Te Korowai o Te Tai ō Marokura

KAIKŌURA COASTAL MARINE GUARDIANS

Kaikōura Marine Strategy 2012

Sustaining our sea

Foreword

Te Tai ō Marokura, the Kaikōura marine environment is an ecological system where the whole is far more than the sum of the parts. Similarly this Strategy is an integrated whole, reflecting the seven years of research and discussion by the Kaikōura community and people from all over New Zealand. Each part of the Strategy is important and no part can be properly understood in isolation from the rest. We invite you to approach the Strategy in this same spirit. We have done our very best to work for the greater good of the people of Kaikōura, the well being of its natural environment, and to secure opportunities for future generations.

We are not perfect and neither is our work. We offer this strategy humbly, but with a measure of satisfaction that we have put everything we could into it. We know that there is great wisdom in our community, and amongst people all over the world who have come to love the Kaikōura environment.

Every submission made to us was analysed, compared with the ideas of others, and taken into account to help finalise the Strategy. It will come as no surprise that compromises have been made with such a wide ranging strategy. The Strategy is not fixed; it will be subject to review and will adapt to the future. We are confident, however, that this Strategy presents the best mix of solutions for the management of Te Tai o Marokura at this time.

As was the case with the Fiordland Guardians special legislation may be required to give effect to this Strategy. The same need for various legal requirements to come into place at the same time is also true in Kaikōura. Government officials have indicated that they want all the options for implementation to be fully explored before they consider supporting special legislation. Te Korowai has accepted that advice, but will push on firmly to put solutions into practice.

Ka ora te mauri me te wairua o "Te Tai o Marokura" i a tātou ngā kaitiaki nō te hapori tonu, ka ora hoki ko ngā wai, ko ngā uri, ko ngā taonga a Tangaroa, hei painga mō tātou, ā, mō ngā uri ā muri ake nei.

From the heights of Te Tapuae o Uenuku above, to the depths of Hikurangi below, it is Te Tai o Marokura in between which sustains the wellbeing of the people.

Larnce Wichman
Chair
Te Korowai o Te Tai ō Marokura

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Front cover: Rob Suisted
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Summary

This summary gives an overview of the finalised Te Korowai o Te Tai ō Marokura(Te Korowai) Strategy. Each proposed action is described in detail in the full Strategy below.

The Te Korowai vision can be summarised as:

> ***By perpetuating the mauri and wairua of Te Tai ō Marokura***
> ***The community act as kaitiaki of Tangaroa's tāonga***
> ***To achieve a flourishing, rich and healthy environment***
> ***Where opportunities abound***
> ***To sustain the needs of present and future generations***

We have worked with local knowledge and the best science available to define how to achieve this vision. We have applied a philosophy of **gifts and gains** where each stakeholder group has gifted concessions to sustain the integrity of the whole resource for the future. We have described four key outcomes and the specific steps required to achieve them. We have also described four broad actions that cut across and support all the outcomes. The general structure of the Strategy is depicted in Figure 1 below.

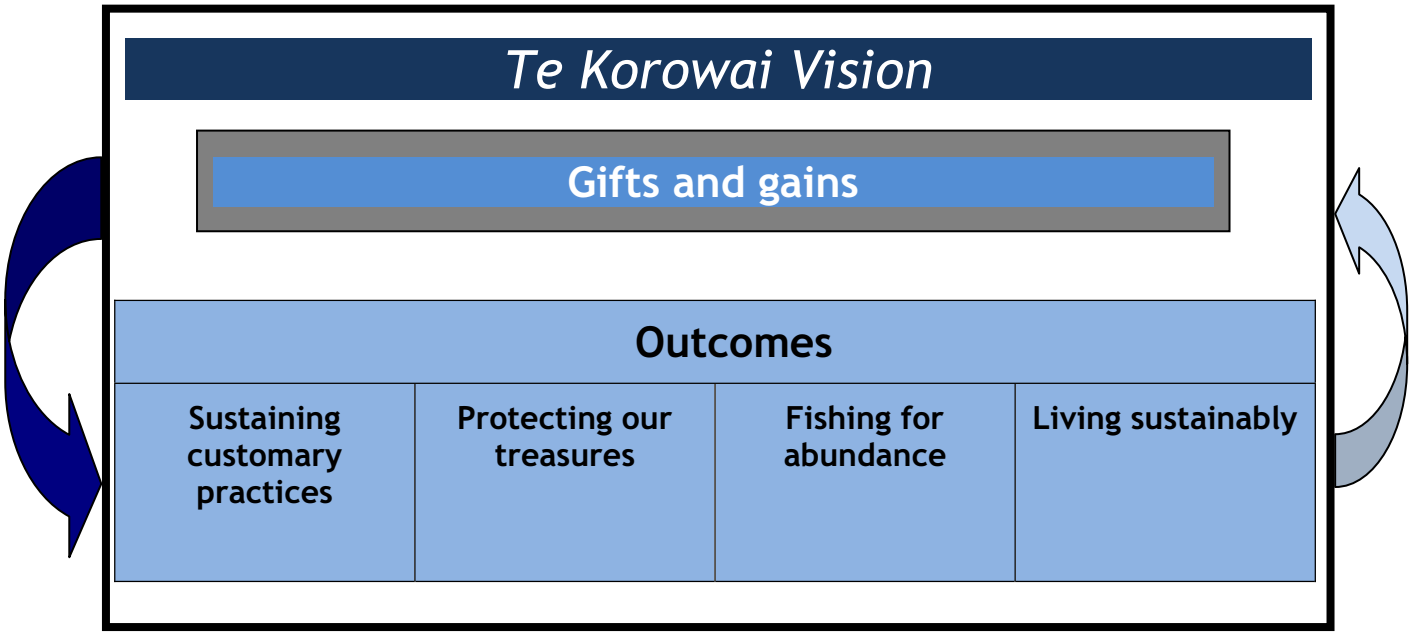

Figure 1 Structure of the Strategy

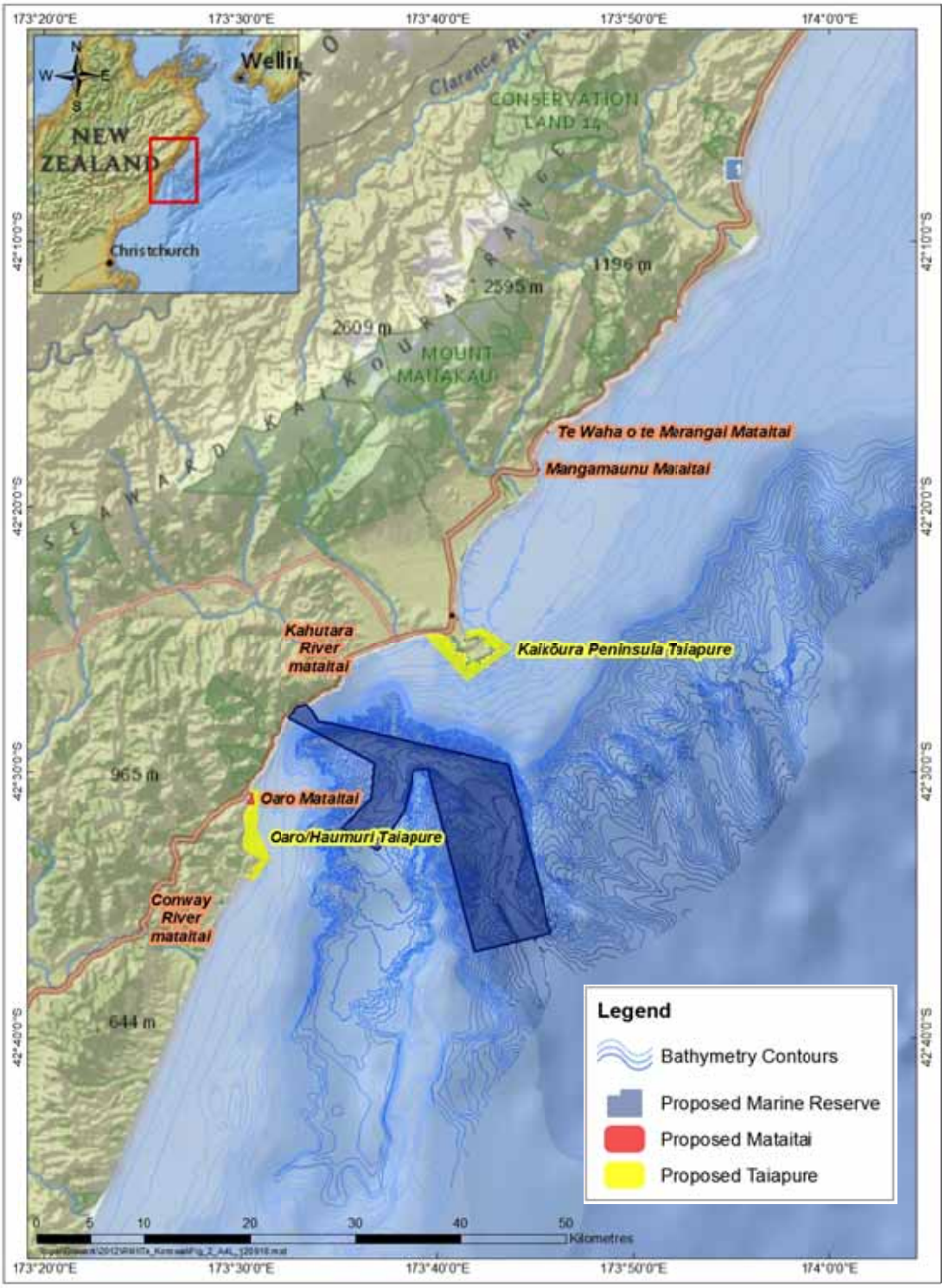

Figure 2 – Overview map of key proposals

Sustaining customary practices

Mataitai – Taiapure – Baseline surveys

The objectives are that traditional fishing areas of special significance to Ngātī Kurī are restored and maintained and traditional knowledge (mātauranga) and customs (tikanga) of Ngātī Kurī are utilised to protect the fisheries of Te Tai ō Marokura.

We are committed to:

- Sustaining Ngātī Kurī as the tangata moana of Te Tai ō Marokura.
- Providing for tāngata whenua control of key food baskets.
- Shared leadership for culturally important areas.
- Effective use of customary management practices.
- Securing public support for all of this.

The overall approach is to use tools provided by Government following the Treaty settlement on fisheries. The settlement means that the commercial interests of Ngātī Kurī in fisheries have already been provided for in the settlement package. The area-specific interests of the iwi can recognised in the use of special provisions under the Fisheries Act 1996. Ngātī Kurī has held back its use of these provisions pending the comprehensive discussions of the Te Korowai process.

Sustaining customary practices will be achieved by:

a) **Protecting the traditional food gathering places of tāngata whenua as Mātaitai managed by tāngata whenua at Mangamaunu, Mussel Rock (Te Waha o te Marangai) and Oaro (mātaitai are closed to commercial fishing but open to recreational fishing under mātaitai rules).**

b) **Taiāpure around the Kaikōura Peninsula and Oaro Blocks/Haumuri Bluff (open to all under taiāpure rules)are managed by tāngata whenua with representation of other local interests.**

c) **Customary and scientific baseline surveys and ongoing monitoring of mātaitai or taiāpure to assist reserve managers.**

Protecting our treasures

World Heritage – Marine Mammal Sanctuary – IBA - Marine Reserve – Rāhui

The objective is that our marine treasures are protected and future generations can continue to experience the wonders that we have today.

We are committed to:

- Protecting Kaikōura's unique coastal and marine features.
- Having representative coastal and marine areas in their natural state.
- The international standing of Kaikōura.

Whales, mountains and the undersea KaikōuraCanyon, together with the diversity of life and landscapes, inspire wonder. Together they define the uniqueness of Kaikōura that draws people from around the world. The Te Korowai approach is to seek legal protection and recognition for:

- The areas of highest biodiversity.
- The habitat of iconic species.
- Some typical areas to remain in their natural state as examples of the natural functioning of the Kaikōura marine environment.

Protecting our treasures will be achieved by:

a) **World Heritage status for Kaikōura from mountain tops to the canyon floor.**

b) **A Marine Mammal Sanctuary from the Clarence River to Gore Bay near Cheviot.**

c) **An "Important Bird Area"(IBA) listed by Birdlife International.**

d) **A local code of practice for avoiding Hector's dolphin entanglement in set net operations, outside the current area closed to all set netting.**

e) **Marine Reserve status over the Kaikōura Canyon, with a connection to the coast south of Barney's Rock.**

f) **One or more rāhui (areas closed to fishing for a generation) within a taiāpure around the Kaikōura Peninsula.**

Fishing for abundance

Enforcement - Bag limits - Charter fishers - Fishing Accord - Research - Reseeding

The objective is abundant fish for present and future generations.

'Fishing for abundance' affirms that it is okay to fish. At the same time it says that how fishing is done can result in a relative abundance of fish in the sea, or a depleted environment. Te Korowai's approach is ecosystem management at a local level. We aim to integrate social and ecological objectives, in a way that complements the use of national tools for fisheries management.

We are committed to:

- Te Tai ō Marokura as the food basket of the Kaikōura community.
- Prosperity for local commercial fishers.
- Good fishing for customary and recreational fishers.

For Kaikōura, the challenge is to be able to manage fisheries effort to a new local consensus thatmanages access and effort. Kaikōura fisheries are currently open to any recreational fisher, customary fisher and to any commercial fisher that holds quota for areas that include Kaikōura. We want fish populations in Kaikōura to remain healthy and grow in response to improved management. This means that rules on commercial, cultural and recreational harvest will need to adapt and aim for ongoing equity across all sectors.

Fishing for abundance will be achieved by:

a) **Fish theft minimised through better enforcement and education of fishers.**

b) **Localised fisheries managed under local recreational fishing rules (see text box below for a summary).**

c) **A charter fishers' code of practice.**

d) **Voluntary agreements with commercial fishers and local codes of practice for all fishers,brought into a comprehensive *Kaikōura Fishing Accord*.**

e) **More research and monitoring relevant to Kaikōura fisheries.**

f) **Increased reseeding of local stocks.**

Summary of proposed changes to recreational fishing limits

- **Karengo**(*Porphyra* spp. and *Ulva* spp.) and**bladder kelp** (*Macrocystis pyrifera*) - introduce a daily limit of five litres wet volume per person per day for each species measured in a 5-litre bucket with a requirement for hand picking.
- **Black foot paua** (*Haliotis iris*) and **yellow foot paua** (*Haliotis australis*)- reduce daily bag limit for each to 6 per person (from 10), increase minimum size to 127mm (from 125mm) for black foot paua (retaining the 80mm limit for yellow foot paua), and add a requirement to measure before taking,with an accumulation limit of 20 paua or 2kg for all paua.
- **Cockles** (*Protothaca crassicosta* and *Austrovenus stutchburyi*)- reduce daily bag limit to 50 per person (from 150).
- **Kina** (*Evichinus chloroticus)* - reduce daily bag limit to 20 per person (from 50).
- **Pupu** (cats eye *Turbo smaragdus*) – reduce daily bag limit to 20 per person (currently 50).
- **All other shellfish** (excluding mussels) combined total 30 per person per day (currently 50).
- **Crayfish** (Rock lobster *Jasus edwardsii*) - keep daily bag limit at 6 per person per day, introduce an accumulation limit 18 (three day take), and a telson clipping requirement for all recreationally harvested crayfish.
- **Blue Cod** (*Parapercis colias)* – reduce the daily bag limit to 6 per person (from 10) and increase minimum size to 33cm (from 30cm).
- **Tarakihi** (*Nemadactylus macropterus*)- reduce daily bag limit to 10 per person from 15, keep 25cm size limit.
- **Kahawai** (*Arripis trutta, A. xylabion*) – reduce daily bag limit to 10 per person (currently 15) with requirement for fish that will not be utilised to be released immediately.
- **Perch** (*Helicolenus percoides*) introduce daily bag limit to 20 per person (currently no limit) and a minimum size of 26cm.
- **Butterfish** (*Odax pullus*) reduce daily bag limit to 10 per person (currently 15).
- **Red moki** (*Cheilodactylus spectabilis*)– institute a no-take policy (currently 15).
- Introduce daily combined bag limit of five per person for all of:
  - **Kingfish** (*Seriola lalandi*) (currently 3).
  - **Bass** (*Polyprion moeone*) and **hapuka** (*Polyprion oxygeneios*) (currently combined limit of 5 with kingfish).
  - **Blue nose** (*Hyperoglyphe antarctica*) (currently 30).
  - **Ling** (*Genypterus blacodes*) (currently 30).
  - **Albacore tuna** (*Thunnus alalunga*) (currently no limit).

  With a daily limit of three for any one of these species.
- Institute limits of one **game shark** per person per day (**seven-gilled shark**(*Notorynchus cepedianus*), **mako shark (***Isurus oxyrhinchus*), **blue shark (***Prionace glauca*), **hammerhead shark**(*Sphyrna zygaena*), **porbeagle shark** (*Lamna nasus*) **or thresher shark**(*Alopias vulpinus*)) (current limit of one of each of these per person per day).
- Introduce a daily limit for three **school shark** (*Galeorhinus galeus*) per person per day and three **rig** (*Mustelus lenticulatus*) per person per day (currently both five).
- Develop and promote a code of practice for catch and release with a requirement to release sharks that will not be utilised unharmed.

Living sustainably

Land and water plan - Highway plan - Biosecurity

The objective is to sustain and enhance the quality of the Kaikōura coastal and marine environment.

Living sustainably in the Kaikōura coastal environment will require integrated land and water planning and with resource management processes under local control.

We intend to work directly with the community, with operational agreements with central and local government and by gaining provisions in statutory plans, regulation, bylaws and laws as required, to achieve the vision. The intention is for any Resource Management Act 1991 provisions to be dealt with under standard procedures rather than under special Te Korowai processes. Te Korowai will lead the work whenever feasible.

We are committed to:

- The environmental integrity of Te Tai ō Marokura.
- Protecting the natural character of the Kaikōura coast.
- Integrated management of land, sea and infrastructure.

Living sustainably will be achieved by:

a) **An integrated land and water plan for the Kaikōura coast.**

b) **A public access and highway management plan for the Kaikōura coast.**

c) **Effective marine biosecurity protection for Kaikōura.**

Engaging understanding

Traditional and new knowledge - Education - Kaitiakitanga

The objective is that the whole community consciously cares for Te Tai ō Marokura.

Engaging people's understanding is fundamental to improving the way people interact with their environment. 'Understanding' means having access to information, experiences and ways of thinking that allow people to understand the value of Te Tai ō Marokura and the consequences of their actions and the actions of others. Informing the community in a way that is relevant and understandable, is vital.

Engaging people's understanding will be achieved by:

a) **Sustaining and disseminating traditional and local knowledge.**

b) **Growing new knowledge on Te Tai ō Marokura through research and monitoring.**

c) **Kaikōura becoming a focal point for marine education and creating an education programme on marine values and threats.**

d) **Directly engaging with key groups to grow a sense of ownership and kaitiakitanga.**

Governance

Special legislation – Funding – Leadership

The objective is effective oversight of implementation.

We are seeking to enhance the role of local leadership, but are not seeking independence from Government or to usurp statutory functions for decision-making and enforcement. This is about local communities taking the initiative and developing a regional view of things. Te Korowai is asking the Government to consider giving it statutory recognition.

Effective governance will be achieved by:

a) **Legally embedding the role of Te Korowai and introducing the suite of legal instruments identified in the Strategy.**

b) **Securing ongoing funding for the work of Te Korowai in implementing the Strategy.**

c) **Ongoing leadership by Te Korowai as kaitiaki of Te Tai ō Marokura.**

Compliance

Branding - Enforcement

The objectives are that legal rights and obligations and local customs and codes of practice, are respected.

Achieving compliance with the outcomes of the Strategy will involve developing a culture and social expectation that supports the vision of this Strategy. Implementation will also require enforcement where legal rights and obligations are transgressed. Nothing in this Strategy proposes changing the rules around enforcement and penalties, and enforcement would remain with the relevant agencies under our proposals.

Effective compliance will be achieved by:

a) Te Korowai-endorsed branding of code-compliant companies.

b) Effective enforcement by the Ministry for Primary Industries, Department of Conservation, Kaikōura District Council and Environment Canterbury.

Monitoring and review

Review periods - Indicators

The objective is that the Strategy remains up-to-date and implementation is adapted over time.

Effective monitoring and review will be achieved by:

- The Strategy being reviewed every 10 years in an open process that involves opportunities for the whole community to influence future directions.
- All protection mechanisms being reviewed for their effectiveness at least every 25 years so that each generation can take responsibility and adapt management to the current situation.
- Monitoring and reporting on key indicators.

The key indicators for this strategy will be based on assessing:

a) **Progress with implementing each of the actions above.**

b) **Changes in key indicators(such as area of seaweed or size of fish) inside and outside marine reserves, marine mammal sanctuaries, taiāpure, mātaitai, and rāhui.**

Part A
Introduction

1. About Te Korowai
2. Developing the Strategy

1. About Te Korowai

1.1 Te Korowai o Te Tai ō Marokura

Te Korowai o Te Tai ō Marokura (Te Korowai) is a group of people standing for local leadership in caring for Tangaroa, and in decisions on the use and protection of our marine environment.

Our community has come together in response to many issues and uses, to develop a management strategy for our coast – the Strategy is a korowai for Te Tai ō Marokura. We are weaving that korowai together.A *korowai* is a cloak worn by a chiefly person and is laid over something to ensure its care and protection. With respect to Te Tai ō Marokura, the 'korowai' signifies the care and protection of the coastal marine area of Marokura.

Te Korowai membership includes local groups directly involved with the coastal marine area. These are depicted in Figure 3 within in the centre or 'yolk' of the 'egg' model. Agency and authority members of Te Korowai responsible for managing aspects of the coastal marine area play a support role and they appear in the outer ring or 'white' of the egg.

In submissions, various groups requested greater involvement in developing solutions for the Kaikōura marine environment. As part of the implementation phase, we will work to ensure appropriate levels of engagement with affected parties and sector interests. Sector working groups will be established as part of the implementation plan.

Te Korowai o Te Tai ō Marokura – Kaikōura Coastal Marine Guardians

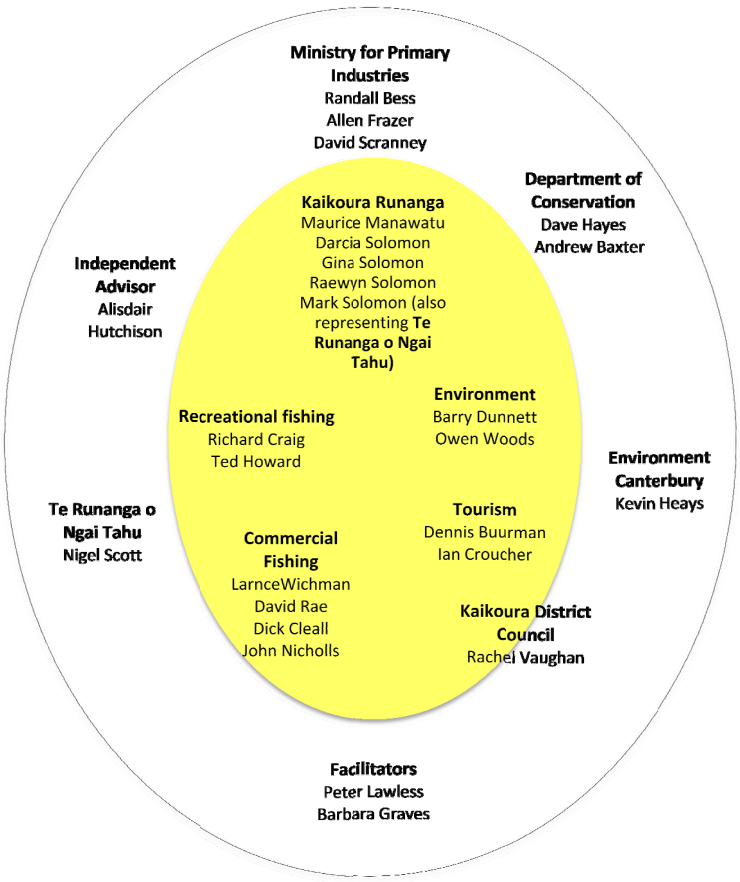

Figure 3 – The egg model of Te Korowai (membership as at August 2012)[1]

(Model developed by Laurel Teirney)

Note: Te Rūnanga o Ngāi Tahu and the Kaikōura District Council are in both the yolk and the white of the egg. For Te Rūnanga o Ngāi Tahu this reflects its dual role in Kaikōura representing its community and business interests, and as a legal entity representing the tribal interests of Ngāi Tahu as a whole. The Kaikōura District Council is an agency and thus in the white advising on its areas of statutory responsibility, but it also represents the primary community of interest for the area and thus is in the yolk as part of decision-making.

[1]Note that Alisdair Hutchison previously represented the Ministry for the Environment. Te Korowai invited Alisdair to continue his involvement in a private capacity when the Ministry withdrew its support on 2009, and he remains an advisory member. Others who have served on Te Korowai are Lynda Kitchingham (Forest and Bird), Tai Stirling (Kaikoura Runanga), Phil Richardson (Commercial fishing, Paua), Thomas Kahu (Whale Watch), Paul McGahan(Kaikoura Marine & Coastal Protection Society), Nicole Sherriff (Kaikoura District Council), facilitators Laurel Tierney and Glen Lauder, agency representatives -Mealnie Russell (MFish), Marie Kleinlangevelsloo (MfE), Mike Morrissey (DOC), Tony Brett (MFish), Carl Baker (MFish), Jonathon Dick (MFish), Rose Gindley (MFish), David Gregory (Ecan), Robert Gerard (Ecan), David Hewson (Ecan) and support staff Rachel Pharazyn and Carly Sommerford (Minute Secretaries)

1.2 Te Korowai vision

Our vision is a future where the moana (sea) of Kaikōura is richer and healthier. We want it to be used sustainably, providing for the needs of present and future generations. In this vision, people will interact with the sea in ways that care for its mauri (life force). People's activity will be managed to respect the natural connections between living and physical elements and sustain the sea's dynamic ecological balance.

Our vision:

By perpetuating the mauri and wairua of Te Tai ō Marokura, our community, as kaitiaki of Tangaroa's tāonga, are sustaining a flourishing, rich and healthy environment, where opportunities abound to sustain the needs of present and future generations.

Mā te whakapūmau i te mauri me te wairua o Te Tai o Marokura ko mātou ngā kaitiaki o ngā taonga a Tangaroa kei te tiaki i te mōmona me te waiora o te Taiao mō tātou, ā, mō kā uri ā muri ake nei.

Māori terms have been included in the English version because their unique meaning cannot be fully translated. These concepts are at the core of the Te Korowai vision, and their full meaning will become apparent as we share the journey ahead. The journey aims to enrich the relationship of people with their marine environment.

Without pretending to delve into the deeper meaning of the Māori terms, the following is a simple explanation of their use here:

- *Mauri* is the life-force of the living system, and *wairua* its spirit. These can be enhanced or diminished by human actions, but continue to exist in their own right whatever we do.
- *Te Tai ō Marokura* is the sea around Kaikōura.
- In this context, *kaitiaki* are the guardians who recognise the need to care and take responsibility for the natural environment. The vision recognises that members of the wider Kaikōura community are the kaitiaki of the Kaikōura marine area. We acknowledge the importance of local people acting to protect the valuesof their natural world.
- *Tangaroa*, the Māori sea god, embodies the sea in its entirety – both its seen and unseen elements. *Taonga* are the treasures of Tangaroa – all those wonderful facets that make the sea a dynamic living system.

1.3 The management area

The area covered by this strategy is the coast and sea between Waiau toa (Clarence River), south to Tutaeputaputa (Conway River) (Figure 4), from mean high-water springs out to seaward boundaries defined by the issues being raised.

In practice the Strategy focuses strongly on the coastal marine environment from the high tide mark to the limits of the Territorial Sea at twelve nautical miles. It has details about management of the shore adjacent to the coast, and something to say about the management of landscapes to the top of the Seaward Kaikōura range and catchments that discharge to this coast. Seaward, the Strategy deals directly with activities that affect marine mammals to around twenty five nautical miles from the coast.

This strategy deals with activities and issues on coastal land where there are:

- Direct effects on the coastal marine area (e.g. pollution or fresh water flowing off the land).
- Effects on the amenity value or uses of the coastal marine area.
- Effects on coastal and marine wildlife.
- Cross-boundary management issues (such as boat ramps that span the land/sea boundary).

Te Korowai o Te Tai ō Marokura agreed that although the legal boundary of Ngāti Kurī is from Parinui o Whiti (White Bluffs) south to the Hurunui River and inland to the Main Divide, a smaller geographical area centred on the Kaikōura community rather than multiple communities would be more practical for resolving issues. A further phase of work could cover the entire marine area in the Ngāti Kurī rohe (area).

Ngāi Tahu is a tribe (iwi) with many sub tribes (hapū). Ngāti Kurī is one of those sub tribes. Ngāti Kurī is the subtribe that holds manawhenua manamoana (customary authority over the land and sea) in the area of Te Tai o Marokura. The values of Ngāti Kurī have been an important driver in defining the scope and content of this Strategy, and key aspects are summarised below:

- Te Tai ō Marokura is within the realm of Tangaroa, God of the Sea. Tangaroa was the first husband of Papatuanuku (the Earth Mother), before she wed Ranginui (the Sky Father). The fishing harbours and sheltered coastal areas of the eastern coastline of Te Waipounamu (land of the greenstone waters) were created by Tuterakiwhanoa, the mokopuna (grandchild) of Aoraki, son of Ranginui.
- Tuterakiwhanoa was sent by his grandfather to enable human occupation of the lands of Te Waka o Aoraki (the canoe of Aoraki) – the lands of Te Waipounamu, that formed when the waka navigated by Ranginui's sons ran aground on a hidden reef and turned to stone and earth.

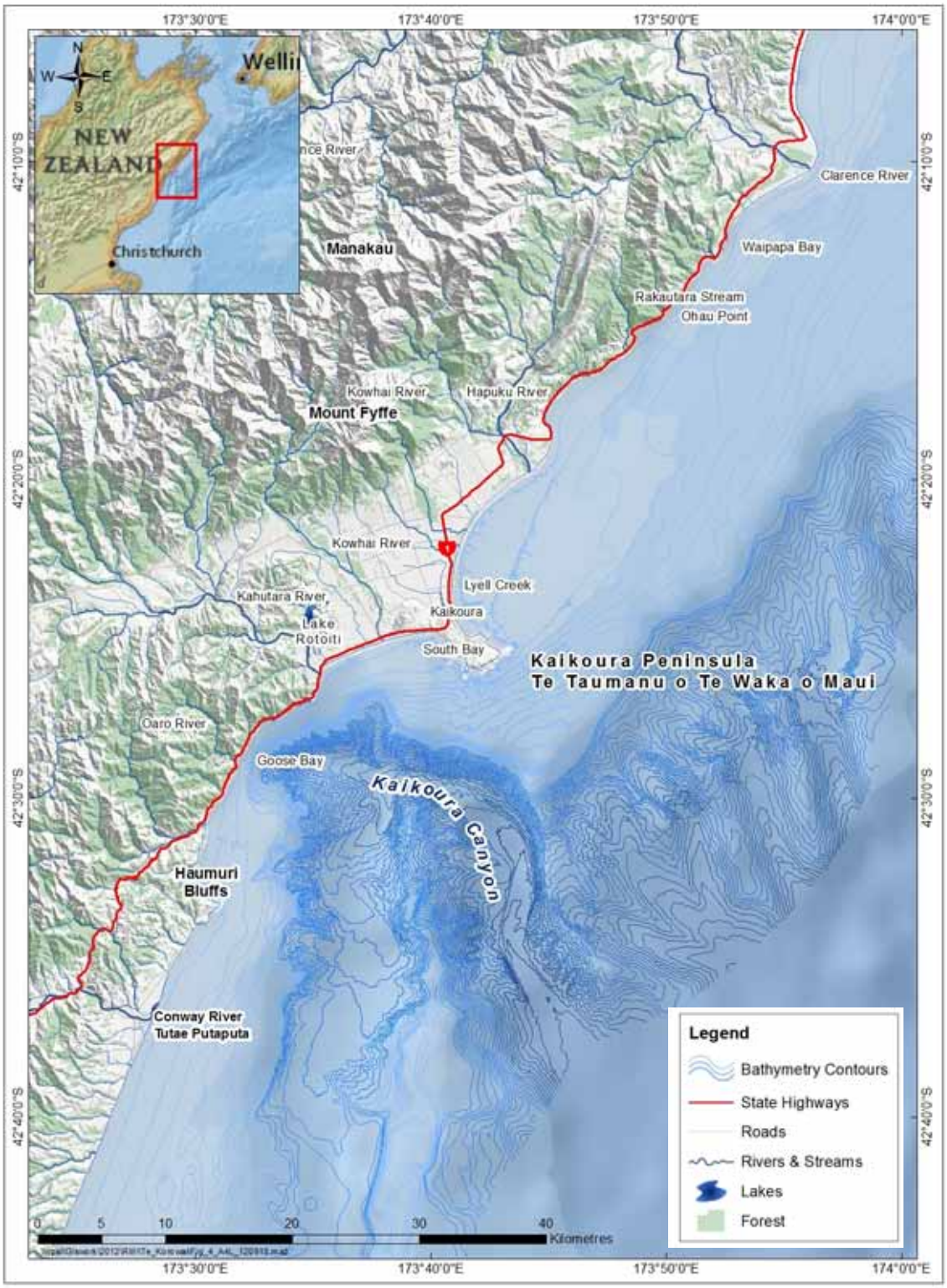

Figure 4: Kaikōura coastal area and catchment

- Tuterakiwhanoa enlisted the help of Marokura with this task. In honour of his work the Kaikōura marine environment was named after Marokura. Te Tai ō Marokura (the coastal marine area of Marokura) is an integral part of Ngātī Kurī history and cultural identity. The immense importance of the area historically, culturally and spiritually is as dynamic as its geography and the life forms that depend on it.

2. Developing the Strategy

The process of forming this Strategy began more than a decade ago. After long debate, the Royal Forest and Bird Protection Society's application for a marine reserve on the Peninsula,did not proceed to completion. Recognising the importance of this marine environment, Te Tai ō Marokura, the Minister of Conservation invited Ngātī Kurī to collect everyone together and plan formally for the future of the Kaikōura marine environment.

Funding and support for the process to date, has come from the Department of Conservation, Kaikōura District Council, Environment Canterbury, Encounter Foundation, Solution-Multipliers NZ Ltd, Canterbury Community Trust, Te Rūnanga o Kaikōura, Ngāi Tahu Communications, Takahanga Marae, The Lobster Inn, Ministry for the Environment and the Ministry for Primary Industries. In addition there has been a large number of voluntary hours from Te Korowai members, as well as some financial donations from within the group. The provision of facilities and support from the community is also greatly appreciated.

The proposed Strategy was not developed under the Government Marine Protected Areas Policy,and this confused and concerned some submitters. The Minister of Conservation specifically excluded Kaikōura from the national process. Te Korowai was, however, advised by the Department of Conservation throughout the process and took the practice guidance of the Policy into account, as it developed and revised the Strategy.

Following the lead of the Fiordland Guardians, issues were identified and information was gathered to inform the process. Te Korowai completed the first step, publishing a comprehensive Characterisation Report in 2008, that summarised the current information about the Kaikōura coast. This report went to a second edition and, in total, 500 copies were printed and distributed to interested parties.

We sought comment on the Characterisation Report, ran workshops, attended meetings, developed more detailed solutions and sought feedback on those, and invited people to come to our meetings.

The clear message, from those who commented, was that they wanted Te Korowai to proceed and make a full strategy and then consult again. Te Korowai published its proposed Strategy in 2011 and allowed three months for public submissions. One hundred and sixty nine submissions were received. The submissions were analysed and covered 997 points. We considered each point and responded to submitters with a full account of our decisions in August 2012. The Strategy was then redrafted to reflect those decisions.We noted the concern of some submitters that the amount of effort already put in might hinder taking on new ideas, and we worked to ensure that all issues were considered with open minds.

Te Korowai identified outcomes and actions that would enable us to stand for the future of Te Tai ō Marokura. We worked with local knowledge and the best science

and other information available, to define how to achieve the vision. This Strategy presents the best of the ideas that have been developed; the ones that will make a real difference.

We applied a philosophy of gifts and gains where each party gifted concessions to sustain the integrity of the whole resource for the future. We noted that a gifts and gains approach was not supported by a number of submitters. We did find the approach useful and are grateful to Laurel Tierney and the Fiordland Guardians for its development. Citing gifts and gains in the draft Strategy was more a commentary on the experience of consensus building, than intended as a formula for decision-making. What we realised as we went on, was that our shared vision was the touchstone that guided discussion and consensus. The gifts were to the sea, to the future and to our community. The gains are everybody's.

We described four key outcomes and the specific steps required to achieve them. We then described four broad actions that support all of the outcomes. These are shown in Figure 1 in the Summary and in more detail in Figure 5 below.

We noted the desire of some submitters to retain the status quo, but considered that implementing the Strategy as a whole was required to protect and enhance the coastal marine environment, fisheries and wildlife of Kaikōura.

We have endeavoured to continue to inform the public over the last seven years through:

- Reports in the Kaikōura Star.
- Production of newsletters, brochures and rack cards distributed around Kaikōura.
- Events such as Seaweek.
- Holding open meetings, open days, and advertised public sessions of Te Korowai meetings and local events.
- Speaking to local groups on request and with recreational fishing groups in Christchurch.

Six hundred copies of the full Strategy and four hundred copies of the summary were printed and distributed, as well as promotion of the documents on the website.

The Te Korowai Strategy is an integrated, community-based and agency-supported approach. It seeks integration across different jurisdictions through unifying legislation, but does not seek to create any unique legal instruments, such as marine parks. We believe that costs will be reduced through increased efficiencies and reducing duplication of effort.

Te Korowai considered all interests equally and the Strategy reflects this. We recognise the need to have on-going dialogue with local residents and will develop a process to do this in the implementation phase.

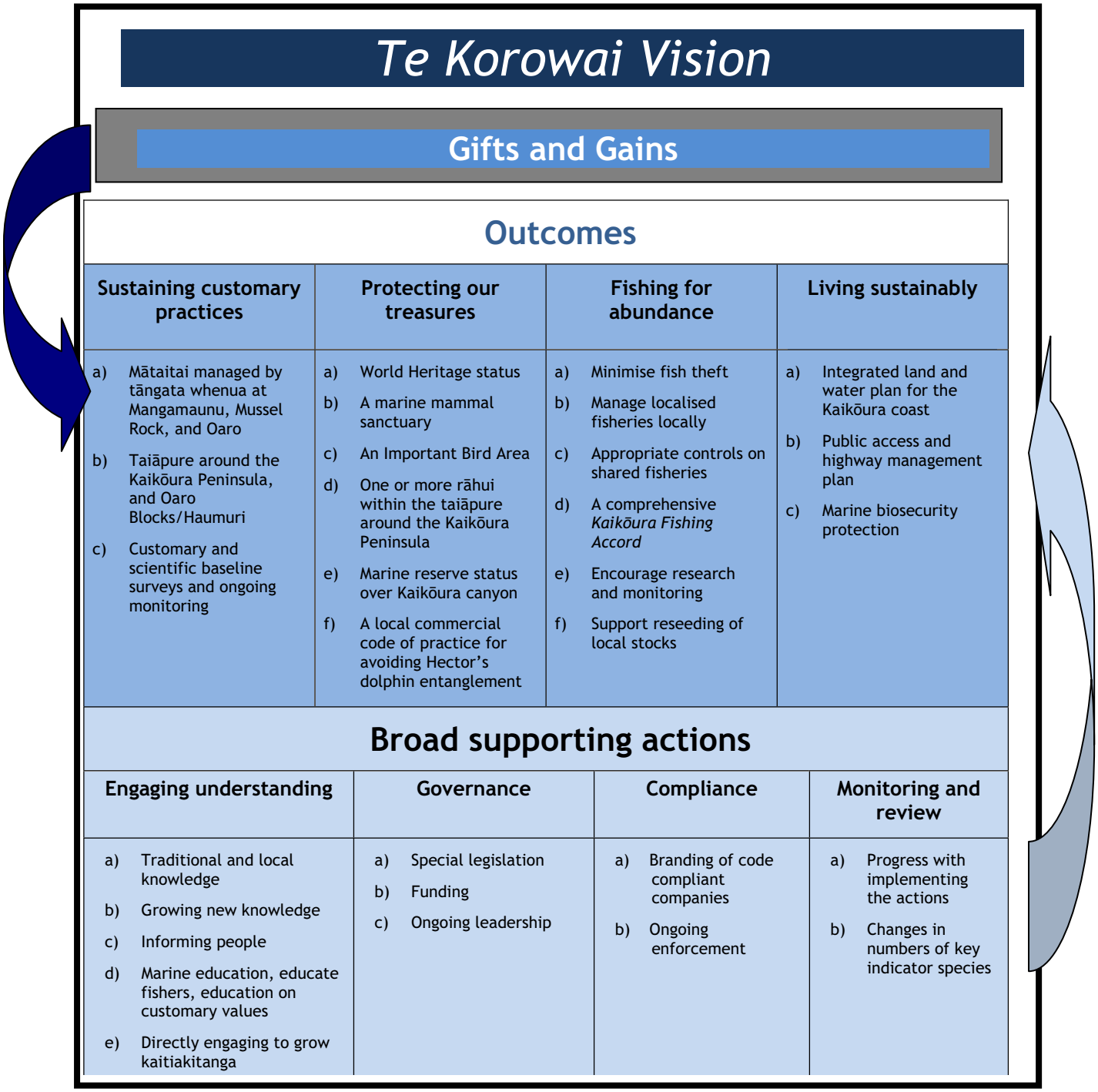

Figure 5 Detailed structure of the Strategy

Part B
Outcomes

3. Sustaining customary practices
4. Protecting our treasures
5. Fishing for abundance
6. Living sustainably

3. Sustaining customary practices

3.1 Objectives

The objectives are that traditional fishing areas of special significance to Ngātī Kurī are restored and maintained and traditional knowledge (mātauranga) and customs (tikanga) of Ngātī Kurī are utilised, to protect the fisheries of Te Tai ō Marokura.

We are committed to:

- Sustaining Ngātī Kurī as the tangata moana of Te Tai ō Marokura.
- Providing for tāngata whenua control of key food baskets.
- Shared leadership for culturally important areas.
- Effective use of customary management practices.
- Securing public support for all of this.

The overall approach is to use tools provided by Government following the Treaty settlement on fisheries. The settlement means that the commercial interests of Ngātī Kurī in fisheries have already been provided for in the settlement package. The area-specific interests of the iwi can be recognised in the use of special provisions under the Fisheries Act 1996.

Ngāti Kurī, as the local tangata whenua, agreed to put their mātaitai proposals on hold so that solutions integrated into a comprehensive plan could be considered.

3.2 Background

3.2.1 Kaitiakitanga

Kaitiakitanga is the exercise of guardianship by the tāngata whenua of an area in accordance with tikanga Māori. For Ngāi Tahu whānui, there is a kaitiakitanga obligation to safeguard the wellbeing and mauri of ancestral land, water, sites, wāhi tapu, valued flora and fauna, and other taonga in the Ngāi Tahu takiwā for future generations.

As far back as 700 years ago, the earlier peoples of what is now the Ngāi Tahu takiwā, had mana and authority over land, sea and water. The Ngāi Tahu ancestors who intermarried with those peoples assumed the mana of the whenua. They continued to sustainably manage and protect the mauri of the marine fisheries. Today, Ngāi Tahu whānui remain committed to this task.

3.2.2 Traditional values and uses

The Kaikōura coastline took its name from Tama ki te Rangi, who visited during his explorations and caught and cooked crayfish over an open fire there. From this event the area was named Te Ahi Kai Kōura a Tamakiterangi (the crayfish-cooking fire of Tamakiterangi).

Because it was an attractive place to build permanent settlements, including pā (fortified settlements), the coast was visited and occupied successively by Rapuwai, Ngāti Wairangi, Waitaha, Ngāti Mamoe and Ngāi Tahu, who through conflict and alliance have merged in the whakapapa (genealogy) of the Ngāi Tahu whānui. The struggles, alliances and marriages arising out of these migrations eventually resulted in a stable, organised, and united series of hapū, located at permanent or semi-permanent settlements along the coast that corresponded with mahinga kai sites.

Mahinga kai refers to the custom of gathering food. It encompasses the life-supporting food itself, the place it is found, and the practice of gathering it. Mahinga kai involved great seasonal hīkoi (journeys) to gather kai from the mountains to the sea (ki uta ki tai).

The mahinga kai custom underpins Ngāi Tahu culture. It is central to the tribe's relationships with places, species and resources, to their cultural, spiritual, social and economic wellbeing, and is a vehicle for transferring traditional knowledge from generation to generation.

As well as the crayfish for which Kaikōura is famous, the whole area offered a bounty of mahinga kai, including:

- A range of kaimoana (seafood).
- Freshwater resources from lagoons and rivers.
- Marine mammals (whale meat and seal pups).
- Waterfowl.
- Seabird eggs and forest birds.
- A variety of plant resources.

The near-inshore fisheries (typically 1–2 nautical miles from the coast) were heavily targeted for shellfish, cartilaginous and bony fish (rocky-reef dwellers, demersal and pelagic), and seaweeds such as rimurapa and karengo.[2]

Fishing outside this zone (i.e. offshore) was sporadic, and mainly for hāpuku. Te Ika Whataroa was one of these tauranga ika (offshore fishing grounds). Most offshore fishing occurred within about 12 nautical miles of the shore.[3]

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[2] Higgins and Goomes (1988) and Waitangi Tribunal (1992).

[3] Ibid.

Ngāti Kurī's coastal mahinga kai sites were spread throughout their takiwā (district); however, the most significant traditional fishing areas included:[4]

- Waiau-toa (Clarence River) and coastal area
- Waipapa Bay.
- Okiwi Bay.
- Half Moon Bay (Umu Taoroa, the long-cooking oven).
- Ōhau Point.
- Paparoa Point.
- Rakautara Stream and coastal area.
- Mangamaunu.
- Hāpuku River and coastal area.
- Waikowau (Lyell Creek).
- Te Ahi Kaikōura Tama ki Te Rangi (Kaikōura Peninsula, including Waiōpuka).
- Te Ika Whataroa (Tauranga Ika offshore from Kaikōura Peninsula).
- Kōwhai River (Wai o Ruarangi, the original name).
- Kahutara River (Peketa).
- Tokaanau (adjacent to Parititahi coastline).
- Parititahi coastal area.
- Raramai (Riley's Lookout).
- Kiekie.
- Paia Point (Whakauae).
- Te Makura (Goose Bay).
- Ōmihi coastal area.
- Oaro River, lagoon and coastal area.
- Mikonui coastal area.
- Haumuri coastal area (Haumuri Bluffs).
- Okarahia Stream.
- Te Pariwhakatau coastal area.
- Tūtae Putaputa (Conway River) and coastal area.[5]

The tūpuna (ancestors) had profound knowledge of the coastal environment and weather patterns, passed from generation to generation. This knowledge continues to be held by whānau and hapū, and is regarded as a taonga. The traditional

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[4] Anderson (1998), Brailsford (1997), Cooper (1989), Environment Canterbury (2005), Higgins and Goomes (1988), Solomon and Howse (1988), Te Rūnanga o Kaikōura (2005), Trotter and McCulloch (1998).

[5] Areas outside the scope of the Te Korowai o Te Tai o Marokura strategy have not been included.

mobile lifestyle of Ngāi Tahu people led to their dependence on the coast's resources.

Numerous urupā (cemeteries) have been exposed or eroded along of the coast. Water-burial sites, known as waiwhakaheketupapaku, are spiritually significant and linked with important sites on the land. Places where kaitāngata (the eating of those defeated in battle) occurred are wāhi tapu. Urupā are the resting places of Ngāi Tahu tūpuna, and as such are the focus of whānau traditions. These places hold the memories, traditions, victories and defeats of Ngāi Tahu tūpuna, and are often protected.

The mauri (life force) of the coast binds its physical and spiritual elements, generating and upholding all life. Every aspect of the natural environment possesses a life force, and all forms of life are related. Mauri is critical to Ngāi Tahu's spiritual relationship with the coastal area.[6]

Tikanga are the customs and traditions, handed down through many generations, that govern the use and conservation of the environment. These management practices enabled Ngāti Kurī to sustainably harvest and conserve their fisheries. Traditional fisheries management included restrictions on harvesting, known as rāhui.

We noted concern in some submissions that couching important decisions in terms of "myth and legend" might be seen to be naive and open to ridicule. This is a matter that was seriously debated in the formation of the Strategy.

Many of those around the table hold higher degrees in science and most come from a western background. At the same time, we became aware that the cultural constructs and ways of understanding this place developed by Māori over hundreds of years, were of immense importance.

Not only did their generational world view help to counter short-term thinking inherent in many modern institutions, the natural wisdom of seeing the community and its environment not as two things locked in struggle, but as part of one greater whole linked through ancestry and spiritual connection, was essential to gaining commitment to a shared better future.

We were impressed how science and tradition often reached the same conclusions about how to proceed effectively, and how those holding traditional understanding, mātauranga Māori, were quick to take up scientific perspectives and insights. We were also conscious that the traditional knowledge of others, such as commercial fishermen, was vital.

So we came to a point where our approach is to see traditional knowledge not as myths and legends, not as fishermen's tales, but as part of the community's storehouse of knowledge. We stand for integration, richness and knowledge-based decision making in whatever form that knowledge is presented. This is not an easy

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[6] Ibid.

road to take, as often understanding traditional knowledge requires an understanding of cultural context, just as understanding of science require an understanding of scientific context and method.

3.2.3 Rūnanga governing principles associated with Te Tai ō Marokura

Te Rūnanga o Kaikōura is one of eighteen Papatipu Rūnanga as identified under Te Rūnanga o Ngāi Tahu Act 1996. Te Rūnanga o Kaikōura is the administrative council of Ngāti Kuri. All those that can whakapapa to Kuri, can affiliate to the Rūnanga. Te Rūnanga o Ngāi Tahu is the tribal representative body of Ngāi Tahu Whānui and a recognised iwi authority. Te Rūnanga o Ngāi Tahu is the organisation that services the tribe's statutory rights and ensures that the benefits of the Settlement grow for the future generations. It was established by the Te Rūnanga o Ngāi Tahu Act 1996.

Te Rūnanga ō Kaikōura has developed a comprehensive environmental management plan, which includes a section about Te Tai ō Marokura. An overriding principle of the plan is 'ki uta ki tai', or a holistic mountains-to-sea philosophy.

Rūnanga governing principles associated with Te Tai ō Marokura are, that:

- *"Ngāi Tahu whānui– current and future generations – are able to exercise their customary rights and responsibilities associated with coastal and marine environments as guaranteed by the Treaty.*
- *Coastal and marine biodiversity is protected and enhanced.*
- *Coastal and marine areas important to Te Rūnanga o Kaikōura are enhanced and restored.*
- *The realm of Tangaroa flourishes, and the mahinga kai of Tangaroa is readily available to tāngata whenua and their communities.*
- *The relationship between land and aquatic ecosystems is recognised and provided for in all decision-making relating to the coast.*
- *The adverse impacts of human activities on coastal and marine environments are avoided, remedied or mitigated at all times.*
- *Research and monitoring of coastal and marine areas are supported and encouraged to provide baseline information on which to make sound decisions.*
- *A community-led, integrated strategy is developed with Department of Conservation, other relevant agencies and fisheries stakeholders to effectively manage land, water, mahinga kai, and the biodiversity of Te Tai ō Marokura.*
- *Communication and collaboration is promoted between those groups with an interest in the management of the coast and sea."*

Some issues identified in the Te Tai ō Marokura environmental management plan are similar to those identified by Te Korowai. Accordingly, Te Rūnanga members believe that Te Korowai may assist them in finding and implementing management solutions.

The Fisheries Act 1996 and the South Island Customary Fishing Regulations provide a number of legal tools to help tāngata whenua manage customary fishing areas. There are three main tools.

3.2.4 Mātaitai

A mātaitai reserve is a traditional fishing ground established pursuant to the Fisheries (South Island Customary Fishing) Regulations 1999, allowing tangata tiaki/kaitiaki (specifically appointed for the mātaitai reserve) to sustainably manage the fisheries resources in that mātaitai reserve. Mātaitai reserves also provide for the expression of customary management practices.

A mātaitai reserve identifies a customary food-gathering site and allows for its management by tāngata whenua (South Island Customary Fishing Regulations 1998). Tāngata whenua appoint tāngata tiaki to manage mātaitai, which they do by making bylaws. These must be approved by the Minister of Fisheries, and must apply generally to all individuals.

The appointed tangata tiaki/kaitiaki, or the nominating tangata, may apply for a mātaitai reserve in respect of any part of the area/rohe moana for which they are the tangata whenua or the tangata tiaki/kaitiaki. A reserve can be established in any area of New Zealand Fisheries waters in the South Island.

The establishment of a mātaitai reserve does not affect titles to private land adjoining the reserve, change existing arrangements for access to private land or prevent access to the reserve, beaches or rivers.

Non-commercial fishing is not restricted or prohibited in a mātaitai reserve until such time as bylaws, affecting all fishers within a mātaitai reserve, are put in place. Until bylaws are approved, non-commercial fishing would continue in accordance with the rules set out in existing Amateur Fishing Regulations. Upon its establishment, commercial fishing within the mātaitai reserve is prohibited. tangata tiaki/kaitiaki have the power to recommend a regulation to the Minister that allows commercial fishing of specified species by quantity or time period within the mātaitai reserve.

Tangata whenua nominates tangata tiaki/kaitiaki for the mātaitai reserve, and the Minister appoints them when establishing the reserve.Tangata tiaki/kaitiaki appointed may authorise any individual to take fish, aquatic life or seaweed for customary food gathering purposes from within the whole or any part of the mātaitai reserve. No fishing for customary food gathering purposes may take place in the mātaitai reserve without authorisation from the tangata tiaki/kaitiaki. Tangata tiaki/kaitiaki must report customary authorisations to the Ministry for Primary Industries.

Tangata tiaki/kaitiaki appointed for a mātaitai reserve may recommend bylaws that restrict or prohibit the taking of fisheries resources from within the reserve. Bylaws apply generally to all persons fishing in a reserve, and the process of introducing bylaws includes consultation with the public.

3.2.5 Taiāpure

A taiāpure identifies an area (of estuarine or coastal waters) that has special significance to an iwi or hapū as a source of food or for spiritual or cultural reasons. The object of acknowledging taiāpure is to make better provision for recognising rangatiratanga (chiefly authority) and the fisheries rights secured under Article II of the Treaty of Waitangi. The provisions for taiāpure are contained in Part IX of the Fisheries Act 1996.

A management committee, nominated by the tāngata whenua (which will include representatives from local fisheries stakeholder groups, including commercial fishers) is appointed by the Minister of Fisheries. The role of the committee is to recommend regulations that allow taiāpure to function according to custom.

The regulations may relate to:

1. The species of fish, aquatic life or seaweed that may be taken.
2. The quantity of each species that may be taken.
3. The dates or seasons that each species may be taken.
4. Size limits relating to each species that may be taken.
5. The method by which each species may be take.
6. The area or areas in which each species may be taken.

The effect of the taiāpure on local fisheries and the people using them will depend on the controls that are established as part of the regulations. Until any regulations are enacted to restrict or prohibit fishing within a taiāpure-local fishery, all fishing activities can continue to take place subject existing rules.

3.2.6 Temporary closures and rāhui

Temporary closure and method restriction provisions (section 186b of the Fisheries Act 1996) allow for fishing to cease or be restricted in New Zealand Fisheries waters of the South Island. The purpose of a rāhui (restriction) is to improve the size and/or availability of fish stocks, or to recognise their use and management by tāngata whenua. A rāhui can be applied for particular days, weeks, months or seasons up to a period not exceeding two years (the rāhui can be renewed at the end of each period, however). Rāhui apply to all individuals, including customary fishers. Rāhui can also be formed under customary practices and under other provisions of the Fisheries Act 1996.

Figure 6 – Kaikōura -Wakatu temporary closure

A section 186b temporary closure was first placed on the Waiōpuka reef area of the Kaikōura Peninsula in August 2002 (Figure 6) as a form of rāhui. It was proposed by Te Rūnanga o Kaikōura and the Kaikōura Marine and Coastal Protection Society on the grounds that the combined pressure from recreational, commercial and customary harvesters was depleting fish stocks. This rāhui has been renewed four times and will remain in place until 17 August 2014[7].

3.3 Issues

3.3.1 Quota Management System

In 1986 the Government introduced the Fisheries Quota Management System (QMS) as the means by which New Zealand would sustainably manage fisheries resources. In doing so, the Crown established commercial property rights to fisheries resources in the form of quota – individuals or companies were allocated the right to catch certain quantities of particular species.

Dissatisfied, Ngāi Tahu claimed to the High Court and the Waitangi Tribunal that the Quota Management System was a breach of the Treaty because it gave property rights customarily owned by tāngata whenua to commercial fishers in the form of quota.

The High Court found that: *"by implementing the Quota Management System the Crown had committed a fundamental breach of the Treaty of Waitangi by giving non-Māori a right which belonged to Māori and had not been acquired by the Crown."*

3.3.2 Treaty settlement

The Waitangi Tribunal found that the Crown, as Treaty partner, failed to protect mahinga kai.[8]The Waitangi Tribunal also found that Ngāi Tahu held an exclusive Treaty right to the sea fisheries surrounding the whole of their rohe out to a distance of about 12 nautical miles, there being no waiver or agreement by them to surrender that right.[9]

The Minister of Fisheries was required to promulgate regulations that recognised and provided for the customary fishing rights of tāngata whenua as guaranteed by the Treaty of Waitangi, and that provided tāngata whenua with the opportunity to manage their rights once more. The Fisheries (South Island Customary Fishing) Regulations 1999 were made under sections 89 and 186of the Fisheries Act 1996.

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7 Fisheries (Kaikōura - Wakatu Quay Temporary Closure) Notice 2012

8 Ibid.

9 Waitangi Tribunal (1992).

The regulations provide a process for tāngata whenua to notify their tāngata tiaki/kaitiaki (customary fisheries managers) to the Minister for Primary Industries (formerly the Minister of Fisheries). The Minister will then publish details of the notification. If there are no disputes, the Minister will confirm the appointments. Tāngata tiaki/kaitiaki manage customary food gathering (by issuing fishing authorisations) and provide a framework for tāngata whenua to contribute to fisheries management.

The tangata tiaki/kaitiaki may authorise any individual to take fisheries resources managed under the Fisheries Act 1996 for customary food gathering purposes from within the whole or any part of the area/rohe moana for reasons such as hui, tangi, koha or whānau sustenance. To exercise their customary fishing rights, now administered under the customary regulations, Ngāti Kurī must obtain authorisation from one of their tāngata tiaki or kaitiaki.Tāngata tiaki or kaitiaki were first appointed for Te Rūnanga o Kaikōura in 2000.

The customary authorisations issued for this area since 2000 are primarily for near-inshore fisheries (in particular, shellfish such as pāua, kina and kōura). The main finfish fished under customary authorisation are rāwaru (blue cod) and hāpuku (groper).

There is a clear trend in the purposes for which authorisations are issued – most are for hui and tangihanga (funerals). Catch levels are currently extremely low – less than 1–2 tonnes per year for most key species.

Customary harvesting occurs throughout the entire area managed by the tāngata tiaki or kaitiaki, but key spots tend to be used, including:[10]

- Waipapa Bay.
- Half Moon Bay.
- Rakautara.
- Mangamaunu.
- Kaikōura Peninsula (in particular Sharks Tooth, South Bay).
- Kahutara.
- Barney's Rock.
- Goose Bay.
- Oaro.
- Haumuri Bluffs.[11]

[10] Te Rūnanga o Ngāi Tahu (2006).

[11] Areas outside the scope of the Te Korowai o Te Tai o Marokura strategy have not been included.

Traditional use of marine and coastal areas by Ngātī Kurī families has continued with little change through to modern times. Each family has its own mahinga kai for fishing and gathering kaimoana. Family connections to particular areas are well known and respected by other families. It is particularly important that this system works, as it often happens, due to economic circumstances, that a family must 'live off the beach'.

There are no tools in place over the many fisheries of significance for customary food gathering to allow Ngātī Kurī to utilise their traditional knowledge (mātauranga) and customs (tikanga) to protect these areas. There are no mātaitai or taiāpure established over the fisheries of significance for customary fishing in the Ngātī Kurī area – only a 186B temporary closure over Waiōpuka Reef on Kaikōura Peninsula (see below).

3.4 Solutions

3.4.1 Tāngata whenua management of key food baskets

Goal: to support tāngata whenua gaining direct control of their most important food gathering places

Mātaitai

The key solution is mātaitai managed by tāngata whenua. These would be in the sea at Mussel Rock (Te Waha o te Marangai), Mangamaunu and Oaro as the traditional food gathering places of the local iwi and hapū. These would be closed to commercial fishing and open to recreational fishing under mātaitai rules.The areas selected are small and their boundaries have been carefully talked through with commercial fishers, who are the one group excluded the moment the mātaitai is formed.

- **Te Waha o te Marangai (Mussel Rock)**(Figure 7) is a site just north of Mangamaunu and is used together with the reefs at Mangamaunu, to gather food for the Mangamaunu marae and its community.
- **The Mangamaunu** (Figure 8) site is associated with the Mangamaunu marae and its community.
- **Oaro** (Figure 9) is a traditional occupation area and the mātaitai there would occupy only the area required for the immediate needs of the community.

Boundaries

We will pass on the suggestion in submissions for highly visible markings for the boundaries of the mātaitai to the Rūnanga for consideration.

Although the whole coast was used by tāngata whenua, direct management is being sought for only a handful of the continuously used areas associated with areas of traditional occupation and key institutions such as marae. We emphasise the

collaborative and conciliatory process that led to the areas for mātaitai being proposed and the size and location of these being agreed.

Figure 7 – Proposed Te Waha o te Marangai mātaitai at Mussel Rock

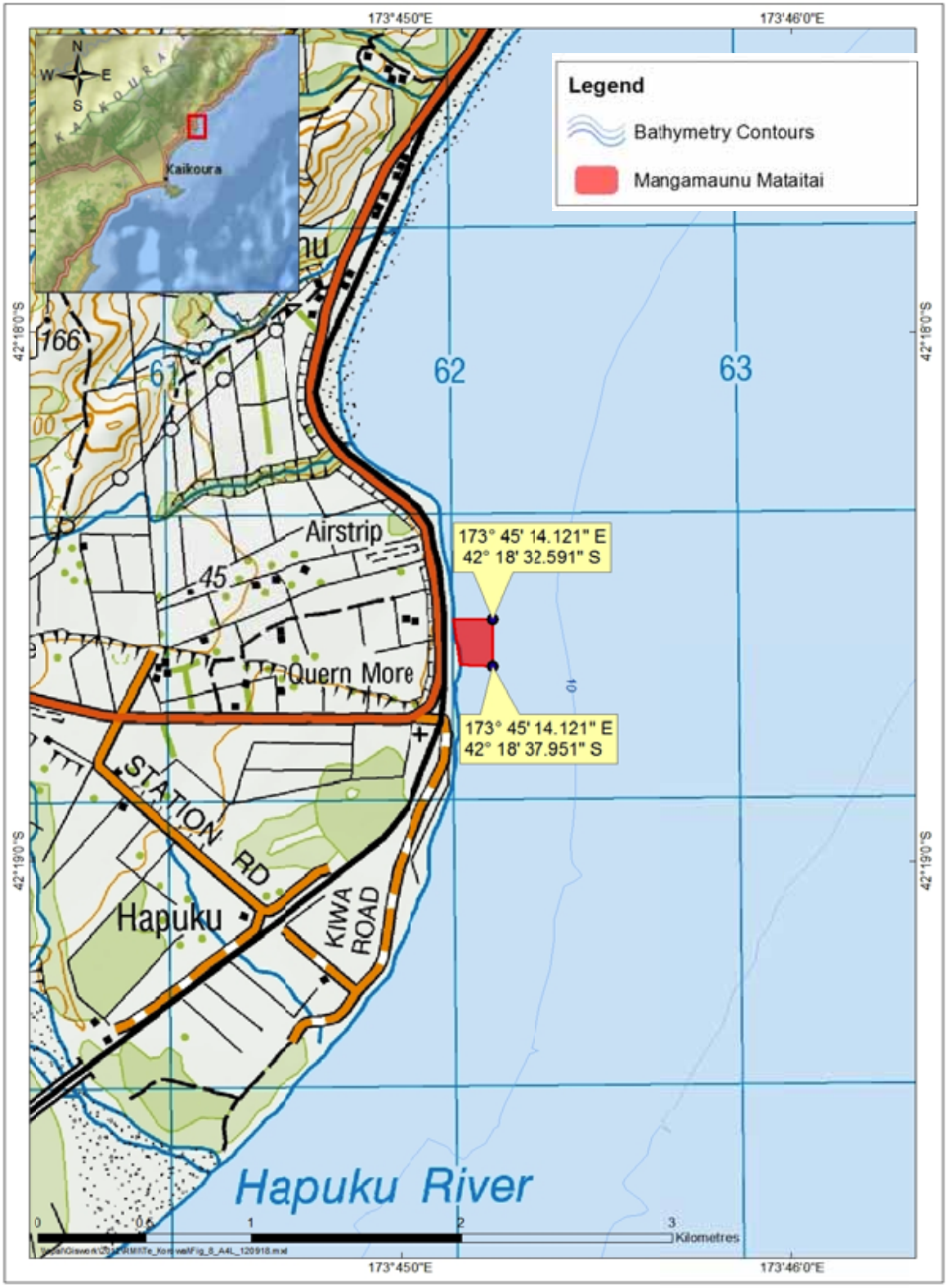

Figure 8 – Proposed mātaitai at Mangamaunu

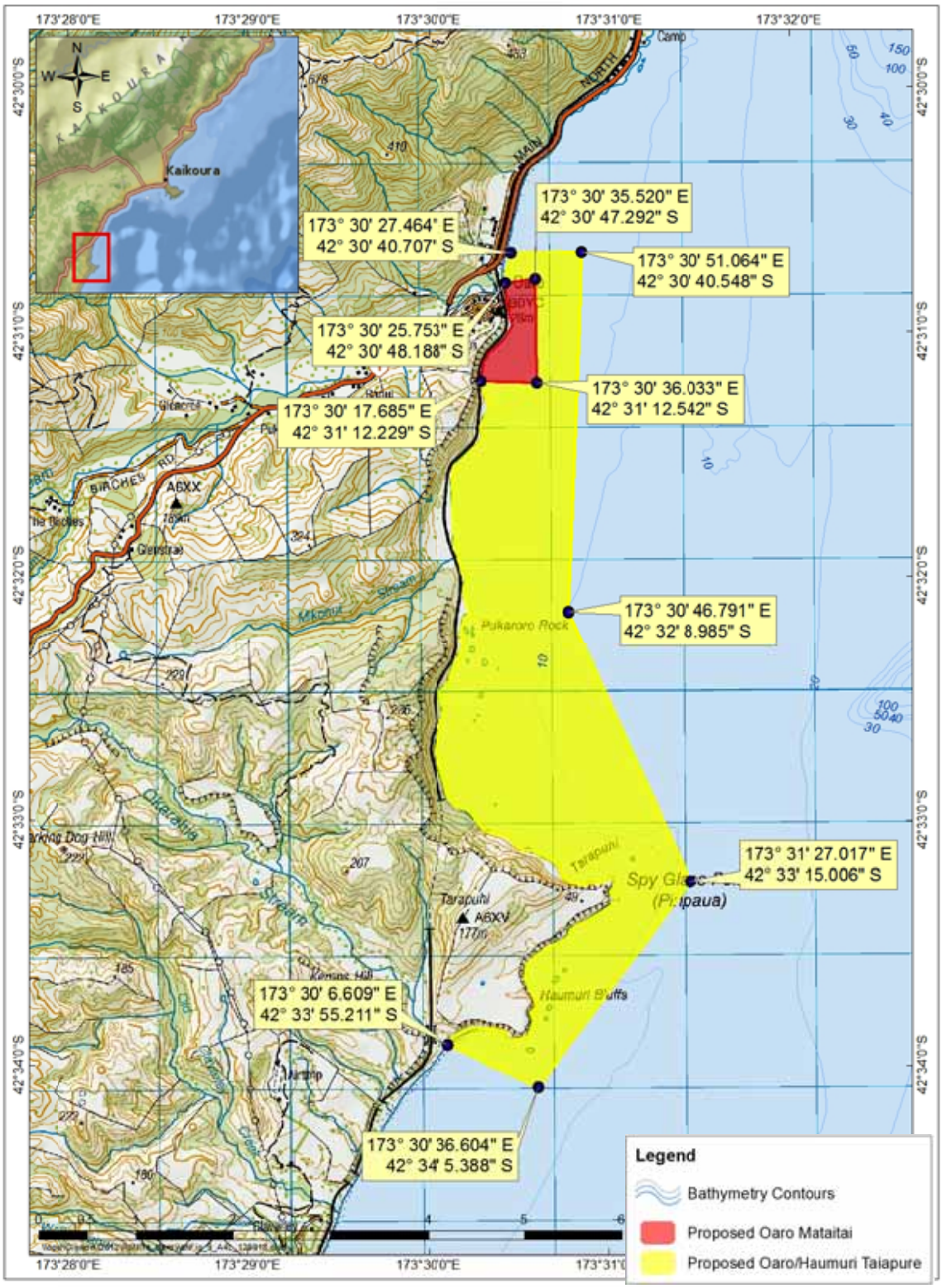

Figure 9 – Proposed mātaitai and taiāpure at Oaro/Haumuri

Te Korowai is pleased to support these initiatives and acknowledges the gifts of Ngātī Kurī in seeking only modest areas and of commercial paua and rock lobster fishers, whose representatives have accepted the potential exclusion of their members from these areas.

We note that mātaitai are established to provide for sustaining customary use and management practices and to recognize the special relationship (ancestral connection) between Ngāti Kurī and these fishing areas rather than as a general fisheries management tool as suggested by some submitters. There does not need to be any danger to the fishery, as suggested in some submissions, for the tool to be a good solution to supporting the tangata whenua in continuing their culture.

Freshwater mātaitai

Mataitai in the lower reaches of the Oaro, Kahutara, and Tutaeputaputa (Conway) Rivers were included in the proposed Strategy. The lower reaches of the river are intimately associated with the marine environment, but are clearly not part of it. Te Korowai sees these freshwater mātaitai as outside our core remit and does not propose to promote them directly within this final Strategy. Consequently the local Rūnanga will be submitting the mātaitai applications. We are, however, supportive of Rūnanga aspirations for these areas and sees them as being complementary to integrated planning for the marine environment.

We agree with the request in submissions for ongoing dialogue with commercial eel fishers and support the need to establish the boundaries of the proposed mātaitai on the Oaro, Conway and Kahutara rivers. We will therefore encourage the Rūnanga to resolve the proposed boundaries for these mātaitai in consultation with commercial eel fishers. The request for involvement of the Kaikōura Zone Committee in the implementation of the river mātaitai, will also be referred to the Rūnanga.

We note that, contrary to concerns expressed by some submitters, the proposed mātaitai on the Kahutara River would have no affect on whitebaiters, as the Department of Conservation administers these species under the Conservation Act 1987 rather than under the Fisheries Act 1996 that contains the mātaitai provisions.

3.4.2 Local control of traditional fishing areas

Goal: to support tāngata whenua leading local management of fisheries associated with key traditional occupation sites.

The key solution is a taiāpure around the **Kaikōura Peninsula** (Figure 10), and at **Oaro Blocks/Haumuri** (Figure 9) managed by locals with equal representation of tāngata whenua and other local interests (open to all under taiāpure rules).

Justification

It is our view that the proposed taiāpure can be justified in terms of part 9, section 174 of the Fisheries Act 1996. As places of special significance for Ngāti Kuri, as a source of food and for cultural reasons, we consider that the use of this instrument

makes better provision for the recognition of rangatiratanga and the rights secured by Article II of the Treaty of Waitangi.

Boundaries

We do not support an extension to the proposed boundary for the taiāpure on the Peninsula, as requested by some submitters, for the following reasons:

- An extension may be hard to fit into the statutory tests for creating a taiāpure. The decision of the High Court on the Akaroa taiāpure regarding the definition of "littoral coastal waters" meant the seaward boundary was defined as being indicated by the presence of seaweed (growth limited by depth/light). The proposed Te Korowai boundary may already be at this limit.
- The inshore areas of most importance to Ngāti Kuri are included in the boundary proposed by Te Korowai.
- There is a risk to implementation in seeking to extend seaward, as recreational and commercial fishers that may be affected by any taiāpure regulations, may vigorously oppose this.
- General measures to protect fisheries proposed for outside the taiāpure area will complement taiāpure management.
- The proposed boundary is easier for compliance with clear visual references for fishers and compliance officers.
- The vast majority of the paua fishery is included, as it is mostly in the very near shore of the Peninsula, and it would take specialist free divers to gather paua in deeper waters outside the taiāpure.

Representation in management

Te Rūnanga o Kaikōura would apply for the taiāpure and nominate the Taiāpure Committee to the Minister responsible for Fisheries. Ngātī Kurī is committed to involvement of local community representatives in management of the taiāpure. We support broad representation on the Taiāpure Committee. In establishing the committee, the Rūnanga has given an assurance that it would be guided by Te Korowai on the half of the membership that would be drawn from outside the Rūnanga.

Te Korowai would ensure that individuals who hold suitable local knowledge and who are well connected with, and respected by, stakeholders are put forward. Already it is clear to us that the composition of this group will need to cover commercial and recreational fishing as well as research and environmental interests. We would look to those that can bring a mature and flexible perspective to the table and who can balance competing interests, taking a wider and longer term view for the community good while meeting the objectives of the taiāpure tool.

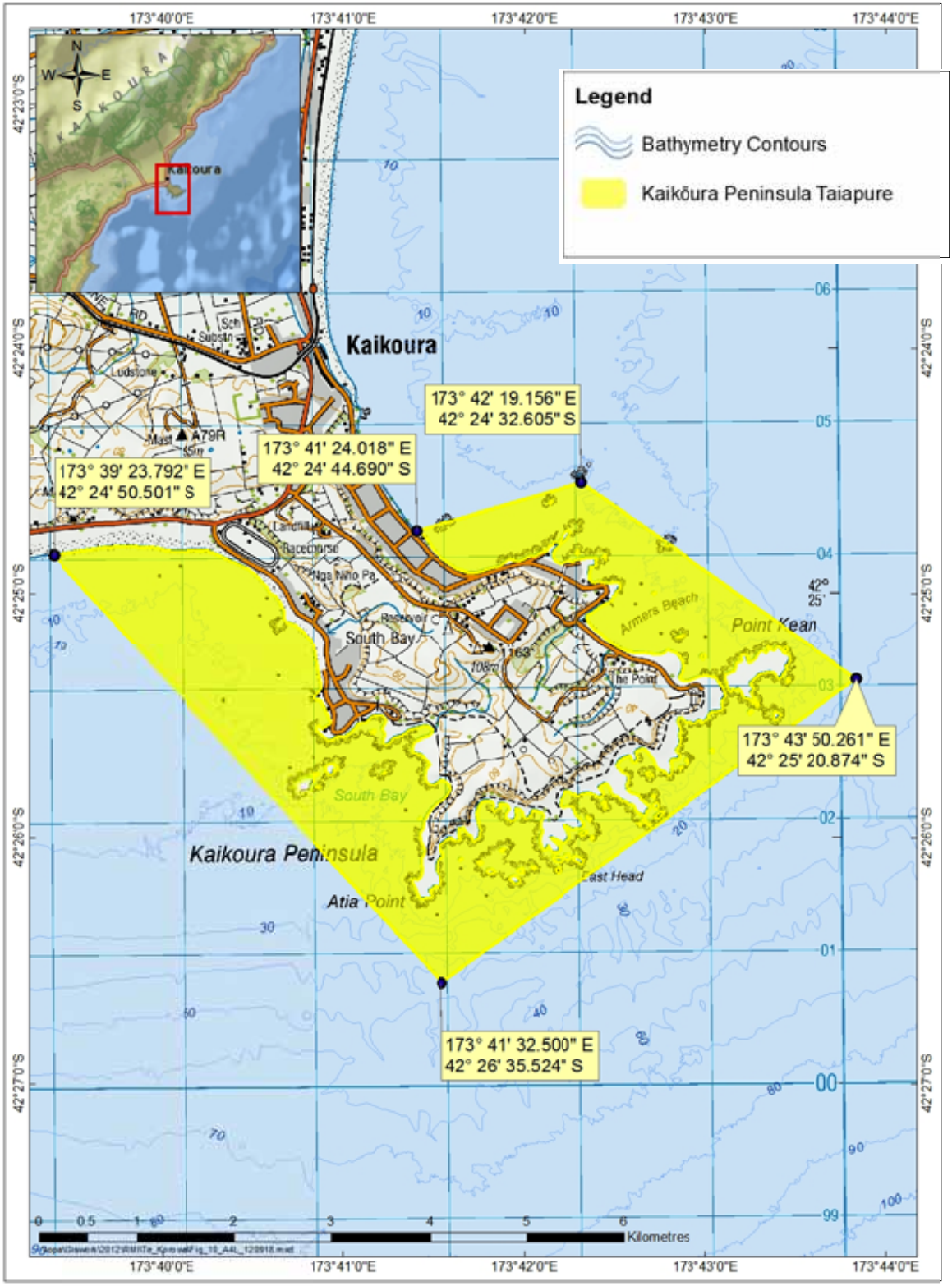

Figure 10 – Proposed taiāpure at Kaikōura Peninsula

Rahui

The hapū has also committed to ensuring that the Kaikōura Peninsula taiāpure will contain one or more rāhui in which all fishing will be excluded for a generational (twenty-five year) period of time (see section 4.4.4). These rāhui would be formed by the regulations for the taiāpure and would replace the current rāhui area described above which is a temporary closure. The new area(s) might include the current area, areas earlier considered for a marine reserve, or might be some other part of the Peninsula agreed by the management committee. Under the Te Korowai proposals, any rāhui on the Peninsula would be formed under regulations for the taiāpure (section 297) rather than as a temporary closure under section 186b as, at present.This means that the two-year limit for such measures will no longer apply to this area. The Taiāpure Committee would work through all the details of taiāpure regulations, and these cannot be pre-empted in this Strategy.

We acknowledge the complexities that exist on the Peninsula. We support the proposal for rāhui areas which are of a meaningful size to represent the complex diversity of the Peninsula area. Te Korowai would encourage the Taiāpure Committee to seriously consider these as a means of providing a comparison (baseline) with other areas inside and outside of the taiāpure. The Rūnanga has already undertaken to support this approach. We will pass on to the Rūnanga, the issues raised in submissions regarding the proposed rāhui.

3.4.3 Monitoring and adaptive management

Goal: that management of mātaitai and taiāpure is effective.

The key solution is customary and scientific baseline surveys and ongoing monitoring of newly established mātaitai or taiāpure to assist reserve managers with restoring these fisheries and to ascertain the effectiveness of localised customary management controls.

Traditional fisheries management is adaptive and knowledge based. Management of mātaitai and taiāpure will work best if it effectively combines modern science with traditional knowledge. We will support the management committees in securing assistance to complete baseline assessments of newly designated areas and to undertake ongoing monitoring.

4. Protecting our treasures

4.1 Objective

The objective is that our marine treasures are protected and future generations can continue to experience the wonders that we have today.

We are committed to:

- Protecting Kaikōura's unique coastal and marine features.
- Having representative coastal and marine areas in their natural state.
- The international standing of Kaikōura.

Whales, mountains and the undersea Kaikōura Canyon, together with the diversity of life and landscapes, inspire wonder. Together they define the uniqueness of Kaikōura that draws people from around the world. The Te Korowai approach is to seek legal protection and recognition for:

- The areas of highest biodiversity.
- The habitat of iconic species.
- Some typical areas to remain in their natural state, as examples of the natural functioning of the Kaikōura marine environment.

4.2 Background

The marine treasures of Kaikōura are its landforms, its wildlife, and amazing areas of biological richness. These come together in the depths of the Canyon and along the rugged shoreline.

4.2.1 Canyon

The undersea Kaikōura Canyon, together with the landforms of the Kaikōura mountains, form a natural feature of international significance. Currently this area, as a whole, has no formal recognition or special protection.

The Canyon itself is part of a landscape made up of a unique combination of land and sea, with the Kaikōura ranges rising steeply inland and the deep waters of the Canyon dropping sharply seaward. Together with the nutrient rich water upwelling from the depths close inshore, this adds a richness of wildlife and biota rare in the world.

Submarine canyons: hotspots of benthic biomass and productivity in the deep sea

Fabio C. De Leo1,*, Craig R. Smith1, Ashley A. Rowden2, David A. Bowden2 and Malcolm R. Clark2

Abstract

Submarine canyons are dramatic and widespread topographic features crossing continental and island margins in all oceans.

Canyons can be sites of enhanced organic-matter flux and deposition through entrainment of coastal detrital export, dense shelf-water cascade, channelling of resuspended particulate material and focusing of sediment deposition.

Despite their unusual ecological characteristics and global distribution along oceanic continental margins, only scattered information is available about the influence of submarine canyons on deep-sea ecosystem structure and productivity. Here, we show that deep-sea canyons such as the Kaikōura Canyon on the eastern New Zealand margin (42°01′ S, 173°03′ E) can sustain enormous biomasses of infaunal megabenthic invertebrates over large areas.

Our reported biomass values are 100-fold higher than those previously reported for deep-sea (non-chemosynthetic) habitats below 500 m in the ocean. We also present evidence from deep-sea-towed camera images that areas in the canyon that have the extraordinary benthic biomass also harbour high abundances of macrourid (rattail) fishes likely to be feeding on the macro- and megabenthos. Bottom-trawl catch data also indicate that the Kaikōura Canyon has dramatically higher abundances of benthic-feeding fishes than adjacent slopes. Our results demonstrate that the Kaikōura Canyon is one of the most productive habitats described so far in the deep sea. A new global inventory suggests there are at least 660 submarine canyons worldwide, approximately 100 of which could be biomass hotspots similar to the Kaikōura Canyon.

The importance of such deep-sea canyons as potential hotspots of production and commercial fisheries yields merits substantial further study.

http://rspb.royalsocietypublishing.org/content/277/1695/2783.abstract

The Kaikōura Canyon is the most biologically rich ocean habitat known in the world at depths of below 500 metres (100 times richer than the next documented area at this depth outside areas with the life-support system of hydrothermal vents).[12]

The Canyon holds a special significance to the people of Ngātī Kurī. They say that "*The ocean is known as Te Tai ō Marokura or the sea of Marokura. Marokura was the atua (god) who with his magical patu (war club), carved the underwater trenches and canyons, which is why we have our whales here, off our shoreline. The underwater trenches also connect us back to where we first came from. It was Paikea the whale rider, who come on the back of the whale from Hawaiki along the whale route. He arrived here along the east coast of the North Island. He had two sons. One of those sons was Tahu Potiki the ancestor of Ngai Tahu. Tahu's people travelled down the east coast of the North Island and settled in Kaikōura where we are still today. The Hikurangi trench is what connects us to where we came from some 700 years ago.*"

The coastal landscape of Kaikōura is both spectacular and accessible, being traversed by State Highway 1. The intertidal shore and its wave formed backdrop of cliffs, is the core of this visual feast. The character of the area is a unique blend of dramatic eroded rocks, high energy waves and richness of plants and animals.

4.2.2 Marine species and communities

The marine communities of plants and animals are special both for their diversity and for the special and valued species that occur here:

- Baleen **whales** including:
    - Southern right whales.
    - Humpback whales which pass northwards along the Kaikōura coast in winter, on their annual migration from their summer subantarctic feeding grounds to their breeding grounds in the tropics.
    - Minke whales.
    - Fin whales.
    - Sei whales.
    - The occasional blue whale.
- Several species of **toothed whales** including:
    - New Zealand's only resident sperm whales. These are present off the Kaikōura coast all year, although their distribution and numbers vary seasonally.
- A variety of **dolphins** including:

[12] De Leo, F. C., Smith, C. R., Rowden, A. A., Bowden, D. A. & Clark, M. R. *Proc. R. Soc. B* doi:10.1098/rspb.2010.0462 (2010).

    - Pods of orca or killer whales which regularly visit the coast as part of their long-distance foraging migrations around New Zealand.
    - Pilot whales.
    - Common dolphins,
    - Dusky dolphins - there are an estimated 2,000 dolphins along the Kaikōura coast at any one time.
    - Hector's dolphins – a New Zealand endemic species found around much of the South Island, including the Kaikōura coast.
    - Southern right whale dolphins.
- Haul-outs and breeding colonies of New Zealand **fur seals**.
- A great diversity of **seabirds** including the Hutton's shearwater only breeds in the hills and mountains of Kaikōura.
- Almost half the **sharks, rays and ghost species** found around New Zealand are recorded from Kaikōura. This high diversity will largely be due to the habitat complexity of the region, particularly the variety of deepwater habitats found within the Territorial Sea. By far the greatest diversity (66% of species) occurs at outer shelf and upper slope depths (i.e. below 100 m depth).
    - Endemic species include all of the skates and electric rays, carpet shark, rig, dark ghost shark and northern spiny dogfish.
    - Absolutely protected species include the great white shark and basking shark.
    - The frequency of reports from Kaikōura and the results of satellite tagging of white sharks at the Chatham Islands and Stewart Island suggest great whites do not aggregate in the region, but probably migrate through it. This behaviour could change as the numbers of fur seals breeding along the Kaikōura coast increases, although there appears to be no evidence of this occurring as yet, despite the number of seal colonies located in the area.
    - Basking sharks are also believed to be in gradual decline, however their status may be more serious than this. Newspaper reports from the mid 1960s indicate schools containing up to several hundred basking sharks (6-9 m total length) were seen each spring off the Kaikōura Peninsula, however anecdotal reports suggest very few have been seen in the area for at least 15 years.
- Some of the most diversely populated **intertidal shores** in New Zealand:
    - The studies of the Kaikōura Peninsula highlight the area's high physical and biological diversity. Kaikōura Peninsula has the greatest range of intertidal habitat types of the shores studied in the area. Overall, subtidal seaweed forests at Kaikōura Peninsula are notable for their

diversity and abundance of species, mostly mixed stands of large brown algae and carpets of red algae.

- Haumuri Bluffs, platforms, and the large boulder beach west of Spy Glass Point, are the most biologically rich in the area.
- Limestone platforms and the boulder beach at Oaro have a rich invertebrate fauna and the greatest diversity of red algae.
- Rocky headlands, outcrops and boulder shores from Waipapa to Hāpuku, and again between the Kahutara and Oaro rivers, have diverse plants and animals, including a wide range of invertebrates, especially on the boulder shores.

4.3 Issues

4.3.1 A special place

Put simply, Kaikōura is one of those special places in the world that deserves protection and international recognition for:

1. Its sheer beauty, the way those snow-capped mountains stand so close to the restless sea, separated by a thin band of green cultivated land.
2. The wonders of the deep sea canyon so close to the coastline.
3. The outstanding abundance and diversity of marine life flourishing in the nutrient-rich upwelling of deep oceanic water.The diversity of habitats from deep ocean to intertidal shores and the convergence of warm and cold water currents.
4. The great diversity of marine habitats in a small geographic area.
5. The whales and dolphins, in great numbers and diversity, with large whales such as sperm whales seen here so reliably by visitors.
6. The second highest number of seabird species ever counted around New Zealand, a country more deservedly known for its seabird diversity than for its famous land birds.
7. As **the** site that characterises New Zealand in its current mountain building phase so well that our time (24 million years of it) is known as the Kaikōura Orogeny.

But what is it that really needs protecting? Key things include:

- The productive capacity of the marine environment to support the abundance of wildlife, fish and marine mammals.
- Some parts of the marine environment that people leave intact for their natural values, and so we can understand and enjoy them.

- Sites of scientific importance, areas of high biological diversity, nursery and breeding areas and reference sites.
- The habitat of the species that we most value just for being there – the whales, dolphins and birds.
- The beauty of the coast and its protection from inappropriate and ugly development.
- The quality of the environment – the clarity of the water and the air, and places of natural quiet.

4.3.2 International recognition

The landforms as a whole do not need protecting as such. We are not about to tear down the mountains or fill in the Canyon. But we can destroy the life they hold and it is within our power to mar their beauty forever.

International recognition for the Kaikōura coast as a potential World Heritage Site has been considered in the past. However, the World Heritage Advisory Committee commented in November 2006 that there were *major integrity and management issues that would need to be addressed before a potential World Heritage site could be defined and added to New Zealand's tentative list*[13].

At present the Committee noted that Kaikōura has:

1. No formal marine protected areas.
2. Lack of protected lowland of high natural character linking the protected mountains to the sea.
3. Lack of integrated planning for the area.

Specific issues for treasured species and communities are briefly discussed below.

4.3.3 Whales

The potential risks for whales at Kaikōurainclude:

- Food shortages.
- Getting accustomed to boats.
- Entanglement in craypot ropes.
- Seismic testing and oil drilling.
- Ship strike.

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[13] Our World Heritage. A Tentative List of New Zealand Cultural and Natural Heritage Sites.

A Report to the Department of Conservation by the Cultural and Natural Heritage Advisory Groups. November 2006.

- Human interaction and lack of compliance with marine mammal watching regulations.

An internationally renowned tourism industry has developed around the viewing of sperm whales at Kaikōura. In a recent review of tourism permits at Kaikōura, the Director-General of Conservation declared that no further commercial whale watching permits may be issued along the Kaikōura coast for the next 10 years. Recorded declines in the number of sperm whales present at Kaikōura over recent years is a significant concern.

Craypot entanglement is a current issue for whales migrating past Kaikōura. Ongoing monitoring and scientific investigations are required to identify whether these risks become issues and to identify new issues as they arise.Craypot entanglement can be dealt with by voluntary codes of practice, fisheries regulations or provisions of a marine mammal sanctuary.

4.3.4 Dolphins

The potential risks for dolphins at Kaikōura include:

- Set netting.
- Boat strikes.
- Jet skis.
- Human interaction.
- Lack of compliance with marine mammal watching regulations.

Set netting is an issue for dolphinsaround the New Zealand coast, especially the endangered Hector's dolphins. There is already an inshore set net exclusion area under the Fisheries Act 1996to protect Hector's dolphinsfor defined inshore areas along the Kaikōura coast (see Figure 11). Since the set net closure was introduced in 2008 by the then Minister of Fisheries,two Hector's dolphin deaths have been recorded from nets outside the closed area.

4.3.5 Seals

Seals are a contentious issue in Kaikōura. Most tourists love the seals. Many fishers dislike seals, and believe they compete with fisherman for the fish resource. Some submissions raised concerns on the number of seals on our coastline and suggested seal culling to control numbers. The impacts of seals are currently subject to several studies, particularly to better determine the dietary preferences of seals. Culling or harvesting of seals is not currently permitted under New Zealand law.

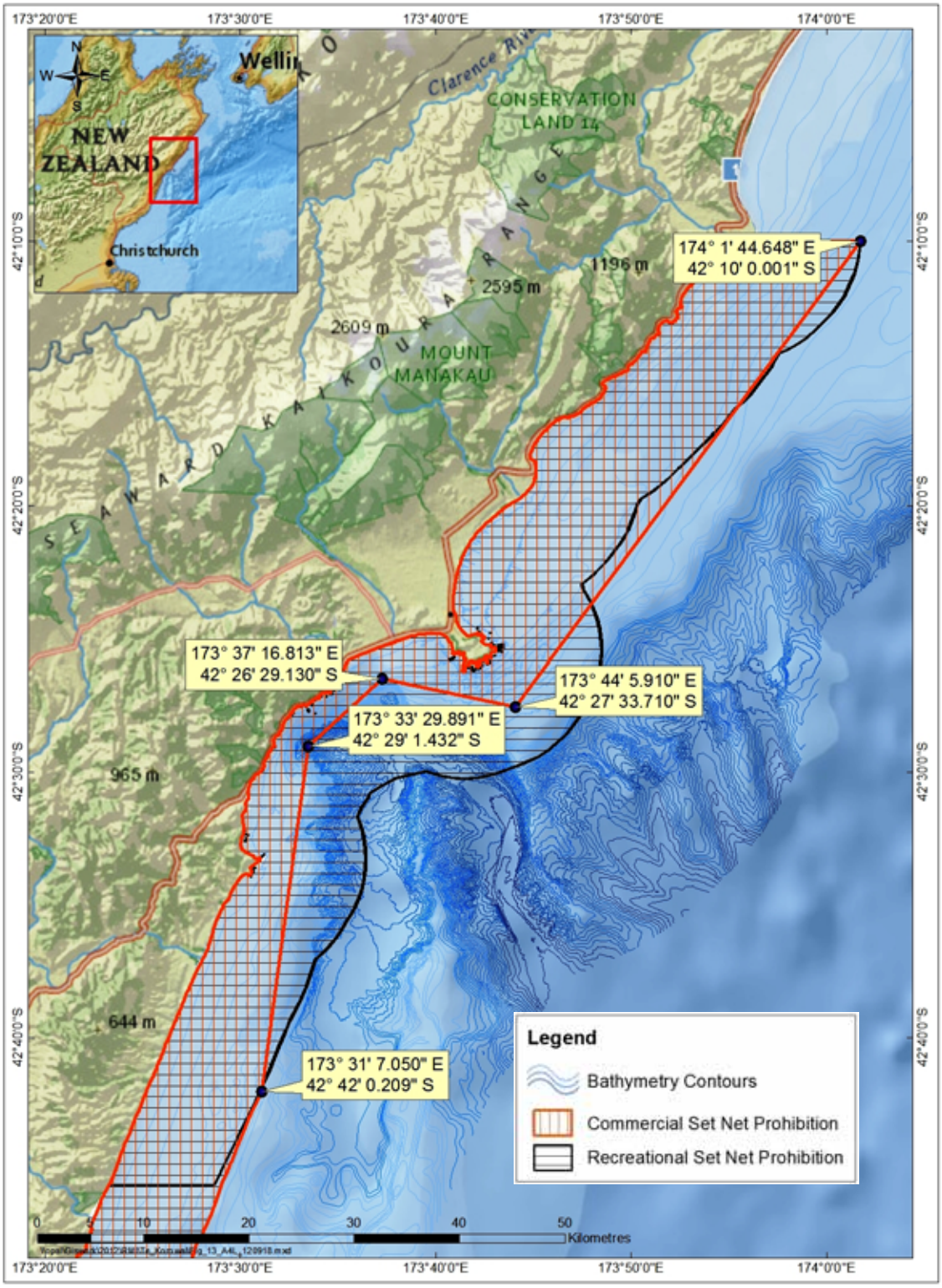


Figure 11 – Kaikōura canyon set net prohibition

The purpose of the Marine Mammals Protection Act 1978 is protection, conservation and management and any decision would have to satisfy all of these three elements. The Department of Conservation is clear that the fully protected status on New Zealand fur seals precludes this option. Communities around the world have learned to live with large mammals in their environment. Kaikōura is going to have to do the same, and Te Korowai is well placed to facilitate this process.

Potential risks for seals include:

- State Highway 1.
- The railway line.
- People harassing, harming or killing them.

Seals are a protected species and the Department of Conservation is responsible for enforcing the law and dealing with harassment and killing of seals. Seals, however, continue to die on the road and on the railway line. Integrated planning to separate the seals and the traffic will become more important as seal numbers continue to increase and larger storm events cause seals to seek shelter. There are also risks for people who try to get too close to the seals and this is particularly the case at Ohau Point.

4.3.6 Seabirds

Potential risks for seabirds include:

- Pollution / plastic waste.
- Fishery by-catch issues.
- Limited food supply.
- Conduct of boats especially around rafts of seabirds including boat strike on seabirds.
- Affects on coastal nesting sites by people, vehicles and land-based predators.
- Shore lighting.

At present there are legal rules that govern pollution and discharge of waste from vessels.There are opportunities to reinforce good waste management practices through voluntary codes of conduct and public education programmes.

We noted the concern in some submissions, that Hutton's shearwaters are under-recognised in the Strategy. We also noted the view that the use of appropriate fishing methods could reduce the catch of seabirds. Hutton's shearwaters are currently protected under the Wildlife Act 1953. From anecdotal accounts, the set net ban currently in place for the protection of Hector's dolphins,has led indirectly to a significant reduction in the numbers of seabirds being caught and injured. We will be working with commercial fishers to establish a code of practice to support practices that would further minimise the risks to seabirds. We will also be working

to educate the public on issues such as avoiding boating through rafts of seabirds to reduce boat strike.

As suggested in some submissions, we do not believe that there is a significant issue with feeding seabirds. Many seabirds follow fishing boats to eat the offal thrown overboard and the extra amount provided by commercial tour boats would be comparatively very small.We do not feel that further regulation is necessary.

Kaikōura District Council currently has a policy of zero waste and is working to reduce the use of plastic within the community. Practices around waste management seek to reduce any spread of plastic into the marine environment.

4.3.7 Sharks

The ecosystem role of most sharks is very poorly understood, but given their abundance and diversity in deep water, they could be expected to play a significant role in structuring upper slope assemblages. Several outer shelf and upper slope species are fed upon by sperm whales.

Overfishing is the major threat to sharks in New Zealand, and elsewhere. In southern and eastern Australia large deepwater marine reserves have been established to protect endangered deepwater dog fish species and monitoring of these reserves suggests they have been successful in protecting at least some of the adult population.

4.3.8 Seaweed

Seaweed is an important part of the near shore coastal ecosystem. Potential risks for seaweed include:

- Harvesting bladder kelp and other seaweeds.
- Pollution, particularly increased sediment input to the sea.

Harvesting could be managed by local codes of practice or by controls under the Fisheries 1996. Pollution is a matter for plans formed under the Resource Management Act 1991 (see section 6).

4.3.9 Intertidal species

Kaikōura has one of the most accessible rocky shorelines in New Zealand. Between the Clarence and the Conway Rivers, State Highway 1 only leaves the coast for short stretches and even south of Oaro, local roads and tracks give access for motorised transport in most places. Potential risks for intertidal communities include:

- Harvesting/fishing.
- Pollution.
- Habitat destruction.
- Trampling in high foot traffic areas.

Anecdotal reports indicate that wholesale stripping of intertidal species occurs and trampling and pollution (rubbish and human excrement) are evident at many high use sites. Legal controls may be possible under fisheries regulations or the Reserves Act 1977.Much could also be achieved through public education.

4.3.10 Threats common to all species

Future potential threats to all species include:

- Climate change.
- Beach and seabed mining.
- Aquaculture development.
- Pollution/plastics.
- Acidification of water – CO_2 uptake in the ocean.
- Biosecurity incursions.
- Run-off from land.
- More coastal development.
- Lack of awareness.

4.4 Solutions

The diversity of values and threats at Kaikōura means an integrated package of measures is required. This package is intended to create both protection for the important values present at Kaikōura and international recognition. Mechanisms under the Fisheries Act 1996 are detailed in section 5 on Fishing for Abundance and those under the Resource Management Act 1991 in section 6 on Living Sustainably. This section details mechanisms for species and special area protection.

The package is to seek:

- World Heritage Status for Kaikōura.
- A marine mammal sanctuary for the core habitat of whales and dolphins.
- A marine reserve over the Kaikōura Canyon with a connection to the coast at Barney's Rock.
- One or more rāhui areas on the Kaikōura Peninsula.

These are discussed in more detail below.

Several submissions referred to the Marine Protected Areas Policy. This policy is a central Government initiative and contains useful information, which is relevant to the Te Korowai process and has been considered in the process to date. We note, however, that its Strategy is much broader than the Marine Protected Areas Policy

and different decisions have been reached reflecting the breadth of issues and values at Kaikōura.

4.4.1 World Heritage

Goal: to have Kaikōura recognised around the world for its natural heritage.

Recognition and protection of what makes Kaikōura unique can be enhanced in many ways. The core solution selected is World Heritage status for Kaikōura from mountain tops to canyon floor as shown in Figure 12. This is a long term aim and would need to be preceded by appropriate legal protection under New Zealand's own laws. The boundaries shown in Figure 12 are intended as a starting place for discussion rather than a firm proposal at this stage.

Protection can be achieved by legal means and by other processes such as education and understanding. Foremost in international recognition is the status conferred under widely recognised conventions such as World Heritage status. Other ways are to improve the information available to the world or to gain recognition under other awards and conventions.

In New Zealand legal protection for the things that make Kaikōura unique is available under the:

- Resource Management Act 1991 (land and sea).
- Marine Reserves Act 1971 (sea).
- Marine Mammals Protection Act 1978 (sea and species).
- Wildlife Act 1953 (land, sea and species).
- Fisheries Act 1996 (sea and species).
- Reserves Act 1977 (land and intertidal).
- National Parks Act 1980 (land and intertidal).

World Heritage is the designation for places on earth that are of outstanding universal value to humanity and as such, have been inscribed on the World Heritage List to be protected for future generations to appreciate and enjoy. Places as diverse and unique as the Pyramids of Egypt, the Great Barrier Reef in Australia, Galapagos Islands in Ecuador, the Taj Mahal in India, the Grand Canyon in the USA, or the Acropolis in Greece, are examples of the 890 natural and cultural places inscribed on the World Heritage List to date.

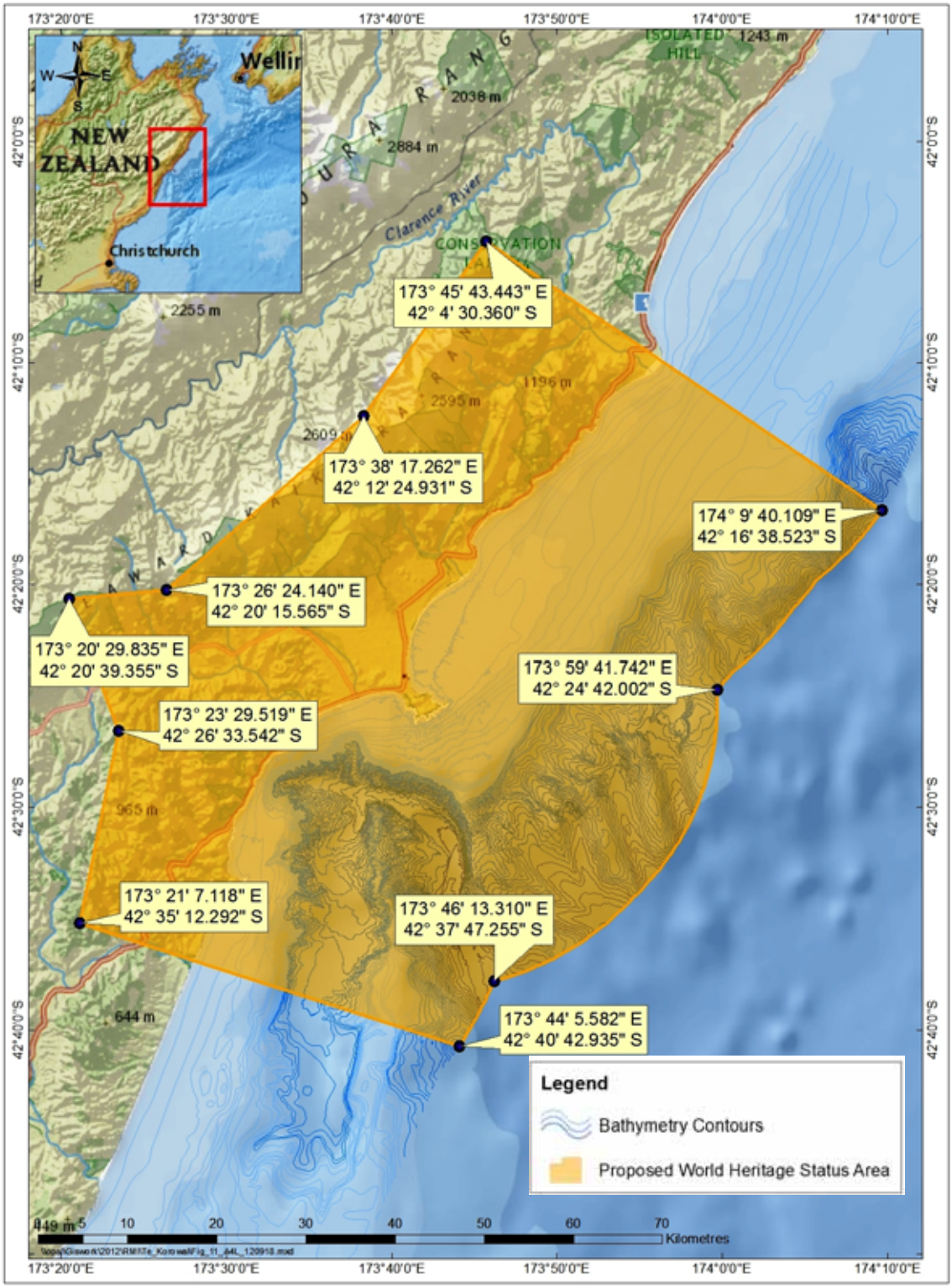


Figure 12 – Area proposed for World Heritage Status

Without prejudice to property rights provided by national legislation, countries recognise that the protection of the World Heritage is the duty of the international community as a whole.

The UNESCO World Heritage Convention is a treaty that has become, over the past 30 years, the foremost international legal tool in support of the conservation of the world's cultural and natural heritage. Today, 186 countries have ratified the Convention, making it an almost universally accepted set of principles and framework of action. Current New Zealand World Heritage sites are

- Te Wahipounamu – South West New Zealand.
- Tongariro National Park.
- New Zealand Sub-Antarctic Islands.

New Zealand's current World Heritage tentative list comprises eight sites which, at this stage, are proposed to be developed for nomination in the following order:

- Stone Store, Kerikeri.
- Kahurangi National Park, Farewell Spit, Waikoropupu Springs and the Canaan Karst System.
- Waters and Seabed of the Fiords of Fiordland (Te Moana o Atawhenua) - an addition to Te Wāhipounamu - South-West New Zealand World Heritage Area.
- Napier Art Deco Historic Precinct.
- Kerikeri Basin Historic Precinct.
- Waitangi Treaty Grounds Historic Precinct.
- Kermadec Islands and Marine Reserve.
- Auckland Volcanic Field.
- Whakarua Moutere, or the north-east Islands (including Poor Knights Islands).

Submissions raised a number of issues about World Heritage status and these are addressed below.

We agree that before World Heritage status is sought, long-term protection is needed, in particular the unique features of international importance (e.g. the Canyon). Consideration of this status would only follow after any protection mechanisms are considered and decided under New Zealand legislation. World Heritage status would be a long process of evaluation and we are indicating the intention of working with Government to enter into this process with UNESCO.

A World Heritage area would not close anything and would have its own extensive public process over many years. World Heritage status would not directly prevent offshore exploration, drilling or fracking, but could influence Government decision-making. Our understanding of World Heritage status is that World Heritage status does not take away local management of the area.

4.4.2 Important Bird Area

Sea birds are totally protected under the Wildlife Act 1953, but remain at risk from accidental bycatch in fisheries, from poor boating practices and marine debris. We intend to work with commercial fishers to establish a code of practice that would minimise the risks to seabirds. Public education programmes in good boating practices and marine debris are also proposed.

We will also consider the merits of establishing an Important Seabird Area for the Kaikōura coast. BirdLife International is a global partnership of conservation organisations that strives to conserve birds, their habitats and global biodiversity, working with people towards sustainability in the use of natural resources. One of the tools they use is the designation of important bird areas for areas that have outstanding value for birds.

At present most of these are on land, but, in New Zealand, important bird areas are being developed for areas of sea; generally where there are concentrations of birds in feeding areas. Kaikōura is likely to be designated as an important bird area under the current work programme. An "important bird area" has no legal protection; it is simply Birdlife International identifying the best bird habitats in the world, and using this as a tool for partner organisations to promote wildlife protection measures.

4.4.3 Marine Mammal Sanctuary

Goal: to protect the habitat of whales and dolphins from future disturbance.

Whales are an iconic species critical to the culture of Ngātī Kurī, the wider Kaikōura community and as a basis for the local tourism industry. Any activity that poses risks to the whale populations of Kaikōura, needs to be carefully managed. We want to see the whales stay, both in numbers and diversity around Kaikōura.

While all marine mammals are legally protected in New Zealand, their habitat is not. Marine mammal sanctuaries can be established throughout New Zealand fisheries waters to create a permanent refuge for marine mammals. Marine mammal sanctuaries are one mechanism for providing greater protection to marine mammals and their habitats.

Marine mammal sanctuaries are established under the Marine Mammal Protection 1978 as permanent refuges for marine mammals. Activities that may harm marine mammals are controlled or excluded within the sanctuary. The Department of Conservation is responsible for administering and managing marine mammal sanctuaries. Whales and dolphins can be harmed or disturbed by the loud noises generated by seismic airgun surveys used in the oil and gas industry.

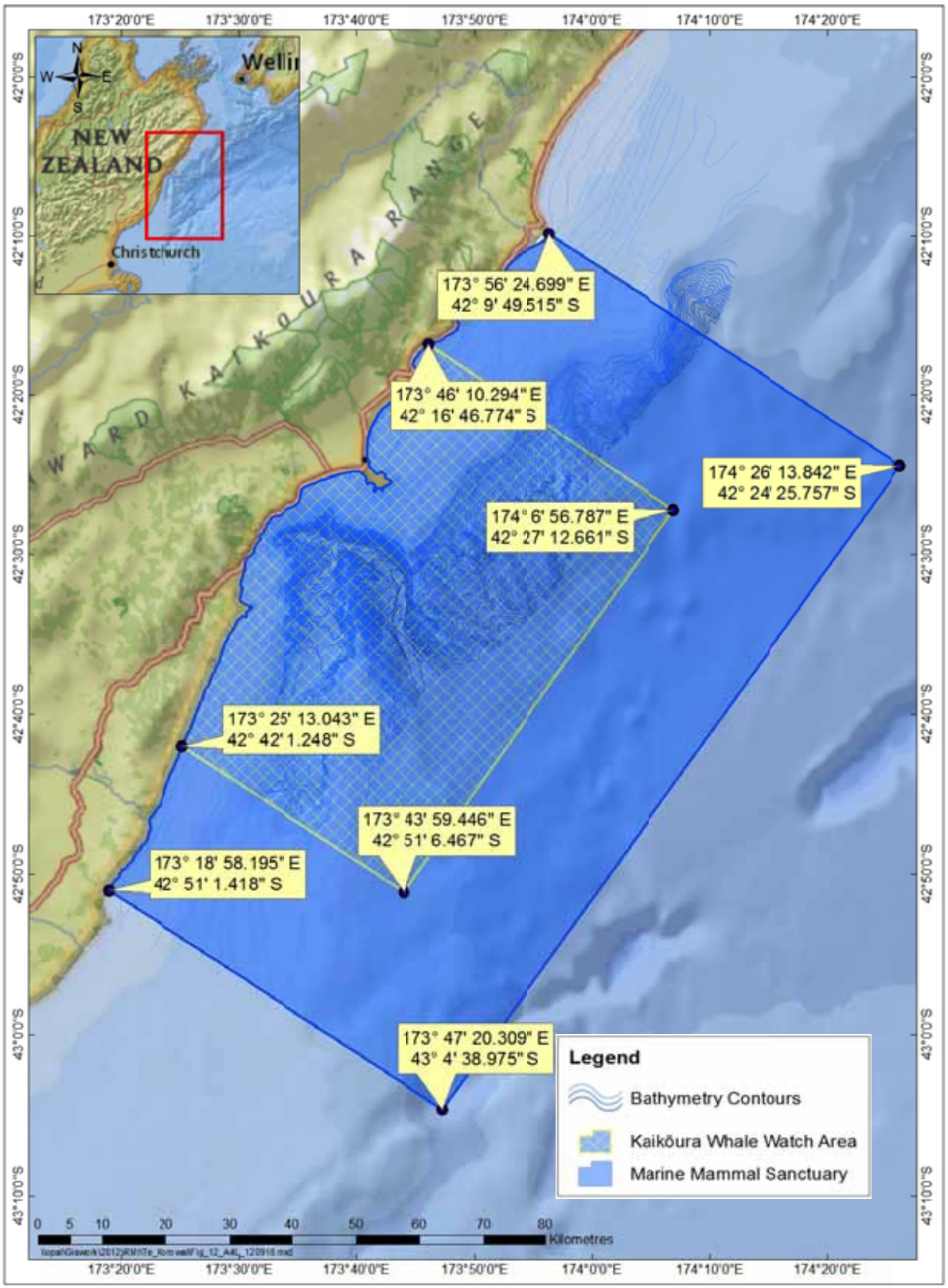


Figure 13 – Area proposed for a marine mammal sanctuary

We propose to establish a marine mammal sanctuary off the Kaikōura coast to regulate seismic surveys. The proposed area is depicted in Figure 13 and matches the area that was excluded from recent seismic survey off Kaikōura. The area used for commercial whale watching is also shown in Figure 13.The inner zone of the proposed marine mammal sanctuary extends offshore for about 37km at its widest point. The outer buffer zone extends a further 18.5km along the south-eastern flank of the area.

We noted a concern of the petroleum industry, that the area for seismic exclusion was too large. We propose a precautionary approach with a significant buffer around the core area for marine mammals (notably sperm whales), and suggest the following arrangement. Marine mammal sanctuary boundaries are shown in Figure 13 with the two zones having specific rules for seismic surveys:

- Prohibit "level 1 surveys" within the entire sanctuary (i.e. both zones) though allow line turns as long as there is no sound data acquisition within the sanctuary.
- Allow "level 2 surveys" in the outer buffer zone, consistent with the 2012 Code of Conduct for Minimising Acoustic Disturbance to Marine Mammals from Seismic Survey Operations.
- Allow "level 3 surveys" throughout both zones.

We have proposed to control seismic surveys in this manner in order to protect the whales and dolphins that are present there, as well as the iconic marine mammal watching tourism industry, that depends on the presence of these mammals.We have based our decision on potential behavioural effects, more than on estimates of physical damage, though these have been taken into account as well.

The buffer around the inner whale watching zone recognises that underwater noise, particularly low frequency noise, is readily transmitted through water, but attenuates with distance due to the spreading transmission loss. The purpose of the buffer zone is to ensure that any whale (or dolphins) within the whale watching zone, are not subjected to unacceptable levels of underwater noise.

The boundaries and conditions adopted are designed to give a reasonable, although not absolute, level of certainty that marine mammals will not be displaced from or have their behaviour disrupted in the Kaikōura area. We have focused most firmly on the core area for sperm whales as defined by Whale Watch Kaikōura. At the same time we note that there are over 20 species of marine mammals in the area. For some, their area of utilisation extends much further offshore than for resident sperm whales.

The area and conditions for the marine mammal sanctuary would formalise the current exclusion area for higher intensity seismic survey and provide an undisturbed haven for marine mammals at all times during periods of exploration.

We further note advice from the Petroleum Exploration & Production Association of New Zealand, that the prospectivity of the area involved is low for both oil and gas.

As part of the marine mammal sanctuary we also propose that public access to the Ohau Point fur seal colony is restricted in order to prevent disturbance at this significant breeding colony.

We accept that there could be more issues which need to be addressed in the future within the proposed Sanctuary. We will endeavour to ensure that all affected parties are involved as we work with Government to determine the rules for the marine mammal sanctuary.

The Sanctuary would be supplemented in the interim by local codes of practice for:

- Avoiding Hector's dolphin entanglement in set nets outside the current closed area.
- Avoiding whale entanglement in craypot lines.
- Purse seining.

Many submissions proposed fisheries controls within the area of the proposed marine mammal sanctuary including trawl bans. Issues raised in submissions regarding the effects of trawling on marine mammals cover a much smaller area than the proposed marine mammal sanctuary. These will be the subject of further discussion with the fishing industry from outside Kaikōura. We note that it is difficult to judge the impact of trawling on marine mammals and would not currently support a general trawl ban. We will also work with trawl fishers through working groups and the development of the Kaikōura Fishing Accord.

We note that any measures introduced in the proposed marine mammal sanctuary have to pass the 'just cause test'. The issues for trawlers, crayfish pots and set nets are all different. The justification and boundaries for any area measure, would need to be established through talks with those commercial fishers fishing in the area. The other issues raised involve fisheries management tools and will be dealt with through the current set net ban (to protect Hector's dolphins), and local codes of practice. Measures to reduce risk generally come at a cost, and risk reduction needs to match both threat classification of the species involved and the ability of fishers to address the issues.

Te Korowai negotiated a special line around the Kaikōura Canyon for the East Coast set net exclusion zone introduced by the then Minister of Fisheries to protect Hector's dolphins. This area is unique along the East Coast of the South Island with very deep water close inshore that is not a preferred habitat of Hector's dolphins, but is very important to local commercial fishers.

Since then two dolphins have been killed at Kaikōura in set nets outside the exclusion zone. We understand that the Ministry for Primary Industries is unwilling to reconsider details of the set net closure until Hector's dolphin protection is reviewed as a whole. In the meantime we will promote the formation of a local

code of practice for commercial set net fishers to reduce the ongoing risk. If there are more recorded dolphin deaths at Kaikōura, we will seek an early review of the set net closure at Kaikōura.

Risks for dolphin entanglement are different between commercial and recreational fishing methods. We support the continuation of the recreational set net ban out to 4 nautical miles, and note that little or no recreational set netting takes place beyond this line. We will raise the question of equity between recreational and commercial fishers when the review of the set net closure takes place in 2013.

Seals and dolphins are currently protected under the Marine Mammals Protection Act 1978, but we do not yet know enough about the food web to know what the interaction of fishing is with their food supplies. The numbers of dolphins and seals suggests that food is not currently limiting.

4.4.4 Marine Reserve and Rāhui

Goal: to protect the most biologically rich and special areas of the Kaikōura coast and also representative slices of typical coast in their natural state.

The key solutions proposed by Te Korowai are marine reserve status over the globally important Kaikōura canyon "biodiversity hot spot" (Figure 14) with a connection to the coast south of Barney's Rock (Figure 16); and one or morelong term rāhui within a taiāpure around the Kaikōura Peninsula.

Marine Reserve for the Canyon

Marine reserves are the most comprehensive tool for providing area-based biodiversity protection in the marine environment. Marine reserves protect areas in their natural state, by excluding fishing and damaging activities such as mining. Boats can pass through marine reserves with catch on board as long as they comply with the rules of the area and are not actively fishing in the reserve. Marine reserves do not resolve all threats to the marine environment, and integrated land and sea management is essential. This is covered further in Section 6 on Living Sustainably.

Marine reserves are used to protect both representative areas and special areas (see the text box below for Department of Conservation's description of the tool). Marine reserves have been criticised for displacing fishing effort to other places and for displacing customary management.

Marine reserves are specified areas of the sea and foreshore that are managed to preserve them in their natural state as the habitat of marine life for scientific study. Marine reserves may be established in areas that contain underwater scenery, natural features, or marine life of such distinctive quality, or so typical, beautiful or unique that their continued preservation is in the national interest.

Within a marine reserve, all marine life is protected and fishing and the removal or disturbance of any living or non-living marine resource is prohibited, except as necessary for permitted monitoring or research. This includes dredging, dumping or discharging any matter, or building structures.

The public is welcome and encouraged to enjoy marine reserves. In all marine reserves you may: dive, snorkel, take photos, swim, kayak, anchor(with care), navigate through, picnic on the beach, build sand castles, investigate in rock pool.

http://www.doc.govt.nz/conservation/marine-and-coastal/marine-protected-areas/marine-reserve-information/

Within Te Tai ō Marokura, two biodiversity hot spots stand out:

- The Kaikōura Peninsula is an outstanding area for intertidal and near shore biodiversity.
- The Kaikōura Canyon is internationally significant amongst areas below 900m deep for its biological richness and diversity.

These areas form the natural focus for marine protected areas on the Kaikōura Coast. We propose that the core of the Kaikōura Canyon is protected under a formal marine reserve.

Information gathered by Te Korowai revealed set netting occurs on the slope of the Canyon down to more than 800m. There is little commercial and recreational fishing known to occur over the high biodiversity areas which lie between 900m and 1100m. Including parts of the shelf and slope between 100m and 800m would offer some protection to middle-depth communities and some refuge for mid-deep water sharks and rays.

The offshore lines selected for the proposed marine reserve (Figure 14) represents a compromise between the competing needs of minimising effects on known fisheries, protecting documented areas of high biological diversity and providing enough habitat diversity to include representation of as many ecological communities as possible.

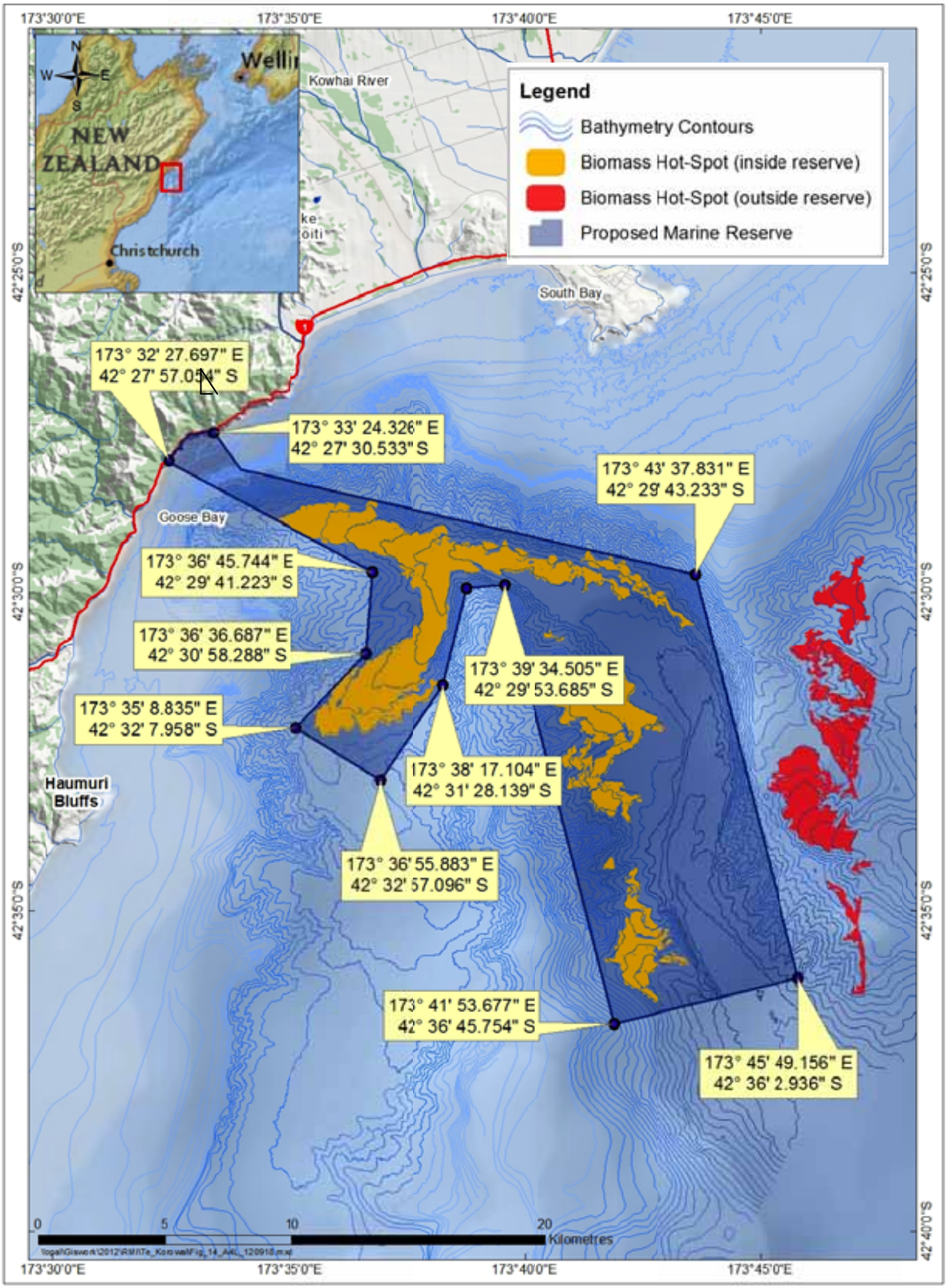


Figure 14 – Canyon area proposed for a marine reserve

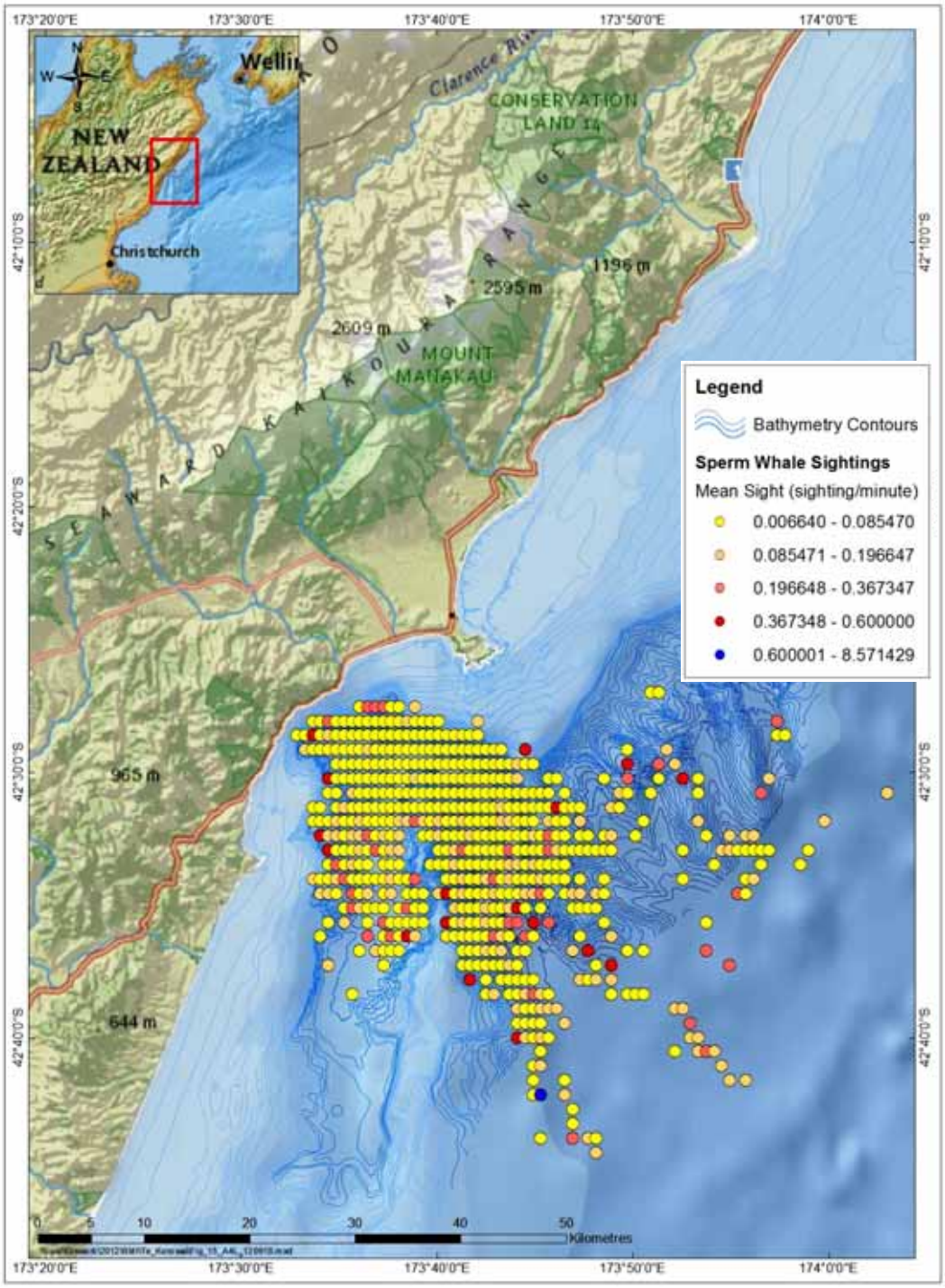


Figure 15 – Sperm whale sighting 1994 to 2001[14]

[14] Data kindly provided by Dr Christoph Richter, Department of Biology, University of Toronto at Mississauga, Canada. Original data source: Richter, C. F. 2002. Sperm whales at Kaikōura and theeffects of whale-watching ontheir surface and vocal behaviour. Ph.D. thesis, University of Otago, Dunedin

Apart from the shore connection discussed later, the boundary proposed for the marine reserve involves:

- Including areas of documented and reliably projected areas of high benthic biological diversity.
- Including core documented sperm whale habitat without trying to cover all of the known whale areas.
- Using straight lines to assist in compliance and enforcement.
- Avoiding areas of known fishing activity (noting that our information is more complete for set netting than for lining and trawling).
- Generally keeping at or below the 800m contour, but taking in shallower areas where straight lines cut across complex toe-slopes and ridges.

The biodiversity and research value of the reserve will be vastly increased if it can include a connection all the way to the high tide limit on the shore. Including the near shore environments means that the typical, as well as the special, parts of the wider ecosystem are included. It also would reveal over time the way the natural environment functions in a connected way from the abyssal depths to the sunlit shallows in the absence of human modification.

Marine protection in the near shore is a much more contentious matter. All of the rocky coast adjacent to the Canyon is heavily fished - recreationally, customarily and commercially. There is no place where fishing can be excluded without some effect on current fishing practices. We have had lengthy discussions with commercial fishers operating in the area and the map below represents the least effect compromise that allows a useful length of shoreline to be protected. Any smaller and edge effects from fishing around the boundary, compliance issues and loss of habitat diversity would sharply diminish the value of the shore connection.

Respecting Ngātī Kurī tikanga, and the desires of the local community, we propose that the reserve be formed with a commitment from the Minister of Conservation for a generational review of the performance of the reserve and its effects on the community after twenty-five years.

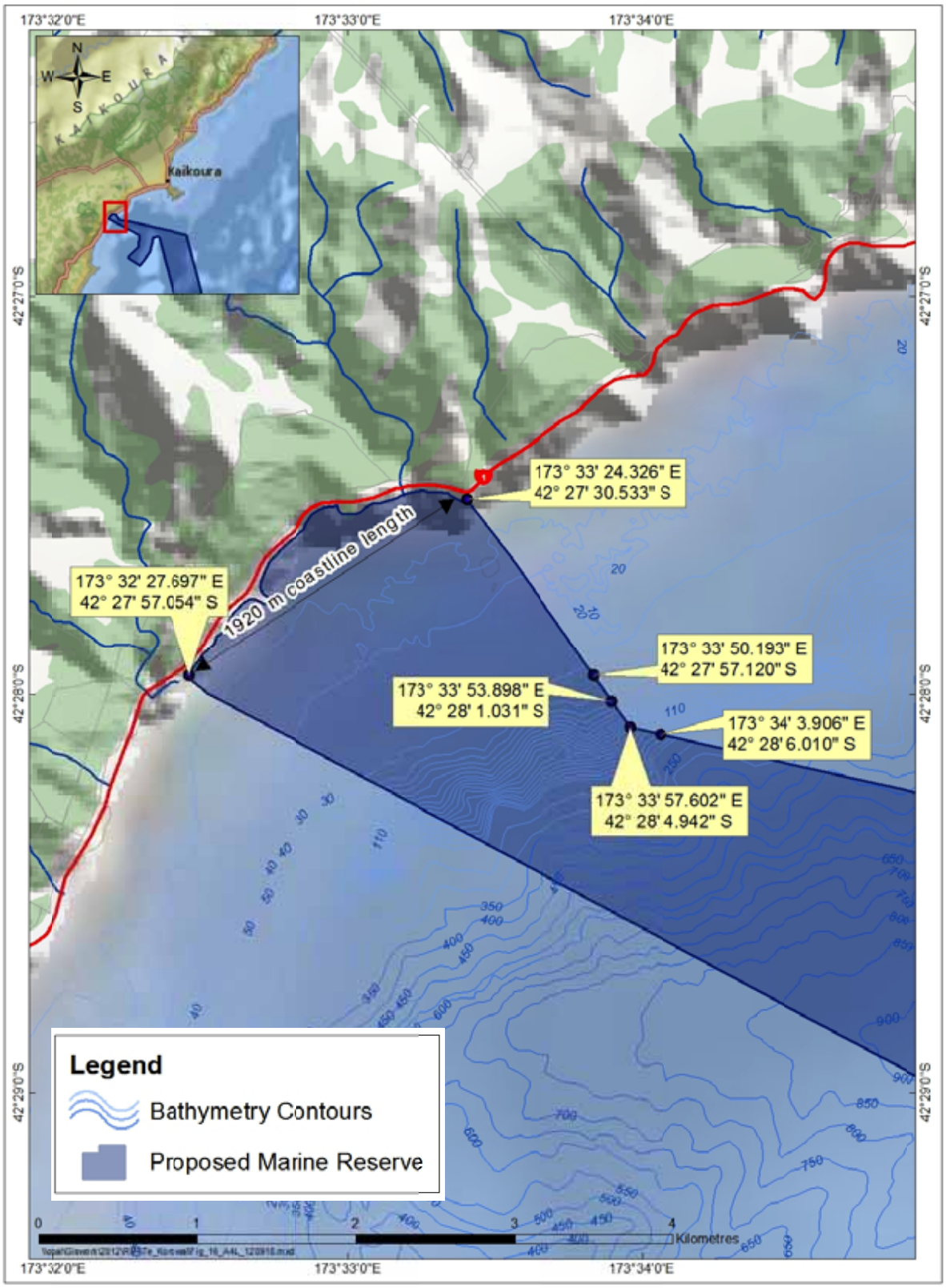


Figure 16 – Canyon marine reserve connection to the coast

The proposals for the Marine Reserve are designed to meet the provisions of the Marine Reserves Act 1971, which states that reserves are for "*the purpose of preserving, as marine reserves for the scientific study of marine life, areas of New Zealand that contain underwater scenery, natural features, or marine life, of such distinctive quality, or so typical, or beautiful, or unique, that their continued preservation is in the national interest*". The coastal portion of the proposed reserve is typical of the Kaikōura rocky coast. The proposed offshore area is special for its high biodiversity and both consequently have value for scientific study.

We believe that the proposed marine reserve captures important biodiversity hot spots, and includes a representative example of the nearshore rocky coast,while avoiding areas important for commercial fishers.

The need for a marine reserve and its boundaries were the subject of more comments in submissions, than any other matter raised by Te Korowai in our draft Strategy for the coast. Having reviewed the submissions, we found a balance of opinion of those that wanted the marine reserve proposed for the Kaikōura Canyon to be larger, those that wanted it smaller and those who did not want it to be established at all.

We reviewed the options both for the near shore and for the Canyon area and its surrounds. We worked to understand the issues and to distinguish fact and opinion and the degree of certainty associated with each item of information. We reached the conclusion that the only option that would fulfil our vision was a "no take" marine reserve under the Marine Reserves Act 1971.

We examined options under the Fisheries Act 1996 and found that these did not produce the level of protection required to meet our objectives in this section of the Strategy. We also looked at a combination of tools, using a Fisheries Act 1996 set of provisions to buffer a reserve, and rejected these as being too complex and unlikely to meet the necessary legal tests.

Some submissions proposed straight-line boundaries for the Marine Reserve offshore to simplify enforcement and increase representation of inshore habitats, canyon slope habitats and deeper water ridge habitats. There were also requests to include the possible areas on benthic abundance to the north east of the proposed marine reserve.

We werenot prepared to make these extensions because of:

1. The adverse effects on customary, commercial and recreational fishing opportunities around the Canyon and inshore.
2. The lack of certainty about the biodiversity hot spots to the north east, as these are based on projections rather than actual sample results.

We acknowledge scientific advice that the boundaries proposed in the Strategy are complex and that generally low boundary to area ratios make for good reserves.

The simple boundaries recommended in submissions however, would result in effects on local commercial fishers that we cannot support. Discussions with the Department of Conservation, commercial fishers and fisheries enforcement officers indicated that the boundary proposed would be enforceable. With modern technology, the boundaries of the proposed marine reserve are relatively simple to comply with and enforce. Inshore boundaries would be clearly marked. GPS would only be required around the Canyon where commercial fishing, and the few recreational fishers involved in deep water fishing,can all be expected to have good position finding equipment.

Near Shore

For the purposes of this discussion the near shore is the area from Mean High Water Spring Tide to the edge of the 'shelf' – the drop off for the Canyon.

A marine reserve for the near shore would constitute a piece of representative or typical coast left undisturbed by direct fishing extraction. Scientific advice was that the 1.95km shoreline length would allow substantial "edge effects" for many species where harvesting outside the reserve and issues of enforcement would reduce the value of the reserve in revealing what an unharvested state might look like. At the same time, we found that customary, recreational and commercial fishers heavily use the whole of the coast though more so in some places than others. Any marine reserve will have effects that are keenly felt by fishers who focus their efforts in the area involved and some displacement of effort is inevitable.

Thus the value of a marine reserve in the near shore increases with:

1. Longer shore line length.
2. Greater area.
3. Connection to the protected area offshore.
4. Greater habitat diversity.
5. Practical public access.
6. Being adjacent to protected lands.
7. Being away from areas of shoreline disturbance or potential for discharge of pollutants.
8. Enforceability.

The adverse effects of the reserve on fishing activity increases with:

1. The amount of commercial, customary and recreational fishing activity affected where alternatives are constrained.
2. Longer shore line length.
3. Greater area.

We concluded that we had reasonably assessed the balance of the forces acting on achievable shoreline length in their initial assessment. Around 2km of linear coastline represents the minimum effective width for relatively localised species, and about the most that can be achieved without causing too much conflict with fishers.

Analysing the submissions and further information obtained on commercial rock lobster fishing,we concluded that moving the inflection point in the northern boundary for the reserve a small distance to the south would reduce the adverse effects on the most affected commercial fisher (a rock lobster fisher). The boundaries at the shore remain as in the draft Strategy.

This change would reduce the habitat diversity in the proposed reserve by excluding one subtidal reef area valued for rock lobster fishing. We are conscious that the way rock lobster fishing is organised means that this one commercial fisher bears the greatest effect of any marine reserve in the near shore in this area. We have endeavoured to reduce this impact.

A large number of boundary options have been considered and the data provided on pot locations and productivity carefully assessed. On balance, however, we feel that having a marine reserve in the shallower water close to the coast outweighs the impacts that remain. It would provide a small representative stretch of coast to be protected in a more natural state which will allow the full impact of fishing on the rest of the Kaikōura coast to be more fully understood. While there would be some displacement of effort for one commercial fishing operation, the scale of that displacement is such that we believe that it could be mitigated by good will and accommodation amongst the commercial rock lobster community through agency of CRAMAC5. We note that it would be quite possible to maintain the existing puerulus collectors in a marine reserve.

A number of submitters raised concerns about access to and from Rosy Morn. We have been advised that vehicle/boat activity at Rosy Morn can be provided for in the Order in Council that establishes the marine reserve. Fishers would be able to take any legally caught fish through the marine reserve and on landing do not have to prove where their fish was caught.

<u>Offshore</u>

For the purposes of this discussion, the offshore is the sea from the edge of the 'shelf' – the drop off for the canyon, to the limit of the proposed reserve at over 1200m depth.

The reasons for having a marine reserve in this area are:

1. Protection for internationally important seabed biodiversity.

2. Protection of the Kaikōura Canyon as the best example of a landform and ecosystem of its type in New Zealand and as one of perhaps only 100 habitats of its type in the world.
3. Protection from disturbance of the core resident sperm whale habitat which is also the area of highest marine mammal occurrence at Kaikōura.

In this area, the main concerns that led people to want a bigger reserve were the complexity of the proposed boundaries and the lack of representation of the habitats of the Canyon slopes with their associated fauna of deep-water sharks and biogenic habitats. The main concerns of people that wanted the reserve smaller, or not to happen at all, were effects on some locally based commercial fishing or a view that it was wrong to exclude fishing from any area. The boundaries chosen in the draft Strategy sought to bring protection to the areas of highest documented biodiversity which generally lie deeper than 900 m, while avoiding the areas most fished which generally lie at depths of less than 800 m. This led to a series of straight lines approximating the 800m contour, except at the head of the Canyon, where the reserve connected to the near shore area. This Canyon head portion would protect the active sediment portion of the Canyon where long shore material is deposited to be periodically released in turbidity flows that help fuel the high biodiversity at depth. It would also protect some of the typical canyon slope habitats.

We have been particularly concerned to ensure that a reserve in this area would be enforceable. We explored the issues around the deep setting of fishing gear, particularly droppers and set nets. While views differed, those with a clear knowledge of local fishing practices indicated that commercial fishers could operate successfully around the boundaries proposed in the Strategy and that enforcement could be successful. Little fishing occurs close to the 800m contour that sets the upper boundary of the proposed reserve. It was established that commercial fishers know precisely where they are at any time and can adapt their practices to take account of the effects of currents. Where an unexpected event occurs, such as a large mass of seaweed being carried onto the gear by tidal currents, this could be a sufficient defence from prosecution for having fishing gear in the water in the reserve, if the facts supported that this was the case.

Te Korowai thus resolved to stay with their proposed boundaries for the offshore, except to the extent changes are required to link practically with any changed boundaries inshore. We resolve to seek to buffer the effects of commercial fishing around the reserve with voluntary agreements, developed through the establishment of the proposed Kaikōura Fishing Accord.

Rāhui for the Peninsula

We propose one or more rāhui within the proposed Kaikōura Peninsula taiāpure (see Figure 10 and section 3.4.2).

The Kaikōura Peninsula stands out for its biodiversity, but is also the primary focus of human marine activity on this coast. It is the home of the urban centre,

harbours, tourism, recreational and commercial fishing and is the primary place of Ngātī Kurī with its centre at Takahanga Marae. For more than 20 years the Royal Forest and Bird Protection Society has advocated a marine reserve on the Peninsula. Many boundaries, arrangements and compromises have been brought forward and debated.

At the same time everyone has recognised that the Peninsula is special, and worthy of care and protection. The Peninsula is also rich in landforms, history and habitat complexity.

Accepting the importance of this place to the cultural identity of Ngātī Kurī, we propose in section 3.4.2 that the marine areas around the Peninsula be managed as a taiāpure under the Fisheries Act 1996. This places the tāngata whenua in a leadership role, respecting their mana. At the same time, Ngātī Kurī wants to recognise the Peninsula as a shared resource and share kaitiakitanga for this place. Ngātī Kurī has made two commitments:

1. The management committee for the taiāpure will be made up equally of tāngata whenua and other local interests with the rūnanga providing the chair who would have a casting vote.
2. The regulations for the taiāpure will include one or more rāhui areas of a sufficient size to protect marine biodiversity where fishing will be excluded on a long term basis.

We welcome this leadership and these commitments and acknowledge the exercise of the mana of Ngātī Kurī over this place.

This has meant Forest and Bird representatives forgoing the opportunity to apply for a marine reserve around the Peninsula and we acknowledge that gift to achieving a consensus decision on the future of Te Tai ō Marokura.

Te Korowai noted detailed comment from the Forest and Bird national office, on the use of a rāhui on the Peninsula. We are aware of Forest and Bird efforts to have a new form of "rāhui tapu" recognised in relation to marine protected areas. As noted for other submissions, the Taiāpure Committee would make decisions about the location of rāhui on the Peninsula. We would support the establishment of one or more rāhui areas that reflect the diversity of habitats around the Peninsula.

We note that "rāhui" is a term that relates to customary practice of Māori and a rāhui can be given legal force under more than one part of the Fisheries Act 1996. The idea that rāhui are only for two years relates to the use of 186b of the Fisheries Act 1996. The term "rāhui" as used in the Te Korowai Strategy relates to any mechanism that is used to give legal effect to this customary practice as understood by Ngāti Kuri. Some of these mechanisms can have much longer terms than two years. We note that the Rūnanga is committed to generational (twenty-five year) review, for any rāhui on the Peninsula.

5. Fishing for abundance

5.1 Objective

The objective is abundant fish for present and future generations.

'Fishing for abundance' affirms that it is okay to fish. At the same time it says that how this is done, can result in a relative abundance of fish in the sea or a depleted environment. Our approach is integrated ecosystem management at a local level. It sets out to integrate social and ecological objectives in a way that complements national tools for fisheries management.

We are committed to:

- Te Tai ō Marokura as the food basket of the Kaikōura community.
- Prosperity for local commercial fishers.
- Good fishing for customary and recreational fishers.

This means reducing overall fishing effort from the level accepted in traditional management to a zone of new consensus as described by Dr Ray Hilborn in Figure 17 below. This approach maximizes **benefits** rather than maximizing gross biomass harvest. The 'zone of new consensus' refers to lower total fishing effort, which leads to more abundance, which in turn leads to higher social and economic benefit.

As Dr Hilborn says:

"We know the primary cause of failure in fisheries management:

- *The race for fish sucks the economic sustainability out of the fishery even with strong sustainable catch regulation.*
- *The race for fish provides incentive to catch as many fish as fast as possible, build bigger boats, ignore all but the target species to pressure management agencies for the 'last sustainable fish'."*[15]

For Kaikōura, the challenge is to be able to manage fisheries effort to a new local consensus and find ways to control access and effort. Kaikōura fisheries are currently open to any recreational fisher and to any commercial fisher that holds quota for areas that include Kaikōura. Fish populations in Kaikōura will remain healthy and grow in response to improved management. This will mean that rules on commercial, cultural and recreational harvest will have to continue to adapt to retain equity in access across all sectors.

[15] http://www.fish.washington.edu/people/rayh/

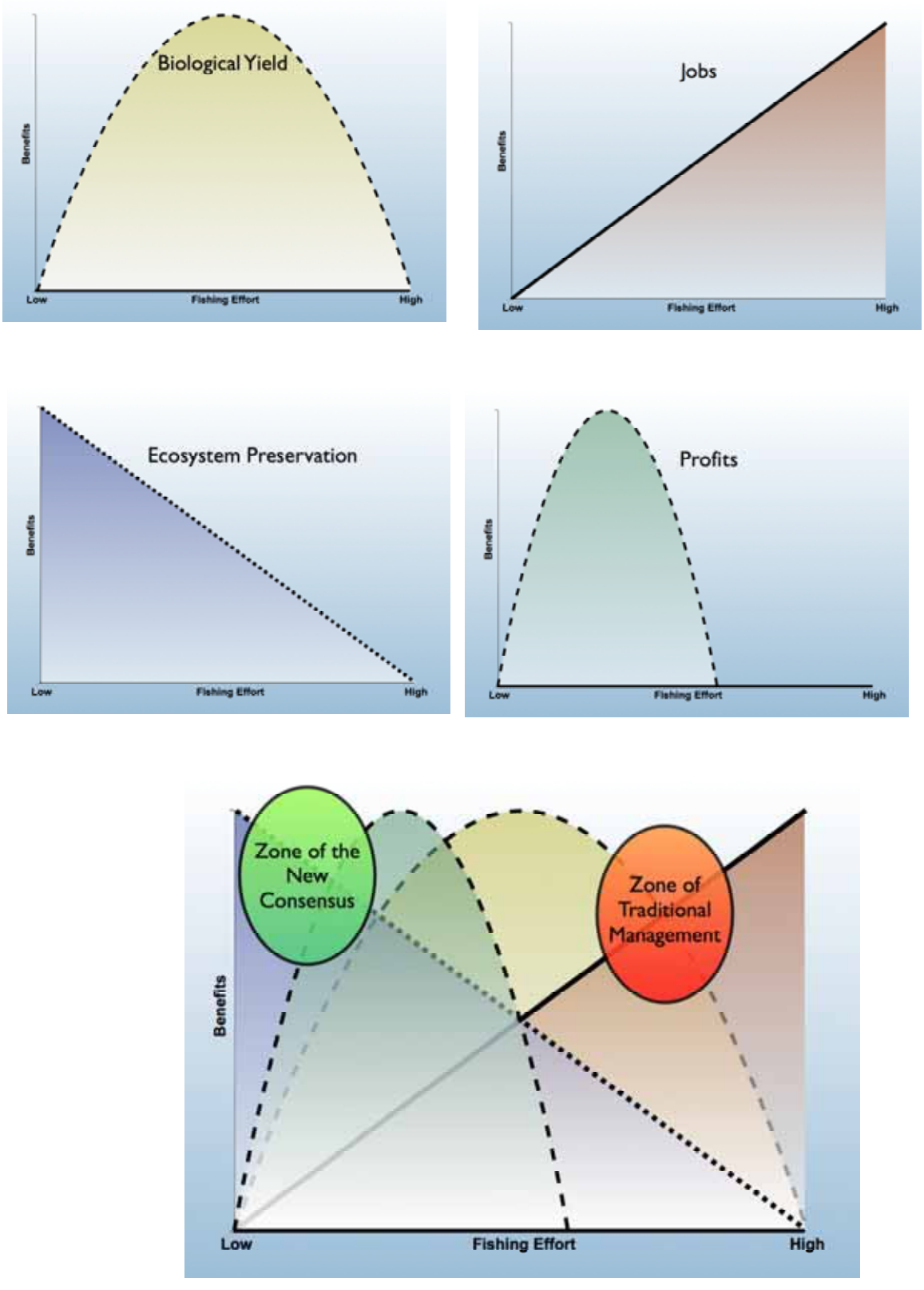


Figure 17 – Dr Hilborn's model of the zone of new consensus

5.2 Background

5.2.1 Early days

From the first occupation of Kaikōura about 700 years ago the whole area offered a bounty of mahinga kai, including:

- A range of kaimoana (seafood).
- Fish from the sea.
- Freshwater resources from lagoons and rivers.
- Marine mammals (whale meat and seal pups).
- Waterfowl.
- Seabird eggs and forest birds.
- A variety of plant resources.

Charles Brunel and Andrew Cross were professional fishermen who took up fishing in South Bay, in 1867. Before that, Ngātī Kurī had fished and traded and bartered fish, and pākehā whalers had fished, but it was not the principal source of livelihood for either group.

Filleting fish for export began in 1933, which led to more fish being caught putting pressure on stocks. A prohibition on taking female crayfish with eggs, and size restrictions, were put in place and guidelines were drawn up for the competency of masters for fishing boats. These guidelines became the fisheries regulations in 1938. There were seven boats operating in Kaikōura in 1942, and most fishing was by deep line and set line. In 1945, there was an extension of territorial waters from three nautical miles to twelve. There was concern that outsiders were overfishing Kaikōura's inshore waters.

The advent of set netting in the late sixties and early seventies culminated in thirty-five commercial set-netters operating out of the wider Kaikōura area by the eighties and early nineties. There were also four local trawlers based in Kaikōura. Substantial and unsustainable catches were taken through this 'boom' period.

5.2.2 Ngātī Kurīfishing

Darcia Solomon, Kaumatua, relates an oral history of Ngātī Kurī experience as follows:

Before the advent of the quota system, Māori fishers mainly fished to feed their families. Johnny (Solomon) and his father Rangi said every area was important to not only feed all their families, but they knew that to ensure their fishing area would be abundant and replenishable, other areas needed to be also. We didn't eat pāua, crayfish and other fish all the time, these were only eaten seasonally. Shell fish such as mussels, cockles, pāua,

booboos etc were gathered regularly, but also, only when in season. Certain protocols were observed when gathering and eating kaimoana, for instance we were always told by our old people to not leave shucked shells on the beach, as this would deter other shellfish from coming to that area.

Crayfish pots were made using supplejack gathered from the bush and they made their own nets. Blue cod often ended up in the craypots and that was our breakfast on that day.

Before colonisation, there were numerous Māori fishermen and each had their own area for fishing, for instance there were fisherman who fished in the South Bay area, fishermen who fished around the wharf, each fisher family fished their own particular areas, up and down the coast of Kaikōura. And while each family had their own fishing areas, they also respected each other's fishing grounds.

The whānau fished in the rivers for whitebait, flounders and eels. Trout wasn't eaten so much, as they were too dry for our palate. Johnny used to take the young boys out eeling to show them how and where to gaff eels. He also took them bobbing for crayfish at night time at low tide when there was no moon. He used a Tilley lamp to light the way and the girls were sometimes invited to carry the bag.

Johnny and Rangi also made their own nets to catch wet fish, but these were never left out for any extended period of time, as they were mindful of the potential issues associated with non targeted species being caught as by-catch. They saw that as a waste and as unsustainable even though in those days, there was plenty of food. Crayfish was always cooked in sea water and kina was regarded as a delicacy. They were known as the 'scavengers' of the sea because they ate everything that other species ate; Johnny would regularly dive for them.

There is no doubt that Māori fished sustainably, given that the environmental productivity of our coastal area was rich with resources, when the colonizers first arrived. But with the onset of a growing industry and fishing becoming more attractive to non-Māori, fishing changed and it eventually became too expensive for Māori fishermen to compete.

There is an expectation that whānau can still go to the beach to gather kai. Mahinga kai played a critical role in upholding and passing on a way of life and knowledge. Mahinga kai is not just about the food gathered, it's also about how it was gathered and the passing on of that knowledge to the next generation. It is a cornerstone of Ngātī Kurī. Te Tai ō Marokura is statutorily acknowledged as a cultural seascape. This seascape has been acknowledged by the Crown in recognition of a special relationship between tāngata whenua and this coastal space.

It is a hard pill to swallow when we see at times, our land and seascapes being abused and where there is no recognition acknowledged. The crux of the matter from a Ngai Tahu perspective to date, is that Ngai Tahu have

settled with the Crown over past injustices and decisions pertaining to significant Ngai Tahu landscapes, and yet current planning provisions continue to support and exacerbate those injustices, which is why the rūnanga drove and initiated the Te Korowai process.

Kaitiakitanga played a huge role in how fishing grounds were managed. To understand this in today's context it is important to understand how Māori viewed 'ownership'. Ownership was not viewed as an individual right, but as a collective one, and importantly, it included the responsibilities that go with that. The following quote explains the fundamental principle of kaitiakitanga.

Kaitiakitanga is a philosophy of traditional resource management born of recognition that all elements of nature are related and that what happens 'upstream' effects what happens 'downstream'. Pursuant to this philosophy, traditional rights to access and use key resources were premised on, and maintained on, one's ability and willingness to uphold associated responsibilities. For example, "rāhui" (temporary restrictions to access and use a given area or resource) may be imposed in order for the mauri of any given area or resource to be restored and thus the interests of future users recognised and provided for. Rights and responsibilities were collectively held and maintained by whānau (extended family), hapū (sub-tribe) and iwi (tribe) depending on the resource in question. Failure to uphold one's responsibilities could result in the associated rights being removed or restricted.

5.2.3 The Quota Management System

The Quota Management System (QMS) for wet fish and paua commenced in October 1986. Quota, issued to individual fishers, was based on their previous three-year catch history. Many fishers chose to either sell their quota through the government buy-back scheme, or sell to other fishers or fishing companies once quota became transferable. The ensuing years saw fishing effort in Kaikōura reduced quite dramatically, as fishers sold out and moved on to other activities. Currently there are only five vessels engaged in set netting in Kaikōura. Quota levels on some depleted stocks were reduced in order to improve the sustainability of stocks.

Recreational and traditional fishers, however, still have significant concerns with the Quota Management System, as it only deals with abundance at the very large scale of Quota Management Areas (in our case the east coast of the South Island), and has no influence over issues of localised depletion. Shifts of commercial harvest up and down the coast, to areas of current higher abundance or value, is at variance with attempts to increase fish abundance locally.

5.2.4 Recreational fishing

The Kaikōura coastal marine area supports a valued and economically valuable recreational fishery. A wide variety of fish and shellfish, together with easy access along the coast, accounts for its popularity. Local and other fishers, have become more mobile and better equipped. Kaikōura fishers travel to the Marlborough Sounds and Nelson to scallop and fish, and will venture as far afield as Fiordland and Stewart Island. Equally, fishers from places such as Christchurch and Marlborough are attracted to Kaikōura in increasing numbers. This makes the Kaikōura fishing scene far more complex than in the past. Notably, significant recreational fishing effort now coincides with the summer tourist season. Furthermore, as industries such as tourism and dairy flourish, local people have more resources, such as better boats and fish-finding equipment, with which to fish. Some recreational fishers have responded to these changes by becoming organised and making commitments to voluntary good practice. The open nature of the fishery, however, makes it hard to get better practices without regulation and enforcement.

5.2.5 Paua

Commercial paua fishing is a distinctive and important part of Kaikōura. Self management of the fishery is conducted through PauaMac3. The area involved spans from the Te Korowai boundary at the Clarence River, south to the Waitaki River, with a Total Allowable Commercial Catch of 91,615kg of paua. Commercial paua fishers in Area 3 (PAU3) have set voluntary size limits (above the legal minimum), as well as closed areas, and shifted fishing areas to avoid local depletion and re-seeded juvenile paua into the sea.

Commercial paua fishers have taken the following steps to achieve the abundance seen today:

- Since 2001 a voluntary agreement divides PAU3 into four fishing management zones, and a proportion of the Total Annual Catch Entitlement is allocated to each zone to avoid overfishing in any one area.
- While there is a minimum legal size of 125mm for paua, PauaMac3 members have agreed to increase this in some parts of their fishery to better reflect biological parameters. The increasing of the minimum harvest size limit allows adults to spawn for another oneor two years before they can be harvested.
- Commercial paua fishers have voluntarily almost doubled the number of samples for assessing paua growth. They are also funding research on size at maturity and aging techniques.

- Commercial paua fishers are committed to investing in electronic data capture and monitoring systems to increase knowledge of the resource and its utilisation.
- Commercial harvesting is managed under an agreed code of practice included in an annual operating plan agreed to all quota owners and harvest teams.
- Local paua fishers have set up a reseeding hatchery and release spawned lava and 10-12mm juvenile paua annually - approx 50,000 each year since 2002. All reseeding is paid for by PAU3 quota owners, with resulting adult paua available to recreational and customary harvesters as well as commercial divers.
- Commercial paua fishers support enforcement by reporting suspicious behaviour and providing sentencing notes for judges after a successful prosecution. They have been successful in having an extra fine levied on offenders that has gone back to the reseeding programme to help undo the damage done by poachers.

5.2.6 Rock lobster

Careful management of the rock lobster fishery at Kaikōura has seen the catch per unit effort increase from 0.3kg in 1993 to 1.9kg per pot in 2010. See Figure 18 below. Rock lobster abundance is now well above biological maximum sustainable yield.

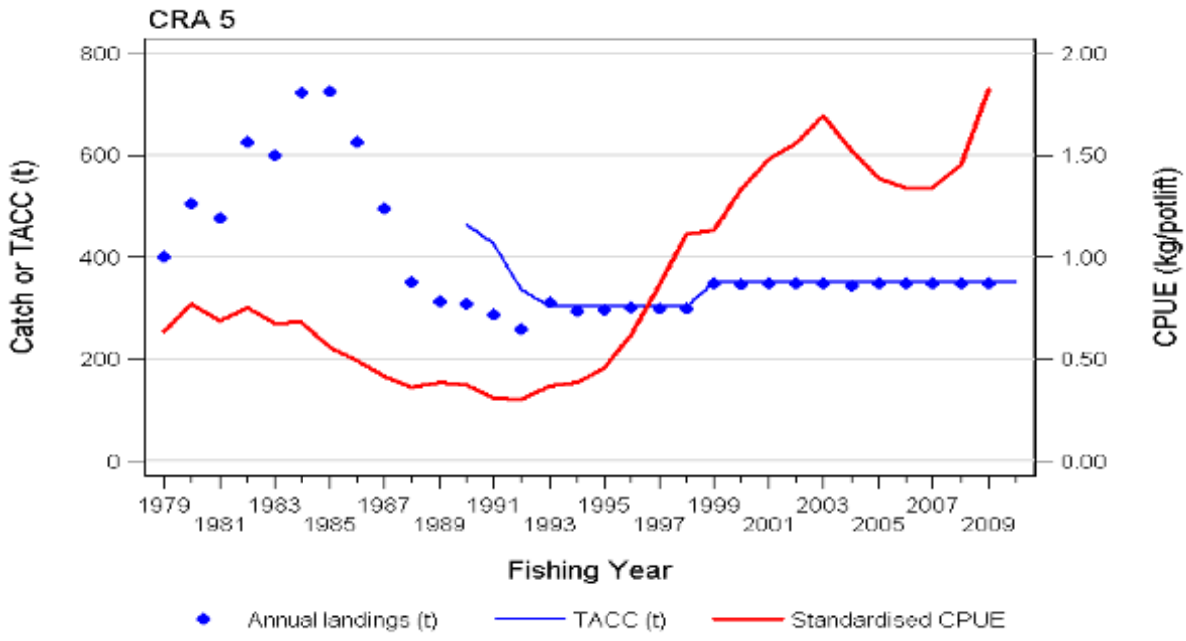


Figure 18-Rock Lobster Catch and Catch per Unit Effort in Area 5

Rock lobster was introduced into the Quota Management System in 1990 with individual fishers receiving quota based on their previous five-year catch history. A reduction in fishing effort (similar to that associated with the wet fish effort), has seen a dramatic reduction in annual pot lifts in the Kaikōura region. For example in 1990 there were in excess of twenty commercial rock lobster fishermen operating from Kaikōura alone (from New and Old Wharf and South Bay); currently there are only five.

Measures introduced over the past twelve years to increase the abundance of rock lobster include:

- When quota entered the lobster fishery in 1990 the Total Allowable Commercial Catch was reduced by 28%. A further reduction occurred later bringing the total reduction to 52%.
- A Total Allowable Commercial Catch increase of 10% was introduced after maximum thresholds were reached in 1999.
- No further Total Allowable Commercial Catch increases have been accepted since 1999. Two Total Allowable Commercial Catch increases have been declined by commercial fishers.
- A voluntary spatial catch effort code of practice has been introduced.
- A voluntary management rule is in place to protect abundance that triggers an allowable catch reduction when the catch per unit effort goes down.
- In 1993 the measurement method was changed from tail length to tail width and commercial rock lobster fishers in Area 5 lobbied Government to increase the size of the female lobster from a tail width of 58mm up to 60mm.
- Escapement gaps made mandatory in rock lobster pots.
- Commercial rock lobster fishers in Area 5 conduct a large amount of voluntary research outside of the mandatory research requirements.

5.2.7 Sharks

Many shark populations are depleted round New Zealand, and with almost half the shark and ray species present in Kaikōura, they deserve some special attention (note the protected and threatened shark species are addressed in Section 4). These were neglected in our Characterisation Report and so more detail is provided here than for other species. This information was kindly provided by Clinton Duffy of the Department of Conservation

Chondrichthyan (sharks, rays and ghost sharks) species recorded from Kaikōura (* = QMS species)

Migratory pelagic species (n=7):
Alopias vulpinus – common thresher shark
Carcharodon carcharias – great white shark
Cetorhinus maximus – basking shark
Isurus oxyrhinchus – mako, shortfin mako shark*
Lamna nasus – porbeagle*
Prionace glauca – blue shark*
Sphyrna zygaena – smooth hammerhead shark

Shelf species (n=10):
Callorhinchus milii – elephantfish*
Cephaloscyllium isabella – carpet shark
Dasyatis brevicaudata – shorttail stingray
Galeorhinus galeus – school shark, tope, grey boy*
Mustelus lenticulatus – rig, spotted dogfish*
Notorhynchus cepedianus – broadnose sevengill shark ('thrasher shark')
Raja innominata – smooth skate, barndoor skate*
Squalus acanthias – spotted spiny dogfish*
Torpedo fairchildi – electric ray
Zearaja nasuta – rough skate*

Upper slope species (n = 33):
Apristurus spp – deepwater catsharks (species complex, individual species very difficult to identify)
Bathyraja shuntovi – longnose deepsea skate
Brochiraja asperula – smooth deepsea skate
Brochiraja spinifera – prickly deepsea skate
Bythaelurus dawsoni – Dawson's catshark
Centrophorus squamosus – leafscale gulper shark
Centroscymnus coelolepis – Portuguese shark
Centroscymnus owstoni – Owston's dogfish
Centroscymnus plunketi – Plunket's shark
Centroselachus crepidater – longnose velvet shark
Chimaera sp. C – brown chimaera
Chimaera sp. D – purple chimaera
Chlamydoselachus anguineus – frill shark
Cirrhigaleus australis – southern mandarin dogfish
Dalatias licha – seal shark (black shark, kitefin shark)
Deania calcea – shovelnose dogfish
Echinorhinus cookei – prickly shark
Etmopterus granulosus – Baxter's dogfish, southern dogfish
Etmopterus lucifer – blackbelly dogfish, Lucifer dogfish
Harriotta raleighana – longnose spookfish
Heptranchias perlo – sharpnose sevengill shark
Hexanchias griseus – sixgill shark
Hydrolagus novaezelandiae – dark ghost shark
Hydrolagus sp. A – black ghost shark
Hydrolagus sp. B2 – pale ghost shark
Hydrolagus sp. C – pointynose blue ghost shark
Mitsukurina owstoni – goblin shark
Oxynotus bruniensis – prickly dogfish
Rhinochimaera pacifica – Pacific spookfish
Somniosus longus – pygmy sleeper shark
Squalus griffini – northern spiny dogfish
Typhlonarke aysoni – circular blind electric ray
Typhlonarke tarakea – oval blind electric ray

The most familiar species are the large migratory pelagic sharks and sharks and rays occurring over the shelf. These groups contain the sport fishes, species of particular customary significance, and are target and important commercial by-catch species. Quota Management species are indicated by an '*' in the text box above.

The most important commercial target species are elephant fish, rig and school shark. The most important bycatch species are spotted spiny dogfish, rough and smooth skate, blue shark, mako and porbeagle shark.

Catch per unit effort indices for:

- Rig and elephant fish suggest these species are recovering following overfishing prior to the introduction of the Quota Management System and the Hector's dolphin set net ban.
- School shark are relatively stable, however low biological productivity and fishery collapses elsewhere mean it is not known if current catch limits are sustainable.
- Short fin mako and porbeagle have declined.

School shark, rig and spotted spiny dogfish were important customary food fishes throughout New Zealand. Shark liver oil was used to mix paints and rub on the skin.

5.3 Issues

The core issue is that inshore fisheries are coming under increasing pressure, with a trend of increased harvesting from recreational and charter fishers following a history of commercial depletion before the introduction of the Quota Management System. Increasing fuel prices and other factors such as new technologies could change commercial fishing patterns in ways that increase pressures on inshore fish stocks. Associated with commercial fishing is depletion in some migratory fish stocks that are valued in Kaikōura. These pressures are illustrated in Figure 19 below and they include:

1. Fish theft.
2. Commercial harvest of migratory stocks elsewhere.
3. Annual Catchment Entitlement[16] being taken in Kaikōura by fishers based outside the region.
4. Increased charter fishing.
5. Increased recreational fishing effort.
6. Potential habitat degradation from future seaweed harvesting and from bottom trawling on stable bottom types.

[16]See Glossary for definition of terms.

7. Fishing pressures on slow breeding shark species.

In addition, current fishing management approaches take little account of local circumstances and may depress the productivity of fisheries by rules that do not match fish biology or fishing patterns. Quota Management Areas span the most of the east coast of the South Island and make no distinction between local areas. Recreational fishing rules often set minimum size limits for species, but seldom set maximum size limits to protect the most productive breeding stock.

Kaikōura is part of Fisheries Management Area 3 for finfish that extends from Kaikōura to Flat Point south of Dunedin. The statistics in Table 1 put things in context. The numbers of fishers were derived from the Ministry for Primary Industries website information for Area3. Kaikōura numbers are rough estimates based on the local knowledge of Te Korowai.

Table 1 - Fishing pressure indicators (numbers of fishers)

Fisheries Management Area 3	Kaikōura
Coastline 1490km	Coastline 90km
646,000 people	3,500 people
49,000 tāngata whenua	500 tāngata whenua
129,000 recreational fishers	More than 50,000 recreational fishers

We note that locally based commercial fishers have made many changes as a result of a history of boom and bust. After a history of depletion for many stocks as a result of overfishing and wasteful practices, the Government intervened with the Quota Management System. All the information gathered by Te Korowai suggest that this combination of Quota Management System controls, local codes of practice, reseeding and local area management, have resulted in more sustainable local fisheries.

Issues to be resolved are:

- How local commercial fishing fits with the goal of abundance.
- Growing recreational fishery.
- Sustaining customary practices.
- Dealing with commercial fishing pressure based outside Kaikōura.

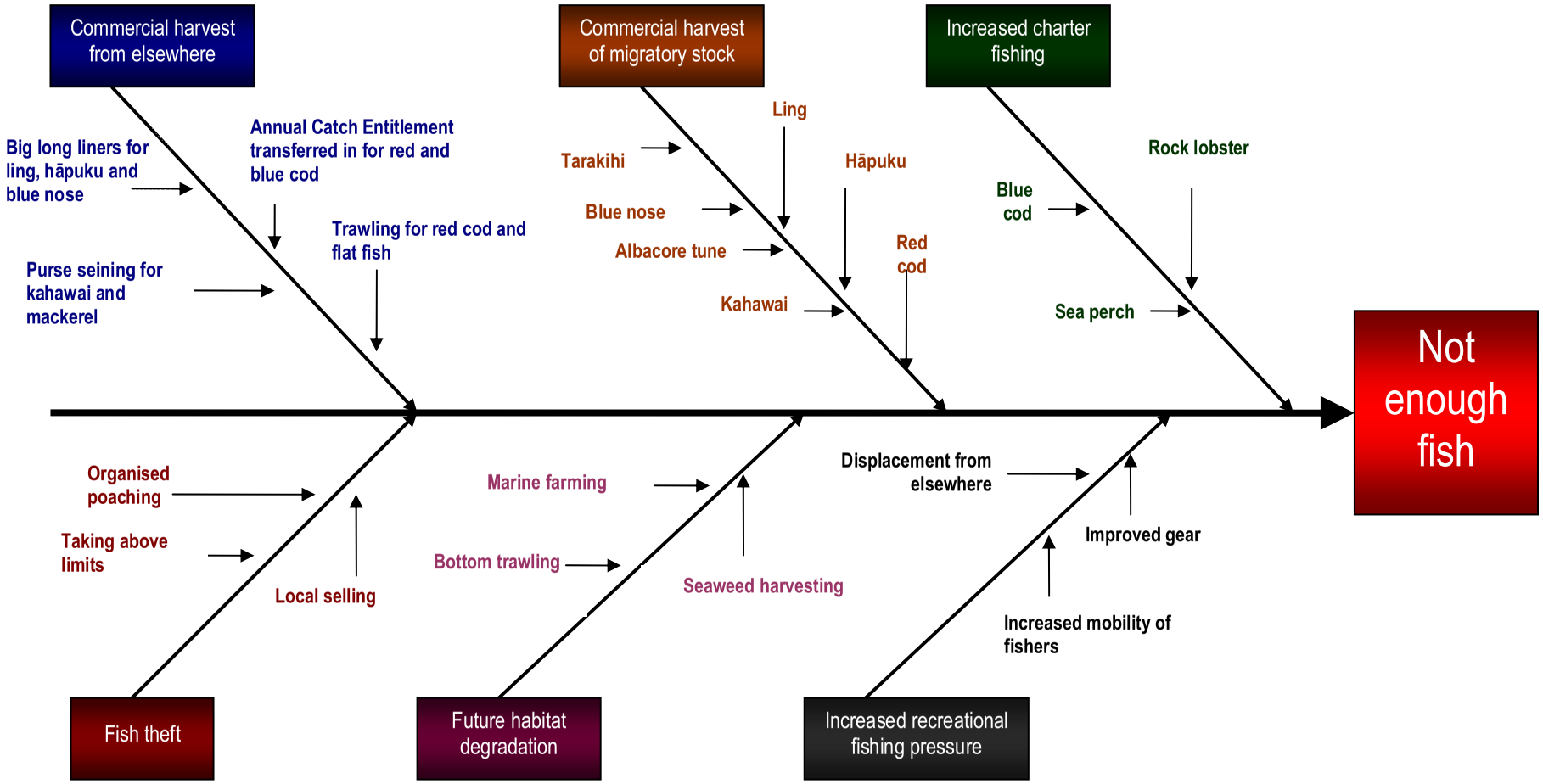


Figure 19 – Pressures reducing fish stocks

For example, the total local catch of finfish is around 1,000 tonnes per year while a big trawler can take 100 tonnes in a week (though different species are involved in trawling operations). Local commercial fishing has its greatest effects on the local abundance of crayfish, paua, blue cod and sea perch.

5.3.1 Fish theft

Kaikōura is a target for professional and amateur fish thieves from both Kaikōura and further away. Organised gangs associated with other criminal activities are known to operate in the area, with high abundance and high value of rock lobster and paua, together with multiple points of access, proving a draw card. The present regulations struggle to cope with the few people who sell catch ostensibly taken under recreational fishing rules.

5.3.2 Commercial harvest of migratory fish elsewhere

For many migratory fish species, Kaikōura is part of a common stock with other places, often the whole of the South Island.The classic case is kahawai, where catch rates have declined in Kaikōura along with other parts of New Zealand (see Figure 20).

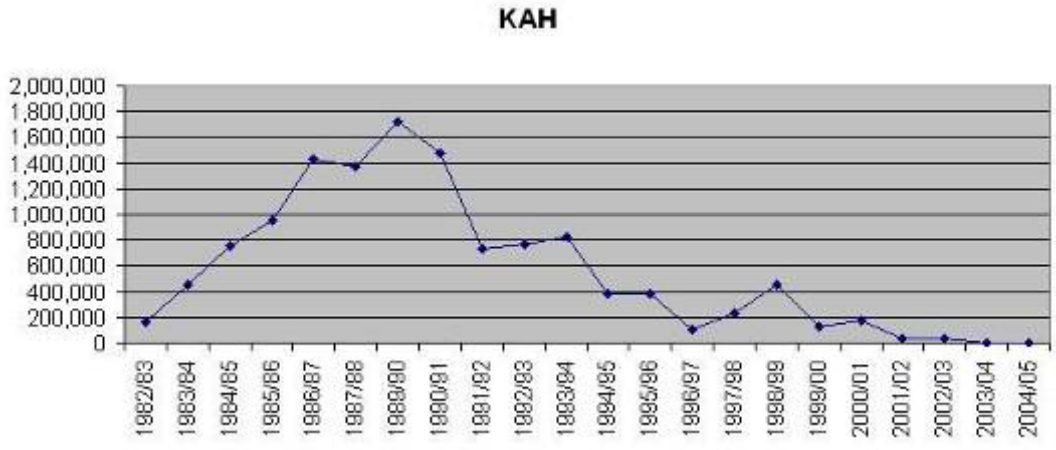
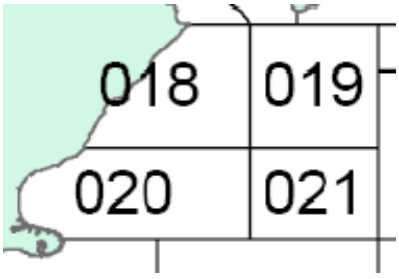


Figure 20 – Commercial catch of kahawai in Fisheries Statistical Area 018[17]

[17] Area 018



Other migratory fish caught in Kaikōura but affected by harvest elsewhere include tarakihi, ling, blue nose, hapuka, albacore tuna, red cod and a number of other species.

5.3.3 Annual Catch Entitlement of fishers based outside Kaikōura

Commercial fishers based outside Kaikōura can fish their Annual Catch Entitlement around Kaikōura as long as they hold quota for the relevant quota area. The amount of each species that can be caught commercially in each area, is set by the Minister of Fisheries (the Total Allowable Commercial Catch or TACC). Fishers hold "quota" for each species and this entitles them to a share of the Total Allowable Commercial Catch set by the Minister that year.

Quota areas differ for different species. For paua the PAU3 area extends from the Clarence River in the north to the Waitaki River in the south. For crayfish the CRA5 extends from Farewell Spit to the Waitaki River mouth.

Fishing effort from elsewhere which is known to take place in Kaikōura waters includes:

- Purse seine fishing for kahawai and mackerel.
- Trawling for red cod and flat fish.
- Inshore fishing for blue cod and red cod.
- Big long liners fishing for ling, blue nose, and groper.
- Deep water trawlers.

There is risk of a rise in such fishing effort around Kaikōura in the future if local controls make fish more abundant locally.

5.3.4 Increased charter fishing

Charter fishing effort is reported to be increasing around Kaikōura, but the total effect is difficult to ascertain. Unconstrained increases in charter fishing could bring excess pressure to bear on Kaikōura fish stocks.

The charter fishery in Kaikōura is complex, including both serious full time operators and some very part time elements. At present there is no licensing for charter fishing other than Maritime New Zealand requirements. With the introduction of specific reporting requirements for fish taken in charter fishing being phased in, a more accurate assessment of the role of charter fishing in Kaikōura fish stock abundance will emerge.

5.3.5 Increased recreational fishing effort

Kaikōura is a very popular recreational fishing area. Anecdotal observations by local fishers and various recreational fishing surveys[18] identify four areas of particular importance for recreational fishing (see Figure 21):

- Kaikōura Peninsula, particularly around the south and eastern sides.
- Waipapa to Rakautara in the north.
- Barney's Rock and Goose Bay.
- Oaro to Haumuri Bluffs in the south.

Fishers' observations and formal surveys both suggest that about half of total recreational fishing is concentrated around the Kaikōura Peninsula.

The major difference between observations and survey results is that recreational fishers report moving offshore to areas further afield, to target species such as hāpuku, which are becoming more significant to the recreational catch.

Novice fishers and smaller charter operators tend to fish closer to the Peninsula. Smaller perch and the odd blue cod are readily caught around the Peninsula and it is considered good fishing by some fishers, when in fact the area is quite depleted. Cod potting commercially in adjacent areas plays a part in reducing the overall abundance. Perch around Kaikōura was heavily targeted commercially prior to its introduction into the Quota Management System. Little is known about the age and robustness of sea perch.

In general, the greater mobility of the New Zealand population, increased availability of offshore capable boats, improved fishing technology and declines in fish stocks elsewhere, are creating the potential for excessive recreational fishing pressure on Kaikōura stocks, even if local resident fishing effort remains unchanged. Even so, changes in recreational fishing pressure need to be considered in the context of overall changes to fishing effort and changes in commercial and charter operations. Future recreational fishing effort is, however, hard to predict reliably. Negative changes in the economic health of the country can reduce effort that involves high costs, but can lead to more subsistence fishing locally. Increasing fuel prices may be a significant driver over the next decade. Population growth is linked to increased fishing pressure and, with immigration, a change in the types of fishing.

[18]The Kaikōura recreational fishery has been studied using regional and national diary schemes (1991, 1996 and 2001), a combined diary/roving and boat-ramp survey (1999), and boat-ramp surveys (1996 and 2000) (Blackwell, 2006) and on qualitative observations made by local recreational fishers, recorded in 2007. Although Blackwell cautions the use of the survey results, broadly speaking there is agreement between the survey and anecdotal observations.

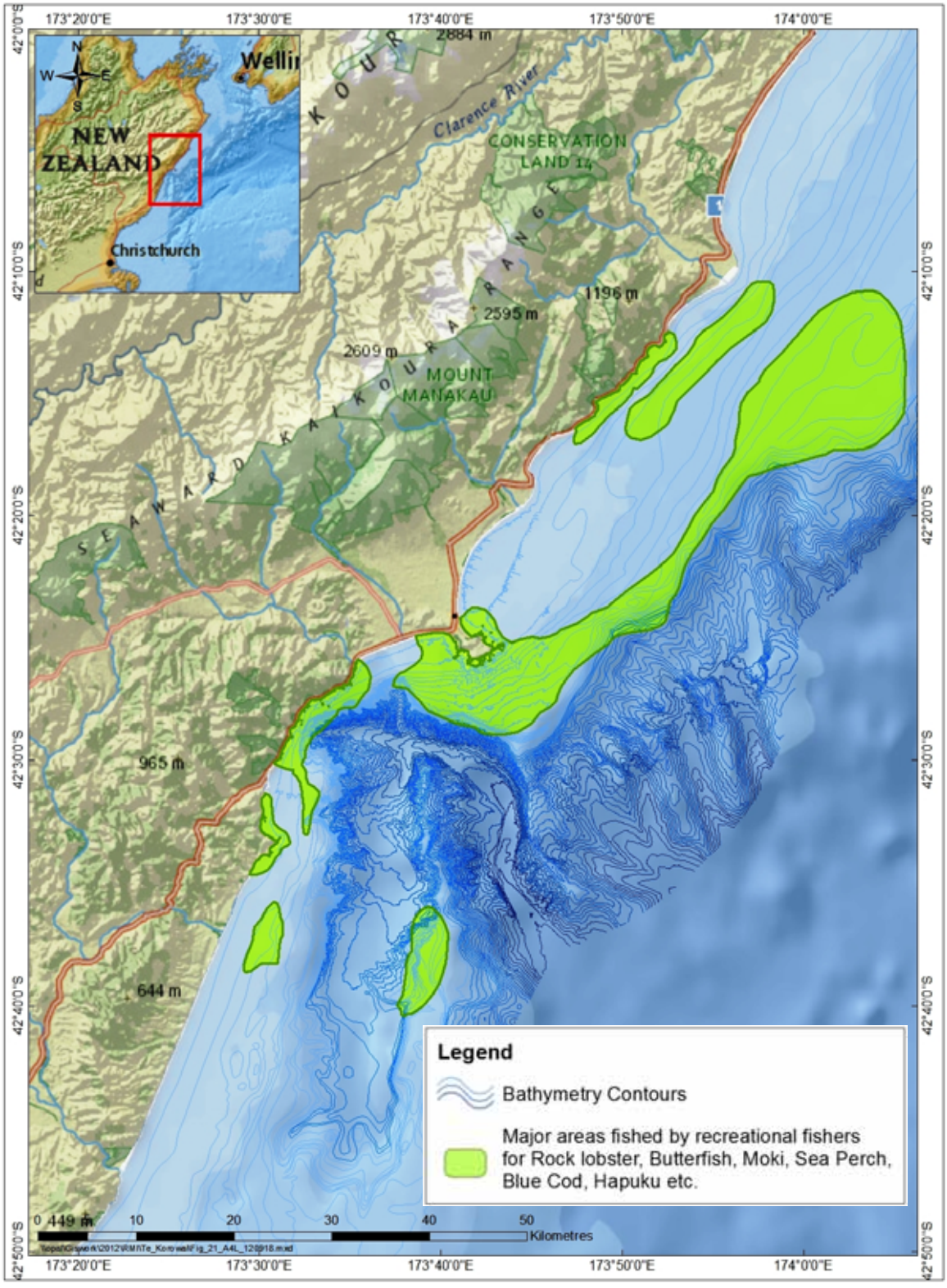


Figure 21 – Recreational fishing areas

5.3.6 Seaweed harvesting and bottom trawling

There is potential for habitat degradation from bottom trawling on stable bottom types and, in the future, from seaweed harvesting.

At present, bottom trawling occurs on some shelf areas and offshore rises near Kaikōura. Bottom trawling and dredging can have adverse effects on both living things and natural physical features on the seafloor. Some species (e.g. horse mussels) form three dimensional biogenic habitats which are important fisheries habitat but are also particularly vulnerable to bottom-towed fishing gear. Horse mussel beds are known to occur in certain inshore areas between Kaikōura Peninsula and Haumuri Bluffs.

Harvesting of the large brown seaweed *Macrocystis* was brought within the Quota Management System in 2010. Kaikōura is included within the area where harvest is permitted, although there are no known intentions for harvest here at present. *Macrocystis* is an important habitat and food source for many coastal species.

5.3.7 Sharks

Sharks and other cartilaginous fishes are inherently vulnerable to overfishing due to their low biological productivity - a product of slow growth, late age at maturity (particularly females) and low fecundity (small numbers of young, plus long gestation periods and resting years in some species).

Among the inshore species rig, are one of the most productive, whereas school sharks have very low productivity (i.e. slow growth, late age at maturity and a three year reproductive cycle). In general, deepwater sharks and rays are considered to have very low productivity, although in most cases management is complicated by a lack of species specific information on critical life history parameters, stock structure and fishery relevant behaviour (e.g. movements). Deepwater sharks were quite heavily fished at Kaikōura for their livers and to a lesser extent their meat, following the introduction of the Quota Management System in 1986,using gill nets in depths of 330m to 840m.

5.4 Solutions

To achieve the our goal of abundant fish for present and future generations, the key is to better control the future pattern and quantity of fish harvest, both around Kaikōura and in the wider area of migratory fish stocks.

The priorities are to:

1. Minimise fish theft.
2. Manage fisheries locally.
3. Support the development of a code of practice for charter fishers.
4. Advocate for appropriate controls on shared fisheries.

5. Educate fishers to improve awareness and behaviour.
6. Encourage research and monitoring relevant to Kaikōura fisheries.
7. Support reseeding of local fish stocks.

Some submitters suggested that the Te Korowai approach was in conflict with the Fisheries Act 1996, but this is far from true. Our approach is integrated ecosystem management at a local level, integrating social and ecological objectives in a way that complements national tools for fisheries management.

The Fisheries Act 1996 confers very wide powers. Existing Government policy is to use Quota Management Area level tools to deal with most aspects of fisheries. As the bulk of take from most fisheries is commercial in origin, the output controls of the Quota Management System are the major influence on fisheries abundance generally. However, these Quota Management Area level tools do nothing to ensure abundance at the local level. It is perfectly possible for concentrations of commercial, and other effort, to produce areas of localised depletion.

Section 5 of the Fisheries Act 1996 requires consistency with international obligations (including obligations to coastal communities) and with the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992. Section 6 forbids action under the Resource Management Act1991 from doing selective allocation between fisheries sectors, but is silent on the issue of Resource Management Act1991 tools, excluding all sectors equally. Section 8 includes "conserving" within the definition of "utilisation". Wider tools under Section 297 allow the creation of restrictions of any imaginable type upon fishing activities - with any combination of closed areas and closed seasons.

There are no changes of legislation required to implement Te Korowai's goals of fishing for abundance. A simple change of approach is all that is needed; one which would acknowledge and address the needs of all people at all levels.

The Strategy, and the proposals within it, will be reviewed after ten years. Specific bag limits may, however, be reviewed annually to fit with current fisheries management processes.

We note that some suggestions in submissions could not be practically taken up. For example, a suggestion that proposed to limit Quota to the specific Kaikōura area cannot practically be done. To make changes of this nature there has to be a compelling sustainability issue or agreement of 75% of the Quota holders. We support the voluntary agreements made by PauaMac3 and CRAMAC 5 to provide additional protection for their fisheries. We will be applying for a new statistical reporting area, as an intermediate tool to allow refinement of management at a fine scale over time.

In resolving the issues, and in protecting the treasured resources of Kaikōura, Te Korowai is working to minimise transfer of effort. Transfer of effort cannot be entirely avoided in achieving the Te Korowai vision. We do not have sufficient resources or time to undertake the full study on transfer of fishing effort suggested

in the submission by CRAMAC5, but will continue to work with affected parties to minimise the impacts on all users. This has already begun with CRAMAC5 documenting levels of effect produced by different options on rock lobster fishers. We will advocate for research into the effects of effort transfer as part of on-going monitoring of the strategy and the actions therein.

Some submitters suggested that any changes to recreational bag limits should be reflected by bag limit changes for commercial operators. Commercial fishing does not work to bag limits which makes direct comparisons difficult. Locally, quota has already been reduced for some species and increases voluntarily rejected by commercial quota holders, e.g. rock lobster. We will seek changes to recreational bag limits where the inshore stocks are known to be under pressure and will also promote 'fishing for a feed' as a general aim for recreational fisheries. We will also seek changes to commercial interests through agreements and negotiations with commercial operators, noting there are limited options available.

5.4.1 Minimising fish theft

Goal: to minimise fish theft in Kaikōura.

This goal matters because every stolen fish is one less for legitimate fishers, and each fish thief that gets away with it, undermines the fisheries management systems that protect our fisheries. We have been advised that the law regarding accumulation associated with holiday cottages is not clear and needs to be clarified to make it enforceable.

The goal will be achieved by:

1. Education (see sections 3.4.5 and 7 below).
2. Lobbying Government for better enforcement and supporting local fisheries officers. We are grateful for the positive Government response that has allowed full-time fisheries officers to be assigned here in Kaikōura and acknowledge the good work currently being done. We do not propose to have local people policing the coast, other than as honorary fisheries officers as at present.
3. Advocating strong penalties and return of fines to Te Korowai to support local educational and reseeding initiatives.
4. Support for better methods such as accumulation limits and telson clipping for crayfish.
5. Supporting a strong policy of naming convicted poachers in local media.
6. Supporting ideas of Māori poachers having to account to the Rūnanga, in addition to the legal processes they face through the courts.
7. Lobbying for clarity on the legality of the practice related to commercial premises/holiday cottages.

Lobbying Government for better enforcement will include:

- Increased funding and increased penalties for theft and receipt of stolen fish.
- Increased policing of fisheries inKaikōura.

5.4.2 Te Korowai's proposals forKaikōura recreational fisheries

Goal: to sustain local abundance of localised fish stocks.

This goal matters because Kaikōura is coming under increasing recreational and charter fishing pressure. Local commercial fishers have already adjusted practices to sustain local commercial stocks, and recreational fishers need to do likewise.

We will work to support recreational, customary or commercial fishers to achieve their objectives where there is data to show that fish stocks are under pressure. We are trying to achieve regional control of fisheries management through establishing local bag limits. The inshore fisheries are a local food basket and we are looking to achieve community consensus that greed is not okay and that fishing for a feed is a priority. Where there are no bag limits, we will seek to introduce these. Where there are excessive bag limits, we are seeking a reduction. We acknowledge the contribution of recreational fishers in accepting reduced bag limits to sustain the quality of fishing for all. This creates expectations that charter, commercial and customary fishers will do likewise. We will advocate for reductions in Annual Catch Entitlement (ACE) where these seem necessary.

In arriving at recommended limits for recreational fishing we have adopted the approach of '**Fish for a feed and for the future**.' We acknowledge the contribution of the recreational fishers in limiting catch in the interests of all. We have only suggested solutions for species where there are seen to be current or emerging issues. A wide range of other species were considered, but were not deemed to merit revised limits locally.We will seek Ministry for Primary Industries support for setting legally binding rules for recreational fishing under the Fisheries Act 1996 for the Te Korowai area as follows:

Seaweed

- **Karengo**(*Porphyra* spp. and *Ulva* spp.) - introduce a daily limit of five litres wet volume per person per day measured in a 5-litre bucket with a requirement for hand picking.

Reason: Karengo is a traditional food of Māori. With the increasing range of ethnicities in New Zealand more people are harvesting seaweeds. Some techniques, such as the use of sharp instruments and "piano wire", do not sustain re-growth as well as traditional indigenous techniques. Te Korowai is aware of an area open for taking beach-cast seaweed off the Haumuri Bluffs and would not support a start to this practice in other areas.

- **Bladder kelp** (*Macrocystis pyrifera*) - introduce a daily limit of five litres wet volume per person per day measured in a 5-litre bucket with a requirement for handpicking.

Reason: Te Korowai agrees that large-scale bladder kelp harvest should be avoided and accepts that small amounts for the paua hatchery and scientific purposes should not have significant adverse effects. Te Korowai notes that there is not much bladder kelp harvest in the area and that hand plucking is good practice. There is currently no bag limit. Te Korowai intends to future proof potential changes to the harvest through management and good harvesting practices included in the Codes of Practice.

Shellfish

- **Black foot paua** (*Haliotis iris*) and **yellow foot paua** (*Haliotis australis*)- reduce daily bag limit for each to 6 per person (from 10) with an accumulation limit of 20 paua or 2kg for all paua;increase minimum size to 127mm[19] (from 125mm) for black foot paua (retaining the 80mm limit for yellow foot paua), add a requirement to measure before taking; and support regulation to enforce the Ministry for Primary Industries code of practice (see box below).

Reason: Paua has gone from being a traditional Māori fishery to a very important commercial fishery and popular recreational fishery. Recreational fishing pressure is growing. Commercial fishers have adopted voluntary size limits over the minimum to encourage paua breeding and fund re-seeding activity.

[19]Matching the minimum legal size currently taken by commercial fishers on the Kaikōura coast.

Paua – One Code of Practice for All Fishers

Sustainable paua fisheries that avoid wastage

The Code:

- ***Only use approved harvest tools.***
- ***Measure in the water and return undersized paua where removed from the rock.***

Recent studies have revealed that we have a special problem with paua. While most fishers are responsible, some use fishing techniques which kill undersized paua. A number of practices used in the paua fishery result in high mortalities of undersized paua through ignorance and poor harvesting techniques.

Lethal damage
Many fishers remove undersized paua from the reef surface using sharp instruments. This will usually result in some damage to the foot of the small paua. Paua are unable to clot blood when cut, so even the tiniest nick could result in the paua bleeding to death. Even if the paua survives the cut, the blood will attract predators into the area, and the paua may be killed before it has a chance to clamp down onto the rock surface. Furthermore, damage to the paua may reduce the ability of the paua to clamp onto the rock surface. Research has shown that damaged paua may develop abscesses, which will result in death weeks later.

Drying out
Paua should not be removed from the water and placed on deck to be counted and measured. Paua left in the sun quickly dry out and will soon die in these conditions.

Left to die
Undersized paua are commonly thrown back into the water with no thought of where the paua may end up. Paua thrown over areas of sand have no hope of survival. Even if paua are thrown over reef areas, they often land on their shell and take some time to right themselves and clamp onto the reef surface. While paua are not attached to a reef they are an easy meal for predators in their area.

Why worry?
Undersized paua should be thought of as next year's harvest. Death of any damaged paua that you return will not only lead to fewer paua in the following year, but also in years to come. Young stocks are the breeding stocks of the future.

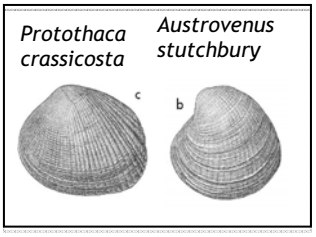
Adapted from Minfish guidelines for gathering pauahttp://www.fish.govt.nz/en-nz/Recreational/Most+Popular+Species/Paua/default.htm

- **Pupu** (cats eye *Turbo smaragdus*) – reduce daily bag limit to 20 per person (currently 50).

Reason: Pupu are a traditional Māori delicacy but are now being targeted by new ethnic groups. Te Korowai notes that there are not many pupu on the Kaikōura coast and that they are quite large. Twenty per person was agreed by tāngata whenua to comprise a good feed.

- **Cockles**(*Protothaca crassicosta* and *Austrovenus stutchburyi)*- reduce daily bag limit to 50 per person (from 150).The predominant species, *Protothaca crassicosta* , being harvested at Kaikōura as "cockles" differs from most other parts of New Zealand. This rarer species needs special care and 50 per person is still above the 30 recommended in science advice. This is seen as compatible with fishing for a feed and all cockles are rare in the Te Korowai area. Cockles are culturally significant to Ngātī Kurī which is why a total harvest ban is not being proposed. In addition, we will provide education on good practice for cockle gathering, which minimises the damage to habitats such as sea grass and include this in a proposed code of practice to be developed for cockles at Kaikōura. Vehicle limits are not be proposed, as these are difficult to enforce.

Reason: Cockles are rare around Kaikōura and are a traditional Māori seafood item. Current limits are set on the basis of a "kerosene tin full" and have little to do with sustainable harvesting.



- **All other shellfish** (excluding mussels) - combined total 30 per person per day (currently 50).

Reason: Most small shellfish have no specific limits. New ethnic groups entering the recreational fishery are extending the range of intertidal species being targeted. These species can be important components of the marine ecosystem and a precautionary approach is warranted.

Other invertebrates

- **Kina**(*Evichinus chloroticus*) - reduce daily bag limit to 20 per person (from 50).

Reason: Twenty kina is ample for a feed.

- **Crayfish**(Rock lobster *Jasus edwardsii*) - keep daily bag limit at 6 per person per day; introduce an accumulation limit of 18 (three day take); and a telson clipping requirement for all recreationally harvested crayfish, as an aid to better enforcement.

Reason: Careful management of the rock lobster fishery at Kaikōura has seen the catch per unit effort increase from 0.3 in 1993 to 1.9kg per pot in 2009. The main threat is fish theft. An accumulation limit of three day's take and telson clipping were identified by enforcement officers as a key tool to increasing their effectiveness. Te Korowai is not proposing a closed season for crayfish when in berry as suggested in some submissions. Currently crayfish are not allowed to be landed in berry and crayfish are in berry much longer than the proposed season, so such a closure would not be an effective measure.

Finfish

- **Blue Cod** (*Parapercis colias)* – reduce the daily bag limit to 6 per person (from 10) and increase minimum size to 33cm (from 30cm). Include the use of circle 6/0 or larger hooks for blue cod as part of a blue cod code of practice. These limits are being proposed due to the depletion of the inshore blue cod population. Note that these measures are associated with a voluntary commercial exclusion zone discussed in section 5.4.2.

Reason: The inshore (less than 80m depth) blue cod population at Kaikōura is depleted as shown by size and sex ratios. The deeper water fishery (which is also the main commercial fishery) does not show the same depletion. Blue cod are susceptible to localised depletion and recruitment over fishing. A reduced bag limit and increased size limit will aid recovery of the inshore fishery.

- **Tarakihi** (*Nemadactylus macropterus*)- reduce daily bag limit to 10 per person from 15; keep 25cm size limit.

Reason: This species has been reduced by commercial fishing and needs a chance to recover. There is a lack of larger fish.

- **Perch** (*Helicolenus percoides*)- introduce daily bag limit to 20 per person (currently no limit) and a minimum size of 26cm.

Reason: Sea perch are the most commonly taken recreational finfish at Kaikōura. Currently there are no limits and wasteful practices have been observed. Fillets are small and a limit of 20 per day is compatible with fishing for a feed. A size limit of 26cm allows all females at least one breeding season.

- **Kahawai** (*Arripis trutta, A. xylabion*) – reduce daily bag limit to 10 per person (currently 15) with requirement for fish that will not be utilised to be released immediately.

Reason: Nationally depleted by commercial fishing and can be fished wastefully when schooling in accessible areas. Ten fish is a generous feed even when smoking fish.

- **Butterfish** (*Odax pullus*) - reduce daily bag limit to 10 per person (currently 15).

Reason: Nationally depleted by commercial fishing and can be fished wastefully when schooling in accessible areas. Ten fish is a generous feed even when smoking fish.

- **Red moki** (*Cheilodactylus spectabilis*)–no-take (currently 15).

Reason: Locally depleted reef fish needing opportunity to recover. Vulnerable to local over-fishing.

- **Blue Moki** (*Latridopsis ciliaris*) - reduce daily bag limit to 10 per person (currently 15).

Reason: Te Korowai acknowledges that numbers have increased due to the restrictions on set netting but propose a daily bag limit of 10 as this is enough for a feed.

- Introduce a daily combined bag limit of five per person for all of the following species:
  - **Kingfish** (*Seriola lalandi*) (currently 3).
  - **Bass** (*Polyprion moeone*) and hapuka (*Polyprion oxygeneios*) (currently combined limit of 5 with kingfish).
  - **Blue nose** (*Hyperoglyphe antarctica*) (currently 30).
  - **Ling** (*Genypterus blacodes*) (currently 30).
  - **Albacore tuna** (*Thunnus alalunga*) (currently no limit).

With a daily limit of three for any one of these species where current limits are higher for bass, blue nose hapuka, tuna and ling.

Reason: These are large fish with varying bag limits of up to 30 per day per person or more. Any one fish is a feed and combined limit of five is very generous even though the reduction is significant.

Sharks

- Introduce a limit of one game shark per person per day(**seven-gilled shark**(*Notorynchus cepedianus*)**, mako shark (***Isurus oxyrhinchus*)**, blue shark (***Prionace glauca*)**, hammerhead shark**(*Sphyrna zygaena*)**, porbeagle shark** (*Lamna nasus*) **or thresher shark**(*Alopias vulpinus*)).The current limit is of one of each of these species per person per day.
- Introduce a daily limit ofthree **school shark** (*Galeorhinus galeus*) per person per day and three **rig** (*Mustelus lenticulatus*)(currently both five). Develop and promote a code of practice for catch and release with a requirement to release sharks unharmed that will not be utilised.

Reason: Nationally populations of larger sharks are depleted and Kaikōura has an unusual diversity of species making it a good place to commence recovery.

- **<u>Other proposed measures:</u>**

The following measures are also proposed for recreational fishing at Kaikōura:

- Education on reducing wastage and good fishing practises.
- The development of guidelines for fishing competitions to avoid wastage and to promote the message of 'fishing for a feed and fishing for the future'.
- Landing in a measurable state.
- Prevention of high grade sorting (i.e. throwing the little ones back to die).
- Supporting and facilitating recreational fishers to record their catches and report to Te Korowai to support analysis for future planning.

5.4.3 Charter fishing

Goal: encouraging good charter fisheries practice at Kaikōura, and ensuring that these are not adversely affecting the abundance and productivity of fish locally.

This goal recognises the important role of charter fishing in local tourism and the capacity of charter fishing to amplify the recreational take to a level where the abundance of local stocks are compromised. We want to encourage charter fishing that provides high quality experiences for visitors and discourage charter fishing as a vehicle for plunder.

Te Korowai notes that the current status of charter fishers being regarded as recreational fishers is a national issue that cannot be resolved locally, and neither have we found a way to legally cap the number of charter fishing operations in Kaikōura. We will advocate for a policy platform that promotes charter fisheries management and separation from recreational fishing under the Fisheries Act 1996 in a way that is fair to clients, charter operators and also to the environment. We will continue to support the development of a code of practice for charter fishers and certification under the Te Korowai brand.

To better manage local charter fishing activities, we will:

- Facilitate the development of a local charter fishers' code of practice (for eventual inclusion in the Kaikōura Fishing Accord, see 5.4.2 below).
- Introduce a Te Korowai best practice certificate for approved charter operators and display and publicise the approved list.
- Support stringent enforcement.
- Accelerate local recording of blue cod catch through the charter fisher's Code of Practice.

We believe that better management of the charter fleet would be achieved under a charter fishers' code of practice. The Te Korowai best practice certificate would only be issued to those operators who met specified criteria. We are keen for charter fishers to record all of their catch under the code of practice.

The matters raised in submissions regarding multiple trips and suggested maximum catch limits, will be explored during the development of the charter fisher's code of practice. The issue of the use of holding pots is a matter of enforcement. We note that standard pots can be used as long as they have escape hatches and as long as they comply within recreational limits. The practice of using holding pots is not common within the Te Korowai area.

The process for developing the Code of Practice, and its scope, have not yet been defined but an opportunity for public comment is intended. It will be a process for bringing together a range of issues in a way that can be supported by both charter fishers and other interested parties.

5.4.4 Controls on shared fisheries

Goal: to ensure that commercial fishing effort does not adversely affect the abundance and productivity of fish locally.

While Te Korowai acknowledges that we cannot "build an island" in which migratory fish stocks increase,we can achieve results for less migratory species. We also think that Kaikōura can lead by example and local limits will lend credibility in working in the wider Quota Management Area, on issues of common concern and in working with others to improve their areas.

This goal matters because:

- Large commercial vessels can have a big effect on a local area in a short time.
- Migratory fish depleted elsewhere will impact the abundance of these species in Kaikōura.
- Current fisheries rules do not match the goal of Te Korowai of abundance through highly productive stocks.
- To be effective, local codes of practice need to be respected by all those involved.

The goal will be achieved by:

1. Voluntary agreements with large commercial enterprises that fish around Kaikōura.
2. Bringing all Kaikōura focused agreements and local codes of practice - whether recreational, charter or commercial - into a consolidated ***Kaikōura Fishing Accord***, and seeking participation by all those operating in the area,in a common code.

3. Having Kaikōura recognised as a special area for statistical reporting, and, if necessary, seeking legal controls on commercial fishing practices if voluntary agreements prove ineffective.
4. Seeking an inshore blue cod commercial fishing exclusion area(s) under a code of practice, with the specific areas to be established through dialogue with researchers and commercial fishers engaged with blue cod in Kaikōura.
5. Advocating for appropriate catch limits on migratory species.

Voluntary agreements would extend the current purse seine agreement, to include other operators and other forms of fishing. This would be the preferred approach, with regulations only being sought if voluntary agreements were insufficient. Agreements would include information sharing arrangements. We support the suggestion in submissions of setting up working groups and running workshops to ensure that the specifics necessary for implementation are identified.

The Kaikōura Fisheries Accord is an idea for pulling a range of voluntary measures together. This will include: codes of practice current in the commercial paua and rock lobster fisheries, voluntary agreements regarding purse seining, trawling and for specific fisheries such as blue cod and the commercial set net industry. The details of this will be worked out with the parties involved and brought together in a formal document called the *Kaikōura Fisheries Accord*. This will address many of the equity issues between commercial and recreational fishing raised in submissions.

We will seek recognition for Kaikōura as a special area with its own statistical reporting (area 0181) as it would provide Te Korowai with a definitive answer to the amounts of commercial fish take within the Kaikōura management area and would inform local management.

We would also seek to have an accepted voice in all fishery related processes that might affect the area (see section 8 on proposed governance). The area involved for statistical reporting would be the same as the Te Korowai boundary. We agree with submitters that it will take some work to change the statistical area, and would require a change of regulation, but it could be done with minimal effect on prior datasets, as the area being proposed is wholly within an existing area.

Matters that have been raised with us that would be investigated through discussion with commercial fishers for inclusion in agreements include:

- Bottom trawl bans on sensitive areas.
- Limiting catch of small fish from ‘net block’ on trawlers.
- Constraining wasteful fishing.
- Use of square mesh trawls.
- Low horse-power, low-speed trawling.
- Reducing juvenile fish take inshore.

- Limiting tow time for trawlers and setting an inshore trawl zone limit.
- The management and use of by-catch.
- Protection of biogenic habitats.

We will hold discussions with commercial blue cod fishers regarding the management of BCO3 Annual Catch Entitlement, codes of practice for blue cod and the inshore management of the commercial fishery, as part of the implementation phase of the process.

We are not making any proposals regarding set netting at this stage, leaving decisions until the Ministry reviews the current limits in 2013. We are not aware of any significant issues regarding offal disposal, long-lining or potting practices within the area of interest.

5.4.5 Fisheries research and monitoring

Goal: to maximise the information available on Kaikōura fishing, fish stocks and habitat.

This goal matters because giving effect to local control of fisheries depends on fine scale information on fishing activity, local fish stocks and the things that might degrade the habitat. Local understanding of local fisheries will allow faster response times to deal with any issues as they arise.

This goal will be achieved by:

- Encouraging research, particularly by the University of Canterbury.
- Advocating for fine-scale monitoring by the Ministry for Primary Industries.
- Creating reporting and data archiving systems for information gathered by local iwi, recreational fishers, commercial fishers and educational institutions.
- Seeking funding for local monitoring programmes.

Most education, research and monitoring will be paid for by existing institutions. We will seek to influence this. We will also work to encourage research opportunities for institutions that have choices (e.g. universities). We note that not all research has to be paid for, although issues of funding were uppermost in submissions from researchers.

5.4.6 Supporting re-seeding of local fish stocks

Goal: that fisheries recruitment limitations should be alleviated by re-seeding where this can restore local fisheries.

This goal matters because the high fishery productivity available in Kaikōura can be constrained by lack of juvenile organisms in the area. Experience with paua has shown that this constraint can be alleviated through reseeding for some species.

The goal will be achieved by:

- Supporting the paua re-seeding programme.
- Investigating extension to other species.

Although there are difficulties in monitoring local stocks, measures could be introduced to influence the success rate of the reseeded stocks.

6. Living sustainably

6.1 Objective

The objective is to sustain and enhance the quality of the Kaikōura coastal and marine environment.

We are committed to:

- The environmental integrity of Te Tai ō Marokura.
- Protecting the natural character of the Kaikōura coast.
- Integrated management of land, sea and infrastructure.

6.2 Background

The environment of Kaikōura is a place where people live and make their livelihood. This place is also of national and regional significance, recognised in national and regional policies and plans.

This chapter sets out the values, issues and solutions for:

1. The whole of the land and sea environment of Kaikōura, from the crest of the Seaward Kaikōura range, to the floor of the canyon, and the area required to safeguard the whale populations of Te Tai ō Marokura.
2. Four land/sea environments.

6.2.1 Land/Sea environments

The four land environments (Figure 22) are:

a) **Waipapa** – the cliffs and narrow coastal strip from the Clarence River mouth to Mangamaunu, rocky shores and near shore reefs, shallow shelf and offshore canyons.

b) **Kaikōura** – the coastal plains and hills with their backdrop of mountains from Mangamaunu to Peketa, shingle beaches and rocky reefs around the Kaikōura Peninsula, shallow shelf and offshore canyons.

c) **Ote Makura** – the cliffs and narrow coastal strip from Peketa to Oaro, centred on Goose Bay (Te Makura), shingle beaches and rocky reefs shallow shelfand the Kaikōura Canyonand Conway Trough.

d) **Haumuri** – the remote cliff backed coast from Oaro to the delta of the Conway River mouth,including Haumuri Bluffs.

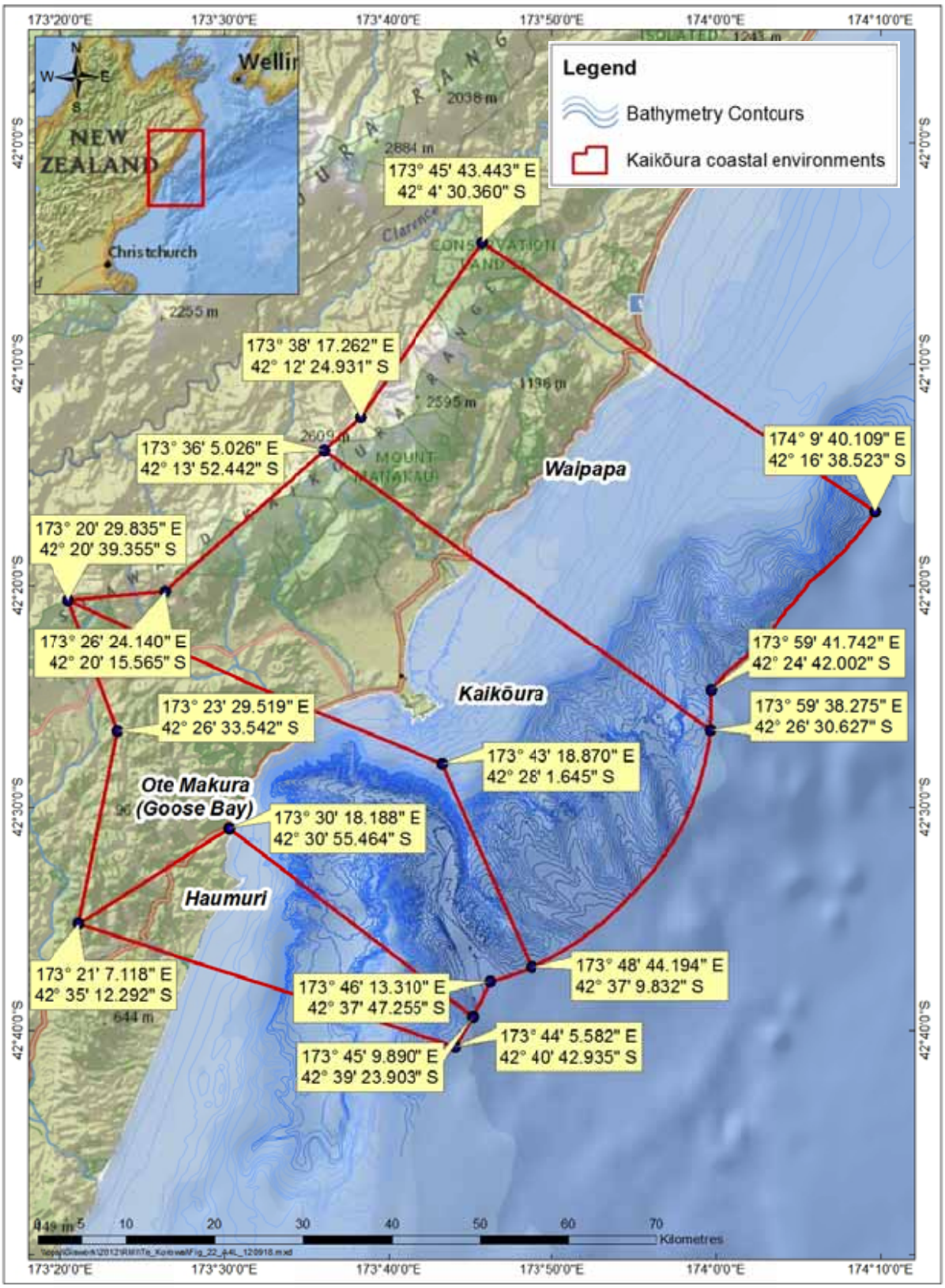


Figure 22 – Kaikōura coastal environments

Each environment has its own natural character:

Waipapa	The Clarence River, building its delta and fuelling sediment flows creating sand/gravel beaches to the north;limestone outcrops in steep uplifted hills; steep bushy cliffs; rugged wave-lashed shores;water inshore often sediment laden; profusion of reefs interspersed with subtidal boulder fields; broad marine shelf to 90m depth,then continental slope to 1300m by 12nm; oceanic quality water offshore.
Kaikōura	Broad outwash delta; sand/gravel beaches; sediment laden water delivered by short steep rivers and nutrient enriched water from lower lying more intensively farmed areas; dramatic Kaikōura headland with broad intertidal rock platforms and numerous reefs; broad marine shelf to 90m depth then incised continental slope to 1600m by 12nm with oceanic quality water.
Ote Makura	Steep short run catchments on steep coastal hills; rocky and boulder shores; lower sediment inputs from the shore with clearer inshore water, huge active undersea canyon intercepts the active near shore wave transport zone within 1km of the shore;Canyon reaches 1500m by 12nm and connects to the Hikurangi Trough with periodic turbidity flows carry sediment and nutrients all the way to East Cape; offshore to the south the Conway Trough keeps the near shore shelf narrow; a broad undersea ridge separates the trough from deeper offshore waters which reach 1000m at 12nm.
Haumuri	Conway River delta to the south delivering sediment and building beaches along the shore as far as Spyglass Point; steep short catchments; sea cliffs and rocky shores around and north of Spyglass Point.

At the scale of the whole coast, we have noted the value people place on the Kaikōura coast for its:

- Visual quality.
- Amenity value.
- Recreational opportunities.
- Role as habitat for plants and animals.
- Cultural value.
- Utility for essential infrastructure.

These are detailed below.

6.2.2 Visual quality

The 2010 landscape review, conducted by Environment Canterbury, rated the Kaikōura coast, Kaikōura Peninsula and the Seaward Kaikōura Range, as outstanding features and landscapes under the requirements of the Resource Management Act 1991 (see the text box below for part of this assessment)[20].

6.2.3 Amenity value

Amenity values are well described by Ngātī Kurī in its Environmental Management Plan as,"*those natural and physical qualities and characteristics of an area that contribute to people's appreciation of is pleasantness, aesthetic coherence and cultural and recreational attributes….For Ngātī Kurī, this includes the ability to smell the sea, hear the waves, or have undisturbed celestial darkness. It also includes the ability to enjoy and appreciate natural and cultural landscapes, including views or important landmarks, significant places, or wāhi tapu.*"

6.2.4 Recreational opportunities

Recreational opportunities abound along the Kaikōura coast. These range from camping and picnicking to commercial adventure and ecotourism.

Of note are the two surf breaks of national significance at Mangamaunu on State Highway 1 and the Meatworks break at Hāpuku. Regionally significant surf breaks have not been formally assessed. Possible candidates identified to date by Te Korowai are at:

- Clarence Point.
- Sandy Bay.
- Wild Rock (Half Moon Bay).
- Graveyards (opposite the Mangamaunu cemetery).
- Kahutara, right-hand point break at the river mouth.
- Oaro breaks over shifting sandbars.
- Blue Duck Stream, north of Mangamaunu.
- Waipapa Bay.

The great popularity of recreational fishing is covered in Chapter 5 and is reflected in the importance placed on public access, boat launching opportunities, shore fishing and shore based diving.

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[20] http://ecan.govt.nz/publications/Plans/canterbury-regional-landscape-study-review-2010-section-d.pdf

Kaikōura is famous for its opportunities to view marine mammals and wildlife and supports a thriving ecotourism industry based around whales, dolphins, seals and seabirds.

Beaches and coastal reserves offer camping, picnicking opportunities and also support amenities associated with the State Highway. These areas are also used by people exercising dogs.

6.2.5 Role as habitat for plants and animals

The marine area of Kaikōura provides habitat for a huge range of plants and animals. These depend on the quality of the environment and the integrity of natural connections and interactions between land and sea. Of particular significance are:

- The role of water quality with a complex mix of warm and cold oceanic waters, deep water upwelling, and high sediment loads in rivers from eroding mountains.
- Nutrient flows between layers and bodies of seawater and from the land to the sea, and return flows to the land with seabirds creating areas of fertility high in the Seaward Kaikōura Range.
- Connections between the sea and freshwaters for migratory fish, with large wave-driven sediment transport in the near shore closing river and stream mouths at times.
- Substrate stability including disturbance and smothering (e.g. from slips and road works).

6.2.6 Cultural value

The cultural values of the area are well documented in the Te Rūnanga ō Kaikōura Management Plan. They include the links provided by the landscape between the spiritual and physical worlds, ancestral connection, history, and places still used and valued for a wide range of activities. *"Don't scar the treasures of our ancestors, the spiritual world will become ill, therefore so will the world of man".*[21]

We have noted a large number of pre-European occupation sites including Pari Whakatau in the Hamuri area, wāhi tapu and historic sites around Oaro and numerous sites on the Kaikōura Peninsula.

[21] Brett Cowan, Te Rūnanga o Kaikōura.

6.2.7 Utility for essential infrastructure

The Kaikōura coast hosts nationally, regionally and locally significant infrastructure. State Highway 1 and the railway line interrupt its erosional interface, which results in protective structures being built and rebuilt across the margin between land and sea. Commercial and recreational harbour facilities are clustered around the Kaikōura Peninsula and small boat ramps and launching structures are dotted along the coast. Stormwater structures have been constructed to carry water efficiently to the sea and to avoid erosion. Car parks, viewing areas and walking tracks have been constructed to enable and manage people's interaction with the coastal environment.

6.3 Issues

Issues have been assessed to identify those that present likely threats to important values and where practical action is possible.

6.3.1 Issues for the whole coast

At the level of the whole coast, three critical issues have been identified:

- Protection of ecosystems and the habitat of wildlife.
- Development and use of the coastal area, which is incongruent with the small town, rural and wild environments of Kaikōura.
- Marine biological invasion.

Submissions also raised the issues of bio-prospecting or climate change. Bio-prospecting does not appear to present any special or immediate threat to the Kaikōura coast. Any issues of bulk harvesting are considered under the Fisheries Act 1996. New Zealand is developing responses to bio-prospecting and intellectual property as a nation and at this stage domestic law covering these matters has not been passed.

The coastline may experience significant effects from climate change. Risks include sea level rise associated with climate change and the risk of large storm events affecting the coastline. We will support coastal planning work especially coastal hazard risk management. In Kaikōura, sea level rise could result in more road and rail works along the coast, including emergency works. All these responses can lead to damaging activities along the coastal margin. In addition, we will advocate against infrastructure protection works that adversely impact the coastline.

Ecosystems and wildlife

It was noted in Section 4 that issues for ecosystems and wildlife, best controlled under the Resource Management 1991 and Local Government Act 2002, would be dealt with in this section in an integrated way. Issues identified include:

- Impacts on the coast from infrastructure and reconstruction and State Highway 1 and the Christchurch-Picton railway line.
- Risks for seals on State Highway 1 and the railway line.
- State Highway 1 and the railway line as sources of pollution.
- Risks to wildlife from pollution/plastic waste, the conduct of boats including boat strike on seabirds, effects on coastal nesting sites by people and vehicles, and shore lighting.
- Beach and seabed mining disrupting habitat.
- Future aquaculture development compromising habitat and acting as a vector for biosecurity threats.
- Run-off from land (nutrient loading, sedimentation and bacterial contamination).
- Accumulation of persistent toxins and biologically active substances washed down rivers.
- More coastal development and increasing people pressure.
- Freshwater abstraction.
- River mouths closing during periods of fish migration.
- Habitat degradation from shore development or trampling.

Use and development in the coastal environment

The natural character of the coastal environment can be adversely affected by large scale land use changes such as land clearance or conversion to exotic plantations. Kaikōura District Council has an operative District Plan (23 June 2008) and the area is also subject to Environment Canterbury's Regional Coastal Environment Plan (November 2005). These two major controls on the Kaikōura coastal environment are not well integrated with one another and both need to be updated to give effect to the newly revised New Zealand Coastal Policy Statement 2010. This policy has new requirements relevant to Kaikōura, including consideration of biosecurity and surf breaks of national significance.

Issues to be managed include:

- Maintenance of water quality to avoid adverse effects on human health from seafood and adverse effects on marine ecosystems generally.
- Management of riparian margins and avoiding adverse effects from intensification of agricultural land use.
- Subdivision on coastal margins.
- Avoiding structures in the marine environment that would adversely affect surf breaks of national and regional significance.
- Public access to culturally important areas such as wāhi tapu sites.

- Ensuring appropriate development and maintenance of facilities, such as the Kaikōura boat harbours, that require a coastal location.
- The effects of sea-level rise, storm surges and increased wave energy expected with climate change.
- Increasing tourist numbers and consequent requirements for services and infrastructure.
- Managing access in a way that enables appropriate public access, taking into account implications for fisheries management, wildlife disturbance and effects on sites of cultural importance, and sustaining "remote" experiences in areas currently less visited.
- Providing for restoration and maintenance of native vegetation for its role in the landscape, its value in riparian and coastal buffers and as habitat for wildlife.
- Restoration and maintenance of coastal lakes and freshwater wetlands both for their habitat value for migratory and coastal species and also for the buffering capacity they have on run-off to the sea.
- Management of weeds and pests on coastal land for their adverse visual effects and effects on wildlife and habitat values.

Potential habitat degradation in the sea

To date, fisheries habitat around Kaikōura supports very high local productivity. Future development could change that.

The effects of human activity on land around Kaikōura have had limited impact on fish habitat. There has been some small scale pollution of streams and rivers entering the sea, but, in the context of the coast as a whole, these have been minor.

As technologies change, and as demand for sea based resources increases, new activities may affect Kaikōura. For example:

- Marine seismic survey for oil exploration began in the Kaikōura area in the 1980s with further surveys in 2009.
- The Minister of Fisheries set quota for harvesting the brown seaweed *Macrocystis* that is a particularly important part of the Kaikōura marine environment.
- The Government is moving to open more of the coast to marine farming and new technology developments are taking marine farming into areas traditionally not considered suitable.

Marine biosecurity

Kaikōura is vulnerable to marine biological invasion through national and international vectors. The area is most subject to marine traffic from domestic

ports and from recreational boats arriving by road. There is also some visitation from further afield.

A number of non-indigenous species with known adverse ecological and/or economic effects already occur in the coastal marine area of the top of the South Island and in Canterbury. These include:

- Saltmarsh cordgrass *Spartina anglica*.
- Pacific oyster *Crassostrea gigas*.
- Japanese kelp *Undaria pinnatifida*.
- Sea squirts *Didemnum vexillum* and *Styela clava*.

A 2005 survey by NIWA at Kaikōura[22] recorded only one species currently listed on the New Zealand Register of Unwanted Organisms from the Kaikōura port area, the Asian seaweed *Undaria pinnatifida*.

Four further taxa of current concern in Australasia were recorded during the Kaikōura port survey:

- the exotic ascidian *Didemnum* sp. and
- three potentially toxic diatoms considered native in New Zealand due to their cosmopolitan oceanic distributions (*Pseudo-nitzschia australis, Chaetoceros concavicornis* and *C. convolutus*)

No target organisms were identified from any of the zooplankton samples from Kaikōura. The target organisms are:

- the Chinese mitten crab *Eriocheir sinensis* or other members of this genus,
- the European green crab *Carcinus maenas*,
- the northern Pacific seastar *Asterias amurensis*,and
- the ascidian *Styela clava*).

The report on the 2005 NIWA survey noted that *"there is almost no international shipping traffic to Kaikōura. Furthermore, many non-indigenous species introduced to New Zealand ports by shipping do not survive to establish self-sustaining local populations. The risk of new introductions from overseas to Kaikōura is therefore very low. Nonetheless, the consequences of a marine invasion in such a relatively valued marine environment could be severe."*

It identified *"the expected increase in cruise ship visits with the planned creation of new wharf structures could also present an increased risk of new marine invasions. Those coming from southern Australia probably present the greatest potential risk of introducing new non-indigenous species to Kaikōura, both because*

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[22] Kaikōura - First baseline survey for non-indigenous marine species (Research Project ZBS2005/19)

of the relatively short transit time (approximately two days for a cruise ship) and because of similarities in coastal environments between these locations. Six of the eight marine pests on the New Zealand Register of Unwanted Organisms are already present in southern Australia (Carcinus maenas, Asterias amurensis, Undaria pinnatifida, Sabella spallanzanii, Caulerpa taxifolia, and Styela clava). The native range of the other two species – Eriocheir sinensis and Potamocorbula amurensis – is the north western Pacific, including China and Japan."

6.3.2 Issues for the Waipapa environment

People pressure is focused along a very narrow strip beside the coastal highway from the Clarence River mouth to Mangamaunu. The critical issues are:

- Management of the privately owned cliffs that form the backdrop of the area – particularly earthworks and vegetation clearance.
- Management of the interaction of seals and people, including safety on State Highway 1.
- Maintenance of road and rail infrastructure, particularly the seaward margins.
- Protection of water quality by the control of discharges near the proposed mātaitai at Mussel Rock and Mangamaunu.
- Pressure for development and subdivision at Mangamaunu and other areas along the coast.
- Provision of facilities and access for the surfing population.
- Proposals to dam the Clarence and alter its natural sediment flow regimes.
- Trawling affecting seabed habitat.
- Marine farming development.
- Changes to the natural flow regimes and to the water quality of rivers.

6.3.3 Issues for the Kaikōura environment

The coastal plains and hills with their backdrop of mountains from Mangamaunu to Peketa are where the interaction between people and the coastal environment is most intense. The critical issues are:

- "Loving the place to death" as tourist numbers keep increasing with associated infrastructure and pressures from recreational use.
- Pressure for large scale development.
- Restoration of the degraded Lyell Creek.
- Management of urban waste and run-off from the settlements around the Kaikōura Peninsula, particularly to protect water quality in the Peninsula taiāpure and freshwater mātaitai.

- Protection of lowland lakes and wetland complex around the Kahutara River.

Critical issues for the shelf, shingle beaches and rocky reefs around the Kaikōura Peninsula are:

- Further harbour development and security of fuels and waste in wharf areas.
- "Loving the place to death" as tourist numbers keep increasing with associated infrastructure and pressures from recreational use.
- Potential discharge of human waste into a culturally important marine resource.
- Elevated marine biosecurity risks around the high use areas of the Kaikōura Peninsula.
- Any marine farming development.
- Changes to the natural flow regimes and water quality of rivers.

6.3.4 Issues for the Ote Makura environment

The critical issues for the cliffs and narrow coastal strip from Peketa to Oaro are:

- Development of road and rail infrastructure particularly the seaward margins.
- Need for improved parking and toilet facilities for visitors to the new marine reserve.
- Potential for increased public access, subdivision and development.
- Protection of traditional occupation sites.
- Management of the interactions of seals and people including safety on State Highway 1.

Critical issues for the shelf, shingle beaches and rocky reefs from Peketa to Oaro are:

- Maintenance and development of road and rail infrastructure that can involve destruction of coastal features.
- Trawling affecting seabed habitat.
- Marine farming development.
- Changes to the natural flow regimes and water quality of rivers.

Critical issues for the Kaikōura Canyon are:

- Interruption of the long shore transport of organic material that fuels high biodiversity of the canyon floor.
- Development of deep sea trawling technology affecting seabed habitat.
- Potential oil and gas exploration and mining.

6.3.5 Issues for the Haumuri environment

Critical issues for the remote cliff backed coast from Oaro to the delta of the Conway River mouth are:

- Potential for increased public access, subdivision and development.
- Managing vehicle access through Oaro to protect the remoteness of this section of coast.
- Management of the rail corridor.
- Protection of traditional occupation sites.
- Protection of water quality in the Oaro mātaitai and taiāpure and the Conway River mātaitai.
- Conway River lagoon water quality.
- Marine farming development.
- Changes to the natural flow regimes and water quality of rivers.

Critical issues for the Conway Trough are:

- Development of deep sea trawling technology affecting seabed habitat.
- Potential oil and gas exploration and mining.
- Loss of inputs of organic material from the active Kaikōura Canyon.

6.4 Solutions

Living sustainably in the Kaikōura coastal environment will require integrated land and water planning, and with resource management processes under local control.

Legally, environmental management outside protected areas is governed by a suite of laws, principally the Resource Management Act 1991 and Biosecurity Act 1993, but also many others. This section looks at the effects of people on the general physical and biological environment from activities other than fishing, which is covered in detail in section 5. Te Korowai acknowledges the suggestion in submissions that specific objectives be developed with the community and notes that this is consistent with the good practice approaches in the Resource Management Act 1991 and the Local Government Act 2002.

Our proposals will not impinge on individual property rights. Any new rules will be subject to public input through engagement in Resource Management Act process and other statutory processes rather than replace them. The Strategy only addresses land to the extent it affects the sea. For example, the Strategy covers weed and pest control in the sea, but not on the land.Terrestrial rare native plants are also out of the scope of the Strategy.

None of the current proposals involve any restriction in access to facilities or constraints on rights of passage for vessels. Under limited circumstances, some of

the statutes involved can create such restrictions, so no absolute guarantees for the future can be given, as decision making on these lies outside the mandate of Te Korowai. However,we are not proposing any such restrictions in the foreseeable future.

We will work toward the vision with the community, with operational agreements with central and local government, and by advocating for provisions in statutory plans, regulation, bylaws and laws as required to achieve the vision. The intention is for any Resource Management Act 1991 provisions to be dealt with under standard procedures rather than under special Te Korowai processes. We will identify issues to be dealt with under the Resource Management Act and advocate for changes to plans where appropriate.

6.4.1 Integrated land and sea management

Goal: integrated land and sea management that safeguards the sustainable use of Te Tai ō Marokura.

The key solution is the development of an integrated land and water plan for the Kaikōura coast.

Land use planning is primarily afunction of the Kaikōura District Council ,whereas coastal planning and water management belong to Environment Canterbury.

Under the Resource Management 1991 it is possible for a single plan to be created that deals with these issues in an integrated way. Such plans exist for a number of places around New Zealand. The plans for the Marlborough Sounds and Wairau Awatere, completed by the Marlborough District Council, are good examples of what can be done.

The situation in Kaikōura is more complex as the roles here are held by two bodies rather than by one as is the case in Marlborough. What is required is a three cornered relationship between Environment Canterbury (regional focus and coastal planning expertise), Kaikōura District Council (local focus and land management expertise) and Te Korowai (citizen and iwi connection) and a framework of solutions for the full range of issues. On-going dialogue is needed to identify the specific parameters of concern, the standards that will be sought and the measures identified to achieve those standards.

There are limited controls on public and vehicle access to coastal sites and no legal controls on shore lighting, all of which have the potential to adversely affect seabirds. As part of integrated planning, we will explore how these matters could be controlled under the Resource Management Act 1991 or Local Government Act 2002. Te Korowai will also promote public education and awareness and could seek legal controls through Council by-laws, under the District Plan, Regional Coastal Plan or by seeking the formation of wildlife sanctuaries and refuges under the Wildlife Act 1953.

6.4.2 Highway management

Goal: integrated highway management, management of public access and amenities, and environmental protection.

The key solution is a public access and highway management plan for the Kaikōura coast. No such plan currently exists, but it is sorely needed.

The Kaikōura portion of State Highway 1 and the rail line interrupts an erosional interface between the sea and the land. Traffic, trains, visitors, locals and wildlife are all constrained to exist together in an extremely narrow corridor. Physical works, such as barriers and rest areas, have a major affect on the patterns of use of the coastal environment.Work on the road and rail infrastructure can have major effects on the local landscape and the natural environment.

Regional transport planning is a function of Environment Canterbury. Local amenities and freedom camping are largely the responsibility of the Kaikōura District Council if they are located on Council reserves. Department of Conservation manages wildlife and provides visitor amenities. The New Zealand Land Transport Agency manages the State Highway Network. In addition to these, we will also talk to Land Information New Zealand (LINZ), which manages unallocated Crown land. We will advocate for these agencies to work together effectively to provide the mix of rules, information and physical works required to achieve the goals of this strategy. We welcome the suggestions in submissions about traffic risks at Mangamaunu and envisage that these are the sorts of issues that the Highway Management Plan will grapple with.

6.4.3 Marine biosecurity

Goal: to prevent harmful organisms becoming established in Te Tai ō Marokura.

The key solution is effective marine biosecurity protection for Kaikōura through joint efforts by local, regional and national partners.

Activities required for effective marine biosecurity for Te Tai ō Marokura are:

- Marine biosecurity education and advocacy activities.
- Integration of local and regional biosecurity with national marine biosecurity systems.
- Access to regional intelligence, resources and organisational structures.
- Operational resources for local participation in nationally-led activities (e.g. personnel and boats).
- Coordination of local surveillance programmes including stakeholder involvement.
- Strengthening the links with NIWA and other biosecurity research providers.

In the report on the 2005 NIWA port survey[23] it was noted that: "*the Biosecurity Act 1993 and the Import Health Standard for Ships' Ballast Water from all Countries (Biosecurity New Zealand 2005) exist to reduce the risk of new marine invasions arriving in New Zealand via hull fouling and ballast water. In addition to these legal instruments, vessels operating in Kaikōura are requested to follow voluntary guidelines to reduce the risk of marine invasions in Kaikōura. These include:*

- *There must be no cleaning hulls below the water line and running gear within coastal areas.*
- *Cleaning on shore must occur above the high tide mark and ensure that no fouling material or contaminated water could re-enter the sea (Te Korowai ō Te Tai ō Marokura (Kaikōura Coastal Marine Guardians) 2007)."*

To achieve these objectives we need partners to:

- Invoke statutory authority under the Resource Management 1991, Biosecurity Act 1993 and Local Government Act 2002 to support regional marine biosecurity.
- Use powers as owners and managers of local ports, marinas and other areas of intense marine activity to enhance marine biosecurity.
- Provide funding according to legal responsibility, capacity to pay, and according to agreed priorities.
- Use such other powers and resources (e.g. harbour master roles) as appropriate to support regional marine biosecurity.

The Pest Management National Plan of Action (3 March 2011) says: "*National and regional partnerships are proving to be successful in improving pest management performance in the marine environment. By extending this approach to all parts of New Zealand and all aspects of marine pest management, responsible parties will grow to understand how to make their overlapping roles work in practice.*"

This initiative provides the basis for Te Korowai to get the marine biosecurity protection Te Tai ō Marokura needs. To make this effective, we will:

1. Identify to the Ministry for Primary Industries and Environment Canterbury that Te Korowai is a key marine biosecurity partner.
2. Encourage Environment Canterbury, the Otago Regional Council, CRAMAC5, PauaMac3 and other interested parties, to form a regional marine biosecurity partnership modelled on the Top of the South model.
3. Link with the National Institute of Water and Atmospheric Research in the regular programme of marine biosecurity survey.

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[23] Kaikōura - First baseline survey for non-indigenous marine species (Research Project ZBS2005/19), MAF Biosecurity New Zealand Technical Paper

Part C Implementation

7. Engaging understanding
8. Governance
9. Compliance with the Strategy
10. Monitoring performance of the Strategy

7. Engaging understanding

7.1 Objective

The objective is that the whole community consciously cares for Te Tai ō Marokura.

7.2 Background

Engaging people's understanding is fundamental to achieving sustained change in the way people interact with their environment. 'Understanding' means having access to information, experiences and ways of thinking that allow people to understand the value of Te Tai ō Marokura and the consequences of their actions and the actions of others. Informing the community and reporting back, in a way that is relevant and understandable, is vital.

In compiling our Characterisation Report, we have found that there is an enormous body of information about Te Tai ō Marokura. Much of this information is hard to access and much is not documented or securely archived. Te Korowai can play a key role is coordinating efforts to understand Te Tai ō Marokura, and in making this available to local people, visitors and decision makers.

At the same time there are many agencies and organisations charged with responsibility for providing information about Te Tai ō Marokura. We can help to ensure that Kaikōura gets its share of national, regional and local resources in caring for this internationally significant environment.

7.3 Issues

We want to increase understanding of Te Tai ō Marokura in a way that encourages and allows people to take proper care of it.

Five core issues are:

- How to sustain traditional and local knowledge.
- How to grow new knowledge through research and monitoring.
- How to have more people experience the wonders of Te Tai ō Marokura in a way that leads them to understand and value it.
- How to grow understanding in the people of Kaikōura.
- How to inform visitors to Te Tai ō Marokura.

7.3.1 Traditional and local knowledge

People in Kaikōura have over 700 years of experience with their local marine environment. Ngātī Kurī intermarried with earlier tribes that lived here, and carried much of their knowledge forward. Similarly, early Europeans drew on the knowledge of local Māori as they explored and drew on the resources of the sea here. At the same time much knowledge has been lost. It is now hard to document accurately the abundance of fish or marine mammals experienced in the past, and this fuels disagreement about how to manage our interaction with these resources and what we can expect in the future.

Traditional and local knowledge has value and its own systems and tikanga for sharing and protection. It is not entrusted easily and some information is not for sharing with the wider community. Few fishers want to tell everyone where their favourite fishing hole is located and tāngata whenua would seldom reveal the exact location of sacred sites that might be plundered for artefacts.

At the same time, sustaining local and traditional knowledge and documenting it is vital to becoming effective kaitiaki for our marine environment. Only in this way can we:

- Avoid repeating the mistakes of the past.
- See clearly past the "recent settler syndrome" where each new immigrant takes the current state as the natural one.
- Properly respect the established cultures and tikanga of the tāngata whenua and local residents.

Te Korowai has made a start by recording as much local knowledge and history in our Characterisation Report. There is much more knowledge than that available however, and much of it can be lost with the passing of knowledge holders.

7.3.2 Research and monitoring

Te Tai ō Marokura is the subject of research and monitoring by a wide range of organisations and individuals. This information is vital to the wise management of the marine environment. Only a small portion of this information is available to Te Korowai and even less to the general public. Much information is technical in nature and not readily understood by lay people. Some information has commercial value and is held closely by industry groups. On the other hand, there are information gaps about activities and resources important to people caring for the coast.

Research about the marine environment of Kaikōura is undertaken by:

- University of Canterbury.
- Lincoln University.
- University of Otago.

- Massey University.
- National Institute of Water and Atmospheric Research.
- Department of Conservation.
- Ministry for Primary Industries.
- Texas A&M University.
- New Zealand Whale and Dolphin trust.
- And many others.

Monitoring data is collected by:

- Ministry for Primary Industries.
- CRAMAC5.
- PauaMac3.
- Commercial fin fishers.
- Department of Conservation.
- Kaikōura District Council.
- Environment Canterbury.
- Marine mammal tourism operators.
- Resource Management Act 1991 consent holders.
- Royal Forest and Bird Protection Society.
- Ornithological Society.
- Ministry for Primary Industries.
- Ministry of Health.
- Ngātī Kurī.
- And many others.

Monitoring data is held in a wide range of places and tends to be less accessible than research where there is a greater pressure for publication.

7.3.3 People's experience

Direct experience of the Kaikōura environment shapes people's attitude to this environment. Research suggests that experiences early in life in the context of family activities, are particularly important in shaping lifelong values about the

natural environment[24]. Increasing opportunities for positive and well informed interactions for Kaikōura people, as well as visitors, can lay the foundations for lasting behaviour changes. New technologies such as the Whale Watch video and live feeds from underwater cameras can give people insights to the under-waterworld. Marine tourism operators are a key way that visitors can have an enhanced experience of Te Tai ō Marokura, and the messages they provide about the environment and environmental issues are critical.

7.3.4 Kaikōura people

Adoption by the people of Kaikōura of their role as kaitiaki for Te Tai ō Marokura is central to the success of this strategy. The children of Kaikōura are the future holders of this role and reaching them through the formal education system is a key opportunity.

> **Education Kaikōura Strategic Plan (November 2008)**
>
> *People report seeing huge opportunities for world leading environmental education in Kaikōura. They talk of the potential for Kaikōura to be **the** place for marine environmental education in New Zealand. Unique elements are already present, and people want to make connections between science, landscape, visitors and a deep respect for traditional knowledge. Schools in Kaikōura are already doing amazing things and seek to broaden this into a coherent programme, coordinated from early childhood to adult learning.*

Each of the elements of the formal education system already has marine components, but the parts are not talking to each other, and there is opportunity for Te Korowai to support further development.

With the adult community of Kaikōura, it is practical to directly reach those organised into interest groups, such as fishing clubs. A greater challenge is to reach that broad group of Kaikōura people who just live in their environment and interact with Te Tai ō Marokura.

[24] Greg Place – *Does interaction with the environment during the camping experience influence environmental attitudes?* Chicago State University; Anja Kollmuss; Julian Agyeman Mind the Gap: why do people act environmentally and what are the barriers to pro-environmental behaviour? Environmental Education Research, Volume 8, Issue 3 August 2002 , pages 239 - 260

7.3.5 Informing visitors

Kaikōura is a major visitor destination. Information provided to visitors will affect the way they value Te Tai ō Marokura, how they behave and how they support Te Korowai to protect the environment.

Visitors receive their information from many sources: the internet, brochures and publications, from friends, accommodation providers, information centres, local residents, and from tourism service providers.

The challenge for us is to infuse all of these sources with up to date information that builds recognition of Te Tai ō Marokura, passion for its protection and informed understanding of how to treat it with respect.

7.4 Solutions

To achieve its objective of moving the whole community into consciously caring for Te Tai ō Marokura, Te Korowai will work to increase the quality, quantity and accessibility of information on this environment.

We are committed to learning and adapting our actions based on new knowledge and understanding as it emerges. Already, the more we find out about the marine environment of Kaikōura, the more we realise there is to learn.

Knowledge is rarely something fixed. In the vast majority of cases, the more we know about anything, the more we know we don't know about it; and the deeper the relationships we see to other things. Many of the things we once thought of as fixed, we now know to be temporary states in cycles and processes that can cover tens, hundreds, thousands or millions of years.

However, action is needed now on many issues and we have to work within the limits of our knowledge even as we learn. Our approach is to engage in:

- Investment in new knowledge.
- Effort in developing and spreading collective understanding.
- Time for reflection and learning.
- Commitment to apply new knowledge and to change methods if required.
- Openness to finding our actions did something other than we expected.
- Revision of our approach as things change.

7.4.1 Sustaining traditional and local knowledge

Goal: that local knowledge is secured for future use and is readily available to the community.

The solution is to sustain traditional and local knowledge by:

- Encouraging historic research, including collection and archiving of oral histories.
- Disseminating this information into the community including supporting the teaching of traditional knowledge in schools.
- Creating "living documents" of its reports and regularly updating the Te Korowai website with supplements and new information.
- Encouraging historic research displays at the Information Centre.

7.4.2 Growing new knowledge

Goal: to encourage research and monitoring of Te Tai ō Marokura.

The solution is to grow new knowledge on Te Tai ō Marokura through research and monitoring.This will be done by:

- Forming a specific strategy of our needs for research and monitoring.
- Mapping and recording past and current research and monitoring, including working with the University of Canterbury to develop a register of past and current research and monitoring on Te Tai ō Marokura, recording who is doing what and where the information is held.
- Growing the stream of funding for research and monitoring on Te Tai ō Marokura, targeting the gaps identified in our research and monitoring strategy.
- Maintaining a list of research/monitoring workers, and create opportunities for them to work in Te Tai ō Marokura.

We believe that strong involvement of the University of Canterbury will be important to achieving the Te Korowai vision and integrating their research activity with management of the coast, especially on the Peninsula. There is an opportunity under these proposals for ongoing research, and we hope that universities will pick up the challenge.

7.4.3 Informing people

Goal: that people are aware of the values of Te Tai ō Marokura and supportive of its management.

The solution is to inform people with a package of information resources utilising the latest technology available.

To inform our visitors and enhance experiences of Te Tai ō Marokura, we will work with partners to develop a cutting edge package of information resources including:

- Partnering with others to develop a suite of integrated resources exploring the application of new technology together with traditional print media and interpretive signs.
- Linking in with all local tourism and business operators.

- Exploring partnerships with national tourism bodies such as airlines.

We acknowledge the aspirational vision for an "Oceanographic Institute" in Kaikōura described in submissions and would be pleased to support any initiatives in this direction.

7.4.4 Marine education

Goal: to bring understanding of Te Tai ō Marokura into mainstream education processes.

The solution is for Te Korowai to support and champion marine education, connecting with education providers and coordinating and encouraging the production of public information with consistent core messages. Kaikōura has a unique coastal environment and there is considerable scope for further educational opportunities to be developed. This will include:

- Engagement with primary and secondary schools.
- Liaison with tertiary educational institutions agencies, particularly universities.
- Growing buy-in from teachers.

7.4.5 Direct engagement

Goal: to ensure that key stakeholder groups share in kaitiakitanga.

The solution is to directly engage with key groups to grow a sense of ownership and kaitiakitanga.

We will sustain direct engagement with key groups to grow a sense of ownership and kaitiakitanga. These will include connecting with.

- Tāngata whenua.
- Management agencies including Kaikōura District Council, Environment Canterbury, Department of Conservation, Ministry for Primary Industries, Ministry for the Environment.

And connecting locally, regionally and nationally with:

- Commercial fishing interests and collectives.
- Fishing and diving clubs.
- Researchers.
- Environmental groups.
- Tourism interests.

7.4.6 Public awareness and acceptance of traditional methods

Goal: that the general public accepts and supports the use of traditional fishing practices and management methods in all parts of Te Tai ō Marokura and respects the rules of special areas.

The key solution is an education programme for the general public on customary rights and area management tools such as mātaitai and taiāpure.

Education is needed so that more recent settlers understand and accept the activities of tāngata tiaki in licensing and recording customary harvesting that occurs throughout the entire area and the special rules that will apply in each mātaitai and taiāpure. This will also assist in acceptance of practices more common traditionally, such as maximum size limits and seasonally harvested areas, that would enhance management across the area.

We acknowledge concerns in submissions about customary fisheries and recreational take both being available to the same person. We also note that the customary fishing effort in Kaikōura is very small in relation to catch by the commercial and recreational sectors. For example in Area 5 that includes Kaikōura, the customary allowance for rock lobster is around 8.5% (40tonnes) of the Total Allowable Catch (467tonnes).

7.4.7 Education and awareness for fisheries management

Goal: that people understand what is required to sustain local fisheries abundance.

This goal matters because understanding will yield not only compliance with the rules, but appropriate behaviour in a wide range of situations and support for the systems needed for a sustainable future.The goal will be achieved by:

- Promoting marine conservation and sustainability through education in schools, both in local Kaikōura schools and in the wider curriculum.
- Supporting national advertising campaigns for responsible fishing practices.
- Taking advantage of local opportunities to promote messages.
- Directly educating fishers with consistent messages – “fish for a feed, fish for the future”.
- Training new fishers to fish responsibly.
- Supporting the idea in submissions, of producing a comprehensive Kaikōura Marine Area Guide and we will seek funding for this.

8. Governance

The objective is effective oversight of implementation.

Te Tai ō Marokura, the Kaikōura marine environment, is a functioning ecosystem where the whole is far more than the sum of the parts. Similarly this Strategy is an integrated whole, reflecting the seven years of research and discussion by Te Korowai. Each part of the Strategy is important and each of the proposed tools works with the others to give a multiplying effect.

We are seeking to enhance the role of local leadership, but are not seeking independence from Government or to usurp statutory functions for decision-making and enforcement. This is about the local community taking the initiative and developing a regional view of things.

The current models of governance in relation to "Guardians" groups (e.g. Fiordland) involve nomination from within the community and appointment by a Minister of the Crown. Crown agencies and local councils remain advisory rather than decision-making. The Government decisions in response to the final Te Korowai Strategy will determine whether a new governance body is established, or whether the current Incorporated Society should develop further in its capacity to represent the community.

We support a real role for tangata whenua in managing marine resources, though we understand that some find this idea troubling. A tangata whenua lead is proposed for taiāpure and mātaitai to reflect the importance of re-establishing tangata whenua authority over these key places and shared governance will remain the model for Te Korowai.

Implementing the Strategy will involve a mix of legal mechanisms, ongoing active engagement in management and advocacy activity, and generating the community awareness and ownership needed across generations.

We will work with national, regional and local government to ensure that legal rights and obligations match local priorities in caring for Te Tai ō Marokura.

Implementing the Strategy may require special legislation because an integrated package would provide the best results for the marine environment. Special legislation also gives the opportunity to embed statutory recognition of Te Korowai in all subsequent legal processes. The world will not stand still and to be effective kaitiaki, the voice of Te Korowai will need to be heard by those with authority over marine management for generations to come.

In approaching special legislation, we have followed the lead of the Fiordland Guardians and have endeavoured to ensure all of the consultation requirements of the relevant legislation have been met, or exceeded. We note that the Te Korowai process was initiated, and fully supported by Ngati Kuri at all stages.

Statutory functions for Te Korowai might include:

- Advising management agencies and Ministers who exercise functions under the Biosecurity Act 1993, Environment Act 1986, Fisheries Act 1996, Marine Reserves Act 1971, Resource Management Act 1991, Marine Mammals Protection Act 1978, Wildlife Act 1953, and the Marine and Coastal Areas Act 2011, including on:
    - The effectiveness of management measures in the Te Tai ō Marokura marine area.
    - Activities occurring outside the Te Tai ō Marokura marine area if those activities impact, or are likely to impact, on the Te Tai ō Marokura marine area.
    - Likely threats to the Te Tai ō Marokura marine area.
- Facilitating and promoting the integrated management of the Te Tai ō Marokura marine area.
- Obtaining and sharing information, including monitoring, on the state of the Te Tai ō Marokura marine area.
- Assisting management agencies to:
    - Prepare and disseminate information about Te Tai ō Marokura, including educational information.
    - Monitor the state of the marine environment and biological diversity in the Te Tai ō Marokura marine area.
    - Plan for the enforcement of, and compliance with, the management of the Te Tai ō Marokura marine area.
- To conduct reviews.
- To perform any other functions given to them under any legislation.

Generally, Te Korowai's functions would be to raise issues and influence, rather than to decide on solutions. It would however see the changes being proposed as evolutionary rather than revolutionary and is looking for local solutions that mesh well with the current legal fabric of New Zealand.

Ngāti Kurī has recognised the ongoing leadership by Te Korowai and has affirmed its role in protecting Te Tai ō Marokura. They want the whole community to take on the role of kaitiaki for the Kaikōura marine environment. This will require ongoing leadership. Te Korowai will need to nurture the next generation of kaitiaki to take their place.

If the government agrees to establish a statutory body, then it will need to ensure the membership is adequate for the job. This may well differ from the current Te Korowai membership, as has been the case in Fiordland.

Funding and support for the process to date has come from: the Department of Conservation, Kaikōura District Council, Environment Canterbury, Encounter Foundation, Solution-Multipliers NZ Ltd, Canterbury Community Trust, Te Rūnanga o

Kaikōura, Ngai Tahu Communications, Takahanga Marae, The Lobster Inn, Ministry for the Environment and the Ministry for Primary Industries. In addition, there have been a large number of voluntary hours from the Te Korowai members as well as some financial donations from within the group. The provision of facilities and support from the community is greatly appreciated.

Te Korowai will need ongoing funding to sustain its role and its work as the Strategy is implemented. In planning for implementation, Te Korowai has budgeted for legal advice, but recognises that it will be dependent on central Government agencies for much of the policy and legislative process.

The expected roles of the various agencies and institutions in the implementation phase are listed in Table 2 below:

Table 2: Roles of agencies and institutions in Strategy implementation

Risk	*Response*	*Agencies involved*	*Statutes*
Loss of cultural identity and rangatiratanga.	Mātaitai managed by tāngata whenua at Mangamaunu, Mussel Rock (Te Waha o te Marangai), and Oaro.	Ministry for Primary Industries – establishment, regulation, monitoring and enforcement.	Fisheries Act 1996.
	Taiāpure around the Kaikōura Peninsula and Oaro Blocks/Haumuri Bluff.		
Management approaches produce unintended outcomes.	Scientific baseline surveys and ongoing monitoring.		
Lack of deserved international recognition.	World Heritage status.	Department of Conservation – establishment, regulation, monitoring and enforcement.	Convention Concerning the Protection of the World Cultural and Natural Heritage, UNESCO 1972.
Seismic survey, visitor interactions with seals.	Marine mammal sanctuary.		Marine Mammals Protection Act 1978.
Disturbance of Hutton's shearwater and other seabirds.	Important Bird Area.	Bird Life International – establishment and support, Department of Conservation.	Wildlife Act 1953.
Dolphin entanglement in commercial set nets.	Local code of practice for avoiding Hector's dolphin entanglement.	Department of Conservation/ Ministry for Primary Industries – advice.	Marine Mammals Protection Act 1978, Fisheries Act 1996.

Risk	*Response*	*Agencies involved*	*Statutes*
Whale entanglement in craypot lines.	Implement the code of practice and training programmes for reducing and dealing with whale entanglement.	Department of Conservation/ Ministry for Primary Industries.	Marine Mammals Protection Act 1978, Fisheries Act 1996.
Loss of high biodiversity values.	Marine reserve status over the Kaikōura Canyon.	Department of Conservation – establishment, monitoring and enforcement.	Marine Reserves Act 1971.
	A rāhui within a taiāpure around the Kaikōura Peninsula.	Ministry for Primary Industries – establishment, regulation, monitoring and enforcement.	Fisheries Act 1996.
Loss of resource to legitimate fishers.	Fish theft minimised through better enforcement and education of fishers.		
Localised reductions in abundance.	Localised fisheries managed under local recreational fishing rules.		
	Charter fishers code of practice.	Ministry for Primary Industries – advice.	Fisheries Act 1996.
Local measures for fish abundance compromised by shifts in commercial fishing effort and added risks to marine mammals, birds and biogenic communities.	Voluntary agreements with commercial fishers brought into a comprehensive *Kaikōura Fishing Accord*.	Ministry for Primary Industries – advice and support.	Fisheries Act 1996.
Insufficient knowledge for local management.	More research and monitoring relevant to Kaikōura fisheries.	Ministry for Primary Industries, Department of Conservation, Ministry for the Environment universities – funding, research, advice.	Fisheries Act 1996, Marine Reserves Act 1971.
Localised stocks reduced by over-fishing.	Increased reseeding of local stocks.	Ministry for Primary Industries – permitting.	Fisheries Act 1996.
Protection mechanisms unsupported, conflicting provisions in plans.	Integrated land and water plan for the Kaikōura coast.	Kaikōura District Council, Environment Canterbury – plan development, integration, consultation and enforcement.	Resource Management Act 1991.

Risk	*Response*	*Agencies involved*	*Statutes*
Loss of amenity and habitat values, risk to people from seals.	Public access and highway management plan for the Kaikōura coast.	Kaikōura District council, Environment Canterbury, Department of Conservation, New Zealand Transport Agency, Land Information new Zealand – plan development and implementation.	Local Government Act 2002, Resource Management Act 1991,Conservation Act 1987, Reserves Act 1977, Land Transport Act 1998, Land Act 1948.
Ecosystems and amenity compromised by unwanted organism establishment.	Effective marine biosecurity protection for Kaikōura.	Ministry for Primary Industries, Environment Canterbury – plan development, border management, pest management, pathway management.	Biosecurity Act 1993, Resource Management Act 1991.
Loss of knowledge over time.	Sustaining and disseminating traditional and local knowledge.	Kaikōura District Council, Department of Conservation, Environment Canterbury, Historic Places Trust, Canterbury Community Trust – funding, signs and resources.	Local Government Act 2002, Conservation Act 1987, Historic Places Act 1993.
Lack of capacity to respond to environmental change.	Growing new knowledge on Te Tai ō Marokura through research and monitoring.	Environment Canterbury, Ministry for Primary Industries, Department of Conservation, Ministry for the Environment, universities – funding, research, advice.	Biosecurity Act 1993, Environment Act 1986, Resource Management Act 1991, Conservation Act 1987, Historic Places Act 1993.
Loss of public support and failure to change behaviour.	Informing people	Kaikōura District Council, Department of Conservation, Environment Canterbury, Canterbury Community Trust – funding, signs and resources.	Biosecurity Act 1993, Environment Act 1986, Resource Management Act 1991, Conservation Act 1987, Fisheries Act 1996, Marine Reserves Act 1971, Marine Mammals Protection Act 1978.
Failure to develop the next generation.	Acting as focal point for marine education.	Ministry of Education, universities, local schools and pre-schools – provision of funding, resources, and hands on education.	Education Act 1989.
Dislocation from stakeholders.	Directly engaging with key groups.	Nil.	

Risk	*Response*	*Agencies involved*	*Statutes*
Resistance to customary management practices and instruments.	Education programme for the general public on customary rights and area management tools such as mātaitai and taiāpure.	Ministry for Primary Industries – education resources and activities of local staff,	Fisheries Act 1996.
Compliance failure.	Improved awareness and behaviour by fishers through education and awareness-raising.	Ministry for Primary Industries, Department of Conservation – education resources and activities of local staff.	Fisheries Act 1996, Marine Reserves Act 1971, Marine Mammals Protection Act 1978.
Partial implementation.	Special legislation.	Ministry for the Environment – policy and legislative processes.	Environment Act 1986.
Lack of capacity to achieve the vision.	Ongoing funding.	Ministry for the Environment, Kaikōura District Council, Department of Conservation, Ministry for Primary Industries Environment Canterbury, Canterbury Community Trust.	Environment Act 1986, Local Government Act 2002, Resource Management Act 1991, Conservation Act 1987, Fisheries Act 1996.
Loss of direction.	Ongoing leadership by Te Korowai.	Ministry for the Environment if Fiordland model followed – servicing and policy advice.	Environment Act 1986.
Ineffective policies in areas where regulation is difficult.	Guardian endorsed branding of code compliant companies, codes of practice, Kaikōura Fishing Accord.	Nil.	
Ineffective rules.	Ongoing enforcement.	Ministry for Primary Industries, Department of Conservation, Kaikōura District Council and Environment Canterbury – on ground and water enforcement activities and training and support of honorary officers.	Biosecurity Act 1993, Environment Act 1986, Resource Management Act 1991, Conservation Act 1987, Fisheries Act 1996, Marine Reserves Act 1971, Marine Mammals Protection Act 1978, Reserves Act 1977, Land Transport Act 1998, Land Act 1948, Local Government Act 2002.

Risk	*Response*	*Agencies involved*	*Statutes*
Loss of momentum and engagement.	Monitoring and reporting progress with implementing each of the actions.	Nil.	
Failure to identify problems with management approaches and lack of ability to learn and adapt.	Monitoring programmes, - changes in numbers of key indicator species inside and outside marine reserves, marine mammal sanctuaries, taiāpure, mātaitai, and rāhui, local feedback and anecdotal information.	Environment Canterbury, Ministry for Primary Industries, Department of Conservation, Ministry for the Environment, universities – funding, monitoring, research, advice.	Biosecurity Act 1993, Resource Management Act 1991, Conservation Act 1987, Fisheries Act 1996, Marine Reserves Act 1971, Marine Mammals Protection Act 1978, Reserves Act 1977, Wildlife Act 1953.

9. Compliance with the Strategy

The objectives are that legal rights and obligations, and local customs and codes of practice, are respected and followed.

Achieving compliance with the outcomes of the Strategy will involve developing a culture and social expectation that supports the intentions of Te Korowai. Implementation will also require enforcement where legal rights and obligations are transgressed. Social pressure and education are the pathways to having local customs and codes of practice respected and complied with. Nothing in this Strategy proposes changing the rules around enforcement and penalties, and enforcement would remain with the relevant agencies.

In areas where there are local codes of practice, we will endorse and brand companies that commit to complying with the code. An example would be a code of practice for charter fishing operators that committed to quality experiences for visitors, while not adversely affecting the abundance and productivity of fish locally (see section 5.4.3).We support the concept of certification of charter fishers suggested in some submissions and will consider extending this to other sorts of operators for compliance with the Strategy.

Ongoing legal enforcement will require a presence by the Ministry for Primary Industries, Department of Conservation, Kaikōura District Council and Environment Canterbury. We will lobby Government and Councils to keep these resources available and support enforcement in all ways practical.

10. Monitoring performance

The objective is that the Strategy remains up-to-date and implementation is adapted over time.

The Strategy is intended to be a living document. Different review periods are required for different aspects. Some things will be reviewed as required by other processes, such as the mātaitai and taiāpure.

A ten-year review period is becoming standard in related statutory processes for documents like the Strategy, but we are also committed to partial reviews as required, and to full opportunities for public participation if these happen. For the mechanisms such as marine protected areas, twenty-five years seems appropriate for a generational review and these mechanisms require at least that long to show their effectiveness. An integrated monitoring programme, which links all of these together, will be developed as part of implementation.

We suggest that the Strategy should be reviewed as and when needed, at least every ten years, in an open process that involves opportunities for the whole community to influence future directions. We will seek comment in advance of the review and test proposals publicly before setting any new direction.

Recognising the wishes of tangata whenua and the wider community for the opportunity for each generation to consider and makes its own decisions, longer-term protection mechanisms will be reviewed for effectiveness according to the best available knowledge at least every twenty-five years. These will include marine mammal sanctuaries, marine reserves, taiāpure, and mātaitai. World Heritage status is a matter of international convention and, once in place, it would be beyond the powers of Te Korowai to initiate a review.

We see a need for an intensive long term monitoring programme on the effects of the proposed marine reserve on fish stocks. We will encourage the Department of Conservation, which monitors marine reserves nationally, to devote resources to Kaikōura. An integrated programme for fisheries management, taiāpure, mātaitai and the marine reserve will be required involving multiple agencies and the community.

Monitoring must be undertaken in a proper scientific manner. Public good research, funded by central, regional and local government agencies usually includes processes to maintain scientific standards and resourcing for public dissemination. We would aim to support these processes, get the community's priorities recognised and put the information in the hands of people that need it.

A monitoring strategy will be developed as part of the implementation plan. It is most important to commit to monitoring the necessary few things that clearly signify any changes, while noting that funding will be limited.

The **key indicators** for this strategy will be based on assessing:

- Progress with implementing each of the actions in the Summary.
- Changes in numbers of key indicator species inside and outside marine reserves, marine mammal sanctuaries, rāhui, taiāpure and mātaitai.

Te Korowai's annual report will include an assessment of every action listed in the Summary of the Strategy.

We will work with the Kaikōura District Council, Department of Conservation, Ministry for Primary Industries, Environment Canterbury, MAF Biosecurity and research providers in developing and implementing an integrated monitoring programme across all special areas and the general environment of Te Tai ō Marokura.

Research and science are not all about funding; much of science occurs outside the formal funding process. In relation to the marine reserve and the marine mammal sanctuary, funding for monitoring will come from the Department of Conservation. Universities and other academic institutions also do a lot of research that can be directed towards monitoring. Funding for monitoring the mātaitai and taiāpure could be applied for from the Ministry for Primary Industries. Research will also come from the usual mix of public good science funding, core funding of Crown agencies, local organisations such as the Kaikōura Ocean Research Institute (KORI) and philanthropic donations. Commercial operators already commit funding to monitor relevant data on their own initiative and through levies. Other external funding will be sought as required.

11. Glossary

Benthic – of the seafloor.

Biomass - is the mass of living biological organisms in a given area or ecosystem at a given time.

Hapū – a "sub-tribe", or "clan" is sometimes described as "the basic political unit within Māori society."

Hīkoi – journey.

Iwi – or tribes form the largest everyday social units in Māori culture.

Kaimoana – seafood.

Kaitāngata - the eating of those defeated in battle.

Kaitiaki – guardians.

Kaitiakitanga – the role of guardianship.

Ki Uta Ki Tai - mountains to the sea.

Mahinga kai – refers to customary gathering of food, the practices involved, the places where food is gathered, and the resources themselves.

Marine mammal sanctuaries - Marine mammal sanctuaries can be established under the Marine Mammals Protection Act 1978 throughout New Zealand fisheries waters to create a permanent refuge for marine mammals.

Marine reserves - Marine reserves are specified areas of the sea and foreshore that are managed to preserve them in their natural state as the habitat of marine life for scientific study.

Mātaitai - A mātaitai reserve identifies a customary food-gathering site and allows for its management by tāngata whenua (South Island Customary Fishing Regulations 1998).

Mātauranga - traditional knowledge.

Moana – the sea.

Ngā uri o Tangaroa – seafood.

Pā - can refer to any Māori village or settlement, but in traditional use it referred to hill forts fortified with palisades and defensive terraces and also to fortified villages.

Pākehā - is a Māori term for New Zealanders who are not of Māori blood lines.

Rāhui – areas closed to fishing for customary reasons. These can be traditional, having no legal but a strong moral basis, or may be recognised under the Fisheries

Act 1996 S186B or S297. In this Strategy a rāhui is an area closed to fishing under legal regulations within a taiāpure.

Rangatiratanga – the exercise of chiefly authority.

TAC - Total Allowable Catch, which is the total amount of fish that may be taken from a stock, while maintaining the maximum sustainable yield. From the TAC an allowance is made to provide for recreational fishing, customary uses and all other fishing-related mortality of that stock. The remainder is available to the commercial sector as the Total Allowable Commercial Catch (**TACC**). This is the total quantity of each fish stock that the commercial fishing industry can catch for that year.

Tāngata tiaki - are individuals who can authorise customary fishing within their rohe moana, in accordance with tikanga Māori.

Taiāpure - A taiāpure identifies an area (of estuarine or coastal waters) that has special significance to an iwi or hapū as a source of food or for spiritual or cultural reasons.

Takiwā – district.

Tangaroa – Māori God of the sea.

Tāonga – treasured resources.

Tāngata whenua – people of the land used here as the hapū Ngāti Kurī who hold manawhenua manamoana over the area covered by Te Korowai.

Te Tai ō Marokura – the seas around Kaikōura.

Tikanga – customary ways of doing things.

Tūpuna – ancestors.

Urupā – burial place.

Wāhi tapu – sacred place.

Whānau – extended family.

Whānui – collection of extended families.

World Heritagesite - World Heritage is the designation for places on Earth that are of outstanding universal value to humanity and as such, have been inscribed on the World Heritage List to be protected for future generations to appreciate and enjoy.