

S U M M A R Y R E P O R T

THE BREAKING WAVE

Oceans reform in Aotearoa New Zealand



Environmental
Defence
Society



The
Law
Foundation

NEW ZEALAND



Michael &
Suzanne
Borin
Foundation

Greg Severinsen, Raewyn Peart, Bella Rollinson, Tracey Turner and Phoebe Parson

S U M M A R Y R E P O R T

THE BREAKING WAVE

Oceans reform in Aotearoa New Zealand

Greg Severinsen, Raewyn Peart, Bella Rollinson,
Tracey Turner and Phoebe Parson



First published May 2022

Published by:

Environmental Defence Society Incorporated

P O Box 91736 Victoria St West

Auckland 1142

Phone (09) 302 2972

manager@eds.org.nz

www.eds.org.nz

www.environmentguide.org.nz

© Environmental Defence Society Incorporated 2022

Front cover image: Hahei, Raewyn Peart

Back cover image: Mussel farm, Coromandel, Raewyn Peart

Copies can be downloaded from www.eds.org.nz

Table of contents

Acknowledgements	iv		
1 Introduction	1		
2 The marine environment	3		
2.1 The marine environment and how we use it	3	6.2 Environmental limits	17
2.2 Problems in the marine environment	4	6.3 Legal “rights” in a future toolkit	18
3 The current system: Issues and context	6	6.4 Other regulatory tools	19
3.1 The current system	6	6.5 Non-regulatory and funding tools	20
3.2 The context of reform	9	6.6 Spatial protections: MPAs	20
4 Why do we have an oceans management system?	11	6.7 Towards a more strategic and integrated toolkit	22
5 The normative foundations of a future system	13	7 Legislative design	24
5.1 Worldviews and ethics	13	8 Institutional design	29
5.2 Principles and objectives	14	9 Drawing the threads together: Four potential starting points for system reform	34
6 Reconsidering the toolkit	16	9.1 Approach 1: Building on what we have	34
6.1 Planning and consenting	16	9.2 Approach 2: Redesigning the structural features of the system	39
		9.3 Approach 3: Enlarging the rangatiratanga sphere	43
		9.4 Approach 4: Breaking the normative mould	46
		10 Concluding comments	49
		Appendix: A summary of potential building blocks for reform	50

List of figures

1 Planet “Earth” seen from directly above the Pacific Ocean	1	8 Key structural features of approach 1	37
2 Structure of the main report	2	9 Brief assessment of approach 1	38
3 Key statutes that form the core of the current oceans management system, and their spatial application	7	10 Key building blocks of approach 2	40
4 The different lenses through which existing marine legislative boundaries have been created	25	11 Key structural features of approach 2	41
5 Layers of core legislation in the current oceans management system	26	12 Brief assessment of approach 2	43
6 Characteristics of institutions	30	13 The relationship between different spheres of power/governance	43
7 Key building blocks of approach 1	36	14 Key building blocks of approach 3	45
		15 Key building blocks of approach 4	48

List of terms

AMA	Aquaculture management area	NBA	Natural and Built Environments Act
EDS	Environmental Defence Society	NES	National environmental standard
EPA	Environmental Protection Authority	NPS	National policy statement
EEZ	Exclusive economic zone	NZCPS	New Zealand Coastal Policy Statement
EEZ Act	Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2012	QMA	Quota management area
MACA Act	Marine and Coastal Area (Takutai Moana) Act 2011	QMS	Quota management system
MPA	Marine protected area	RMA	Resource Management Act 1991
MSY	Maximum sustainable yield	TAC	Total allowable catch
		TACC	Total allowable commercial catch

Acknowledgements

The Environmental Defence Society extends its thanks and gratitude to all those who have been involved in the project. That includes our funders – the New Zealand Law Foundation and the Michael and Suzanne Borrin Foundation as well as the Ministry for the Environment and Department of Conservation. We would particularly like to thank the members of our Māori Advisory Group – Dr Dan Hikuroa, Dayle Hunia, Dr Anne-Marie Jackson, Dr Robert Joseph and Professor Jacinta Ruru – who met periodically to provide valuable guidance.

We also thank all those who have contributed written material including Dr Glen Carbines, Dr Tim Denne and Adrienne Paul, as well as those who have given up their time to talk with us through interviews and workshops. To enable interviewees to express their views frankly and freely, all interviews were held in the strictest confidence and the identities of those interviewed have been kept anonymous. Because the point of the project is to facilitate a debate rather than test a proposition, we have incorporated people’s perspectives into our general exploration of ideas rather than treating them as “stakeholder consultation” per se.

We also note that while the Ministry for the Environment and Department of Conservation provided financial support for the project, the views expressed and any omissions or errors are solely those of the authors/EDS.

1 Introduction

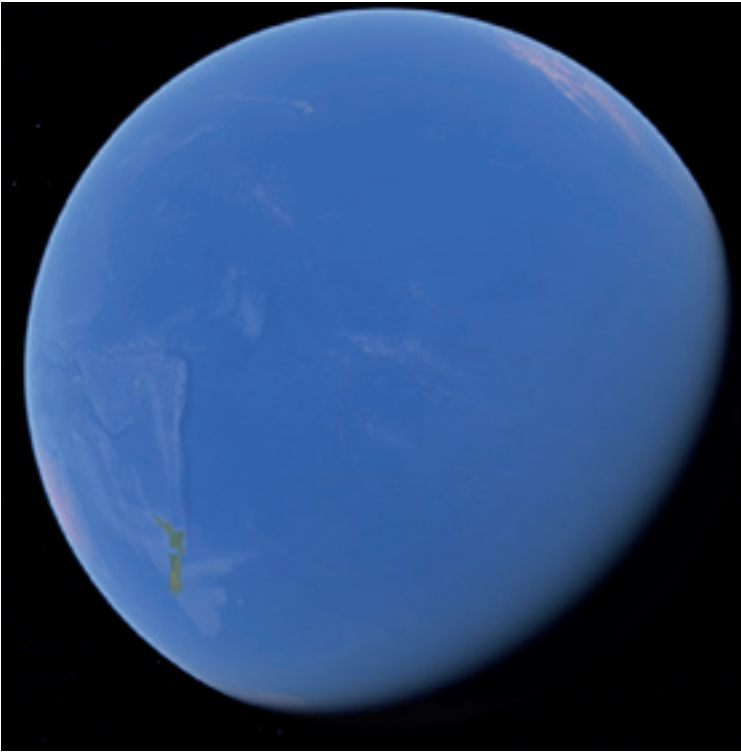


Figure 1: Planet “Earth” seen from directly above the Pacific Ocean. Aotearoa New Zealand can be seen in the bottom left corner. Source: Google Earth

With 70 percent of its surface covered in water, some have said that our planet should rightly be called “Ocean”.¹ The name “Earth” – not coincidentally a synonym for the brown stuff that we tread under our feet – speaks far less to the actual nature of the globe than it does to how humans have always perceived and experienced it. We are a land-based species, with our concerns dominated by land-based issues that we can see and feel on a daily basis. Yet humanity relies enormously on the sea that surrounds us – more, perhaps, than many people realise.

In our own corner of the Pacific, Aotearoa New Zealand has jurisdiction – and stewardship – over a vast and disproportionate part of the global oceans. Our sea is many times larger than our land mass. Environmental reporting² describes a space with many uses and much potential to benefit humanity, but also one which is suffering serious and concerning environmental problems (see further below). There are questions about how its bounty is best used and shared as pressures grow.

The system by which we manage people’s interactions with this marine space requires an urgent rethink. The current legal framework has developed over more than 50 years into an uneven patchwork of provisions. There are multiple pieces of overlapping legislation and some significant gaps in coverage. Some legislation is outdated and in need of radical revision. There is no overarching mechanism to help ensure that all legislation impacting on the marine environment is interacting coherently. Above all, the reality is that the system we have at the moment has presided over a period of alarming environmental decline, thereby failing in one of its key purposes. If we do nothing, the risk is that this will continue. Aotearoa New Zealand needs a system that is not only fit to tackle the growing and changing challenges of the 21st century, but also one that can reverse the cumulative mistakes of the past and reflect our modern and evolving set of ethical values that are not well recognised in current frameworks.

The need for a conversation about fundamental reform has been underscored by Cabinet papers referring to a “review of the marine system” following the government’s overhaul of the Resource Management Act (RMA).³ Since the 2020 election, and creation of a new ministerial portfolio for Oceans and Fisheries, all indications are that oceans reform is being seen by government as a priority. There has been the 2021 announcement of a marine “vision”, and potential for deeper reforms to the oceans management system has been signalled.⁴

This system is a very broad, and complex, thing. In essence, it encompasses the formal legislative frameworks, institutional arrangements and tools by which public authorities can intervene to shape how people interact with the sea.⁵ It can have multifaceted objectives and manages many different human activities across multiple spaces – those in the marine area itself (estuaries, the territorial sea, the exclusive economic zone (EEZ) and the extended continental shelf) as well as those on land that impact those spaces and what people do in them. It is not about a single sector, space or piece of legislation; it is much broader than that. It defies siloed thinking.

Over the past 18 months, the Environmental Defence Society (EDS) has been conducting a first principles policy project looking at the future of our oceans management system. The purpose of the work is to encourage and support a wide-ranging conversation in advance of government reform efforts, and to present a number of ways in which

the country could do things differently in the future. We are deliberately not making recommendations (we anticipate a phase 2 of the project in which we do that). For now, all options are on the table for discussion, be they a collection of small-scale changes or a staggered programme of revolutionary reform.

This paper is a summary of the project’s final report and refers extensively to its more detailed analysis. We encourage readers to delve into that more comprehensive discussion, and throughout this summary report we provide endnotes that identify the places where further explanation can be found in the main report.

As shown in Figure 2 below, the main report is divided into three parts. Part 1 looks at what we have now. This includes a description of Aotearoa New Zealand’s marine environment, how we use it, and the problems/challenges this has caused. It also includes a summary of the existing oceans management system and issues with it, and the context within which systemic reform would occur (including reform measures currently planned or underway).



West coast, Northland

Part 2 then looks at various options for reforming our oceans management system according to cross-cutting “themes”: norms (worldviews, principles and objectives); tools (specific ways in which the system intervenes to shape people’s behaviours, such as plans, policy statements and consents); and structures (how legislation and institutions are split up and designed).⁶ Throughout the main report, tangible reform options appear next to icons of building blocks 🧱 (non-plastic ones, of course). In this summary paper we compile a list of these building blocks (see the Appendix), which is intended to give a sense of some of the reforms that could be mixed and matched. Part 3 of the main report is more exploratory, and sketches out four possible approaches or starting points for what a reformed system could look like as a whole.

Through all of this, te ao Māori te Tiriti o Waitangi need to underpin thinking about a new system. These are not just “subjects” of a system that is otherwise assumed to be “Western” in its foundations (things to be contained *within* it or protected *by* it).⁷ Tikanga and te Tiriti are living and evolving things that exist *outside* the oceans management system. We also note that the report’s title is deliberate. Momentum for change in the marine space has built up over the past 20 years to the point where deeper systemic reform is now a wave waiting to break.⁸

Chapter 1	Introduction
Part 1	What we have now
Chapter 2	The marine environment
Chapter 3	The current oceans management system
Chapter 4	The context of reform
Part 2	Options for the future
Chapter 5	Conceptualising a future oceans management system
Chapter 6	What is the rationale for having a system?
Chapter 7	Ethics, principles and objectives
Chapter 8	Reconsidering the toolkit
Chapter 9	Spatial protections in the toolkit
Chapter 10	Strategic and integrative tools
Chapter 11	Legislative design
Chapter 12	Institutional design
Part 3	Drawing the threads together
Chapter 13	Visions for the future

Figure 2: Structure of the main report

2 The marine environment

One of the key drivers for reform is the extent of problems being faced in the moana. In Chapter 2 of the main report we describe the marine environment, and then outline the challenges or problems that a future system will need to address.⁹

2.1 The marine environment and how we use it

There is a huge variety of life in our oceans, which depends on a wide range of different habitats – from soft sediments and reefs, to estuaries and underwater volcanoes.¹⁰ An estimated 30 percent of the country's biodiversity is in the sea,¹¹ with over 17,000 species identified in the EEZ.¹² Endemic species include around 95 percent of all known sponge species, over 80 percent of bivalves and gastropods, and three quarters of sea squirts.¹³ There are 13,415 identified animal species, 702 plant species and 89 fungal species.¹⁴ The 412 species of marine invertebrates that have been assessed are thought to represent only five percent of the actual number. There is a lot we do not know, and there are vast areas where habitats have not been mapped.

Species exist within complex ecosystems. Fish use the seabed and its flora as a spawning/nursery ground as well as a food source and a place to hide from predators. Habitats support species that pass through them on ambitious journeys, often assisted by the currents. Some fish (such as marlin) and marine mammals (like whales) travel vast distances within and beyond the country's jurisdiction, and some (such as longfin eels) have life cycles that take them on incredible migrations across the Pacific Ocean into freshwater environments. Habitats are highly connected. Small changes to them and associated food chains, whether through the removal of species, the addition of species or the introduction of stressors (eg climate or pollution), can have significant impacts on how (or if) they continue to function.

Many New Zealanders are highly active in the marine environment and Māori have a long-standing and deep relationship with it going back centuries.¹⁵ Some uses can be described as commercial. The marine economy as a whole was worth \$7 billion in 2017¹⁶ and employs around 70,000 people.¹⁷ The Hauraki Gulf alone is said to support the livelihoods of one-third of the country's population.¹⁸ The seafood sector contributes over \$4 billion per year to the economy.¹⁹ Māori are heavily involved in the fishing industry, and around a third of fishing quota is owned by iwi interests.²⁰ Aquaculture is also now a large and developing industry. Total revenue from the sector in 2018 was over \$600 million, the majority from

mussel farming.²¹ There has been increasing interest in recent years in deep seabed mining for phosphate nodules (which are ground up for fertiliser), massive sulphides (from hydrothermal vents, containing deposits of copper, zinc, lead and gold), manganese nodules (containing various metals), cobalt and iron sands. Sand has been mined in shallower coastal marine environments for many years.²² Oil and gas – notably off the Taranaki coast – has been a significant activity for decades and still forms one of the mainstays of the region's economy.²³ Shipping now provides the biggest contribution to our marine economy, including port operations, boat building and maintenance, and freight and passenger transport.²⁴ Around 99 percent of all exports are transported by ship.²⁵ Marine tourism – including sightseeing, whale watching, dolphin swimming and shark diving – made up over 40 percent of the marine economy prior to Covid-19, employing over 43,000 people.

Uses of the marine environment might also look different in the future. Offshore wind energy and tidal energy might be deployed²⁶ (a large-scale offshore wind farm off the Taranaki coast is currently being explored, which could power over 650,000 homes and represent over 11 percent of current demand capacity).²⁷ Incentives for sequestering “blue carbon” could also see new operations (eg seaweed farming) alongside potential for marine carbon geo-sequestration (whereby carbon dioxide from point source emissions is compressed and injected deep below the seabed and stored in perpetuity).²⁸ Desalination plants (making seawater drinkable) are a future prospect for a water-constrained Auckland.²⁹ All of these would have benefits and risks. In some places like the Hauraki Gulf, close to large centres of human population, the sea is becoming increasingly congested. That trend may well continue;³⁰ people may wish to use the same “resource” as others (eg fish), or they may use them in ways that have impacts on others (eg excluding fishers from protected marine space).

Human use of the sea is more than just commercial. The area is used extensively for public purposes – as a receiving environment for stormwater/floodwater and treated wastewater, as a space for defence and security operations, and as a blue highway for public transport. People enjoy swimming at the beach, sailing and water sports. Many people own or use boats. Estuaries and bays are highly valued for leisure and recreation. New Zealanders like seeing the sea teeming with marine life; one study from 2008 recorded a staggering 375,000 annual visits to the Cape Rodney-Okakari Point marine reserve near Leigh.³¹ Recreational fishing, in particular, is a core part of Kiwi culture.³²

Aside from food, leisure and other direct uses, people draw many environmental services from the sea. It provides local temperature regulation and a buffer for global warming (absorbing a significant portion of both heat and carbon dioxide from the atmosphere).³³ Marine habitats (eg mangrove forests) trap sediment from land, the seabed forms a key part of the nutrient cycle, and filter feeders “clean” the water coming off the land.³⁴ The marine environment has considerable existence and intrinsic value too, and when it comes to individual species such as whales, dolphins and threatened seabirds, their value is based on complex moral considerations. Intrinsic value is a part of te ao Māori, where te moana is linked to people through whakapapa and whanaungatanga (relationship, kinship, sense of family connection). Indeed, many places around Aotearoa New Zealand (such as Te Rerenga Wairua/Cape Reinga) have a special significance for Māori based on stories and histories of events that happened there or because of their place in a broader cosmogony.

2.2 Problems in the marine environment

Not all is well in the moana. While many changes have occurred naturally over thousands of years, much adverse change has been induced or accelerated by people in recent history.³⁵ For one, **marine biodiversity is in crisis**.³⁶ A recent New Zealand conservation status assessment found that 90 percent of seabirds and 80 percent of shorebirds are at risk of, or threatened with, extinction.³⁷ Ten out of 45 assessed species of marine mammals are in the same category, with 30 classified as data deficient.³⁸ Many biogenic habitats are under threat or degrading, including seagrass meadows, kelp forests, bryozoan thickets, corals, shellfish beds and tubeworm mounds.³⁹ Estuaries are in a poor state across a variety of habitat types.⁴⁰ Reporting points out that 83 percent of *routinely assessed* fish stocks were, in 2020, considered within safe limits,⁴¹ but the remaining 17 percent were considered overfished and nine stocks were considered to be collapsed.⁴² In addition, many stocks are not routinely assessed so their status is unknown. Local depletion of kai moana matters too. While stocks may be deemed healthy over large management areas, that may not be the case in particular places having high value and accessibility to coastal communities.

Pressures are coming from multiple fronts. Modern society's rapacious, industrial-scale fetish for creating disposable **plastic** products has led to significant amounts of it (including micro-plastics) being consumed by marine animals, with impacts on health and reproduction and unknown impacts across the food chain (including, ultimately, for human health).⁴³ **Commercial fishing methods** like bottom trawling and dredging not only remove vast quantities of marine life, they can also damage the underlying biogenic habitat. **Recreational fishing** is putting pressure

on fish stocks, and likely contributing to trophic cascades, in parts of the country. **Invasive non-indigenous species** – of which there are now upward of 200 in Aotearoa New Zealand – can predate on, compete with or crowd out indigenous species, fundamentally changing the nature of habitats and species they support as well as impacting human activities like aquaculture and fishing.⁴⁴ The toxoplasma gondii parasite has been identified as a potentially serious threat to (particularly) female Māui and Hector's dolphins.

The past one hundred and fifty years has seen an explosion in the volume and rate of **sediment** entering the marine environment. It has been noted that “New Zealand has one of the highest rates of sediment runoff in the world; equivalent to around 35 million truckloads of sediment entering the sea annually.”⁴⁵ Contributions come from many sources, including **agriculture, horticulture, commercial forestry and urban development**. Deposited sediment can smother, stress and kill benthic life. Suspended sediment can impact the amount of light reaching photosynthetic species on the seabed such as seagrass and seaweed,⁴⁶ and impact fish spawning and survival.⁴⁷ Stormwater flowing from construction sites, motor vehicles, domestic properties and spills can bring with it an increasing, and increasingly varied, confection of **chemical contamination** which ends up in the sea.⁴⁸ **Pharmaceutical and cleaning products, antibiotics, hormones** and so forth are also entering our seas from wastewater flows (whether treated or not), with potential impacts on ecosystem and human health.

Eutrophication – excessive nitrogen enrichment which is largely from farming operations – occurs in a number of our estuaries. This can cause algal blooms, reducing oxygen levels which can kill fish, as well as throwing food webs out of balance. Many **coastal landfills** are draining toxic material into estuaries with some being eroded to the point that they disgorge their contents directly onto beaches or into the sea.⁴⁹ **Hard structures along the coastal edge** are reducing inter-tidal habitats vital to some species like shorebirds, with their extent and impacts increasing as sea levels rise.⁵⁰ **Wastewater overflows** and stormwater contamination can make people sick and limit access to the marine space for recreational, spiritual and cultural purposes. **Shipping** and underwater activities like **seabed mining** and **seismic surveying** can interfere with marine mammals and other marine life through **noise pollution**,⁵¹ and **people's activities on beaches** (such as driving and dog-walking) can threaten shorebirds, especially during vulnerable life stages such as breeding and nesting.⁵²

Perhaps most alarmingly, **climate change** is impacting the sea on multiple related fronts. A **warming and acidifying ocean** will directly impact

species as well as reduce underlying ecosystem resilience (because species struggle to survive, reproduce and recover in those conditions).⁵³ There has been a 7.1 percent increase in the acidity of Aotearoa New Zealand's oceans over the past 20 years.⁵⁴ Climate change will also exacerbate events that can send those already weaker ecosystems over the edge (eg increasing the frequency of storms, energy of waves, movement of invasive species, and large scale sediment runoff events from land). Marine activities can also contribute to climate change. One recent international study, published in *Nature*, found that bottom trawling produces as much carbon dioxide globally as the entire aviation industry, through releasing it from the seabed into the water column.⁵⁵

A decade ago, a group of scientists ranked the threats to Aotearoa New Zealand's marine habitats. Across all habitats, after two key climate-induced changes (ocean acidification and seawater warming), bottom trawling was ranked as the greatest threat, followed by sediment, further climate change impacts (changes in currents and increased storminess), fishing dredging and the dumping of dredge spoils. Invasive species were also highly ranked.⁵⁶ But these and more are interacting to create

cumulative and unpredictable impacts that can threaten not only the intrinsic value of species and nature, but also the ecosystem services on which humans rely. In the main report we look at the Firth of Thames as an example of such cumulative stressors.

By harming species and ecosystems, people are not just harming something "over there". Flow on effects mean that **humanity is harming itself economically, socially, culturally, economically and from a health perspective**.⁵⁷ This makes the health of te moana a pressing te Tiriti issue and of broader importance than just "environmental" protection. Some have also pointed to **purely social and economic issues** in the marine environment, such as whether the country is making the most of our seas and whether the value generated by its use is distributed fairly (eg amongst those involved in the fishing sector and between those who wish to use space in the coastal marine area).⁵⁸ To some, it may also be a problem that we are **underutilising** the capacity of the marine environment, which arguably has much more potential to benefit humanity (such as through the development of offshore aquaculture, desalination, wind and tidal energy and carbon capture and storage).



Trawler, Nelson

3 The current system: Issues and context

We have a formidable number of challenges facing us. It is clear that although the detail of those challenges (and blame for them) can be debated, the status quo cannot continue. So what should policy and law makers do in response? How might our oceans management system be reformed to better address these challenges? In Chapter 3 of the main report we look at what is going wrong with the system we have now, to give insight into the things that a new system will need to do differently.

3.1 The current system

In Appendix 1 of the main report, we provide a more extensive summary of what the current system looks like. The system covers all public

interventions that influence people's interactions with the moana. We have separate legal frameworks for resource management, conservation, fisheries, transport, climate change, biosecurity, mining, and many other things. These are matched by an equally diverse range of institutions that administer them and hundreds if not thousands of tools that operate under them.⁵⁹ The array of statutes in the current system means that they interact with each other in complex and sometimes unclear ways. The system also operates within a broad framework of international law, which is primarily treaty-based. Although the system is much more than just a list of statutes, it is useful to consider core pieces of legislation and their spatial application, to get a sense of what it covers (see Figure 3 below).

Raewyn Peart



Pelorus Sound

Family of statutes	Statute	Spatial application		
		Land/freshwater	Territorial sea	EEZ and extended continental shelf
Resource management	Resource Management Act 1991			
	Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2012			
Fisheries	Fisheries Act 1996			
	Treaty of Waitangi (Fisheries Claims) Settlement Act 1992			
	Māori Commercial Aquaculture Claims Settlement Act 2004			
	Māori Fisheries Act 2004			
	Fisheries (Quota Operations Validation) Act 1997			
Shipping	Maritime Transport Act 1994			
Biosecurity	Biosecurity Act 1993			
Conservation	Conservation Act 1987			
	Marine Reserves Act 1971			
	Wildlife Act 1953			
	Marine Mammals Protection Act 1978			
	Hauraki Gulf Marine Park Act 2000	(islands and catchments)	(specific area)	
	Fiordland (Te Moana o Atawhenua) Marine Management Act 2005		(specific area)	
	Sugar Loaf Islands Marine Protected Area Act 1991		(specific area)	
	Kaikōura (Te Tai o Marokura) Marine Management Act 2014		(specific area)	
Climate change	Climate Change Response Act 2002			
Mining	Crown Minerals Act 1991			
	Continental Shelf Act 1964			
Other	Heritage New Zealand Pouhere Taonga Act 2014			
	Marine and Coastal Area (Takutai Moana) Act 2011			
	Submarine Cables and Pipelines Protection Act 1996			

Figure 3: Key statutes that form the core of the current oceans management system, and their spatial application

Problems with the current system

People may have different views about whether the current system is fundamentally broken or not. But the fact that it has failed to prevent the problematic outcomes described in Chapter 2 (eg threatened species, habitat loss, social inequities)⁶⁰ indicates that it must be in need of some change.⁶¹ In Chapter 3 of the main report we explore the design features of the system that have arguably given rise to or exacerbated poor outcomes, as well as issues with *how* it operates.⁶² In particular, the following categories of problem stand out.

- There is a **lack of strong environmental limits**. The system draws few lines in the sand that strictly prevent additional environmental impacts occurring. Instead, the system is characterised by balancing, trade-offs and mitigation. This can be seen across multiple frameworks, including the RMA (despite positive steps in the *King Salmon* decision),⁶³ Marine Reserves Act (not least because marine reserves cannot be established in the EEZ), Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act (EEZ Act), aspects of the Fisheries Act, and conservation legislation such as the Wildlife Act. While the system has many tools that *can* impose limits, these are often not mandatory, and they have often not eventuated in practice. Furthermore, limits set in one place can be undermined by exceptions or allowances in other places.
- The system's underpinning **norms and values are inconsistent** and, in many cases, **outdated**. There is an inconsistent approach to Te Tiriti across legislation, including the RMA's requirement to take its principles into account⁶⁴ and the EEZ Act's simple and presumptuous assertion that the provisions of the Act already embed the principles without needing further interpretation.⁶⁵ Moreover, the Marine Reserves Act proclaims that it is concerned only with scientific research, reflecting a time when much deeper concerns like biodiversity protection and climate change were not high on the agenda.⁶⁶ The Wildlife Act does not make a clear distinction between the importance of protecting indigenous species and introduced ones, or threatened and non-threatened ones.⁶⁷ Even something as "modern" as the RMA is oriented towards passive management and mitigation of adverse effects rather than defending limits and striving for positive outcomes for the oceans.
- The **system is fragmented**, causing gaps and overlaps. Overall, legislation has developed in an ad hoc way, sometimes providing bespoke workarounds to existing frameworks no longer fit for purpose. For example, place-based legislation establishing marine

protected areas (MPAs) (eg in Fiordland, Kaikōura and forthcoming for the Hauraki Gulf to implement its non-statutory spatial plan) in part reflect shortcomings with more general frameworks like the Marine Reserves Act. It is by no means clear that there is a sensible reason for the fragmentation of conservation legislation whereby marine mammals are protected under one framework and other marine wildlife under another. The extent to which this matters or not is an interesting question, and one that is explored in Chapter 11 of the main report where we consider legislative design.

- There is a great deal of **complexity in the system**, which has become inaccessible over time as more processes, carve outs and legislative layers have been added.⁶⁸ There has also been a proliferation of alternative planning and consenting processes. The RMA is twice as long as it used to be. Many decision-making processes are slow, cumbersome and largely inaccessible to the general public.⁶⁹ Fundamental features, such as the interpretation of the purpose of the RMA and its relationship with the Fisheries Act, frequently require resolution by the courts.⁷⁰
- There is a **lack of overall stewardship and leadership** for the marine system. Central government has made little progress on establishing a coherent network of MPAs, or controls on damaging fishing methods. The mandatory New Zealand Coastal Policy Statement (NZCPS) has existed since shortly after the enactment of the RMA, but unlike for forestry and urban development (for example), it has not led to national level regulations (National Environmental Standards (NES) for the sea)⁷¹ or a meaningful policy framework for estuaries. This is not so much an issue with the RMA itself, but rather with the political will to use the legislation in the ways it was intended to be used. While regional councils have always had responsibilities under the RMA (and NZCPS) for habitat protection in the marine area, the extent to which that has manifested in practice has been patchy.
- There is a **lack of strategy and agility**. The RMA, for example, talks about enhancement, but lacks a framework for setting targets and a mechanism for holding authorities to account for failing to meet them. Existing use rights on land (eg for sediment-inducing activities like agriculture, urban development and forestry) can be hard to constrain legally as well as politically. Aquaculture proponents are struggling with fixed spatial consents that cannot move easily when conditions change (such as seawater warming in the Marlborough Sounds) and are encountering a highly uncertain policy and regulatory environment further offshore. New sectors like offshore wind energy are likely

to encounter similar problems. The lack of strategy is even more noticeable under the EEZ Act (especially for activities like mining)⁷² and Fisheries Act, with ongoing questions about what fisheries plans are intended to achieve (if anything) in a strategic sense.⁷³ On the conservation front, a change in the status of a protected marine species does not automatically trigger a regulatory or policy response.⁷⁴ Conservation strategies and plans can routinely be out of date and lack adequate weight when it comes to the consideration of concessions.⁷⁵ Similarly, the deployment of MPAs has been left largely to political discretion.⁷⁶

- Aspects of the system are arguably **unfair in a procedural sense**. For instance, the RMA provides for coastal occupation rights to be allocated using structured tendering processes (to determine which use would be “best”), but the default use of “first in first served” consenting is more common⁷⁷ Charges can be imposed on coastal occupiers, but tend not to be, and where they exist they are designed inconsistently. There is uncertainty about when compensation should be forthcoming for an erosion of “rights” in the marine area (eg spatial exclusions for fisheries). Māori voices are saying they feel excluded or marginalised from decision-making processes and that the system does not reflect te Tiriti principles.⁷⁸
- There are **issues with information and funding**. For example, the Parliamentary Commissioner for the Environment has pointed to the lack of a coherent research strategy for environmental issues more broadly (and the absence of forward planning for what our data needs might be),⁷⁹ and the existence of significant data gaps.⁸⁰ Monitoring data and research outputs are “cobbled” together from a range of sources in an opportunistic way, to present in reporting, rather than being collected in a purposive and time-series fashion according to what is most useful to tackle pressing problems.⁸¹ Information is not aggregated or stored across institutions in a way that enables it to be easily accessed, interrogated or used. Datasets often do not speak well to each other,⁸² and research can be effectively lost, and then sometimes replicated. In addition, funding for environmental research is not ringfenced from other competing funding pressures,⁸³ and mātauranga Māori is not well-integrated into broader datasets.⁸⁴

In some cases the concept of a “problem” may be subjective, and the reasons something is seen to be a problem (and therefore the legitimacy of responses to it) can differ. Solving one problem might create a different new one, making silver bullet solutions elusive. All options for reform will have pros and cons.

3.2 The context of reform

In Chapter 4 of the main report we look at the context in which system-wide reforms would take place. One important element is the reforms that are planned, already underway, or are still playing out.⁸⁵ For instance, important case law under the EEZ Act about the interpretation of its principles is evolving,⁸⁶ as is jurisprudence concerning the place of environmental bottom lines in the RMA⁸⁷ and the nature of te Tiriti o Waitangi obligations under conservation legislation.⁸⁸ Work on national direction under the RMA continues to progress, including for biodiversity,⁸⁹ as does implementation of the broader non-statutory Biodiversity Strategy *te Mana o te Taiao*.⁹⁰ Processes to recognise customary marine title under the Marine and Coastal Area (Takutai Moana) Act 2011 (MACA Act) are underway.⁹¹ Significant legislative change is also progressing or on the horizon, with much of it relevant to marine management, including the following.

- An overhaul of the resource management system (repealing the RMA and enacting a new Natural and Built Environments Act (NBA), Strategic Planning Act and Climate Change Adaptation Act).⁹² We note that references to the RMA when discussing options for reform in this report are intended to encompass both that act and the NBA (which, despite many differences, would occupy much the same space as the RMA in a future system).
- Targeted but significant changes to the Fisheries Act, including to provide for the rollout of cameras on boats,⁹³ changes to the quota management system (QMS) (although retention of the basic tool), revisiting the National Plan of Action on Sharks, significant changes to rules around discarding and landing fish,⁹⁴ the ability to establish pre-set changes to catch limits and other sustainability measures in advance, and more responsive tools to set recreational fishing (eg bag) limits.⁹⁵
- A review of the Biosecurity Act (including marine biosecurity).
- Ongoing reform of “three waters” which is changing arrangements for the funding and delivery of drinking water, stormwater and wastewater services.
- A review into the structure of local government (including regional councils).
- A review of waste legislation – the Waste Minimisation Act and Litter Act.
- Changes to the Environmental Reporting Act.

- A review of the Wildlife Act and (over the longer-term) the wider conservation system.

In the main report we provide more detail on two key sets of reforms – those to the resource management system and the Fisheries Act. The report of the government’s independent panel on resource management reform (the Randerson Panel) is providing the basic blueprint for the former⁹⁶ and, with respect to the latter, Cabinet papers have suggested that “significant reform of the fisheries system is required”,⁹⁷ including the management of commercial fishing.⁹⁸ A Bill has been introduced to the House to progress many of the fisheries reforms. Of potentially even greater significance is the establishment of an Oceans and Marine Ministers Group⁹⁹ and an inter-agency Oceans Secretariat¹⁰⁰ to look into the prospect of deeper reform of the oceans management system as a whole, with reporting on this due in June 2022.¹⁰¹ Overall, the current government has an active reform agenda, which presents opportunities (and potentially constraints) for future reform.

Oceans reform will also take place in the context of an ongoing and evolving conversation about constitutional arrangements and Māori sovereignty under te Tiriti o Waitangi.¹⁰² In the main report we shine a

spotlight on *He Puapua*¹⁰³ and the report of Matike Mai Aotearoa – The Independent Working Group on Constitutional Transformation.¹⁰⁴ These have contributed to a debate about how the Māori-Crown relationship and society as a whole could work in the future.¹⁰⁵ Core to all this is whether sovereignty was ceded to the Crown, the nature of rights to manage resources, and whether the system should actively pursue specific things like co-governance, the transfer of powers, and parallel Māori institutions.

It is also important to locate the current system, and potential reforms, in their historical context. We summarise how our system of environmental management (and marine management within it) has evolved over time.¹⁰⁶ Other important contextual features may not be obvious from reading the statute book, including numerous existing rights and interests (including commercial fishing rights), unresolved te Tiriti claims, fraught relationships between sectoral interests, growing competition for resources, increasing environmental awareness amongst the public, a volatile international context, and numerous challenges lurking on the horizon (such as international conflict, population change, shifting demographics, technological advancements and social change).¹⁰⁷ A future system will need to be cognisant all of these things.

Raewyn Peart



Māori stone fish trap, Colville

4 Why do we have an oceans management system?

In Chapter 6 of the main report we consider why we have an oceans management system, and what it might be expected to do in the future. Answers to these questions are unlikely to be codified in an actual statute. But when considering fundamental reform, it is important to have a discussion up front about people's expectations. This will help avoid arguments later on about whether a particular intervention is overreaching what people may see as the system's proper boundaries (eg allegations of improper interference in markets or eroding people's rights).

Some may be of the view that the system should have a narrow scope, and only step in where something has "gone wrong".¹⁰⁸ Other than that, authorities should let people get on with their business. In economics language, intervention might be justified when there is a market failure, such as an "externality" that needs to be "internalised". A negative externality is created when a person does not bear the full cost of his or her actions (eg when a polluter does not pay). The task of public authorities might be to correct or "internalise" externalities by imposing (at least part of) their true cost on those who created them. This is, primarily, about preventing further harm to people (especially where those harmed have not agreed to it) or the environment.

Multiple externalities exist in the marine environment. Many impacts (such as the effects of contaminated stormwater on coastal habitats) are not priced or even recognised, let alone prevented (for example, oyster farms in the Bay of Islands were closed for eight years due to wastewater pollution).¹⁰⁹ A system that is narrowly focused on preventing harm could address these kinds of anomalies much better than at present. But would that be enough? Some may want public authorities to do more in the marine space. For instance, the current distribution of access to marine resources is, to some, unfair (eg who captures the most value in commercial fishing) and from that perspective may require some reallocation.¹¹⁰ The state could even have a strong role in supporting or mandating the development of particular beneficial activities (eg renewable energy or sustainable aquaculture). A narrow approach may tend towards short-term and reactive management – intervening only when problems become apparent – and fail to address cumulative impacts or make improvements.

Broader basic rationales are possible.¹¹¹ These might include interventions necessary to resolve disputes or ensure the provision of public goods and services (eg navigation aids, marine parks or even "ecological

infrastructure" like biogenic reefs or restored shellfish beds). At its broadest, some might support the system intervening where it is in the "public interest" to do so, reflecting the idea that authorities are active stewards or trustees of te moana, not just dispute resolvers or providers of specific services where the market has demonstrably failed. What the public interest means could evolve over time, potentially allowing authorities – whether through regulations, operational activities, subsidies or incentives – to play wide-ranging roles in the future. Yet a broad system also has risks, such as inviting politicians or bureaucrats to "pick winners" in the marine economy or impose unreasonably intrusive regulation for indeterminate reasons.

Whether a tikanga perspective supports a broad or narrow scope may depend on whether the future system is seen as a Western style constraint on the ability to exercise tikanga (favouring a narrow scope) or whether it incorporates tikanga norms and co-governance (favouring a broad scope).¹¹² Either way, a wide rationale for a future system cannot be based only on what the "public interest" demands. The interests of the public as a whole are not necessarily the interests of Māori safeguarded by te Tiriti, and a future system needs to be able to respond to both. For example, a system that allocates coastal space on a first in time basis, grants tourism concessions according to who can pay the most, or rolls out extensive no-take MPAs, may arguably fulfil the public interest but fall short of what tikanga and te Tiriti require.

There is no "right answer" to whether the system should be broad or narrow in its scope. There are dangers in regulatory overreach, but also risks the other way. That said, various features of the marine environment (eg its interconnected nature, fewer defined property boundaries, expectations for public access, its "natural" character, and an overlay of international law) may support a broader rationale for management – a more proactive public trust type function – than on land.¹¹³

Irrespective of the general rationale for the system, the reality is that many rights and interests already exist in the marine environment. These include private marine title, customary marine title and protected customary rights, te Tiriti settlement rights, commercial fishing quota, long-term resource consents, and mining permits. To what extent should a reformed system be allowed to interfere with these? We consider this question in Chapter 6.¹¹⁴

Here, a distinction might be drawn between expectations and legal rights. Some things (such as the ability to continue clear-felling of plantation forests, discharging wastewater into the sea, or bottom trawling) may really be expectations about the status quo continuing. Other interests, such as fisheries quota holdings and resource consents, may be legally recognised rights and have significant monetary value. One approach would be to allow new interventions that change people's expectations but do not infringe their rights (which might be property rights, te Tiriti settlement rights or human/environmental rights)¹¹⁵ or render them incapable of reasonable use. An alternative might be to allow the erosion of rights and interests but only if the *reason* is legitimate (eg to review consent conditions to address environmental harm but not to reallocate rights to "preferable" uses), or only if the *mechanism* for doing so is fair (eg financial incentives or compensation, but not a regulatory taking). It is particularly interesting to consider the extent to which reform might be allowed to erode the value of commercial fishing quota, and reasons why it might do so (or from another perspective, whether it should continue to confer such rights). Some have floated complete alternatives to the QMS, which we discuss

in Chapter 8 of the main report, but many other interventions (eg the establishment of MPAs or controls on trawling) have the potential to impact on the value of quota (including settlement quota).

Perhaps the most useful way of thinking about the boundaries of a future system is that property rights themselves lie outside the system, and should not be extinguished except in the most exceptional of circumstances (as on land). But they can be linked to responsibilities. After all, a property right is not a freedom from obligation to society; it is simply a bundle of legal rights defensible against others.

Considering the rationale for having a system, and how it relates to existing interests, helps identify what overreach looks like. However, it is equally useful to contemplate what specific roles a future system *should* be performing. We identify seven roles that could be considered core:¹¹⁶ (1) setting environmental limits; (2) making trade-offs above limits; (3) providing public goods and services; (4) pursuing positive outcomes more generally; (5) protecting the interests of mana whenua; (6) allocating resources and (7) resolving disputes.



Salmon farming, Marlborough Sounds

5 The normative foundations of a future system

Having considered its scope, in Chapter 7 of the main report we look at options for what the normative basis of a future system could be. At the highest level, this is about the worldviews or ethics that underpin it. We explore several broad approaches:¹¹⁷ te ao Māori, welfare economics, anthropocentrism and ecocentrism. They weave quite different narratives around how and why we value the oceans, and therefore could result in the use of different tools (eg rāhui, taxes, participatory planning or legal personhood) and institutional settings (eg councils, a Tikanga Commission or marine guardians) in the future.

5.1 Worldviews and ethics

Te ao Māori is one complex world view in which the moana plays an important role. Here, the relationship between humans and nature is perceived and experienced as one of whakapapa and whanaungatanga rather than separation and hierarchy, and where maintaining relationships with the atua and tūpuna is paramount. Failing to protect the mauri of the moana results in diminished mana (power, authority) of those responsible for its protection, meaning that environmental harm cannot be divorced from harm to the people or kaitiaki. Te ao Māori forms the normative foundation of tikanga – the right way of doing things – and its associated toolkit. In many places the current system does not reflect te ao Māori, and could potentially do so more in the future.

Anthropocentric worldviews stemming from Western tradition put *people* at the centre of marine management. Within that broad church, some economic approaches construe human interests relatively narrowly – the overall aim is said to be the maximisation of social welfare. Social welfare in this context is generally seen as the product of two things: efficiency and equity, where value tends to be measured primarily in dollar figures. Traditionally, this has attracted the label of environmental economics, which has developed from the neoclassical school of economics. It was a prominent way of seeing the world when much of the current system was established in the late 1980s.

While there is a seductive simplicity in measuring success by a single metric (social welfare), and a lot can be achieved through markets, strict economic approaches can also be criticised. Not all will agree that the oceans are a source of instrumentally valued resources to be managed for the benefit of people, that efficiency is more important than fairness, or that intrinsic value is beyond the realm of meaningful measurement. That said, “greener” approaches to economics have been developed in more recent times (such

as Kate Raworth’s “doughnut” model) where the morality of decisions is defined by a much broader range of considerations.¹¹⁸

Other versions of anthropocentrism focus on the importance of democracy, which recognises that right and wrong can change according to the shifting values of society, and that what we want as consumers is not necessarily who we are as citizens of a society. They generally stress the importance of participation, transparency, and rational discourse leading to decisions, features that are strongly reflected in frameworks like the RMA. While such approaches can accommodate much normative change (as has arguably occurred with the evolution of principles like te mana o te wai under the rubric of sustainable management), anthropocentrism is still about serving human interests and is measured by human values. To some, that may be an inappropriate basis for a future system.

Ecocentric approaches conceive nature as a separate entity, with interests or rights that should be separately recognised and defended. Humans are not seen as inherently superior beings, but rather as part of a complex web of natural relationships that need to be respected. Arguably, the current oceans management system contains elements of ecocentrism or biocentrism, in its recognition of animal rights and intrinsic value. We shine a spotlight on the interesting ethical assumptions underpinning our protection of whales and dolphins. Arguably, our perception of marine mammals is less an ecocentric ethic than a projection of our anthropocentric bias; the more a creature behaves or thinks like us, the more it seems to matter. As with other worldviews, ecocentrism can be criticised on a number of grounds (it must reflect human values because nature cannot speak, and has little to say about anthropocentric issues like allocation).

The foundations of the current oceans management system arguably rest on a tripartite marriage between economic rationalism, a strong sense of environmental activism, and a growing recognition of te Tiriti o Waitangi. Particularly in the marine space, there is an interesting mix of worldviews, where an instrumentalist view of fisheries exists alongside strong recognition of intrinsic value (eg for marine mammals) and a spiritual understanding of freshwater and its impact on estuaries (te mana o te wai). A future system is also unlikely to be founded upon any single worldview. The question is therefore, not so much about which ethic(s) to adopt or reject, but more about the direction in which the system should head and where synergies can be found.¹¹⁹

In particular, te ao Māori will need to stand alongside Western worldviews. But this poses challenges. Some may see anything less than full recognition of tikanga as fatally flawed, given that the Māori worldview is so interconnected, and may resist elements of it being “cherry-picked” or codified into an inflexible statutory definition. There is also a question around whether te ao Māori is so intimately connected to Māori as a people that recognition of that worldview would need to bring with it a recognition of Māori stewardship and decision-making. Some have criticised the inclusion of te ao Māori concepts in legislation as a way to “co-opt” values into the political process without corresponding Māori involvement.¹²⁰ The normative foundation of the system is therefore related to institutional design, as explored in Chapter 12.

Yet there may be potential synergies between te ao Māori and Western perspectives, which we explore in a spotlight in Chapter 7 (for example, in recognising that the environment is not comprised of resources, but rather a taonga to be treasured; our institutions are not regulators and policy makers, but rather kaitiaki and stewards; and our water and living creatures are not there just to be used and owned, but have their own mana, mauri and dignity).



Danish seining, Hauraki Gulf

5.2 Principles and objectives

One way to operationalise ethics is through the creation or recognition of legal and ethical principles. We explore a number of these in Chapter 7.¹²¹ They include ecosystem-based management, different versions of “sustainability” (eg sustainable management, sustainable development and maximum sustainable yield (MSY)), principles or concepts embedded in te ao Māori (such as whanaungatanga, manaakitanga, kaitiakitanga, mana, mauri, tapu/noa and utu), and various iterations of environmental and ecological justice (here, we shine a spotlight on the proposed Rangitāhua/Kermadec Ocean Sanctuary). Others include precaution, subsidiarity, efficiency, conservation, non-regression and the polluter-pays principle. There are also important normative concepts like property rights, security of investment, growth and wellbeing, although they are often not talked about as “principles”.

All of the above (and others) could be adopted, rejected or expressed in different terms depending on the statutory context.¹²² For example, choosing terms like sustainable development or te ora o te taiao in a new NBA might go further than sustainable management in embracing the “social dimension” of sustainability (how rights and responsibilities should be allocated). Recognising ecological justice (justice for the natural world) alongside environmental justice could transform how the law perceives environmental harm.

It would also be possible for a future system to go beyond general principles, instead embracing specific, direct and timebound objectives in primary or secondary legislation. Outside the climate change context, specific objectives tend not to be embedded in current statutory frameworks, which are instead defined by general principles like sustainability (and which largely leave objective setting to the political realm).

We offer a number of possibilities for objectives in Chapter 7,¹²³ by asking what the system might be seeking to achieve when discharging its seven (potential) core roles identified in Chapter 6. In particular, there are differing views as to whether it is possible to set a comprehensive range of “environmental limits” in the marine space and, if it is, what those limits should be aiming to achieve (preventing further degradation? Stopping ecological collapse? Protecting place-based values? Or safeguarding human health?)

The current system also has something of an identity crisis when it comes to making trade-offs *above* environmental limits, because it provides little guidance as to when the pros of particular activities should outweigh the cons. A future system could be clearer about what such trade-offs should

be seeking to achieve, and it could tackle some difficult strategic trade-offs in advance (eg between commercial and recreational fishing, and between urban development and coastal aquaculture).

Similarly, the system performs a crucial allocative role in the marine space – it determines who gets to use what, for how long and for what purpose. But in many contexts it does not do so in a proactive way or consider what use would be “best”. A future system may need to engage more directly with allocation as the marine space becomes more congested and contested (including determining whether rights should be reallocated, and who should be responsible for giving up rights in what measure to meet environmental bottom lines). The purpose of allocating resources might be efficiency, maximising return to the public purse, equity, or optimising environmental or social wellbeing. The impact of te Tiriti o Waitangi is also significant when it comes to allocation, but its full implications remain unresolved (eg when it comes to priority for regulatory permits to use resources, like consents and concessions).

More broadly there is the question of how legislation articulates its objectives with respect to te Tiriti o Waitangi in the future. That includes how te Tiriti clauses are expressed (eg to “give effect to” its principles, or be “consistent with” the document itself), and whether there are more specific goals for things like the transfer of powers, the development of mātauranga frameworks, or establishment of co-governance arrangements.

Whatever objectives the system adopts, it is important that they are made explicit at the highest levels of legislation, and are not just treated as the preserve of political wrangling. For example, the biodiversity crisis, like the climate crisis, requires a predictable and planned pathway out of danger, not just management of the status quo or the avoidance, remediation or mitigation of further harm. We need to know where we are going and by when. However, we need to be wary of treating particular solutions as legislated objectives in their own right, as this might create issues of path dependency. MPAs are of particular interest here. Should we legislate a target for their deployment (eg for their coverage and location)? Or do we set general biodiversity objectives (eg maximum mortality of protected species) and allow all sorts of other tools (eg bycatch controls) to be deployed to achieve them?

A future system could even contain objectives relating to particular sectors or activities, like aquaculture, desalination, tourism or carbon capture and storage (eg whether to expand them, phase them out or put them in particular places), reflecting a more interventionist approach to resource or economic planning in the marine environment than at the moment. Would it be appropriate, for instance, to have a statute with the express purpose of expanding offshore wind or tidal energy facilities, just as we have legislation promoting the mining of petroleum?¹²⁴ Such questions abound and remain unresolved.



Cockle harvesting, Kawakawa Bay

6 Reconsidering the toolkit

Having considered the normative underpinnings of a future system, in Chapters 7 to 9 of the main report we investigate what its toolkit might look like. A “tool” is, essentially, any form of public intervention that influences people’s behaviour when interacting with the oceans. In Chapter 8 we explore a range of regulatory and non-regulatory tools (noting that this is a summary and by no means an exhaustive account of options), while Chapter 9 considers spatial protections (MPAs) specifically. Chapter 10 then looks at how the toolkit as a whole might be made more strategic and integrated, including through the application of marine spatial planning.

6.1 Planning and consenting

The defining feature of regulatory tools is that they have teeth – they can result in sanctions on people who do not comply with them. Usually, they tell people what they cannot do. Regulatory tools will be necessary to impose environmental limits in a future system, and could be used to perform other roles like allocation and pursuing positive outcomes.

We begin by looking at how “framework” type regulatory tools – loosely described as planning and consenting – could be deployed differently.¹²⁵ Central to this is the RMA, which is set to be replaced with a new NBA with quite different features. This provides potential opportunities for reforming the marine toolkit. In particular, the National Planning Framework (an integrated set of regulatory and policy-based national direction) looks set to be the engine room of the Act. It could be used by central government to fill notable gaps under the RMA, including common regulatory standards for wastewater (and possibly stormwater) discharges to the marine environment; more specific and directive provisions on sedimentation of estuaries; national direction on offshore aquaculture; integrated policy outlining how the Te Tiriti relationship is intended to work offshore; and provisions on plastic and chemical pollution.

The National Planning Framework could be structured in a more considered fashion (eg a comprehensive range of domain-based policies to which all regulatory provisions, including new national level controls, must give effect) compared to the disparate array of National Policy Statements (NPSs) and NESs we have now. That could prevent potential misalignments between narrower sectoral regulations (eg the NES for Plantation Forestry) and the policy intent of broader tools like the NZCPS.

Existing national direction could be strengthened using a marine lens, for example to prohibit or phase out clear-felling of plantation forestry (or at

least to require integrated catchment approaches to stagger planting and harvesting), to extend the NPS for Freshwater Management to include estuaries as management units, and to link the concept of good urban design under a revised NPS on Urban Development to the benefits that can have for marine outcomes (eg onsite stormwater treatment solutions).

Marine policies (the NZCPS components of the Framework) could also get a makeover, by requiring them to have active and timebound implementation obligations (more akin to the provisions in the NPS for Freshwater Management). The Framework could be a home for a new “marine restoration strategy” just as the NPS on Urban Development requires the development of “future development strategies” for cities.

A clearer policy framework could also be required under the EEZ Act, both to protect the environment and provide greater certainty to business. Since 2017, the Minister has had the power to issue an EEZ policy statement, but has not done so, despite the Act setting out a range of matters to consider when determining whether such a policy statement is desirable or not. This means that consenting is largely undertaken in a policy vacuum other than the Act’s general purpose and principles. One wonders if applicants like Chatham Rock Phosphate and Trans-Tasman Resources would have gone to so much trouble and expense seeking consent to mine in the places they did, if there had been clearer policies outlining the places or contexts where the impacts of mining were deemed unacceptable (eg on the Chatham Rise or in benthic protection areas), and where mining was to be entertained or even encouraged.

A future system could also contemplate what “planning” means in the context of fisheries management. Fisheries plans can be created under section 11A of the Fisheries Act, and while the Minister must take them into account when making decisions, they are not required and their purpose remains murky. These could be made mandatory, their place/hierarchy in the system made clearer, and their content or at least their purpose prescribed. They could also be regional or local in their application (in effect becoming bioregional fisheries plans) as opposed to the general plans that have been prepared in the past, involve greater public input, and reflect the full range of values reflected in the purpose of the Fisheries Act. That could engage a broader constituency in fisheries management, and provide greater certainty as to how fisheries management will be effected in the public interest.

This also raises the question of whether a more RMA-style consenting framework should be applied to fisheries, alongside the property rights based QMS. At present, permits are not like resource consents, in that they are not linked to policies or objectives in a fisheries plan or any other instrument. Depending on location and method (and therefore environmental impact), fishing could be a permitted, controlled or discretionary activity. That might provide more nuanced control over methods like bottom trawling (eg tailored conditions to determine when and where trawling could take place) and the use of mitigation devices (eg conditions requiring practices that reduce seabird and marine mammal bycatch) than the use (or non-use) of broader sustainability measures. It would be conceptually similar to how mining is managed in the marine environment (requiring both environmental authorisations and “property rights”).¹²⁶ Other things like waste might also benefit from a consenting framework; the Waste Minimisation Act could require consent to produce particular types of product rather than just prohibiting them or providing for product stewardship schemes.

Raewyn Peart



Stormwater outlet, Titahi Bay

6.2 Environmental limits

In Chapter 8 we consider how a new tool called an “environmental limit” might be deployed in a future system.¹²⁷ Limits would be regulatory controls that strictly prohibit environmental damage beyond a certain defined point. The most obvious home for this tool would be in the proposed NBA, with an exposure draft of the Bill contemplating them already. There, limits are to be mandatory and must be set for a wide range of things in the National Planning Framework or regional level plans, including “coastal waters”, “estuaries” and the overlapping concept of “biodiversity, habitats and ecosystems”.¹²⁸

Those descriptors are high level, and the proposed Act could be strengthened by including a schedule that prescribes the specific elements that require biophysically focused limits (eg sediment, nutrients, wastewater, chemicals, habitat protection etc) as well as the human activities requiring limits to defend them (eg how and where forestry, agriculture and urban development can occur). A “limit” for marine biodiversity might even require spatial expression – specific areas being mapped and protected – meaning the NBA could be used as a mechanism to create a network of MPAs.

Key to the design of limits would be establishing an appropriate spatial scale (eg national, regional or location-specific limits, and whether these should allow harm in one place to be offset elsewhere); the bespoke purpose for which they are set (eg preventing ecosystem collapse, safeguarding human health or ensuring equitable access to a healthy resource base); whether they would be expressed as actual regulations (ie NESs) or include directive policies (ie NPSs); and what the legal consequences of being designated a “limit” would be (eg requiring a higher standard of proof to change a provision, or the extinguishment of existing land use rights under the RMA if a limit is infringed).

A range of regulatory tools under the Fisheries Act could also be re-characterised as environmental limits. There could be a mandatory, comprehensive set of national-level regulatory limits based on a clear purpose, rather than just a toolbox of sustainability measures to be deployed in a selective and discretionary manner where political considerations allow.

Some limits are already familiar in the fisheries context through the concept of catch limits (a total allowable catch (TAC) and total allowable commercial catch (TACC) for stocks). These could be reformed, for example, by formalising the Harvest Strategy Standard (currently used as a non-statutory guide when setting catch limits) in primary legislation.

We shine a spotlight on recent case law that highlights the importance of this kind of document.¹²⁹ In addition, a more ecosystem-based approach to stock assessment could be taken, a form of hard “cap” or licensing/reporting framework established for recreational fishing, and a more agile process for changing quota management area (QMA) boundaries provided for (or the creation of more granular, ecologically based management units within a QMA to address issues of local depletion). Spatial separation could even be created between commercial and recreational fishing (or other) activity by creating dedicated areas for each.

Tools under conservation legislation could also be strengthened so that they provide for more powerful species-based environmental limits. In particular, the process for creating population management plans could be made simpler and/or focused only on the biological needs of protected species (rather than balancing them against the impact on other users of the sea).

6.3 Legal “rights” in a future toolkit

In Chapter 8 we consider how different kinds of rights could be provided for (and allocated) in a future system.¹³⁰ These include property rights, rights to use resources, human rights and rights for nature.

Many private property rights exist in the marine environment, such as commercial fishing quota, private title over the seabed and Crown ownership of some minerals like oil and gas. But property is not as widespread as on land. Rights under the RMA and EEZ Act are deemed not to be property; there are no such rights in wild fish themselves (only rights to take a proportion of a TACC); and wild species are not “owned”. The marine space is a mix of private and public interests.

Relying entirely on property rights – the privatisation or “enclosure” of resources – to achieve public interest environmental outcomes has risks. Generally, people accept the need for some regulatory controls as well, since conferring a property right in something is no guarantee of responsible inter-generational stewardship. That is a reasonably settled proposition when it comes to most marine activities. However, there is still an underlying philosophical tension in the current system about the extent to which commercial private property rights under the QMS should be relied on to protect the marine environment versus the extent to which that should be the role of separate regulation like sustainability measures. This needs to be resolved within a future toolkit one way or another (eg by having a separate statutory purpose to guide the setting of mandatory sustainability measures, or clarifying who has the responsibility for creating fisheries plans).

More broadly, we have many options when it comes to the use of property rights in a future system. On the one hand (reflecting an economic worldview or faith in markets), more property rights could be created or existing ones expanded. For example, the QMS could be broadened to include recreational fishing charter boats,¹³¹ or even all recreational fishers (replacing tools like bag limits). Recreational fishing could even be included in the same market as commercial quota, so (at least in theory) fisheries would go to their highest value use. Consents under the RMA and EEZ Act could be made more akin to property rights, by allowing greater tradability and longer duration, especially for activities requiring a long-term presence for public good reasons or investment certainty (eg aquaculture, wind turbines affixed to the seabed, and desalination facilities). Tradeable property rights in aquaculture space could also be established. These could consist of space within designated aquaculture management areas (AMAs) or be rights that are not linked to any particular places (such as a right to produce a specified biomass) to enable aquaculture operations to easily move.¹³² Cap and trade markets for some forms of diffuse pollution (eg nutrients or potentially sediment) could be rolled out more proactively across relevant catchments and include estuaries.¹³³

Using property rights and markets more in the future might direct resources to their highest value use. But they could raise issues about equity of access (particularly to fish), Te Tiriti obligations, and public expectations that the marine environment is a “commons” or shared space.

The system could, alternatively, head in the opposite direction by questioning whether property rights in the marine space are a useful tool at all, or rather a relic of a past neoliberal age. This could see “ownership” of some things removed or softened (eg buyback of private title and a different “non-owned” status for Crown owned minerals), and some existing market based tools rolled back. For example, some have suggested altering or even replacing the property rights based QMS system. This could be undone through mass buyback of quota and implementing a permitting system. Alternatively, more targeted changes (eg more aggregation controls, creation of a public quota holder to operate within the market to pursue public interest outcomes, and earmarking some quota for particular types of commercial fishers) could be made to soften the social impacts of market forces and incentivise environmental improvements without upending the basic market architecture of the QMS.

There may be formidable practical hurdles in unravelling existing rights. This is because many property rights have significant value, and eroding them would understandably meet resistance and cause issues of natural

justice, even with the prospect of compensation. It is also because some of them have been used as a tool to implement Te Tiriti settlements. One way forward would be to more closely link existing (and new) property rights with other regulatory tools designed to safeguard the public interest, rather than remove rights themselves.

Even if they are not “property”, some form of rights to use resources will be necessary in a future system. This is to provide the level of certainty needed for the private and public sector to invest, and to enable important social, cultural and economic outcomes (eg food security from aquaculture, energy security from offshore renewables development, economic value through minerals development, and infrastructure like ports). A number of reforms are possible on this front. For instance, there could be national guidance about the duration of rights for different activities, to provide adequate commercial certainty while also avoiding locking in sub-optimal uses. Some activities require a longer (or potentially indefinite) period of time to provide adequate commercial certainty and viability, and arguably should not face the risk of full re-consenting when consent expires. One example is offshore wind energy, where operations may last many decades.

The system also needs to determine how rights are allocated in the first place. The “best” mechanisms for doing so will depend on what the system is trying to achieve when performing its allocative role (eg different forms of equity, efficiency, Te Tiriti obligations, or environmental improvement). The current system is not clear about which allocative mechanisms are best, which can be seen most notably in the context of aquaculture and coastal occupation rights. One option for allocating marine resources would be to use a first in time permitting system, whereby the first user to apply receives rights as long as the environmental impacts of an activity are acceptable. However, that can have a number of issues. More structured and competitive allocative mechanisms could be used (and made mandatory) in a future system, such as auctioning or attribute weighted tendering supported by national direction. An even more proactive allocation of rights across multiple sectors could be achieved through marine spatial planning (which we look at in Chapter 10). This could distribute rights between different uses based on public interest principles, and potentially stakeholder consensus, but might risk locking in uses or becoming a negotiated settlement between existing interests.

A future system will also need mechanisms by which rights can be reallocated over time. Market mechanisms make this reasonably straightforward (they can be bought and sold), but regulatory tools pose challenges. A formal forum could be established whereby new entrants

or sectors (eg aquaculture or carbon capture and storage) wishing to use the marine space in a way that conflicts with existing uses (eg fishing and mining) could have some legal pathway to negotiate joint access rather than being excluded. The Public Works Act or minerals-type access arrangements could be used to accommodate new publicly important uses of the marine environment. Rights in a future system could be made more spatially agile (eg allowing for the easy movement of offshore energy and aquaculture facilities). While rights to use resources are important, rights can also be used in other, more novel, ways. For example, a future system could enshrine human rights to a healthy marine environment (eg in the New Zealand Bill of Rights Act). While that would have challenges in practice, and may not be a silver bullet solution to addressing environmental issues, it is worth consideration.

Going even further, the system could recognise that the moana itself has legally enforceable rights and is a “person”. At one end of the scale, personhood could be conferred on the Ocean as a whole, potentially in the person of Tangaroa or Hinemoana. This would be akin to the constitutional-level protections for elements of nature seen in countries like Ecuador and Bolivia.

At the other end of the scale, rights and personhood could be conferred on more granular features of the marine environment. This could be particular populations or species (eg recognising the sentience and human-like characteristics of whales and dolphins, or the need to give agency to particularly vulnerable or threatened species that need it most). For example, a right to survive or thrive offers a different basis for setting limits for the mortality of threatened species than controls under a statute like the Fisheries Act (based on sustainable utilisation). Some advocates propose that dolphins should be granted their own non-human legal personhood status due to their high intelligence. The exact nature of the legal rights conferred on aspects of the moana would need to be determined and could pose practical challenges, but could (for example) include the right to make claims for personal injury, to own and defend property from others, or to have standing to appeal decisions of public authorities.

6.4 Other regulatory tools

New forms of regulatory tools could also be developed in a strengthened oceans management system.¹³⁴ Some might be created within the framing of the NBA. For example, we explore how water conservation orders could provide a template for other “order-based” tools that could be deployed in our seas (including providing the basis for legally binding rāhui). Regulatory tools under “non-marine” frameworks also warrant consideration. For one, how we address plastic waste is of enormous importance to our

oceans, but (although much more could be done through the Fisheries Act, RMA and EEZ Act) a lot of this must be achieved largely outside “marine” statutes through product stewardship schemes and prohibitions on manufacture under the Waste Minimisation Act. This could contain a duty for Ministers to deploy such tools to reach targets for the reduction or elimination of plastic dangerous to marine life. The performance of our wastewater and stormwater systems is also significant, meaning that a broad range of tools for funding and maintaining infrastructure, bylaws under the Local Government Act, and regulatory mechanisms like the Building Code have potential to make a difference. So too do vehicle emission standards and design requirements.

6.5 Non-regulatory and funding tools

Regulatory tools have a part to play on many fronts (eg defending environmental limits through standards and prohibitions, making trade-offs through value-based plans, and allocating resource rights by creating property rights or conferring permits). They are vital for recognising and protecting the interests of mana whenua (eg by safeguarding wāhi tapu and allowing for the exercise of customary rights). However, while regulatory tools can be used in innovative ways (for example, using offsetting or a biobanking framework to require improvements from consent conditions, establishing targeted sectoral accords or voluntary regulatory codes, or smoothing the consenting pathway for particularly desirable activities),¹³⁵ they have limitations when it comes to pursuing positive outcomes. To improve outcomes, the system may need to start speaking the language of incentives, not coercion.¹³⁶

Funding is a big part of this, to enable authorities to undertake direct action and perform their roles effectively in the marine space. We explore a number of options that might improve how marine management is funded. For instance, targeted rates could be broadened so that land uses causing adverse impacts on the moana could be charged (a polluter-pays revenue raising model). Central government could provide greater funding assistance to regional councils to support marine management, and take over specific functions such as marine habitat mapping. Councils can struggle to find the funds (and political drivers) to undertake large scale marine functions when faced with many land-based priorities.

Another potential funding tool available under the RMA (and presumably the NBA) would be resource rentals or charges. These recognise that use of non-private resources (which abound in the marine environment) should see some value returned to the public and/or mana whenua. They raise money that can be earmarked for agencies to spend on environmental improvements or other actions that may be less politically

expedient or risk seesawing over political cycles. At the moment, charges are not uniform or consistent, and could be made compulsory (or their use guided more) through amendment to legislation or national direction.

Resource rentals could also be reintroduced for commercial fishing. That could, conceivably, even be extended to recreational fishing if there were a requirement for fishers to be licensed and report their catch, although that may infringe strong cultural expectations around the right to fish. A sub-option might be to charge for some types of use (eg where occupation of coastal space is exclusive) but not others (eg where there is a public, rather than commercial, interest). This could effectively create a subsidy for “positive” activities (eg potentially some forms of shellfish or seaweed aquaculture), creating not just a funding mechanism, but also an economic incentive for environmental enhancement. Charging for the use of resources (and where any funds are directed) can raise significant issues around tino rangatiratanga (eg the prospect of iwi paying to use resources where ownership is contested, where rights have previously been taken, or where settlements over the use of resources have been made), and detailed design would need to involve mana whenua.

A future system could also explore the more intentional use of economic and behavioural incentives to drive positive outcomes (not just to raise funds). They might include “green” taxes, a more systematic use of subsidies, feebates, bonds, behavioural nudging, reform of the school curriculum and professional training programmes, strengthening of directors’ duties and corporate disclosure requirements, and government certification programmes.

6.6 Spatial protections: MPAs

In Chapter 9 we consider a specific type of tool: MPAs. MPAs can be defined in quite different ways. Spatial protection tools in the current system are, under existing government policy, regarded as MPAs if they meet a particular protection standard (even if their primary purpose is not the maintenance or restoration of biodiversity). As explained in the main report, a number of tools (under many different statutes) meet this definition, including marine reserves (known as a type-1 or high protection MPAs), benthic protection areas established under the Fisheries Act, and spatial exclusions possible under the RMA and Submarine Cables and Pipelines Protection Act.¹³⁷

The extent to which the current toolkit for MPAs is adequate depends on a number of things: what we are wanting to protect, for what purpose, how and by whom they are established, by when they must be achieved, and where they are located. Many have argued convincingly that the current

toolbox falls short in a number of ways. For example: there is a lack of a legal mechanism to create marine reserves or other highly protected areas beyond the boundaries of the coastal marine area; the purpose of establishing a marine reserve is very limited, focused on scientific research and not biodiversity; and MPAs can be insensitive to the worldview of *mana whenua* by not allowing cultural use and connection. Many sensitive ecosystems remain largely unprotected, such as numerous seamounts and biogenic habitats.

That said, in a future system existing tools could be used more effectively than they have been in the past. The RMA (and NBA) as well as the EEZ Act provide opportunities for the more proactive deployment of MPAs in the future at both national and regional levels.¹³⁸ In particular, the Court of Appeal's decision in *Motiti* signals a "new phase" in the relationship between councils and central government agencies in the marine space, and regional coastal plans (and policy statements) may organically become a more widely used mechanism for establishing MPAs in the

future now that their potential to protect biodiversity from all activities (including fishing) has been highlighted. The Minister, through national direction, could also conceivably use the RMA or NBA (and EEZ Act) to create spatial protections.

However, these existing mechanisms would have drawbacks. RMA style restrictions are not permanent, and can be undone through politically driven changes in national direction or changes to regional coastal plans (we do not rely on the RMA to create and manage national parks and reserves on land for such reasons). And while the Fisheries Act might be used to create more MPAs, it may also require quite a different purpose, principles and scope (and be linked to other legislation) if it were expected to do so in an effective and integrated way.¹³⁹ Alternatively, the Marine Reserves Act could be reimagined in a future system as an MPA Act.¹⁴⁰ Such an Act could go further than previous proposals (including by applying MPAs to the EEZ, broadening their purpose, and being able to trigger land use change under the RMA).



Whanganui A Hei (Cathedral Cove) marine reserve

Irrespective of the statutory framework used, choices will need to be made as to exactly what activities are to be restricted in MPAs (and what things are to be protected) as well as on a range of other design features.¹⁴¹ For example, a more comprehensive set of MPAs could include spatial protections for heritage, wāhi tapu areas, recreational sites and green infrastructure. The process for creation could be made more collaborative and/or independent, and provide for interim protection to be conferred (a feature now in Canadian legislation).¹⁴² In the future, a process for shifting some MPAs from one place to another (based on the values being protected rather than the space) could also be provided for, recognising that climate and environmental change may demand greater agility.

Any new approach to MPAs needs to be cognisant of te Tiriti obligations, and reconcile two core purposes: protecting biodiversity and safeguarding indigenous interests.¹⁴³ There can be tensions between highly protective MPAs (such as no-take reserves) and the exercise of customary rights, which is how Māori maintain connections with te moana. Indigenous protected areas in Australia provide an interesting model, which we explore in the main report. The process for creating MPAs also needs to be clear and predictable, to ensure issues of procedural and indigenous justice do not arise (as has been noticeable in the case of Rangitāhua/Kermadec Islands). Another interesting possibility is that customary marine title (which is recognised under MACA Act processes), might provide a mechanism for title holders themselves to effectively deploy MPAs by exercising rights under the RMA and other legislation with which the MACA Act is linked.¹⁴⁴

6.7 Towards a more strategic and integrated toolkit

Having considered a range of individual tools, in Chapter 10 we look at two higher-level questions about the toolkit as a whole. First, how might we make it more strategic, so it is focused on driving change for the future rather than just managing the present? And, secondly, how might we ensure that our vast array of tools are used in an integrated or coordinated way to ensure it all works well together?

A future system could be made more strategic in a number of ways.¹⁴⁵ At the highest level, it could recast the purposes and principles of legislation so that they drive decision-making towards achieving a different future, rather than maintaining or protecting things or seeking static outcomes (eg wellbeing or sustainability). Statutory purposes can be very powerful, as can be seen in the case of the RMA and the Climate Change Response Act. If this future is defined in a reasonably specific and measurable way, and expressly tied to the tools required to achieve it (eg green taxes,

biobanking, public funding, subsidies, behavioural incentives and so forth), that could change the entire orientation of the legislation from passive management to pursuit of change.

More granular features of the system might also assist. For instance, the progress of authorities towards attaining defined statutory objectives could be subject to a scorecard issued by an independent authority like an Oceans Commission (which we describe in Chapter 12). Mandatory statutory targets (including interim stepping stones) could be used more systemically across a future system to drive positive change. Indeed, these formed a core part of the Randerson Panel's recommendations for a new NBA, and could be replicated in other legislation such as an MPA Act (for the rollout of protected areas). Targets could address the gradual transfer of powers to mana whenua under tools like section 33 of the RMA; the phasing out of all single use plastics that impact on marine life; or the rebuilding of populations of indigenous species (as can be seen in Canadian legislation).¹⁴⁶ Mandatory targets are designed to achieve greater accountability for basic outcomes that should be beyond the realm of political argument.

Existing tools could also be made more strategic by planning ahead for how they might change over time. Spatial tools (eg MPAs and AMAs) might, for example, move to more appropriate pre-planned locations based on changing environmental impacts or climate change. Triggers (eg changing threat status) could also require immediate and corrective action under conservation legislation, such as the release of funding or imposition of regulatory restrictions.

A future focused system also needs to be constantly scanning ahead to identify new challenges and opportunities. Arguably the current system does not do this well. For example, there is a high degree of risk for an applicant wishing to undertake novel activities that the law is ill-equipped to regulate, such as deep sea mining (where there is next to no policy guidance under the EEZ Act), offshore fish farming (which lacks a meaningful policy framework even in the coastal marine area) or marine carbon capture and storage (where there are deeper questions about which legal frameworks even apply). To address this, a “futures scanning” role could be given to an independent Oceans Commission (see Chapter 12) or added to the statutory functions of relevant government departments. In short, there needs to be stronger anticipatory governance – “a real, nationally-focused effort at looking ahead”.¹⁴⁷ This could resemble the Welsh approach, which we explore in Chapter 10.

If tools are to be used in a more strategic way to drive change, then they need to be well coordinated with each other. The current system is highly fragmented across legislation, institutions and tools, and could benefit from a more integrated approach. We explore a number of options on this front.¹⁴⁸ One measure could be to broaden the responsibilities of institutions; if one agency has responsibilities for deploying (or engaging with) multiple tools, then they could be used in a more integrated way. For example, Fisheries New Zealand might be given a legal mandate to engage more with land use planning and consenting under the RMA to the extent that activities would have impacts on fish habitats.

Another way forward could be stronger legislative cross-referencing.¹⁴⁹ This could be used to make boundaries between statutes clearer. For example, cross-references could be made between MPA legislation and the Fisheries Act (specifying principles for when a reduction in value in fishing rights due to protected areas is justified or warrants compensation); between the Fisheries Act and the MACA Act (linking the use of tools like taiāpure and mātaītai to the exercise of protected customary rights and customary marine title); and between emissions reduction plans under the Climate Change Response Act and a range of other statutes (eg for MPAs, fishing and mining, which could address big picture issues like the emissions implications of bottom trawling, the protection of benthic habitats as carbon sinks, and the long-term impacts of oil and gas exploration). Cross-referencing could also see the timing of different instruments aligned (eg the development and review of spatially focused fisheries plans at the same time as the marine and catchment components of regional plans and relevant parts of an EEZ policy statement).

Tools created under one framework could even be used to connect to decision-making under others.¹⁵⁰ For example, the relevant parts of the NZCPS could be deemed to be an EEZ policy statement, or (if expanded in scope) be required to be given effect to through plans under the Fisheries Act. The NZCPS could even outline a national strategy for the deployment of MPAs. Greater normative alignment could also potentially be achieved (eg by inserting common principles like ecosystem-based management, environmental limits and te oranga o te taiao/moana across legislation).

The creation of cross-cutting strategies could be another mechanism through which tools could be coordinated across multiple statutory frameworks.¹⁵¹ However, most strategies in the current system lack legal influence or accountability around progress, thereby undermining their effectiveness (being non-statutory and reliant on political will to implement). In the future, mandatory strategic instruments could have

formal legislative standing (eg an MPA Strategy under an MPA Act, or an Aquaculture Strategy under the NBA), including in fiscal and regulatory decision-making under other frameworks. We look at the Californian experience with the strategic deployment of MPAs (where significant financial investment and active management, enforcement and education have been crucial to progress) and recent calls for a more strategic approach to research and information.¹⁵²

Targeted strategies (eg for a sector, a tool or a species) may have benefits, but it is worth going further and asking whether we need an integrated strategy that focuses on entire marine areas and everything within them (often called marine spatial planning).¹⁵³ This provides a forum for collaborative conversations to happen that are place-based and not just focused on one interest, or toolkit, at a time.

There is currently no legislative framing for this in Aotearoa New Zealand, and in Chapter 10 we consider how it might be deployed in a future system. We look at lessons learnt from our first non-statutory marine spatial planning process (Sea Change Tai Timu Tai Pari); the benefits of marine spatial planning; what such plans might contain; potential triggers for a marine spatial planning process to occur; and the importance of connecting with plans on land (eg to determine where activities in catchments like forestry, agriculture and urban development should and should not proceed). International experience, including in the United Kingdom, highlights the importance of marine spatial planning having clear and direct influence on decision-making and a clear implementation pathway. We also consider whether the framework for spatial planning under the government's proposed Strategic Planning Act should include marine spatial planning, or whether it should be separate (and needs a legislative foundation).

We conclude Chapter 10 by looking more broadly at a national Oceans Policy.¹⁵⁴ This is essentially a mechanism to provide a coherent approach for oceans management across the country's entire oceans realm, setting out a vision for the oceans and a set of high-level principles. Alongside a strategy for rolling out regional-level spatial plans, it could outline strategic actions to reduce pressures on the marine area that are not "spatial", such as measures to reduce production of plastics or the release of contaminants (eg from vehicles or stormwater) to the environment. It could, with sufficient framing, be a form of "constitution" for the oceans, including setting out how te Tiriti o Waitangi is to be provided for across the whole system. We shine spotlights on Australia's Oceans Policy and Canada's Oceans Strategy, which provide interesting lessons.

7 Legislative design

While a more strategic and integrated toolkit is important, arguably many issues with the system stem from (or are exacerbated by) the manner in which we have designed its legislation – where lines are drawn, what falls between the cracks, and how statutes interact with each other. Excessive fragmentation can cause confusion, incoherence, inaccessibility and poorer environmental outcomes. Ironically, overlapping legislative jurisdictions can create gaps in management (as can be seen in the case of the Bryde’s whale), while spatial boundaries can create perverse incentives (eg to locate activities beyond the 12 nautical mile limit of the coastal marine area).

In a first principles rethink, there is an opportunity to improve integration by tackling problems directly, rather than just “papering over the cracks”



Mussel harvesting, Pelorus Sound

with tools like marine spatial planning. That could involve refining the boundaries between existing statutes, combining them, or splitting them along completely different lines. In Chapter 11, we look at some of the ways in which this could be done, after considering why legislative design matters¹⁵⁵ and what common design principles might look like.¹⁵⁶

The concept of “statutory lenses” can help structure a conversation about why (and how) we might arrange statutes differently in the future. As explained in the main report,¹⁵⁷ a lens reflects our main concern when we slice and dice legislative boundaries. There are many lenses that could be looked through. Legislation can, for example, be:

- outcome-based (statutes are split up because each is designed to achieve a particular type of outcome, such as the RMA or Biosecurity Act);
- spatial (statutes are split up based on the different locations they apply to, such as the Hauraki Gulf Marine Park Act);
- sectoral (different statutes apply to particular ways in which people use a resource (eg fishing under the Fisheries Act, mining under the Crown Minerals Act, or shipping under the Maritime Transport Act);
- domain-based (concerned with the resource or subject being managed, like marine wildlife under the Marine Mammals Protection Act or Wildlife Act);
- tool-based (an individual statute provides a home for one or more interventions, like the emissions trading scheme in the Climate Change Response Act or marine reserves in the Marine Reserves Act);
- institutional or administrative (each statute covers some or all the statutory responsibilities of one or more particular institutions, like Maritime New Zealand, or establishes the cross-cutting machinery of the system, such as under the Environmental Reporting Act).

As seen in Figure 4, there is no single lens through which current marine legislative frameworks have been split up. We have outcome-based frameworks like the RMA, sectoral ones like the Fisheries Act, administrative ones like the Environmental Reporting Act, tool-based ones like the Marine Reserves Act, domain-based ones like the MACA Act, and space-based ones like bespoke legislation for the Hauraki Gulf.

Outcome	Domain	Sector	Space	Institutional and administrative	Tool
RMA	Climate Change Response Act	Fisheries Act	Some te Tiriti settlement legislation	Environmental Protection Authority Act	Marine Reserves Act
EEZ Act	Marine Mammals Protection Act	Fisheries Settlement Acts	Kaikōura (Te Tai o Marokura) Marine Management Act	Local Government Act	
Biosecurity Act	Wildlife Act	Crown Minerals Act	Sugar Loaf Islands Marine Protected Area Act	Local Government (Auckland Council) Act	
Conservation Act	MACA Act	Continental Shelf Act	Fiordland (Te Moana o Atawhenua) Marine Management Act	Environment Act	
Hazardous Substances and New Organisms Act	Heritage New Zealand Pouhere Taonga Act	Maritime Transport Act	Hauraki Gulf Marine Park Act	Environmental Reporting Act	
Waste Minimisation Act		Submarine Cables and Pipeline Protection Act		Territorial Sea, Contiguous Zone and Exclusive Economic Zone Act	
Litter Act		Building Act			

Figure 4: The different lenses through which existing marine legislative boundaries have been created. Some statutes having an influence on te moana span multiple systems, including public policy areas like education, property and health and safety.

As shown in Figure 5, the idea of *layering* legislative lenses provides a conceptual starting point for considering future options. Instead of thinking about millions of possible statutory configurations on a piecemeal basis, we can instead ponder how different lenses might be laid down in sequence, or how the relationships *between* and *within* lenses could be approached differently. We further explain numerous options, and the potential benefits and downsides of each, in the main report.¹⁵⁸ Some possibilities for reform are summarised below.



Dusky dolphin, Kaikōura

Raewyn Peart

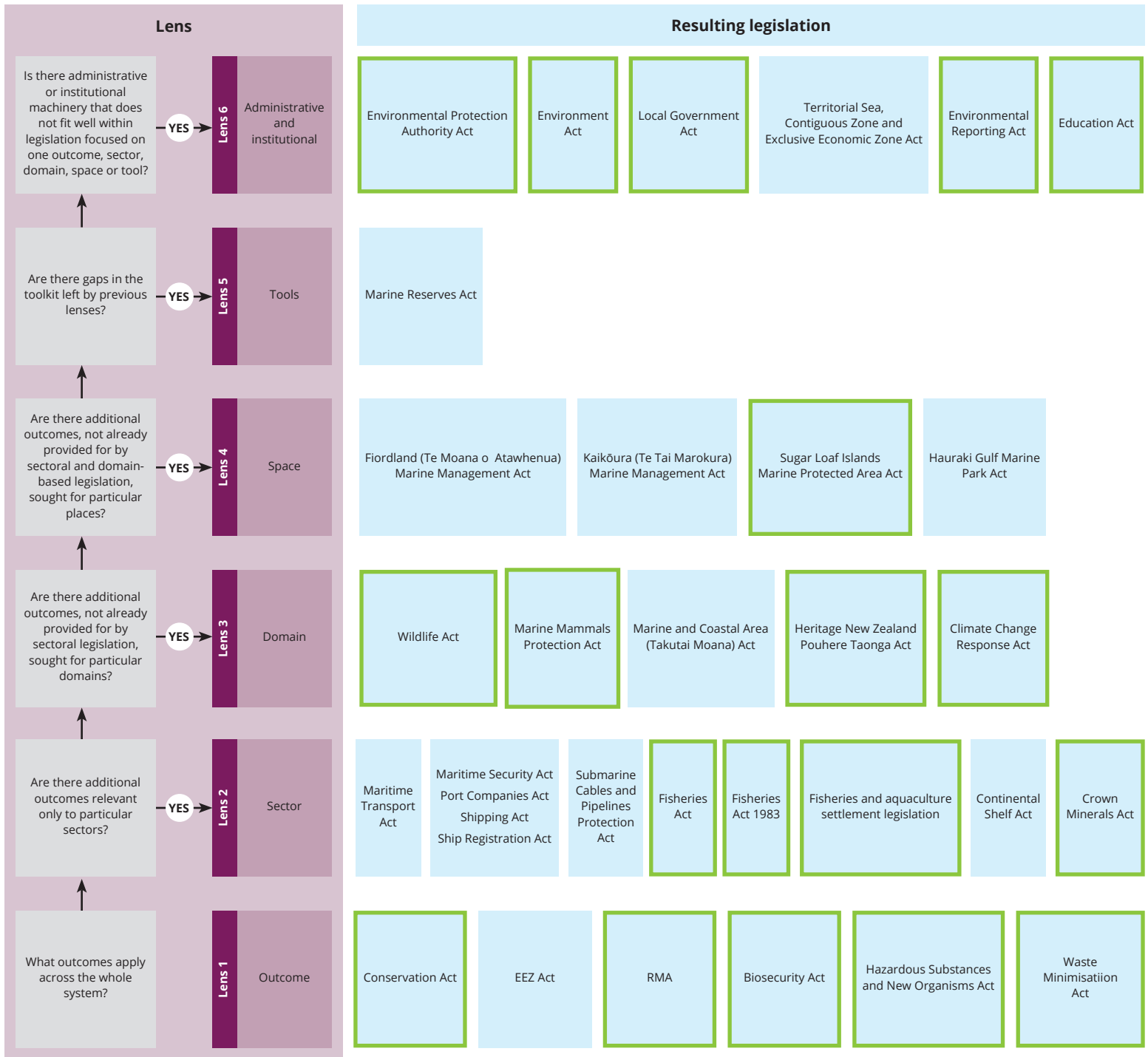


Figure 5: Layers of core legislation in the current oceans management system. Most of the system's content is found in outcome-based statutes, with gaps being filled by statutes created through other lenses (eg ones focusing on particular sectors, spaces or institutions). This figure is not to suggest that one statute is "dominant" or "subservient" to another on a different layer. Instead, it is about how the content of the system has been distributed between different types of statutes. Green framing indicates where statutes also apply to land and/or freshwater environments.

If we were to redefine the boundaries *between* different lenses:

- The boundary between the Maritime Transport Act (sectoral) and EEZ Act (outcomes-based) could be refined, so that the latter includes management of discharges from ships. “Environmental” jurisdiction under the Maritime Transport Act for things like oil spills could also be moved to the RMA and EEZ Act.
- The boundary between the RMA/EEZ Act (outcomes-based) and Fisheries Act (sectoral) could be clarified by clearly shifting responsibility for the incidental impacts of fishing activity on the marine environment to the former. The Fisheries Act could be left as a means to allocate and manage fish stocks themselves.
- A sectoral Fisheries Act could remain as a home for the QMS and other allocative mechanisms such as the TACC, with all sustainability measures (including TAC) being set under an expanded NBA (at a central or regional level).
- A future system could clarify the relationship between the Fisheries Act and “domain” based legislation like the Wildlife Act and Marine Mammals Protection Act. This could be done by making it clearer that tools under the latter statutes are to be used in an integrated way, to achieve domain-based outcomes like the protection of threatened species, rather than relying on tools deployed under sectoral frameworks.
- The management of some fish stocks, such as those that have “collapsed” or breached a limit, could switch from the Fisheries Act to a revamped Wildlife Act.

If we were to *expand the scope* of some lenses:

- The kinds of outcome sought by statutes like the RMA, EEZ Act and Conservation Act could be expanded to include more specific and proactive objectives for the marine environment, including those relating to a sustainable blue economy, the defence of strict environmental limits, and the allocation of resources (or the distribution of value from their use).
- More place-based legislation could be enacted to protect particular areas (eg to implement the Sea Change Tai Timu Tai Pari recommendations in the Hauraki Gulf).

- More tool-based statutes could be enacted to create new types of MPAs (either an MPA Act or multiple different bespoke statutes).
- New sectoral statutes could be created for tourism, offshore energy or open ocean aquaculture.

If we were to reshuffle boundaries *within* lenses:

- Some sectoral statutes could be integrated, such as by merging the Continental Shelf Act with the Crown Minerals Act or the Fisheries Act 1996 with the largely redundant Fisheries Act 1983.
- Maritime transport legislation could be integrated into a single Maritime Transport Act. Greater integration between terrestrial and maritime transport legislation might also be possible.
- The EEZ Act could be integrated within an expanded RMA/NBA, so that the latter encompassed all the country's marine jurisdiction.
- The boundary between the RMA and EEZ Act could be redrawn at a line that arguably makes more ecological sense. This could make the RMA a statute concerned with the land-sea interface (eg out to around three nautical miles) and the EEZ Act about the deeper sea environment.
- The RMA and EEZ Act could be split into an “Environmental Limits Act” and another act concerned with making trade-offs and allocative decisions through value-based plans.
- The Wildlife Act and the Marine Mammals Protection Act could be combined.

Statutes could even be integrated *across* different lenses, meaning:

- A more comprehensive NBA could encompass not only the EEZ Act but also the entirety of the Fisheries Act.
- Marine conservation statutes, along with ones that include land and new MPA legislation, could be integrated into a new Protected Areas and Species Act that spans land and sea.

We also consider how we might add an *additional* layer of umbrella legislation (like a Marine Spatial Planning Act) to provide for this integrative

tool, which could act as legislative glue without overhauling other legislation (which would continue to exist separately).

A more radical option would be not to split up our marine legislation at all. This could result in a single Oceans Act, which could see much more extensive integration and the dismantling of existing acts. There are different options for what that could look like. At the more modest end of the scale, parts of the RMA (eg management of the coastal marine area beyond, say, a three nautical mile limit) could be combined with the EEZ Act, and nothing else. That “Oceans Act” would essentially be a beefed up EEZ Act that applied closer to shore (boundaries could be drawn differently, including by giving an Oceans Act jurisdiction over the coastal marine area on the seaward side of mean high water springs).

Alternatively, an Oceans Act could integrate sectoral and domain-based marine legislation, bringing together the RMA (to the extent it applies to the coastal marine area), the EEZ Act, and one or more of the Fisheries Act, the Marine Reserves Act, the Marine Mammals Protection Act, the

Maritime Transport Act, and the marine provisions of the Wildlife Act (concerning seabirds and marine species). It could even subsume the MACA Act, more tightly integrating that legislation with others that it is intended to influence (eg the RMA and conservation legislation). Extensive integration has been the path followed in the United Kingdom’s Marine and Coastal Access Act. In Chapter 11 we outline what a highly integrated Oceans Act might do, and some of its potential benefits and downsides.

It is not immediately clear which division of the statute book makes most sense in the marine space. Some might legitimately say that, if something is not broken, it does not need to be fixed. Others might contend that, at the very least, there is unnecessary complexity that should be tidied up given the opportunity. Still others might contend that the boundary between primary and secondary legislation (ie tools like regulations and plans) is the more important thing to address.¹⁵⁹ For example, might the Fisheries Act be made more agile and less complex if some of the mechanics of the QMS were to be located in regulations rather than primary legislation?

Raewyn Peart



Picton

8 Institutional design

If legislation is the backbone of the oceans management system, institutions are the muscles that make it work. The two things are closely related (one can be an alternative to, or complement, the other). In Chapter 12 we look at how institutional settings could be changed in the future. We do so by exploring a number of characteristics that institutions might have,¹⁶⁰ noting that each of these exist on a spectrum (see Figure 6). From a system design

perspective, it is important to consider not just how to design or change individual institutions (eg the characteristics of the Environmental Protection Authority (EPA) or councils), but also how different entities are intended to interact with each other, and the place they hold in the broader system (eg by splitting/integrating different subject-matter responsibilities, or separating advisory, watchdog and decision-making roles).



Raewyn Peart

Wellington waterfront

1. The degree of an institution's independence

An institution can be independent of political influence (such as the Environment Court) or politically accountable (such as Ministers and regional councils).



2. The degree of an institution's centralisation

An institution can be central in that it functions across the whole country (such as a government department) or locally (such as a district council). Both central and local institutions can be accountable or independent.



3. The extent of an institution's subject focus

An institution can focus narrowly on specific resources or domains or have a wide focus (such as the Ministry for the Environment).



4. The extent of an institution's geographical focus

An institution can focus narrowly on a specific geographical area (such as the Fiordland Marine Guardians) or on a broad area (such as the Department of Conservation).



5. The nature of an institution's task

An institution can have different kinds of tasks. Among other things, it can create policy, impose regulation, or enforce decisions.



6. The formality of an institution's creation

Some institutions can be formally created (such as by statute), while others are created in a more informal way (such as by Cabinet decision).



7. The nature of an institution's mandate

An institution can have a protective mandate (such as the Department of Conservation), or it can have an exploitative mandate and seek to secure the benefits of resource use (such as the Ministry for Primary Industries). The word "exploitative" is not intended to have any negative connotations. It simply means driving resource uses that are considered to be in the public interest.



8. The extent of an institution's power

An institution can have binding powers (such as a Minister who promulgates an NPS) or a recommendatory power (such as the Parliamentary Commissioner for the Environment inquiring into an environmental issue).



Figure 6: Characteristics of institutions

Exploring these characteristics gives rise to a number of intriguing options for reform. All will have pros and cons. As a prompt for conversation, we include some below, and encourage readers to delve into the main report for more discussion.

Independence/accountability¹⁶¹	The role of the courts could be expanded in a future oceans management system to include appellate authority over the merits of some fisheries decisions and some national direction under the RMA/NBA.
	Some regulation making powers could be shifted to more independent or arm's length institutions, including some sustainability measures for fisheries and a new class of environmental limits under the RMA/NBA.
	Independent hearings panels with stronger legal influence over final decisions on planning and regulatory instruments could be rolled out in a future system. This has been proposed for combined plans under the NBA but could be extended to planning processes under other marine legislation, like the Fisheries Act and conservation statutes.
	More independent advisory institutions could be established in a future system, whether through a place-based guardians model or domain based entities. A Tikanga Commission could be established to provide advice into all statutory processes (including integrative ones like marine spatial planning).
	An independent entity focused on supporting marine research could be established, either as a marine division of an Environmental Research Council or as an independent body (Marine Research Council). It could include a branch focused on strengthening mātauranga Māori.
	An independent Oceans Commission could be established to fulfil a similar place in the system as the Climate Change Commission. Alternatively, both could be combined into a broader Futures Commission (potentially an expanded Parliamentary Commissioner for the Environment) to cover the whole environment, integrating oversight over land and sea.
	If the moana (or parts of it) were to be given its own legal rights and personhood, careful thought would be needed on how institutional arrangements around it would work. There are many potential options (including those building on the Te Urewera and the Whanganui River models, or the development of guardians or an Oceans Ombudsman) but such institutions would need to be ultimately accountable to the environment itself.

Centralisation¹⁶²	Central government could be tasked with a more proactive role in marine management under the RMA, including the mandatory production of regulatory provisions giving effect to the NZCPS and the spatial identification of areas for protection.
	Regional councils could continue to have jurisdiction over truly coastal matters, out to a three-nautical-mile boundary or similar. Alternatively, councils could have jurisdiction only to mean high water springs. In either case, other parts of the marine area could be managed by a well-resourced Oceans Agency, the potential features of which we describe further in Chapter 12. This could, for example, have semi-autonomous regional branches.
	Alternatively, a strengthened EPA could take on this role. Māori input into the Agency's decision-making could be supported through a strengthened Ngā Kaihautū Tikanga Taiao model.
	The seaward boundary of regional council jurisdiction could be redrawn, based on the approximate boundaries of ecological systems, including potentially expanding it <i>beyond</i> the current 12 nautical miles.
	Regional councils could be given more jurisdiction over fishing activity for biodiversity purposes, embracing the powers clarified by the Court of Appeal in <i>Motiti</i> (and taking it even further).
	An oceans co-governance entity between Māori and the Crown could be established at a national level and/or regional co-governance partnership bodies could be established at a regional level.
	Three waters services (including wastewater and stormwater which can have significant impacts on the marine environment) could continue to be managed by territorial authorities and council controlled organisations, or there could be greater centralisation via co-governed national entities or state owned enterprises.
	If we were to give rights to nature, the "moana" as a person could be centralised (a single person) or have ecologically defined regions (different parts of the same body) that can speak for their own interests.

Place-based institutional arrangements could be rolled out more broadly across the moana, reflecting existing guardian and advocacy roles performed in Kaikōura, Fiordland and the Hauraki Gulf. For example, every new MPA or network of MPAs could have its own guardian.

Inter-regional boundaries could be shifted so that they better reflect the ecological characteristics of the sea (eg a single regional local government unit covering the whole of the Hauraki Gulf or Kaipara Harbour). Alternatively, a separate layer of maritime councils could be established with jurisdiction over biophysically defined parts of the moana.

In the future, institutions could focus on different geographical spaces: some for land, some for sea. There would be benefits in having an integrated Oceans Agency focused on the latter, but also downsides given the complexity of the land-sea interface. (An institutional overlay, in the form of a Coastal Commission, could be established to integrate management of land and the sea if a sharp division was created between land and sea).

The Oceans Secretariat could be given formal statutory basis and its membership extended to representatives from regional government and mana whenua.

The “policy shop” advisory functions of ministries could be separated from their regulatory tasks (eg Ministers could be responsible for setting policy under the RMA/NBA, such as through the NZCPS or marine part of a national planning framework but leave regulation-making to an expanded EPA or Oceans Agency).

Regulatory tasks could be more clearly separated from enforcement tasks (eg by moving the enforcement roles currently undertaken by regional councils and/or Fisheries New Zealand to a strengthened EPA. For councils, that might formalise best practice by removing enforcement decisions from political interference and concentrating expertise in compliance matters).

Policy and regulatory tasks could be more clearly separated from advocacy (eg shifting the Department of Conservation’s legal advocacy role to an Environmental Defender’s Office with a dedicated branch for the marine environment).

Some funding responsibilities could be separated from other tasks (eg a dedicated national-level agency for funding marine environmental research could be established, to complement (and coordinate) the more focused funding roles of various ministries and departments).

Existing institutions could be given stronger or more specific mandates than at present. These could be more directive (ie to take particular forms of action), to reflect a more outcomes (rather than management) oriented system.

Mana whenua could be given statutory mandates when exercising significant public powers in a future system.

Institutions or groups responsible for marine spatial planning could be given formal legal status in the future, to ensure they endure to oversee implementation. So too could some government departments (eg for fisheries management).

Māori institutions, such as iwi authorities, a Tikanga Commission, and a more nuanced layering of other entities, could be formalised through statute in a future system.



Koheru, Cavalli Islands

Checks and balances on institutional power are particularly important when it comes to system design.¹⁶⁵ Sometimes that might be achieved by sharing power (eg between councils and Fisheries New Zealand for the biodiversity impacts of fishing), or by creating a hierarchy of power (eg allowing appeals from consent authority decisions to the Environment Court). It can also be achieved by surrounding those in a position of power

with watchdogs (eg an independent Oceans Commission, Environmental Defender's Office, or strong civil society groups).

One of the most significant questions about institutional power is how it is shared between public authorities and mana whenua. As explored further in Chapter 12, this could lead to many different institutional forms, including operational changes to or support for existing institutions (eg in how the Department of Conservation *gives effect to* te Tiriti principles); structural changes (eg Māori wards for regional councils); the creation of new advisory or watchdog institutions to assess compliance with te Tiriti (eg transforming more targeted entities like the

EEZ Act's Māori Advisory Committee into a Tikanga Commission with roles across all marine legislation); co-governance arrangements (eg building on models for the Waikato River or Te Urewera); or transfer of powers. Deeper options for constitutional reform – to which institutions are central – could include foundational changes to the executive, legislative and judicial branches of government (eg a new Upper House of Parliament) where mana whenua institutions exist in parallel to Western-style ones. Those go well beyond the oceans management system and are part of a broader constitutional conversation.



Waharoa, Rangitoto wharf

9 Drawing the threads together: Four potential starting points for system reform

Some of the options we have explored in this project could be pursued in isolation. For instance, significant benefits could come from creating a framework for marine spatial planning. A number of more surgical changes might also work well together, and be pursued as smaller packages. However, it is also worth thinking about what might result if we were to tackle the whole oceans management system at once (even if that would be a long-term, staggered effort).

In Chapter 13 we therefore offer four quite different possible starting points or approaches for systemic reform. These are designed to test how

far (and in what broad directions) people might be willing to go, and are not intended as comprehensive models. In short, these different approaches can be described variously as: (1) How we might build upon what we have now; (2) What deeper structural change might look like; (3) What features might be part of a system that recognises tino rangatiratanga; and (4) What a system based on legal personhood for nature might entail. All will have pros and cons, and our intention is not to support or reject any one of them. They are food for thought, not recommendations. We summarise the key features (and pros and cons) of each below.

9.1 Approach 1: Building on what we have

The basic starting premise of approach 1 is that the current system has much unrealised potential.¹⁶⁶ This implies that it is possible to achieve better outcomes without the upheavals associated with legislative, institutional or normative overhaul. The overall objective of the approach would ultimately be the same as the others: to address the problems and challenges identified in Chapters 2 and 3 and to build a system that reflects modern values. But it would seek to do so with a relative minimum of fuss, and without fundamentally changing norms or objectives, other than those already contemplated by other reforms.

The basic ideas of sustainability, integrated management, species conservation, the principles of te Tiriti o Waitangi, environmental enhancement and efficiency would remain. Approach 1 would aim to reform the system so it actually lived up to those ideals (which it does not do at present), including through applying ecosystem-based management, developing a more strategic outlook focused on improvement to environmental indicators, and making any trade-offs clearer. It would recognise, at least conceptually, the need to have clear environmental limits or bottom lines beyond which trade-offs should not occur. And it would seek to improve integration within the system by linking together tools used under fragmented statutory frameworks (including through the use of a National Ocean Strategy and regional-level marine spatial planning). Fairness would be a stronger objective than currently, particularly with respect to how the value from using marine resources is distributed. Overall, the reformed system would remain recognisable to those familiar with the current system, which would be part of the point. Its key features are summarised in Figures 7 and 8, followed by a brief assessment of its potential pros and cons (in Figure 9).

Raewyn Peart



Red-billed gulls, Otago Peninsula

Theme	Key features of approach 1
Overall description	Refining the existing system and “maxing out” its toolkit without structural overhaul beyond what is currently envisaged through other reform processes. More change would happen to the toolkit than in other approaches, with the caveat that planned reforms already envisage significant structural change that would be reflected in the approach.
Legislative design	<p>The RMA would be replaced by the NBA, Strategic Planning Act and Climate Change Adaptation Act, as envisaged by the government’s resource management reforms.</p> <p>Most existing statutes would remain separate, such as the Fisheries Act, Wildlife Act (reimagined as a Protected and Threatened Species Act), Conservation Act and Marine Mammals Protection Act. The Biosecurity Act, Maritime Transport Act and MACA Act would also remain separate.</p> <p>The Marine Reserves Act would be replaced by a new more fit for purpose MPA Act, which would incorporate the protected areas aspects of bespoke legislation (eg for Fiordland, the Sugar Loaf Islands, Kaikōura and anticipated legislation for the Hauraki Gulf).</p> <p>The Continental Shelf Act would be largely merged into the Crown Minerals Act.</p> <p>The EEZ Act would be merged into the RMA/NBA.</p>
Norms (ethics, principles, objectives)	<p>Norms are largely the same as in the current system (and planned reforms).</p> <p>Te ora ngā o te taiao would be embraced as a common normative thread across multiple statutory frameworks, but would be defined with reference to specifically marine-focused principles (building on those in the NZCPS). Differences in purposes could still remain for existing statutes, reflecting that they would be there for quite different reasons.</p> <p>The norms underpinning particular tools like MPAs would be modernised and made sensitive to te Tiriti and expectations of mana whenua.</p> <p>Principles for allocation would be made clearer, including as to when compensation would be payable for lost rights or expectations.</p>
Institutional design	<p>There would be no overhaul of institutional settings, but there would be some significant changes around the edges.</p> <p>Existing government departments would remain in their current form, but the Oceans Secretariat (a collective grouping of a number of separate agencies) would be formalised in legislation. A Minister for Oceans would also be formalised in legislation.</p> <p>Central government would take on a more proactive role in preparation of marine plans under the RMA/NBA.</p> <p>The role of the Environment Court would expand, including to have merits decision-making powers over some fisheries decisions (eg some sustainability measures).</p> <p>A National Fisheries Advisory Council, already possible under the Fisheries Act, would be made mandatory.</p> <p>Regional councils would remain with their current boundaries (pending the outcome of the forthcoming local government review), and would have clearer responsibilities and duties to protect the marine environment (including with respect to the impacts of fishing).</p> <p>An independent Tikanga Commission would be established to provide advice rooted in tikanga and mātauranga Māori alongside the Parliamentary Commissioner for the Environment.</p> <p>A public interest quota holder would be established to operate within the QMS to buy quota and lease annual catch entitlement based on public interest factors.</p> <p>The role of the EPA would be expanded to take on both marine consenting functions in the EEZ and regulation making functions under the RMA/NBA where needed to give effect to national direction.</p> <p>Guardians would be established for regional networks of MPAs.</p>

Theme	Key features of approach 1
The toolkit	<p>Approach 1 would embrace (and tailor) reforms to the toolkit planned through existing reform processes, including:</p> <ul style="list-style-type: none"> • Use of mandatory environmental limits under the NBA for particular domains (including marine elements). • Incorporation of revamped marine policies under the National Planning Framework, with gaps (eg for estuaries) filled. • Mandatory minimum standards for wastewater and stormwater discharges into the marine environment. • Mandatory targets for restoration of degraded marine habitats. • Regional spatial strategies with additional legal influence over marine frameworks beyond the NBA (including fishing and conservation). • Combined regional plans with planning committees including mana whenua and key marine agencies . • Regionally based fisheries plans. • Rules around discards and landings. • Rollout of cameras on boats. • More mixed species stock assessments. <p>A national level, statutory Oceans Strategy would be created under the auspices of the Strategic Planning Act.</p> <p>Marine spatial plans would be created under the Strategic Planning Act on a regional basis, using a different process and along different regional boundaries, to regional spatial strategies on land. They would have legal influence over other legal frameworks (the NBA, fishing and conservation legislation).</p> <p>A modernised and expanded NZCPS, included in the National Planning Framework, would have greater legal influence across other frameworks (including conservation and fishing).</p> <p>Under modernised conservation legislation, all indigenous marine species would be protected by default. Management measures would be triggered automatically by a worsening threat status.</p> <p>Conservation management plans and strategies would be developed in partnership with Māori and would be structured more like RMA-style plans. Population management plans would be recast as species recovery plans.</p> <p>Provision would be made for binding rāhui under the Fisheries Act.</p> <p>There would be a stronger ability for Fisheries New Zealand and the Department of Conservation to influence the content of NBA plans on land where there was impact on the marine environment.</p> <p>The role of the Harvest Strategy Standard in setting catch limits would be formalised under the Fisheries Act.</p> <p>A number of sustainability measures would be made mandatory under the Fisheries Act.</p> <p>There would be some public buyback of commercial quota, which could be retired or leased out to achieve broader social and environmental outcomes.</p> <p>Resource rentals would be rolled out on a mandatory basis.</p>

Figure 7: Key building blocks of approach 1

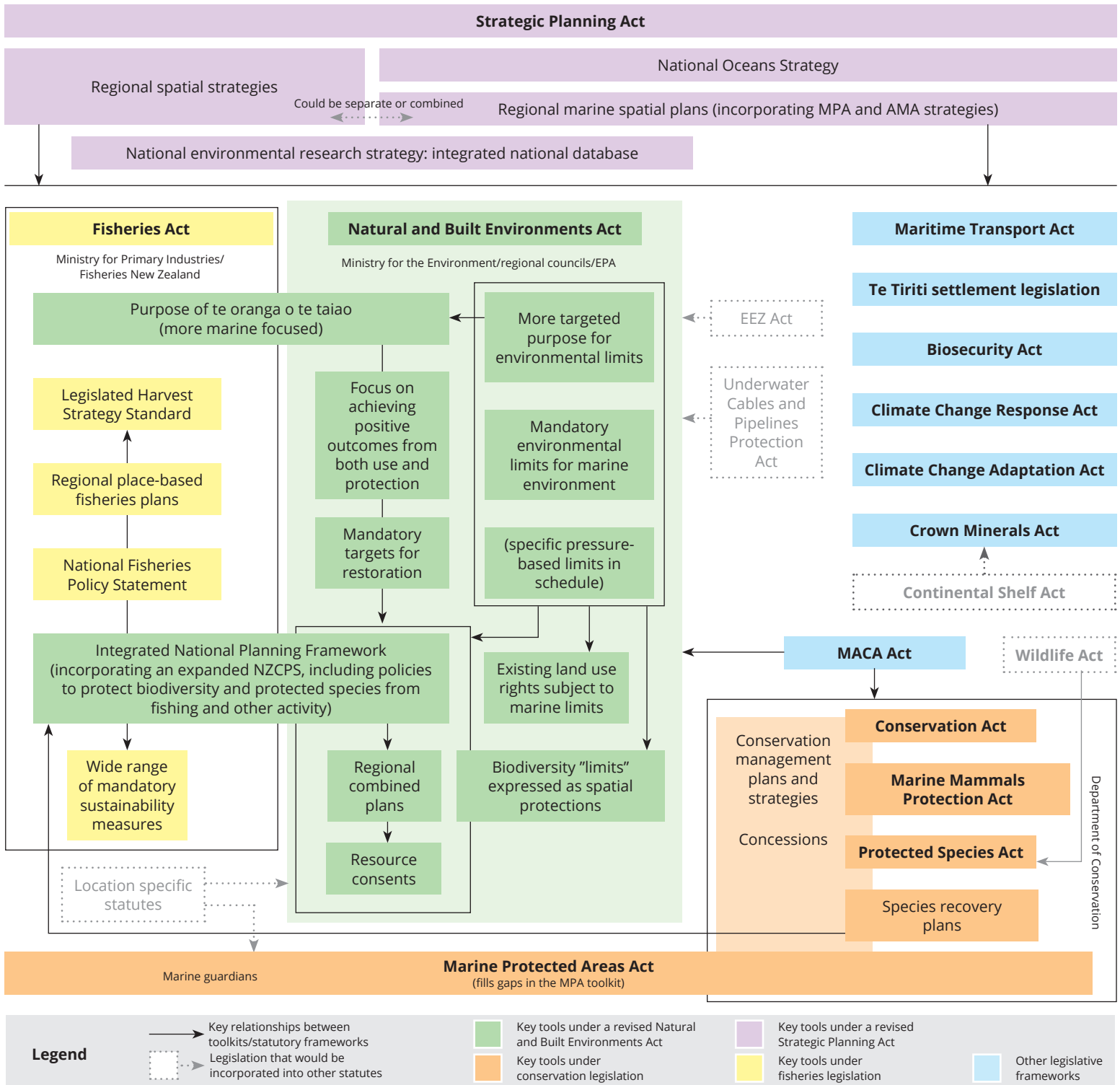


Figure 8: Key structural features of approach 1

Some potential benefits of approach 1	Some potential downsides of approach 1
Changes could be staggered and targeted, without the need for overhaul of entire legislative frameworks.	It arguably does not tackle the root cause of systemic problems, notably the fragmentation across multiple legislative frameworks.
The approach piggybacks on, and makes more targeted, many of the changes already envisaged for the resource management system.	There is no fundamental normative reimagining of the system, such as one based on te ao Māori or ecocentrism.
A focus on strong environmental limits, a national oceans strategy and regional marine spatial planning would provide more certainty for users (including to prevent the impacts of landbased activities on marine sectors like aquaculture and fishing) as well as establish clear bottom lines to prevent cumulative harm.	Additional complexity is added to the system, by creating a new layer of marine spatial planning and a National Oceans Policy.
The system would become more future-focused through the use of mandatory targets and consideration of where beneficial/synergistic uses of the marine environment can go (eg offshore wind energy, offshore aquaculture).	Specific environmental limits might be hard to set and measure in an information-poor environment, and would raise difficult issues about how to “claw back” existing rights where limits have been overshoot.
The retention of a separate Fisheries Act would avoid the difficulties associated with merging it with a quite different management framework.	Regional councils may struggle to discharge significantly larger responsibilities to map and protect the coastal marine environment.
Boundaries and gaps between legislation would be clarified and filled, with some rationalisation of statutes.	Some uncertainty may result from expanding the role of the EPA in regulation-making vis-a-vis regional councils.
New MPA legislation would allow a more culturally sensitive approach to spatial protections in the toolkit.	It is unclear whether formalising the Oceans Secretariat through legislation would make much difference in practice.
Connections between different statutes and their tools would be strengthened in a way that would minimise cost and disruption, and retain key case law.	Some may object to the use of compensation or financial assistance to transition away from environmentally harmful practices.
Property rights would not be extinguished, avoiding the practical and ethical difficulties of doing so.	Some may argue that the approach does not have a clear enough normative vision or objective for the future.

Figure 9: Brief assessment of approach 1

9.2 Approach 2: Redesigning the structural features of the system

Whereas approach 1 is about building on what we already have, approach 2 is transformational in a structural sense.¹⁶⁷ In particular, it would be highly integrative in legislative design terms, and get to the heart of the many issues caused by the fragmentation and complexity of oceans management across multiple statutes, processes and institutions. It would be a different and more far reaching way to address the problems and challenges described in Chapters 2 and 3. Again, we invite readers to consider whether this framework would provide a better springboard to do so than others.

Its centrepiece would be a new “Oceans Act”, which would subsume a number of existing acts (or the marine parts of them). It would also involve some fundamental shifts in terms of the toolbox and institutional design. Essentially, it begs the question: if we were to go further than the more targeted changes in approach 1, what could that look like? While the focus here is on deeper structural change, a number of the changes to the toolkit envisaged in approach 1 could also potentially be deployed. The key features of approach 2 are summarised in Figures 10 and 11, followed by a brief assessment of its potential pros and cons (in Figure 12).

Theme	Key features of approach 2
Overall description	Deeper structural change. The main focus of the approach would be on changing statutory boundaries, reinventing institutions, and undertaking deeper changes to the toolkit.
Legislative design	<p>A single Oceans Act would be created, which would apply on the seaward side of mean high water springs.</p> <p>Most existing statutes with marine components (or relevant parts of them) would be integrated into an Oceans Act, including the RMA, Fisheries Act, Biosecurity Act, Maritime Transport Act, Wildlife Act, Marine Mammals Protection Act, EEZ Act, Marine Reserves Act (albeit heavily amended and modernised), Undersea Cables and Pipelines Protection Act, Territorial Sea, Contiguous Zone and Exclusive Economic Zone Act, and bespoke marine legislation (eg for Fiordland, the Sugar Loaf Islands, Kaikōura and the Hauraki Gulf). The “terrestrial” components of legislation (eg the RMA, Biosecurity Act and Wildlife Act) would remain separate.</p> <p>The MACA Act and te Tiriti settlement legislation would remain separate.</p> <p>Relevant parts of the Continental Shelf Act would be integrated into the Crown Minerals Act and the Oceans Act.</p>
Norms (ethics, principles, objectives)	<p>Norms would build upon what we already have, but would be made more consistent across frameworks (eg for fishing and resource management). There would be no large scale normative shift, and worldviews would remain pluralistic.</p> <p>A more modern purpose statement would underpin a new Oceans Act, tailored to the marine context (there are various options). There could be multiple purposes existing in a hierarchy (building on the concept of te mana o te wai).</p> <p>There would be a single/consistent expression of te Tiriti or its principles in the Oceans Act.</p> <p>There would be a consistent set of allocative principles across all marine resources.</p>
Institutional design	<p>There would be significant institutional change.</p> <p>Regional councils would no longer have jurisdiction over the coastal marine area. Instead, jurisdiction would be conferred on semi-autonomous regional branches of a single Oceans Agency (a Crown entity). Regional councils would retain jurisdiction over catchments and coastal land. The Oceans Agency would audit regional plans to ensure their consistency with oceans policy.</p> <p>An Oceans Agency would be co-governed, via appointments of members to its governance authority by mana whenua. Some regional representatives would be appointed by regional councils, safeguarding aspects of local democracy and making links between land and sea.</p>

Theme	Key features of approach 2
Institutional design <i>(continued)</i>	An Oceans Agency would have a strong statutory mandate focused on the health or oranga/manā of the moana. It would receive hypothecated funding to discharge its core functions, removing reliance on politically determined budgeting decisions.
	An Oceans Agency would have consenting functions in the coastal marine area and EEZ, as well as regulation making functions to give effect to national policy, and operational functions currently held by the Department of Conservation, Maritime New Zealand and Fisheries New Zealand. There would be joint jurisdiction with the Department of Conservation for matters that crossed the land-sea boundary.
	A single Ministry for Oceans would be established to give policy advice to a formally established Minister for Oceans. The Ministry would integrate existing relevant advisory functions of Fisheries New Zealand, Ministry for the Environment, Department of Conservation, Ministry for Primary Industries and Ministry of Transport.
	An independent Oceans Commission would be established (including a Tikanga Commission or Tikanga Commissioner) and would play a similar structured advisory and watchdog role as the Climate Change Commission.
	An Environmental Defender's Office would be created and granted standing and resourcing to undertake public interest litigation for various marine matters under the Oceans Act.
The toolkit	Many of the more granular tools in approach 1 could be deployed in approach 2.
	Mandatory marine spatial planning would be provided for in an Oceans Act and exist at the top of the planning hierarchy. Greater clarity would be provided as to where different forms of development could go and where they would be encouraged for public interest (eg desalination, offshore wind).
	Clear statutory links would be made between marine spatial plans and other mandatory tools such as a national planning framework for oceans (ie national direction), place-based fisheries plans and regional marine plans.
	Regional marine plans would integrate many forms of planning, including under RMA/NBA, fisheries, shipping, biosecurity and conservation.
	The concept of mandatory environmental limits would be expanded, from being confined to the NBA, to applying to all things managed under the Oceans Act including fishing and conservation.
	A common set of allocative principles would be included in the Oceans Act, providing more certainty as to why rights/value should be given to some over others. Attribute weighted tendering would be more proactively provided for within spatial allocations provided for in a marine spatial plan.
	Mandatory legislated targets would be provided for, including for the rollout of MPAs over defined timeframes.
	Regional plans on land would be strictly subject to the Oceans Act (ensuring that marine limits would not be infringed by land-based pressures).
	Over time, the QMS <i>might</i> be replaced (or partially replaced) by a permit-based system under the Oceans Act, treating commercial fishing as an activity more like others under the NBA. That could occur through the gradual and willing buyback of some quota.
	Recreational fishers would be required to be licensed, with fees used to fund the activities of an Oceans Agency and Oceans Commission. Resource rentals would be charged on a principled and predictable basis across all forms of marine resource use, with a proportion returned to mana whenua for use as kaitiaki.

Figure 10: Key building blocks of approach 2

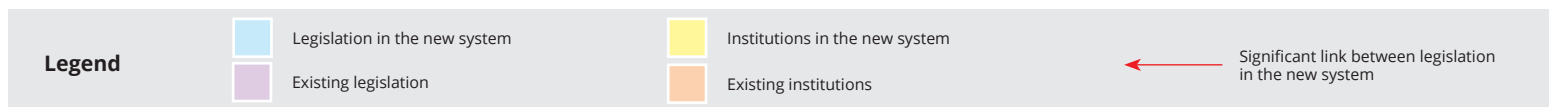
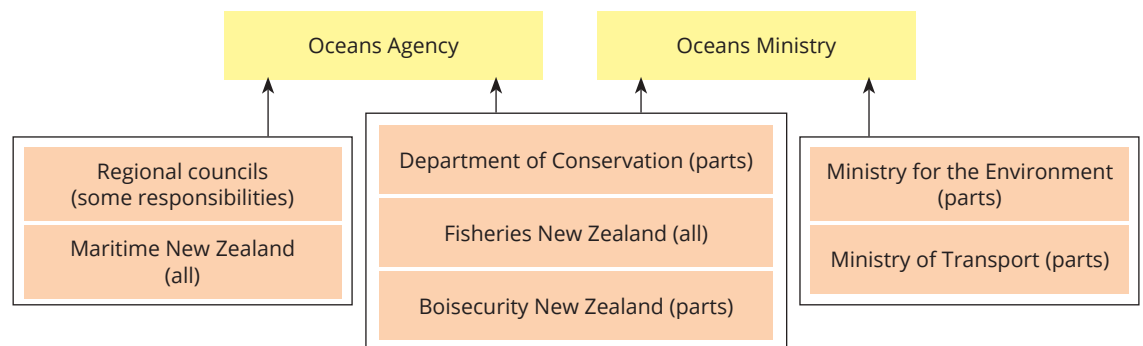
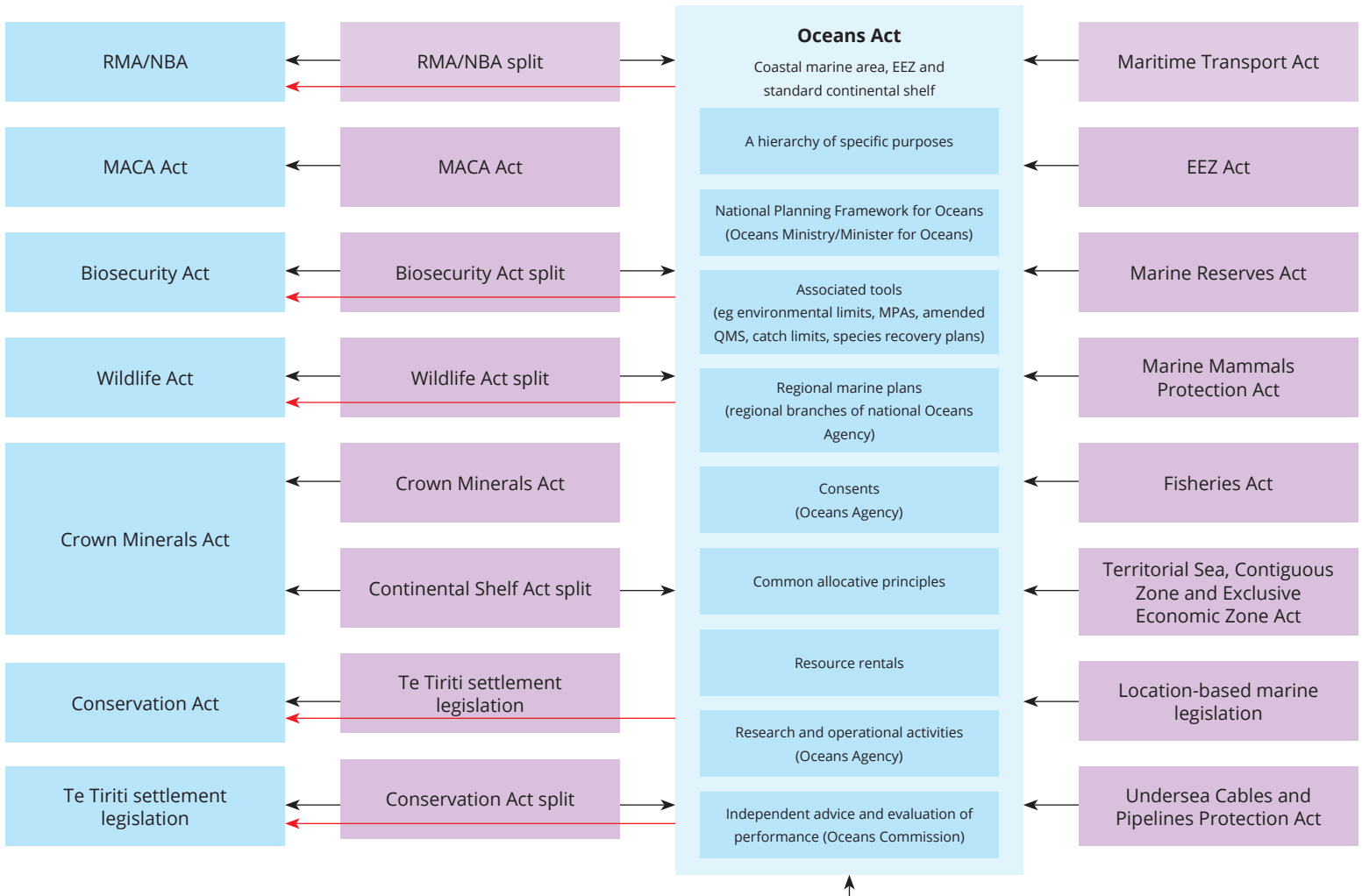


Figure 11: Key structural features of approach 2

Some potential benefits of approach 2	Some potential downsides of approach 2
Significant statutory integration could serve to better implement ecosystem-based management for the marine space, busting management silos characterising the current system.	Legislative integration in one domain has risks of fragmentation across others, especially where connections are needed across the land-sea divide (as for mobile species like shorebirds and mobile pollutants such as sediment).
An Oceans Act could provide a statutory home for a National Oceans Strategy and regional spatial planning.	It may create unnecessary disruptive statutory change when integrated tools could be equally housed under the proposed Strategic Planning Act.
Clearer links between tools would be possible under a single statutory framework.	The purpose of an integrated Oceans Act might not be targeted enough, as it will need to encompass many different facets of management.
A dedicated marine management focus could be achieved by locating most marine functions within an Oceans Agency, potentially making it more effective.	Additional complexity could be created by having marine management regions that look different to regions on land, and which may not correspond to fisheries management areas.
An Oceans Agency could have dedicated funding arrangements, making it less susceptible to the funding swings of departmental budgetary cycles.	An arm's length Oceans Agency with regulatory powers may lack the accountability to communities that regional councils/Ministers have and undermine local level working partnerships with mana whenua.
Some may see benefits in having regulatory powers exercised by an arm's length entity like an Oceans Agency, rather than government departments or councils, to avoid politicisation of decisions.	As in the context of climate change, it may be sufficient to have an independent Commission to oversee government, provide an alternative stream of advice, and hold it to account rather than also transferring regulatory powers to an arm's length Oceans Agency.
A single policy and regulatory framework could better integrate protection of the marine environment, the deployment of MPAs, the pursuit of sustainable development and the regulation of fishing.	An Oceans Agency with a broad mandate under an Oceans Act risks losing the conservation focus of bodies like the Department of Conservation.
There would be a clearer sense of how and why various powers would be held/shared with mana whenua across the moana.	It is unclear the extent to which wholesale integration of "operational" institutions (eg Maritime New Zealand) would provide efficiencies or better outcomes.
A permit-based approach to commercial fishing (wholly or partly replacing the QMS) might have benefits in more tightly tying rights to environmental responsibilities, allowing judicial oversight of key decisions and in changing incentives (eg resistance to regulation) that arguably arise from a rights-based system. It could also, arguably, allow for a fairer redistribution of some of the value that comes from marine resources.	Tampering with the QMS may prove extremely difficult in practice, risks undermining Te Tiriti settlements and the benefits of a property rights approach (eg efficiency and security of tenure), and would require significant compensation for loss of rights as well as raising issues of natural justice. It is not necessarily clear that a wholesale replacement of the QMS by a permitting system would provide better environmental or social outcomes than a refined QMS.
Stronger marine-focused institutions (eg an Oceans Ministry, Agency and Commission) could have a more powerful voice when it comes to addressing land-based activities having marine impacts, and this would enable a more holistic and ecosystem based view of the moana.	A single Oceans Ministry risks having a broad and vague mandate and losing the more focused and independent streams of advice from different departments concerned with (for example) fisheries, species conservation, transport and resource management.

Some potential benefits of approach 2	Some potential downsides of approach 2
Separating policy from regulatory functions might depoliticise difficult decision-making (in that it can be easier to create general policy than translate it into actual regulatory restrictions). ¹⁶⁸	There are potential risks in separating policy-making functions (in an Oceans Ministry) from regulatory functions (in an Oceans Agency), as close links are often needed to ensure the latter achieves the former.
Combining regulatory (and enforcement) and operational functions within an Oceans Agency could create efficiencies (eg knowledge, capability, resources such as boats and monitoring equipment).	There are potential risks in combining regulatory and operational functions in a single arm's length entity (an Oceans Agency), such as the potential problem of the fox guarding the henhouse. ¹⁶⁹
Separating marine management (in an Oceans Agency) and catchment management (regional councils) could depoliticise some of the decisions currently made on land that have impacts on the marine environment.	Separating marine management from catchment management responsibilities could risk an adversarial rather than cooperative relationship between an Oceans Agency and regional councils, and undermine management of the land-sea divide (especially estuaries).
The arbitrary geographical line between the coastal marine area and EEZ would be removed.	Deep structural change would be expensive and disruptive more generally.

Figure 12: Brief assessment of approach 2

9.3 Approach 3: Enlarging the rangatiratanga sphere

Approach 3 is premised on the idea that the oceans management system has two core spheres – kāwanatanga (governorship by the Crown) and rangatiratanga (Māori sovereignty). These can overlap (giving rise to a third sphere) as shown in Figure 13, in that:

[the] Rangatiratanga sphere reflects Māori governance over people and places. The Kāwanatanga sphere represents Crown governance. There is a large “joint sphere”, in which Māori and the Crown share governance over issues of mutual concern.

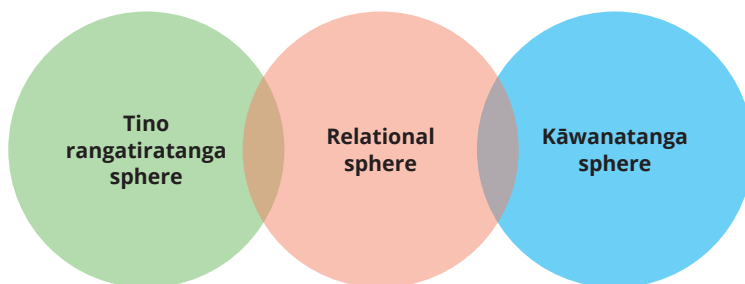


Figure 13: The relationship between different spheres of power/governance

Three key things would define approach 3.¹⁷⁰ First, the rangatiratanga sphere would grow relative to the kāwanatanga sphere. Secondly, there

would be more overlap between the spheres in the “relational” component. Thirdly, the kāwanatanga sphere would remain open to interactions with the relational and rangatiratanga spheres. This is where some elements of the existing system may need to accommodate more than one source of authority. For convenience, one might call this a “tino rangatiratanga” approach. Ultimately, what an enlarged sphere for rangatiratanga looks like must be determined by Māori. We therefore offer some initial thoughts about potential features of this system rather than seeking to describe its mechanics in detail (and many of the more detailed features described in approach 1 and elsewhere in the report may also be compatible with this approach). Figure 14 summarises some of its key features.



Waka, Karaka Bay

Raewyn Peart

Theme	Key features of approach 3
Overall description	Embracing tino rangatiratanga. The key shifts here would be with respect to institutional design (eg co-governance) and norms (reflecting te ao Māori), but additional reforms suggested in other approaches (eg to the toolkit and legislative boundaries) would also be possible and potentially consistent as long as a rangatiratanga lens was put over them.
Legislative design	<p>Legislative redesign is not the key driver of approach 3, and many options (including from other approaches, such as an Oceans Act) could be possible.</p> <p>A constitutionally significant piece of overarching legislation would be created to embed the partnership between the Crown and mana whenua in law, including in the marine context.</p> <p>Legislative silos would be broken down, including by removing the arbitrary jurisdictional boundary between the RMA and EEZ Act and between fragmented pieces of conservation legislation.</p> <p>The MACA Act and te Tiriti settlement legislation would remain separate.</p>
Norms (ethics, principles, objectives)	<p>A key normative driver in approach 3 is more parity between Māori and Crown governance spheres. At its core would be a recognition of tino rangatiratanga rather than the principles of te Tiriti per se, but that would not exclude other norms (eg sustainability, resilience, ecocentrism, efficiency).</p> <p>At least parts of the system (those in the tino rangatiratanga and relational spheres) would be guided primarily by substantive norms at the heart of te ao Māori, such as whānaungatanga, wairuatanga, mana, tapu, noa, koha, utu, manaakitanga, aroha, mauri, hau and kaitiakitanga.</p> <p>A significant normative element would be the implementation of United Nations Declaration on the Rights of Indigenous Peoples, which would go beyond the principles of te Tiriti o Waitangi.</p> <p>Ultimately the approach is less about what the normative substance of the system is (its principles) and more about by whom and how that gets decided.</p>
Institutional design	<p>Various specific institutional changes could be possible (including those in approaches 1 and 2), as long as they reflected a strong approach to co-governance.</p> <p>Deep constitutional level changes could be made (which would go well beyond the marine context), such as separate or hybrid parliamentary structures (eg an Upper House to scrutinise bills).</p> <p>Separate Māori institutions could be created as another layer of regulation-making or consenting authorities operating through a tikanga lens (eg transforming advisory bodies like the Māori Advisory Committee under the EEZ Act into a body that assesses compliance of applications or decisions with te Tiriti).</p> <p>Co-governance arrangements could be rolled out across multiple existing institutions (including Crown entities), reflecting the model of the Waikato River Authority. Operational entities could be recast as co-management entities (eg through decisions about staffing of institutions like local marine guardians who could be responsible for management of MPAs within a particular rohe moana).</p>

Theme	Key features of approach 3
Institutional design (continued)	A Tikanga Commission could be established as an independent national advisory body to the Crown (and agencies) and councils. This Commission could also assess their performance against te Tiriti obligations.
	A Tikanga Commission could be reimagined as a form of national level representative body for mana whenua, which could be conferred some policy or regulatory powers currently held by the Crown.
	Māori wards could be made mandatory for regional councils.
The toolkit	Many of the more granular tools in approach 1 could be deployed in approach 3.
	There would be transparent triggers for power sharing or transfer of powers to mana whenua.
	MPAs would be rolled out in a culturally sensitive manner (continuing/enhancing ancestral connection through use) and subject to co-management.
	Sign off would be required from mana whenua (eg a national level executive body/Tikanga Commission) on any national level strategy/policy.
	Co-management agreements/mana whakahono a rohe under the RMA/NBA would be extended to cover a broader range of legislation and non-statutory decision-making.
	Sustainable and independent funding (eg a portion of resource rentals/koha for use of marine resources) would be apportioned to mana whenua in their role as kaitiaki or to fund work of a Tikanga Commission.
	Formal and legally binding rāhui would be provided, not just for fisheries, but also for other activities including under the NBA where a breach of limits is threatened.
	There would be express recognition of the importance of Mātauranga Māori as an input across all decision-making processes.

Figure 14: Key building blocks of approach 3

Because approach 3 is described in a quite different way to approaches 2 and 3, it is in some ways more challenging to identify pros and cons neatly in tabular form. It is also fraught with difficulty because its core normative features are highly dependent on people’s worldviews and values. What may be considered a benefit by one person could be seen as a risk by others. The approach is, however, intended to be one that goes beyond just te Tiriti jurisprudence to make it clearer what power sharing looks like in the future. Such clarity may have significant benefits as we move into a post-settlement environment focused less on grievance and more on partnership. The approach is also pluralistic in a normative sense; it contemplates a shared space where new concepts can evolve – the relational sphere – and may foster a “third way” where te Māori and

Western concepts can meet. Many may also regard an enlargement of the tino rangatiratanga sphere as a benefit in its own right irrespective of its form (eg the use of section 33 of the RMA, an iwi-led NPS on te Tiriti o Waitangi, or co-governance arrangements like for the Waikato River).

Others may see a system premised only on tino rangatiratanga as failing to reflect the plurality of worldviews held by society, or some forms of power sharing as altering the forms of democracy (including local democracy) they hold dear. No-take MPAs may be valued by some and anathema to others. There may be challenges in a system that introduces spiritual or metaphysical considerations (which may not, for example, be amenable to judicial resolution), or a system in which aspects of te ao Māori are cherry

picked or co-opted by a system that retains Western structural features. However, aside from governance arrangements, the approach provides valuable opportunities to reconceptualise how people relate to the moana and broaden the toolkit for management.

9.4 Approach 4: Breaking the normative mould

While approaches 1 and 2 represent a significant degree of change, they do not necessarily break the normative mould or represent a fundamentally different way of looking at the world. Approach 2 is primarily about far-reaching structural change (redesigning legislative boundaries and institutions) while approach 1 is primarily about expanding and making better connections across the system's existing toolkit. Approach 3, while it embraces the normative concepts inherent in te ao Māori and would see significant shifts on this front, is primarily oriented towards power sharing between human partners in the system –

a reconceptualisation of the Māori-Crown relationship – rather than being rooted in a single overriding “idea”.

Approach 4, however, would seek to shift the ways in which the system conceptualises the relationship between people and the moana.¹⁷¹ This might in some ways be characterised as one (although by no means the only)¹⁷² form of an ecocentric approach – a transformation in norms – but would go well beyond how we express the purpose and principles of legislation. The approach is, at root, about giving nature the same kinds of multifaceted attention that we already give people in our society. That has potentially broader implications than one might initially think, given the complexity of human society and how our interactions with each other are managed. It provides some answers to the question: what would happen to the system if the ocean were one of us? Figure 15 sets out the key features of the approach.

Raewyn Peart



New Zealand sea lions, Catlins coast

Theme	Key features of approach 4
Overall description	Approach 4 is about reshaping the worldview upon which the system rests. This normative shift has significant implications for the toolkit and institutional design.
Legislative design	<p>Legislative redesign is not the key driver of approach 4, and many options (including from other approaches, such as an Oceans Act) could be possible. The existing statute book could, however, remain largely unchanged.</p> <p>While the NBA and Fisheries Act could remain separate, environmental limits (including those concerning the impacts of fishing on the marine environment) would be found in the former and the latter would be concerned primarily with stock management and allocation.</p> <p>A new umbrella statute (eg an Oceans Act) may be needed to confer personhood on the moana (or aspects of it), although some rights could be conferred via the New Zealand Bill of Rights Act.</p> <p>Arbitrary legislative boundaries could be removed so as to better recognise the indivisibility of the moana as a “person”, such as the boundary between the RMA/NBA and EEZ Act, the Marine Mammals Protection Act and Wildlife Act, and Crown Minerals Act and Continental Shelf Act.</p>
Norms (ethics, principles, objectives)	<p>There is recognition that the moana and its living (and non-living) components are deserving of rights and respect, and are not just to be protected and used for instrumental value. The system could be founded upon principles like te mana o te moana or the voice of the ocean.</p> <p>There would be potential for synergistic expression of norms founded on te ao Māori and ecocentrism.</p>
Institutional design	<p>Institutional change would be focused on how the moana, as a person, would be represented by humans. This could add a layer of institutions, or amend existing ones, and may not require complete overhaul. Some options in approaches 1, 2 and 3 may be compatible with this approach.</p> <p>An independent and co-governed Oceans Commission would be created to speak for and act on behalf of the moana as a whole.</p> <p>Guardians would be created to speak for more granular places/aspects of the moana, such as species or MPAs. Personhood could be conferred at multiple scales and over multiple elements in the marine environment.</p> <p>An oceans councillor or observer could be made part of regional councils, if they were to retain jurisdiction over the coastal marine area, to ensure a strong focus on marine matters.</p> <p>The EPA would be given a stronger role in overseeing the performance of regional councils.</p> <p>Central and local government arrangements could remain largely unchanged, but their relationships with the moana as a legal person would need to be clarified and made judicially enforceable. Authorities would manage the oceans on behalf of the moana, not in their own right.</p>

Theme	Key features of approach 4
The toolkit	Many of the more granular tools in approach 1 could also be deployed, but potentially recast in a more ecocentric mould.
	The ocean could hold property in its own right (eg quota, protected areas).
	The ocean could, through its agent, be empowered to enter into contracts and have the same rights as humans under common law (eg to take civil action in trespass or other torts like negligence).
	The ocean could impose constraints on the use of its property, eg through things like covenants and easements.
	Koha/resource rentals could be paid to the ocean itself for the harvesting of fish, the occupation of the seabed, marine mining and other extractive uses, as well as for land uses that could impact the marine environment.

Figure 15: Key building blocks of approach 4

As with approach 3, approach 4 is something of an exploratory exercise and does not lend itself to a list of pros and cons. However, some thoughts can be ventured to stimulate conversation. For instance, recasting the oceans as a legal person may have the potential to improve biophysical outcomes (see Chapter 2) not just by strengthening regulation, but also by changing how users perceive their relationship with the moana. An upside relative to other approaches (which retain many potentially conflicting objectives) is that there is a clear organising concept or paradigm – a worldview – that underpins reform and this could provide a clearer reference point to guide choices.

The approach could also provide a mechanism for greater integrated management by focusing on the marine environment itself (and stipulating its own interests), rather than the interests of sectors or the purposes of different legislative frameworks. Personhood has a great deal of flexibility and agility too, in that it could be applied at different spatial scales or to different things (eg regions, MPAs, species or the moana as a whole). And it opens up the toolbox in novel ways, by granting powers and rights to non-human entities (eg human rights, property rights and standing in civil litigation) that have traditionally existed well beyond “resource management” frameworks.

Finally, although additional complexity might be created in some ways (eg new institutions), the approach would not necessarily require overhaul of the system’s existing structures. Existing statutes and institutions could remain – in the same way that legislation for te Urewera has not completely reinvented the machinery of management – with an overlay of personhood implemented across them all (eg new rights and powers for the moana within existing laws). While the courts would likely have a greater role

(to interpret the nature of rights and resolve disputes), and that could exacerbate the adversarial nature of the system, that is not necessarily a bad thing if they are suitably resourced. Standing for the moana in the courts might also bolster the stretched resources of civil society advocates.

On the other hand, some may dismiss personhood as an artificial construct and distraction from the more tangible measures needed to create change. Recognising nature as a legal person will not by itself make a difference. It may, for some, also be too subversive of cherished anthropocentric concepts like capitalism, property rights, and deliberative democracy. Such powers for the moana could be seen as eroding human freedom and rights. By creating a separate entity, it could also potentially pit development interests against the environment – through fights with the ocean in court – rather than emphasising everyone’s stewardship responsibilities to look after it. And despite being a mechanism of choice for some te Tiriti settlements, legal personhood is not itself a feature of te ao Māori and some may see it as falling short, or masking the importance, of true partnership between Māori and the Crown at the human level. Much may depend on who gets to speak for the oceans.

In some senses, an approach based on legal personhood is a radically different way of thinking about our relationship with nature. But in other senses it does not require a complete revolution in norms, only another layer or lens. For example, the system already recognises the importance of principles like environmental justice, inter-generational equity and property rights. They can prompt much debate, but as concepts they are by no means new. In this approach, we would be inviting the moana as a participant into these human concepts rather than replacing them with different ones.

10 Concluding comments

The purpose of this project is ultimately to stimulate debate about our oceans management system and the extent of reform needed. Change – in its environmental, climatic and social manifestations – is upon us whether we like it or not. We need a system that responds and pre-empts, not just manages. There is a rich conversation to be had about what that should look like. In this summary document we have outlined some of the thinking in the main report, and we encourage readers to engage with that report more deeply.

Siloed thinking will no longer serve us. We cannot reform fisheries management without thinking about our approach to climate change adaptation. We cannot look to establish a network of protected areas without addressing the impact of land-based pollutants. And we cannot focus just on redrawing legislative boundaries without thinking about the deeper economic and behavioural incentives that regulatory and non-regulatory tools have on people's interactions with the sea and its resources. Everything is connected – it is one marine environment, and one system.

Of course questions abound, not just about what the future should look like, but also about how we get there (and how long it takes). To some, the frameworks we have may be broadly appropriate, and what we need to do is focus on better implementing what we have. Outlaying huge amounts of time, money and resources overhauling the system requires a sound justification, particularly in the context of a system that is already in a state of significant stretch and flux on many fronts. Replacing an entire system at once might even divert attention away from the things that require most urgent and targeted change – a lesson learnt from the failed oceans policy process of the 2000s.¹⁷³ To that end, we have outlined a number of ways in which the toolkit could be reformed or used in a more proactive and coordinated way (and there will be many others). It is not clear that will be enough, however. Options for more fundamental legislative redesign and institutional change deserve to be considered, especially if we treat them as markers to navigate towards over time.

The moana and all that it contains are taonga, our watery backyard, and to some degree a shared space both inherited from our ancestors and held in trust for future generations. What do they want? If we stop to listen, what does the voice of the ocean tell us? And how will we, as kaitiaki and stewards of our vast oceans, answer? Reforming the oceans management system is a kōrero that all New Zealanders need to be a part of. To that end, we leave readers with some high-level questions to ponder. In the Appendix we include a summary of the building blocks discussed in the main report that might be mixed and matched to form a new system.

High-level questions for oceans reform

- What are the key problems and challenges that will need to be addressed by a future system, and what are their relative urgency?
- What do we want the system to achieve in an environmental, social, economic and spiritual sense, and what mix of worldviews and ethics should underpin it? Do we need a revolution in norms?
- To what extent, and by what means, should a future system be able to change or erode existing rights and interests in the marine space? On what grounds would it legitimately seek to do so?
- What aspects of marine management should be managed centrally, and what should be managed locally?
- What does a te Tiriti (or United Nations Declaration on the Rights of Indigenous Peoples) compliant system look like in the marine space?
- Should fisheries, resource management and conservation be managed as separate silos with different purposes? Is legislative and institutional fragmentation a fundamental issue?
- Should we focus on improving regulatory tools, making the system more strategic and integrated, or providing economic and behavioural incentives? Are all of those things needed?
- To what extent would a legal framework for marine spatial planning address most problems?
- Should the current system be reconfigured from the ground up, or changed through surgical amendment to what we already have? Is it fundamentally broken?
- Does everything need to happen at once, or can it be staggered?
- How important is a desire to minimise cost and disruption in a reform process?

Appendix: A summary of potential building blocks for reform

The rationale for the system

- A future system's ability to intervene could be narrow, based on internalising externalities or addressing other market failures.
- A future system could be designed to intervene whenever the public interest is at stake, providing more flexibility, but also less certainty, about scope creep and overreach.
- A future system could be able to intervene where necessary to meet te Tiriti o Waitangi obligations, even where those go beyond (or are different to) the public interest.
- A future system might be permitted to alter people's expectations but not erode explicitly recognised property rights (eg quota).
- A future system could be allowed to erode property rights but only for particular reasons.
- A future system could be allowed to alter some property rights but not others.
- The normative basis of a future system could be one in which synergies between te ao Māori and ecocentrism are placed at the heart of decision-making.
- Ecosystem-based management could form a core principle in a future system, expanding upon that of integrated management observable in frameworks like the RMA.
- Sustainable management could be recast as a broader concept of sustainability (eg te oranga o te taiao, or te mana o te moana), potentially embracing the social and economic dimensions of resource use and protection.
- The principle at the heart of fisheries management could be reframed from one of sustainable utilisation to one more like sustainable management or te oranga o te taiao at the core of frameworks like the RMA/NBA.
- A future system could seek to give effect to the principles of te Tiriti o Waitangi that have been developed in the courts, or recognise and adhere to te Tiriti itself.

Ethics, principles and objectives

- The normative foundation of a future system could be based on te ao Māori and its concepts and principles.
- The normative foundation of a future system could be based on a welfare economics view of the world, in which instrumental value is placed on the natural world as a collection of resources.
- A future system could be based on anthropocentrism, where the multifaceted interests and values of society are put at the forefront of decisions.
- A future system could be based on ecocentrism, where nature is recognised as having intrinsic value alongside humans, not just as a set of resources or serving human needs.
- The normative core of a future system could be based on te ao Māori concepts such as kaitiakitanga, mana and mauri.
- Distributional equity or intra-generational equity could be expressly recognised as a principle in a future system, particularly to guide decisions about allocation.
- The principle of environmental justice could be strengthened in a future system, reflecting a broader understanding of the social elements of sustainability.
- There could be express recognition of ecological justice in a future system, embracing an ecocentric ethic and welcoming nature into human systems of justice.

- Inter-generational equity could be strengthened in a future system by defining more specifically what the relative interests of current and future generations are, including with respect to restoring, enhancing and developing the marine space.
- A principle of procedural justice could be included or reflected more strongly in a future system, outlining common elements of all processes to ensure they are fair, including for mana whenua.
- A broader precautionary principle could be adopted at a more systemic and proactive level, including obligations to take positive action to enhance the resilience of the environment where future cumulative impacts are uncertain.
- A future system could provide more clarity as to what subsidiarity means in the marine environment, and when it is appropriate for decisions to be centralised or devolved to councils, mana whenua, or stakeholder groups.
- Principles in a future system could be made more specific and directive in legislation, giving greater clarity as to what outcomes are expected and less room for interpretation by policy makers and the courts.
- A future system could legislate for a much more specific set of objectives, including timeframes or milestones for achieving change.
- A future system could specifically define what an environmental limit is, and require such limits to be set for a defined list of things in the marine environment.
- A future system could be expected to guide more clearly how trade-offs are made between different forms of wellbeing above environmental limits. It could also reconceptualise the role from one of balancing things against each other to seeking win-win situations.
- The system could be expected to guide how rights to use or benefit from different resources are distributed.
- The system could be expected to guide how some existing rights might be reallocated to “better” uses or users over time.
- A future system could include an overarching set of allocative principles, which might look different for different resources. That could relate to the use to which resources are put, or which users can benefit from them. In particular, how the Tiriti provisions are worded will have implications for how resources and rights are allocated.
- The system might take a more directive approach to allocation, where resources are reserved for uses or users that are seen as more deserving than others.
- The system could be reoriented to drive positive change more than it does at present. The concept of providing public goods and services could be broadened to include the active provision and protection of ecosystem services.
- A future system could legislate for measurable environmental enhancement objectives. These could reflect those contained in international fora (eg the Aichi biodiversity targets) and could relate to the deployment of particular tools, such as MPAs.
- A future system could provide formal mechanisms by which legally influential objectives could be set for achieving social and economic outcomes.
- A future system could contain objectives relating to particular sectors or activities (eg whether to expand them or phase them out), reflecting a more interventionist approach to resource or economic planning in the marine environment.
- In performing all its other roles, the system could be expected to protect the interests of mana whenua.
- Stronger and more consistent te Tiriti clauses could be deployed across marine legislation in the future. It could be made clearer what these clauses mean in practice and how the Tiriti objectives affect or interact with other objectives.



Reconsidering the toolkit

- A National Planning Framework envisaged under the NBA provides an opportunity for marine matters to be more thoroughly integrated into other parts of national direction. New marine-related national direction could be created and existing documents reviewed through a marine lens. The NZCPS itself could be strengthened.
- The NZCPS could be paired with new national level regulations (an NES) to give effect to its objectives and policies, and/or it could be strengthened to provide for more extensive “implementation” provisions.
- An EEZ policy statement could provide a much stronger framework for consenting in the EEZ, increasing certainty for applicants and the environment.
- Combined plans under the NBA should provide more effective tools for marine management. Conservation planning could be strengthened to have a focus on marine bio-regional areas. A future system could also see the creation of a more developed planning framework for fishing.
- Fishing permits could be brought under a more environmentally policy-driven framework, which could operate alongside the QMS.
- Consenting could be applied more broadly to waste minimisation frameworks.
- Environmental limits contemplated by the NBA could be more targeted to the marine context, including by being more specific about what things limits must be created for. To be useful, a provision classed as a limit would need to have clear consequences different to other provisions.
- There are many regulatory tools available under the Fisheries Act that have been underutilised. A future system could provide more structure and direction around how (and why) they are to be deployed, and could characterise some of them as environmental limits.
- The Harvest Strategy Standard, which provides a more nuanced approach to setting TACs, could be formally incorporated into legislation.
- A hard “cap” could be placed on recreational take (a “total allowable recreational take”) as well as a commercial TACC although that might be difficult to implement.
- Greater spatial separation could be created between recreational and commercial fishing activities by creating dedicated recreational fishing areas.
- A future system could provide more framing around how to set localised catch limits within QMAs, requiring boundaries to be redrawn based on ecological factors, or providing a more agile process (and trigger points) by which QMAs are (or must be) revised.
- Tools under conservation legislation could be strengthened so they provide for more powerful species-based environmental limits. In particular, the process for creating population management plans could be made simpler and/or focused only on the biological needs of protected species (rather than the impact on other users of the sea)
- The system could provide that a breach of environmental limits has clear and immediate consequences as a matter of law, including (to the extent necessary) overriding existing land use rights.
- The QMS could be expanded to include commercial operators of recreational fishing activities (eg charter boats), by requiring such operators to cover their catch by purchasing annual catch entitlements.
- A parallel system of quota could be established for all recreational fishers (replacing tools like bag limits).
- Recreational fishing could be included in the same market as commercial quota, so (at least in theory) fisheries would go to their highest value use.

- Coastal permits under the RMA and EEZ Act could be made more akin to property rights by allowing greater tradability and longer duration, especially when it comes to aquaculture and other activities requiring a long-term presence (eg wind turbines affixed to the seabed or desalination facilities).
- Property rights in aquaculture could be established that are not linked to particular places or the need for coastal occupation (eg for mobile aquaculture operations based on a particular biomass rather than the area of operation).
- Aquaculture rights could be made more fungible with quota rights, meaning that trading of rights could occur across sectors.
- Cap and trade markets for some forms of diffuse pollution (eg nutrients) could be rolled out more proactively across relevant catchments, and include estuaries. Depending on the ability to measure or estimate runoff from individual properties, that could include sediment.
- Property rights could be eschewed in a future system by removing “ownership” over some things (eg buyback of private title and a different status for Crown owned minerals), and by declining to use market based tools for others (eg greenhouse gas emissions and occupation rights for aquaculture).
- Some have suggested altering or even replacing the property rights based QMS system. It could be undone through buyback of quota and implementing a permitting system. Alternatively, more targeted changes (eg more aggregation controls, creation of a public quota holder, and earmarking some quota for particular types of commercial fishers) could be made to soften the social impacts of market forces and incentivise environmental improvements.
- Existing use rights for land could be overridden where environmental limits were threatened (eg to avoid significant impacts on protected areas in or near estuaries).
- National guidance could state what durations for resource rights are appropriate for different activities, in order to provide adequate commercial certainty, while also avoiding locking in sub-optimal uses.
- A first in time permitting system, whereby the first user to apply receives rights as long as the environmental impacts of an activity are acceptable, could continue to be used to allocate marine resources.
- More proactive, structured and competitive allocative mechanisms could be used (or made mandatory) in a future system, such as auctioning or attribute weighted tendering.
- A more proactive allocation of rights in particular spaces or zones could be achieved through marine spatial planning. This could distribute rights between different uses based on public interest principles, and potentially stakeholder consensus, although not necessarily different users.
- A formal forum could be established whereby new entrants or sectors wishing to use the marine space in a way that conflicts with existing uses could have some legal pathway to negotiate access rather than being excluded.
- The Public Works Act or minerals-type access arrangements could be used to accommodate publicly important uses of the marine environment.
- Rights in a future system could be made more spatially agile, especially when it comes to fixed occupation rights. That is particularly relevant to aquaculture operations, which may need to shift or become more operationally mobile, but it could also apply in the future to other activities as environmental conditions change (eg floating wind farms or tidal energy facilities).
- A future system could enshrine human rights to a healthy marine environment (eg in the New Zealand Bill of Rights Act). However, that would have challenges in practice, and may not be a silver bullet solution to addressing environmental issues.
- A future system could recognise that the moana itself has legally enforceable rights. The normative basis of recognising

personhood for nature will be important, but potentially difficult to establish given the different worldviews of te ao Māori and te ao Pākehā.

- The scale at which the moana is granted rights is important. At one end of the scale, the ocean as a whole could be recognised as a person with rights. At the other end, particular places, species or features could be given personhood. Layers of personhood could even be established, just as we have layers of personhood for companies.
- If the moana was granted legal rights, the system would need to be clear as to what those rights involve. They could be much wider than current environmental protections in the RMA or Fisheries Act. They could be as broad as the rights enjoyed by humans.
- Emergency orders could be utilised in a future system where environmental limits were imperilled. That could be one basis on which legally binding rāhui could be deployed.
- The Waste Minimisation Act could contain a duty for ministers to progress regulatory tools like prohibitions and product stewardship schemes to meet mandatory targets for the reduction or elimination of plastic dangerous to marine life.
- The Building Code, wastewater and stormwater infrastructure standards, and vehicle emissions standards could be strengthened to reduce the impacts of buildings and runoff on the marine environment.
- Regulatory tools could be used to drive positive outcomes in the marine environment. Duties on public authorities to pursue restoration and enhancement could be strengthened; sectoral accords could be reached with industries to provide improvements; a marine biobanking framework could be deployed; and fast track processes (or less stringent activity status) could provide an incentive for projects having public interest/environmental benefits.

- Targeted rates could be broadened to enable their use to charge land uses causing adverse impacts on the moana.
- Central government could provide greater funding assistance to regional councils to support marine management, and take over specific functions such as marine mapping.
- Greater use could be made of resource rentals and charges which could be imposed more consistently across all marine users.
- A number of non-regulatory tools could be explored to provide economic and behavioural incentives in a future system, including charges and taxes, a more systematic use of subsidies, feebates, bonds, nudging, reform of the school curriculum and professional training programmes, directors' duties and corporate disclosure requirements.

Spatial protections in the toolkit

- Existing opportunities under the RMA (and NBA) as well as the EEZ Act could be utilised in the future for the more proactive deployment of MPAs at both central and regional levels.
- The Fisheries Act could be used to deploy MPAs more systematically in the future, which might be supported by strengthening or clarifying its purpose and sustainability principles. As well as using spatial fisheries closures, the TAC itself could be adjusted to provide spatial biodiversity protection.
- The Marine Reserves Act could be reimagined in a future system as an MPA Act, which could go further than previous proposals (including by applying MPAs to the EEZ, broadening its purpose, and triggering land use change under the RMA).
- A more comprehensive set of MPAs could include spatial protections for heritage, wāhi tapu areas, recreational sites and green infrastructure. The process for creation could be made more collaborative and/or independent, with interim protection conferred.

- The recognition of customary marine title might provide a mechanism by which title holders could themselves deploy MPAs, and that roundabout mechanism could be strengthened.
- MPAs could be made their own legal persons, reflecting a rights for nature approach.
- A process for shifting some MPAs from one place to another (based on the values being protected rather than the space) could be provided for, recognising that climate and environmental change may demand greater agility.

Strategic and integrative tools

- A future system could be made more strategic by recasting the purposes and principles of legislation to ones that drive towards a different future, rather than maintaining or protecting things or seeking static outcomes (eg wellbeing or sustainability).
- Mandatory targets could be used more systemically across a future system to drive positive change. Accountability mechanisms could be established around them to measure progress. Binding targets could cover many things, but may be particularly useful to return to a safe ecological space if limits have already been infringed.
- A future system could establish a more comprehensive range of trigger points that result in automatic or immediate management measures being taken. Here, the system would be more proactive in preparing for the future, providing greater agility when things change.
- Monitoring and reporting in a future system could be linked to obligations to conduct futures scanning exercises, to ensure that problems, opportunities and changes are pre-empted rather than leaving gaps in policy and regulatory frameworks to develop.
- Tools could be better coordinated in a future system by extending the responsibilities of institutions. If one institution has responsibilities for deploying (or engaging with) multiple tools, then they may be used in a more integrated way.
- There are a number of ways that connections could be improved between legislative frameworks, such as through cross-referencing, alignment of processes and the insertion of common principles.
- Strategies in a future system could be made mandatory (guided by revised and carefully crafted statutory purposes) and have strong legal effect on the tools needed to realise their objectives.
- An environmental research strategy, containing a specific part on marine research and information, could be made mandatory and have legal influence over how integrated research is undertaken, funded and deployed to achieve clearer cross-cutting objectives for the marine environment. The strategy could provide for large “one-off” exercises such as a national coastal habitat mapping project.
- An Environmental Research Council or another independent agency such as an Oceans/Tikanga Commission could oversee the marine research and information system.
- Funding for environmental research (or even marine components of it) could be ringfenced/hypothecated using revenue from tools like resource rentals.
- A future system could provide for the mandatory creation of marine spatial plans to integrate or coordinate the use of other tools (regulatory and non-regulatory) in a particular place.
- Marine spatial plans could include environmental bottom lines, targets and outcomes for the marine area. They could be strategic only, and rely on implementation through other frameworks. Alternatively, they could include regulatory provisions themselves as an alternative pathway for things like environmental limits and MPAs.
- Marine spatial plans could be targeted to areas where there are particular issues or conflicts or they could cover all the country's marine areas. There could be specific trigger points specified for when a planning process was deemed necessary.

- A Marine Spatial Planning Strategy, developed by the Minister of Oceans, could provide a policy framework for marine spatial planning and set out a programme for developing marine spatial plans in targeted areas.
- A national level Oceans Policy could be a strategic instrument, going far beyond just an action plan for rolling out marine spatial plans. It could, with sufficient framing, be a form of “constitution” for the oceans.
- A statutory framework that both initiates marine spatial planning and provides agencies, mana whenua and stakeholders with guidance on principles and process steps could be provided to help with the implementation of marine spatial planning.
- Marine spatial planning could have a broad and flexible legislative framing, allowing change and innovation to occur as practice and experience evolves.

Legislative design

- The boundary between the Maritime Transport Act and EEZ Act could be refined, so that the latter includes management of discharges from ships. “Environmental” jurisdiction under the Maritime Transport Act for things like oil spills could also be moved to the RMA and EEZ Act.
- The boundary between the RMA/EEZ Act and Fisheries Act could be clarified by clearly shifting responsibility for the incidental impacts of fishing activity on the marine environment to the former. The Fisheries Act could be left as a means to allocate and manage fish stocks themselves.
- A sectoral Fisheries Act could remain as a home for the QMS and other allocative mechanisms like a TACC, but with all sustainability measures (including the TAC) being set under an expanded NBA (at a central or regional level).
- A future system could clarify the relationship between the Fisheries Act and “domain” based legislation like the Wildlife Act and Marine Mammals Protection Act. This could be done by making it clearer that tools under the latter statutes are to be used in an integrated way to achieve domain-based outcomes like the protection of threatened species, rather than relying on tools deployed under sectoral frameworks.
- The management of some fish stocks, such as those that have collapsed or breached a “limit”, could switch from the Fisheries Act to a revamped Wildlife Act.
- The scope (ie the kinds of outcome) sought by statutes like the RMA, EEZ Act and Conservation Act could be expanded to include more specific and proactive objectives for the marine environment, including those relating to a sustainable blue economy, the defence of strict environmental limits, and the allocation of resources (or the distribution of value from their use).
- Other layers of legislation could be expanded in a future system. This could see the enactment of more place-based legislation to protect particular areas, tool-based acts to create new types of MPAs, or new sectoral statutes for tourism, offshore energy, or ecological infrastructure.
- Some legislation within a sectoral layer could be integrated, such as by merging the Continental Shelf Act with the Crown Minerals Act or the Fisheries Act 1986 with the largely redundant Fisheries Act 1983.
- Maritime transport legislation could be integrated into a single Maritime Transport Act. Greater integration between terrestrial and maritime transport legislation might also be possible.
- The EEZ Act could be integrated within an expanded RMA/NBA, so that the latter encompassed all the country’s marine jurisdiction.
- The boundary between the RMA and EEZ Act could be redrawn at a line that arguably makes more ecological sense. This could make the RMA a statute concerned with the land-sea interface (eg out to around three nautical miles) and the EEZ Act about the deeper sea environment.

- The RMA and EEZ could be split into an “Environmental Limits Act” and another act concerned with making trade-offs and allocative decisions through value-based plans.
- The Wildlife Act and the Marine Mammals Protection Act could be combined.
- Marine conservation statutes, along with ones that include land and new MPA legislation, could be integrated into a new Protected Areas and Species Act that spans land and sea.
- Marine spatial planning could be provided for under the proposed Strategic Planning Act, or an umbrella Marine Spatial Planning Act (which could be called an Oceans Act) could be created.
- The legislative arrangements in a future system could be fundamentally reimagined by changing the primary lens through which statutes are split up. This could be shifted to a sectoral or spatial lens.
- There are various options for what a more integrated Oceans Act could encompass, ranging from the simple integration of the marine parts of the RMA and EEZ Act, through to combining the marine components of conservation legislation, the Fisheries Act, the Biosecurity Act, the Maritime Transport Act and potentially others.
- An integrated Oceans Act could provide a set of common, high-level principles for allocating rights to marine resources.
- Legal personhood for te moana (or parts of it) could be provided for in a variety of statutes. One option would be for the moana as a whole to be granted personhood in an umbrella act like an Oceans Act or the Environment Act, and for its more specific rights to be conferred under more targeted legislation.

Institutional design

- The role of the courts could be expanded in a future oceans management system to include appellate authority over the

merits of some fisheries decisions and some national direction under the RMA/NBA.

- Some regulation making powers could be shifted to more independent or arm’s length institutions, including some sustainability measures for fisheries and a new class of environmental limits under the RMA/NBA. This would, however, require accountable institutions (or legislation itself) to provide clear and direct policy guidance (eg on bottom trawling or sediment) amenable to independent interpretation.
- Independent hearings panels with stronger legal influence over final decisions on planning and regulatory instruments could be rolled out in a future system. This has been proposed for combined plans under the NBA but could be extended to planning processes under other marine legislation, like the Fisheries Act and conservation statutes.
- More independent advisory institutions could be established in a future system, whether through a place-based guardians model or domain-based entities. A Tikanga Commission could be established to provide advice into all statutory processes (including integrative ones like marine spatial planning).
- An independent entity focused on supporting marine research could be established, either as a marine division of an Environmental Research Council or as an independent body (Marine Research Council). It could include a branch focused on strengthening mātauranga Māori.
- An independent Oceans Commission could be established to fulfil a similar place in the system as the Climate Change Commission. Alternatively, both could be combined into a broader Futures Commission (potentially an expanded Parliamentary Commissioner for the Environment) to cover the whole environment.
- Legal personhood for the moana could be supported by institutional arrangements like guardians, an Oceans Commission, an Oceans Ombudsman or the kinds of models developed for Te Urewera and the Whanganui River.

- Central government could be tasked with a more proactive role in marine management under the RMA, including the mandatory production of regulatory provisions giving effect to the NZCPS and the spatial identification of areas for protection.
- In a future system, regional councils could continue to have jurisdiction over truly coastal matters, out to a three nautical mile boundary or similar. Alternatively, councils could have jurisdiction only to mean high water springs. In either case, other parts of the marine area could be managed by a well-resourced Oceans Agency.
- A dedicated Oceans Agency could operate at arm's length from government and be the implementing agency for the Oceans Act. Alternatively, a strengthened EPA could take on this role. Māori input into the Agency's decision-making could be supported through a strengthened Ngā Kaihautū Tikanga Taiao model.
- The seaward boundary of regional council jurisdiction could be redrawn, based on the approximate boundaries of ecological systems, including potentially expanding it beyond 12 nautical miles.
- Regional councils could be given more jurisdiction over fishing activity for biodiversity purposes, embracing the *Motiti* decision and taking it even further.
- An oceans co-governance entity between Māori and the Crown could be established at a national level and/or regional co-governance partnership bodies could be established at a regional level.
- Three waters services (including wastewater and stormwater which can have significant impacts on the marine environment) could continue to be managed by territorial authorities and council controlled organisations, or there could be greater centralisation via co-governed national entities or state owned enterprises.
- If we were to give rights to nature, the "moana" as a person could be centralised (a single person) or have ecologically defined regions (different parts of the same body) that can speak for their own interests (or both, where branches come together in something like an Oceans Congress).
- Place-based institutional arrangements could be rolled out more broadly across the moana, reflecting existing guardian and advocacy roles performed in Kaikōura, Fiordland and the Hauraki Gulf. For example, every new MPA could have its own guardian.
- Inter-regional boundaries could be shifted so that they better reflect the ecological characteristics of the sea. Alternatively, a separate layer of maritime councils could be established with jurisdiction over biophysically defined parts of the moana.
- Future institutions could focus on different geographical spaces: some for land and some for the sea, with an integrated Oceans Agency focused on the latter.
- An institutional overlay, in the form of a Coastal Commission, could be established to integrate management of land and the sea if a sharp division was created between land management (by councils) and marine management (by an Oceans Agency or similar).
- An Oceans Agency could be given an integrating role by ensuring that terrestrial plans and regulations complied with the requirements of marine legislation.
- An independent Oceans Commission could perform a watchdog function over all government responsibilities at sea, but it could equally be incorporated into an entity like a Futures Commission applying to the whole of Aotearoa New Zealand.
- The Oceans Secretariat could be given a formal statutory basis and its membership extended to representatives from regional government and mana whenua.
- The "policy shop" advisory functions of ministries could be separated from their regulatory tasks.

- Regulatory tasks could be more clearly separated from enforcement tasks.
- Policy and regulatory tasks could be more clearly separated from advocacy.
- Some funding responsibilities could be separated from other tasks.
- New institutions could be created, or existing ones reimagined, to perform innovative tasks.
- Existing institutions could be given stronger or more specific mandates than at present. These could be more directive (ie to take particular forms of action), to reflect a more outcomes-based management system.
- Mana whenua could be given statutory mandates when exercising significant public powers in a future system.
- Institutions or groups responsible for marine spatial planning could be given formal legal status in the future, to ensure they endure to oversee implementation.
- Māori institutions, such as iwi authorities, a Tikanga Commission, and a more nuanced layering of other entities, could be formalised through statute in a future system.
- A future system could strengthen obligations on existing institutions to safeguard the interests of mana whenua.
- A future system could provide for independent Māori advisory or watchdog institutions in a more systemic way, such as through a Tikanga Commission, that have the power and duty to assess compliance by public authorities with te Tiriti obligations.
- A future system could provide various mechanisms for co-governance, including through Māori wards for regional councils, layers of bespoke location-based entities such as the Hauraki Gulf Forum and Waikato River Authority, or by strengthening powers for customary marine title holders to influence RMA instruments.
- A future system could outline clear statutory principles by which some powers currently wielded by others (eg councils and various central government agencies) are to be transferred to mana whenua.
- Deeper options for constitutional reform – to which institutions are central – could include foundational changes to the executive, legislative and judicial branches of government (eg a new Upper House of Parliament) where mana whenua institutions exist in parallel to Western style ones. These go beyond the oceans management system.

Endnotes

- 1 Simon Winchester *Land: How the Hunger for Ownership Shaped the Modern World* (William Collins, 2021) at 7.
- 2 Ministry for the Environment and Statistics New Zealand *Our marine environment 2019* (ME1468, October 2019). Similar conclusions, although delivered in a different framework based on te ao Māori and the stars of Matariki, have been presented in the government's most recent environmental reporting synthesis report *Environment Aotearoa 2022* (at 46-53).
- 3 Office of the Minister for the Environment *Comprehensive review of the resource management system: scope and process* (2019) at 10.
- 4 Minister for Oceans and Fisheries *Oceans and Fisheries portfolio – ensuring healthy ecosystems* (2 July 2021). See also Minister for Oceans and Fisheries *Fisheries system reform agenda* (2 July 2021); Minister for Oceans and Fisheries *Fisheries Amendment Bill: Strengthening fishing rules and policies: landings and discards* (2 July 2021); Minister for Oceans and Fisheries *Fisheries Amendment Bill: Strengthening fishing rules and policies: offences and penalties and agile decision-making* (2 July 2021); Minister for Oceans and Fisheries *Revitalising the Hauraki Gulf – Government Sea Change Strategy* (2 July 2021); Minister for Oceans and Fisheries *Initial response to Prime Minister's Chief Science Advisor's report on commercial fishing* (2 July 2021); and Minister for Oceans and Fisheries *On-board cameras across the inshore fishing fleet* (2 July 2021). More targeted marine reforms are also being progressed as a result, which are described in Chapter 4 of the main report and mentioned below.
- 5 See Figure 1.2 of the main report for a more extensive (but still broad) definition of the system.
- 6 Described in Chapter 5 of the main report.
- 7 Despite being often treated like that in practice in the current system (for example, in requirements to consider the Treaty of Waitangi, have particular regard to kaitiakitanga, or protect sites of cultural significance).
- 8 The need for deeper oceans reform – which may take several years to progress – should not be used as an excuse to do nothing in the meantime. There are many elements of the system – legislative and otherwise – that require targeted attention. Many (such as MPAs, regenerating the Hauraki Gulf, supporting a sustainable and productive marine economy, reducing catchment-based pollution and minimising waste) are urgent and on the government's radar already. They need to proceed now. But careful thought needs to be given to how such short-term changes can be eventually knitted into longer-term reforms.
- 9 See also the project's working paper and associated appendices (available at <www.eds.org.nz>) for a more in depth look at Aotearoa New Zealand's marine environment.
- 10 See Chapter 2.3 of the main report.
- 11 Dennis Gordon and others "Marine biodiversity of Aotearoa New Zealand" (2010) 5(8) PLoS ONE e10905.
- 12 Ministry for the Environment and Statistics New Zealand *Our marine environment 2019* (ME 1468, October 2019) at 10.
- 13 Ministry for the Environment *Environment New Zealand* (ME 847, December 2007) at 316.
- 14 Lucy Brake and Raewyn Peart *Sustainable Seas: Managing the marine environment* (Environmental Defence Society, Auckland, 2015) at 10.
- 15 See Chapter 2.4 of the main report.
- 16 Ministry for the Environment *Environment Aotearoa 2019* (ME 1416, April 2019) at 88.
- 17 Market Economics Ltd *Measuring New Zealand's Blue Economy* (Prepared for Sustainable Seas and University of Auckland, September 2019) at 5. Note these statistics are pre-Covid 19 data.
- 18 Minister for Oceans and Fisheries and Minister for Conservation *Revitalising the Hauraki Gulf – Government Sea Change Strategy* (2 July 2021) at [13].
- 19 Statistics New Zealand *Environmental-economic accounts* (June 2019).
- 20 Raewyn Peart *Voices from the sea: Managing New Zealand's fisheries* (Environmental Defence Society, Auckland, 2018) at 3.
- 21 See Ministry for Primary Industries *Aquaculture strategy* (2019); Ministry for Primary Industries *Aquaculture strategy: 2021 implementation plan* (2019); and further Ministry for Primary Industries <www.mpi.govt.nz>.
- 22 New Zealand Steel "The history of ironsand" <www.nzsteel.co.nz/new-zealand-steel/the-story-of-steel/the-history-of-ironsand/>.
- 23 See Taranaki Regional Council "Oil & gas – production" <www.trc.govt.nz/council/plans-and-reports/monitoring-reports/consent-compliance-monitoring-reports/oil-and-gas-production/>.
- 24 Ministry for the Environment and Statistics New Zealand *Our marine environment 2019* (ME 1468, October 2019) at 39. Shipping accounted for 37 percent of the marine economy.
- 25 Ministry for the Environment and Statistics New Zealand *Our marine environment 2019* (ME 1468, October 2019) at 7.
- 26 See Venture Taranaki *Offshore wind: A new energy opportunity for Taranaki discussion paper*; Ian Mason and Giacomo Caleffi *Developing Offshore Wind in New Zealand: Technical, socio-economic and environmental issues in relation to a post-pandemic future* (presented to 14th OERC Symposium, University of Otago, November 2020); and Sustainable Seas "Energy from tidal currents - Kick-starting a new marine industry with huge potential" <www.sustainableseaschallenge.co.nz/our-research/energy-from-tidal-currents-kick-starting-a-new-marine-industry-with-huge-potential/>.
- 27 See <www.nzherald.co.nz/business/nz-super-to-explore-large-scale-offshore-wind-energy-generation-off-south-taranaki-coast/UVWMHW5G5P3SHLSBFZYSX7XLRM/>
- 28 See Barry Barton, Kimberley Jane Jordan and Greg Severinsen *Carbon capture and storage: Designing the legal and regulatory framework for New Zealand* (report for the Ministry of Business, Innovation and Employment and the New Zealand Carbon Capture and Storage Partnership, Centre for Environmental, Energy and Resources Law, Te Piringa Faculty of Law, University of Waikato, September 2013); and Sustainable Seas, National Science Challenge *Transitioning to a Blue Economy: Scoping and Horizon Scanning* (Envirostrat Ltd, December 2019) at 24. See further, Sustainable Seas, National Science Challenge "Building a Seaweed Sector" <www.sustainableseaschallenge.co.nz>.
- 29 See spotlight in Chapter 2.4 of the main report; Jim Robbins "As water scarcity increases, desalination plants are on the rise" *Yale Environment* 360 (11 June 2019); Mohamed A Dawoud and Mohamed M Al Mulla "Environmental impacts of seawater desalination: Arabian Gulf case study" (2012) 1(3) *Int J Environ Sustain* 22 at 27.
- 30 See Hauraki Gulf Forum *State of our Gulf 2020* (State of the Environment Report 2020, February 2020) at 6.
- 31 Louise Hunt *Economic impact analysis of the Cape Rodney Okakari Point (Leigh) Marine Reserve on the Rodney District* (Department of Conservation, Investigation number 4052, June 2008) at 9.
- 32 In 2017-2018, people undertook around two million fishing trips a year and came home with seven million fish and almost four million shellfish: see J Wynne-Jones and others *National panel survey of marine recreational fishers 2017-18* (Fisheries New Zealand, July 2019).
- 33 Enric Sala and others "Protecting the global ocean for biodiversity, food and climate" (2021) 592 *Nature*.
- 34 See for example, Revive our Gulf "Restoring mussel reefs off the Hauraki Gulf" at <www.reviveourgulf.org.nz>.
- 35 See Chapter 2.6-2.7 of the main report.
- 36 Department of Conservation *Te Mana o Te Taiao – Aotearoa New Zealand Biodiversity Strategy 2020* (Department of Conservation, Wellington, August 2020) at 12.
- 37 See Statistics New Zealand at www.stats.govt.nz/indicators/conservation-status-of-indigenous-marine-species as reported in Ministry for the Environment and Statistics New Zealand *Our marine environment 2019* (ME 1468, October 2019) at 16.
- 38 Ministry for the Environment and Statistics New Zealand *Our marine environment 2019* (ME 1468, October 2019) at 16.
- 39 Ministry for the Environment and Statistics New Zealand *Our marine environment 2019* (ME 1468, October 2019) at 5.
- 40 Parliamentary Commissioner for the Environment *Managing our estuaries* (August 2020).
- 41 Fisheries New Zealand *The status of New Zealand's fisheries 2020* (February 2021) at 1.
- 42 Fisheries New Zealand *The status of New Zealand's fisheries 2020* (February 2021) at 8.
- 43 On the impacts of plastics on marine life, see Murray Gregory "Environmental implications of plastic debris in marine settings—entanglement, ingestion, smothering, hangers-on, hitchhiking and alien invasions" (2009) 364(1526) *Philosophical Transactions of the Royal Society B: Biological Sciences*; Chris Wilcox, Erik Van Sebille and Britta Denise Hardesty "Threat of plastic pollution to seabirds is global, pervasive, and increasing" (2015) 112(38) *PNAS*, both as cited in Ministry for the Environment and Statistics New Zealand *Our marine environment 2019* (ME 1468, October 2019). Ana Markic and others "Double trouble in the South Pacific subtropical gyre: Increased plastic ingestion by fish in the oceanic accumulation zone" (2018) 136 *Marine Pollution Bulletin* 547; "Marine researchers find microplastics in Bay of Plenty shellfish" University of Waikato (online ed, 8 July 2021); and S Webb and others "Microplastics in the New Zealand green lipped mussel *Perna canaliculus*" (2019) 149 *Marine Pollution Bulletin* 110641.
- 44 See for example, Department of Conservation, pest seaweed *Undaria pinnatifida* at <www.doc.govt.nz/nature/pests-and-threats/>.
- 45 Minister for Oceans and Fisheries *Fisheries system reform agenda* (2 July 2021) at [34].
- 46 See Ministry for the Environment *Our marine environment 2019* (October 2019) at 51.

- 47 MA Morrison *A review of land-based effects on coastal fisheries and supporting biodiversity in New Zealand* (Ministry of Fisheries, New Zealand aquatic environment and biodiversity Report 37, 2009), as cited in Ministry for the Environment and Statistics New Zealand *Our marine environment 2019* (ME 1468, October 2019).
- 48 Barry Robertson and Leigh Stevens *Porirua Estuary: Fine scale monitoring 2014/15* (Greater Wellington Regional Council, 2015), as cited in Ministry for the Environment and Statistics New Zealand *Our marine environment 2019* (ME 1468, October 2019).
- 49 See Nikki Macdonald “More than 300 old dumps at risk of coastal erosion and flooding” *Stuff Media* (online ed 29 March 2021) <www.stuff.co.nz>.
- 50 See Ministry for the Environment and Statistics New Zealand *Our marine environment 2019* (ME 1468, October 2019) at 6 and 36.
- 51 Walker and others “Environmental effects of marine transportation” *World seas: An environmental evaluation* (2018), as cited in Ministry for the Environment and Statistics New Zealand *Our marine environment 2019* (ME 1468, October 2019).
- 52 See for example, Department of Conservation (media release 6 October 2020) “Shorebirds start nesting in Eastern Bay of Plenty” at <www.doc.govt.nz>.
- 53 Ministry for the Environment and Statistics New Zealand *Our marine environment 2019* (ME 1468, October 2019) at 51-53.
- 54 Ministry for the Environment and Statistics New Zealand *Our marine environment 2019* (ME 1468, October 2019).
- 55 Karen McVeigh “Bottom trawling releases as much carbon as air travel, landmark study finds” *The Guardian* (online ed, 17 March 2021).
- 56 A MacDiarmid and others *Assessment of anthropogenic threats to New Zealand marine habitats* (Ministry of Agriculture and Forestry, New Zealand Aquatic Environment and Biodiversity Report 93, 2012) at 40.
- 57 See Chapter 2.7 of the main report.
- 58 See Chapter 2.8 of the main report.
- 59 Depending on how one defines a “tool”.
- 60 Whether they *are* problems, and the *extent* to which they are problematic, may depend on worldviews.
- 61 Again, with the caveat that not all will agree on what the rationale for the system is (see Chapter 6 of the main report).
- 62 More specifically, see Chapter 3.4 of the main report.
- 63 *Environmental Defence Society Inc v The New Zealand King Salmon Co Ltd* [2014] NZSC 38, [2014] 1 NZLR 593. On the contribution and shortcomings of this decision when it comes to environmental limits, see the spotlight in Chapter 3.4 of the main report.
- 64 Resource Management Act 1991, s 8.
- 65 Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2012, s 12. In practice, the Act has been read in a much wider light, despite this narrow *te Tiriti* clause. See *Trans-Tasman Resources Ltd v Taranaki-Whanganui Conservation Board* [2020] NZCA 86 at [133]-[180].
- 66 Marine Reserves Act 1971, long title.
- 67 Deidre Koolen-Bourke and Raewyn Peart *Conserving nature: Conservation system reform issues paper* (EDS, 2021).
- 68 See, for example, Simon Berry, Helen Andrews and Jen Vella “The death of the RMA by a thousand cuts: The next two incisions” (April 2017) *Resource Management Journal* 3.
- 69 Raewyn Peart *Voices from the sea: Managing New Zealand's fisheries* (Environmental Defence Society, Auckland, 2018).
- 70 See, for example, *Attorney-General v The Trustees of the Motiti Rohe Moana Trust & ors* [2019] NZCA 532 and the spotlight on this case in Chapter 11.5 of the main report.
- 71 The NES for Marine Aquaculture can hardly be said to be designed to implement the policies of the NZCPS in the round – it is a much more targeted consenting tool.
- 72 See Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2012, s 37A.
- 73 And if they are meant to be industry-led self-management tools or ways for communities to steer commercial fishing in a different direction. See Raewyn Peart *Voices from the sea: Managing New Zealand's fisheries* (Environmental Defence Society, Auckland, 2018) at 128.
- 74 Kate Mulcahy and Raewyn Peart *Wonders of the sea: The protection on New Zealand's marine mammals* (Environmental Defence Society, Auckland, 2012) at 80.
- 75 Deidre Koolen-Bourke and Raewyn Peart *Conserving nature: Conservation system reform issues paper* (EDS, Auckland, 2021) at 72.
- 76 Kate Mulcahy, Raewyn Peart and Abbie Bull *Safeguarding Our oceans* (Environmental Defence Society, Auckland, 2012) at 101.
- 77 Greg Severinsen and Raewyn Peart *Reform of the resource management system: The next generation* (December 2018) at 114.
- 78 See Robert Joseph and others *The Treaty, Tikanga Māori, Ecosystem-Based Management, Mainstream Law and Power Sharing for Environmental Integrity in Aotearoa New Zealand – Possible Ways Forward* (Te Mata Hautū Taketake – the Māori and Indigenous Governance Centre, Te Piringa-Faculty of Law, University of Waikato, 2019).
- 79 Parliamentary Commissioner for the Environment *A review of the funding and prioritisation of environmental research in New Zealand* (December 2020) at 35, 45 and following.
- 80 At 3.
- 81 At 72.
- 82 At 37.
- 83 At 57.
- 84 At 41; see also Waitangi Tribunal *Ko Aotearoa Tenei: A report into claims concerning New Zealand law and policy affecting Māori culture and identity* (Wai 262, 2011) at 561 and following.
- 85 See Chapter 4.2 of the main report.
- 86 For example, see *Trans-Tasman Resources Ltd v Taranaki-Whanganui Conservation Board* [2020] NZCA 86.
- 87 For example, see *Environmental Defence Society Inc v Otago Regional Council* [2019] NZHC 2278, which is subject to appeal in the Supreme Court at the time of writing.
- 88 For example, see *Ngāi Tai ki Tāmaki Tribal Trust v Minister of Conservation* [2018] NZSC 122.
- 89 In the form of an NPS for Indigenous Biodiversity
- 90 Department of Conservation *Te Mana o Te Taiao - Aotearoa New Zealand Biodiversity Strategy* (Department of Conservation, Wellington, August 2020).
- 91 For interesting legal commentary on this process and interpretation of the Act, see *Re Edwards (Te Whakatohea (No 2))* [2021] NZHC 1025.
- 92 See generally Resource Management Review Panel *New directions for resource management in New Zealand* (June 2020); Ministry for the Environment *Natural and Built Environments Bill Exposure Draft* (June 2021).
- 93 Around 300 inshore fishing boats are intended to have cameras by 2024: see Minister for Oceans and Fisheries “On-board cameras across the inshore fishing fleet” (2 July 2021).
- 94 Which is to be rolled out over several years to maintain the value of quota as fishers transition to more selective methods of fishing to avoid non-target species. QMS species, whether alive or dead, must be landed unless an exemption is issued by the Minister for Oceans and Fisheries. See Minister for Oceans and Fisheries “Fisheries Amendment %illStrengthening fishing rules and policies: landings and discards” (2 July 2021).
- 95 See Minister for Oceans and Fisheries “Fisheries Amendment Bill: Strengthening fishing rules and policies: offences and penalties and agile decision-making” (2 July 2021).
- 96 See the spotlight in Chapter 3.4 of the main report.
- 97 Minister for Oceans and Fisheries *Fisheries system reform agenda* (2 July 2021).
- 98 See Office of the Prime Minister's Chief Science Advisor *The future of commercial fishing in Aotearoa New Zealand* (February 2021).
- 99 Comprised of the Minister of Oceans and Fisheries, Minister for the Environment, Minister of Conservation and the Under-Secretary for Oceans and Fisheries.
- 100 Hosted by the Department of Conservation. This comprises officials from the Ministry for Primary Industries and Ministry for the Environment, and is supported by other agencies as required.
- 101 One Cabinet paper suggests this “could consider issues such as: Marine spatial planning across the territorial sea and the EEZ... comparisons with oceans governance and ecosystem-based management in other jurisdictions, and their potential suitability in the New Zealand context... ie legislative, institutional and funding arrangements, including the incorporation of Māori world views and interests...” (Minister for Oceans and Fisheries *Oceans and Fisheries portfolio – ensuring healthy ecosystems* (2 July 2021) at 8-9). The EDS project is mentioned as one input.
- 102 See Chapter 4.3 of the main report.
- 103 In 2019, in response to ongoing pressure at the domestic and international level, Te Puni Kōkiri (the Ministry of Māori Development) established a working group to advise the government on a plan for implementing United Nations Declaration on the Rights of Indigenous Peoples in Aotearoa New Zealand. The report of the working group (*He Puapua*) was released in 2019 as the result of an official information request.
- 104 Margaret Mutu and Moana Jackson *Whakaaro Here Whakaamu mō Aotearoa* (Matike Mai Aotearoa, Independent Iwi Working Group on Constitutional Transformation, January 2016).
- 105 See “approach 3” in Chapter 13 of the main report for how such ideas might form a starting point for systemic reform.

- 106 See Chapter 4.4 of the main report.
- 107 See Chapter 4.5 of the main report.
- 108 See Chapter 6.3 of the main report.
- 109 See Raewyn Peart *Farming the sea* (Environmental Defence Society, Auckland, 2019) at 93.
- 110 See Chapter 7.7 and the spotlight in Chapter 8.6 of the main report.
- 111 See Chapter 6.4 of the main report.
- 112 See Chapter 6.4 of the main report.
- 113 See Chapter 6.5 of the main report.
- 114 See Chapter 6.6 of the main report.
- 115 For example, it might mean that property rights in quota could not be taken or eroded directly, but controls on fishing could be placed through conditions on resource consents (which are, legally speaking, not a form of property).
- 116 See Chapters 6.7 and 7.7 of the main report.
- 117 See Chapter 7.2 of the main report.
- 118 Kate Raworth *Doughnut economics: Seven ways to think like a 21st Century economist* (Random House, London, 2017).
- 119 See Chapter 7.3 of the main report.
- 120 See discussion in Greg Severinsen and Raewyn Peart *Reform of the resource management system: The next generation* (Environmental Defence Society, Auckland, December 2018) at 71.
- 121 See Chapter 7.4 of the main report.
- 122 See Chapter 7.5-7.6 of the main report.
- 123 See Chapter 7.7 of the main report.
- 124 Crown Minerals Act 1991, s 1A(1).
- 125 See Chapter 8.4 of the main report.
- 126 In the form of resource consents under the RMA and exploration/mining permits under the Crown Minerals Act.
- 127 See Chapter 8.5 of the main report.
- 128 See Ministry for the Environment *Natural and Built Environments Bill Exposure Draft* (June 2021), cl 7.
- 129 See Chapter 8.5 of the main report (under the heading "Limits with respect to fish stocks"); *Royal Forest and Bird Protection Society v Minister of Fisheries* [2021] NZHC 1427.
- 130 See Chapter 8.6 of the main report.
- 131 By, for example, requiring such operators to cover their catch by purchasing annual catch entitlement.
- 132 At present, aquaculture proponents are facing challenges where spatially fixed consents are not able to move easily when conditions change (eg such as seawater warming in the Marlborough Sounds). This might, in theory, provide a means to implement the Te Tiriti settlement for aquaculture (which, unlike fishing quota, remains fraught due to the need for regionally specific agreements based on projections of likely future aquaculture development in the area).
- 133 Depending on the measurability of sediment entering the marine environment.
- 134 See Chapter 8.7 of the main report.
- 135 For example, via an easier pathway to consent through controlled activity status; preferential weighting in applications to occupy coastal space in an attribute weighted tendering process; or specific areas set aside for an activity through marine spatial plans.
- 136 See Chapter 8.8 of the main report.
- 137 See Figure 9.1 in Chapter 9 of the main report.
- 138 See Chapter 9.2 of the main report.
- 139 See Chapter 9.3 of the main report.
- 140 See Chapter 9.4 of the main report.
- 141 See Chapter 9.5 of the main report.
- 142 Here, the footprint of current human activities in interim protection areas are frozen, and proposed MPAs have to be fully designated within five years (or else repealed). See Department of Fisheries, Oceans, and the Canadian Coast Guard "Changes to the Oceans Act" (1 August 2019) Government of Canada <<https://www.dfo-mpo.gc.ca/oceans/act-loi/index-eng.html>>.
- 143 See Chapter 9.6 of the main report.
- 144 For example, if a resource consent were required in a regional coastal plan to undertake commercial fishing (eg in reef environments where fishing were a discretionary rather than a prohibited activity), then a title holder could conceivably exercise a permission right to refuse it under the MACA Act. Management plans could also be used to influence potential fishing-related provisions in a regional coastal plan, which in turn could, in practice, be used to establish no-take (or limited-take) protected areas, even if they were temporary. See the discussion in Chapter 9.6 of the main report.
- 145 See Chapter 10.2 of the main report.
- 146 In Canada, for instance, the federal government established a timeline for listing marine species under the Species at Risk Act 2002 (for which orders are made to protect critical habitat). The Minister must do so within 36 months of being given a species status assessment conducted by the Committee on the Status of Endangered Wildlife.
- 147 See Jamie Morton "Back to the future: Has NZ stopped looking ahead?" *The New Zealand Herald* (online ed, 13 November 2016).
- 148 See Chapter 10.3-10.7 of the main report.
- 149 See Chapter 10.3 of the main report.
- 150 See Chapter 10.3 of the main report.
- 151 See Chapter 10.4 of the main report.
- 152 See Chapter 10.5 of the main report; Parliamentary Commissioner for the Environment *A review of the funding and prioritisation of environmental research in New Zealand* (Office of the Parliamentary Commissioner for the Environment (Wellington, December 2020); Prime Minister's Chief Science Advisor *The future of commercial fishing in Aotearoa New Zealand* (February 2021).
- 153 See Chapter 10.6 of the main report.
- 154 See Chapter 10.7 of the main report.
- 155 See Chapter 11.2 of the main report.
- 156 See Chapter 11.3 of the main report.
- 157 See Chapter 11.4 of the main report.
- 158 See Chapter 11.5 of the main report.
- 159 See Chapter 11.7 of the main report.
- 160 See Chapter 12.2 of the main report.
- 161 See Chapter 12.3 of the main report.
- 162 See Chapter 12.5 of the main report.
- 163 See Chapter 12.6 of the main report.
- 164 See Chapter 12.7-12.9 of the main report.
- 165 See Chapter 12.10 of the main report.
- 166 See Chapter 13.3 of the main report.
- 167 See Chapter 13.4 of the main report.
- 168 As can be seen when it comes to implementation of national direction by councils.
- 169 That said, the Department of Conservation performs both regulatory and operational functions, and although that has been criticised by some, other checks and balances (eg the model of a Conservation Authority or an Oceans Commission) and a strong legal mandate can ameliorate such concerns.
- 170 See Chapter 13.5 of the main report (see also Chapters 4.3 and 7.2-7.4 for an exploration of some of the contextual features underpinning it).
- 171 See Chapter 13.6 of the main report.
- 172 Other ecocentric approaches might, instead of conferring personhood, recognise intrinsic value, human responsibilities to nature, or concepts like te mana o te wai (where the needs of nature come first).
- 173 On the oceans policy process of the 2000s, see the discussion in Chapter 4 and Appendix 4 of the main report.

EDS is undertaking a project which is taking a first principles look at the oceans management system in Aotearoa New Zealand and outlining various options for reform. This summary report highlights the key points from phase 1 of the project, which are described more fully in the Synthesis Report. That looks at what is going wrong in the marine environment and how systemic change could occur on a variety of fronts, including worldviews and principles, the management toolkit, how we structure our legislative frameworks, and how we design our institutions. It is intended to frame a wide-ranging conversation, not to make hard and fast recommendations. It concludes by presenting four quite different starting points for what whole of system reform could look like for the moana.

