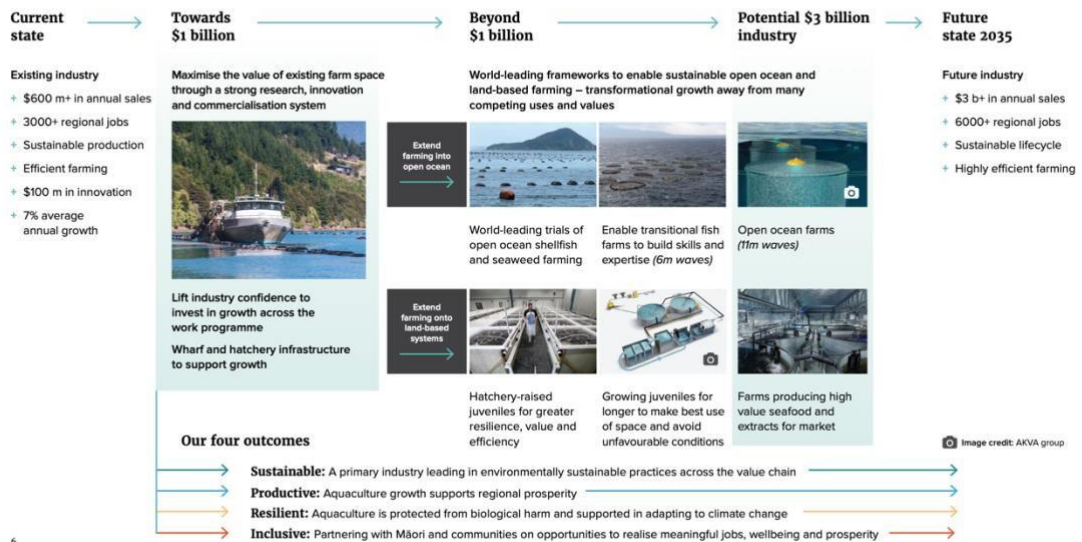


The sustainable growth pathway

Towards our goal of \$3 billion in annual sales by 2035



The Government's Aquaculture Strategy Map (Sep 2019)

Submission
Variation 1:
Variation 1A:

Marlborough District Council
Marine Farming and
Finfish Farming

February 2021

Parts 1-4 of the Marlborough District Council Form

Part 1: Submitter Details

McGuinness Institute

Part 2A: Trade Competition

Could you gain an advantage in trade competition in making this submission?

No

Part 2B: Declaration of any perceived or actual conflicts of interest

The CEO of the McGuinness Institute, Wendy McGuinness, owns a property on Arapawa Island. The CEO also owns a small number of shares in NZKS. This is not for investment purposes, but was a mechanism to receive timely, reliable and complete information in the capacity of being a shareholder.

Part 3: Council Hearing

Do you wish to be heard in support of your submission?

Yes (but would prefer not to present a joint case)

Part 4: Return Submission to:

Attention Planning Technician
Marlborough District Council
PO Box 443, Blenheim 7240

Email: variations@marlborough.govt.nz

Fax: 03 520 7496

For Office Use

Submission No:

MCGUINNESS INSTITUTE SUBMISSION

Part 5. The specific parts of the variation(s) (Volume, Chapter and Provision No.) the submission relates to are as follows:

The preliminary focus of our submission is finfish farming (i.e. Variation 1A), but because the underlying framework is set out in Variation 1, it is necessary to discuss both Variations 1 and 1A. Appendix 1 sets out our work to date on oceans management and salmon farming.

After reading and reviewing the documents provided, we have come to the conclusion that the McGuinness Institute does not support the policy framework developed in Variation 1A and in particular the resulting Finfish Aquaculture Management Areas (FAMA). The Aquaculture Management Areas (AMA) concept is old and outdated and was replaced in 2011 for the reasons outlined by the Ministry for Primary Industries (MPI) in 2012 (see Appendix 2). We are unsure why the Marlborough District Council (MDC) is wanting to revert to a system that has proven to be inefficient and ineffective. This is one of the many strategic questions that Variations 1 and 1A raise. To help the reader, we are placing these strategic questions into blue boxes (see directly below).

Q1: Why is the MDC wanting to revert to a system of AMAs that has proven to be inefficient and ineffective in the past?

Given our concerns with the proposed framework, this submission looks more deeply at the evidence that has been provided to support this proposal. In practice, this means we have tended to look at all the specific documents and then comment accordingly.

We have also tried to provide an historical context. The aim is to ask the reader to think more critically about the general trajectory and the key issues facing the industry, and to think strategically about the best way forward: Do changes need to be made? If yes, how will the environment and the people of the MDC benefit from those changes?

If you would prefer a more detailed response to this question, please do not hesitate to contact Wendy McGuinness (021 781200).

Part 6. Our submission is: (state the nature of your submission whether you support or oppose (in full or in part) specific provisions)

Introduction

Thank you for the opportunity to submit on variation 1 and variation 1A.

This part of our submission is broken up into four sections. The first section outlines the McGuinness Institute perspective. It is followed by an overview of the background history to date in terms of aquaculture governance and climate change. We then follow this with an explanation of concerns with the variations. Part 7 summarizes what we seek in terms of changes to the variations.

Section 1: The McGuinness Institute approach (page 5)

Section 2: Historical overview of aquaculture governance (page 8)

Section 3: Recent government policy on climate change (page 19)

Section 4: Concerns with Variations 1 and 1A (page 29)

Where possible, we aim to illustrate the connection between the issues we raise and why we have the concerns we do, both in terms of the proposed MDC approach and the more specific detail in the variations. It is not possible to cover every point in detail, so we alert readers to the major principles and reasons for our engagement, which in practice aim to state the nature of our submission.

Section 1: The McGuinness Institute approach

Resource management is still relatively new in terms of legislation and consultation, but as resources are limited and impacts are being found to be more complex, we, as a country and as communities, need to find effective and timely ways to manage these resources for both current and future generations.

In March 2015, the Institute explored ways to develop a framework and published the results in a major report under our OneOceanNZ project. The title is Report 10 – One Ocean: Principles for the ocean and it put forward an approach to ocean management (see below).¹ This model continues to shape our work and in particular, this submission.



Below, we set out three principles that shape our response to ocean governance, and in particular Variation 1 and 1A and our appeal on the proposed MDC plan.

(i) An informed and collaborative community

One of the key ideas that shape our work and therefore our engagement with this issue is the need to create capacity and flexibility for future generations to make their own decisions. For this reason, providing effective use of public resources, in this case oceans, and in particularly inshore oceans (which is where much of the diversity in the wider oceans ecosystem is situated, grown and sustained), is critically important.

If the wider community is not involved and/or not informed, it is possible that those that are informed (and have self-interest and able legal experts) are able to gain access to public goods to the exclusion of other users and the environment. Hence, one of the principles we are interested in is intergenerational and intragenerational equity (intragenerational being equity between different people of the present generation and intergenerational being equity between people of different generations). We have always

¹ McGuinness Institute. (March 2015). *Report 10 – One Ocean – Principles for the stewardship of a healthy and productive ocean*. Retrieved 8 March 2023 from <https://www.mcguinnessinstitute.org/publications/project-2058/>

been concerned about the length of coastal permits (some permits are provided for 35 years), the fact that permit holders do not pay for water space use, and that the difference between stakeholders (e.g. in terms of expertise, networks and interests) could intentionally or unintentionally influence MDC decisions.

Q2: Are the variations that are being proposed today, in practice, taking away rights and use of resources from other users, and removing access and/or polluting the assets of future generations of users?

(ii) An integrated governance approach

A second key principle is integration. As we move from a very singular and siloed approach and move to a more integrated and interconnected approach (as evidenced by the government's Wellbeing Budget and Treasury's Living Standards Framework), we are needing to ensure all evidence and views are not only heard but integrated.

We believe the approach adopted by the MDC, where a proposed variation was released for public consultation four years after the original proposed plan was (from 9 Jun 2016 to 2 Dec 2020) is inappropriate. It has meant not only that submitters were being asked to submit on the proposed plan without knowing what was envisaged in the aquaculture space (which has a big impact on places as far away as Blenheim and Nelson, as well as the Marlborough Sounds), but also that, because of the length of time between submissions, a lot more new evidence and public policy developments needed to be absorbed, understood, integrated and considered. Further, as we note in this submission, it seems difficult to understand why the length of time was necessary.

Q3: What was the reason why Variation 1A was not put out for public consultation in the plan, as little new evidence has been cited? How can the proposed plan be separated from variations, in terms of the purpose of the RMA (e.g. s 5,6 and 7)?

(iii) Durable policies and processes

Uncertainty is often cited as the enemy of business. Clear and consistent public policy and processes are always the desired outcome but occasionally new impacts come along to turn policies on their head. Climate change is one of those, but also a new information and deeper understandings about the relationship between the land and ocean, ocean pollution and reduced diversity are required to be absorbed and considered in order to ensure we make great decisions. One of the interesting things about the New Zealand King Salmon (NZKS) applications is that the Board of Inquiry (BOI) did create certainty and it has been the NZKS applications (by farm, by relocating groups of farms, and now open ocean) that is driving the policy. Many of us, the Institute included, struggle to keep up with the many applications before the Minister of Fisheries and the MDC. In reality, the uncertainty is being driven by concerns by NZKS about its business model, and in particular the rising of water temperatures in the Marlborough Sounds.

The Institute is a strong advocate of Task Force on Climate-related Financial Disclosures (TCFD) reporting as a way to share timely and accurate information. Stranded assets is particularly relevant to variation 1A, as some of the coastal permits are already, in our view, climate change stranded assets. It would be a dangerous precedent if MDC or indeed the government recompense NZKS for climate change stranded assets when there will be many other industries in the near future that will also face these challenges. We consider TCFD is one way that accurate information is shared early, so companies can pivot. In the case of NZKS, that means moving to landbased and oceanbased aquaculture (not farming more salmon in the inshore water spaces such as the Marlborough Sounds).

There are, however, some basic approaches that will help us all navigate this terrain.

(a) A transparent and accountable approach

Q4: How is MDC going to deliver an integrated approach and enable the variations (1 and 1A) to catch up and be integrated with the proposed plan? We were unable to find how the plan and the variations would be brought together into one integrated document.

Q5: Who is accountable to manage the framework outlined in variations (1 and 1A)?

(b) A precautionary approach

Timely and reliable research is paramount to good decision making, particularly in times of significant change (which climate change will bring). We were pleased to see the research outlined in Appendix 3 below, but we need to develop a research programme to manage the Marlborough Sounds in a more complete, informed and timely manner.

Q6: How many salmon farms (or volume of feed) is too much for the Marlborough Sounds ecosystem to bear? What is the tipping point? Who is undertaking the necessary scientific research on climate change and ecosystem management and is that information shared equally, in an easily accessible manner?

Section 2: Historical overview of aquaculture governance

Below, we provide an overview of key strategic documents that relate to NZKS and their activities to obtain more access to water to farm salmon. More detailed timelines are available in our publications. (See the complete list in Appendix 1).

(i) Cabinet Paper on Aquaculture Reform (2010)

In 2010, a Cabinet Paper on Aquaculture Reform (15 March 2010) noted (among other things):

1. a desire for an integrated approach,
2. that marine and land-based salmon farming were connected, and
3. that land-based salmon farming required careful consideration.²

Excerpts from the Cabinet Paper are below:

5.3	enable integrated decision-making that:
5.3.1	integrates aquaculture management with other activities managed under the Resource Management Act 1991;
5.3.2	addresses the impact of aquaculture on activities managed outside the Resource Management Act 1991, particularly existing fishing rights;
5.3.3	provides for the Māori Commercial Aquaculture Settlement and co-ordinates aquaculture policy with the review of the Foreshore and Seabed Act 2004;

8	agreed that the aquaculture business unit will be the government's principal advisor on marine and land-based aquaculture, and will lead the aquaculture reform process and implementation of the improved regime;
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Land-based aquaculture	
49	agreed that the aquaculture business unit will review the regulatory regime for land-based aquaculture separately from the current reforms and report to the Minister with overall responsibility for aquaculture and the Minister of Conservation at a date to be agreed to by those Ministers, on problems and opportunities for reform, and recommendations for a programme of work;

² Cabinet office. (15 March 2010). *CAB Min (10) 9/2; EGI Min (1) 3/3: Aquaculture Reform*. Retrieved 8 March 2023 from <https://www.epa.govt.nz/assets/FileAPI/proposal/NSP000002/Applicants-proposal-documents/6c8fbfff97/Application-Attachment-Report-on-National-Significance-Appendix-3-Cabinet-Minute.pdf>

(ii) Aquaculture Reforms (2011)

Appendix 2 contains a copy of MPI's Guidance Overview: Aquaculture Legislative Reforms 2011 (Oct 2012). Importantly, it makes it clear both in the Guidance and on their website that the reforms in 2011 were designed to remove the need for AMAs, which had proved to be ineffective.

Legislation was changed in 2011 to encourage sustainable aquaculture development and streamline planning and approvals for marine aquaculture. Changes were made to the:

- Resource Management Act 1991
- Aquaculture Reform (Repeals and Transitional Provisions) Act 2004
- Fisheries Act 1996
- Māori Commercial Aquaculture Claims Settlement Act 2004.

Prior to this, under the Aquaculture Reform Act, farmers could apply to set up new farms only in aquaculture management areas (AMAs) established by councils. AMAs were introduced as a management tool, **but were found to complicate and delay approvals for new aquaculture. The 2011 changes simplified the approval process by removing the need for AMAs.**³ [Bold added]

(iii) National Significance (2011–2013)

In 2011, NZKS applied to the Minister of Conservation to treat an application to extend salmon farming as nationally significant, which led to a 2013 Board of Inquiry.⁴ The Environmental Protection Authority (EPA) decision and documents can be found on the EPA website.⁵

The extent of that application shows very little difference from what this variation proposes. We therefore consider the same level of due diligence applied by the Board of Inquiry in 2013 should be applied under this variation.

The Marlborough District Council notes on its website:

On 3 October 2011 New Zealand King Salmon lodged with the Environmental Protection Authority two private plan change requests to change the Marlborough Sounds Resource Management Plan. The New Zealand King Salmon proposal comprised the following requests: A plan change request (the "Main" plan change request titled "Sustainably Growing King Salmon") to create a new salmon farming zone (Coastal Marine Zone 3) in eight (8) specific areas in the MSRMP; and A plan change request (the "Ancillary" plan change request) addressing the plan provisions relating to the allocation of the right to apply for coastal permits for marine farming in the MSRMP. This was accompanied by nine (9) resource consent applications for salmon farms in the Marlborough Sounds. New Zealand King Salmon stated that the

³ Ministry for Primary Industries. (12 July 2021). Aquaculture legislation. Retrieved 8 March 2023 from <https://www.mpi.govt.nz/legal/legislation-standards-and-reviews/aquaculture-legislation/>

⁴ The Minister for the Environment (or Minister of Conservation for proposals in the coastal marine area) must decide whether it is a proposal of national significance and, if it is, they refer it to a board of inquiry or the Environment Court for decision. Environmental Protection Authority. (2023). Proposals of national significance. Retrieved 8 March 2023 from <https://www.epa.govt.nz/industry-areas/rma-proposals/proposals-national-significance/>

⁵ Environmental Protection Authority. (2023). New Zealand King Salmon. Retrieved 8 March 2023 from <https://www.epa.govt.nz/database-search/rma-applications/view/NSP000002>

purpose of the proposal is to enable New Zealand King Salmon to secure new water space for marine farming to meet demand for its product, King Salmon. The Minister of Conservation referred the proposal to a Board of Inquiry for determination. Information on the proposal, the Board of Inquiry process and the Board's decision can be found on the Environmental Protection Authority website.⁶

The Resource Management Act 1991, s142 (3) sets out the grounds for national significance:

In deciding whether a matter is, or is part of, a proposal of national significance, the Minister may have regard to—

(a) any relevant factor, including whether the matter—

- (i) has aroused widespread public concern or interest regarding its actual or likely effect on the environment (including the global environment); or
- (ii) involves or is likely to involve significant use of natural and physical resources; or
- (iii) affects or is likely to affect a structure, feature, place, or area of national significance; or

(iiia) gives effect to a national policy statement and is one that is specified in any of paragraphs (c) to (f) and (j) to (m) of the definition of matter in section 141; or

(iv) affects or is likely to affect or is relevant to New Zealand's international obligations to the global environment; or

(v) results or is likely to result in or contribute to significant or irreversible changes to the environment (including the global environment); or

(vi) involves or is likely to involve technology, processes, or methods that are new to New Zealand and that may affect its environment; or

(vii) is or is likely to be significant in terms of section 8; or

(viii) will assist the Crown in fulfilling its public health, welfare, security, or safety obligations or functions; or

(ix) affects or is likely to affect more than 1 region or district; or

(x) relates to a network utility operation that extends or is proposed to extend to more than 1 district or region; and

The reasons NZKS claimed their project was of national significance are as follows:

NZ King Salmon considers its Sustainably Growing King Salmon Proposal to be a proposal or part of a proposal of national significance. The reasons for that are as follows:

- (a) It is likely to be of widespread public interest (s142(3)(a)).
- (b) It involves a structure, feature, place, or area of national significance (s142(3)(c)).
- (c) It is likely to involve the significant use of natural and physical resources (s142(3)(c)).
- (d) There are other relevant factors, including the huge regional and national economic benefit predicted to result from successful implementation of the Proposal (s142(3)).⁷

⁶ Marlborough District Council. (2023). PC24 - New Zealand King Salmon. Retrieved 8 March 2023 from <https://www.marlborough.govt.nz/your-council/resource-management-policy-and-plans/marlborough-sounds-resource-management-plan/marlborough-sounds-plan-changes/pc24-new-zealand-king-salmon>

⁷ Environmental Protection Authority. (n.d.). *Sustainably Growing King Salmon - A Proposal Of National Significance*. New Zealand King Salmon Co. Limited. Retrieved 8 March 2023 from <https://www.epa.govt.nz/assets/FileAPI/proposal/NSP000002/Applicants-proposal-documents/cda422603a/Application-Attachment-Report-on-National-Significance.pdf>

In their application, NZKS suggests the proposal will lead to a doubling of production (8250 mt to 21000 mt). See page 4 of their proposal.⁸

22. As the Economics Report shows (see Tab 10 of the *Sustainably Growing King Salmon Proposal*), NZ King Salmon's currently operational farms produce some 8,250 mt of salmon annually. With its current sites (and sites under appeal being made operational), NZ King Salmon's production is likely to progressively increase to around 13,000 mt annually by 2020. Establishment of 8 or 9 new farms would take the total production level to some 21,000 mt pa (this is a biosecure future - or 'conservative' - estimate). In plain terms, the proposed new farms would provide potential to more than double NZ King Salmon's current salmon production, and support strong growth in salmon exports, as well as increase availability for domestic consumption.

(iv) Relocation proposal (2015-2017)

The relocation proposal was led by the Ministry for Primary Industries (MPI) for the Minister of Fisheries but began after they were approached by NZKS. See below:

A Fisheries New Zealand spokeswoman said a "robust" process had been followed involving public consultation and establishing an independent panel to provide advice to the minister.

A wide range of views and issues had been considered to make sure any decisions would deliver sustainable aquaculture, consistent with the Resource Management Act and the Government's Aquaculture Strategy, the spokeswoman said.

The relocation was a MPI-led proposal, which began after they were approached by New Zealand King Salmon in 2015, she said.

As the regulator, MPI was the lead for communications on the proposal and, along with NZ King Salmon, it established a media protocol for responding to requests for information, and media inquiries during the consultation.⁹

(v) Minister's Aquaculture Strategy (Sep 2019)¹⁰

The strategy's objectives are to:

- promote and assist implementation of strategic integrated coastal and catchment planning to ensure a healthy aquatic environment
- partner with industry on a transition plan to reduce emissions and waste across the value chain
- maximise the value of all farmed space through a strong research, innovation, and commercialisation system
- develop world-leading frameworks for open ocean and land-based farming

⁸ Environmental Protection Authority. (n.d.). *Sustainably Growing King Salmon - A Proposal Of National Significance*. New Zealand King Salmon Co. Limited. Retrieved 8 March 2023 from

<https://www.epa.govt.nz/assets/FileAPI/proposal/NSP000002/Applicants-proposal-documents/cda422603a/Application-Attachment-Report-on-National-Significance.pdf>

⁹ Angeloni, A. (4 November 2019). Salmon company and Government careful not to 'collude' during relocation proposals. Stuff. Retrieved 8 March 2023 from <https://www.stuff.co.nz/business/112924308/salmon-company-and-government-careful-not-to-collude-during-relocation-proposals>

¹⁰ New Zealand Government. (September 2019). *The New Zealand Government Aquaculture Strategy*, pp. 4–5, 8–9. Retrieved 3 April 2023 from <https://www.mpi.govt.nz/dmsdocument/15895-The-Governments-Aquaculture-Strategy-to-2025>

- support infrastructure needs to enable growth
- strengthen biosecurity management
- support the industry to adapt to climate change
- build Māori and community knowledge about aquaculture and their input into growth opportunities
- deliver the Crown's aquaculture settlement obligations in a manner that facilitates early investment in new opportunities
- recognise Māori values and aspirations across the work programme.

The strategy objectives are expected to be achieved through three key drivers (see the strategy map on the front cover of this submission). Importantly, the three key drivers of the strategy are not about expanding salmon farming in the Marlborough Sounds (which the implementation of Variation 1A would do), but about applying innovation to the existing farms inshore and expanding land based aquaculture and open ocean aquaculture. The three key drivers are explained in the strategy, as set out overleaf:

1. Maximising the value of existing farms through innovation

Aquaculture is and will continue to be a value success story. A strong innovation programme and co-investment between Government and industry have been key to New Zealand delivering premium, high value products to the world.

There is still scope for being more productive, efficient and sustainable, and deriving greater value from what we grow. Examples include mussel oils, powders and extracts; high value nutrition; and premium salmon. There are other opportunities on offer – such as through macro-algae farming to provide ecosystem services, buffering ocean acidification, and storing carbon.

2. Extending into high value land-based aquaculture

Land-based aquaculture farms produce juvenile stock for growing to harvestable size in the sea. For marine aquaculture to grow, land-based hatcheries will also need to grow or increase their output.

There is potential for land-based aquaculture to further support marine aquaculture in a number of ways. This includes rearing juveniles that better withstand climate change, ocean acidification or pests and diseases. Land-based aquaculture also enables increased productivity by breeding juveniles that have marketable traits such as size or nutritional characteristics; and making better use of sea space by growing juveniles for longer before they are transferred to marine farms.

Land-based aquaculture also presents opportunities to farm right through to harvest. This includes precision growing to meet evolving market demands for high value seafood and extracts such as oils and powders.

3. Extending aquaculture into the open ocean

Aquaculture has traditionally taken place in sheltered, enclosed bays and harbours where there are other legitimate uses and values. Many areas have reached their social carrying capacity.

Both globally and in New Zealand, attention is turning to open ocean farming as the big opportunity for aquaculture growth.

Open ocean farming presents an opportunity to farm in cooler, deeper waters, and more easily position farms away from areas of high competing use. New Zealand's exclusive economic zone is 15 times bigger than our land area – presenting significant potential.

Open ocean farming outside of enclosed bays requires a technological shift – existing technology does not perform in open ocean environments. We can leverage work being undertaken globally to farm in high energy environments. We have the opportunity to develop and implement a world-leading framework for managing open ocean development, and ensure it integrates with existing uses and values. This will be a critical part of our work programme.

This would mean that Variation 1A is inconsistent with the government's aquaculture strategy.

The strategy signalled the Government's clear plan and support of the aquaculture industry, Nash said. They were working on biosecurity and offshore farming, which was where the "real potential" was. He said regulations were necessary, but he didn't want them to hold up the process. "It's ensuring it works for industry as an enabler rather than a barrier." The Government would support the development and adoption of new technologies and practices to reduce the industry's contribution to **waste and emissions**, Nash said.¹¹ [Bold added]

(vi) New Directions for Resource Management in New Zealand Report (June 2020)

The *New Directions for Resource Management in New Zealand* report (chaired by Hon Tony Randerson QC) provides some useful insights and general trajectory for consideration.

From page 16, the report outlines the reasons why the system has not responded effectively. One of these is the lack of clear environmental protections. It uses NZKS as an example (see overleaf):

¹¹ Angeloni, A. (19 September 2019). Aquaculture's 'ambitious' \$3 billion goal by 2035. Stuff. Retrieved 8 March 2023 from <https://www.stuff.co.nz/business/115879161/aquacultures-ambitious-3-billion-goal-by-2035>

Excerpts by page number

Reasons why the system has not responded effectively

Lack of clear environmental protections

16. While a major improvement on the previous system, the RMA has not sufficiently protected the natural environment. The RMA had the ambitious purpose of sustainable management of natural and physical resources. However, the Act suffered from a lack of clarity about how it should be applied – taking over two decades for the courts to settle this through the Environmental Defence Society Incorporated v The New Zealand King Salmon Company Limited case. As a consequence of this lack of clarity, as well as insufficient provision of national direction and implementation challenges in local government, clear environmental limits were not set in plans. Lack of clear environmental protections has made management of cumulative environmental effects particularly challenging. (p. 16)

32. Issues identified with the purpose and principles of the RMA fall into five broad categories:

- insufficient protection for the natural environment
- lack of recognition and strategic focus for development
- insufficient recognition of Te Tiriti and te ao Māori
- insufficient focus on outcomes
- lack of clarity in intent and implementation. (p. 49)

38. While the effectiveness of plans in setting environmental limits has been strengthened following *King Salmon*, EDS argues that the phrases ‘recognise and provide for’ and ‘have particular regard to’ in sections 6 and 7 leave considerable scope for interpretation and application of environmental protection. Moreover, we continue to lack national policy on most of the issues covered in sections 6 and 7. At the regional level, regional plans are not mandatory and rules are not required, let alone prohibited activity rules. According to EDS, “our laws may need to be more active and directive in terms of when, by whom, and under what normative umbrella we impose bottom lines”. (p. 51)

42. While these reviews have generated an ongoing process of RMA and wider urban planning reform, Part 2 has remained largely unchanged. The Principles TAG was appointed in 2012 to review Part 2 of the RMA. Importantly, this group was appointed prior to the *King Salmon* decision. The group noted that: “if the Government were desirous of upholding the environmental bottom line approach formerly thought to be the correct interpretation of the Act then significant amendment should be made to the Act, because that is clearly not the law as established by judicial interpretation.” (p. 54)

43. From this starting point, the Principles TAG recommended reform of sections 6 and 7 to address what was then a mismatch between the ‘overall broad judgement’ approach adopted by the courts, the matters of national importance in section 6 and the hierarchy of matters provided for in sections 6 and 7. In particular, it argued sections 6 and 7 focused almost exclusively on the environmental factors that should be taken into account in decision-making, rather than acknowledging the full range of environmental, social, economic, cultural, and health and safety considerations raised in the Act’s purpose statement. (p. 54)

131. The new purpose and principles contain an expanded list of outcomes that must be provided for, including the matters that were treated as matters of national importance under section 6 of the RMA. It is intended to preserve key elements of the King Salmon decision including the rejection of the overall broad judgment approach and the recognition of the hierarchical approach under the RMA. (p. 81)

48. One of the issues with the current resource management system is insufficient long-term focus across the system. Long-term spatial planning is an important tool to avoid or reduce ad hoc decision-making in response to perceived issues as they arise. As articulated by international cities and spatial planning expert, Greg Clark, spatial planning “looks into the future in ways which go beyond the usual vision of governments and public bodies and seeks to express the future demand for a wide range of public goods that can then be anticipated (p. 132)

61. A number of submitters on our issues and options paper also supported provision for a fully integrated marine spatial planning framework. For example, New Zealand King Salmon submitted: “New Zealand should institute a comprehensive marine spatial planning regime. Marine spatial planning regimes should extend into the exclusive economic zone. It should better integrate environmental protection and the human uses of the coastal environment including aquaculture”. (p. 136)

72. The decline of environmental outcomes experienced over the last thirty years suggests a continued need for emphasis on environmental limits. However, as the Supreme Court has pointed out, Part 2 of the RMA is not a “primary operative decision-making provision.”¹⁰⁵ Rather, section 5 simply provides a ‘guiding principle’ to be applied by those performing functions under the RMA. And, while the operation of section 5 has been clarified following the King Salmon decision, the process of developing detailed environmental controls at the national, regional or local levels continues to afford broad discretion to central and local government. An important question for our review has been how to ensure our system of setting protections for the natural environment is sufficiently active and directive. (p. 63)

76. In order to address concerns about how New Zealand’s natural environment is managed, a future environmental management framework must therefore ensure:

- biophysical environmental limits ‘have teeth’ within a reformed system
- limits are set in a way that ensures sustainability and resilience
- instruments and incentives are available to deliver environmental improvement and restoration when needed. (p. 64)

81. Reliance on limits alone risks creating a ‘race to the bottom’ mentality where exploitation of all available resources above the limit may be seen as acceptable. It may also mean that our environmental management system is not responsive to the need for positive change to improve and enhance the environment and long-term human health and wellbeing. And it creates more risk that cumulative effects will breach bottom lines and that buffers put in place to address uncertainty will come under pressure. As such, outcomes and targets are needed to orient the management approach towards continuous environmental improvement where a healthy and flourishing environment is sought, rather than one that can merely endure human modification. Outcomes are intended to be high-level enduring goals reflecting a desired future state. Targets are time-bound steps for improving the environment and moving towards achieving outcomes. (p. 65)

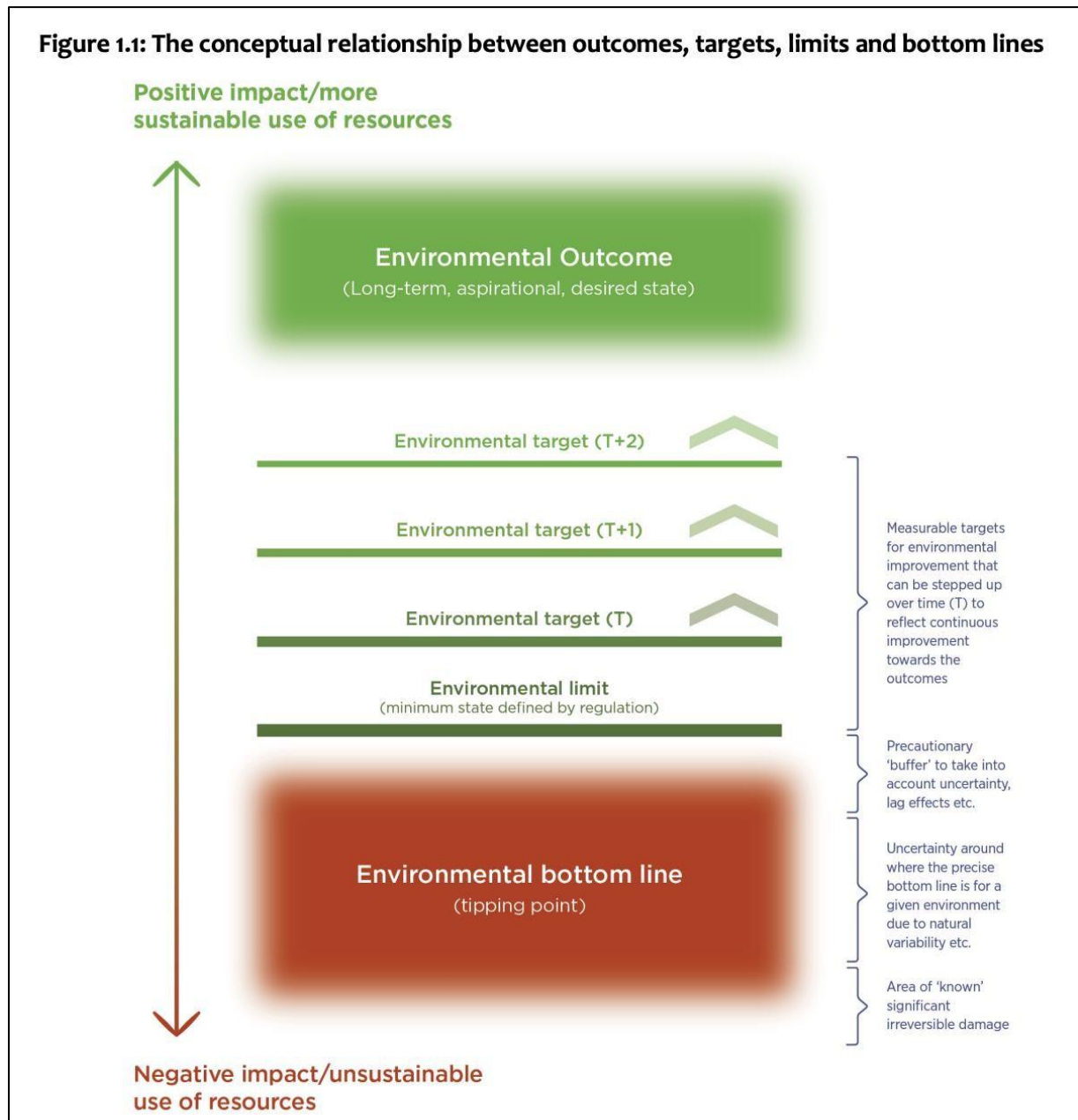


Figure 1.1. (p. 66)

84. To ensure a sustainable and resilient management approach, these limits would be required to provide a margin of safety above the conditions in which significant and irreversible damage may occur to the natural environment. Decision-makers would also be required to take a precautionary approach to setting limits where effects on the natural or built environment are uncertain, unknown or little understood but have potentially significant and irreversible adverse consequences. (p. 67)

85. Limits and targets would also be expressed in various other planning documents. Depending on the content, coverage and detail of national targets and limits, combined plans would need to retain the ability to set targets and limits at local authority level (see chapter 8). (p. 67)¹²

¹² Resource Management Review Panel. (June 2020). *New Directions for Resource Management in New Zealand*. Retrieved 8 March 2023 from <https://environment.govt.nz/assets/Publications/Files/rm-panel-review-report-web.docx>

There is an expectation that if the national system is not working, local government should resolve the gaps identified in para 32. There should be:

1. sufficient protection for the natural environment
2. recognition and strategic focus for development
3. sufficient recognition of Te Tiriti and te ao Māori
4. sufficient focus on outcomes
5. clarity in intent and implementation.

(vii) National environmental standards for marine aquaculture (NES-MA) (mid-2020)

On December 2020, the national environmental standards for marine aquaculture (NES-MA) became law. This was an outcome of the aquaculture strategy. The aim is to:

- (a) increase regulatory consistency and certainty
- (b) ensure environmental effects are appropriately managed
- (c) increase industry confidence to promote investment.¹³

(viii) Minister of Fisheries becomes Minister of Oceans and Fisheries (Nov 2020)

This change in name sends a very clear message about a change in the government's responsibilities to ocean management. It indicates a move away from seeing the ocean as simply a provider of fish to eat, but as a resource that needs to be managed in its own right for the use and enjoyment of current and future generations. Placing the term 'ocean' ahead of 'fisheries' is also strategic, and in our view was a policy realignment that better positions all users of the oceans to have a shared narrative about the values and methods for managing the resource going forward.

¹³ Ministry for Primary Industries. (24 September 2021). National environmental standards for marine aquaculture. Retrieved 8 March 2023 from <https://www.mpi.govt.nz/fishing-aquaculture/aquaculture-fish-and-shellfish-farming/national-environmental-standards-for-marine-aquaculture/>

Section 3: Recent government policy on climate change

It is important that any decisions made going forward take into consideration climate change. Given that NZKS has indicated their business model is being challenged by rising water temperatures, it acts as a warning that the total ecosystem in the Marlborough Sounds will come under increasing stress in the short term. For example, removing farms (rather than increasing areas farmed), is likely to remove stress on an already stressed system. Looked at this way, salmon farming is the canary in the coalmine. If an ecosystem is being stressed, the goal should be to destress it.

The context of recent climate change developments is vital when it comes to assessing the variations under review. Below we set out what the key players are advocating. Importantly, these are all developments since the MDC published and publicly notified its proposed plan on 9 June 2016 and before it published Variations 1 and 1A. We consider the proposed plan will require significant updating, as the variations have failed to consider negative climate change impacts in any material way. It is as if Section 32 Evaluation only reviews commercial impacts from the farmer's perspective (i.e. NZKS) in terms of area to be farmed and not from the citizens' perspective, who have an interest in the whole of the Marlborough Sounds as a public good.

The Variation 1A Section 32 Evaluation report on page 9 simply refers to Objective 19.1 (Mitigation of and adaptation to the adverse effects on the environment arising from climate change) and Objective 19.2 (Avoid and mitigate the adverse effects of natural hazards influenced by climate change). It states, 'These objectives recognise the need for adaptation to the adverse effects of climate change'. However, the plan the council is progressing will increase the amount of feed into the Marlborough Sounds significantly, placing even more stress on the environment, and releasing more carbon from making the feed and transporting it from Chile and Australia.

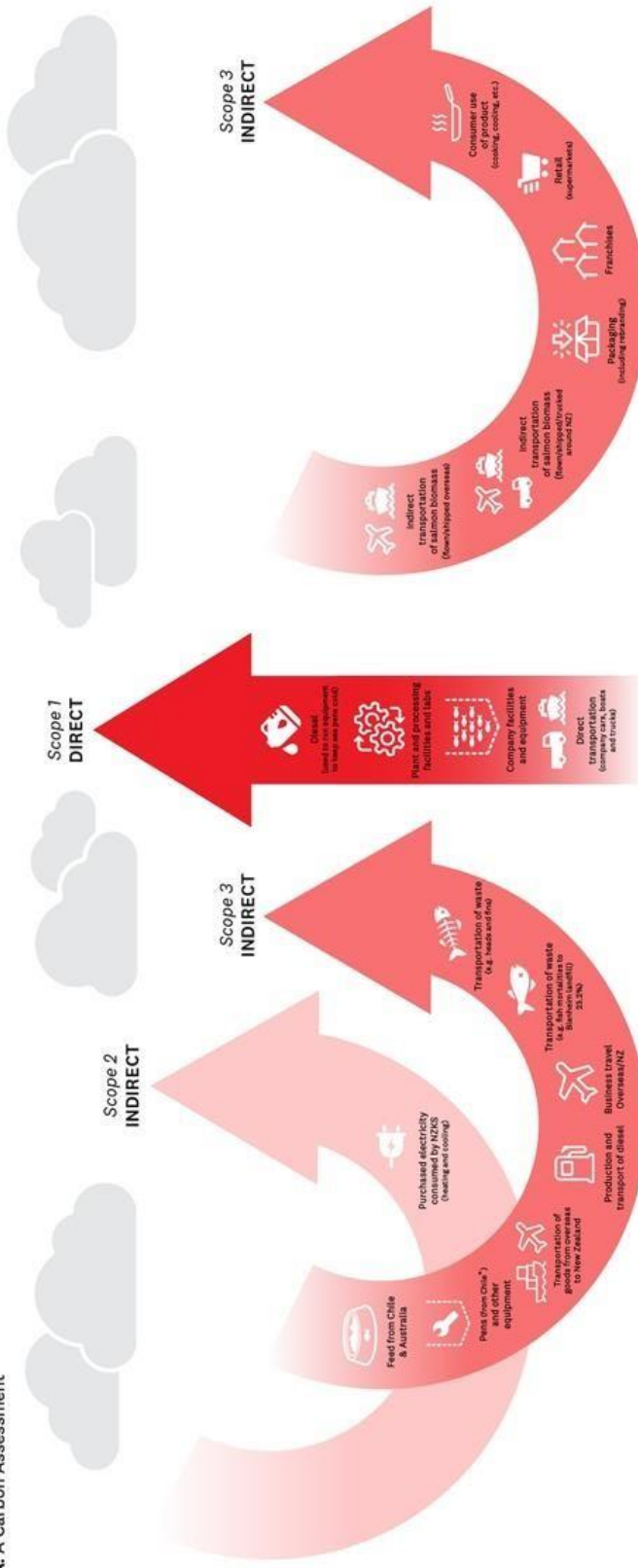
This is perhaps best illustrated by a diagram we designed based on the actual flows. Salmon farming is an intensive carbon industry – the more salmon we farm, the more fish we need to feed and the more tonnes of salmon we will export. However, we appreciate we need to find more sustainable and durable business models. The MDC must work harder to answer these questions:

Q7: How is MDC going to drive and deliver zero carbon by 2050?

Q8: If Variation 1A was implemented (as per your suggestions in the guidance document), what level of feed would be allowed to be distributed into the Sounds? In particular, what is the difference between the current actual level of feed over a 12-month period, the current allowed feed (permitted for the same 12month period) and the proposed feed (under your suggested new framework outlined in page 6 of Variation 1A guidance)? Note: We had expected to find this information in the s 32 evaluation document.

Figure 1: Exploring Scope 1, 2 and 3 for New Zealand King Salmon – An external perspective

A: A Carbon Assessment



B: Life Cycle Analysis



Disclaimer: This diagram is made by the McGinness Institute based on information in the public arena. This diagram must not be relied upon for making investment decisions.
 Sources: NZKS 2019 Annual Report; Stuff 8/7/2015 Winter; Chilean firm wins King Salmon contract; **NZKS BOJ June 2012 Wybourne; Skretting expects that about 20% of the dry matter consumed is excreted as faeces, for NZ King Salmon current salmon diet range'.
 Faeces estimate based on 20% of feed volume (1953x0.2). ***Mortality estimate based on feed volume converted less harvest (19593/1.8 - 7931).

Below we outline recent developments:

(i) First council to announce a climate emergency (May 2019)

In May 2019, two regional councils declared a climate emergency. Environment Canterbury was first, followed closely by Nelson City Council.¹⁴ By the latest count, 67 councils have signed the Local Government New Zealand (LGNZ) declaration.¹⁵ One of the signatories was Mayor John Leggett of the MDC. Importantly, the commitment the mayor made includes the following key principles:

Guiding Principles

(Source: New Zealand Local Government Leaders' Climate Change Declaration)

The following principles provide guidance for decision making on climate change. These principles are based on established legal¹⁶ and moral obligations placed on Government when considering the current and future social, economic and environmental well-being of the communities they represent.

1. Precaution

There is clear and compelling evidence for the need to act now on climate change and to adopt a precautionary approach because of the irreversible nature and scale of risks involved. Together with the global community, we must eliminate the possibility of planetary warming beyond two degrees from preindustrial levels. This could potentially threaten life on Earth (Article 2 of the UNFCCC). Actions need to be based on sound scientific evidence and resourced to deliver the necessary advances. Acting now will reduce future risks and costs associated with climate change.

2. Stewardship/Kaitiakitanga

Each person and organisation has a duty of care to safeguard the life-supporting capacity of our environment on which we all depend and to care for each other. Broad-based climate policies should enable all organisations and individuals to do all they feasibly can to reduce emissions and enhance resilience. Policies should be flexible to allow for locally and culturally appropriate responses.

3. Equity/Justice

It is a fundamental human right to inherit a habitable planet and live in a just society. The most vulnerable in our community are often disproportionately affected by change and natural hazards. Approaches need to consider those most affected and without a voice, including vulnerable members in our community, our Pacific neighbours and future generations.

4. Anticipation (thinking and acting long-term)

Long-term thinking, policies and actions are needed to ensure the reasonably foreseeable needs of current and future generations are met. A clear and consistent pathway toward a low carbon and resilient future needs to provide certainty for successive governments, businesses and communities to enable transformative decisions and investments to be made over time.

¹⁴ *New Zealand Herald*. (16 May 2019). 'The science is irrefutable': Two regional councils declare climate emergency. Retrieved 8 March 2023 from <https://www.nzherald.co.nz/nz/the-science-is-irrefutable-two-regional-councils-declare-climate-emergency/BEVJR44WBLHM7YM4CELDICCCNI/>

¹⁵ Local Government New Zealand. (2017). *Local Government Leaders' Climate Change Declaration*. Retrieved 8 March 2023 from <https://www.lgnz.co.nz/assets/Uploads/Climate-Change-Declaration.pdf>

¹⁶ These Guiding Principles are established within the: Treaty of Waitangi, Resource Management Act 1991, Local Government Act 2002, Civil Defence and Emergency Management Act 2002, Oslo Principles 2014, Principles of Fundamental Justice and Human Rights.

5. Understanding

Sound knowledge is the basis of informed decision making and participatory democracy. Using the best available information in education, community consultation, planning and decision making is vital. Growing understanding about the potential impacts of climate change, and the need for, and ways to respond, along with understanding the costs and benefits for acting, will be crucial to gain community support for the transformational approaches needed.

6. Co-operation

The nature and scale of climate change requires a global response and human solidarity. We have a shared responsibility and cannot effectively respond alone. Building strong relationships between countries and across communities, organisations and scientific disciplines will be vital to share knowledge, drive innovation, and support social and economic progress in addressing climate change.

7. Resilience

Some of the impacts of climate change are now unavoidable. Enhancing the resilience and readiness of communities and businesses is needed so they can thrive in the face of changes. Protecting the safety of people and property is supported by sound planning and a good understanding of the risks and potential responses to avoid and mitigate risk. [bold added]

(ii) The 2050 target of zero emissions is set in law (Nov 2019)

Part 1B

Emission reduction

Part 1B: inserted, on 14 November 2019, by section 8 of the Climate Change Response (Zero Carbon) Amendment Act 2019 (2019 No 61).

Subpart 1—2050 target

Subpart 1: inserted, on 14 November 2019, by section 8 of the Climate Change Response (Zero Carbon) Amendment Act 2019 (2019 No 61).

5Q Target for 2050

- (1) The target for emissions reduction (the **2050 target**) requires that—
 - (a) net accounting emissions of greenhouse gases in a calendar year, other than biogenic methane, are zero by the calendar year beginning on 1 January 2050 and for each subsequent calendar year; and
 - (b) emissions of biogenic methane in a calendar year—
 - (i) are 10% less than 2017 emissions by the calendar year beginning on 1 January 2030; and
 - (ii) are 24% to 47% less than 2017 emissions by the calendar year beginning on 1 January 2050 and for each subsequent calendar year.
- (2) The 2050 target will be met if emissions reductions meet or exceed those required by the target.
- (3) In this section, **2017 emissions** means the emissions of biogenic methane for the calendar year beginning on 1 January 2017.

Section 5Q: inserted, on 14 November 2019, by section 8 of the Climate Change Response (Zero Carbon) Amendment Act 2019 (2019 No 61).

(iii) LGNZ reports (2019-2020)

LGNZ has worked hard in this space. In addition to the declaration, they have produced three publications:

- (a) *Vulnerable* (January 2019)
- (b) *Exposed: Climate change and infrastructure* (August 2019)
- (c) *Community engagement on climate change adaptation Case Studies* (August 2020)

(a) The *Vulnerable* report (January 2019) made four recommendations, namely that:

- Local government leads a national conversation about the level of local government services currently provided and what can be maintained in the short (1–10 years), medium (10–30 years) and long term (30+ years) as sea levels rise.
- Central and local government partner to establish a National Climate Change Adaptation Fund to ensure that costs of adaptation are shared equally, and do not over impact lower socioeconomic households.
- Establish a Local Government Risk Agency to help councils understand and factor climate change risks into their planning, decision-making and procurement frameworks.
- Local government team up with owners and users of exposed infrastructure to create a National Master Plan, setting out options, priorities and opportunities for responding to sea level rise.¹⁷

(b) The *Exposed: Climate change and infrastructure* report (January 2019) discussed a maturity index framework. The proposed variations and plan indicate that MDC has a long way to go before getting to a ‘making progress’ level. We appreciate this is hard work, but climate change is not simply about sea level risk and ‘adaptation’ – it is also about water temperature risk, acidification, biodiversity risk and the all-important ‘mitigation’.¹⁸ See the table overleaf.


¹⁷ Local Government New Zealand. (31 January 2019). \$14 billion of council infrastructure at risk from sea level rise [media release]. Retrieved 8 March 2023 from <https://www.lgnz.co.nz/news-and-media/2019-media-releases/14-billion-of-council-infrastructure-at-risk-from-sea-level-rise/>

¹⁸ Local Government New Zealand. (August 2019). *Exposed: Climate change and infrastructure*. Retrieved 3 April 2023 from <https://www.lgnz.co.nz/assets/Uploads/6ed34721bd/LGNZ-2019-CC-guidance-document-FULL.pdf>

Maturity index

This simple maturity index (Figure 7.1) can be used by councils in order to gauge their approaches to managing climate risk and planning for adaptation. The levels range from 'starting out' to 'leading' and cover actions relating to *networks and cooperation* both internally and externally, *leadership and governance*, and specific *risk assessment and adaptation planning approaches*.

Figure 7.1: Example maturity index for climate adaptation



Level	Networks and cooperation	Leadership and governance	Risk assessment and adaptation planning
1. Starting out	<ul style="list-style-type: none"> No meetings with other councils or stakeholders regarding Climate Change. No working group within council. No public engagement. 	<ul style="list-style-type: none"> Climate change not on the radar. 	<ul style="list-style-type: none"> There is no or limited understanding of infrastructure exposed to climate change. No understanding of risks to communities or to councils finances or reputation etc.
2. Making progress	<ul style="list-style-type: none"> Some ad-hoc meetings and cooperation beginning to take shape. 	<ul style="list-style-type: none"> Commitment to understand climate exposure and risks. 	<ul style="list-style-type: none"> Risk and vulnerability assessment framework developed and commenced.
3. Developed	<ul style="list-style-type: none"> Regular cooperation, working groups established. 	<ul style="list-style-type: none"> Climate risks identified and communicated internally and with the public. Adaptation plan developed and signed off. 	<ul style="list-style-type: none"> Risk and vulnerability assessments undertaken, high risks prioritised and options/pathways developed.
4. Leading	<ul style="list-style-type: none"> Regular cooperation, working groups established across disciplines and stakeholders. Linking to central government direction. Strong integration with civil defence, land use planning, asset planning etc. 	<ul style="list-style-type: none"> Adaptation plan implemented, monitoring and review regularly undertaken. Climate change is a strategic priority that influences all plans and decisions. 	<ul style="list-style-type: none"> Defend/accommodate/retreat options (could be part of a DAPP approach) are developed and implemented via appropriate channels/mechanisms. Risks reviewed and updated regularly. Community are aware and engaged in decision-making - within a robust and transparent process.

(c) The Community Engagement on Climate Change Adaptation Case Studies (August 2020) found that the issues challenging three councils could fit under five key themes:

1. A policy vacuum
2. Resourcing challenges
3. Communication and well-being
4. Hearing from the right people
5. A lack of partnership with central government

[Notably, in regard to 4.] ‘Councils are grappling with how to ensure that all relevant parties are participating in their engagement processes. They are working out how to ensure that the diversity of voices within a community is adequately heard, and that those voices are given appropriate weight. In particular, councils are trying to work out how best to ensure that the voices of those both directly and indirectly affected by adaptation options are adequately heard. **There are concerns about what legally constitutes adequate engagement with different parts of the community.**¹⁹ [Bold added]

(iv) Labour Government (Dec 2020)

On 2 December 2020, our government declared a climate emergency, setting out a need to be on the right side of history:

We issue declarations sparingly. The reason we have done this today is that those cases where we do issue declarations are often where there are threats to life, threats to property, or civil defence emergencies. If we do not respond to climate change, we will continue to have those emergencies on our shore. I do want to acknowledge, as I conclude, the Minister of Climate Change and the Green Party, endless advocates for activity in this space that we will continue to work in partnership with. But I encourage every member of this House to take the issue of climate change with the utter seriousness that it deserves. Vote in favour of this declaration today. Be on the right side of history. Be part of the solution we must collectively deliver for the next generation. – Prime Minister Jacinda Ardern (2 December 2020)²⁰

Discussion (Impacts of Climate Change)

Our understanding of the challenges of climate change is that the water in the inner sounds is likely to be too hot to farm salmon in the medium term. See for example the NZKS annual report below. However we think it is recognised by all parties that this is the general trajectory and the reason for the relocation application and the open ocean application by NZKS. When they look out to the future, they know they need to find alternative models.

¹⁹ Local Government New Zealand. (August 2020). *Community engagement on climate change adaptation – Case Studies*, p. 12. Retrieved 8 March 2023 from <https://www.lgnz.co.nz/assets/Uploads/LGNZ-Climate-Change-case-studies-FINAL.pdf>

²⁰ New Zealand Parliament. (2 December 2020). Motions — Climate Change—Declaration of Emergency. Retrieved 8 March 2023 from https://www.parliament.nz/en/pb/hansard-debates/rhr/combined/HansDeb_20201202_20201202_08

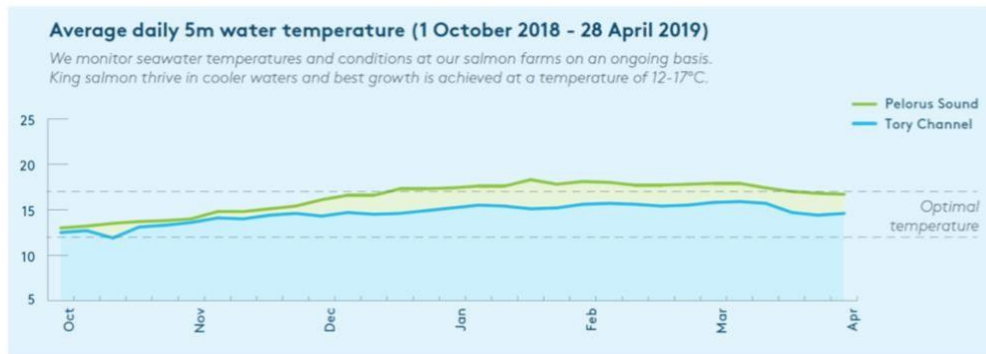


Figure 22. Surface seawater temperature records at Marlborough Sounds salmon farms (2018-2019).

Source:²¹

With respect, we all need to check in regarding whether we are on the right side of history, and with particular regard to Variation 1A, whether increasing the amount of tonnes of salmon being farmed in the Marlborough Sounds inshore waterways is a step too far. This is particularly important given that no research has been undertaken on how much is too much, in terms of tonnage.

Further, if MDC is going to support more farming of salmon, it needs to think how that impacts its obligation to reach zero carbon by 2050. There is no discussion in the documents provided (either in the proposed plan or the variations) that illustrates a focus on mitigation strategies.

The proposed MDC chapter on climate change requires significant work and alignment to current public policy. This is perhaps best illustrated by the following excerpt from the proposed plan's chapter on climate change.²² This paragraph implies the Council only needs to undertake adaptation strategies. However, government has set a national goal of zero emissions by 2050, meaning a discussion over the degree of certainty over climate change is no longer relevant, whereas meeting the emission targets in New Zealand law is highly relevant.

²¹ New Zealand king Salmon. (2020). *Annual Report 2019*. Retrieved 3 April 2023 from <https://www.kingsalmon.co.nz/wp-content/uploads/2020/07/FY19-Annual-Report.pdf>

²² Marlborough District Council. (n.d.). *Appeal Version – Policy – Chapter 19: Climate Change*. Volume One, p. 1. Retrieved 8 March 2023 from <https://www.mcguinnessinstitute.org/wp-content/uploads/2021/03/20210304-McGuinness-Institute-submission-FINAL1.pdf>

Section 7 of the Resource Management Act 1991 (RMA) requires the Council to have regard to the effects of these predicted climatic changes in exercising its functions under the RMA. Uncertainty about the nature of these effects at international, national and local level makes this a difficult task. Most projections are also long term and certainly beyond the ten year life of the Marlborough Environment Plan (MEP) While there is now a state of scientific certainty regarding the facts of climate change, the exact nature of these effects will always involve a degree of uncertainty, given the timeframe, the range of factors involved and the complexity of global weather systems, as well as the extent that the global community reduces greenhouse gas emissions. However, there is strong national guidance providing for an adaptive management approach that allows uncertainty to be addressed and flexibility in adapting as more information becomes available. Taking all of this into account, the provisions of this chapter focus on applying the best available information to enable people and communities to respond to the adverse ~~and positive~~ effects created by climate change – and any beneficial effects that may arise. It is noted that the adverse long-term effects of global warming are likely to outweigh any regional short term benefits that may occur.

In addition to climate change, a consequence of higher carbon dioxide levels in the sea is ocean acidification. Shells are predominantly calcium carbonate, which dissolves in acid. An increasing seawater acidity therefore has a direct effect on the ability of shellfish to form shells. In addition to obvious effects on shellfish, there is a potential for other species to be impacted as well. Although a serious potential threat to Marlborough's marine ecology, ocean acidification is not an effect of climate change and is therefore not addressed in this chapter.-

Furthermore, the statement, '[a]lthough a serious potential threat to Marlborough's marine ecology, ocean acidification is not an effect of climate change and is therefore not addressed in this chapter,' should be revisited. The MDC will be aware of the issue and how it was discussed in the media, but we agree with Professor James Renwick: acidification viewed only through an aquaculture lens is a 'bit narrow'.²³ The same article noted: 'A Marlborough District Council spokesman said ocean acidification would be included in the aquaculture chapter which was yet to be released.' However, we were unable to find any mention of acidification in the key documents supporting the Variation 1 and 1A on the MDC website.

²³ Angeloni, A. (13 March 2020). Ocean acidification an aquaculture issue, not a climate change issue. Stuff. Retrieved 8 March 2023 from <https://www.stuff.co.nz/environment/climate-news/120045113/ocean-acidification-an-aquaculture-issue-not-a-climate-change-issue>

Climate scientist professor James Renwick said the panel was "technically" correct in their reason not to include acidification in the climate change chapter, but it was "sort of splitting hairs".

"Because climate change and acidification are both driven by the same thing, I would see them as equally important aspects of the same problem," Renwick said.

Ocean acidification and climate change were both caused by human emissions of greenhouse gases, he said.

The ocean "soaks up" carbon dioxide, which alters the chemistry of the sea water and [results in it becoming more acidic](#).

It posed a threat to ecosystems and "could be quite damaging to marine life generally", as some creatures struggled to grow shells in the acidic environment.

"Acidification of the ocean is a really dangerous situation that we should be paying more attention to," Renwick said.

Choosing to address ocean acidification through the lens of aquaculture was a "bit narrow" as it affected more than just life in marine farms, he said.

"There's a lot of knock-on effects for acidification generally. It affects fisheries, it affects life in general and that could have huge consequences economically and for our lives."

Marine Farming Association general manager Ned Wells said the two processes were "inherently linked".

"The carbon emissions that are responsible for temperature increases are also causing ocean acidification."

Further evidence of this is the fact that the '19. Climate Change' in the proposed plan does not mention salmon farming (or finfish) being challenged by warmer temperatures caused by climate change (nor its section 32 evaluation of climate change), yet variation 1A and its 'Section 32 Evaluation' promote finfish farming as being an important contributor to the local and regional economy (page 68) but with minimal mention of climate change.^{24,25}

²⁴ Marlborough District Council. (n.d.). *Appeal Version – Policy – Chapter 19: Climate Change*. Volume One, p. 1. Retrieved 8 march 2023 from

https://www.marlborough.govt.nz/repository/libraries/id:2ifzri1o01cxbymxkvwz/hierarchy/documents/your-council/environmental-policy-and-plans/notified-version-pmep-volume-1-list/Chapter_19_Climate_Change.pdf

²⁵ Perception Planning. (November 2020). *Section 32 Evaluation Proposed Variation 1: Marine Farming for The Proposed Marlborough Environmental Plan (PMEP)*. Marlborough District Council. Retrieved 3 April 2023 from

Section 4: Concerns with Variations 1 and 1A

(i) The lack of evidence in the Section 32 Evaluation (Variation 1A)

Section 32 puts in place a certain level of due diligence and rigour over what the evaluation should deliver. In our view this has not been provided.

32 Requirements for preparing and publishing evaluation reports

- (1) An evaluation report required under this Act must—
 - (a) examine the extent to which the objectives of the proposal being evaluated are the most appropriate way to achieve the purpose of this Act; and
 - (b) examine whether the provisions in the proposal are the most appropriate way to achieve the objectives by—
 - (i) identifying other reasonably practicable options for achieving the objectives; and
 - (ii) assessing the efficiency and effectiveness of the provisions in achieving the objectives; and
 - (iii) summarising the reasons for deciding on the provisions; and
 - (c) contain a level of detail that corresponds to the scale and significance of the environmental, economic, social, and cultural effects that are anticipated from the implementation of the proposal.
- (2) An assessment under subsection (1)(b)(ii) must—
 - (a) identify and assess the benefits and costs of the environmental, economic, social, and cultural effects that are anticipated from the implementation of the provisions, including the opportunities for—
 - (i) economic growth that are anticipated to be provided or reduced; and
 - (ii) employment that are anticipated to be provided or reduced; and
 - (b) if practicable, quantify the benefits and costs referred to in paragraph (a); and
 - (c) assess the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the provisions.

Below we will look at three reports mentioned on the evaluation in more detail. Importantly, none of these three reports were prepared expressly for the purpose of the Variation 1A proposal.

(a) Marlborough Aquaculture Review Working Group (MARWG) (July 2019)

This report expressly states that it did not look at finfish (see page 2), so its value to support the framework proposed in Variation 1A is, at best, minimal – it instead relies on the MPI salmon relocation process.

The Marlborough Aquaculture Review Working Group was not tasked with reviewing any other provisions in the Proposed Marlborough Environment Plan that had already been notified.

We clarified that the group was not tasked with reviewing the space allocated for salmon farming. **This was, to an extent, being dealt with through the MPI salmon relocation process.**²⁶ [Bold added]

https://www.marlborough.govt.nz/repository/libraries/id:2ifzri1o01cxbymxkvwz/hierarchy/documents/your-council/environmental-policy-and-plans/mep-variations/section-32-reports-list/V1_s32.pdf

²⁶ Marlborough District Council. (n.d.). *Proposed Marlborough Environment Plan – Aquaculture Variations: Variation 1 – Guidance Document*, p. 15. Retrieved 3 April 2023 from

[https://www.marlborough.govt.nz/repository/libraries/id:1w1mps0ir17q9sgxanf9/hierarchy/Documents/Your%20Council/Environmental%20Policy%20and%20Plans/MEP%20Variations/Background Information List/V1_Guidance.pdf](https://www.marlborough.govt.nz/repository/libraries/id:1w1mps0ir17q9sgxanf9/hierarchy/Documents/Your%20Council/Environmental%20Policy%20and%20Plans/MEP%20Variations/Background%20Information%20List/V1_Guidance.pdf)

It is also important to note that, when comparing the guidance document for Variation 1 against Variation 1A, a significant gap in transparency is missing in the latter. Illustrating this gap, Variation 1 explains behind the scenes on page 14 of the guidance document, but no equivalent section sits in the guidance document for Variation 1A.

A further significant gap is the failure to mention how NZKS's other application, the open ocean application before council, fits into this proposal. Arguably, the NZKS open ocean proposal is actually more 'alive' than the relocation proposal. The latter was considered 'relatively dead' because the Minister decided not to implement the panel's recommendations and has asked them to go back to the drawing board (see discussion in 3 below).

Q9: How would the open ocean application by NZKS be actioned if the proposed Variation 1A is accepted? If this was approved, would the MDC need to progress NZKS's open ocean application, or simply use variation 1A to implement the open ocean application?

We found a brief discussion of the NZKS application with the MDC (July 2019) in the evaluation report, but nowhere else. This application is looking to build the farm within a 1792-hectare site in the ocean, which would be located seven kilometres north of Cape Lambert.²⁷ As a result, it should be very much on the MDC's radar when completing this proposal.

(b) EnviroStrat report: Open Ocean Finfish Aquaculture: Business Case (Feb 2020)

The Section 32 Variation 1A report mentions the EnviroStrat report: *Open Ocean Finfish Aquaculture: Business Case* (Feb 2020), which was prepared for New Zealand Trade and Enterprise to explore open ocean finfish aquaculture.²⁸ It does not look at traditional inshore salmon farming or review a set of options for the MDC. Its purpose, audience and utility is very different from how the authors of the Variation 1A Section 32 evaluation report have used it. See excerpt from page 4.

Purpose

The purpose of this document is to provide information for potential investors and sponsors to make informed investment decisions and to understand Open Ocean Aquaculture (OOA) potential in New Zealand. It does this by assessing the attractiveness of the proposed investment from different dimensions, including an overview of the financial feasibility and an assessment of potential direct and in-direct economic benefits to the New Zealand economy to inform an overall view of the case for investment.

This report includes a financial model and economic analysis that provides projections for an OOA operation in New Zealand, including investment requirements, establishment timeframes, revenues and operating costs (including jobs created). The primary focus of the business case is open ocean farming of finfish with the key species being Chinook (King) Salmon. We have adopted a scenario approach tailored specifically for New Zealand that leverages sound international understanding and is underpinned by robust assumptions and commentary. The report also includes a high-level commentary regarding potential upside from farming other species relevant to the New Zealand context.

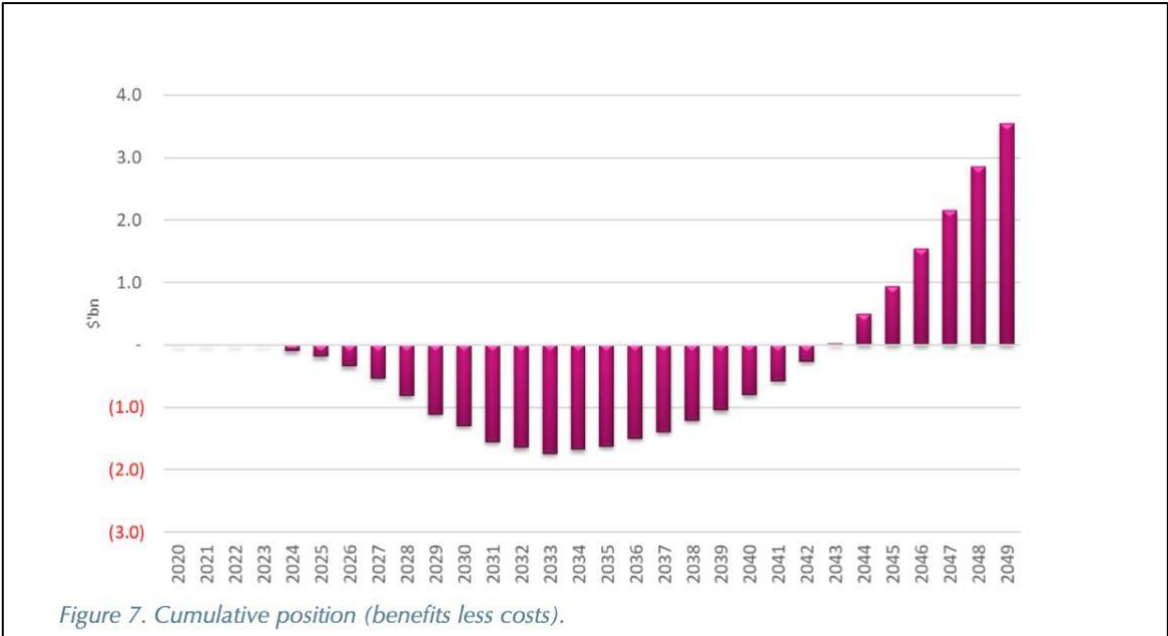
It does however provide some useful context.

²⁷ Note: 7 km is equivalent to 3.8 nautical miles. In law, the territorial sea extends 12 nautical miles. See Territorial Sea, Contagious Zone, and Exclusive Economic Zone Act 1977, s 3. Retrieved 8 march 2023 from https://www.legislation.govt.nz/act/public/1977/0028/latest/DLM442665.html?search=sw_096be8ed81baaf3f_nautical_25_se&p=1&sr=1

²⁸ Envirostrat Ltd. (February 2020). *Open Ocean Finfish Aquaculture: Business Case*. New Zealand Trade and Enterprise, pp. 4, 24–48, 59. Retrieved 8 March 2023 from <https://www.mpi.govt.nz/dmsdocument/40778/direct>

Firstly, there is a wide range of risks associated with the proposal and, even if these do not occur, a net positive position will not be reached until after the year 24. See their Figure 7 below.

Based on the base assumptions, the OOA industry will deliver a positive net position under low discount rates (up to 6%) with the net benefit position being \$242m (at 6%¹²) over 30 years. This is equal to an annual gain of \$8.1m. The export revenue (a benefit to New Zealand) is substantial, with a present value of \$8bn (at 6%). The value of the employment benefit (after allowing for opportunity costs and transfer) is estimated at \$355m over 30 years. The present value of the costs, both capex and opex, is estimated at \$8.1bn with the opex component accounting for 88% of the costs. **Overall, establishing the OOA industry is expected to deliver benefits outweighing the costs, returning a Cost Benefit Ratio (CBR) of 1.03.** Figure 7 shows the cumulative position of establishing the OOA. Overall, a net positive position will be reached after 24 years. The breakeven position (not shown in the graph) is reached in year 15.



Secondly, although it said it did not consider semi-closed systems as they were outside the scope of the summary, they are, in fact, an important option. For example, the authors note on page 4: ‘Technologies being investigated include semi-closed systems to increase production in the existing sheltered coastal ribbon, land-based systems using RAS technology and offshore systems that can exploit much more energetic open ocean locations.’ Their report does not explore these options in detail; see the slightly misleading excerpts below. The first shows semi-closed systems are outside the scope, whereas they do discuss this option further below.

Semi-closed Systems

Various semi-closed systems are in development. In these systems the salmon would be separated from the sea by an impermeable barrier (GRP or strong fabric). These systems are not being developed for the offshore environment – rather they are being developed for the inshore environment and are outside the scope of this summary.

Semi-closed systems will have lower capital costs than offshore systems and RAS systems. They will have higher operating costs (especially energy costs and waste treatment costs) than traditional cage systems. But they will offer a significant health benefit for the fish that may off-set these costs. The future for salmon farming is bright. Consumer demand for the product is high and the environmental case is strong. Farming systems need to change to accommodate the increasing demand as the existing coastal ribbon is at or near capacity. It is likely that there will be a mix of the traditional (existing) farming systems, more exposed systems using more robust existing technology, genuine offshore farming technologies, semi-closed farming systems and RAS systems. At this stage what will emerge as the dominant production technology for the next 20 years is not clear. Over the next 5 years there will be significant progress made in all these different systems and much more robust information to determine what the shape of the industry will be.

(c) The Report and Recommendations of the Marlborough Salmon Farm Relocation Advisory Panel (Jul 2017)²⁹

The Institute submitted and made ourselves available as an expert at the panel deliberations. The process in our view was narrow in scope and difficult to engage with. We had expected more inquiry and curiosity by the commissioners (e.g. we asked them to call-in certain information on the PWC model that in our view would explain the assumptions underlying their model) and better governance and stewardship by MPI (e.g. there were no MPI staff in the room at a crucial time when the economics were being discussed, nor was it recorded). The end outcome was, in our view, not a good basis for the Minister to make such strategic decisions. We believe the Minister agreed with our sentiment and this is why he never actioned the commissioners' recommendations. It is therefore surprising to see the MDC use the panel report as evidence to support Variation 1A.

Our submissions are all public and explain where our concerns lie. Of particular note is the PowerPoint slide that was presented to the commissioners. Key slides are discussed briefly overleaf, however, rather than being repetitive we will direct those interested to the links in Appendix 1.³⁰

²⁹ Advisory Panel. (July 2017). *Report and Recommendations of the Marlborough Salmon Farm Relocation Advisory Panel*. Ministry for Primary Industries. Retrieved 8 March 2023 from <https://www.mpi.govt.nz/dmsdocument/27447-Report-and-Recommendations-of-the-Marlborough-Salmon-Farm-Relocation-Advisory-Panel>

³⁰ McGuinness Institute. (9 May 2017). *Proposed Marlborough Salmon Farm Relocation*. Slideshow. Retrieved 8 March 2023 from <https://www.mcguinnessinstitute.org/wp-content/uploads/2016/08/20170614-Proposed-Marlborough-Salmon-Farm-relocation-FINAL-for-web.pdf>

Slide 1: Illustrates concerns about perceived conflicts of interest. It is also important to note the author of the PWC report was a previous consultant to NZKS.

Table 1: List of research commissioned for MSWG

90% was prepared by the 2012 NZKS BOI team.

Research	Provider
Navigation	Navigatus Consulting Ltd
Landscape and natural character	Hudson and Associates
Tourism and recreation	TRC Tourism Ltd
Seabirds	NIWA
Marine mammals	Cawthron and Associates
Pelagic fish	Statfishitics
Benthic	NIWA and Cawthron Institute
Water quality	NIWA and Cawthron Institute
Discharges (Cu/Zn, greywater)	Cawthron Institute
Disease and pests	DigsFish and Cawthron Institute
Biosecurity	Cawthron Institute
Underwater lighting	Cawthron Institute
Noise	Marshall Day Acoustics
Cultural impact assessment	Maximize Consulting Ltd
Heritage impacts	Heritage Works
Social impacts	Taylor Baines & Associates
Economic analysis	PwC
Operations	NZKS
Engineering	OCEL

Source: Marlborough Salmon Working Group. (2016). *Marlborough Salmon Working Group Advice to the Minister of Aquaculture*, p. 30. Retrieved from www.mpi.govt.nz/document-vault/15982.

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Slide 2: This shows the important set of adjustments in Col A(ii) that NZKS and PwC would not share publicly. The figures used in this column have a significant effect on the outcome, but the assumptions supporting these figures were not made public for commercial reasons. Generally, those analysing models tend to find out what data is sensitive, in other words, what is likely to shape the outcome. All the Institute asked was that the commissioners inquire into this information or have an independent person review that information. To our knowledge they did not.

Reconciliation of PwC's Table 41

PwC Economic Impact Assessment report reconciliation of Table 41 (November 2016)

Prepared by McGuinness Institute 9 May 2017

Value add (\$m)	Table 41 (p. 49)					
	Column A (i)	Column A (ii)	Column A (iii)	Column B	Column C	Column D
	Total economic impacts from BMP guidelines (From Table 24 (p.36))	Adjustments incorporating commercial viability and operational considerations	BMP maximum production, incorporating commercial viability and operational considerations (also from Table 25, p. 37)	Baseline production (also from Table 16, p. 31)	Estimated decrease in economic impact from implementing maximum BMP production, incorporating commercial viability and operational considerations	Estimated decrease in economic impact from implementing maximum BMP production
McGuinness Institute terminology	Best practice ¹	Adjustments by NZKS ²	Adjusted best practice ³	Worst practice	Difference	Difference
	Col A (i)	Col A (ii)	Col A (iii)	Col B	Col C = Col A-Col B	Col D = Col A (i)-Col B
Otanerau	3	0	3	3.1	-0.1	-0.1
Ruakaka ⁴	3	3	0	3.5	-3.5	-0.5
Forsyth ⁵	4	2.3	1.7	1.7	0	2.3
Waihinau ⁵	4	2.3	1.7	1.7	0	2.3
Crail Bay MFL32 ⁴	2	2	0	0	0	2
Crail Bay MFL48 ⁴	2	2	0	0	0	2
Total	18	11.6	6.4	10	-3.6	8

¹ P. 36: 'The BMP production figures assume that the benthic impacts are the limiting factor.'

² We were unable to determine what supporting evidence was used to make these adjustments.

³ P. 36: 'The figures in Table 25 ... consider the benthic impacts in conjunction with the commercial viability and operational considerations of each site as the limiting factor.'

⁴ Assumption 1 – NZKS say they will not operate these sites as not commercially viable: 'If the sites are not commercially viable, the resulting economic contribution is nil.' NZKS have advised PwC that Ruakaka and the two Crail Bay sites are not commercially viable (see p. 36). Cabinet Paper December 2016 p. 4, FN 4 states: 'Given they have not been used recently they are the lowest priority for location.'

⁵ Assumption 2 – NZKS say they will operate these sites even though they are not commercially viable: 'From discussions with MPI and NZKS, we understand that NZKS would operate the Forsyth and Waihinau salmon farm sites even if they were not commercially viable as stand-alone operations, as they would help achieve single year class on NZKS's Pelorus high-flow-sites.' (p. 37)

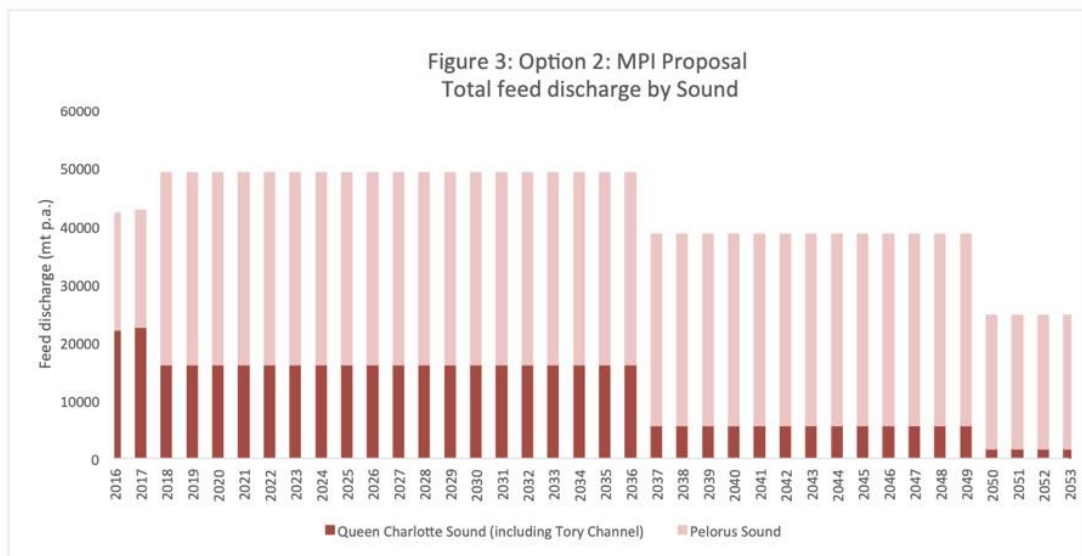
Note: Baseline production refers to potential future production not operating under best management practice (BMP) guidelines at six existing low-flow salmon farm sites. (p. 29)

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Slide 3: The variation 1A evaluation report shows no feed analysis. We consider such analysis is critical to decision making as it is a key indicator of impacts. It is one of a number of ways that the MDC can express a limit (as noted in the excerpts of the Randerson report above). In practice the Marlborough Sounds fits nicely into three major areas and each area (Pelorus, Queen Charlotte and the Tory Channel) could have an overall feed limit in the plan.

3: Option 2: MPI proposal Total feed discharge by Sound



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Slide 4: Our recommendations. We believe it is so important for decision makers to appreciate that the low-feed farms and the farms that were not being used formed a part of the inputs into the Board of Inquiry considerations. They had already been considered in the recommendations of the board. Putting it in colloquial terms, NZKS is double dipping.

Recommendations

- The Panel should be aware that the BOI already took the low-flow farms into account in the 2013 decision.
- MPI and the Panel should request the Excel document discussed in the PwC report (see below). We believe this will be much more informative in terms of the commercial reality of the existing farms than the *Economic Impact Assessment* report.

NZKS has provided an Excel model which calculates earnings before interest and tax (EBIT) for each operational salmon farm site.⁴⁰ We have checked the arithmetic used to calculate FY16 EBIT for all operational salmon farms and EBIT for Ruakaka, Waihinau and Otanerau using the maximum projected salmon production under BMP guidelines. We found that the calculation is internally consistent with NZKS's EBIT calculated using NZKS's audited FY16 statement of comprehensive income, which is provided in the model.⁴¹

Source: PricewaterhouseCoopers. (2016). *Marlborough Salmon Relocation – Economic Impact Assessment*, p. 36.

Option 1: Advise the Minister that a cost-benefit analysis and public consultation on the cost-benefit analysis is required before you are able to prepare your final report and recommendations.

Option 2: Advise the minister that the proposal should be declined on the basis that it would be better undertaken as part of the mid-2017 MPI consultation on the national direction of aquaculture.

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Importantly, the guidance in variation 1 implies the proposal is still before the Minister – but the panel decision was given to the Minister in 2017 (almost four years ago) and made public in 2018.

The MPI website indicates it is still ongoing, but it is an 'alternative' proposal that will be considered.³¹ In particular the website indicates that they are waiting for more technical information: Fisheries New Zealand is waiting for further technical reports before it gives advice to the Minister for Oceans and Fisheries (see excerpt below). Our view is that the 2017 decision is old and no longer relevant. The reality is the dialogue has moved on and an 'alternative relocation proposal' is under consideration. MDC appear to be relying on a questionable 2017 decision that was never implemented and has led to further technical questions. Why would MDC rely on old information to inform decision making?

³¹ Ministry for Primary Industries. (n.d.). Marlborough salmon relocation. Retrieved 8 March 2023 from <https://www.mpi.govt.nz/consultations/marlborough-salmon-relocation>

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 Manatū Ahu Matua

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UPDATES

30 November 2020 – Progress of alternative relocation proposal

Fisheries New Zealand is still waiting for further technical reports before it gives advice to the Minister for Oceans and Fisheries. Fisheries New Zealand has asked New Zealand King Salmon and representatives of some Marlborough iwi to provide an update on when a final complete proposal will be provided. Once the status of the proposal is confirmed we will provide the Minister with advice on options for proceeding.

15 July 2019 – Alternative proposal received

On 12 June 2019, Fisheries New Zealand received an updated proposal for salmon farm relocation in the Marlborough Sounds from New Zealand King Salmon and representatives of some Marlborough iwi.

The proposal focuses on options to address matters considered by the independent Marlborough Sounds Salmon Farm Relocation Advisory Panel that led to it not recommending the Waitata Mid-Channel site for salmon farming. While the proposal received outlines a revised approach, Fisheries New Zealand is awaiting further technical reports before advice is given to the Minister of Fisheries.

Fisheries New Zealand will publish the proposal in full once it has been received and advice has been provided to the Minister of Fisheries on options for proceeding. Further public comment will be sought if the revised proposal is considered further and it is significantly different to the proposal consulted on previously.

3 May 2019 – Progress of relocation proposal

In 2018, the Minister of Fisheries released a report and recommendations from the Marlborough Sounds Salmon Farm Relocation Advisory Panel on whether to relocate 6 salmon farms in the Marlborough Sounds.

When he released the report, the minister advised that he would meet with key parties in the relocation process before making a decision on how to proceed.

As a result of these discussions, New Zealand King Salmon and Marlborough iwi were encouraged to work together and were provided the opportunity to submit an updated proposal.

Further, it is important to see the two statements made in the guidance documents for Variation 1 and Variation 1A regarding the panel report.

In terms of variation 1, to make it clear the relocation is a separate process, but then in Variation 2 to say the relocation panel's recommendations are being implemented, is at best inconsistent, and at worst intentionally misleading. People reading Variation 1 would not know that a 2017 decision is being used to shape decisions in Variation 1A for 2022 and beyond.

Variation 1: Marine Farming – Guidance Document ([PDF, 585.9KB](#))

Will the Ministry for Primary Industries' salmon relocation process be affected by Proposed Variation 1: Marine Farming?

In early 2017, the Ministry for Primary Industries released a proposal for relocating Marlborough Sounds salmon farms. This included shifting six of New Zealand King Salmon's farms from low flow areas to higher flow areas, which would decrease their environmental impacts.

The proposed aquaculture provisions will not affect the relocation proposal, because that is a separate proposal run by the Ministry for Primary Industries. It is still in progress and awaiting a decision by the Minister.

Variation 1A: Finfish Farming – Guidance Document (PDF, 868.8KB)

Farms we think should be relocated

We've decided to adopt the recommendation of the Marlborough Finfish Farm Relocation Advisory Panel to create three new finfish farming sites to replace three existing ones. Three finfish farms (in Waihinau, Otanerau, and Ruakaka Bays) are operating in low flow areas. Therefore, we think that they should be relocated to the higher flow areas Tio Point, Richmond Bay South, and Horseshoe Bay.

Two existing farms in Crail Bay are also located in low flow areas. These were also identified for relocation, however suitable relocation sites have not been identified. At these low flow sites, the farms have the potential to continue to degrade the environment. For these reasons, we think that finfish farming is inappropriate here and we have not proposed a Finfish AMA over these two sites.

If the Council decided to rely upon and implement the panel's recommendations, in reality, it is taking over the Minister's role – it will make the technical and consultative work the Minister had envisaged irrelevant.

Our last point is that there is very little reliance being placed on the government's aquaculture strategy. We note MDC's publications rarely mention the strategy or its contents. The strategy map below (and on the front of this submission) makes the general trajectory the government is pursuing very clear – it is a landbased aquaculture and offshore ocean aquaculture strategy. It is not pursuing expanding in the inshore ocean area (other than through innovation). Also, see the boxed excerpts from the strategy in Part 2 of this submission, under Aquaculture Strategy. It is likely the Minister expected the strategy to set the trajectory for the MDC, when determining its proposed plan. It is definitely our expectation.



(ii) The need for better protection for Hector's dolphin from fish farming

Hector's dolphins' conservation status is considered nationally vulnerable.³² A recent article highlighted new research. It states:³³

A survey of historical and scientific references to the now-rare native Hector's and Māui dolphins, going back to the 1800s, found strong evidence the species were abundant and ranged through much of New Zealand's waters, until recently.

Māui dolphins are now critically endangered, with only about 60 left, and there's estimated to be about 15,000 Hector's dolphins.

Both live close to the shore, which makes them especially vulnerable to human impacts and fishing.

"They are traditionally a tohu, a sign, and there's whakataukī, or proverbs, that say when Hector's dolphins are plentiful, abundant and well, so too is everything else in our local inshore eco-system." [and] Māui dolphins are a subspecies of Hector's dolphin's, meaning they have different physical characteristics; "Māui dolphins are slightly longer, and their beaks are slightly longer, they're genetically slightly different, but they're distant cousins", she said.

[and] McGrath found a surprising amount of evidence the pods would often foray "up rivers and estuaries - more so than we see now".

Finfish farming does create risks for the Hector's dolphin. Seals are attracted to the farms due to all the salmon; which in turn attracts sharks and sharks are a predator of dolphins.³⁴ Our view is that any finfish plan needs to consider ways to further protect the Hector's dolphin; this is particularly relevant given the research is out of date (we could only find a 2014 Abundance and distribution of ECSI Hector's dolphin publication on the abundance and distribution of the Hector's dolphin).³⁵ See excerpts from the 2014 report overleaf.

³² Department of Conservation. Hector's dolphin. Retrieved 8 March 2023 from

<https://www.doc.govt.nz/nature/native-animals/marine-mammals/dolphins/hectors-dolphin>

³³ Tuckey, C. (28 December 2020). Now-rare Hector's and Māui native dolphins were once 'abundant', study finds. RNZ. Retrieved 8 March 2023 from <https://www.rnz.co.nz/news/national/433714/now-rare-hector-s-and-maui-native-dolphins-were-once-abundant-study-finds>

³⁴ WDC. (n.d.). Can Dolphins Fight Off Sharks?. Retrieved 8 March 2023 from <https://us.whales.org/can-dolphins-fight-off-sharks/>

³⁵ MacKenzie, D.L. & Clement, D. M. (March 2014). *Abundance and distribution of ECSI Hector's dolphin*. New Zealand Aquatic Environment and Biodiversity Report No. 123. Ministry for Primary Industries, pp. 75–76. Retrieved 8 March 2023 from <https://www.mpi.govt.nz/dmsdocument/4350-AEBR-123-Abundance-and-distribution-of-ECSI-Hectors-dolphin>

Clifford and Cloudy Bay Marine Mammal Sanctuary (CCBMMS)

This region was not originally considered a high density area for Hector's dolphins until more recent research found a sizable population present year-round (about 200–950 animals; DuFresne & Mattlin 2009). The Clifford and Cloudy Bay Marine Mammal Sanctuary (CCBMMS) was also created in 2008 as part of the new TMP regulations implemented to protect Hector's dolphins by DOC and MFish in 2008 (Figure 29). The boundaries of this Sanctuary also extend out to 12 nmi offshore from Tory Channel to Cape Campbell. Similar commercial and recreational fishing regulations apply as to BPMMS with both commercial and recreational setnetting banned out to four nmi and commercial trawl fishing out to two nmi. A few exemptions have been made based on legal reviews of some closures, in particular the decision to allow both commercial and recreational fishing for butterfish using setnets within 200 m of the shore along the western edge of Cloudy Bay and Marlborough Sounds (from Rarangi to Cape Jackson; see Figure 29 for place locations).

During our summer, 10% of the ECSI population was within the Clifford and Cloudy Bay stratum (Table 26) and 9% in winter (Table 28). Apportioning the local estimated abundance based upon the number of individual dolphins sighted in the full data sets as above; 47% of

the local summer population appear to be within the 4 nmi fisheries restriction zone and 97% within the CCBMMS boundaries. In winter, 14% of the local population appear to be within the 4 nmi fisheries restriction zone and 74% within the CCBMMS boundaries (Figure 29).

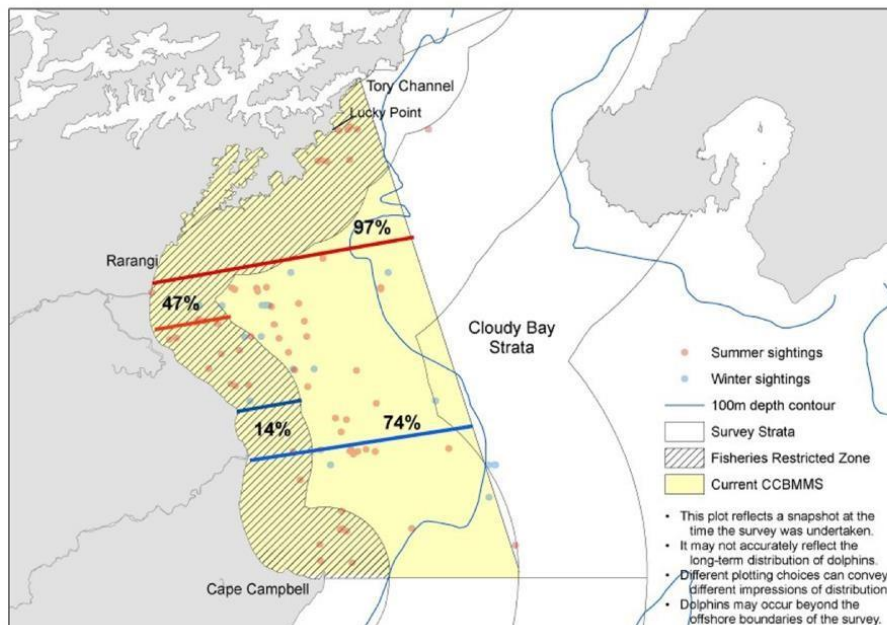


Figure 29: Survey sightings in relation to the CCBMMS boundaries. Red lines and associated percentages represent proportion of local summer population within 4 nmi and 12 nmi of CCBMMS, and blue lines and associated percentages denote winter.

(iii) Concerns over the length of time between the proposed plan and the variations

The Proposed Marlborough Environment Plan was publicly notified on 9 June 2016 and submissions closed on 1 September 2016. The Variations to the proposed plan were publicly notified on 2 December 2020 and submissions closed on 26 February 2021. This is a gap of four years. It is unclear how the variations are intended to merge with the remainder of the plan. Further, the reasons why the variations took four years is unclear given the *New Zealand Coastal Policy Statement*. The review of the NZCPS was initiated by DOC in 2016 to fulfil its monitoring responsibilities for the NZCPS in 2016 and was completed in June 2017.³⁶

In the MEP it states this extension was necessary due to ‘The Council did not consider that the draft provisions gave full effect to Policy 8 of the New Zealand Coastal Policy Statement. The review has now been completed and the variations are a result of the review process.’³⁷ It is difficult to understand why this has taken four years when the wording of the NZCPS has not changed. Even if we assume MDC was waiting for the DOC review (published in June 2017), that would still make the process over three years.

It is important to note that the Marlborough Aquaculture Review Working Group report (published July 2019) only looked at bivalve aquaculture (not finfish).³⁸ This means variation 1 took 1 ½ years from the publication of the July 2019 report to prepare the consultation document.

- (5) The MARWG commenced meeting in March 2017. 16 meetings were held between February 2017 and June 2019.
- (6) The Council provided the MARWG with a starting proposition for the review process. For completeness, the starting proposition is attached as Appendix 2. The scope of the review process did not include finfish marine farming. The reasons for constraining scope in this regard are set out later in this report.³⁹ [Bold added]

However, this does not explain the time difference between the finfish variation taking three years from the DOC review. A lot of new information will have been made available that may not be inputted into the process. It is hard to understand the reasoning why the finfish variation needed to wait for bivalve aquaculture.

³⁶ Department of Conservation. (June 2017). *Review of the effect of the NZCPS 2010 on RMA decision-making – Overview and key findings*. Retrieved 8 March 2023 from <https://www.doc.govt.nz/globalassets/documents/conservation/marine-and-coastal/coastal-management/review-of-effect-of-nzcps-2010-on-rma-part-one.pdf>

³⁷ Marlborough District Council. (n.d.). *Proposed Marlborough Environment Plan. Aquaculture Variations. Variation 1 – Guidance Document*, p. 1. Retrieved 8 March 2023 from [https://www.marlborough.govt.nz/repository/libraries/id:1w1mps0ir17q9sgxanf9/hierarchy/Documents/Your%20Council/Environmental%20Policy%20and%20Plans/MEP%20Variations/Background Information List/V1_Guidance.pdf](https://www.marlborough.govt.nz/repository/libraries/id:1w1mps0ir17q9sgxanf9/hierarchy/Documents/Your%20Council/Environmental%20Policy%20and%20Plans/MEP%20Variations/Background%20Information%20List/V1_Guidance.pdf)

³⁸ Marlborough District Council. (July 2019). *Recommendations of the Marlborough Aquaculture Review Working Group*. Retrieved 8 March 2023 from [https://www.marlborough.govt.nz/repository/libraries/id:1w1mps0ir17q9sgxanf9/hierarchy/Documents/Your%20Council/Environmental%20Policy%20and%20Plans/MEP%20Variations/Background Information List/ARWAG_Recommendations.pdf](https://www.marlborough.govt.nz/repository/libraries/id:1w1mps0ir17q9sgxanf9/hierarchy/Documents/Your%20Council/Environmental%20Policy%20and%20Plans/MEP%20Variations/Background%20Information%20List/ARWAG_Recommendations.pdf)

³⁹ Marlborough District Council. (July 2019). *Recommendations of the Marlborough Aquaculture Review Working Group*, p. 2. Retrieved 8 March 2023 from [https://www.marlborough.govt.nz/repository/libraries/id:1w1mps0ir17q9sgxanf9/hierarchy/Documents/Your%20Council/Environmental%20Policy%20and%20Plans/MEP%20Variations/Background Information List/ARWAG_Recommendations.pdf](https://www.marlborough.govt.nz/repository/libraries/id:1w1mps0ir17q9sgxanf9/hierarchy/Documents/Your%20Council/Environmental%20Policy%20and%20Plans/MEP%20Variations/Background%20Information%20List/ARWAG_Recommendations.pdf)

These are strategic questions that raise concerns into timely and comprehensive process and evidence based decision making.

A more logical process would be to have incorporated aquaculture together as one variation (aquaculture) with four chapters, the first introducing Coastal Management Units (CMU), the second Aquaculture Management Areas (AMA), the third bivalve marine aquaculture and the fourth finfish marine farming.

We believe the approach MDC progressed (Variation 1 and Variation 1A) added unnecessary confusion and will have reduced the quality of consultation the Council would have received.

It is not that we do not support quality consultation, but the consultation over that time was narrow, and the public were only given just over two months (including 5 public holidays) to respond to this variation.

Policy 8: Aquaculture

In the “*New Zealand Coastal Policy Statement 2010*”

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Recognise the significant existing and potential contribution of aquaculture to the social, economic and cultural well-being of people and communities by:

- a. including in regional policy statements and regional coastal plans provision for aquaculture activities in appropriate places in the coastal environment, recognising that relevant considerations may include:
 - i. the need for high water quality for aquaculture activities; and
 - ii. the need for land-based facilities associated with marine farming;
- b. taking account of the social and economic benefits of aquaculture, including any available assessments of national and regional economic benefits; and
- c. ensuring that development in the coastal environment does not make water quality unfit for aquaculture activities in areas approved for that purpose.

(iv) **The title of the variation ‘Finfish farming’, fails to indicate you are simply referring to the marine space**

The title of the variation is illogical for the purposes of consultation and adds further confusion. We suggest ‘Marine Finfish Farming’.

(v) **Reverting back to AMAs (which were not effective)**

The reverting back to AMAs (and indeed FAMAs) is surprising given in 2011 changes to aquaculture legislation was made to remove AMAs in order to improve processes. See for example, MPI’s comments on their website below and in Appendix 2, a copy of MPI’s Guidance Overview: Aquaculture Legislative Reforms 2011 (Oct 2012).

Legislation was changed in 2011 to encourage sustainable aquaculture development and streamline planning and approvals for marine aquaculture. Changes were made to the:

- Resource Management Act 1991
- Aquaculture Reform (Repeals and Transitional Provisions) Act 2004
- Fisheries Act 1996
- Māori Commercial Aquaculture Claims Settlement Act 2004.

Prior to this, under the Aquaculture Reform Act, farmers could apply to set up new farms only in aquaculture management areas (AMAs) established by councils. AMAs were introduced as a management tool, **but were found to complicate and delay approvals for new aquaculture. The 2011 changes simplified the approval process by removing the need for AMAs.**⁴⁰ [Bold added]

⁴⁰ Ministry for Primary Industries. (12 July 2021). Aquaculture legislation. Retrieved 8 March 2023 from <https://www.mpi.govt.nz/legal/legislation-standards-and-reviews/aquaculture-legislation/>

(vi) Separate legislation exists for landbased and marine based farming

The distinction between landbased and marine based aquaculture are currently managed through two separate pieces of legislation. As summarised by MPI:⁴¹

Land-based aquaculture

We manage land-based aquaculture through the Freshwater Fish Farming Regulations 1983, under the Fisheries Act 1996. The regulations cover all aquaculture above the high tide mark, including aquaculture:

- in freshwater canals
- in indoor aquariums
- on land using fresh water
- on land using sea water or brackish water (either pumped from the sea or circulated around the farm).

Under the regulations, farmers must have a fish-farm licence – which we grant – to farm certain listed species.



[Freshwater Fish Farming Regulations 1983 – NZ Legislation](#)

Marine aquaculture

Marine aquaculture is mainly managed under the Resource Management Act 1991 (RMA) which promotes sustainable management of natural resources.

Under the RMA:

- regional councils are responsible for planning and managing aquaculture in their coastal area between high tide and the 12 nautical mile limit
- any new marine farm must have a resource consent from the regional council.



[Resource Management Act 1991 – NZ Legislation](#)

We consider this creates a strategic problem for the following reasons:

1. Councils tend to review marine and land as separate resources, but in reality both work together.
2. There is already a great deal of salmon farming that is happening on land in New Zealand (e.g. although NZKS landbased farming works out about 2.5%⁴², Mt Cook salmon is 100%⁴³), and this is likely to increase given 100% landbased models are increasing overseas (and are likely to be investigated and implemented in New Zealand) and climate change is making the inshore water too hot to farm salmon. Therefore landbased, as a percentage of total salmon farmed in New Zealand, is likely to increase.

⁴¹ Ministry for Primary Industries. (12 July 2021). Aquaculture legislation. Retrieved 8 March 2023 from <https://www.mpi.govt.nz/legal/legislation-standards-and-reviews/aquaculture-legislation/>

⁴² See page 10 of NZKS annual report: (158/6294 tonnes, audited as at 30 June 2020); New Zealand King Salmon. *New Zealand King Salmon Investments Limited And Subsidiaries Interim Consolidated Financial Statements For The Six Months Ended 31 December 2020*. Retrieved 8 March 2023 from <http://nzx-prod-s7fsd7f98s.s3-website-ap-southeast-2.amazonaws.com/attachments/NZK/368071/341014.pdf>

⁴³ Mt Cook alpine salmon. (n.d.). Nature's Finest Tasting Salmon. Retrieved 8 March 2023 from <https://alpinesalmon.co.nz/>

3. The financial implications, labour models and environmental impacts of both types of fish farming tend to work together (as in NZKS model), and this is likely to increase. For example, discussions on when to move salmon from land to marine pens is part of the ongoing narrative of NZKS.
4. Council plans cannot effectively separate processes, even though we accept MDC is envisaging this.

In our view, alignment is essential, which is one of the reasons we have appealed the proposed MEP.

This issue is also relevant if NZKS continue with their plans to apply farming outside of the 12 nautical mile limit. We understand this would mean three different pieces of legislation would be required to what is in reality one business entity.

(vii) Coastal Management Units

We support the concept of Coastal Management Units, but are concerned that there is no mechanism to bring them together. In other words the method or approach is to divide but not consolidate. This is another example of why we have appealed the proposed plan on the basis of not applying an integrated approach.

(viii) The draft authorisation implementation guide is still very preliminary⁴⁴

How is the MDC going to manage penalties for poor behaviour. For example, the MDC has issued two fines and a warning after Cawthron Institute's inspection of New Zealand King Salmon's farms found five in nine were non-compliant.⁴⁵ How can the regulation and accountability aspects of the framework be strengthened to ensure marine farmers are responsible and derive the social license that the public, via the MDC, have provided.

(ix) Reporting

Overleaf is an excerpt from the *Draft Authorisation Implementation Guide* (page 2), setting out the MDC proposed way forward:

⁴⁴ Marlborough District Council. (n.d.). *Draft Authorisation Implementation Guide For The Proposed Aquaculture Provisions Of The PMEP*. Retrieved 8 march 2023 from [https://www.marlborough.govt.nz/repository/libraries/id:1w1mps0ir17q9sgxanf9/hierarchy/Documents/Your%20Council/Environmental%20Policy%20and%20Plans/MEP%20Variations/Background Information List/Draft Authorisation Implementation Guide-Variations 1 and 1A.pdf](https://www.marlborough.govt.nz/repository/libraries/id:1w1mps0ir17q9sgxanf9/hierarchy/Documents/Your%20Council/Environmental%20Policy%20and%20Plans/MEP%20Variations/Background%20Information%20List/Draft%20Authorisation%20Implementation%20Guide-Variations%201%20and%201A.pdf)

⁴⁵ The Marlborough District Council has issued two fines and a warning after Cawthron Institute's inspection of New Zealand King Salmon's farms found five in nine were non-compliant.

Many marine farm permits in Marlborough are due to expire within the next four years.

We have not yet decided on the exact order in which authorisations will be offered, and we might need to talk to people in the industry about that. We will probably:

- Prioritise authorisations for marine farms that are located in CMUs where the majority of coastal permits are due to expire the earliest. It is important to note that in reality, many CMUs contain marine farms with a range of coastal permit expiration dates. Therefore, it may not be possible to do this consistently.
- Offer authorisations for marine farms in CMUs that will remain in their current positions, for example Port Underwood, later in the process. This is because marine farms in these CMUs will be less affected by any new spatial allocation.
- Plan to offer authorisations for finfish farms closer to the time of coastal permit expiry.

We are unsure how the proposed variations will be assessed and reported against. There are many key measures that tell a narrative about the impacts of finfishing on the environment. These can also be used to set limits and targets. For example morality, feed and biomass.

Q10: Will a detailed report (ideally annually) be provided and what will it contain?

Q11: Will Variation 1A result in an increase in mortality, feed or salmon farmed? If yes, by how much? Are there any limits or targets being set? And if yes, by whom?

An earlier piece of work found the actual tonnes of harvested biomass is decreasing and that mortality has increased.⁴⁶ Understanding the relationship between biological assets, mortality and feed are important characteristics to explore in order to understand the impact of salmon farming on the fish (mortality) and the environment. Animal husbandry and ethics are important issues that should be explored in the s 32 examination.

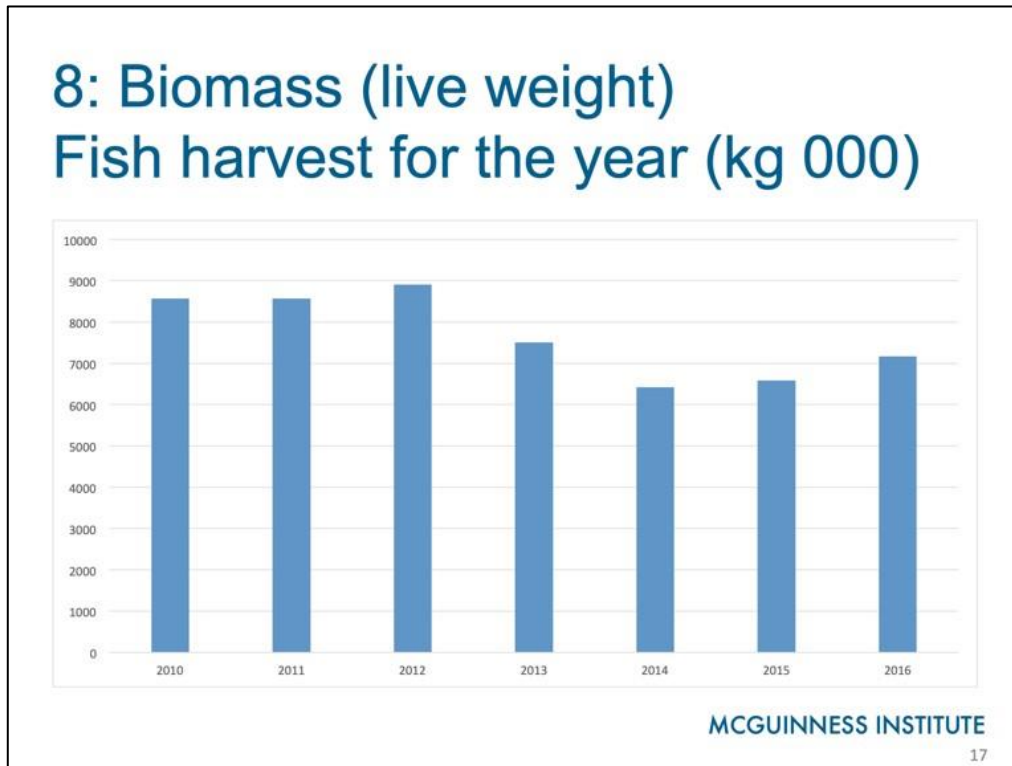
7. BIOLOGICAL ASSETS

The Group has three hatcheries in the South Island and nine operational marine salmon farms in the Marlborough Sounds. The fish livestock typically grow for up to 31 months before harvest.

UNAUDITED	Cost	Fair value	Total
Biological assets	\$000	\$000	\$000
As at 1 July 2020	53,704	38,674	92,378
Increase due to biological transformation ¹	44,697	24,435	69,132
Decrease due to harvest ²	(34,444)	(29,649)	(64,093)
Decrease due to mortality ³	(5,077)	-	(5,077)
Changes in fair value ⁴	-	(4,437)	(4,437)
As at 31 December 2020	58,880	29,023	87,903

⁴⁶ McGuinness Institute. (9 May 2017). *Proposed Marlborough Salmon Farm Relocation*. Slideshow. Retrieved 8 March 2023 from <https://www.mcguinnessinstitute.org/wp-content/uploads/2016/08/20170614-Proposed-Marlborough-Salmon-Farm-relocation-FINAL-for-web.pdf>

Slide 5: This shows the biomass over time. This figure should be another characteristic that should be measured.



Below is an excerpt from NZKS Annual report showing biomass harvested.

	UNAUDITED 31 Dec 2020 tonnes	UNAUDITED 31 Dec 2019 tonnes
Harvested biomass		
Total live weight harvested for the period	4,716	4,252
	UNAUDITED 31 Dec 2020 tonnes	AUDITED 30 Jun 2020 tonnes
Estimated closing biomass		
Closing fresh water stocks	154	158
Closing seawater stocks	6,790	6,136
Total estimated closing biomass live weight	6,944	6,294
Fair value measurement		

Part 7. The decision we seek from Council is:

- We seek the deletion of every objective, policy, rule or other method that is inconsistent with the Government’s aquaculture strategy, or the amendment of those provisions and/or addition of new provisions to ensure the strategy is implemented, but we go further. We seek provisions:
 - That finfish farming be either landbased or deep-sea based by 2040.
 - Both the Queen Charlotte and Pelorus Sounds become finfish free by 2040.
 - A transitional plan is developed and agreed to cover this transition from 2022 to 2040.
- That provisions are introduced to preclude any new marine finfish farms from being given a coastal permit in the inner and outer Queen Charlotte or Pelorus Sounds (with the view the existing Long Island - Kokomohua Marine Reserve be extended from west to east, connecting Ship Cove, Motuara Island bird sanctuary and Arapawa Island).^{47,48}
- That the existing coastal permit system continues, but that more work is done at enabling the farms to be seen as a group, and as such having group impacts; and to the extent that the Plan enables finfish farming in the Marlborough Sounds, it does so on the basis that no sites are predetermined to be appropriate, and applications for any sites are open to full assessment on a case-by-case basis, with appropriate weight able to be put on environmental values. Public consultation and legal processes must continue to be available to the public. The public’s success to date indicates how important these processes are, and are indicative of the changing values and expectations in society and in the law. For policy to be durable, it needs to be flexible and trusted.
- That the NZKS application for offshore aquaculture should be treated as simply another application in the Marlborough Sounds. It should not be treated separately, as it is within the 10 nautical miles and therefore forms part of the MDC area of management. Furthermore, landbased aquaculture, inshore aquaculture and offshore aquaculture operate together as one business model, therefore, in our view, their impacts cannot be assessed in isolation.
- That limits and targets are included in variation 1 and 1A to provide clarity of purpose and improve public trust and transparency over intentions and guide decision making.
- The marine mammal sanctuary be extended, regulated and researched, with a particular focus on the Hector’s dolphins. The sanctuary could run along the mouth of all three entry points (to the Tory Channel, the Queen Charlotte and Pelorus) and up to French Pass.
- A bird sanctuary be created around the black shags, so they are managed and researched to improve and support biodiversity within the Marlborough Sounds.
- We support the concept of Coastal Marine Unit (CMU) and the resulting 45 units, however we believe a mechanism needs to be put in place to bring them together so as to understand interconnections and improve public policy outcomes. The fact that the proposed CMUs traverse land and ocean, supports our view that an integrated approach is necessary to bring about the intention of the RMA (section 5, 6 and 7).
- Such other changes to the provisions of Variations 1 and 1A (whether those are alternative, additional or consequential to the changes outlined above) as may be required to address the issues identified above.



⁴⁷ Department of Conservation. (n.d.). Long Island – Kokomohua Marine Reserve. Retrieved 8 March 2023 from <https://www.doc.govt.nz/parks-and-recreation/places-to-go/marlborough/places/long-island-kokomohua-marine-reserve/?tab-id=Bird-and-wildlife-watching>

⁴⁸ Marlborough. (n.d.). Motuara Island bird sanctuary. Retrieved 8 March 2023 from <https://marlboroughnz.com/guides/eco-environment/motuara-island-bird-sanctuary>


Appendix 1: List of McGuinness Institute publications that discuss NZKS

Date	Name	Link
May 2012	New Zealand King Salmon Proposal: Proposed Plan Changes and Resource Consent Applications (Part 1 of 5)	https://www.mcguinnessinstitute.org/wpcontent/uploads/2016/08/McGuinness-Institute-KingSalmon-Submission.pdf
Aug 2012	New Zealand King Salmon Proposal: Statement of Evidence Prepared for the Board of Inquiry (Part 2 of 5)	https://www.mcguinnessinstitute.org/wpcontent/uploads/2016/08/McGuinness-Institute-NZKSSubmission-August-2012.pdf
Sep 2012	New Zealand King Salmon Proposal: Statement of Evidence Prepared for the Board of Inquiry prepared by Dr John Volpe, expert witness on behalf of the McGuinness Institute	https://www.mcguinnessinstitute.org/wpcontent/uploads/2016/08/20120930McGuinnessInstituteNZKSJohnVolpe.pdf
Sep 2012	New Zealand King Salmon Proposal: Final Statement of Evidence Prepared for the Board of Inquiry (Part 3 of 5)	https://www.mcguinnessinstitute.org/wpcontent/uploads/2016/08/20120926McGuinnessInstituteNZKSFinalPresentation.pdf
Oct 2012	New Zealand King Salmon Proposal: Submissions of McGuinness Institute on Proposed Conditions of Consent (Part 4 of 5)	https://www.mcguinnessinstitute.org/wp-content/uploads/2016/08/McGuinness-Institute-Submission-16-October2012.pdf
Feb 2013	New Zealand King Salmon Proposal: Comments of McGuinness Institute on Minor or Technical Aspects of the Draft Report (Part 5 of 5)	https://www.mcguinnessinstitute.org/wpcontent/uploads/2020/05/20130208-NZKS-Commentson-Draft-Decision.pdf
Mar 2013	Think Piece 16 – New Zealand King Salmon: Was it a good decision for New Zealand?	https://www.mcguinnessinstitute.org/wpcontent/uploads/2016/08/201605030-Think-Piece-16.pdf
Mar 2013	2013/01 – Notes on the New Zealand King Salmon Decision	https://www.mcguinnessinstitute.org/wpcontent/uploads/2017/03/20170327-NZKS-WorkingPaper-201301.pdf
May 2013	2013: Update to MPs: King Salmon	https://www.mcguinnessinstitute.org/wpcontent/uploads/2016/08/24-May-2013-King-Salmon-MP-letter.pdf
July 2016	2016/02 – New Zealand King Salmon: A financial perspective	https://www.mcguinnessinstitute.org/wpcontent/uploads/2017/05/20170519-Working-Paper-

		201602-NZKS-A-financialperspective-Final.pdf
May 2017	2017/02 – Letter to the Minister on New Zealand King Salmon	https://www.mcguinnessinstitute.org/wpcontent/uploads/2018/03/20170519-Working-Paper-201702-WEB-1.pdf
May 2017	OneOceanNZ – Presentation to the Marlborough Salmon Farm Relocation Advisory Panel	https://www.mcguinnessinstitute.org/wp-content/uploads/2016/08/20170614-Proposed-Marlborough-Salmon-Farmrelocation-FINAL-forweb.pdf
July 2019	Submission to Marlborough District Council on NZKS’s application for more water space	https://www.mcguinnessinstitute.org/wpcontent/uploads/2019/07/20190722-McGuinness-Institute-Submission-on-NZKSResource-Consent-U190357FINAL.pdf
November 2019	Oral Submission to NZKS Hearing	https://www.mcguinnessinstitute.org/wp-content/uploads/2019/12/20191129-NZKS-Oralsubmission.pdf
December 2019	NZKS Submission Diagram	https://www.mcguinnessinstitute.org/wpcontent/uploads/2020/01/20191219-NZKS-Diagram.pdf
December 2019	The New Zealand King Salmon Co Limited (U190438) North of Cape Lambert, North Marlborough	https://www.mcguinnessinstitute.org/wpcontent/uploads/2019/12/20191220-NZKS-ApplicationU190438-FINAL.pdf
March 2020	Marlborough District Council U160675: The New Zealand King Salmon Co Limited (NZKS) and Te Atiawa o Te Waka-a-Maui Limited	https://www.mcguinnessinstitute.org/wpcontent/uploads/2020/04/20200409-NZKS-RC-U160675-.pdf



Ministry for Primary Industries
Manatū Ahu Matua



AQUACULTURE LEGISLATIVE REFORMS 2011 GUIDANCE OVERVIEW

AN OVERVIEW

This information sheet provides an overview of the aquaculture legislative reforms that made changes to the Aquaculture Reform (Repeals and Transitional Provisions) Act 2004, the Fisheries Act 1996 (Fisheries Act), the Maori Commercial Aquaculture Claims Settlement Act 2004 (Settlement Act), and the Resource Management Act 1991 (RMA). The changes came into effect on 1 October 2011.

This overview is part of a series of information sheets and technical guidance documents explaining different aspects of the reform of marine-based aquaculture in New Zealand.

In this overview and in the guidance notes, the term 'regional council' includes both regional councils and unitary authorities.

A series of technical guidance notes describe various parts of the legislative reforms summarised in this overview in more detail, including:

- » **GUIDANCE NOTE 1:** Aquaculture planning and consenting
- » **GUIDANCE NOTE 2:** Managing demand in the coastal marine area
- » **GUIDANCE NOTE 3:** Aquaculture regulation-making power
- » **GUIDANCE NOTE 4:** Re-consenting aquaculture
- » **GUIDANCE NOTE 5:** Mechanisms for managing allocation of coastal space (jointly produced by MPI and DOC)
- » **GUIDANCE NOTE 6:** Delivering on the Māori Commercial Aquaculture Settlement

WHY IS THE GOVERNMENT INTERESTED IN AQUACULTURE?

As the world's population increases, so too does the demand for protein, including seafood. It is unlikely that wild-caught seafood will be able to meet that demand sustainably, and marine farming is on the rise. By 2020, aquaculture is expected to make up 58 percent of worldwide seafood production.

Here in New Zealand, aquaculture is already the fastest growing sector of our seafood industry. In 2010 aquaculture sales totalled \$380 million and accounted for almost 20 percent of total seafood export earnings. The industry has set itself a goal of NZ\$1 billion sales each year by 2025.

The Government is committed to unlocking this potential as part of its Economic Growth Agenda, to increase export earnings and create new jobs.

With its clean waters and strong environmental record, New Zealand is well placed to help meet global demands for high-quality seafood products farmed in an environmentally sustainable way. An essential part of this is making sure that the development of marine farming takes place within acceptable environmental limits and fits in with the way others want to use the coastal marine area.

CHANGES TO THE LAW

The legislative reforms came into effect on 1 October 2011. The aquaculture legislative reforms were designed to: reduce costs, delays and uncertainty; promote investment in aquaculture development; and enable integrated decision-making.

The following gives an overview of how the legislative reforms assist in achieving industry and the Government's objectives for aquaculture.

MOVING TO THE NEW REGIME

The legislative reforms removed the requirement for an aquaculture management area (AMA) – a spatial planning tool – to be in place before marine farming consent applications can be made. This means applying for a marine farm now follows the same process as seeking a resource consent for any other activity in the coastal marine area.

The legislative reforms amended the Transitional Act to bring existing marine farms and outstanding applications into the new legislative regime as smoothly as possible.

October 2012

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EXISTING MARINE FARMS

Existing marine farms are no longer called 'deemed AMAs' and reverted to being farms with resource consents, with no loss of rights or certainty.

OUTSTANDING APPLICATIONS

Outstanding applications, in general, were allowed to proceed from 1 October 2011 when the legislative reforms came into effect. This included the last remaining pre-moratorium applications (applications notified before 28 November 2001), the 'frozen' applications (which were lodged but not notified before the moratorium in 2001), and applications made between 1 January 2005 and 9 May 2006.

All applications that could continue to be processed were deemed to be lodged on the date the legislative reforms came into effect, in the order in which they were originally received.

Frozen applications in areas where aquaculture is prohibited in a regional coastal plan, however, cannot proceed unless the prohibition is removed via a plan change. These applications will be cancelled on 31 December 2014 if a plan change has not been made by that time.

CHANGES TO TASMAN AND WAIKATO REGIONAL COASTAL PLANS

The legislative reforms changed the Tasman and Waikato regional coastal plans to allow applications to farm a wider range of species, including finfish, in existing aquaculture areas in both regions, and for small extensions to existing farms in Waikato.

The Waikato Regional Coastal Plan was changed to provide for a new 300-ha marine farming zone to the west of Coromandel township, within which applications to farm finfish can be made.

APPLICATION PROCESS

Changes were made to both the RMA and the Fisheries Act to streamline the planning and consenting processes and to enhance the characteristics of coastal permits for aquaculture.

The most significant change, already discussed, was the removal of the requirement that aquaculture activities take place only within AMAs. Other changes include:

- » Coastal permits for aquaculture are to have a minimum term of 20 years (unless a shorter term is requested by the applicant or is required to manage effects). Permits lapse after three years if the consent is not used.
- » Regional coastal plans are no longer able to authorise aquaculture activities in the coastal marine area as 'permitted activities'. This ensures that a resource consent application is made and triggers the decision-making process that tests for undue adverse effects on commercial, customary or recreational fishers (UAE test).

- » The UAE test has been better integrated with the RMA consent processes.
- » Aquaculture applicants are able to try to negotiate a 'pre-request aquaculture agreement' with the relevant commercial fishing quota holders before the UAE test is carried out. The advantage is that quota management system (QMS) stocks that have been subject to a pre-request aquaculture agreement are not allowed to be considered by the Ministry for Primary Industries for an aquaculture decision over the same area.
- » Existing marine farm consent holders continue to be protected under the RMA and have priority over other applications when they apply for their consents to continue operating (including species changes if in the same space). Concurrent plan change requests and consent applications can be made where aquaculture is a prohibited activity, including with the Environmental Protection Authority.

More detail on these changes is available in *Guidance note 1: Aquaculture planning and consenting* and *Guidance note 4: Re-consenting aquaculture*.

MANAGING DEMAND IN THE COASTAL MARINE AREA

A number of methods are available to councils under Part 7A of the RMA to manage demand for space in the coastal marine area (CMA). The legislative reforms retain a number of the existing Part 7A provisions, and also provide additional methods for councils, and these are summarised under the headings below.

While the changes to Part 7A of the RMA have been driven by the aquaculture reforms, they can apply to any activity in the CMA – with the exception of the powers of the Minister responsible for Aquaculture.

'First in, first served' remains the default process for allocating space in the CMA and, with the removal of AMAs, now applies to allocations of space for aquaculture activities. Any departure from first in, first served requires specific provision in a regional coastal plan or the approval of an allocation method by the Minister of Conservation at the request of a regional council. Public tendering is the default alternative allocation method, unless a council requests another method.

UNCHANGED PROVISIONS IN PART 7A OF THE RMA

- » Councils remain able to include provisions in their regional coastal plans and proposed regional coastal plans to address the effects of occupation in the CMA and to manage competition for space (section 165F).
- » There are no changes to the provisions around the characteristics of authorisations, and public notice requirements and other provisions relating to running a public tendering process (sections 165R to 165ZA).

- » The Minister of Conservation retains the power to direct that an allocation of authorisations proceed or not proceed in order to give effect to Government policy or to preserve the ability of the Crown to give effect to its historic Treaty settlement obligations (section 165K).

CHANGES TO PART 7A OF THE RMA

- » Regional councils may ask the Minister of Conservation to approve an allocation method via Gazette notice – this applies to any activities in the CMA (section 165L).
- » Regional councils may ask the Minister responsible for Aquaculture for a stay on new applications for consents to occupy space for specified aquaculture activities (section 165ZB).
- » Regional councils may ask the Minister responsible for Aquaculture to direct that aquaculture applications be processed and heard together (section 165ZF).

THE MINISTER RESPONSIBLE FOR AQUACULTURE HAS POWER TO INTERVENE

The legislative reforms provide for regulation-making power in the RMA, giving the Minister responsible for Aquaculture the ability to recommend amendments to provisions in a regional coastal plan about the management of aquaculture activities (sections 360A to 360C).

MĀORI CLAIMS SETTLEMENT

The Settlement Act provides for the full and final settlement of contemporary Māori claims to commercial aquaculture. The Settlement Act was developed in parallel with the 2004 aquaculture law and provided for claims to be settled by allocating authorisations for 20 percent of AMAs to iwi.

The legislative reforms removed the requirement for AMAs to be established before new space can be applied for. A new delivery mechanism for the settlement was established.

FEATURES OF THE SETTLEMENT MECHANISM UNDER THE LEGISLATIVE REFORMS

- » The Crown is responsible for delivering the settlement.
- » The 20 percent obligation established in the Settlement Act remains unchanged.
- » The settlement will be delivered on a regional basis, through agreements between the Crown and iwi.
- » Through the regional agreement process deliverables for the settlement may include space, cash, or anything else that is agreed to.
- » The agreed deliverables will be transferred to Te Ohu Kai Moana Trustee Limited for allocation to iwi.

ROLES AND RESPONSIBILITIES UNDER THE NEW REGIME

The following agencies and people have existing roles and responsibilities under the RMA and Fisheries Act 1996 and new roles and responsibilities under the legislative reforms.

MINISTER RESPONSIBLE FOR AQUACULTURE

- » Provides Government leadership on aquaculture.
- » Holds a power to recommend changes to regional coastal plans in relation to aquaculture management (sections 360A to 360C).
- » Holds a power to direct that a council not receive aquaculture applications for up to one year (sections 165ZB to 165ZE), pending demand management provisions being put in place.
- » Holds a power to direct that applications for the occupation of space for aquaculture activities be processed and heard together by councils (sections 165ZF to 165ZG).

MINISTRY FOR PRIMARY INDUSTRIES

- » Continues to make aquaculture decisions under the Fisheries Act, including:
 - identifying areas where marine farmers must seek the agreement of affected commercial fishers before lodging an application for a coastal permit, and identifies the parties whose agreement is needed;
 - registering agreements between marine farm applicants and fishing interests in areas specified as having an undue adverse effect on commercial fishing; and
 - notifying councils of any agreements lodged with the Ministry for Primary Industries.
- » Administers the fish farm registration system for all fish farms.
- » Provides information to regional councils to help them assess the impact of a proposed aquaculture activity on fishing and fisheries resources.
- » Works with regional councils to ensure that matters relevant to the aquaculture decision are addressed in the consent conditions.

AQUACULTURE UNIT IN THE MINISTRY FOR PRIMARY INDUSTRIES

- » The Aquaculture Unit is the Government's main adviser on aquaculture and works with central and local government, iwi, industry and other stakeholders at both national and regional levels.
- » Responsible for developing and implementing the Government's Aquaculture Strategy and Five-year Action Plan.
- » To avoid any conflict of interest, the Aquaculture Unit is not involved in undue adverse effects (UAE) matters.

MINISTER OF CONSERVATION

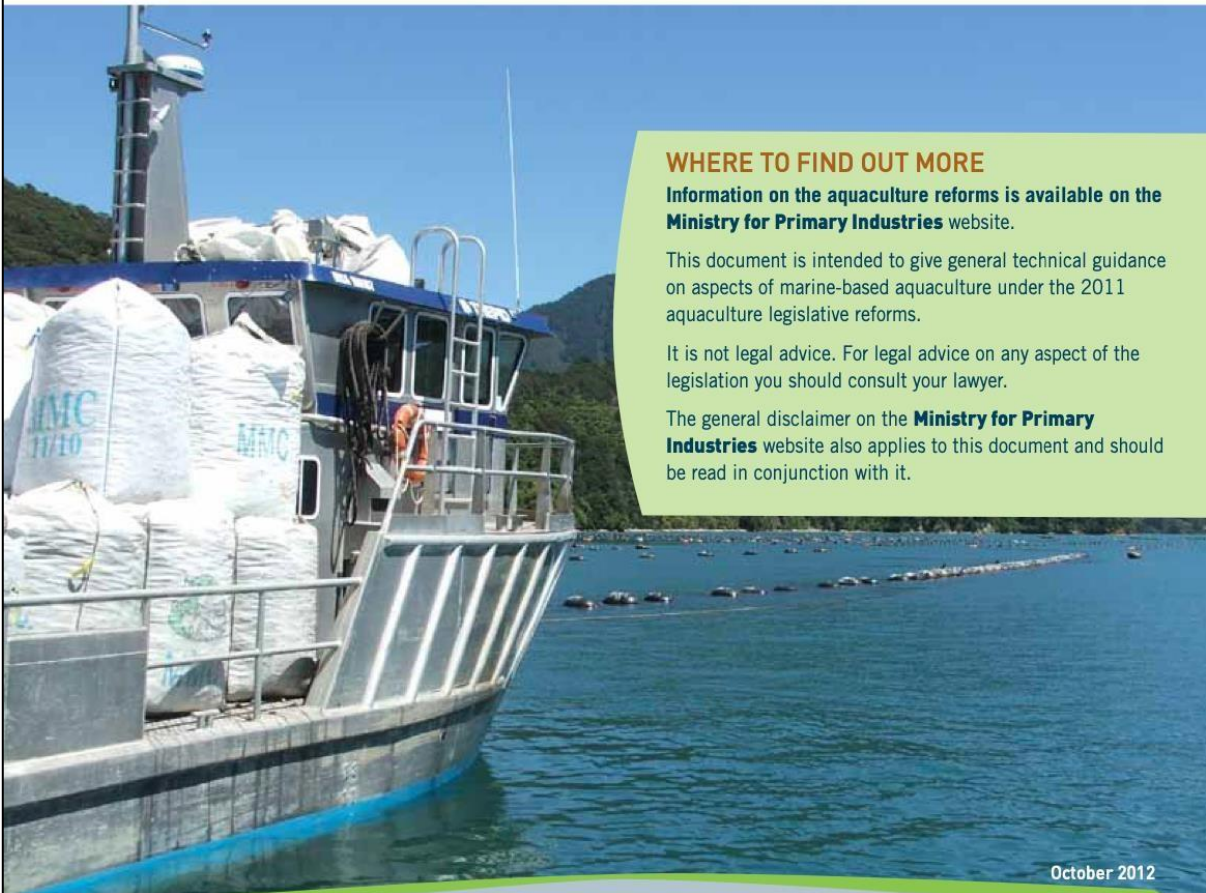
- » Has powers to approve alternative allocation tools in the CMA and continues to approve regional coastal plans.
- » Retains the ability to recommend that a proposed allocation proceed or not proceed in order to preserve the Crown's ability to give effect to Government policy.

DEPARTMENT OF CONSERVATION

- » Continues to be responsible for recommending whether the Minister of Conservation should approve a regional coastal plan, in accordance with the RMA.
- » Continues to be responsible for recommending in certain circumstances, that the Minister of Conservation issue directions to councils on the allocation of space.
- » Continues to be responsible for the New Zealand Coastal Policy Statement 2010, including review and monitoring its implementation.
- » Has a new responsibility to advise the Minister of Conservation whether to exercise the power to Gazette an alternative allocation method.

REGIONAL COUNCILS AND UNITARY AUTHORITIES

- » Retain primary responsibility for aquaculture planning and consenting including:
 - allocating coastal space;
 - administrating existing coastal permits, including all pre-RMA marine farming licences, leases and permits; and
 - assessing the impact of a proposed aquaculture activity on fishing and fisheries resources.
- » Have three new powers under the legislative reforms:
 - can request from the Minister of Conservation the use of an alternative allocation tool;
 - can request from the Minister responsible for Aquaculture a suspension on the receipt of new applications to occupy space for aquaculture activities; and
 - can request from the Minister responsible for Aquaculture that aquaculture applications be processed and heard together.



WHERE TO FIND OUT MORE

Information on the aquaculture reforms is available on the **Ministry for Primary Industries** website.

This document is intended to give general technical guidance on aspects of marine-based aquaculture under the 2011 aquaculture legislative reforms.

It is not legal advice. For legal advice on any aspect of the legislation you should consult your lawyer.

The general disclaimer on the **Ministry for Primary Industries** website also applies to this document and should be read in conjunction with it.

October 2012

Appendix 3: Mapping the Marlborough Sounds

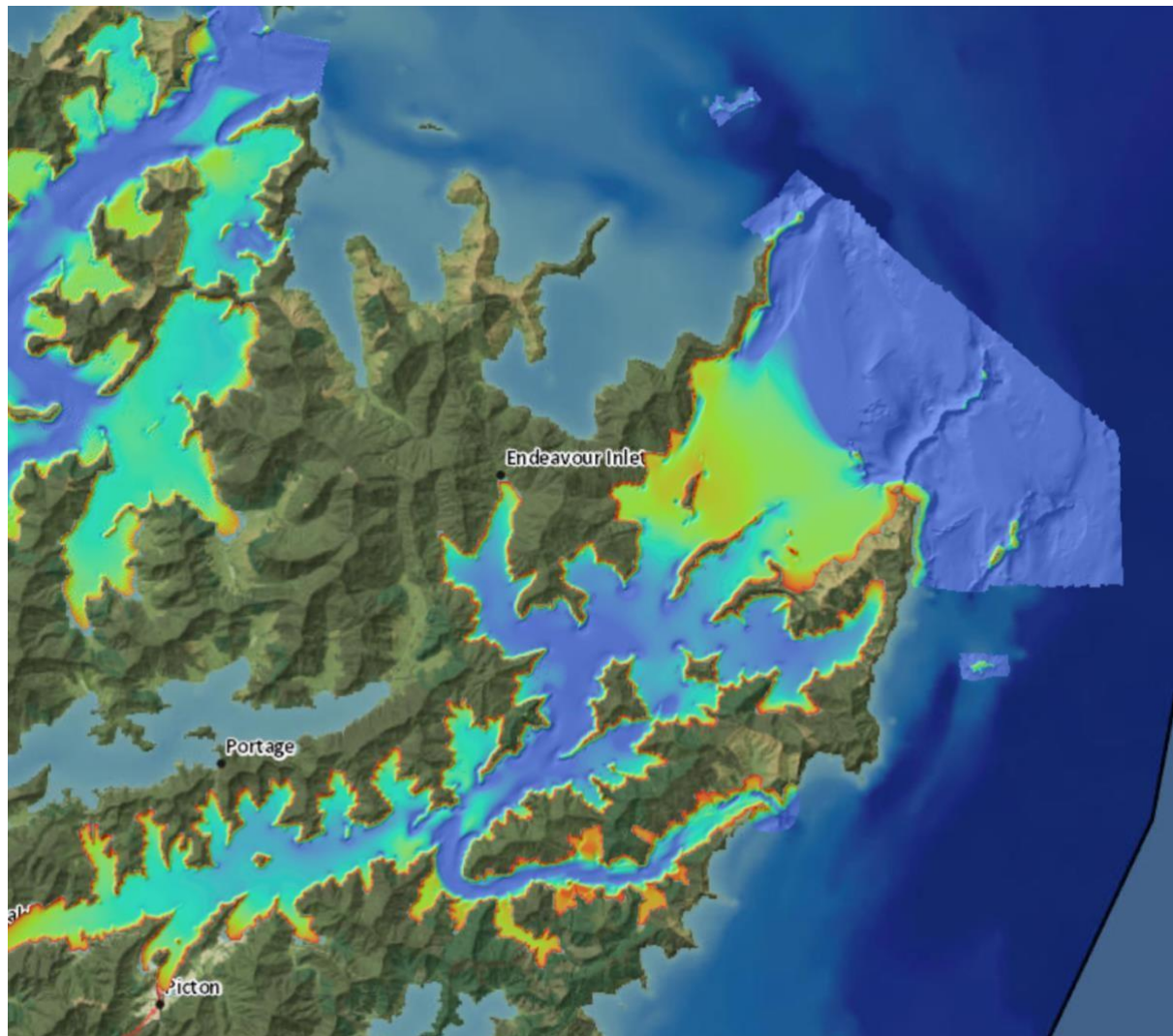
In 2016, MDC partnered with Land Information New Zealand to carry out a comprehensive seabed survey over the entire 83,900 hectare expanse of this intricate network of bays and channels in the Sounds.⁴⁹ The website ‘Marine biodiversity is associated with different habitats. To better manage human activities on marine ecosystems, Council needs a good understanding of where areas hosting high biodiversity are located.’⁵⁰ These maps illustrate how the contaminated water and sediment from the farms may dwell in the centre of the Queen Charlotte Sounds. There may be an opportunity for the MDC to consider turning the outer Queen Charlotte Sounds into a marine sanctuary with DOC.

We have included both maps (a) and (b) below as it is recent research which together tell us new and important information about the ecosystem we are trying to protect and maintain.

⁴⁹ Ranford, C. (21 November 2020). Soundwave survey gives detailed picture of Marlborough Sounds seabed. RNZ. Retrieved 8 March 2023 from <https://www.rnz.co.nz/news/ldr/431146/soundwave-survey-gives-detailed-picture-of-marlborough-sounds-seabed>

⁵⁰ Marlborough District Council. *Seabed Habitat Maps*. Retrieved 8 March 2023 from <https://marlborough.maps.arcgis.com/apps/MapSeries/index.html?appid=155a89b0beb74035bd1c4c71f6f366>

(a) Bathymetry Map



The shape and depth of the seafloor was determined by multibeam echo-sounder sonar technology over 43,300 hectares by the National Institute of Water & Atmospheric Research (NIWA) and Discovery Marine Limited (DML).

These data collectively illustrate the seafloor diversity and complexity over the entire expanse of this iconic coastal area. A sun-illuminated digital elevation model produced from a 2 metre gridded surface was overlain on hill shaded relief to improve the depth visualisation. Depth contours are also shown.

Tory Channel/Kura Te Au

The powerful tidal forces have scoured out the main channel which ranges in depth from 42-67 metres. The marginal bays are much shallower and have shoals across their entrances.

Endeavour Inlet

Steep sided with depths ranging from 50m at the entrance to 35 m near the heads of the bay. The inlet shoals steadily at its head to a very shallow and expansive tidal platform.

(b) Rugosity Map



Rugosity of the seafloor is the variation in three dimensions, and is a measure of terrain complexity. In the benthic environment, ecological diversity can generally be correlated with the complexity of the physical environment. As such, rugosity can help identify areas where high biodiversity may exist on the seafloor.

[Tory Channel Entrance](#)

Red shading depicts a complex mosaic of reefs and boulders at the entrance of Tory Channel/Kura Te Au and along the northern side of the channel. These provide platforms for seabed plants and colonial animals, and nooks and crannies for marine invertebrates and foraging fish.

[Bay of Many Coves and Blumine Island](#)

Reefs extend out from peninsulas and coastal margins, creating habitat for marine life. Many of these areas no longer host habitat-forming kelp (see Ecology map), likely due to overfishing of large blue cod and crayfish which used to keep kelp-grazing kina numbers low.