inshore Finfish Fisheries Plan. • Informing spatial and temporal area closures, to support productivity of key fish species. • Help inform marine spatial planning. • Support habitat enhancement and restoration initiatives. • Support customary management tools including rahui, and rohe moana management plans.

Fisheries case study: Colin Murray boat ramp surveys by LegaSea

After noticing a decline in the fish stocks, members of the Hawke’s Bay Sports Fishing Club initiated the ‘Colin Murray’ ramp survey in 2006, to start tracking their catch levels during their scheduled club competitions. MPI scientists confirmed the ramp survey’s methodology was consistent and reliable, leading to its extension to monitor catch rates in the Springs Box area. After 14 seasons, some species, like tarakihi and snapper, are showing improved catch rates, but continued monitoring remains crucial to understanding contributing factors.

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Next Steps



HBMaC has been recognised nationally as a unique collaboration in the coastal marine planning space. There are multiple benefits to having a group where all members can talk openly and honestly at the table and work towards a shared vision.

“The success of the approach taken by the Hawke’s Bay Marine and Coastal Group demonstrates the strength of tackling complex issues in our marine setting in a holistic, integrated and collaborative way.” (Office of the Prime Minister’s Chief Science Adviser)

With so much research now completed, revising the objectives, communicating research and retaining longevity of the group is highly important.

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Identifying our strength as a collective

The group recognises that success will require drawing on the strengths of all participants. This includes understanding that as a group there is a range of legislations members are operating under, and within these are a selection of tools (Figure 1).

Achieving positive change towards the goal will require an integrated management approach drawing on a range of management tools, regulations, policies, strategies and plans (Figure 2) that can address upstream and ocean-based activities. It will also require synergising efforts with mātauranga Māori and community-based knowledge systems.

Communicating research back to the organisation's key decision-makers, kaitiaki, taiao teams, environmental managers, and policy and planning teams will provide for a more holistic and effective knowledge base on which they can make decisions.



Figure 1 Members operate within different legislative frameworks providing the opportunity to exploit a wide range of environmental management tools.

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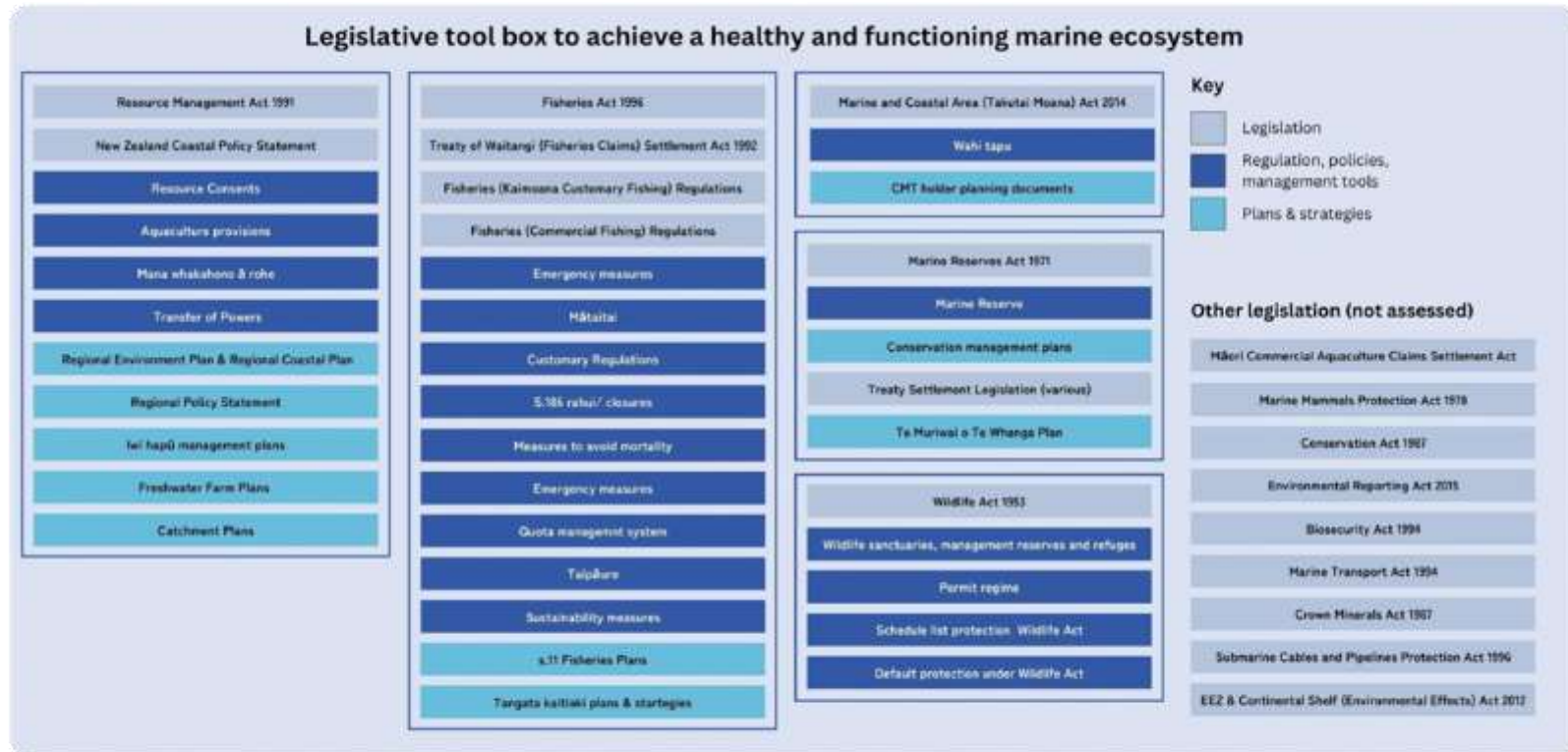


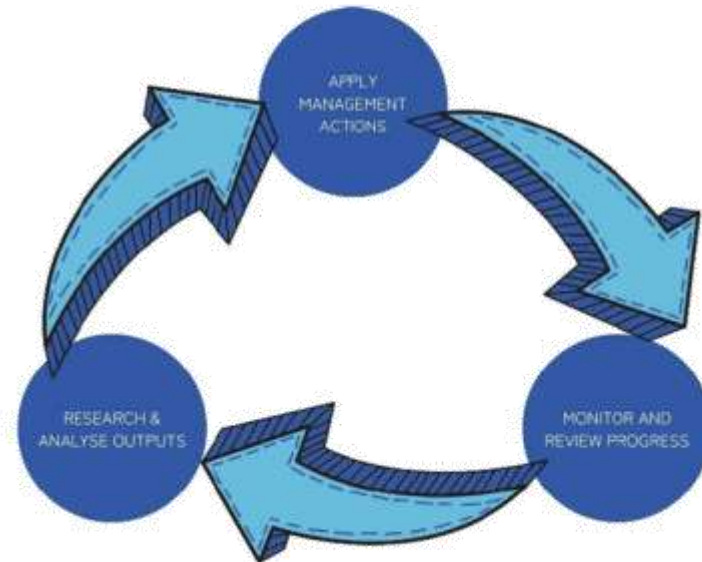
Figure 2 Legislative 'toolbox' provides a wide range of management tools which can draw on this research to achieve a healthy and functioning ecosystem.

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Actions forward

Going forward, HBMaC has prioritised the following research and communication actions:

- Support regional initiatives aimed at improving coastal and marine health for future generations by:
 - Analysing research findings to support plans, strategies and non-legislative actions.
 - Exploring novel solutions.
 - Engaging with and informing catchment-focused research and planning.
- Communicate knowledge to support decision-making:
 - Build a library of knowledge.
 - Analyse research findings to inform policy direction.
 - Set environmental baselines.
 - Support integrated management across agencies
 - Wider communication of information to community groups, iwi and hapū.
- Focused future research and monitoring:
 - Monitoring for progress reporting.
 - Identifying remaining research gaps.
 - Exploring regional or activity-based monitoring opportunities.
 - Identifying research for adaptive management.
- Accountability:
 - Membership reviews every year.
 - Progress reporting every two years.
 - Re-engagement with mana whenua



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Appendices

Appendix 1 Reports and/or projects contributing to achieving our outcomes since the Roadmap was produced

Acronyms: Department of Conservation (DOC), Hawke’s Bay Regional Council (HBRC), Ministry for Primary Industries (MPI), National Institute of Water and Atmospheric Research (NIWA), Seafood New Zealand Ltd (SNZ).

Terrestrial and Coastal Linkages		
<p>Research sub-theme 1: Better understand land-based effects by quantifying contaminant and sediment loads: Includes Catchment modelling: Quantify the source and extent of any water quality problems in a catchment, based on adjacent land use, soil type, catchment steepness, catchment size, river flows and rainfall/flood frequencies</p>		
Report Title	Description	Lead and/or contact agency
Mapping of Subsurface Oxygen Depletion in Hawke Bay	2019 glider missions to collect data on water temperature, salinity and dissolved oxygen levels in the Bay.	HBRC
AEBR-326-Cyclone-Impacts-On-Fisheries-2024-4461 (25.3 MB)	The objective of this project was to understand sediment impacts from the February 2023 Cyclone Gabrielle event on marine environments of the Hawke’s Bay and Gisborne regions to enable rapid fisheries management decisions. Also applies to Ecosystem and Habitats subtheme: Determine the location, extent and state of subtidal habitats and species.	MPI
Impacts on marine environment – coastal ecosystems (Dr Leigh Tait, MBIE funded, report in progress)	This project focused on the nearshore marine coastal zone and used various tools (remote and in situ) to detect the immediate impacts to key marine ecosystems from Cyclone Gabrielle in Hawke’s Bay and Tairāwhiti. Also applies to Ecosystem and Habitats subtheme: Determine the location, extent and state of subtidal habitats and species.	NIWA
AEBR-343-2024-Cyclone-Gabrielle-Tracing-river-sediment-source-contributions-to-marine-sedimentation (19.3 MB)	This project measured the proportional contributions of major rivers to the Cyclone Gabrielle sediment deposits in the sea and describes the physical characteristics of these deposits.	MPI

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	Also applies to Terrestrial and Coastal Linkages subtheme: Better understand contaminant fates and impacts across the coastal marine area.	
HBRC SoE Report 2018-2021 (next report due mid 2025)	State of the Environment monitoring measures the current state and trends of ecosystem health along the Hawke’s Bay Coastline. This report gives an overview of biodiversity and ecosystem health, climate, our coast, and air and water quality. It includes information about intertidal reefs, sand dunes, estuary ecology, estuary mud content and water quality, nearshore water quality, recreational water quality, and our coastal buoy. There are also reports from 2013 and 2018. Also applies to Ecosystem and Habitats subtheme: Determine the location, extent and state of subtidal habitats and species.	HBRC
AEBR-309-Land-Based-Effects-On-Coastal-Fisheries-Kaimoana-And-Habitats-4254-2023 (7.3 MB)	Land-based effects on coastal fisheries, kaimoana, and their habitats occur through a diversity of mechanisms. This literature review explores those mechanisms, and likely impacts in New Zealand, with arguably the most important being sedimentation.	MPI
Assessing the health of Hawke’s Bay Regional estuaries	NIWA calculated health indices for 6 estuaries (Ahuriri, Maungawhio, Pōrangahau, Tukituki, Wairoa and Waitangi) and to discuss their health relative to other national estuaries. Includes land-based stressor information.	HBRC
Our Estuaries internet hub	Share best practice initiatives from around New Zealand for restoring, monitoring and experiencing the estuarine environment. It is a living resource and has new resource being added all the time.	DOC
Land management	The team aims to increase the proportion of the region that is being used in ways considered to be sustainable through supporting and providing advice to landowners and their managers, working with landowners to prepare erosion control plans, supporting catchment and Landcare groups and their activities, and providing training in sustainable land management techniques.	HBRC
Research sub-theme 2: Better understand contaminant fates and impacts across the coastal marine area: Includes a Hydrodynamic model: Assess the transport and fate of contaminants throughout the coastal domain and quantify variation in physical parameters such as temperature, salinity, and nutrients over large spatial scales and under different environmental scenarios.		
Report Title	Description	Lead and/or contact agency
The sediment, river plume, and inner shelf variability in a bay with multiple fluvial inputs	HBRC supported a PhD student at the University of Waikato to create a hydrodynamic model of Hawke’s Bay. He presented to Environment Integrated Catchments Committee in April 2025.	HBRC

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Modelling the effect of river inputs on coastal water quality in Hawke Bay	HBRC River Input Model for Hawke Bay.	HBRC
Napier Port reports on impacts of dredge spoil on fishing	Outlines the environmental impact of the Napier Port's 6 Wharf - Te Whiti project, focusing on dredging operations and offshore disposal activities, and their potential effects on commercial fisheries, particularly bottom trawling. Reports completed in 2019, 2021, 2022, 2023, and 2024. Also applies to Fisheries subtheme: Research the effects of fishing in Hawke's Bay.	Napier Port
Research sub-theme 3: Support tangata whenua monitoring and research across the coastal marine area: Includes supporting the development of new initiatives for customary monitoring and research, and working collectively to bridge gaps between customary and western based monitoring, research and conservation.		
Report Title	Description	Lead and/or contact agency
2023 research funding for the Waimārama Māori Committee to develop a scoping report	Provide formal guidance on an approach to monitoring and management of pāua, specifically in Cray Bay.	MPI
2023 research funding for Ngāti Kahungunu to undertake Te Kohanga Artificial Reef Management	Monitoring, nurturing and growing new biogenic habitat over a newly created reef east of Pānia reef, Napier.	MPI

Ecosystems and Habitats		
Research sub-theme 1: Determine the location, extent and state of subtidal habitats and species: Includes research and monitoring of subtidal rocky reef and soft sediment habitat types to bridge substantial knowledge gaps and establish baseline conditions.		
Report Title	Description	Lead and/or contact agency
Key Ecological Areas Report	This report recommends a suite of selection criteria to Hawke's Bay Regional Council based on current national 'key ecological areas' (KEA) criteria.	HBRC
Mapping Wairoa Hard, Clive Hard, and Mahia	Multibeam surveys of Hawke's Bay Coastal Marine Area.	HBRC
Remotely Operated Vehicle (ROV) surveys of Hawke's Bay	Understanding subtidal habitats.	HBRC
Ecological surveys of Pania Reef	Reports done in 2016, 2019, 2020, 2021, 2022, and 2023.	Napier Port
Research sub-theme 2: Monitor and research marine mammals and seabirds: Includes research and monitoring to assess the current status and trends of marine mammals and seabirds in Hawke's Bay.		

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Report Title	Description	Lead and/or contact agency
Coastal Bird Survey 2021	A comprehensive coastal bird survey across Hawke’s Bay, marking the first time the entire coastline was surveyed from top to bottom.	HBRC
Coastal Bird Survey 2024	Coastal bird survey following Cyclone Gabrielle.	HBRC
Blue penguins	Actively collecting data to monitor the local kororā population. This includes daily box inspection records from the Napier Port Kororā Sanctuary, which track nesting activity, occupancy rates, and breeding success. Additionally, penguin tracking data provides insights into their movement patterns and habitat use, while annual dog-assisted surveys help identify and map nest sites across the Port Harbour and Ahuriri Inner Harbour. These surveys not only help keep tabs on population size but also provide incredibly useful information for managing construction projects in penguin areas, ensuring that development activities are carried out with minimal impact on nesting sites. Together, this information helps us assess population trends, potential threats, and the effectiveness of conservation efforts in the area.	Napier Port
Cape Sanctuary Gannets	Cape Sanctuary is New Zealand’s largest privately owned and funded mainland island conservation project. Their focus has been to restore the Cape Kidnappers Peninsula to support continual growth of native bird and reptile populations. Since their foundation in 2006, they have transformed the outlook for conservation in the Hawke’s Bay region by planting native trees and protecting important natural habitat such as the dune systems and beach forest.	Cape Sanctuary
National Plan of Action – Seabirds 2020	The NPOA Seabirds 2020’s vision is New Zealanders work towards zero fishing-related seabird mortalities. Guidelines to reduce impact have been produced.	MPI (FNZ)/DOC
Spatially explicit fisheries assessment	A method to estimate the risk to protected marine species posed by fishing (or other threats).	MPI
Conservation Services Programme (CSP)	Monitoring the impact of commercial fishing on protected species, studies species populations and looks at ways to mitigate bycatch.	DOC

Fisheries		
Research sub-theme 1: Research fisheries species in Hawke’s Bay: Includes research to identify: Juvenile habitat utilization, Adult habitat utilisation including the identification of spawning grounds, Habitat connectivity and migration patterns and pathways.		
Report Title	Description	Lead and/or contact agency

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Snapper spawning initiative	This was a planned project to work jointly between commercial and recreational fishers identify areas of importance for snappers (and possibly tarakihi) spawning, nursery and recruitment grounds between Cape Runaway and Wellington, including the Hawkes Bay area. The project is currently on hold due to changes in staff.	SNZ
Tarakihi rebuilding programme	Tarakihi voluntary closed areas where high abundance of juvenile tarakihi has been identified.	MPI
Te Angiangi marine reserve monitoring	DOC and Ngāti Kere have completed a review of Te Angiangi Marine Reserve in Hawke's Bay (December 2024). Monitoring at this reserve targets rocky intertidal communities, subtidal reef fish, as well as rock lobster, pāua and kina.	DOC
Research sub-theme 2: Promote citizen participation in fisheries monitoring and research: Includes development of survey methods and tools that could be used by fishing groups to record and report catch.		
Report Title	Description	Lead and/or contact agency
Ongoing Colin Murray HB Sports Fishing Club Ramp Survey	Records of what members were catching during scheduled club competitions and catch rates from the Springs Box area.	LegaSea HB
Research sub-theme 3: Identify ways fisheries can be enriched through habitat enhancement, habitat creation or conservation-related methods: Includes initiatives like: Enhancement (e.g. fencing off estuarine margins, restoring wetland systems or creating artificial structures), Implementation of rahui, No take marine protection areas, Fisheries area or seasonal closures		
Report Title	Description	Lead and/or contact agency
Bottom trawling closure of the "Springs Box" to fishing	From December through to the end of February.	Napier Fisherman's Association/LegaSea HB
Creation of two artificial reefs	LegaSea Hawke's Bay and Napier Port collaborated to create an artificial reef near the Gwen B shipwreck, following the success of an earlier reef near Pania Reef. Constructed using recycled limestone from the port's dismantled structures, the reefs aim to promote marine biodiversity and support the recovery of fish populations. By mimicking natural reef systems, the project provides habitats for various marine life while also enhancing recreational opportunities for fishing and diving. This initiative stands as a sustainable effort, blending environmental, cultural, and economic benefits, and is celebrated as a long-lasting contribution to the Hawke's Bay community.	LegaSea HB/Napier Port/mana whenua
Artificial reef	Proposal for the fishing trawler Twofold Bay to become an artificial reef.	LegaSea HB
Temporary closure of Waimarama	No black foot pāua take under section 186A of the Fisheries Act (up for renewal 22 December 2024).	Ngāi Hapū o Waimārama

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Temporary closure offshore of Napier Port	No take of all fisheries resources under section 186A of the Fisheries Act called Te Rāhui o Moremore (up for renewal 21 June 2025). Used customary research funding for Te Kohanga Artificial Reef (creation of traditional spat ropes to enhance the reef).	Napier Port and MPI
Research sub-theme 4: Use traditional knowledge and historical catch information to evaluate how sections of the fishery has changed: Includes collation of traditional knowledge and other data held by fishers through questionnaires, interviews, and workshops.		
Report Title	Description	Lead and/or contact agency
Marine Cultural Health Programme	Record and assess the cultural health and environmental state of the Ahuriri marine environment.	Napier Port
Citizen participation Litter Intelligence - Data	Litter Intelligence is a long-term programme that collects litter data, provides powerful insights about the problem, and inspires widespread action for solutions. Led by New Zealand charity Sustainable Coastlines, the programme works in close collaboration with the Ministry for the Environment, Department of Conservation and Statistics New Zealand. HB has contributed 1.6k volunteer hours to complete 99 surveys in 15 areas (e.g. Waitangi estuary/Clive; Napier port beaches, Haumoana Marine Parade, Ahuriri estuary, Te Angiangi, Mahia).	Sustainable Coastlines
Customary harvest information	Customary fisheries in the Hawke’s Bay region are deeply rooted in the traditions and practices of local Māori communities. These fisheries are managed under customary rights, ensuring sustainable non-commercial food gathering and protection of marine resources for future generations. They play a vital role in preserving the ecological balance and fostering community stewardship over marine environments.	MPI
Research sub-theme 5: Research the effects of fishing in Hawke’s Bay: Includes key areas of research on: Improving understanding of catch and effort, Evaluating benthic disturbance and biomass removal, Quantifying levels of bycatch and associated discards, Improving gear selectivity.		
Report Title	Description	Lead and/or contact agency
Commercial electronic catch and position reporting	From 2019.	MPI
2023 Rapid Updates For Rock Lobster Stocks	Describes the operation of the stock assessment rapid updates completed in 2023 for six stocks that can be used to guide management decisions of New Zealand red rock lobster QMAs.	MPI
2024 Rock Lobster Catch And Effort	Summarises commercial catch and effort statistics for rock lobsters across NZ.	MPI

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2024 Settlement Indices For Red Rock Lobster	Annual patterns of red rock lobster settlement are described for North Island and South Island coastal areas, based on monthly monitoring of puerulus (the post-larval stage of red rock lobster) settlement collectors.	MPI
Characterisation and CPUE analyses SPO1 SPO2 SPO3 SPO7 SPO8 fisheries	Characterisation and CPUE analyses for the SPO 1, SPO 2, SPO 3, SPO 7, and SPO 8 fisheries to 2020–21	MPI
2023 John Dory Fishery Characterisation And CPUE JDO2	Fishery characterisation and Catch-Per-Unit-Effort indices for John dory in eastern JDO 2, to 2021/22.	MPI
2022 Trevally TRE2 Characterisation And CPUE	Characterisation and catch-per-unit-effort analyses for FMA 2 trevally (TRE 2) up to 2016–17.	MPI
2022 Juvenile Rock Lobster Growth And Implications For Stock Assessment	Growth of juvenile red rock lobster (<i>Jasus edwardsii</i>) in New Zealand and implications for stock assessment.	MPI
2022 Paua Stock Assessment 2021 For PAU2	The 2021 stock assessment of pāua (<i>Haliotis iris</i>) for PAU 2.	MPI
2022 Snapper Age Composition SNA1 SNA2 201920	Age composition of commercial snapper landings in SNA 1 and SNA 2, 2019–20.	MPI
2022 Trevally Length Age Composition TRE1 TRE2	Length and age composition of trevally in TRE 1 (2017–18 & 2019–20) and TRE 2 (2019–20).	MPI
2022 Eastern Tarakihi Stock Assessment 2021	A stock assessment of eastern tarakihi for 2021.	MPI
2021 New Zealand Bluenose Stock Assessment 2021	The 2021 stock assessment of New Zealand bluenose.	MPI
2021 Fishery Characterisation And Age Structure Of Tarakihi Stocks 2018 2020	Fishery characterisation and age composition of tarakihi in TAR 1, 2, 3, 5, 7, and 8, for 2018–19 and 2019–20.	MPI
2021 Tarakihi Fishery Characterisation And CPUE To 2019	Fishery characterisation and Catch-Per-Unit-Effort indices for tarakihi in TAR 1, TAR 2, TAR 3, TAR 5, TAR 7, and TAR 8.	MPI
2021 Characterisation And CPUE Standardisation For School Shark To 2018	Characterisation and CPUE standardisation for school shark in New Zealand, 1989–90 to 2018–19.	MPI
2020 SPO Fishery Characterisation And CPUE	SPO 1, 2, 3, 7, and 8 fishery characterisation and CPUE report.	MPI
2019 CPUE PAU 2	Standardised CPUE analyses for pāua (<i>Haliotis iris</i>) in PAU 2, 1989–90 to 2013–14.	MPI
2019 eastern stock tarakihi 2019	An update of the assessment of the eastern stock of tarakihi for 2019.	MPI
2018 SNA2 CPUE	Catch-per-unit-effort (CPUE) analyses for SNA 2.	MPI
2018 GUR2 Characterisation and CPUE	Catch-per-unit-effort (CPUE) analyses for FMA2 red gurnard (GUR 2).	MPI
2018 TAR stock assessment	Stock assessment of tarakihi off the east coast of mainland New Zealand.	MPI

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2018 FLA2 Characterisation and CPUE	Fisheries characterisation and catch-per-unit-effort analyses FLA 2.	MPI
2017 SPO 1 2 3 7 and 8 Fishery Characterisation and CPUE Report	SPO 1, 2, 3, 7 and 8 Fishery Characterisation and CPUE Report.	MPI
2019 National Panel Survey Marine Recreational Fishers	National Panel Survey of Marine Recreational Fishers 2017-18.	MPI
2024 Spatial decision support tool for managing the impacts of bottom fishing	Exploration of a spatial decision-support tool for managing the impacts of bottom fishing on in-zone seafloor habitats.	MPI
2021 Gear Use In NZ Inshore Trawl Fisheries 4051	Gear use in New Zealand inshore fisheries.	MPI
Quantifying bottom trawling seafloor contact in Hawke Bay	This research focused on quantifying and minimising the impact of commercial fishing gear on the seafloor, particularly through trawling, a key method used to catch finfish. The aim was to understand how trawl gear interacts with seabed habitats and inform decision makers to mitigate seafloor habitat disturbance by fishing gear. See Appendix 4 Commercial trawl fishing map.	Sustainable Seas
Spatial analysis of CPUE for key inshore species	2023 review of potential changes in commercial catch effort targeting snapper, trevally, rig, john dory and gurnard following Cyclone Gabrielle. Report was not published wider than FNZ's Inshore Working Group due to catch effort data sharing constraints. Results indicated little to no significant change for all species except snapper, which experienced a slight offshore shift in catch. More data is required to get robust conclusions.	SNZ
Moana sensor project	The project ran for several years and saw commercial fishing vessels deploying time-temperature-depth sensors on their gear while fishing at depth. The data was then provided back to MetOcean to inform sub-surface temperature and climate modelling (and other science projects around NZ). The data continues to be collected from several vessels in Hawke's Bay and could be made available for analysis should funding become available.	SNZ
Industry trawl project	A fishery-independent, industry-led trawl survey being undertaken in Area 2. Field work is currently in progress and results are expected mid-year.	SNZ
Commercial gear innovation survey	A survey of gear use across the inshore fishing industry is being analysed to identify changes in gear since the late 2000's. There was also a series of workshops aimed at prompting discussion on gear innovation that were run by MPI.	SNZ
Seafloor hazard identification mapping	Mapping high-risk areas and large hazards on the seafloor to allow operators to safely re-enter key fishing grounds.	SNZ /MPI

Final draft pending minor amendments

Appendix 2 HBRC's land management efforts

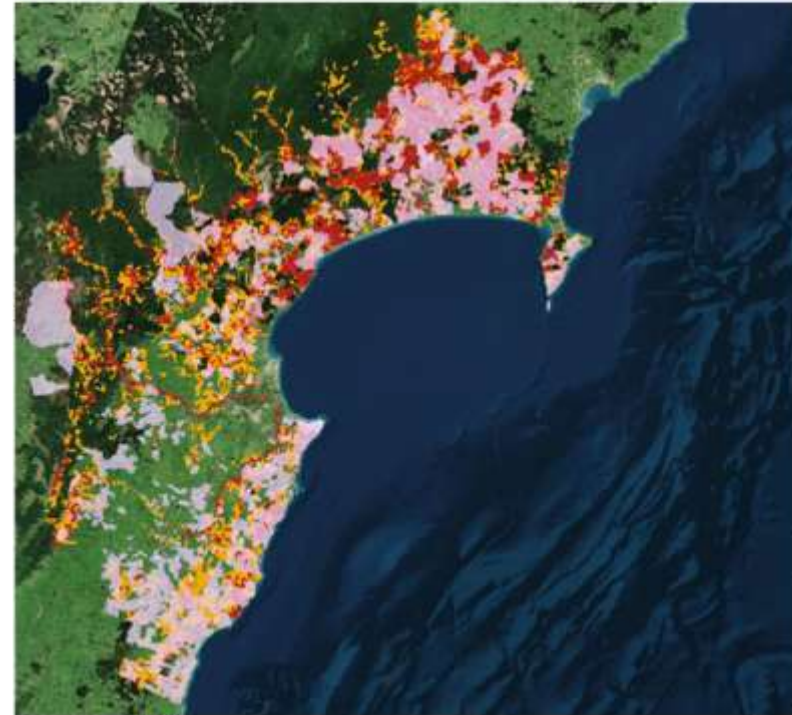
Erosion Control Scheme

Erosion control across the Hawke's Bay region and Gisborne catchments that feed into the Hawke's Bay. Methods include space planting exotics, retirement, reversion, and native planting.

Pink overlay are farms involved in the ECS since 2018. Red & Orange are Sednet layers showing highly erodible areas.

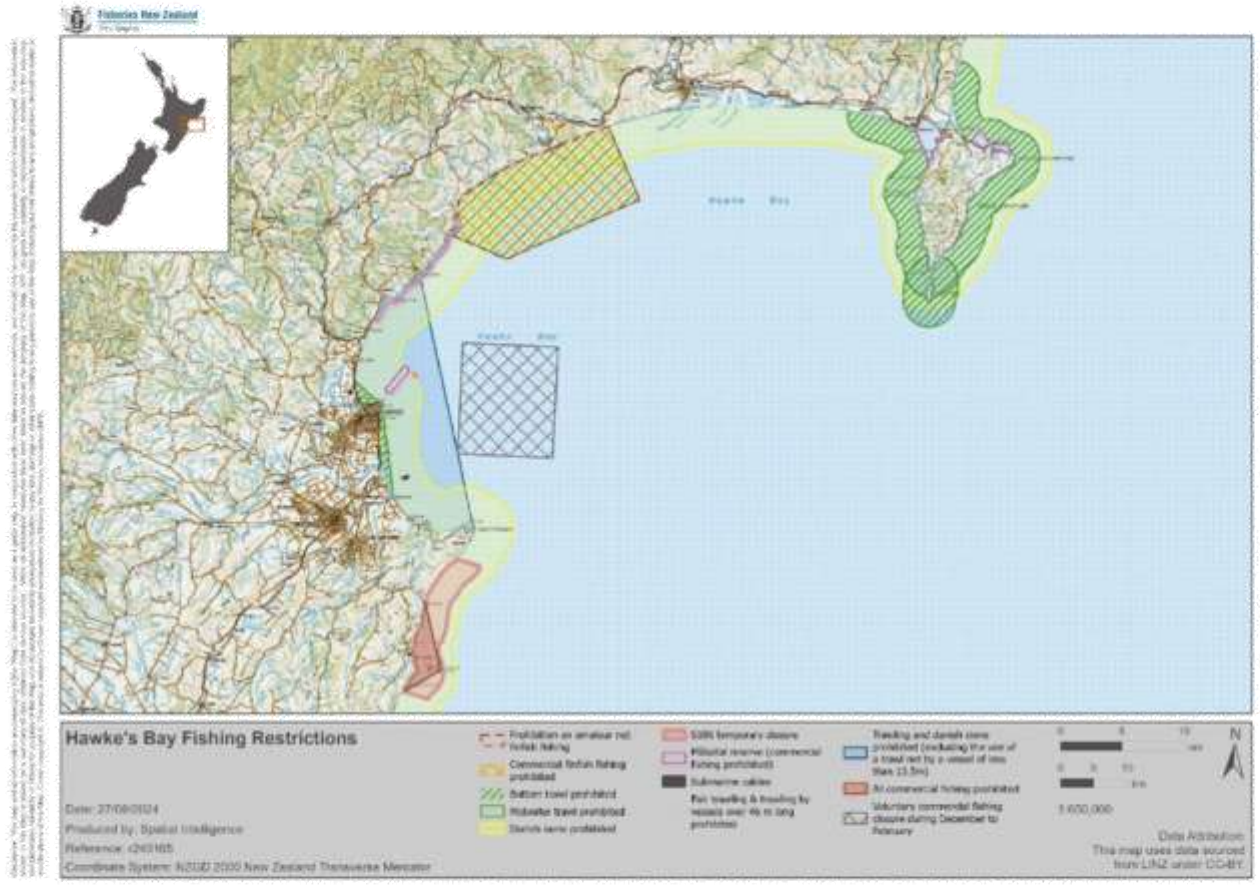
<https://www.hbrc.govt.nz/environment/farmers-hub/>

- \$13.5 million of HBRC loan funding spent
- Leveraged around \$10 million of landowner and co-funder investment
- 503 active Erosion Control Plans (ECPs)
- 5,192ha of erodible land treated, and
- 357km of waterway protected through retirement



Final draft pending minor amendments

Appendix 3 Hawke's Bay fishing restrictions

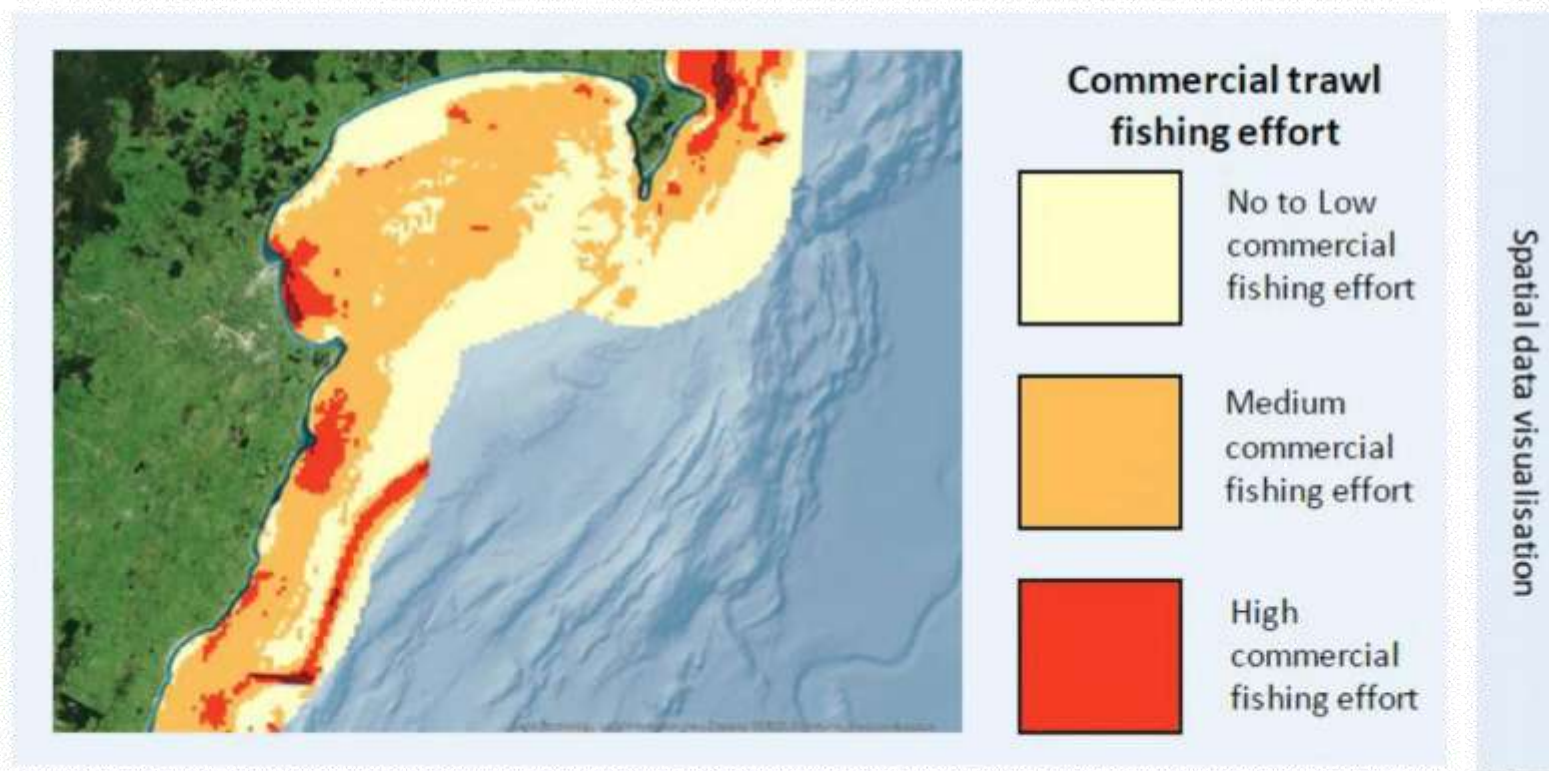


Final draft pending minor amendments

Appendix 4 Commercial trawl fishing effort (from Sustainable Seas)

Quantifying and reducing interactions between commercial fishing gear and the seabed in New Zealand

This research focused on quantifying and minimising the impact of commercial fishing gear on the seafloor, particularly through trawling, a key method used to catch finfish. The aim was to understand how trawl gear interacts with seabed habitats and inform decision makers to mitigate seafloor habitat disturbance by fishing gear.



Final draft pending minor amendments