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# Section 32 Evaluation

PROPOSED VARIATION 1: MARINE FARMING
FOR THE PROPOSED MARLBOROUGH ENVIRONMENTAL PLAN (PMEP)

Prepared for Marlborough District Council
November 2020

# Contents

# 1 Introduction to s32 and proposed Variation 1

Perception Planning Limited prepared this report on behalf of Marlborough District Council (the Council, MDC) under Section 32 of the Resource Management Act 1991. The report summarises our s32 evaluation of ***Proposed Variation 1: Marine Farming*** (proposed Variation 1) for the Proposed Marlborough Environmental Plan (PMEP, the Plan).

Proposed Variation 1 would add an Aquaculture section to the Proposed Marlborough Environment Plan. It would contain objectives, policies and rules about how marine farming activities will be sustainably managed in the Marlborough district.

Section 32 of the RMA requires councils to assess any proposed regional plan change to determine:

- The extent to which the objectives are the most appropriate way to achieve the purpose of the RMA, and
- Whether the proposed policies and methods are the most appropriate way in which to achieve the objectives, in terms of their efficiency and effectiveness.

This report also includes an assessment of proposed Variation 1 under section 165H of the RMA. Section 165H requires a regional council to have regard to and be satisfied about certain matters before including an allocation rule in a regional coastal plan.

This report should be read in conjunction with ***Proposed Variation 1: Marine Farming***, which can be found in Appendix 1.

## 1.1 Abbreviations and definitions in this report

*Table 1: Abbreviations used in this report*

| | |
|---|---|
| **AMA** | Aquaculture Management Area |
| **CMU** | Coastal Management Unit |
| **DOC** | Department of Conservation |
| **NZCPS** | New Zealand Coastal Policy Statement |
| **NPS** | National Policy Statement |
| **NES** | National Environmental Standard |
| **MARWG** | Marlborough Aquaculture Review Working Group |
| **MPI** | Ministry for Primary Industries |
| **MRMP** | Marlborough Sounds Resource Management Plan |
| **PMEP** | Proposed Marlborough Environmental Plan |
| **RMA or the Act** | Resource Management Act |

| | |
|---|---|
| **RPS** | Regional Policy Statement |
| **TAG** | Technical Advisory Group |
| **WARMP** | Wairau/Awatere Resource Management Plan |

### 1.1.1 Marine farming definition

For the purposes of this report, the terms 'marine farming' and 'aquaculture' are used interchangeably. 'Aquaculture activities' are defined in Section 2 of the RMA and include the occupation of the coastal marine area for breeding, hatching, cultivating, rearing, or on-growing of fish, aquatic life or seaweed for harvest. Proposed Variation 1 includes a new definition of 'marine farm' for the PMEP:

> "**Marine Farm** means a single contiguous spatial area used for aquaculture activities (as defined in Section 2 RMA) that has or requires a coastal permit for the occupation of the coastal marine area and which may also have or require coastal permits that authorise one or more of the following activities: the erection, placement, and use of any structures for aquaculture; and any associated disturbance of the foreshore and seabed, and ancillary deposition or discharges in the coastal marine area. Marine farming has the related meaning".

The provisions in the proposed Aquaculture section do not cover aquaculture on land or within freshwater environments.

### 1.1.2 Section 32 RMA requirements

Under section 32 of the RMA, any proposed regional plan change must be accompanied by a report that assesses:

- The extent to which the objectives are the most appropriate way to achieve the purpose of the RMA; and
- Whether the proposed policies and methods are the most appropriate way in which to achieve the objectives, in terms of their efficiency and effectiveness.

A s32 evaluation must:

- 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:
    - economic growth that are anticipated to be provided or reduced; and
    - employment that are anticipated to be provided or reduced; and
- If practicable, quantify the benefits and costs referred to above; and
- Assess the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the provisions.

Section 32, clause 4A requires the evaluation report to include a summary of all advice concerning the proposal from iwi authorities. It also must include the Council's response to the advice, plus any proposed provisions that are intended to give effect to the advice.

### 1.1.3 Section 165H RMA requirements

Section 165H requires a regional council to have regard to and be satisfied about certain matters before they can include an allocation rule in a proposed regional coastal plan. An allocation rule is assessed under s165H instead of s32, so the Council must have regard to:

- the reasons for and against including the proposed rule; and
- the reasons why that method is justified (and how this might affect the preferential rights provided for in section 165W of the RMA1).

The Council must be satisfied that:

- a rule in relation to the allocation of space is necessary or desirable in the circumstances of the region; and
- if the method is not by public tender, that the proposed method is the most appropriate, having regard to its efficiency and effectiveness compared to other methods.

A report must be prepared to summarise these matters, which must be made available at the same time that the rule is included in the regional coastal plan.

This report addresses both the s32 and s165H requirements.

## 1.2 Aquaculture management is an important issue for the coastal plan review

The sheltered bays and clean waters of the Marlborough Sounds make it a favoured environment for aquaculture.

Marine farming in the Marlborough Sounds dates back to the 1970s when the first green-lipped mussel farms were established, followed by salmon farming in the 1980s. There are now over 580 authorised marine farms in Marlborough's coastal marine area, predominantly in the enclosed waters of the Marlborough Sounds. The species that are farmed have expanded to include oysters, salmon, paua and seaweed.

Marine farming in Marlborough produces approximately 80% of all commercially grown seafood in New Zealand. On average 65,000 tonnes of mussels and about 6000 tonnes of salmon are harvested in Marlborough each year, which generates more than $300m in exports. Marine farming contributes significantly to the District's social and economic wellbeing.

Under the New Zealand Coastal Policy Statement (NZCPS), Council is required (through the Regional Policy Statement (RPS) and/or regional coastal plan) to provide and regulate space for aquaculture, in recognition of its contribution to social, economic, and cultural wellbeing[2]. Regulating this occupation of space creates unique challenges because the coastal marine area is a public good. There is increasing competition for use (and protection) of this space by other users. The Council also needs to make sure any adverse effects of aquaculture on the environment are addressed. The Council is working with others (Department of

[1] S165W provides certain iwi with preferential rights to purchase a proportion of the authorisations. These rights were granted through Treaty settlements.

[2] NZCPS Policy 8

Conservation, Ministry for Primary Industries, marine farmers, Sounds Advisory Group) to better understand and monitor the cumulative effects of aquaculture.

Over 300 of the coastal permits[3] for marine farming in Marlborough are deemed permits[4], that are due to expire in 2024/2025. The industry (and central government) is concerned about the uncertainty surrounding the re-consenting process and in particular, how that might be managed under the operative coastal plan provisions and emerging plan review. The aquaculture industry needs confidence and certainty about where and for how long they can operate and develop. Other users of the marine environment need assurance that the impacts and occupation of space by marine farms will be appropriately managed alongside other uses and values.

As marine farm licences and coastal permits have been approved over time, a very distinct pattern of marine farming activity has developed in the Marlborough Sounds. Most of the District's marine farms are located in a coastal ribbon between 50 metres and 300 metres offshore. The development of this coastal ribbon was initially influenced as much by adjoining land tenure and limitations of mooring technology, as by planning provisions.

The resulting spatial allocation that has built up over time through case-by-case consenting decisions is not necessarily the best or most sustainable. There are opportunities to improve both productivity and the impact of existing marine farms on the surrounding environment through the re-consenting process.

The proposed Variation 1 seeks to address these issues, which are discussed in more detail in Chapter 4 of this report.

## 1.3 Proposed Variation 1 would add an Aquaculture Section to the PMEP

The purpose of proposed Variation 1 is to:

- Provide a level of certainty for both the industry and the general public about how aquaculture will be managed in the future;
- Clearly articulate where aquaculture is, or is not appropriate in the Sounds, in accordance with Policy 8 of the NZCPS;
- Provide a transparent and fair allocation process to enable existing marine farms to occupy that 'appropriate' space; and
- Provide clear provisions for decision makers to assess and determine future applications (for resource consents and/or private plan changes).

Proposed Variation 1 was developed using the following principles:

[3] A coastal permit bundles up resource consent requirements for a marine farm to occupy space in the coastal marine area and other activities such as disturbance of the seabed, take and discharge of seawater, and discharges of feed (Regulatory Impact Statement – Proposed National Environmental Standard: Marine Aquaculture, 2017).

[4] A deemed coastal permit is a marine farm lease or licence and its associated conditions, issued prior to 2004. The Aquaculture Reform (Repeals and Transitional Provisions) Act 2004 deemed all existing leases and licences to be coastal permits with a common expiry date of 20 years from commencement. All deemed permits expire in 2024/2025 (Regulatory Impact Statement – Proposed National Environmental Standard: Marine Aquaculture, 2017).

- The enclosed water Sounds (inner Sounds) are at or approaching full capacity for marine farms. Therefore, there should be a focus on maintaining (not increasing) the current level of aquaculture in those areas.
- Any future capacity for marine farming is likely to be beyond the enclosed waters (i.e. in the open waters) of the Sounds.
- Existing farms should be relocated where necessary, to reduce effects on other coastal values (amenity, recreation, landscape, ecology etc).
- Where possible, marine farms should be moved seaward, to improve access and restore foreshore euphotic zone health (the upper layer of a waterbody that receives enough sunlight to enable photosynthesis).

## 1.4 Why proposed Variation 1 is being progressed separately to the PMEP

The Council started reviewing its operative resource management framework in 2009, which includes these documents:

- the Marlborough Regional Policy Statement (Operative 28 August 1995) (RPS)
- the Marlborough Sounds Resource Management Plan[5] (Operative in part 2003, Operative in full August 2011) ('MRMP')
- the Wairau/Awatere Resource Management Plan (Operative in full August 2011) ('WARMP').

These documents are being replaced by the Proposed Marlborough Environmental Plan (PMEP).

The review has involved extensive consultation with the marine farming industry, other parties with an interest in Marlborough's coastal marine area, and the wider community. The decision on the PMEP has been notified and the appeal period closed on 8 May 2020.

Proposed provisions to enable marine farming and manage the potential adverse effects were prepared but not notified with the rest of the PMEP, because the Council decided more work was needed to give adequate effect to Policy 8 of the NZCPS. Policy 8 of the NZCPS requires councils to provide for aquaculture activities in appropriate places in the coastal environment. 'Appropriate places' are to be defined in regional policy statements and regional coastal plans.

Instead, the Council restarted the review process and formed a Marlborough Aquaculture Review Working Group (MARWG), supported by a Technical Advisory Group (TAG). The MARWG and TAG helped Council develop a new marine farming framework. Full details of the MARWG and TAG members, their role, remit, and recommendations are outlined in Appendix 2.

Informed by the work of the MARWG, TAG and Council, the framework is being incorporated into the Plan via three proposed variations (1, 1A and 1B).

**Proposed Variation 1: Marine Farming** – adds objectives, policies and rules about how marine farming activities will be sustainably managed in the district. It manages these activities using Coastal Management Units (CMUs) and an overlay of Aquaculture Management Areas (AMAs). The provisions were developed with

[5] A combined district, regional and regional coastal plan.

mussel farms in mind but are equally applicable to other bivalves such as oysters, and to species such as seaweed (but not to finfish). The provisions refer to the use of typical mussel farming structures such as longlines.

There are two smaller variations alongside Proposed Variation 1:

**Proposed Variation 1A: Finfish Farming** – specifically addresses finfish farming. The provisions in proposed Variation 1A rely on certain keystone provisions in proposed Variation 1, building on and amending these to be specific to finfish. A slightly different approach is needed because finfish farms require different structures and the addition of feed.

**Draft Variation 1B: Apex Marine Farm** - adds an Aquaculture Management Area in Onapua Bay only. The Onapua Bay AMA will be mainly managed by the provisions in proposed Variation 1, with some minor amendments to provide specifically for this AMA and the activities proposed to occur in it. Variation 1B is in draft form, with consultation currently taking place. The Council intends to make a decision about this variation next year.

# 2 Managing marine farming in Marlborough with proposed Variation 1

## 2.1 The policies and legislation that guide proposed Variation 1

Proposed Variation 1 has been guided and directed by the higher level statutory and policy framework. This includes the RMA and documents prepared under it. This chapter identifies the key components of the statutory and policy framework and their influence on the approach that the Council has adopted. Details of this framework are set out in various appendices. Appendix 3 sets out the key provisions in the RMA, NZCPS, RPS and regional coastal plan which apply. Appendix 4 looks in detail at the provisions in Part 7A which relate to aquaculture.

*Table 2: Statutory context for proposed Variation 1*

| Legislation | Relevant provisions/content | Why these provisions are important |
|---|---|---|
| **Resource Management Act 1991** | Sections 5, 6, 7, 8 | The Part II matters set out the purpose and principles of the RMA. |
| | Sections 30, 35 | Sets out the functions, powers, and duties of regional councils. |
| | Sections 63, 64, 65, 66, 67, 68A | Covers the preparation and change of regional coastal plans, matters to be considered and regional rules. |
| | Part 7A: Occupation of common marine and coastal area (Sections 165A – 165ZZA) | These provisions specifically control occupation and allocation of coastal marine space for aquaculture, including through authorisations, ministerial powers, and coastal permits for aquaculture. The key provisions for allocation rules in a regional coastal plan are set out in Appendix 4. |
| **Marine and Coastal Area (Takutai Moana) Act 2011** | This act gives the common marine and coastal area[6] special legal status, which makes it generally incapable of being owned by anyone[7].<br><br>The Act guarantees that the New Zealand public can continue to have access to and use the common coastal and marine area, even if a Māori group's customary rights have been legally recognised under the Act for the particular area[8]. | The Act gave Māori some scope to gain recognition of their customary interests, if they took their claim to the government or the courts by April 2017.<br><br>A protected customary right cannot be recognised in relation to a commercial aquaculture activity (within the meaning of section 4 of the Māori Commercial Aquaculture Claims Settlement Act 2004 (section 51(2)(b)) but can be recognised with respect to non-commercial aquaculture. A non-commercial aquaculture activity recognised as a protected customary right cannot subsequently |

[6] The area starting from the mean (average) high-tide mark, and ending 12 nautical miles out to sea.

[7] The common marine and coastal area excludes existing Māori freehold land and other areas privately owned by New Zealanders, conservation areas, national parks and public reserves.

[8] Rights to recreational access and use are subject to any wāhi tapu conditions that have been included in a government agreement or High Court order recognising Māori customary rights under Te Takutai Moana Act.

| Legislation | Relevant provisions/content | Why these provisions are important |
|---|---|---|
| | | change to a commercial enterprise[9].<br><br>A number of applications have been made under the Act for Crown engagement in the Marlborough District, but no customary marine title determinations have been made so far. |
| **Maori Commercial Aquaculture Claims Settlement Act 2004** | Provides for final settlement of Māori commercial aquaculture claims since 21 September 1992.<br><br>The Minister has powers to gazette space in the coastal marine area to create future settlement options. Gazetting space mitigates the risk that private interests have first access to better aquaculture space, while regional agreements are being negotiated.<br><br>Notifying space under Gazette notices does not change current uses or rules. However, it stops private interests from applying for resource consents to carry out aquaculture activities. It also prevents regional authorities from consenting other activities that might affect future aquaculture activities.<br><br>All gazetted space is still subject to the resource consents process and any other regulatory | Under this Act 20% of aquaculture space must be distributed to Iwi Aquaculture Organisations, where that space is generally either:<br><br>• pre-commencement space: marine farming space applied for between 21 September 1992 and 31 December 2004 (if subsequently granted)<br><br>• new space: new marine farming space (consented or anticipated) from 1 October 2011[10].<br><br>Settlements are made under regional agreements and can deliver a mix of settlement assets (i.e. cash and/or space). The Deed to Settle the South Island (and Coromandel) pre-commencement space agreement was signed 6 May 2009.<br><br>Gazette notices have been issued for Aquaculture Settlement Areas in Marlborough where aquaculture development is expected (Port Gore, Port Underwood, Crosilles Harbour, Tory Channel, Tawero Point, via gazette notices issued 29 September 2011 and 10 May 2012).<br><br>These Aquaculture Settlement Areas allow the government to |

[9] This is because customary interests in commercial aquaculture were settled under the Māori Commercial Aquaculture Claims Settlement Act 2004.

[10] 'New space' is subject to section 116A of the RMA. 'New space' can be space that is actually consented after 1 October 2011 or space that is anticipated or forecast to be used for aquaculture activities in the future.

| Legislation | Relevant provisions/content | Why these provisions are important |
|---|---|---|
| | requirements before it can be approved for aquaculture. | enter into negotiations with iwi. However, gazetting space does not confer any other rights or certainty the space will later become part of a regional agreement under the settlement. |
| **Biosecurity Act 1993** | The Act covers:<br>• pre-border risk management and standard setting;<br>• border management;<br>• readiness and response; and<br>• long term pest management.<br>The Act provides for:<br>• national and regional pest management plans; and<br>• pathway management plans (used to control the different ways pests or diseases may enter New Zealand). | Provides the legal framework to keep harmful organisms out of New Zealand and legislates as to how MPI and other parties should respond, and manage them, if any do make it into the country.<br>Marlborough District Council manages pests through the Regional Pest Management Plan 2018.<br>Invasive marine pests are a threat to Marlborough's aquaculture industry. A Marine Biosecurity Partnership for 'The Top of the South' has been established to manage these threats[11].<br>There is some overlap between the biosecurity functions of the Council under this Act and under the NZCPS[12]. |

[11] The Partnership includes Tasman District Council, Nelson City Council, Marlborough District Council, Ministry for Primary Industries, Department of Conservation, the aquaculture industry, port companies, tangata whenua and other stakeholders.

[12] See NZCPS Policy 12.

| Legislation | Relevant provisions/content | Why these provisions are important |
|---|---|---|
| **National Policy Statements**<br>**The PMEP must give effect to any National Policy Statement ('NPS')[13]. The New Zealand Coastal Policy Statement 2010 ('NZCPS') is the only NPS directly relevant to proposed Variation 1.** | | |
| **New Zealand Coastal Policy Statement 2010** | Objectives 1 - 4, and 6<br>Policies 1 - 4, 6 - 8, 11 - 15, 17 - 23, and 27. | Contains objectives and policies to achieve the purpose of the Act in relation to the coastal environment. See Appendix 3 for details. Policy 8 is particularly important to proposed Variation 1 because it requires the Council to provide for aquaculture within appropriate places in the coastal environment. |
| **National Environmental Standards**<br>**The PMEP must appropriately reflect any National Environmental Standards ('NES')[14]. The NES for Marine Aquaculture ('NESMA') becomes operative on 1 December 2020. ).** | | |
| **NES for Aquaculture** | The NESMA requires that areas identified as inappropriate for existing aquaculture are mapped (or otherwise identified by geographic co-ordinates) or clearly named, with a description of physical boundaries.<br>Existing marine farms in inappropriate areas for existing aquaculture are **discretionary** activities (yet a regional council can include a more | The plan must be consistent with the NESMA, unless the regulations state that it can be more or less lenient.[15]<br>Proposed Variation 1 has been written to be consistent with the NESMA.<br>Variation 1 proposes that replacement consents for existing marine farms are controlled activities within AMAs. This is slightly more lenient than the NESMA, which is appropriate, as the NESMA says that a more lenient rule can be included in relation to replacement |

[13] An NPS is a document prepared under the RMA to provide objectives and policies on matters of national importance.

[14] A NES provides technical standards, methods, or requirements for matters of national importance.

[15] Section 43B(3) of the RMA states that a rule that is more or less lenient than a national environmental standard prevails over that standard, as long as the NES expressly permits the rule to be more or less lenient, as the case may be.

| Legislation | Relevant provisions/content | Why these provisions are important |
|---|---|---|
| | stringent rule than this).<br><br>Existing marine farms not within inappropriate areas for existing aquaculture are **restricted discretionary** activities (yet a regional council can include a more lenient rule than this).<br><br>The NESMA also:<br>• provides for small scale realignments of existing marine farms as restricted discretionary activities, particularly where realignment would reduce adverse effects on the environment;<br>• provides for certain species changes for existing marine farms to be restricted discretionary activities;<br>• provide limited matters of discretion for replacement consents for existing farms; and<br>• provides for most replacement consents for existing farms to be processed as non-notified. | consents (where there is no change in the consented species).<br><br>Variation 1 proposes that replacement consents for existing marine farms outside AMAs are prohibited. This is appropriate as the variation identifies areas outside AMAs, and not in the offshore CMU as inappropriate areas for existing aquaculture.<br><br>Variation 1 proposes that small scale realignments and change of species are a controlled activities. This is more lenient than the NES, and is appropriate because the council is confident that the AMAs and list species in Appendix L mean the effects are likely be minor. |
| **Proposed Marlborough Environmental Plan (PMEP)**<br><br>**The PMEP is a combined Regional Policy Statement, Regional Plan, Regional Coastal Plan and District Plan.** | | |
| **PMEP** | Key chapters include:<br>• 3 (Marlborough's Tangata Whenua Iwi)<br>• 4 (Sustainable Management of Natural and | Table 3 in this report discusses the key objectives for proposed Variation 1. The relevant RPS provisions in the PMEP (as amended by the Panel Decisions) are set out in Appendix 3. |

| Legislation | Relevant provisions/content | Why these provisions are important |
|---|---|---|
| | Physical Resources)<br>• 6 (Natural Character)<br>• 7 (Landscape)<br>• 8 (Indigenous Biodiversity)<br>• 9 (Public Access and Open Space)<br>• 13 (Use of the Coastal Environment and the Allocation of Coastal Space)<br>• 16 (Waste) | The regional coastal plan does not currently contain any provisions specifically addressing aquaculture. |
| **Statutory Acknowledgements**<br>**Statutory acknowledgements form part of the iwi's respective Treaty of Waitangi settlements with the Crown. Statutory acknowledgements recognise particular cultural, spiritual, historical, and traditional associations of each iwi to particular sites/areas.** | | |
| **Ngāi Tahu Claims Settlement Act 1998**<br>**Ngāti Apa ki te Rā Tō Ngāti Kuia, and Rangitāne o Wairau Claims Settlement Act 2014**<br>**Ngāti Toa Rangatira Claims Settlement Act 2014**<br>**Ngāti Koata, Ngāti Rārua, Ngāti Tama ki Te Tau Ihu, and Te Ātiawa o Te Waka-a-Māui Claims Settlement Act 2014.** | The eight iwi of Te Tau Ihu to which these statutory acknowledgements and areas relate are:<br>• Ngāti Apa ki te Rā Tō<br>• Ngāti Kuia<br>• Rangitāne o Wairau<br>• Ngāti Koata<br>• Ngāti Rārua<br>• Ngāti Tama ki Te Tau Ihu<br>• Te Ātiawa o Te Waka-a-Māui | Te Tau Ihu and Ngāi Tahu Statutory Acknowledgements are an attachment to the PMEP and enhance the ability of iwi to participate in RMA processes. |

| Legislation | Relevant provisions/content | Why these provisions are important |
|---|---|---|
| | • Ngāti Toa Rangatira. | |
| **Iwi Management Plans** | | |
| **Ngāti Tama ki Te Waipounamu Management Plan 2018** | Key sections: 15.3 Coastal water quality, 15.4 Coastal Environment (land use and development), 15.5 Structures in the Coastal Marine Area, 15.8 Commercial Surface Water Activities. | Highlights the aspirations of Ngāti Tama for managing ancestral wāhi tapu and wāhi taonga in their rohe. |
| **Te Ātiawa O Te Waka-A-Māui Iwi Environmental Management Plan (IEMP) 2014** | Section 7.8 - objectives and policies relating to the sustainable management of the Moana. Marine farming is listed as a threat to sustaining mauri, due to lack of existing research on the cumulative effects of marine farming including information on:<br>• Changes to water quality,<br>• Modification of hydrological conditions, flow changes, sedimentation;<br>• Modification of the benthic habitat through the accumulation of marine farm associated material such as faeces, shell litter and uneaten food; and<br>• Changes in marine biodiversity as a result of marine farming. | Outlines a number of kaupapa that are central to Te Ātiawa tikanga, one of which is sustainable management of the Moana (coastal/marine area). |

| Legislation | Relevant provisions/content | Why these provisions are important |
|---|---|---|
| | Section 7.8 directs managing agencies to require research and monitoring programmes, in partnership with Te Ātiawa, to assess ecological health, carrying capacity and cumulative effects of marine farming and other fishery practices. | |
| **Ngāti Kōata No Rangitoto Ki Tonga Trust Iwi Management Plan, 2002** | Section 8.1, Policy 8.33. | Open water marine farms are favoured by Ngāti Kōata over a coastal ribbon of development, due to the value for recreational fishing associated with the coastline of the Sounds. |
| **Nga Taonga Tuku Iho Ki Whakatu Management Plan**<br>**(Ngāti Rārua Iwi Trust, Te Runanga o Toa Rangatira, Te Ātiawa Manawhenua Ki Te Tau Ihu Trust, Ngāti Kōata No Rangitoto Ki Te Tonga Trust and Ngāti Tama Manawhenua Ki Te Tau Ihu Trust).** | Section 5.4.4 Tangaroa – marine and coastal realm describes key issues, which include:<br>• the ability to practice kaitiakitanga;<br>• water quality;<br>• shipping, ballast water and boating; and<br>• development of estuary areas.<br>A key issue described under Section 5.4.6 Rongomatane and Haumie-tiketike is the restricted or loss of access to mahinga kai.<br>Section 3.4 lists ngā taonga tuku iho (treasured resources). This includes mātaitai kaimoana (food gathering places of the sea); which are very important to iwi for a range of cultural reasons. | The establishment of marine farms on customary fishing grounds is an issue in the Nelson rohe. |

## 2.2 Proposed Variation 1 must help achieve the objectives in the PMEP

Proposed Variation 1 must help to achieve the objectives in the PMEP, in order to demonstrate that it is appropriate. A review of how the proposed Variation 1 objectives will work alongside the existing objectives in the PMEP and help achieve the purpose of the RMA is set out in Appendix 5.

*Table 3: The PMEP objectives relevant to proposed Variation 1*

| PMEP chapter (Volume 1) | Objectives | Relevance to proposed Variation 1 |
|---|---|---|
| **03: Marlborough's Tangata Whenua Iwi** | Objectives 3.1 - 3.4, 3.6 | These objectives signal that any framework to manage aquaculture must have particular regard to the relationship of Marlborough's tangata whenua iwi with the coastal environment, including wāhi tapu and other sites and taonga, and that this relationship must be recognised and provided for. |
| **04: Sustainable Management of Natural and Physical Resources** | Objectives 4.1, 4.3. | These objectives recognise the multiple values of the natural resources of the Sounds, and the need to balance social, economic, cultural, and environmental wellbeing when making decisions on the use of such resources. |
| **06: Natural Character** | Objective 6.1, 6.2 | Once natural character of the coastal environment has been identified, it must be preserved and restored and protected from inappropriate development. |
| **07: Landscape** | Objective 7.1, 7.2 | Marlborough's identified outstanding natural features, outstanding natural landscapes and high amenity landscapes must be protected (where they are outstanding) from inappropriate development. High amenity landscapes must be maintained and enhanced. |
| **08: Indigenous biodiversity** | Objectives 8.1, 8.2 | These objectives have a strong direction to protect existing marine biodiversity and restore or improve the condition of degraded areas. |
| **09: Public Access and Open Space** | Objectives 9.1, 9.2 | These objectives recognise the importance of maintaining public access to the coastal environment, and that the reasons for limiting such access must be restricted to certain purposes. |
| **10: Heritage Resources and Notable Trees** | Objective 10.1 | Heritage resources should be retained and protected. |
| **13: Use of the Coastal Environment and the Allocation of Coastal Space** | Objective 13.1 – 13.3, 13.6, 13.7, 13.10, 13.12a, 13.14, 13.15, 13.17, 5.13.M | These objectives recognise the need to establish appropriate limits or no-go areas in the coastal environment, in order to manage adverse effects.<br>Recreational activities make a significant contribution to health and wellbeing, and the economy, but also come with adverse |

| PMEP chapter (Volume 1) | Objectives | Relevance to proposed Variation 1 |
|---|---|---|
| | | effects, which must be managed. The same applies to use of the coastal marine area for transportation.<br><br>The disposal or deposition of unwanted material into the coastal marine area must be managed.<br><br>The coastal marine area is a public space. Occupation of that public space for private gain must be sustainably allocated and managed. |
| **17: Transportation** | Objective 17.4 | Conflicts between land uses and the land transport network must be managed. |
| **19: Climate Change** | Objective 19.1, 19.2 | These objectives recognise the need for adaptation to the adverse effects of climate change. |

**Proposed Variation 1 would amend the PMEP, not the operative plans**

Proposed Variation 1 seeks to amend the PMEP, not the operative planning framework (the operative RPS/plans) - because that framework has already been reviewed and proposed to be replaced by the PMEP. This means that the s32 evaluation of the appropriateness of the proposed variation's provisions in achieving the objectives of the RPS/plans is also focused on the PMEP. The provisions in the operative RPS/plans are still important to this evaluation however, as they represent the 'status quo'[16]. The PMEP does not yet include any provisions to manage marine farming.

# 3 Who was consulted during proposed Variation 1 development?

## 3.1 Legislative consultation requirements

Schedule 1(3) of the RMA specifies who the Council must consult when preparing a plan, including any variation to a plan. Clause 3B sets out how that consultation with iwi authorities should be undertaken.

Section 32(4A) of the RMA requires this report to summarise all advice received from iwi authorities on the variation and how the Council has given effect to that advice.

[16] The degree of change between the existing framework in the RPS/MSRMP/WARMP and the proposed new framework (proposed Variation 1) has been considered in determining the scale and significance of the proposals under section s32(1)(c) RMA. This analysis (summarised in Chapter 9 and set out in Appendix 13) has informed the depth of examination in this report.

## 3.2 Statutory consultation requirements

The Council has consulted with the following parties:

*Table 4: Who was consulted while we developed proposed Variation 1*

| Consultee | Consultation undertaken | Issues raised | Council's response |
|---|---|---|---|
| • Ngāti Apa ki te Rā Tō Trust<br>• Ngāti Koata Trust<br>• Ngati Toa Rangatira Manawhenua Ki Te Tau Ihu Trust<br>• Te Ātiawa o Te Waka-a-Māui Trust<br>• Te Rūnunga a Rangitāne o Wairau<br>• Te Rūnunga o Ngāti Kuia<br>• Te Rūnunga o Ngāti Rārua | See section 3.2.1 below. | | |
| Minister for the Environment | Minister for Environment formally consulted during the preparation of the Variation. | No response was received. | |
| Minister of Transport | Minister of Transport formally consulted during the preparation of the | No response was received. | |

| Consultee | Consultation undertaken | Issues raised | Council's response |
|---|---|---|---|
| | Variation. | | |
| Department of Conservation | Ongoing discussions during development.<br><br>Member of the MARWG, and represented on the TAG.<br><br>Minister of Conservation formally consulted during the preparation of the Variation. | The Minister of Conservation[17] noted that while the specific task of the MARWG was to give effect to Policy 8 of the NZCPS, the variation must give effect to the NZCPS as a whole.<br><br>The Minister noted the information gaps and areas of uncertainty regarding the cumulative effects of human activities, including marine farming, on the marine environment.<br><br>The Minister also noted the differing views between the members of the MARWG about the proposed approach and on matters of detail, including a dissenting view from the representatives of the Kenepuru & Central Sounds Residents Association. The Minister expects the Council to demonstrate that provisions in the proposed variation address information gaps and areas of uncertainty to the extent needed to ensure that the cumulative effects of marine farming are sustainably managed.<br><br>Variation is a pragmatic approach. Supports recognition that there are some areas within the Marlborough Sounds where aquaculture is | The proposed Variation 1 addresses some of these concerns through provisions for monitoring and adaptive management. |

[17] David Hayes, Operations Manager, on behalf of the Minister of Conservation

| Consultee | Consultation undertaken | Issues raised | Council's response |
|---|---|---|---|
| | | inappropriate. | |
| Minister of Fisheries / Ministry of Primary Industry | Ongoing discussions during development.<br>Member of the MARWG and represented on the TAG. | The Minister is satisfied with the provisions and approach, including where the provisions are likely to be more or less lenient than the upcoming NES: Marine Aquaculture. | Ongoing liaison to keep the Minister briefed of any developments. |

### 3.2.1 Advice from iwi and the response to their advice

The Council approached each Te Tau Ihu iwi and Ngāi Tahu/Ngāti Kuri, and held hui with several iwi to discuss the aquaculture provisions review process. The purpose of the meetings was to discuss iwi involvement and record iwi values. The Council's starting propositions for proposed Variation 1 were also discussed. Those iwi initially expressed that they did not want to be involved directly in the MARWG, but wanted to be informed of the outcome.

The iwi contacted to discuss the marine farming provisions review process included:

- Ngāti Apa ki te Rā Tō Trust
- Ngāti Koata Trust
- Ngati Toa Rangatira Manawhenua Ki Te Tau Ihu Trust
- Te Ātiawa o Te Waka-a-Māui Trust
- Te Rūnunga a Rangitāne o Wairau
- Te Rūnunga o Ngāti Kuia
- Te Rūnunga o Ngāti Rārua

#### *3.2.1.1 Te Ātiawa o Te Waka-a-Māui Trust*

Toward the end of the process, iwi authority, Te Ātiawa expressed concern about the lack of involvement of kaitiaki and of iwi with commercial interests.

Te Ātiawa feel that iwi have missed out on aquaculture opportunities in their rohe and that this is exacerbated by the position of 'continuing ownership rights'. They would like to see a public tender process used when consents come up for renewal, with Mana Moana Iwi having the first right of refusal.

Te Ātiawa would like to see commercially valued coastal occupancy charges applied as soon as possible, with the revenue generated used to identify the effects of marine farming. These charges would be waived for iwi, as a means of reparation for iwi for 'lost opportunity' and for the 'observable destruction of their rohe' by Treaty Partner interests.

Te Ātiawa consider the precautionary principle should be exercised. They feel the proposed Variation 1 provisions do not provide sufficient precaution, given the lack of adequate information (historic and cumulative) on the state of the environment. They would prefer a discretionary activity status for reconsenting existing marine farms because the controlled activity status does not allow for the necessary spectrum of response to knowledge arising over time. For example, new information might show that there are too many farms in a particular location, or that a specific farm is particularly responsible for negative ecological effects.

Te Ātiawa accept that there is partial precaution built into the new provisions by removing the CMZ2 zone (in the operative plan) from areas which are not already being farmed.

Te Ātiawa recognise the difficulty of managing cumulative effects and agree that such effects can only be managed after the collection and analysis of data and the establishment of a cause and effect relationship.

Te Ātiawa generally accept the proposed rules, but consider that the objective and policy section is non-aspirational for Te Taiao, because it will not achieve enduring net restorative outcomes. The objectives and policies are considered incomplete in the context of Te Ao Maori.

Te Ātiawa Trust provided further input into the draft provisions of the PMEP in October 2020. Their comments are summarised as follows:

- Te Ātiawa recorded their concerns about the lack of iwi involvement in the Marlborough Aquaculture Review Working Group, considering this is a "poor platform for our continuing engagement and the maintenance of mutually respectful relationships", and there should have been a move from consultation, to collaborative co-management.
- The PMEP should not just be for the management of 'resources' and the natural world does not exist for exploitation; it supports all life including our own.
- The provisions appear to be safe, but are non-aspirational.
- Te Ātiawa holds mana whenua and mana moana status over Queen Charlotte Sound and Kura Te Au (Tory Channel) and the open ocean that extends from the outer shoreline of the rohe.
- Te Ātiawa affirms its understanding that the state of the moana in the rohe continues to degrade, which is unacceptable. Consequently, a restorative trajectory is sought, where all action results in net improvement to the mauri of the rohe = net enduring restorative outcomes.
- Te Ātiawa does not support the grandfathering principle of subsequent allocation. It is considered important that a sunset date is applied to all consents and that the process results in re-tendering; which should be weighted, first for iwi, second for locals and then for others.
- Important species are defined in Volume 1, but for Te Ātiawa all indigenous species are important as they are taonga.
- The enclosed waters of the Sounds are subject to a significant suite of increasing pressures, all enabling progressive degradation of Te Taiao. There is need to turn marine farming aspirations to a less sensitive open ocean option.
- Ātiawa supports draft policy 13.21.2, which is concerned with areas set aside for iwi aquaculture.
- All new decisions above Controlled Activity status must be notified applications, to enable iwi, stakeholders, and the community, to participate in the process.
- The cost of SOE and specific performance monitoring and compliance must be met by the industry.
- In relation to monitoring and adaptive management policies; these rely on the understanding of precautionary thresholds and on our knowledge of change. Buffering around acceptable thresholds is necessary, as is the need to revisit the thresholds themselves at regular intervals, to respond to growing/changing knowledge.
- Iwi are seeking exemption from coastal occupancy charges.
- It is unacceptable to use ropes and related materials in marine farms made of synthetics. Prohibition must be applied, along with progressive replacement.
- In support of waste clean-up. Disposal must be specified as being an "approved facility".
- Method 13.M.37 Monitoring program fails to offer any time frame for reporting to the public.
- It is not obvious as to how iwi values were acquired for the provisions.

- In regard to the criteria for determining the location of AMAs, “away from areas of particular significance to iwi” is not listed.
- Provision needs to be made for the collaborative development and inclusion of applicable Māori Cultural Marine Indicators in the PMEP.
- With respect to the proposed Variations 1, 1A and 1B, Te Ātiawa urges precaution in their consideration and the also application of significant monitoring / compliance terms, along with, proactive adaptive management, in the event that they are approved.

The Council has considered the feedback from Te Ātiawa carefully. The Council considers the allocation mechanism it has adopted (see Chapter 7) is more appropriate for the Marlborough region circumstances than a public tender process. The mechanism has been developed with extensive input from the industry and other stakeholders and is effective and efficient. The Council does not intend to allow for any significant growth in marine farming in enclosed waters. The new provisions will require collection of environmental data to monitor for cumulative effects, so that marine farming activities can be modified over time, if a causal effect is established. While there is evidence of a general decline in Te Taiao in the Sounds, the Council does not have evidence that this is being caused by any significant adverse environmental effect from the current level of non-fed marine farming in the Sounds, that would justify the adverse economic and social costs of reducing the size of the industry.

Coastal occupancy charges are outside the scope of Variation 1 and the Council considers that the framework of Variation 1 already addresses the need for ongoing and adaptive management. The suggestion of phasing out synthetic materials in marine farms would require in depth research and consultation with the industry, and has not been included in the provisions at this time. The Council has made a number of changes to the provisions in response to Te Ātiawa’s feedback, including:

- Updating Policy 13.22.6 to refer to appropriate disposal of rubbish
- Updating Method 13.M.37 to provide minimum reporting timeframes to the public of monitoring information.
- Amending Policy 13.21.5 to add an additional clause considering areas of Māori cultural value.

Consideration was given to creating a new method to collaboratively develop Māori cultural indicators for the marine environment. In doing so it was noted that Method 3.M.5 of the PMEP already commits the Council to this action, not just for the marine environment but for all state of the environment monitoring. A new method would therefore duplicate existing provisions and action.

#### *3.2.1.2 Te Ohu Kaimoana*

Te Ohu Kai Moana is a charitable trust established through the Māori Fisheries Act 2004, established to advance the interests of Māori in fishing and fisheries-related activities.

Te Ohu Kaimoana requested that ‘iwi AMA’ be changed to ‘Aquaculture Settlement Area’ to better reflect their statutory name under the Māori Commercial Aquaculture Claims Settlement Act 2004. This amendment has been made.

### 3.2.2 Input from Council staff

Proposed Variation 1 was developed with the expert assistance of the Council’s harbour master (navigational and safety issues), a coastal scientist (who led and convened the TAG), policy specialists, and administrative and GIS technicians.

### 3.2.3 Feedback from key stakeholders through the MARWG

The MARWG was established to help develop and test a policy framework for aquaculture that would be accepted by key stakeholders. The MARWG included council officers, elected members, and government and industry representatives (Appendix 2).

Members of the MARWG from the Kenepuru and Central Sounds Residents Association (KCSRA) expressed concern about the starting propositions provided by the Council (see section 1.4). They retained this concern throughout the review process and presented a dissenting view of the group's recommendations to Council. Their concerns are discussed in more detail in Chapter 4.

# 4 The key questions proposed Variation 1 seeks to address

In Chapter 1 we explained why marine farming is an important issue for the coastal plan review. There are several dimensions to the overall objective of 'providing for aquaculture in appropriate places' which is required by Policy 8 of the NZCPS. The Council had to consider some key questions:

1) How much aquaculture should be provided for in the Marlborough Sounds?
2) Where are the best places to locate aquaculture in the Sounds and what framework should be used to direct aquaculture to those areas?
3) How should the rights to occupy those spaces be fairly allocated?
4) What are the potential effects of providing for aquaculture in these locations, and how can these impacts be better understood and managed in the future?

This section looks in more detail at the Council's answers and why they are important, setting out the detailed rationale for the proposed provisions in Chapter 5. Alternative options for resolving these questions have also been considered. The alternative approaches which were not progressed, and why they were not, are covered in Chapter 6 and 7.

## 4.1 How much aquaculture should be provided for in Marlborough?

Policy 8 of the NZCPS requires regional policy statements and regional coastal plans to make provision for aquaculture activities in 'appropriate places' because aquaculture makes a significant contribution to social, economic and cultural well-being.

The Council have decided that the PMEP should provide for about the same level of aquaculture activities as currently exists. They chose this option because:

- The Council do not have enough robust evidence to prove either that the marine environment has the capacity to absorb more aquaculture, or that the adverse effects require the level of farming to be reduced (see below).

- Some communities are strongly opposed to an increase in aquaculture – the 'social' carrying capacity has been met.
- This option retains the existing economic benefits generated by the industry.

To reduce the level of marine farming through the reallocation process, the Council needs evidence that the benefits of reducing the number of marine farms (for example on other values such as ecology, amenity, natural character, public access etc) is necessary to achieve the objectives of the PMEP, taking into account the economic costs of reducing the size of the industry. The Council considers the information it has collated (including information from the KCSRA) does not yet demonstrate this.

On the flip side, to increase the level of farming the Council needs to be satisfied that there is robust evidence that the marine environment can absorb more farming without generating adverse effects. The aquaculture industry has not provided this evidence, except in the case of Onapua Bay. The applicants for the Apex Marine Farm in Onapua Bay have provided sufficient evidence (which has been peer reviewed) to demonstrate that Onapua Bay can accommodate a marine farm in this area. Variation 1B is in draft form, with consultation currently ongoing. The Council intends to make a decision about this variation next year.

More information about these options is in Chapter 6.

## 4.2 Which spatial framework should be used to locate and manage aquaculture?

The NZCPS requires Councils to identify 'appropriate places' for aquaculture through the regional policy statement and regional coastal plan. Regulation 6 of the NES for Marine Aquaculture Regulations 2020 directs regional coastal plans to define areas which are 'inappropriate for existing aquaculture activities' using maps, geographic coordinates or descriptions of physical boundaries. These areas must be accompanied by a rule (supported by policy) that provides for aquaculture activities in the inappropriate area to be discretionary, non-complying or prohibited.

### 4.2.1 Marine farms proposed to be located in Aquaculture Management Areas

Marlborough's operative plans use zoning to broadly indicate where aquaculture is or is not appropriate. The NES for Marine Aquaculture directs the Council to provide a more fine-grained spatial framework. Proposed Variation 1 uses discrete geographic units ('CMUs') (Figure 1) for assessing values. Within those CMUs 'Aquaculture Management Areas' ('AMAs') are identified which are appropriate locations for marine farms. All areas outside AMAs are by default, 'inappropriate for existing aquaculture activities', except the offshore CMU.

The CMUs are parcels of land and water that have been defined based on their particular values and characteristics. The overall effects of marine farming within individual CMUs can then be identified and assessed against a values table, along with any site-specific adverse effects. The process of identifying the proposed CMUs was informed by the objectives and policies of the NZCPS, along with information gathered on different values.

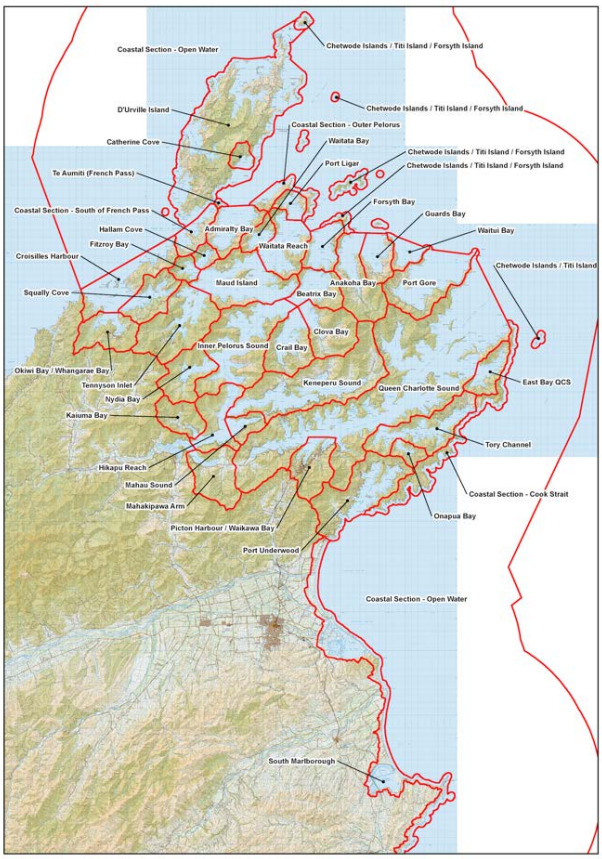


*Figure 1: Proposed Coastal Management Units, Marlborough District*

The size and shape of each CMU is based on catchments, key features, and values. A standard set of criteria was used to divide the Sounds: starting at the large scale and progressively dividing the region into smaller and smaller parts, before fine-tuning the individual CMU boundaries. A consistent set of values was then identified and recorded in detail for each CMU. The criteria used to define the CMU and the types of values are in Appendix 6.

Using the values as a guide, AMAs have been identified within each CMU that are appropriate for marine farming. Through the allocation process, existing marine farms will be given priority to occupy the AMAs, and when necessary they will be encouraged to move seaward or to more appropriate locations that are within AMAs.

### 4.2.2 How Council decided where to locate Aquaculture Management Areas?

The following general principles were used to determine the locations of the AMAs:

- Where appropriate, move marine farms to 100–300 metres from the mean low water mark (MLWM). (Most farms are currently between 50–200 metres from the MLWM.) Moving farms seaward prevents shading in shallow areas and restores biodiversity to the foreshore euphotic zone. This seaward movement also creates a 100-metre corridor between farms and the MLWM, improving public access to the foreshore.
- Avoid 'double parking' marine farms, where one is seaward/in front of another.
- Move marine farms away from beaches and jetties, to increase amenity.
- Avoid making navigable boat routes less than 200m wide. Narrow routes can result in speed restrictions.
- Avoid moving marine farms near reefs and Ecologically Significant Marine Sites, to manage ecological effects as required by the NZCPS.
- Move existing marine farms away from Outstanding Natural Landscapes and areas of Outstanding Natural Character (as identified in the PMEP), if necessary, to manage effects on landscapes and natural character, as required by the NZCPS.

Figure 2 is an example of an AMA configuration.

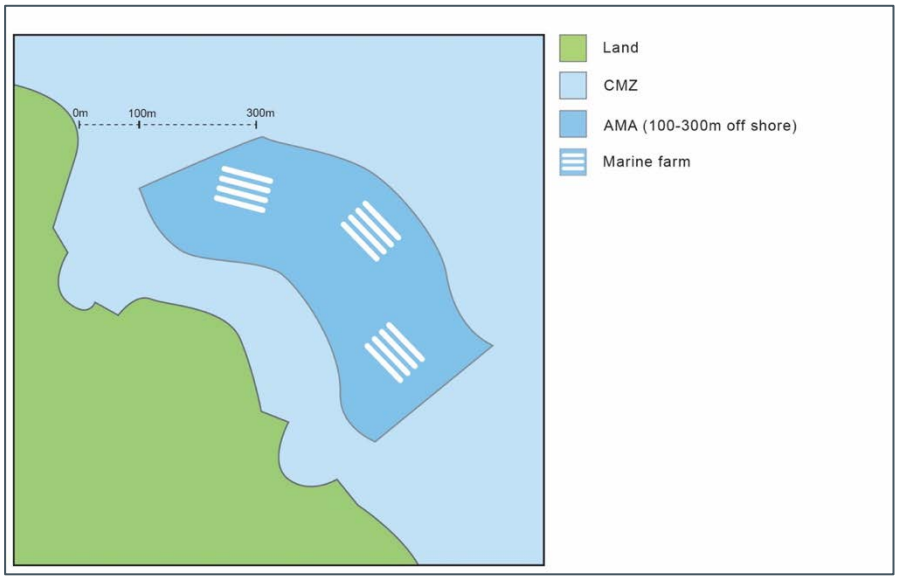


*Figure 2: Example Aquaculture Management Area (AMA) configuration*

In some cases, significant adjustments in location and/or layout of the AMAs compared to the existing layout of marine farms have been proposed to maintain or enhance other values that exist within the CMUs. This includes defining AMAs which will result in removing lines from farms (and in some cases, entire farms) and adding these to existing marine farms at other locations within the CMU (but distant to the original marine farm), or adding the lines to existing marine farms in other CMUs.

Exceptions have been made to the AMA principles where it was more pragmatic to do so. For example, in Port Underwood most of the AMAs mirror the existing marine farm locations. Moving those existing farms would have bigger impacts on sea floor life and navigation than leaving them where they are. Another example is Anakoha Bay, where moving farms away from the foreshore would narrow the navigable channel into the bay.

## 4.3 How should the rights to occupy AMAs be fairly allocated?

Once the overall amount of space and appropriate locations for marine farming had been identified, the Council considered how to fairly distribute (allocate) the rights to locate in the AMAs. There are a lot of different ways to manage marine space allocation. Different allocation options were carefully considered and are covered in more detail in Chapter 7.

The Council chose an authorisation process (a mechanism provided for by the RMA) to manage the competition for space. An authorisation is the right to apply for a coastal permit (a resource consent to do something in a coastal marine area) in the common marine and coastal area. This means that space in the common marine and coastal area, and the right to apply for a resource consent to operate in that space, will be allocated through an authorisation process.

The Council has chosen a 'modified grand parented' allocation process. Authorisations will be offered first to existing marine farmers operating within Aquaculture Management Areas (AMAs), and the space allocated will reflect the existing use of space. Giving priority to existing marine farmers means they can apply for resource consent to continue to operate in the Sounds, without having to compete with new marine farmers.

By allocating space through authorisations with a 'modified grand parented' method, the Council can:

- avoid applications for new marine farms in AMAs (because it is not possible for a marine farmer to apply for a resource consent without an authorisation); and
- allocate space in AMAs in an orderly way, particularly where partial or full relocation of an existing farm is required.

The Council expects most authorisations will be taken up by existing marine farms. This is referred to as the 'first wave' of allocation. The Council will then assess the uptake of authorisations. This may lead to changes in the way space is allocated, and result in a 'second wave' of allocation.

As discussed earlier, this process provides an opportunity for the Council to reconfigure or adjust the existing farms so that they are in more appropriate or optimum locations, ie in the AMAs. This has to be carefully managed through the rules to ensure marine farmers don't take up the new space and hold on to their existing space as well (resulting in a net increase in marine farming).

The Council will offer authorisations to existing consent holders for their marine farms that are:

- currently located within, partially within, or adjacent to an Aquaculture Management Area (AMA)
- not within, partially within, or adjacent to an AMA, but are within the same Coastal Management Unit (CMU) (after providing for those currently located within or partially within an AMA)
- not within, partially within, or adjacent to an AMA, and are in a different CMU (where there is no space available in the same CMU).

Some marine farms will need to move so they are located within an AMA, or move around within the AMA they currently occupy. This may also mean moving around within the CMU they are currently located in, or moving to a completely different CMU.

Rule 16.9 (and Policy 13.21.7) in proposed Variation 1[18] set out this method and its crucial components. Rule 16.9 is discussed in more detail in Chapter 5 and 7. The assessment required by s165H is set out in Chapter 7.

### 4.3.1 Aquaculture Settlement Areas for allocating iwi gazetted space

A regional agreement for Marlborough was signed in August 2015[19] and two areas in the Sounds have been gazetted to enable iwi to apply for consented space. Proposed Variation 1 includes provisions to accommodate these gazetted areas and they are identified in the Variation as ASAs. Only the relevant iwi can apply for resource consents in these areas.

A potential outcome of defining AMAs is that where an existing marine farm is relocated or realigned, any space that wasn't previously occupied by the relocated or realigned farm will count as 'new space' under the Maori Commercial Aquaculture Claims Settlement Act 2004 which will trigger a requirement for the Crown to provide the equivalent of 20% of this 'new space' to iwi. This is a matter for negotiation between the Crown and the affected iwi.

## 4.4 What are aquaculture impacts, and how can they be managed in the future?

While some effects of aquaculture can be managed using a spatial framework, this isn't appropriate for all effects. There is still a high level of uncertainty as to what impact aquaculture activities have on the coastal environment, and how to separate these out from the effects of other human activities.

### 4.4.1 An adaptive management approach

The Council has adopted an *adaptive management* approach (Policy 13.22.1, 13.22.3, 13.22.5) because it recognises that some effects are better managed by responding to information as it becomes available, rather than waiting for a perfect understanding of all effects. This is in line with the precautionary approach in Policy 3 of the NZCPS (which deals with effects on the coastal environment which are uncertain, unknown, or little understood, but potentially significantly adverse).

'Adaptive management' is defined in the New Zealand Biodiversity Strategy 2000 as:

> An experimental approach to management, or "structured learning by doing". It is based on developing dynamic models that attempt to make predictions or hypotheses about the impacts of

[18] As required by subpart 7A of the RMA

[19] Te Tau Ihu agreed on a cash settlement and 4 ha of oyster space.

alternative management policies. Management learning then proceeds by systematic testing of these models, rather than by random trial and error. Adaptive management is most useful when large complex ecological systems are being managed and management decisions cannot wait for final research results[20].

The Environment Court has identified some important features of an adaptive management approach[21]:

- Stages of development are set out;
- The existing environment is established by robust baseline monitoring;
- There are clear and strong monitoring, reporting, and checking mechanisms so that steps can be taken before significant adverse effects eventuate;
- These mechanisms must be supported by enforceable resource consent conditions which require certain criteria to be met before the next stage can proceed; and
- There is a real ability to remove all or some of the development that has occurred at that time if the monitoring results warrant it.

### 4.4.2 How the adaptative management approach was developed

The MARWG and TAG explored how adaptive management could be applied to aquaculture. They agreed that adaptive management was suitable for ecological effects, and specifically benthic and water column effects.

The MARWG research found that adaptive management is generally applied to new activities. The state of the baseline environment is documented, and the activity is then increased in stages. Monitoring is used to check that there are no adverse environmental effects. Applying adaptive management to an existing activity is a novel technique in New Zealand, especially when applied to a plan framework (it is usually applied to individual resource consents).

It is challenging to apply adaptive management to existing activities within an ecosystem that has degraded progressively in response to a range of human activities. It is important to isolate the effects specific to aquaculture from other anthropogenic effects.

### 4.4.3 Indicators and thresholds for monitoring aquaculture

The MARWG asked the TAG for advice on appropriate indicators, thresholds, measurement methods and a monitoring regime (location, frequency, and scale). That advice was used to develop policies 13.22.1, 13.22.3 and 13.22.5.

The TAG identified pragmatic indicators of the effects of aquaculture on ecological functioning. The indicators are:

- scientifically defensible - they provide plausible evidence linking an effect to an activity;
- relevant to the management scale - i.e. data is collected at an appropriate temporal and spatial resolution; and

[20] Golden Bay Marine Farmers v Tasman District Council W19/2003 at [405]

[21] This was in relation to a marine energy project.

- cost-effective to monitor over the long-term.

TAG identified indicators to be measured in both the benthic zone (seabed) and the water column (or pelagic zone).

#### *4.4.3.1 Benthic indicators*

Total free sulfide levels in seabed sediments is an indicator of ecological function[22] which is discussed below. Measuring sulfide levels is a pragmatic and cost-efficient way of quantifying seabed ecological health (when compared to measuring biological attributes such as species richness/diversity and densities directly[23]).

The MPI Best Practice Guidelines for Salmon Farms in relation to the benthic environment[24] provide a measurement methodology, and the ASC Bivalve Standard 2012[25] provides a framework for assessment and response. The ASC Standard sets out a tiered approach based on initial risk assessments, followed by increasing levels of monitoring depending on the results. Policy 13.22.1 and 13.22.3 require regular sulfide monitoring at control and farmed sites. Tailored trigger points for increasing monitoring and putting management actions in place are included in the policies. Elevated sulfide levels above 615 µM $mL^{-1}$ trigger more in-depth monitoring (increase in frequency, spatial extent, and parameters) and an assessment of the Enrichment Stage (ES). If the calculated ES is 4.0 or greater, this triggers a statistical analysis to compare farmed and control sites and review by an independent expert panel. Depending on the effect, a farm or group of farms will be required to change their operations to reduce the effects.

Enrichment Stage is a multi-variable indicator[26], which combines sulfide readings with analysis of benthic community structure and organic matter levels. It provides a picture of the biological and chemical responses to the rate and concentration of organic loading onto the seafloor. The ES model is used in the best management practice of benthic environments underneath salmon farms. For salmon farms, the upper limit of enrichment permitted is 5.0[27]. This approach has been modified to reflect an appropriate upper limit of enrichment for mussel farms (ES 4.0).

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[22] This is because there is a direct and measurable impact on sulfide levels from shell-drop, mussel faeces, pseudofaeces (indigestible material bound up in mucus and expelled) and other biological material (eg biofouling) on the seabed. The rate and concentration of organic matter deposition changes the seabed chemistry and affects the biological community composition in a relatively predictable manner as organic enrichment increases.

[23] Sulfide levels can be used as a rough proxy for benthic enrichment, in terms of providing a potential indicator for assessing the ability of the benthos at farm sites to process organic matter into energy through decomposition, and to recycle nutrients into the water column.

[24] Keeley, N; Gillard, M; Broekhuizen, N; Ford, R; Schuckard R; Urlich S. 2014. Best Management Practice guidelines for salmon farms in the Marlborough Sounds: Benthic environmental quality standards and monitoring protocol. Prepared by the Benthic Standards Working Group. www.marlborough.govt.nz/environment/coastal/marine-farming/salmon-farms/best-practice-guidelines-for-salmon-farming

Keeley, N; Gillard, M; Broekhuizen, N; Ford, R; Schuckard R; Urlich S. 2019. Best Management Practice guidelines for salmon farms in the Marlborough Sounds: Part 1: Benthic environmental quality standards and monitoring protocol. New Zealand Aquatic Environment and Biodiversity Report No 219. Prepared for Fisheries New Zealand by the Benthic Standards Working Group.

[25] ASC Bivalve Standard 2012. Version 1.0 Jan 2012. Aquaculture Stewardship Council. https://www.asc-aqua.org/wpcontent/uploads/2017/07/ASC-Bivalve-Standard_v1.0.pdf

[26] Keeley, N.B., 2013. Quantifying and predicting benthic enrichment: lessons learnt from southern temperate aquaculture systems, Quantitative Marine Science Program, Institute of Marine and Antarctic Sciences. Ph.D thesis University of Tasmania, Tasmania, p. 257.

[27] Keeley, N; Gillard, M; Broekhuizen, N; Ford, R; Schuckard R; Urlich S. 2014. Best Management Practice guidelines for salmon farms in the Marlborough Sounds: Benthic environmental quality standards and monitoring protocol. Prepared by the Benthic Standards Working Group. www.marlborough.govt.nz/environment/coastal/marine-farming/salmon-farms/best-practice-guidelines-for-salmon-farming

This threshold is based on advice in the MPI Review of the Environmental Effects of Aquaculture in 2013, which stated that the enrichment levels associated with mussel farms are not expected to exceed 4.0[28]. A higher level (such as the 5.0 limit for salmon farms) would allow greater adverse impacts to occur than what are currently happening, or what would have been assessed during previous marine farming consent applications. A lower ES is also justified on the basis that there are over 570 mussel farms covering approximately 3000 hectares, whereas salmon farms number less than ten farms and occupy a fraction of that space. The overall impact of a higher ES for salmon farms is much less.

#### *4.4.3.2 Water column indicators*

The TAG identified a number of indicators for understanding water column or pelagic zone effects which may be used to monitor and manage marine farms in the future, which included: chlorophyll-*a*, particulate carbon, and particulate nitrogen. To monitor changes in the water column, monthly sampling would be required, in addition to the need for time-series data to be collected in ten-year cycles in order to see if changes are a result of aquaculture or climate fluctuations.

Chlorophyll-*a* is a proxy for phytoplankton biomass. A study into the effects of mussel farming on plankton in Marlborough Sounds[29] found that phytoplankton concentrations have declined at some sites over this time, but this decline is not a localised phenomenon. The analysis found no evidence that mussels farms are the cause for this drop, however it was noted that the time series are too short to merit tests for long term trend.

As there is currently no long time-series data available for the above indicators, the TAG proposed using Criterion 2.2: Pelagic effects from the ASC standard[30]. This compares how long it takes a population of bivalves to clear a body of water (clearance time) with how long it takes for tides to flush that body of water (retention time). This is used as a measure of the ecological carrying capacity of the body of water.

The TAG decided that due to the minimal available long term data on the natural parameters for the area, a greater level of scientific certainty should be present before any trigger thresholds are determined using this method[31].

Due to the insufficient long term data on indicators to understand water column effects, it is not possible to include an adaptive management regime for water column effects at this time. Council is undertaking monitoring of chlorophyll-*a*, particulate carbon and particulate nitrogen, with the intention of the data collected informing an adaptive management regime in the future. Acceptable amounts and/or rates of change will be defined, so that these indicators can be used to trigger management actions.

### 4.4.4 Addressing the cumulative effects of marine farming

The Council will continue to learn about the effects of marine farming through its Coastal Monitoring Strategy (adopted 2012) (see Chapter 5 on implementation methods).

Monitoring will help council gather any evidence of adverse cumulative effects, which may be used to inform adjusting the intensity of marine farming. Because marine farming coastal permits have a minimum duration

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[28] Ministry for Primary Industries 2013. Chapter 3: Benthic Effects – Literature Review of Ecological Effects. Ministry for Primary Industries.

29 Newcombe, E. and Broekhuizen, N. 2020. Measuring mussel farming effects on plankton in the Marlborough Sounds. Prepared for Marlborough District Council. Cawthron Report No. 3550. 49 p.

[30] ASC Bivalve Standard 2012. Version 1.0 Jan 2012. Aquaculture Stewardship Council. https://www.asc-aqua.org/wpcontent/uploads/2017/07/ASC-Bivalve-Standard_v1.0.pdf

[31] MARWG meeting minutes July 2018.

of 20 years, all new resource consents for marine farms will include a review condition. This will allow the Council to respond to any evidence of adverse cumulative effects. Adaptative management will be implemented if the ES trigger levels are reached (see Policy 13.22.1).

# 5 Summary of proposed marine farming provisions

## 5.1 An overview of the proposed provisions

Proposed Variation 1: Marine Farming introduces new provisions to the PMEP to manage marine farming in the District. The proposed Variation will insert new issues, objectives, policies, and methods of implementation to Chapter 13: Use of the Coastal Environment and the Allocation of Coastal Space. Chapter 13 will set out the principal policy framework for assessing proposals for marine farming. Proposed Variation 1 will also insert new rules into Chapter 16: Coastal Marine Zone. The rules relate to the allocation and occupation of space in the coastal marine area for marine farming. They also identify the activity status and required standards for various marine farming activities.

The marine farming rules in proposed Variation 1 relate to bivalves, for example mussels and oysters. As set out in Chapter 1, a separate proposed Variation (1A) provides specific provisions for finfish farms where feed is added as part of the activity.

New planning maps will identify CMUs, which are the units for managing spatial allocation and the zoning maps will be modified with an overlay to show the location of the AMAs.

Table 5 below shows how the new provisions will fit into the PMEP.

*Table 5: Figure 2 - How proposed Variation 1 will amend the PMEP*

| Volume | Chapter | Content | How proposed Variation 1 will amend the PMEP |
|---|---|---|---|
| **Volume 1 (Objectives and policies)** | 13: Use of the Coastal Environment and Allocation of Coastal Space | Objectives and policies for the Coastal environment | Proposed Variation 1 will insert issues, objectives, policies and implementation methods specifically for marine farming. Some consequential amendments will be made to existing objectives and policies (Chapter 4 and 13). |
| **Volume 2 (Rules)** | 16. Coastal Marine Zone | Rules | Proposed Variation 1 will insert specific rules for marine farming. |
| | 25. Definitions | Definitions | The proposed Variation will insert new definitions including:<br>• technical terms (e.g biogenic habitat, reef, conventional longline structures) |

| Volume | Chapter | Content | How proposed Variation 1 will amend the PMEP |
|---|---|---|---|
| | | | • management terms (e.g AMA, CMU, Enclosed Water CMU, Near-shore CMU, Off-shore CMU)<br>• a revised definition of 'marine farm'. |
| **Volume 3 (Appendices)** | | Appendices | The proposed Variation will add a new appendix:<br>Species authorised to be farmed within the Marlborough region's coastal waters. |
| **Volume 4 (Zoning Maps)** | Planning Maps | Coastal Natural Character, Ecologically Significant Marine Sites, Zoning Maps | The proposed Variation will add:<br>• an overlay of AMAs.<br>• a map dividing the Coastal Marine Zone into CMUs. |

## 5.2 A detailed look at the proposed provisions

This section provides more detail about the proposed provisions and why they have been included.

### 5.2.1 Issues to be added to the PMEP

Proposed Variation 1 will insert new 'issue statements' into the PMEP. Issue statements set out the issues that the marine farming provisions seek to address.

*Table 6: Proposed issue statements and their explanations*

| Issue | Proposed wording | Explanation |
|---|---|---|
| **Issue 13.N** | There is uncertainty about the future of marine farming in Marlborough. For the industry there is uncertainty about the process and outcome of any future resource consent application when existing resource consents for marine farms expire. For the community there is uncertainty about the future location and potential growth of marine farming, and whether or not existing marine farms in current locations are resulting in adverse effects on uses and values of the coastal | The process of applying for new coastal permits creates a level of uncertainty for the aquaculture industry, who want to continue to farm in the Sounds. The wider community wants to understand where marine farms might be located in the future, what the effects are and whether the Council will allow the industry to expand. |

| | | |
|---|---|---|
| | environment. | |
| **Issue 13.O** | If not managed well marine farming has the potential to have adverse effects, including cumulative adverse effects, on other processes, values and uses of the coastal environment. | The marine farming industry contributes to economic, cultural, and social wellbeing of the region because it provides jobs and revenue. However, it also has the potential to have adverse effects, including cumulative adverse effects on values such as amenity, marine ecology, high value seascapes, navigation, and public access, if not managed well. |

### 5.2.2 Objectives to be added to the PMEP

Proposed Variation 1 will insert new objectives into the PMEP which address the issues identified above:

*Table 7: Proposed objectives and their explanations*

| Objective | Which part of the plan? | Proposed wording | Explanation |
|---|---|---|---|
| **Objective 13.21** | RPS | Provide for marine farming in appropriate locations while protecting and maintaining the values of Marlborough's coastal environment. | The intention of this strategic objective is to acknowledge that marine farming will be provided for in appropriate locations (as required by Policy 8 of the NZCPS), but in doing so, the impacts of that activity must be managed (as required by Policy 6 and other provisions in the NZCPS). It signals to plan readers that there is a strong policy framework which seeks to manage the potential impacts of marine farming. |
| **Objective 13.22** | RPS, CP | Marine farms are operated sustainably, kept in good order, and individual and cumulative adverse effects are addressed. | The objective signals the key issues that are managed through the policies and methods in the proposed Aquaculture Section. |

### 5.2.3 Policies to be added to the PMEP

Proposed Variation 1 will insert policies into the PMEP to achieve the new objectives. The new policies explain and set up the framework for the rules.

*Table 8: Proposed policies and their explanations*

| Policy | What the policy covers | Explanation |
|---|---|---|
| **Policy 13.21.1** | The division of the coastal marine area into 45 geographical units (CMUs) for the purpose of managing marine farming. CMUs are identified as being either: 'Offshore', 'Near-shore' or 'Enclosed Water' and are defined by new definitions within Chapter 25 – Definitions.)<br><br>The identification of natural and human use values identified within each CMU and AMA in the Values Report 2018.<br><br>Where marine farms are appropriate, or inappropriate as follows:<br>• Areas where marine farms are identified as being appropriate are identified as AMAs, in accordance with Policies 13.21.3 and 13.21.4.<br>• Marine farms may be appropriate in offshore CMUs and will be assessed under Policy 13.21.6.<br>• Other than in the offshore CMUs, new and existing marine farms outside an AMA are inappropriate.<br>• Where possible, existing marine farms are provided for at their existing size and within the same locations (or as near as possible).<br>• Where it is necessary to relocate an existing marine farm (or part of) because of adverse effects on the natural and human use values in that area, the equivalent amount of space is provided in an AMA in another location.<br><br>The allocation of space within AMA's will be managed using an authorisations process, guided by Policy 13.21.7. | This policy explains and sets up the aquaculture management framework in the Plan. It gives plan users an overview of what locations are considered "appropriate" by Council, and how this framework will be used in making allocation decisions. |
| **Policy** | Areas set aside for iwi aquaculture as aquaculture settlement areas in legislation, are | Policy 13.21.2 provides for iwi aquaculture under the Māori |

| Policy | What the policy covers | Explanation |
|---|---|---|
| **13.21.2** | identified as Aquaculture Settlement Areas (ASAs). Resource consent to use that space for marine farming will only be granted to those holding an authorisation provided under s13 of the Māori Commercial Aquaculture Claims Settlement Act 2004 (Policy 13.21.2). | Commercial Aquaculture Claims Settlement Act 2004. More information about why such areas are required is set out at Chapter 5 of this report. |
| **Policy 13.21.3** | Sets out the principles for how AMAs (for existing marine farms) within Enclosed Waters CMUs have been located. AMAs are generally located in the coastal ribbon between 100-300m from mean low water. The AMAs avoid:<br>• reefs and other areas of significant marine biodiversity value,<br>• residences, publicly accessibly boat launching facilities, jetties, publicly accessible beaches, moorings, refuge anchorages, navigational routes,<br>• areas of high, very high or outstanding levels of natural character, outstanding natural features, and landscapes,<br>• areas which provide significant feeding or breeding habitat for NZ King Shag, elephant fish, dolphins, and other important species,<br>• ecologically significant marine sites. | This policy identifies locations where Enclosed Water AMA's will be located or excluded from. |
| **Policy 13.21.4** | Guides the location of additional or new AMAs; and identifies specific areas where such AMAs would be inappropriate. | New AMAs could be created by a Council-initiated plan change, a private plan change, or s360A[32] regulations. Where one of these processes is initiated, policies 13.21.4 and 13.21.5 provide guidance on how these applications should be assessed. The policies are future-focussed and provide a high level of certainty about the appropriate locations of new AMAs.<br>The Council considered leaving future private plan change decisions to be |
| **Policy 13.21.5** | Sets out the policy considerations and framework for assessing whether any AMAs would be appropriate. The policy identifies the evidence base that will be needed to demonstrate appropriateness. | |

[32] Regulations amending regional coastal plans in relation to aquaculture activities, made by Order in Council by the Governor-General.

| Policy | What the policy covers | Explanation |
|---|---|---|
| | | decided on a case by case assessment against generic RPS values and policies and the NZCPS and RMA. The Council decided that while this would give flexibility, it would insufficient certainty for both the community and industry. |
| **Policy 13.21.6** | Marine farms may be appropriate in offshore CMUs. Policy 13.21.6 provides detailed criteria to determine the appropriateness of marine farms in offshore CMUs. The criteria are broadly similar to those set out in Policy 13.21.3, and include additional criteria to:<br>• avoid areas known to be important migratory corridors for whales, and important habitat for dolphins, if a more than minor adverse effect is anticipated.<br>• locate more than 50m from reefs, biogenic habitats, cobble habitats, algae beds that may be significantly affected<br>• avoid areas where amenity values will be significantly affected by lighting and noise from the operation of the marine farm. | Marine farms in open coastal water are a discretionary activity under Rule 16.6.13. Policy 13.21.6 guides decision makers as to when a farm in open coastal water is appropriate. The policy is to be read alongside the general policy on marine farms and coastal values.<br>The open water coastal area does not contain many existing farms. Policy 13.21.6 and Rule 16.6.13 provide flexibility to enable marine farmers to explore new technologies and new types of farms in the future. |
| **Policy 13.21.7** | Sets out how authorisations will be allocated. Space will only be allocated within AMAs.<br>Authorisations will be allocated using a modified grandparenting methodology (other than for FAMAs).<br>Authorisations will be allocated for consent holders of existing marine farms for the equivalent space within an AMA to accommodate the same area and total backbone length or, in the case of intertidal oyster racks, the same area and length of racks, as that authorised in existing consents.<br>The order of allocation for existing marine farms will be as follows:<br>• farms currently in locations within or partially within or adjacent to an AMA | Policy 13.21.7 guides how authorisations to occupy space will be allocated, giving priority to existing farms. It also explains when additional space may be allocated. The policy gives a level of certainty for existing and future users about the pattern of allocation which will be used in making allocation decisions.<br>FAMAs are AMAs that are specifically created for finfish farming. FAMAs are introduced by provisions in proposed Variation 1A. |

| Policy | What the policy covers | Explanation |
|---|---|---|
| | for the same or adjacent space in that AMA;<br>• farms not within, partially within, or adjacent to an AMA, but within the same Coastal Management Unit (CMU) (after providing for those currently located within or partially within an AMA);<br>• farms not within, partially within, or adjacent to an AMA, and in a different CMU (where there is no space available in the same CMU).<br>The policy also covers those situations where the Council may allocate space for new marine farms, or extensions of existing farms. That will only occur when:<br>• space previously used for an existing farm becomes available (ie an existing consent lapses or expires and no new application is made by the consent holder)<br>• monitoring in accordance with Policy 13.22.1 shows that additional marine farming can be undertaken without creating a significant adverse effect on the natural and human use values of the CMU. | |
| **Policy 13.22.1** | Sets out requirements for monitoring and adaptive management in order to manage unanticipated and cumulative adverse effects on the benthic environment in the enclosed waters CMUs.<br>The Council will:<br>• identify appropriate control and farmed sentinel monitoring sites;<br>• at those sits, sample seabed sediments every five years;<br>• measure total free sulfide in the seabed sediments as an indicator of ecological function, in a manner consistent with any best practice guidelines for benthic environmental | Policy 13.22.1 specifies a monitoring programme and trigger points for review of the resource consents of existing farms (individually) or groups of farms, if the monitoring shows specific effects.<br>Depending on the effect, a farm or group of farms will be required to change their operations to reduce, cease or reverse adverse effects (through consent review conditions).<br>Policies 13.22.1, 13.22.3 and 13.22.5 were recommended and developed by the TAG. |

| Policy | What the policy covers | Explanation |
|---|---|---|
| | quality in the Marlborough Sounds, or as approved by an independent scientific review panel.<br><br>If measured total free sulphide levels are greater than 615 μM at any site, monitoring will increase:<br>• in frequency, to annually,<br>• spatially, to include other sites<br>• to include other parameters, including those necessary to calculate the Enrichment Stage (ES).<br><br>If the calculated ES is 4 or greater, or if additional monitoring shows a significant adverse effect, analysis will be undertaken to determine whether marine farming is causing or materially contributing to that effect (using statistical analysis and peer review).<br><br>If such an effect is confirmed, the farm or group of farms will be managed to reduce, cease or reverse that effect.<br><br>All resource consents for marine farms will be required to include a review condition that requires adaptive management to be implemented if the ES trigger levels are reached. | |
| **Policy 13.22.2** | Consent holders will be required to remove marine farm structures on expiry or surrender of the relevant coastal permit, or if marine farming ceases for a period of five years or more and structures are derelict, unused or obsolete. There are some exceptions:<br>• for screw anchors, provided they are carefully cut off at sea floor level and do not protrude;<br>• for block anchors, which should be removed or reused as a first preference, but which can remain if those options are not practical and they will not be an impediment to navigation or safe anchoring. | This policy assists to implement Policy 6 (2e)(ii) of the NZCPS. Policy 6 promotes efficient use of occupied space, including by requiring the removal of any abandoned or redundant structure that has no heritage, amenity or reuse value. |
| **Policy** | Policy 13.22.3 sets out adaptive management | A adaptive management approach will |

| Policy | What the policy covers | Explanation |
|---|---|---|
| **13.22.3** | requirements for new marine farms (not existing farms) where:<br>• potential adverse effects cannot be adequately predicted;<br>• potential adverse effects are significant;<br>• species, technology, or inputs are new;<br>• location, scale, or type of marine farm warrants a precautionary approach;<br>• the CMU has not been extensively farmed in the past.<br>The policy outlines the stages which will be used and how these will be applied:<br>• first stage up to 50% of authorised space / or inputs<br>• subsequent stages up to 75 and 100%, subject to compliance with monitoring, reporting, analysis and criteria specified in the policy.<br>A survey will be required to establish the pre-development environmental baseline.<br>Thresholds of effects are as specified in Policy 13.22.1. | be applied to development, monitoring and management of new farms. The policy specifies the criteria which must be met before each stage can proceed. |
| **Policy 13.22.4** | Marine farms outside an AMA and not within the offshore CMU are inappropriate and are prohibited. | Policy 13.22.4 alongside Rule 16.7.10, the policy prevents development of new farms outside the identified AMAs. The policy reflects that the council considers the inshore waters of the Marlborough Sounds to be at capacity for marine farms, and that they have carefully considered the spatial layout. Marine farms outside that spatial layout or new farms will not achieve the objectives of the plan and are inappropriate. |
| **Policy 13.22.5** | Resource consents for marine farms will be subject to review conditions. Coastal permits will be reviewed when:<br>• monitoring and assessment indicates that the ES for the marine farm is 4 or | The policy sets out the requirement for review conditions for all marine farm consents and the circumstances in which these will be triggered. |

| Policy | What the policy covers | Explanation |
|---|---|---|
| | greater and is, or has been contributed to by marine farms;<br>• trigger levels in Policy 13.22.1 are met;<br>• new information becomes available that requires changes to management to manage effects;<br>• every 5 years, unless a review has been undertaken within that period. | |
| **Policy 13.22.6** | Marine farmers will be required to collect and monitor marine farm related debris and litter for the duration of any coastal permit. | This is a common condition on existing marine farm consents. The Council has included a policy to highlight the need to apply this, rather than relying on an ad hoc approach to individual consent applications. |
| **Policy 13.22.7** | Guides the layout, positioning, design and operation of marine farms. The criteria include:<br>• positioning lines parallel to the shoreline (unless there is practicable reason not to);<br>• positioning lines 15-20m apart;<br>• providing a gap of 50m between adjacent farms to allow for public access;<br>• addressing the visual amenity effects of the colour, reflectivity and finish of the structures;<br>• providing adequate buoyage, anchoring and lighting to protect navigational safety;<br>• managing the loss of structures, lines, ropes and buoys;<br>• managing noise and odour. | Sets out the policy criteria for assessing layout, positioning, design and operation of marine farms. |
| **Policy 13.22.8** | Provides for changes in layout, and sets out when this will be appropriate, including:<br>• where there is no increase in the total area occupied by structures,<br>• where there is an increase in the total | This policy enables change to the layout of a farm where required for operational purposes. The policy provides for the spreading of lines where such a change could reduce visual effects, improve ecology or |

| Policy | What the policy covers | Explanation |
|---|---|---|
| | area, but:<br>o that increase will not have an adverse effect on an adjacent outstanding natural landscape;<br>o that increase will not have a significant adverse effect on the natural and human use values of the CMU, or will result in a positive effect on those values.<br>• where an increase in the total length of lines is proposed and monitoring and assessment shows this would not have a significant adverse effect on the natural and human use values. | provide potential productivity gains. |
| **Policy 13.22.9** | Provides for changes or additions to the species farmed.<br>The species must be listed in Appendix 13M (ie an authorised species) and not a finfish species.<br>Where those specifications don't apply, the policy sets out criteria for consideration of the new species, including whether discharges of feed, medicinal or therapeutic compounds are required. Where farms are authorised solely for mussel spat catching or monitoring purposes, or the new species is an 'unwanted organism', no change or addition of species is appropriate. | This policy provides criteria for assessing changes or additions to the species being farmed. Appendix 13M which is introduced by the proposed Variation, lists those species authorised to be farmed within the Marlborough region's coastal waters.<br>The policy and associated rules (Rule 16.4.5 and 16.6.14) provide for changes to the species grown so that marine farmers are able to diversify or change crop or stock types in response to changing circumstances, including ocean acidification. |

### 5.2.4 Methods to implement the provisions

Proposed Variation 1 includes the following methods of implementation:

- Regional rules (discussed below);
- Identification of monitoring sites and regular reporting on results of a monitoring programme;
- A review of the provisions, if monitoring shows the effects of marine farming in any area are inappropriate or unsustainable; and
- An 'implementation' plan to guide allocation and issuing of authorisations.

### 5.2.5 Proposed regional rules

The proposed rules cover:

- Occupation of space in the coastal marine area for marine farming;
- Erecting and using structures for marine farming;
- Changing the species grown;
- Discharging feed, therapeutants or medicinal compounds;
- No marine farm activities are permitted activities; and
- Marine farming which is not in an AMA or in the offshore CMU is a prohibited activity.

The rules provide a framework for existing marine farms to transition to AMAs. This helps address the long-term effects of marine farms, while at the same time preserving the existing overall allocation of space (ie not aiming to increase or decrease it).

Other rules have been proposed to manage the effects of marine farm activities and to provide for changing practices.

To address the effects of occupation of space and to manage competition for allocation, the rule chapter states that:

1) No application can be made for a coastal permit in the Enclosed Waters CMUs or the Near-Shore CMUs (excluding the area in ASAs) without an authorisation; and

2) The Council may process and hear together applications for coastal permits that are in the same AMA, or within the same CMU or in the Open Coastal CMU where these are in near proximity to each other.

#### *5.2.5.1 Allocating space for marine farms*

Rule 6.9 sets out that the allocation of space in the common marine and coastal area for marine farming will be managed using an authorisations process. Authorisations will only be allocated for space within AMAs. Where space in an AMA is already occupied by an existing marine farm, the authorisation will only be allocated to the holder of the authorisation when the existing consent expires or is surrendered (within six months).

Rule 6.9 sets out the methods that will be used for allocating authorisations:

*Table 9: Methods for allocating authorisations*

| Rule | Origin of AMA | Method of allocation |
|---|---|---|
| **16.9.2** | The AMA is listed in the notified proposed Variation. | Modified grandparenting methodology |
| **16.9.6** | The AMA is proposed through submissions on the proposed Variation, during the Schedule 1 process. | Public tender |
| **16.9.7** | The AMA is proposed once the proposed Variation is operative. | To initiator of private plan change |

Rule 6.9 implements the allocations framework described in Policy 13.21.7 and details the crucial components of that method[33]. The reasons why this allocation rule has been included in proposed Variation 1 are set out in detail in Chapter 7.

#### *5.2.5.2 Permitted Activities*

No marine farm activities are permitted activities. This is restricted by section 68A of the RMA.

#### *5.2.5.3 Controlled Activities*

The following are controlled activities:

Marine farming using conventional longline structures or intertidal structures, where

- An applicant holds an authorisation to apply for a coastal permit in that AMA - Rule 16.4.3
- An applicant wants to farm in an ASA and they have an existing coastal permit for a replacement consent - Rule 16.4.4.
- An applicant who has an existing coastal permit granted under Rule 16.4.3, wants to farm in an AMA, and is seeking a replacement consent, or a new consent is needed to change or add a species - Rule 16.4.5

These rules are all subject to a number of standards and terms. The rules also state matters over which the Council has reserved control.

The controlled activity status provides certainty for authorisation holders that a coastal permit will and can be obtained to occupy and to operate in the space. The controlled activity status is subject to a number of standards which include:

- Surrender of existing permits – to prevent consent holders from 'camping out' in the existing consented space, as well as the new space.
- The allocation is for the same, or shorter, total backbone length of lines or intertidal structures as the existing marine farm which is being replaced.
- The application is for the same or a smaller area.
- Discharge of feed or medicinal or therapeutic compounds is not included (these discharges are a discretionary activity under Rule 16.6.15).

The standards make sure there is no increase in the area of space which is being occupied and that no new marine farm areas are created, other than areas to provide for the relocation or shifting of existing farms.

#### *5.2.5.4 Restricted Discretionary Activities*

The following are restricted discretionary activities:

- Marine farming in an Aquaculture Settlement Area (ASA) (Rule 16.5.2).
- A new marine farm in an AMA, which does not replace an existing farm (Rule 16.5.3).

[33] Section 165G of the RMA states that a regional coastal plan may include a rule which sets out a method of allocating space in the common marine and coastal area for the purposes of an activity, including a rule for allocating authorisations.

- A change in layout of an existing farm within an AMA, which will result in that farm occupying a larger area than the current farm (Rule 16.5.4).

Rule 16.5.2 is required to deal with the circumstances where Aquaculture Settlement Areas have been identified. These are areas where the Crown has chosen to resolve its Treaty obligations with iwi through the physical allocation and authorisation of space for commercial aquaculture[34]. The proposed rules ensure that iwi can apply to occupy and operate in the space which has been set aside for this purpose.

Rule 16.5.3 will apply when there is a plan change (private or Council-initiated) that results in a new AMA being created where there is no existing farm already.

Restricted discretionary activities are subject to similar standards and terms as controlled activities.

#### *5.2.5.5 Assessment Matters for controlled or restricted discretionary activities*

Proposed Variation 1 identifies a number of assessment matters over which Council has reserved control or discretion. These relate to:

- Layout and design of the farm, including the number and length of backbone lines and droppers, and the arrangement/separation of those lines.
- The layout, positioning (including density), lighting and marking of marine farm structures within the marine farm site, to ensure reasonable public access and navigational safety.
- Appropriate and efficient use of the space within the AMA (to ensure space is not squandered, resulting in demands for additional space).
- Conditions to require surrender of existing permits.
- Integrity and security of the structures, including anchoring systems.
- Maintaining the farm in good working order and removing rubbish.
- Visual appearance and compatibility with the surrounding coastal environment.
- Supply of information and monitoring data to the Council.
- Removal of derelict, unused or obsolete structures.
- Review of consent conditions and the duration of the consent, if the trigger levels in Policy 13.22.1 are met.
- Duration of consent.

The assessment matters address the potential impacts of marine farms on public access, navigational safety, visual amenity, and the environment. They also cover various matters which will be dealt with by conditions, such as the surrender of existing permits, supply of information and monitoring data, duration of consent and review conditions.

#### *5.2.5.6 Discretionary Activities*

The following are discretionary activities:

- Marine farming in an offshore CMU (Rule 16.6.13)

[34] Under the Maori Commercial Aquaculture Claims Settlement Act 2004.

- Marine farming within an AMA, where an authorisation is held or there is an existing coastal permit, but the activity is not otherwise provided for as a controlled or restricted discretionary or prohibited activity – ie a 'catch all rule' (Rule 16.6.14)
- The discharge of feed or medicinal or therapeutic compounds associated with any type of marine farming, or the discharge of feed associated with conventional long line structures (Rule 16.6.15).

Rule 16.6.13 provides for research and development of open water marine farming. The discretionary activity status means the Council can carefully assess, manage, and control farming in off-shore areas. Current applications to establish offshore marine farms (for example New Zealand King Salmon) will not be affected by the rules in proposed Variation 1because the applications have already been made.

Chemicals, therapeutants and additives are not currently used in the farming of shellfish in New Zealand. References to these discharges are included in the provisions, in particular Rule 16.6.15 because they are sometimes used in finfish farming. Proposed Variation 1A will amend the marine farming provisions to provide controls for fin fish farming. The reference to the discharge of feed is included in Rule 16.6.15 as a safety net in case the technology or farming methods for shellfish change in the future.

#### *5.2.5.7 Prohibited Activities*

The following are prohibited activities (no application can be made):

- Marine farming (and the associated occupation of space) inside an enclosed waters CMU or a near-shore CMU, and not within an AMA (Rule 16.7.10).

Resource consent applications for marine farms in the enclosed waters CMUs and near-shore CMUs which are not within an AMA, cannot be made.

The Council has imposed a prohibited activity status because it is not appropriate to provide for any growth in marine farming in the enclosed waters of the Sounds. Adding any more farms to these areas could result in significant adverse effects on amenity values, landscapes, natural character, and ecosystems.

### 5.2.6 Monitoring programme to see if proposed Variation 1 is effective

An adaptive management regime relies on good information on data trends, built up over time. The Council will continue and enhance current monitoring of the effects of marine farming.

The monitoring framework will include the factors set out in Policy 13.22.1 to monitor benthic effects.

While it is not possible to include an adaptive management regime for water column effects at this time due to the absence of long term data, indicators chlorophyll-*a*, particulate carbon and particulate nitrogen, will be monitored with the intention of the data collected informing an adaptive management regime in the future (see section 4.4). This is assist in achieving a greater understanding of the cumulative adverse effects of marine farming.

The Council will engage an independent review panel to help identify appropriate monitoring sites and review monitoring results.

Regular monitoring and analysis of information will help determine if proposed Variation 1 is effective, and whether further adjustments are needed.

### 5.2.7 Best practice guidelines for monitoring and controlling effects

The Council will use the most up-to-date best practice guidelines to determine the appropriate levels of benthic and water column effects from marine farming, and how to monitor them. Where appropriate, the Council will contribute to development of such guidance.

### 5.2.8 Do a plan review if provisions need to be adjusted after monitoring

Monitoring results will be used to assess whether a review of the proposed Variation 1 provisions is needed, for example if monitoring shows the effects of marine farming in any area are inappropriate or unsustainable. There may be changes to the way marine farming is managed, for example by reducing or changing the layout of space allocated as AMAs.

### 5.2.9 New aquaculture definitions for the PMEP

Proposed Variation 1 will insert new definitions into Chapter 25 of the Plan. These definitions are required to help users interpret the rules. The definitions include:

- New technical terms - biogenic habitat (from the NESMA), conventional longline structures, intertidal marine farming, reef (from the NESMA).
- New management terms – Aquaculture Management Area (AMA), Aquaculture Settlement Area (ASA), Coastal Management Unit (CMU), enclosed water CMU, existing marine farm, important species, near-shore CMU, off-shore CMU.
- A revised definition of 'marine farm' to replace the one currently in the PMEP.

### 5.2.10 An implementation plan will guide space allocation and issuing authorisations

The 'implementation plan' for allocating authorisations sets out the processes that will be used when offering authorisations, making decisions about allocation, and any conditions that authorisations will be subject to. The implementation plan sits outside the PMEP and does not have statutory status. A draft implementation plan will be released when Variation 1 is notified so that iwi, industry and community stakeholders can see how the council intends to implement the authorisations process.

### 5.2.11 Consequential amendments necessary to align PMEP sections

A number of consequential amendments are proposed to the existing provisions in the PMEP, so that these provisions also cover and signpost the unique requirements and approach to managing aquaculture activities.

*Table 10: Proposed consequential amendments and their explanations*

| Provision | What the amendment covers | Explanation |
|---|---|---|
| **Objective 4.1 (supporting text)** | A minor amendment to the supporting text to recognise that marine farming relies on the availability of suitable coastal space and high coastal water quality. | The amendment reflects the wording in Policy 8 of the NZCPS. |
| **Amend Chapter 13 Heading** | Delete text under the heading:<br>This chapter does not contain provisions managing marine farming. | Proposed Variation 1 introduces provisions to manage marine farming. |

| | | |
|---|---|---|
| **Amend Policy 13.20.2 and supporting text** | The allocation of space for marine farms is an exception to the policy of 'first in, first served' as a mechanism for allocating resources in the coastal marine area. | A grandparenting allocation is used for existing marine farms in the enclosed waters, but the first in first served method will be used in the open coastal waters. The amendment to the supporting text highlights that new marine farms are prohibited in the enclosed waters of the Sounds. |
| **Amend Policy 13.2.3** | An amendment to lapse periods for coastal permits, which will be no more than three years (rather than five for other permits). | This shorter period is to encourage existing farms to move to their new consented space as quickly as possible. |

# 6 Evaluation of proposed Variation 1

## 6.1 Are the proposed objectives the best way to achieve the purpose of the RMA?

### 6.1.1 The purpose (objectives) of proposed Variation 1

S32(1)(a) of the RMA requires an assessment to determine whether the objectives of proposed Variation 1 are the most appropriate way to achieve the purpose of the Act. The Council's assessment against S32(1)(a) is in Appendix 5 and summarised below.

By making provision for marine farming in appropriate locations, Objective 13.21 enables people to provide for their economic and social wellbeing, while at the same time maintaining environmental bottom lines, consistent with s5 of the RMA. The objectives:

- Provide a framework for the Council's response to Policy 8 of the NZCPS, which must also give effect to the other objectives and policies of the NZCPS[35]
- Help the Council give effect to Policy 8, Objective 6, and Policy 6 of the NZCPS in particular
- Give effect to other objectives and policies in the RPS[36]
- Help the Council achieve its statutory functions under s30(1)(d) and in particular s30(1)(d)(ii) which relates to the occupation of space in the common marine and coastal area, and s30(fb)(ii) which relates to the establishment of a rule in a regional coastal plan to allocate space in a coastal marine area under Part 7A of the RMA.

[35] including Policy 3, 6, 11, 13, 14, 5 and 18.

[36] in particular Objective 13.2, Policy 13.2.2, Objective 8.2, Objective 4.3, Policy 4.3.2, Objective 9.1, Objective 6.2, Objective 7.2.

Proposed Variation 1 has been developed with considerable input from affected stakeholders. The Council has considered how the objectives and implementing policies will be read alongside other parts of the RPS and coastal plan. The values associated with aquaculture must be considered against other values, including the appropriate management of natural character, landscapes and visual amenity, public access and recreation, indigenous biodiversity, and water-based transportation.

This is one reason why the marine farming objectives and policies will form part of Chapter 13 of the PMEP once adopted, rather than a stand-alone chapter. Putting these provisions alongside other objectives and policies relating to the coastal environment is the most efficient way to show the full range of provisions that must be considered when deciding on resource consents to occupy the common marine and coastal area.

The Council considers that the objectives in proposed Variation 1 and the proposed policies and methods of implementation to implement the objectives, are the most appropriate way to achieve the purpose of the Act.

### 6.1.2 Alternatives for the objectives were considered

As part of assessing whether proposed Variation 1 objectives are the most appropriate way to achieve the purpose of the RMA, s32 does not require different options (for those objectives) to be identified. However, other alternatives may need to be considered in order to identify what is 'most appropriate'. The Council could decide not to regulate or provide for aquaculture through the regional plan. Doing nothing wouldn't achieve the purpose of the Act, Policy 8 of the NZCPS or the Council's functions set out in s 30(1)(d), and wouldn't reflect community or industry aspirations. The 'do nothing' option was not considered appropriate.

## 6.2 Assessment of the appropriateness of the provisions to achieve the objectives

Proposed Variation 1 is an 'amending proposal' under s32(3) of the Act, as it amends a proposed Plan (the PMEP). In this situation, s32(1)(b)(i) RMA requires the proposed provisions of the Variation to be evaluated against both the objectives of the Variation (if there are any) and the relevant objectives in the proposed Plan. This is so the Variation cannot be justified based solely on its own objectives, without also achieving the broader Plan objectives. The evaluation must assess whether the new provisions will help achieve the objectives already in the plan and will not undermine them[37].

The following sections work through the requirements of s32 for the provisions which implement the objectives.

### 6.2.1 Reasonably practicable options for achieving the objectives

As part of examining the provisions in proposed Variation 1 under s32, reasonably practicable options for achieving the proposed objectives must be identified. Options can include both regulatory or non-regulatory approaches, and should be within the Council's resources, duties, and powers. They must be targeted towards achieving the objectives.

The Council considered a number of options for achieving the proposed Variation 1 objectives. They relate to the important questions of 'how much' and 'where' aquaculture is appropriate (see below), and 'how' space

[37] See page 16 of the MfE Guide to s32 of the Act.

should be allocated. Alternatives relating to the allocation of coastal space are addressed separately in Chapter 7[38].

Other options that were considered related to:

- The structure of the new provisions, and whether or not to include strategic objectives and policies on aquaculture in the RPS part of the PMEP
- How and whether to apply adaptive management to existing farms, and how best to apply it to new farms
- Whether to include provisions to guide future private plan requests
- Whether or not to include a policy which sets out the benefits of aquaculture, for activities with discretionary activity status
- Whether or not a specific policy was needed to guide decision making on marine farms in open coastal CMUs
- How to provide for reviews of consents if monitoring showed a cumulative adverse effect (by a plan change process or a policy which guides review clauses on consents)
- Whether or not to set a different term for marine farm consents from the 20 year minimum time frame in the RMA
- Whether to include very detailed standards in the rules, or general matters of control with the detail included in consent conditions
- How to treat older farms with deemed permits (pre-RMA) and no seabed survey, which were later found to have reef habitat or other sensitive habitats underneath them
- Whether to require the removal of all unused structures when marine farms are moved to the new AMA, or to provide for some exceptions (e.g. for screw or block anchors).

As a starting point, the Council looked at how coastal plans from other parts of the country had addressed these issues. Provisions were modified to suit the circumstances in Marlborough. The monitoring and adaptive management provisions were drafted following technical advice from the TAG. Provisions on allocation of space were developed with legal support, due to the complex nature of Part 7A of the RMA.

Due to the large number of options considered, most of those options are not discussed in detail in this report. Some important options are explained below. Appendix 7 sets out a full set of the options that were considered, the pros and cons of each, drafting examples from other coastal plans, and the recommended approach taken forward.

#### *6.2.1.1 How much aquaculture is appropriate?*

The Council's options were:

- Provide for less aquaculture than is currently authorised by existing permits;
- Provide for about the same as is currently authorised; or
- Provide for growth of aquaculture in the Sounds.

[38] This is because the decision whether or not to include an allocation rule for aquaculture in a coastal plan is subject to a separate assessment process under s165H.

The KCSRA asked the Council to adopt a more precautionary approach and plan for a reduction in the current level of marine farming through the review process. They consider that:

- The ecological carrying capacity of the Sounds has been exceeded
- Existing farms are having significant adverse cumulative effects on natural character and landscapes
- Public values have been treated secondary to economic value
- The Council should identify precautionary safe environmental farming levels and work upwards in scale as effects are proven as sustainable
- 'Safe' farming levels should be determined by modelling, for example using the NIWA Biophysical Model or Bivalve Standards 2012.

Te Ātiawa also felt a more precautionary approach was required, given the lack of adequate information (historic and cumulative) on the state of the marine environment.

Unfortunately, the NIWA model is very expensive to run and requires so much processing power that a supercomputer would be required. This isn't efficient from a cost perspective.

The KCSRA commissioned calculations using the Aquaculture Stewardship Council (ASC) Bivalve Standards 2012[39] to demonstrate that the ecological carrying capacity of certain Sounds has been exceeded. The Council asked two technical experts[40] from the TAG to peer review these calculations. The two reviews produced different results because different parameter values were used. This can result in significant differences in the estimates of effects with some effects exaggerated and others reduced. This variability can be expected because published studies (which are used as reference points), differ on the key parameter value which should be used. As a result, the TAG peer reviewers (and the wider TAG as a whole) questioned the usefulness of the Bivalve Standards calculation as a tool for determining the 'appropriate' level of marine farming.

On the basis of this technical advice, the Council has decided that neither detailed computer modelling, nor the Bivalve Standards 2012 calculations, provide efficient and effective methods for determining the appropriate level of marine farming in Marlborough.

Central government (MPI) and marine farmers want to grow the aquaculture industry. The drivers for growth are the need to reduce emissions, adapt to climate change (including warming coastal waters) and grow international demand for high quality, sustainably produced seafood. These arguments are set out in the government's Aquaculture Strategy 2019, the NESMA and industry submissions on the PMEP.

In recent consenting processes the public has expressed deeply held opposition to additional finfish farms in the enclosed waters of the Sounds. The *Report and Recommendations of the Marlborough Salmon Farm Relocation Advisory Panel* (prepared for MPI, July 2017) set out the Panel's findings in response to a plan change to the MSRMP proposed by the Minister for Primary Industries. The purpose of that plan change was

[39] The Standards define ecological carrying capacity as a relationship between tidal flushing time and clearance time (mussel filtering of the water column). If primary production in the form of phytoplankton is depleted quicker than the tidal currents can replenish, then the fishery is not eligible for certification. The Standards use a "practical" threshold that clearance time should be three times greater than filtering time. To determine the clearance and flushing times requires a set of calculations; these include the area and volume of the embayment or reach being considered, the tidal streams, water depths, mussel volume and spatial area of mussel farm occupancy.

[40] Dr Niall Broekhuizen, NIWA; Ben Knight, Cawthron Institute

to enable the relocation of some existing salmon farms to alternative locations in the Sounds. The Panel noted:

> "There is a substantial body of deep-seated resentment in the public arena against the proposal [to relocate the salmon farms]. Given the depth of that feeling, we felt it was important for the Minister to appreciate that the salmon farming industry is almost certainly going to find its pathway into the future frustrated by continued deeply felt opposition through the RMA plan and consenting processes[41]."

While this statement relates to salmon farms, this view has also been voiced about other forms of marine farming in Marlborough.

The Council has considered all positions put forward during the plan review process. The Council does not have sufficient robust scientific evidence to support either an increase or a decrease in the current levels of farming. To 'hold the line' until such evidence is available, the proposed provisions prohibit further growth in the enclosed waters Sounds, but provide an opportunity for research and development into open water marine farming, as long as it can be demonstrated that this will not have adverse effects. The results of the monitoring regime will provide evidence in the future to guide any adjustments, whether that is up or down.

#### *6.2.1.2 Where is it appropriate to undertake marine farming in the Marlborough Coastal Marine Area?*

These options relate to identifying where aquaculture may be appropriate, and how those areas should be identified in the PMEP.

The options available to the Council were:

- Use zoning and rules tailored to that zoning, to indicate in broad spatial terms where marine farming is appropriate. For example, in the operative Plan new marine farms are a prohibited activity in CMZ1 and a discretionary activity in CMZ2 (subject to some exceptions and certain terms and conditions). Replacement consents for existing farms are either permitted, controlled, or restricted discretionary.
- Use a more directive approach by identifying specific areas where marine farming is appropriate, such as through CMUs and AMAs. This would be supported by evidence based on the values and capacity of each CMU to support marine farming (the preferred option).
- Use an even more ad-hoc approach. For example, do not provide any spatial framework, but set out rules which apply to all marine farming activities anywhere in the coastal marine area.

It was important for the Council to consider alternatives because of the competition for use of coastal space. Coastal permits enable the use of the common marine area for a private commercial purpose. The Council is concerned that the ad-hoc development which arose from the zoning approach in the operative MSRMP has resulted in adverse effects on other use-values that could have been avoided. An even more ad-hoc approach could potentially result in even greater adverse effects, if plan provisions are not robust enough to refuse applications in inappropriate places. The Council has therefore chosen a more spatially directive approach. CMUs based on catchments, key features and values are identified. AMAs respond to those key features and values and reflect existing levels of marine farming.

[41] Report and Recommendations of the Marlborough Salmon Farm Relocation Advisory Panel, prepared for MPI July 2017.

#### *6.2.1.3 What mechanism(s) should the Council use to change the management approach, if monitoring shows that adverse effects are occurring as a result of implementing the provisions?*

If evidence collected through monitoring demonstrates a need to reduce the level of aquaculture, or change the way it is managed, the Council needs tools to do this. The options include:

1) Putting a review condition on individual consents, which would work alongside s128 of the RMA;
2) Rely on a plan change or variation;
3) A combination of review conditions and a plan review.

Review conditions are only applicable for existing consents that have a review condition, new consents or renewed consents. Relying only on this mechanism may create an inequity between different farms, at least until all existing consents have been renewed. A plan review (or further variation) would apply equally to all consents. It would allow for a thorough inquiry into the results from monitoring and appropriate collective response. The downside is that the public consultation process to notify and determine a plan review (Schedule 1 RMA) can take several years.

The Council chose the third option, because it provides the flexibility to respond quickly (consent reviews), but also allows for a more comprehensive and thorough enquiry (plan review) if needed in the future. Policy 13.22.5 provides guidance on how consent reviews will be triggered.

#### *6.2.1.4 Prohibited or non-complying status for Rule 16.7.10*

The proposed rule framework includes a rule (16.7.10) that marine farms in the enclosed waters CMUs and near shore CMUs outside an AMA, are a prohibited activity. Rule 16.9.2 states that authorisations will only be issued for space within an AMA. Section 165J prevents applications for a coastal permit where an authorisation is not held[42].

In these circumstances, an application for a resource consent can only be made if the applicant first makes a private plan change application to create an AMA, and is then offered an authorisation if the plan change is successful. Rule 16.7.10 works alongside Rule 16.9.7, which states that for new AMAs, the Council will allocate authorisations to the person who requested the plan change. These rules provide a prospective applicant with certainty that if a private plan change request is successful, they will be granted an authorisation and resource consent for the new AMA space.

During development of Rule 16.7.10, the Marine Farming Association suggested making this a non-complying activity instead. The Council did not favour this option because it would apply to any application outside an AMA in the enclosed waters of the Marlborough Sounds, not just one that was preceded by a private plan change application to create an AMA. This option wouldn't send a sufficiently clear message that marine farming outside an AMA is inappropriate, and would reduce certainty.

[42] Section 165J applies if a rule in a regional coastal plan or proposed regional coastal plan which has legal effect, requires an authorisation to be held.

#### 6.2.1.5 *Controlled or restricted discretionary status for existing marine farms that have been offered an authorisation*

The activity status and information requirements (and subsequent public notification requirements) for replacement consents can create complexity, uncertainty, and inefficiency, including time and money spent on hearings and appeals.

A controlled activity status means Council can impose conditions, but must grant the consent. The Council has done the necessary research to identify appropriate locations for marine farms, and these will be offered to existing marine farms through an authorisation process. The controlled activity status provides certainty for marine farmers that their investment in the authorisation allocation process will ultimately result in a resource consent, encouraging marine farmers to 'buy-into' the allocation process.

The NESMA makes replacement consents for existing marine farms a restricted discretionary and non-notified activity, but provides for individual councils to be more lenient (where they have done the background spatial planning as Marlborough has). The MPI Regulatory Impact Statement for the NES: Marine Aquaculture comments on the two activity statuses and notes that a controlled activity status is appropriate where:

> "… the effects of aquaculture are well understood, and planning has been undertaken to determine that aquaculture is appropriate. This usually means mapping has taken place, and other uses and values have been considered.
>
> Restricted discretionary status provides less certainty that the consent will be granted, but greater certainty can be given by setting clear matters of discretion and clear information requirements".

The NESMA provides national consistency, but the MPI Regulatory Impact Statement recognises the advantages of a tailored approach:

> "A locally-centric approach does have the benefits of more closely representing local interests, allowing local solutions to match the local situation."

The effects of marine farming in appropriate locations will be managed through consent conditions. Neither of these options provide for public submissions on individual consent decisions. However, the public can comment on the appropriateness of marine farming at the plan-making stage (i.e. notification of proposed Variation 1).

### 6.2.2 Effectiveness and efficiency of the proposed provisions

The provisions create a strong policy framework and strategic direction that is both effective and efficient in setting out where marine farming is and is not appropriate in the Sounds. This approach will be more effective than the provisions in the operative plan. The following table summarises why the proposed provisions are considered the most effective and efficient:

*Table 11: Why the proposed provisions are the most efficient and effective approach*

| **Approach taken in proposed Variation 1** | **Why it is the most efficient and effective way** |
|---|---|
| Identify AMAs as areas which are appropriate for marine farming<br><br>Values table identifies values in each CMU and AMA which are important and need to | Saves applicants and decision makers from having to collect this information on a case by case basis.<br><br>Transparent. |

| | |
|---|---|
| be provided for. | |
| Controlled activity status for existing farms which meet all of the standards | Efficient consent process, once an authorisation has been obtained.<br>Provides certainty regarding investment.<br>Encourages marine farmers to 'buy-in' to the allocation process. |
| Adaptive management approach to the results of monitoring, including consent review conditions | The Council can respond quickly and flexibly without having to go through a public consultation process.<br>Can address effects of individual farms or collectives.<br>Doesn't require waiting until the Council has all the necessary information to determine the full range of effects, including cumulative effects, which is likely to take many years. |
| Prohibited activity status of marine farming outside of AMAs | Clearly signals that no new marine farming will be accepted in the enclosed waters CMUs.<br>Prevents prospective applicants from putting in speculative applications for resource consents that would be consistently refused, saving time and money for all parties. |

The effectiveness and efficiency of the allocation rule is discussed in Chapter 7, under the s165H evaluation.

### 6.2.3 Costs and benefits of implementing the preferred option

The Council commissioned an economic assessment to identify the costs and benefits of the proposed Variation 1 provisions[43].

#### *6.2.3.1 Benefits*

- Creation of CMUs.
- Change from discretionary to controlled activity status for marine farms operating within the AMAs.
- The potential to increase productivity through longer grow lines, where a marine farm or part of a farm is shifted seaward.
- Creation of the open water CMU as a discretionary marine farm activity.
- Improved access and amenity to the near shore area.
- Improved marine environment through protection of the foreshore photic zone.

[43] Executive Finesse Limited. 2019. Economic Analysis of RMA Aquaculture Regulation in the Marlborough Sounds.

The assessment identifies several areas where the economic impact may be significant and positive, but difficult to quantify. These are discussed in the economic report in Appendix 10. In summary these are:

- Greater certainty for the industry, resulting in more investment in research and development;
- An opportunity to advance open water farming, which could have significant positive economic impacts in the future, subject to research trials and technology advancement; and
- Benefits to the recreational marine economy from an improved marine environment and a more accessible marine environment.

#### *6.2.3.2 Costs*

Costs associated with shifting marine farms or parts of farms to ensure they are within the AMA will fall on individual farmers, as well as collectively for the industry.

The financial effects will impact individual farms to differing degrees. The financial costs will also generate some economic activity in themselves, for example:

- Manufacture of new mussel lines
- Relocation services
- Redirecting funds as a result of lower consenting costs
- Reduction in costs for reconsenting (which will benefit marine farmers but will be a drawback for professional and scientific services who provide reconsenting services).

One-off costs to relocate lines seaward are estimated to be between $1,500 - $3,000 per farm (depending on whether new lines are used during the relocation process) with a total estimated cost for the whole region of between $900,000 - $1.8 million[44]. This is outweighed by a reduction in the costs of re-consenting, which are predicted to reduce by 43%, or $17.63 million[45] in total (for the region). Other costs are unknown and unquantifiable at this stage.

There will be both positive and negative financial impacts, but overall, these will be immaterial, as the broader economic impacts are likely to be less pronounced. This is because the changes will not significantly alter the size of the existing industry in Marlborough.

On balance, the costs associated with implementing proposed Variation 1 are considered to be outweighed by the environmental, social, cultural, and economic benefits[46].

### 6.2.4 Social effects

There is potential for beneficial recreational effects from improved public access and amenity of the near shore marine environment. These benefits will arise from existing marine farms being shifted seaward and away from the foreshore. Improvements to the health of the foreshore photic zone may also result in positive effects for recreational fishing.

[44] Para 22

[45] Para 12.

[46] Economic Analysis of RMA Aquaculture Regulation in the Marlborough Sounds.

The Aquaculture Unit of MPI recently published an information paper[47] which summarises research into the social benefits of having a job. The paper describes the benefits for individuals and their households as well as for the wider community. It is not possible to accurately predict to what extent the proposed Variation 1 will generate additional jobs. If new jobs are created, (for example in research and development) this is likely to have flow on positive benefits for individuals, their households, and the wider community.

### 6.2.5 Economic effects

The economic effects are largely summarised in section 6.2.3 above. Overall, the economic impacts of proposed Variation 1 are expected to be positive[48].

### 6.2.6 Cultural effects

Coastal Marlborough holds great spiritual and practical significance to the eight tangata whenua iwi of Te Tau Ihu – the top of the South. It is where the first Maori landed 800 years ago at Te Pokohiwi, the Boulder Bank at the Wairau Lagoon.

Iwi have a strong sense of kaitiakitanga (guardianship) in the management of the coast and protecting the mauri (life force) of the environment for future generations. This responsibility includes the coastal waters, foreshore, estuaries and river mouths and all the species that live within these ecosystems.

Treaty of Waitangi settlements between Te Tau Ihu iwi and the Crown became law in August 2014. These settlements include statutory acknowledgements of the cultural, spiritual, historical, and traditional associations of each iwi to Marlborough's coastal areas.

Te Ātiawa have identified a number of adverse effects arising from the proposed Variation 1 provisions, including a lost opportunity for iwi to provide for their economic wellbeing (through missed opportunities for iwi commercial aquaculture) and to effectively undertake their kaitaki role. Te Ātiawa are concerned with the potential significant adverse effects on the marine environment, which they consider requires a more precautionary approach. These effects are discussed in detail in Chapter 3, which documents the advice received from iwi.

### 6.2.7 Environmental effects

#### *6.2.7.1 Ecological effects*

Representatives of the Keneperu community and Te Ātiawa are concerned about cumulative ecological effects of marine farms in the Sounds, including depleted phytoplankton and zooplankton.

The aquaculture industry believes that no significant adverse environmental effects have been observed from mussel farming. There may even be some ecological benefits arising from mussel farming, like filtering sediment and nutrients, and creating shell reef habitats.

The Council does not have definitive evidence about the extent of the adverse ecological effects of marine farming in Marlborough. Marine farming is one contributor among other stressors on the coastal marine

[47] Quigley, R. and Baines, J. The Social Value of a Job (2014, Ministry for Primary Industries, Wellington). A copy of this report is available here: https://www.mpi.govt.nz/dmsdocument/5266-the-social-value-of-a-job

[48] Economic Analysis of RMA Aquaculture Regulation in the Marlborough Sounds, para 9.

environment, including excess sedimentation, sea floor disturbance, biosecurity incursions and fishing pressure.

A report recently prepared for the Marlborough District Council[49] set out to answer the question of what is known about how the cumulative effects of mussel grazing affect plankton populations.

The study found that phytoplankton concentrations have declined at some sites in the Marlborough Sounds over recent decades, however the trend is weak and not evident at all monitoring locations. This decline is not a localised phenomenon as satellite data suggests that chlorophyll concentrations have fallen around much of the country. This may indicate that chlorophyll reductions in the sounds have been driven by regional environmental change, rather than local effects of mussel farming.

Provisional analysis undertaken found no evidence that mussels farms are the cause for this drop in chlorophyll concentrations (a proxy for phytoplankton biomass), however it was noted that the time series are too short to merit tests for long term trend.

The baseline condition of the coastal marine area and the cumulative effects from past and existing activities (including land-based activities) are not well known. Monitoring and data collection has not been a routine requirement for existing and deemed permits. Important knowledge gaps include natural versus human nutrient inputs, the impact of waste products from multiple marine farms, and the combination of effects from marine farming, land-based pollution, and fishing. The functional role of aquaculture is also not fully understood, and whether or not farmed shellfish can help restore the historic ecosystem functions of past shellfish beds.

Data on long term trends for conditions such as water quality is required to establish an environmental baseline. Then it will be possible to assess changes that might be occurring above and beyond natural levels of variation[50].

Given this current uncertainty, long-term data collection and analysis will be necessary to determine the ecological effects of implementing proposed Variation 1. The provisions provide for data collection and analysis through monitoring key indicators, using an adaptive management approach to respond and adjust the intensity of marine farming activity. The proposed indicators and adaptive management approach are discussed in Chapter 4. In the future, this approach should ensure that if adverse ecological effects (including cumulative effects) are identified as a result of implementing the provisions, they can be addressed with immediate management responses.

The monitoring programme will also make sure better information is available for the next plan review. An early review can be triggered if necessary.

#### *6.2.7.2 Ecological effects of moving existing farms seaward*

During development of the provisions, the Marine Farming Association questioned whether moving existing mussel farms from 50m from the MLWS to 100m seaward would result in positive ecological effects that would outweigh the costs and inconvenience of relocation. The TAG undertook a high-level assessment of the

[49] Newcombe E, Broekhuizen N 2020. Measuring mussel farming effects on plankton in the Marlborough Sounds. Prepared for Marlborough District Council. Cawthron Report No. 3550. 49 p.

[50] MPI. *Overview of Ecological Impacts of Aquaculture*, August 2013. Available at: https://www.mpi.govt.nz/dmsdocument/4300/direct

ecological effects of implementing this policy (see Appendix 8). Ecological effects of moving mussel farms away from the shore are expected to be minor and mainly positive, assuming that:

- Lines are not placed over sensitive habitats or community types (e.g. brachiopod beds, hydroid trees); and
- Feeding habitats of marine mammals or seabirds are not likely to be encroached upon.

Positive effects of moving the lines may include:

- Enrichment and smothering effects being less localised, or occurring in more resilient habitats (ie on deeper, soft sediments)
- Positive effects on environmental heterogeneity occurring on deeper, soft sediments
- Shallow areas suitable for seaweeds experiencing less shading.

The assessment found that positive changes were unlikely to occur at all farms, and in many cases, effects are likely be subtle and difficult to detect. Positive changes would be more likely for older farms established pre-RMA. This is because those farms may not have been required to submit ecological assessments when they were established, and as a result may be located over diverse habitat, or habitats of special value such as rocky reefs. Positive changes are also more likely to occur where there is a large depth range between the inner and outer area of the farm.

Some negative effects could occur when the seabed is disturbed during removal of inshore mussel lines, and when new farming structures are established on the outer edge of the farms.

Effects on marine mammals and seabirds, wild fish, and biosecurity are expected to change little, or not at all.

The TAG assessment assumed that mussel farming intensity would not change. However, if many mussel lines are relocated and mussel droppers lengthened to take advantage of greater water depths, the implications of an overall increase in farming intensity may need to be considered. Substantial encroachment into mid-bay areas or special habitats (e.g. marine mammal or seabird habitat), would also require further assessment of effects.

The TAG recommended that a programme of seabed monitoring of mussel farming areas in Marlborough Sounds would allow for more accurate predictions regarding the implications of management changes, such as movement of farms. This monitoring programme is established by Policy 13.22.1.

#### *6.2.7.3 Landscapes and natural character*

When defining AMAs, the Council had to consider the appropriateness of the existing marine farms in their current consented locations, including in terms of landscape and natural character. The Council is required to give effect to Policy 13 and 15 of the NZCPS, which means that adverse effects on outstanding natural character (ONC) and outstanding natural features and landscapes (ONFL) must be avoided. There are a number of existing marine farms located in ONFL/ONC areas (as identified by overlays in the PMEP). There are also a number of marine farms adjacent to outstanding areas.

As a starting point, the Council considered that marine farms in high value areas identified in the PMEP should be considered for relocation, and that headlands and key features in bays should also be avoided if possible. Policy 13.21.6 signals that locating marine farms in ONFLs or areas with high, very high or outstanding natural character is generally inappropriate.

During the AMA development process, Boffa Miskell[51] established whether the existing farms in or adjacent to ONFL/ONC areas, individually or collectively, adversely affect the values and characteristics of the relevant ONFL or ONC area. Their assessment also identified the nature of the adverse effects. Boffa Miskell recommended how those adverse effects could be avoided through alternative spatial layouts where necessary, or where opportunities should be sought to relocate existing farms.

They assessed ten specific sites (eight in the Outer Sounds Landscape and two in the Inner Sounds Landscape). Their assessment concluded that a combination of factors influenced whether aquaculture was inappropriate or where it could be more readily absorbed into the landscape. These factors were highly specific to each farm/group of farms, and it was not possible to adopt a 'one rule fits all' approach. The factors related to:

- The relationship between the scale of marine farming and the scale of the landscape, including the expanse of the waters within the bay. More robust landscapes that had terrestrial modification, which were large in scale and relatively simple in form, that did not have complex indented coastlines, and retained some degree of enclosure were more able to absorb aquaculture activity.
- Whether the landscape had containing elements (ie bays and headlands) and whether the more sensitive parts of these landscapes in terms of local landscape features retained their integrity and value. This was achieved best where aquaculture was kept clear from headlands and points, was configured in a way that related to and was confined/partly-confined by the coastline, and was kept clear of more delicate peninsulas, rocky escarpments, islands and other local features of value.
- A correlation between shore modification and suitability for aquaculture. If aquaculture was located next to a landscape with low terrestrial modification, and isolated from other marine farms (ie if it was an outlier) then aquaculture was less likely to be appropriate.
- The specific landscape and natural character values that underpin the outstanding area and the proximity of farms to those identified features.

Visual amenity considerations were not specifically taken into account (ie recreational boating and views from houses, walking tracks and roads).

Following the decisions on the PMEP for the natural character and landscape topic, there are several areas within the Marlborough Sounds where ONL mapping has increased, compared to the notified version of the plan. A specific area in Croisilles Harbour/ Squally Cove was added to the ONL mapping. As a result, Boffa Miskell published an addendum report[52] addressing Croisilles Harbour/ Squally Bay, which includes three marine farms.

The assessment concluded that modifications within this ONL are limited, with the three marine farms at the base of Symonds Hill representing the principal modifications. It stated that the continuing occupation of these three farms will erode the natural values of the area, introducing a level of activity not apparent within these central waters, and the marine farms in that area should be relocated

[51] Boffa Miskell for MDC. Existing marine farms in Outstanding Overlays. Appropriateness of marine farms in the Marlborough Sounds. Natural Character and Landscape Assessment on existing aquaculture locations within Outstanding Natural Features and Landscapes and Outstanding Natural Characer in the Marlborough Sounds. February 2018.

[52] Boffa Miskell for MDC. Existing marine farms in Outstanding Overlays. Appropriateness of marine farms in the Marlborough Sounds. Natural Character and Landscape Assessment on existing aquaculture locations within Outstanding Natural Features and Landscapes and Outstanding Natural Character in the Marlborough Sounds. October 2020.

The recommendations from both assessments were taken into account in determining the final configuration of the AMAs for:

- Port Hardy
- Catherine Cove West
- Outer Pelorus (Blow Hole Point North and Blow Hole Point South)
- Port Gore (Pig Bay)
- Inner Pelorus (Fairy Bay)
- Queen Charlotte Sound (Ruakaka Bay)
- Guards Bay
- Crichtons Hill, and
- Croisilles Harbour (Squally Cove).

As a result, the Council considers that the effects of the proposed AMAs in proposed Variation 1 will have a positive impact on landscape and natural character (in some locations), where existing farms are relocated to different AMAs.

#### *6.2.7.4 Natural character, landscape, and visual effects of moving marine farms further seaward*

An assessment[53] was also undertaken by Boffa Miskell (April 2019) of the likely natural character, landscape, and visual effects of the proposals to:

- move the ribbon of marine farms further away from the shoreline (MLWS) to a distance of 100m
- extending the farms seaward to 300m
- adjusting the physical layout within the AMA to provide for greater distance between individual lines (effectively covering a larger area).

The high-level assessment considered the proposed changes and recommended a set of principles. They were taken into account in confirming the final configuration of the AMAs and the proposed Variation 1 provisions.

The landscape assessment found that:

- Larger, broader bays can more easily accommodate changes to the ribbon arrangement of current farm locations than smaller bays, especially where the seascape is more expansive in scale.
- AMAs should be avoided next to areas of ONFL, or, if unavoidable, restrictions should be placed on expansions to farms in these more sensitive locations. Policy 13.21.6 signals that locating marine farms in ONFLs is generally inappropriate.
- Farms should be avoided by slender peninsulas, especially slender ONFL peninsulas (such as Te Puraka Point). Again, where necessary, expansions to these farms should be avoided.

[53] Memorandum from James Bentley, Boffa Miskell to Pere Hawes, MDC dated 5 April 2019. *Proposed AMAs and their natural character, landscape, and amenity effects.*

- Small bays could become quickly dominated by aquaculture when simply extending each farm by 50m. This may be the case where existing farms around the bay's perimeter encroach on the limited central waters of a bay, effectively filling the bay.
- The provisions should seek to maintain a better relationship with the adjacent landform and coastline to enable the marine farm layout to 'read' and respond to the coastline. Coastlines with indentations or complex features have more capacity to absorb farms, compared with coastlines that are relatively even and open, where there is little relationship between the farm and the landform. Landcover also has an influence on assimilative capacity.
- The sensitivity of some bays (or stretches of coastline) are higher than other bays. Relocating aquaculture from some bays (or stretches of coastline) may improve the overall landscape, natural character, and visual amenity values of that bay (or stretch of coastline), while not necessarily adversely affecting other receiving bays (or stretches of coastline) to the same degree.
- Providing greater distance between lines reduces the density of visible lines, can improve ecology and provide potential productivity gains. An increase in the total area occupied did not always have positive effects on landscape and natural character. For this reason, Policy 13.22.7 was included, to guide decisions on changes in layout, along with Rule 16.5.4, which makes a change in layout which results in occupation of a larger area a restricted discretionary activity. Layout is one of the matters the Council has reserved control and or discretion over.

A copy of this assessment is included in Appendix 9 of this report.

The Council and MARWG reviewed each CMU and the location of AMAs within them individually with a view to optimising the layout to reduce all adverse effects, guided by the technical guidance including the Boffa Miskell report. The provisions and resulting AMAs including in the Variation reflect these assessments.

### 6.2.8 Economic Growth and Employment Opportunities

In 2015 NZIER prepared a report for the Marine Farming Association on "*The economic contribution of marine farming in the Marlborough Region*". The aquaculture industry:

- provides employment (859 jobs) for about 3.7% of the Marlborough region's total labour force, with around 1.1% of jobs in marine farming and a further 2.6% in seafood processing;
- contributes 6% (162 million) to Marlborough's regional GDP, with $105 million (3.7%) from marine farming and $57 million (2%) from seafood processing.

The Council commissioned an economic assessment in 2019[54] to identify the economic impacts of proposed Variation 1 (Appendix 10). The assessment found that the industry is largely unchanged since the 2015 report. Implementing proposed Variation 1 has potential to increase:

- Mussel farm productivity, value of assets, and investment in innovation/research and development. This is a result of creating the open water CMU and a consenting regime with greater security and certainty. Both factors create an unknown but potentially significant positive impact.
- Marine recreational activity and value, as a result of improved access and improvements to the marine environment. The potential impacts are not quantifiable.

[54] Economic Analysis of RMA Aquaculture Regulation in the Marlborough Sounds. Douglas Fairgray

Proposed Variation 1 is not expected to facilitate industry growth, but it does provide certainty, which helps investors plan accordingly.

The Government's *Aquaculture Strategy to 2025*[55] (September 2019) has a strong growth focus. The Strategy recognises the potential contribution that aquaculture can make to regional economies and the opportunity to partner with Māori to realise "meaningful jobs, wellbeing and prosperity". The Strategy is not a statutory instrument but is implemented through regional coastal plans and the NZCPS.

The finfish industry is an important contributor to the local and regional economy and there is a strong direction from central government to invest in sustainable aquaculture. The common coastal and marine area is a public space which the Council is required to manage on behalf of all New Zealanders. Opportunities for growth are likely to be in the open water CMUs, where the competing demands from other users for that space will be less.

Security of occupancy encourages development and investment. The policy and allocation regime will minimise re-consenting costs, as far as possible.

### 6.2.9 Risks associated with adopting proposed Variation 1

#### *6.2.9.1 Risks arising from the level of uncertainty/insufficient information*

As discussed in section 6.2.7, there is insufficient information to determine and assess the risk of ecological effects of implementation, because there is insufficient information to establish baseline conditions, potential cumulative effects, or trends. The MPI report '*Overview of Ecological effects of Aquaculture*'[56] recommends risk management approaches to address the lack of certainty and information gaps associated with managing the ecological effects of marine farming. These recommendations have been adopted, as demonstrated in the table below.

*Table 12: MPI recommendations and how these have been adopted through proposed Variation 1*

| **MPI recommendation** | **Approach adopted by the Council through proposed Variation 1** |
|---|---|
| Set conservative limits for development, based on knowledge (including modelled predictions) of the likely carrying capacity of growing waters. | Aquaculture models exist for the Marlborough Sounds, but uncertainty of results is high due to limited field data for model calibration and validation. The computer processing capacity required is also cost prohibitive. The Council has therefore adopted a conservative approach with no additional growth provided for (Policy 13.21.7) until greater understanding of effects has been obtained through monitoring (Policy 13.22.1). |
| Regional state of the environment monitoring programmes, and consent monitoring data are important to establish long term data sets. | Policy 13.22.1 sets up a long-term Council monitoring programme for farmed and sentinel monitoring sites. Policy 13.22.3 requires monitoring of new marine farms. The rules require consent based monitoring for replacement consents (as a matter of control/discretion). |

[55] Available from: https://www.fisheries.govt.nz/growing-and-harvesting/aquaculture/strategy/

[56] ibid

| | |
|---|---|
| Because the carrying capacity for aquaculture remains unknown in most regions, appropriate indicators and trigger points should be selected as measures of water quality and primary production. | Total free sulfides in seabed sediments will be used as an indicator, with a trigger point (615 μM $mL^{-1}$) for increasing monitoring frequency, spatial distribution, and other parameters, in order to calculate the Enrichment Stage (ES). An ES of 4.0 triggers further statistical analysis and expert review (Policy 13.22.1). |
| Staged development should be provided for, alongside long-term regional monitoring of background conditions, to allow for adaptive management of cumulative effects. | New resource consents for existing marine farms will include a review condition requiring adaptive management if the ES trigger levels are reached. Individual farms or groups of farms will be managed to reduce, cease, or reverse effects (Policy 13.22.1). New marine farms (those that don't replace an existing marine farm) will be subject to staged or adaptive management, starting with up to 50%, and subsequent stages (up to 75% and 100%) authorised subject to compliance with monitoring, reporting, analysis and adverse effects criteria (Policy 13.22.3).<br><br>The rules in proposed Variation 1 provide for review of consent conditions, including the number, density or length of lines or droppers, if monitoring information shows the trigger levels are met (matters over which Council has reserved control/discretion - for example see rule 16.4.3). |

#### *6.2.9.2 Risks of an experimental approach to regulation*

The approach adopted in proposed Variation 1 is considered 'experimental' because:

1) It adapts the mechanisms provided in Part 7A of the RMA (which are intended to provide for new space for aquaculture), to provide a reconsenting process which will result in 'adjustments' to existing space, but no new space overall. The allocation method uses a modified grandparenting methodology to issue authorisations, instead of adopting the anticipated public tender process. The risk associated with the range of expiry dates for the existing consents will be managed by requiring existing consents be surrendered within six months of obtaining the replacement consent.
2) It uses adaptative management techniques to manage an existing situation, rather than applying this to 'greenfield' consents. An adaptive management approach is consistent with MPI guidance and the new NESMA.

#### *6.2.9.3 Risks associated with gazumping*

During the early stages of drafting, marine farmers were concerned about potential 'gazumping', and the timing of the allocation process relative to expiry of existing consents. The detailed allocation methodology addresses this risk. Some marine farmers have also submitted their applications for renewal early. At notification, the allocation rules have legal effect; no one can apply for consent unless they hold an authorisation for the same space (165J) or they already have a consent to operate in that space.

#### *6.2.9.4 Risks of alignment between the NESMA and the proposed Variation 1 provisions*

One of the purposes of the NESMA is to provide a more efficient and certain consent process for existing marine farms. This includes limiting the level of discretion and the topics of discretion for decision making.

Most replacement consents will be processed as non-notified, restricted discretionary activities under NESMA.

The Council can include more or less lenient rules for replacement consents[57] in proposed Variation 1, as section 43B(3) applies to the NES[58]. The Council has taken advantage of this. Replacement consents will be processed as controlled activities, if an authorisation is obtained first.

Where proposed Variation 1 is more stringent (in terms of cumulative effects or sensitive landscapes), there is a risk that this will undermine industry support for the provisions.

The Council worked closely with MPI to align the proposed Marlborough framework with the NESMA, and to enlist their support for any deviations. Proposed Variation 1 is drafted to reflect the language in the NESMA.

#### *6.2.9.5 Risks of not acting*

Both the industry and the community want greater certainty about where marine farms will be located in the future. Parts of the community/wider public strongly oppose any growth in marine farming, for visual amenity and landscape, natural character, recreation, and public access reasons. A precautionary approach is prudent, given the uncertainty around the cumulative adverse effects of aquaculture in the enclosed Sounds. The Council has a duty to take these concerns/issues into consideration.

The provisions in proposed Variation 1 have been developed with these risks firmly in mind.

### 6.2.10 Assessment under s32(4)

If a proposal will impose a greater or lesser prohibition or restriction on an activity to which a national environmental standard applies, section 32(4) of the RMA requires that the evaluation report must examine whether the prohibition or restriction is justified in the circumstances of the region.

#### *6.2.10.1 A regional council may have a more lenient rule*

Regulation 23 of the NESMA permits a regional council to have rule for a replacement consent that is more lenient than a restricted discretionary activity.

Analysis under s32(4) is required because:

- Variation 1 proposes that replacement consents (Rules 16.4.3 and 16.4.4), and small scale realignments and change of species (Rule 16.4.5) for existing marine farms in AMAs, are controlled activities, and
- The NESMA directs that replacement consents for existing marine farms are restricted discretionary activities (Regulation 14).

A controlled activity status for replacement consents and small scale realignments and change of species is deemed the most effective and efficient means of achieving the objectives of the Proposed Variation 1. This activity status provides certainty to authorisation holders they can apply for consent to occupy and operate in the space, while providing for an efficient consent process.

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[57] See Regulation 13 and 23 of the Resource Management (National Environmental Standards for Marine Aquaculture) Regulations 2020.

[58] Section 43B(3) of the RMA states that a rule in a coastal plan or proposed coastal that is more or less lenient than a national environmental standard prevails over that standard, as long as the NES expressly permits the rule to be more or less lenient, as the case may be.

The controlled activity status is subject to a number of standards, which ensure there is no increase in the area of space which is being occupied and that no new marine farm areas are created, other than areas to provide for the relocation or shifting of existing farms.

Council reserves control over a number of assessment matters, in order to address the potential impacts of marine farming. These include public access, navigational safety, visual amenity, and the environment. They also cover various matters which will be dealt with by conditions, such as the surrender of existing permits, supply of information and monitoring data, duration of consent and review conditions.

Considerable research has been undertaken to identify appropriate locations for marine farms, and any effects of marine farming in appropriate locations will be managed through consent conditions.

The MPI Regulatory Impact Statement for the NESMA, consider a controlled activity status appropriate where:

> "… the effects of aquaculture are well understood, and planning has been undertaken to determine that aquaculture is appropriate. This usually means mapping has taken place, and other uses and values have been considered".

The MPI Regulatory Impact Statement also recognises the advantages of a tailored approach:

"A locally-centric approach does have the benefits of more closely representing local interests, allowing local solutions to match the local situation."

The Council is satisfied that Variation 1 provides a locally appropriate mapping and values assessment developed in collaboration with local interests and that a more lenient activity status than the NESMA for the existing farms is appropriate in the circumstances of the Marlborough Region.

#### *6.2.10.2 A regional council may have a more stringent rule*

Regulation 13 of the NESMA permits a regional council to have a more stringent rule for a replacement consent than the NESMA in an area that is inappropriate for existing aquaculture activities.

Analysis under s32(4) is required because:

- Variation 1 proposes that marine farming inside an Enclosed Waters CMU or a near-shore CMU, and not within an AMA (Rule 16.7.10) is a prohibited activity, and
- The NESMA directs that existing marine farms within an inappropriate area for existing aquaculture activities, is a discretionary activity (Regulation 12).

The prohibited activity status for marine farms in the enclosed waters CMUs and near-shore CMUs which are not within an AMA, means that resource consent applications cannot be made.

Variation 1 identifies that areas not within an AMA in the enclosed waters CMUs and near-shore CMUs are inappropriate areas for all marine farms, including existing marine farms.

The Council has decided upon a prohibited activity status for all marine farms in these areas as it is not appropriate to provide for any growth in marine farming in the enclosed waters of the Sounds. It is also necessary to provide certainty on the location and size of marine farms and to have control on the appropriate spatial layout. The addition of any more farms, or the alignment of farms outside AMAs could result in significant adverse effects on amenity values, landscapes, natural character, and ecosystems.

A prohibited activity status for marine farming outside of AMAs is considered to be the most effective and efficient means of achieving the objectives of Proposed Variation 1, as it clearly signals that no new marine farming will be accepted in the enclosed waters CMUs. It also prevents prospective applicants from putting in applications for resource consents that would be consistently refused, saving time and money for all parties.

The Council is satisfied that a more stringent activity status than the NESMA for the existing farms in inappropriate areas is appropriate in the circumstances of the Marlborough Region.

# 7 Section 165H assessment of Rule 16.9

As set out in section 5.2, the Council must undertake an assessment under section 165H and be satisfied about certain matters before it can include an allocation rule in a proposed regional coastal plan. The assessment must be documented and published when the rule is publicly notified.

In a section 165H assessment the Council must have regard to:

- The reasons for and against including the rule;
- The reasons why a method of allocating authorisations other than by public tender is justified; and
- How this might affect the preferential rights provided for in section 165W[59].

The Council must be satisfied that:

- A rule in relation to the allocation of space is necessary or desirable in the circumstances of the region; and
- (If the proposed allocation of authorisations will use a method that is not public tender) the proposed method is the most appropriate, having regard to its efficiency and effectiveness compared to other methods.

## 7.1 Why is a rule being included in the coastal plan?

Marlborough District Council is reviewing its coastal plan. The Council considers that a more strategic and spatial approach is needed to manage the location of marine farms. The plan review is happening in the context of the pending expiry of the majority of marine farm consents in Marlborough. New coastal permits will be required for existing marine farms to continue operating. The reconsenting process is treated as a 'new' allocation process under the RMA. The plan review is an opportunity for a more strategic response to the reconsenting process.

The Council can choose from a number of allocation methods (discussed further in section 7.4 below).

After considering the options, the Council considers it is both necessary and desirable to include an authorisation process. The advantages of an allocation process by authorisations include:

[59] S165W relates to the preferential rights of iwi to purchase a portion of the authorisations when a public tender of authorisations is conducted. Those rights pertain to certain iwi.

- Allocating space can be managed collectively and strategically, resulting the optimum occupation of space – rather than on an ad hoc basis;
- Space can be traded and transferred, which the industry thinks results in the most efficient allocation of space;
- Allocation arguments do not take place at plan hearings (overtaking a publicly funded process for private gain).

If a Council decides to use an allocation process by authorisations, it must either:

- Set out the allocation methodology in the coastal plan (s165G) through a plan change or variation. This process follows Schedule 1 and requires an allocation rule.
- Ask the Minister of Conservation for a ministerial direction (s165L) – that is, to give an Order setting out how allocation of authorisations should be provided for (s165K).

If a plan-led process is used, the provisions in subpart 7A require an allocation rule to be included in the regional coastal plan. The provisions in Subpart 7A do not explicitly state what the rule must address, other than the method of allocation.

## 7.2 If an authorisation process is adopted, which allocation process should be used?

The Council reviewed the two different authorisation processes in the RMA: a plan allocation rule or ministerial direction. They are complex, inter-related, and not mutually exclusive. A flow chart showing how they work and how they compare to each other is in Appendix 11.

The Council considered three key factors when assessing the efficiency and effectiveness of the two processes:

- ***Timeliness.*** Deemed coastal permits in the region will expire in 2024, and 518 consents will expire on this date. 198 farm consents will expire before this date. All will require a new consent to continue operating. A process to issue authorisations needs to be in place at least 6 months before consents expire[60] (the timeframe by which an existing consent holder must apply for a replacement consent).
- **Fairness.** How competing applications will be treated and the mechanisms for placing a 'stay' on competing during the process of confirming the allocation. Again, this is important given the impending expiry of many of the existing coastal permits and when existing permit holders will be able to apply for a new coastal permit. Existing marine farmers want to avoid 'gazumping'.
- Providing for an **orderly transition** to the desired spatial allocation. If only some of the farms relocate, and some remain 'camped' in their existing space long-term, this will lead to a 'staggered' or more spread out pattern of development, which is less desirable than a more uniform pattern. If some farms remain in their current locations the benefits of the new spatial allocation will not be achieved for decades. Ideally all farms will move to the new desired locations with a short time period.

[60] Section 165ZH require an existing permit holder to apply for a replacement consent at least 6 months before expiry of the existing coastal permit.

The Council's assessment of the merits of both allocation processes against the three criteria set out above, is in Appendix 12.

The Council found that:

- The ministerial direction process is timely - authorisations can be issued before the plan is operative. This is a considerable advantage for marine farms with resource consents expiring in the next three or four years. The risk of lack of timeliness with the plan allocation process can be reduced by making proposed Variation 1 operative quickly. The Council has little control over timing using the traditional Schedule 1 process, so this might require a 'fast-track' process[61]. However, if needed, the effects of a delayed process can be managed through conditions which restrict the length of the replacement consent until such time as the Variation and authorisation process is in place.
- Both the processes have provisions which will avoid gazumping, so this wasn't a deciding factor.
- The situation regarding an orderly transition is more complicated. Under both processes, existing marine farms can apply to remain in their existing space for a time. These consents must be granted for a minimum of 20 years. There is a risk that existing farms will avoid the costs of relocation required by the new spatial allocation by applying early for their existing space and 'camping' there for the next 20 years. This would significantly delay an orderly transition to the new spatial allocation. This risk exists for different times for the two processes (see below).

For the plan allocation process this 'orderly transition risk' ends when the allocation rule has legal effect (ie when the rule is notified). However, if the ministerial allocation process is used, the risk does not appear to have an end date - unless the plan is operative, and it makes farms outside AMAs a prohibited activity[62]. As it can take many years for a plan to be fully operative, this is a considerable period of risk.

The Council also considered the issue of *transparency*. The ministerial process could be seen as circumventing the public process provided for in Schedule 1 of the RMA[63]. The plan change process would provide more transparency, in that the allocation methodology would be clearly set out in the policy framework.

After carefully weighing up these considerations, the Council resolved to use a plan-led process of allocation, but without opting for a fast track mechanism.

## 7.3 Why is the authorisation allocation Rule 16.9 justified?

Part 7A of the RMA presumes that if a Council decides to use an authorisation process, it will use a public tender process. However, the RMA does provide for alternative mechanisms (discussed in section 7.4 below). The Council decided early on in the review process that a public tender process would not be appropriate for the Sounds because:

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[61] For example, the Council could request that the Ministers for the Environment and Conservation refer the matter directly to Environment Court or a board of inquiry (part 6AA), or request a Ministerial decided plan change through the 'streamlined planning process' (Schedule 1 Part 5).

[62] s165Q prohibits anyone applying for a coastal permit without an authorisation while the ministerial allocation method is in place. However, s165M(4) states that s165Q does not apply to any application referred to in section s165ZH, and there does not appear to be a 'sunset' time on this exclusion as there is for the plan allocation process. The only clause that would prevent s165ZH from applying is s165ZH(1)(b)(ii) which states that s165ZH does not apply if the space for the marine farm is a prohibited activity. (For this reason, the Council has made marine farms outside an AMA in the Enclosed Waters CMUs, a prohibited activity).

[63] While it would circumvent this, this would only be for the allocation rules – the activity status within 'the space', the matters of control or discretion and the policy framework would still need to go through the Schedule 1 process.

- There is very little additional space in appropriate locations to tender for;
- Council wanted to ensure the security of tenure for existing marine farmers.

These were the key factors for adopting a 'grandparenting' mechanism (future allocation is based on past use). The public tender option is considered to be the next best way to allocate space, so it will be used to allocate any remaining space in the AMAs that is not taken up by existing farms.

The 'grandparenting' methodology will allow the Council to:

a) Avoid applications for new marine farms in AMAs; and

b) Allocate space in AMAs to existing farms in an orderly way, particularly where partial or full relocation of an existing farm is required.

To mitigate the risk of applicants 'parking' in their existing space for extended periods of time (ie to address the orderly transition problem), the rule sets time limits. Once an authorisation has been offered, a marine farmer who takes up the authorisation must apply for the necessary consents within two years. Existing consents must then be surrendered within six months and new consents must be given effect to within 3 years. This means that farms will need to relocate within five and a half years of authorisations being offered.

Rule 16.9 may not provide for the ideal economic use of some existing consents, because some farms will have to move before their current consent expires. It does reduce the time needed to reach the 'optimum' occupation pattern for collective farms in individual bays or CMUs however, and makes this time period more predictable. It also allows for the Council to collectively manage the allocation of space within an AMA, or in a particular CMU. For example, the Council could offer authorisations in stages, bay by bay. This would help marine farmers with multiple farm sites spread out their moving costs.

The Council acknowledges that Rule 16.9 does not mitigate the 'timeliness' factor – that is the risk of applicants applying for a replacement consent *before* proposed Variation 1 is notified (this risk will have passed by the time this report is published). The Council considered it was not necessary to request suspension of applications under s165ZB during preparation of this proposed Variation.

### 7.3.1 What the allocation rule (Rule 16.9) covers and why

The key components of the allocation rule and why they are included are set out in the table below:

*Table 13: Components of the allocation by authorisation rule and why it has been included*

| **Component of the rule** | **Why it has been included** |
|---|---|
| Aquaculture can only take place in AMA's (authorisations to occupy space in a common marine and coastal area for aquaculture will only be offered in AMAs);<br><br>Unless a person has an authorisation, they cannot occupy an AMA. | To ensure that aquaculture only takes place in space that the Council has identified is 'appropriate' for aquaculture. |
| The Council will allocate authorisations to occupy AMAs following the process set out in Policy 13.21.7. | Provides a link with the policy which explains the grandparenting allocation process, so that plan readers understand the reasons for inclusion of the rule. |

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|---|---|
| Once the provisions in proposed Variation 1 are operative, if someone wishes to farm in an area which is not covered by an AMA, they will have to apply for a private plan change to create a new AMA. If the private plan change is successful, the Council will only offer authorisations to occupy that new AMA to the plan change applicant. | Prevents gazumping if a private plan change is successful. |
| A public tender process will be used in certain specified cases. This includes where there are new AMA's added through the RMA Schedule 1 variation process (beyond those identified at notification by the Council or created by a subsequent Council initiated plan change)[64].<br><br>It will also be used in the event that there is 'left over' space which is not taken up after authorisations have been issued for existing marine farms. | The public tender process will be used to disincentivise requests for increased space allocation through the Schedule 1 variation process and prevent private advantage from a publicly funded plan change process.<br><br>It will also be used in the event there is 'spare' space left over after the first round of authorisations.<br><br>In principle, where grandparenting does not apply, public tender is the next best method. |
| When someone accepts an authorisation to occupy an AMA, they must have a permit for an existing marine farm of an equivalent scale to that being authorised by the authorisation, then apply for a coastal permit to occupy the new space. | This ensures that existing use rights are protected, and gazumping is avoided. |
| In order to implement any new coastal permit, the permit holder will need to surrender their permit for the existing marine farm (or the permit must have expired) within six months. | This ensures that permit holders do not occupy both spaces at the same time, effectively increasing the farmed space. |
| There will be a time limit of two years, after which authorisations will expire. In addition, consents must be given effect to within three years. | Prevents 'camping out' and facilitates a timely transition to the new space. |
| The authorisations will only apply if the Council gives notice to the authorisation holder that there has been sufficient acceptance of authorisations within the CMU containing the relevant AMA, for the Council to effectively implement the new allocation regime.<br><br>The time period for this will be four months. | Provides a time period for bedding in of the allocation process and for the Council to consider alternative options if the mechanism is not successful. |

[64] This covers the possibility that someone proposes new AMAs through the variation process. It disincentivises the behaviour of requesting increased space allocation using proposed Variation 1 and prevents private advantage from a publicly funded plan change process.

| | |
|---|---|
| The provisions provide for the Council to process and hear together, applications for coastal permits in the same AMA (under RMA s165F(1)(b)) (Rule 16.8). | Provides for the collective management of the allocation of space within an AMA. |

These complex and comprehensive terms have been included to ensure that the allocation system operates efficiently and effectively. An Implementation Plan that provides more detail about how the allocation process works accompanies proposed Variation 1 and this s32 report.

## 7.4 What other allocation methods did the Council consider?

Section 165H requires the Council to be satisfied that the proposed allocation method is the most appropriate, having regard to its efficiency and effectiveness compared to other methods. The efficiency and effectiveness of other potential allocation methods are discussed below. This assessment has been informed by the MPI Technical Guidance Note: *Aquaculture Legislative Reforms 2011 technical guidance note 5: Mechanisms for managing allocation of coastal space (*May 2012).

With the exception of the default 'first in, first served' approach, all of the options require Council to undertake spatial planning first, in order to determine what is 'appropriate space' and/or to set environmental limits. The Council has done this spatial analysis by defining CMUs, collating information on values, mapping constraints, and identifying AMAs.

### 7.4.1 A first in, first served rules-based method

The default mechanism for allocating space in the coastal marine area is by resource consents, which are processed on a first in, first served basis. This is the operative coastal plan's approach, and it has become less effective over time in the face of high and/or competing demands to occupy coastal marine space. This ad-hoc approach has not achieved the most efficient or effective use of public space, and the cumulative effects have been difficult to manage. The difficulty is that "it is the first application, rather than the best application, that potentially gets allocated the coastal space"[65].

Section 165F of the RMA provides for drafting rules to address the effects of occupation and to manage competition for the occupation of coastal marine space. The rules can cover such things as:

- Joint processing and joint hearings for applications for coastal permits;
- Preventing applications before a date specified in a public notice;
- Limits on character, intensity, scale of marine farm activities, or the size and proportion of space that may be occupied.

Despite these provisions, the Council was concerned that achieving the desired spatial distribution would be difficult, resulting in a complex rule framework. There would be a risk of creating loopholes, which would decrease certainty and confidence in the plan.

[65] MPI. Aquaculture Legislative Reforms 2011 technical guidance note 5: Mechanisms for managing allocation of coastal space. Published May 2012.

While it would be straightforward to propose rules for small seaward shifts of farms adjacent to an AMA, it would be more complex and difficult to write rules for farms that would be required to move from their current locations (for example to another AMA or CMU). There would also be an inequitable level of risk associated with this. Farms that were staying in their existing location would be protected by s165ZH (which requires an existing consent holder's application be processed before another application, where the consent holder already occupies the space). Farms moving to a new location would not have this 'protection' of their existing use rights. This might discourage those farms from moving to the optimum location. While section 165F could be used to offset that risk by requiring competing applications to be heard together, and drawing on supporting policies to explain the rationale for moving farms, the first application received would still need to be determined first.

For non-adjacent farms moving to new space, a controlled activity status would not be possible, as discretion would be needed to turn down competing applications. Again, this would decrease the likelihood that farms would be prepared to move to alternative locations.

For the reasons outlined above, this first in, first served rule option was the least favoured method.

### 7.4.2 A public tender method

Part 7A of the RMA explicitly provides for a public tender method as an alternative to 'first in, first served'. A tendering process could be price-based or based on weighted attributes. Advantages of this method include (as identified by MPI):

- This option is administratively simple to implement (if a price-based approach is used)
- It generates revenue which is used for the promotion of sustainable management in the region's coastal marine area (s165ZA)
- Compared to the first in, first served approach, it may promote more efficient use of space and resources and management of the coastal environment, including cumulative effects.

Te Ātiawa stated a preferences for a sunset date for existing marine farms, and that after that date authorisations are tendered. They consider that tendering should be weighted; first for iwi, second for locals and then for others.

The Council decided not to use a public tendering method for existing space for existing marine farms. They considered that this would result in too much disruption to the existing industry, and the advantages of tendering did not outweigh this cost.

However, the public tender option may be used to allocate any remaining space which is not taken up by existing farms. The Council has not yet decided on any criteria or weighting that may be applied to a public tender process.

### 7.4.3 A schedules-based method

Under this option, schedules would be included in the Plan that specify which existing marine farmers can apply for which space. These tables would be debated through the Variation hearings and determined by the hearing panel. If space allocated to particular users through the Variation was not taken up within a certain time limit, there would be an opportunity for new marine farms to apply to occupy the unused space. This option is transparent and provides a high level of certainty for existing users, but little flexibility for farmers to trade space with each other. It could potentially increase the time and complexity of the plan hearing process

and reconsenting costs. It wasn't clear how this option would provide for a timely and orderly transition to the new space either. For these reasons, this plan schedule option was discounted.

### 7.4.4 Auction method

This is a price-based allocation mechanism that sets up a process of exchange based on competing bids. While this is a simple and well understood process, it does not necessarily provide for consideration of broader values[66]. The Council did not investigate this option in any detail.

### 7.4.5 Ballot method

This option is chance-based and so on its own it is not expected to promote efficient economic use. This option can be used in conjunction with well-defined prerequisite criteria, to help the Council make a final decision between very similar applications[67]. The Council did not investigate this option in any detail.

### 7.4.6 The Council prefers a grandparenting allocation rule option

Having considered these alternative options, the Council prefers the grandparenting allocation option, which it has developed. It will be straight forward to administer and is cost-effective. While this allocation process may be less transparent/easily understood by the general public than other options, it provides both flexibility and certainty for the aquaculture industry.

### 7.4.7 Would the grandparenting allocation rule affect any preferential rights under s165W?

No. The mana whenua in this area do not have preferential rights provided for under section 165W of the RMA.

## 7.5 Summary of the allocation rule assessment

The allocation rule (Rule 16.9) provides for an effective and efficient re-consenting process, which is necessary and desirable given the unique characteristics of marine farming in the Marlborough Sounds. Existing consent holders will be able to gain authorisations and coastal permits to move into the AMAs in as timely a manner as possible. The process is simple to administer, does not delay the Schedule 1 plan-making process and assists the Council to manage authorisations in a collective manner. Existing consent holders may not get exactly the same area, but they will get the right to apply to occupy space of an equivalent scale without having to compete with others for that space. Space can be traded with other authorisation holders. Where grandparenting doesn't apply, the tender process will be an efficient way to allocate any 'new' space.

[66] ibid

[67] ibid

# 8 Statutory Evaluation

## 8.1 Section 5 – Purpose of the RMA

Proposed Variation 1 will help to achieve sustainable management of natural and physical resources. The provisions enable the aquaculture industry to continue to operate (providing for economic wellbeing), and will also:

- Improve social wellbeing (through improved recreational access)
- Ensure health and safety (through consideration of navigational safety)
- Avoid, remedy, or mitigate the adverse effects of aquaculture activities on the environment (on marine ecology, sensitive landscapes and natural character).

The provisions seek to remedy the adverse impacts of existing marine farms in inappropriate places by requiring these to move to more appropriate locations.

## 8.2 Section 6 – Matters of National Importance

Decision makers must recognise and provide for matters of national importance when exercising their functions and powers under the RMA. These sections are particularly relevant to proposed Variation 1:

- Section 6 (a) - requires the preservation of the natural character of the coastal environment (including the coastal marine area), and its protection from inappropriate subdivision, use, and development.
- Section 6(b) - requires the protection of outstanding natural features and landscapes from inappropriate subdivision, use and development.

As discussed in section 6.2.7, proposed Variation 1 has been developed to respond to these matters. The Council commissioned a landscape study to assess natural character and outstanding landscape values and identify the measures required for their protection. The AMAs have been modified to take these values into account and to manage existing adverse impacts.

- Section 6 (c) – requires the protection of significant habitats, which includes marine habitats.

The AMAs have been located to avoid ecologically significant marine sites.

- Section 6 (d) - requires the maintenance and enhancement of public access to and along the coastal marine area.

Moving existing marine farms away from the foreshore area will improve public access to this area.

- Section 6 (e) - the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga must be recognised and provided for.
- Section 6 (h) – requires the protection of protected customary rights.

There are some customary rights guaranteed to iwi for commercial aquaculture. The Aquaculture Settlement Areas provide for those rights to be exercised.

## 8.3 Section 7 – Other Matters

Decision makers must have particular regard to a range of matters in exercising their functions and powers under the RMA. The following matters are particularly relevant to proposed Variation 1:

a) Kaitiakitanga

b) The efficient use and development of natural and physical resources

c) The maintenance and enhancement of amenity values

d) The maintenance and enhancement of the quality of the environment

Proposed Variation 1 provides a reconsenting process for marine farms that will provide for efficient use of natural resources. Moving the existing marine farms seaward will potentially increase productivity, enhance the quality of the environment (in particular the near shore photic zone), and improve the amenity of this area for other users. Adjusting locations of AMAs away from sensitive habitats and landscapes is consistent with kaitiakitanga.

## 8.4 Section 8 – Treaty of Waitangi

Section 8 of the RMA requires that the principles of the Treaty of Waitangi (Te Tiriti o Waitangi) be taken into account when achieving the purpose of the Act. The Council has taken into account these principles, including any potential impacts on aquaculture agreements between iwi and the Crown which arise from Treaty rights.

There are a number of Statutory Acknowledgements that cover the Marlborough Coastal Marine Area. The Council has taken these acknowledgements into account and has consulted with the relevant iwi.

# 9 Scale and significance of this s32 evaluation

This s32 evaluation report "must contain a level of detail that corresponds to the scale and significance of the ... effects that are anticipated from the implementation of the proposal" (s32(1)(c)). Scale refers to the size or magnitude of the effects, including how many people or species or other natural resources are affected, by how much, and over how wide an area.

The factors that indicate the scale and significance of the proposals have been assessed in Appendix 13. The proposed Variation 1 provisions are a significant departure from the current framework because they are more directive about where marine farms can locate. This creates certainty for marine farmers, other plan users and the public.

The allocation methodology and gaps in knowledge regarding the ecological effects of aquaculture are two areas of risk that the Council will need to manage. These risks have been addressed by:

- Consulting with key stakeholders to gain their support for the allocation methodology
- Proposing monitoring and adaptive management to respond to the unknown and potentially adverse ecological effects of marine farming.

The issues addressed by proposed Variation 1 are of high significance and at a scale which potentially affects many users of the enclosed waters Sounds. A detailed s32 assessment has therefore been undertaken.

# 10 Conclusion

This report provides:

- A summary assessment of proposed Variation 1: Marine Farming, consistent with s32 of the RMA
- An assessment of the allocation Rule 16.9 as required by s165H of the RMA.

This report assesses the objectives and purpose of proposed Variation 1, and the options that were considered in developing the variation. The conclusion is that proposed Variation 1 is the most appropriate way to achieve the purpose of the RMA and to give effect to the RPS.



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## 11.2 Acts or Regulations

18. Biosecurity Act 1993
19. Māori Commercial Aquaculture Claims Settlement Act 2004
20. Marine and Coastal Area (Takutai Moana) Act 2011
21. Resource Management Act 1991
22. Resource Management (National Environmental Standards for Marine Aquaculture) Regulations 2020
23. Ngāi Tahu Claims Settlement Act 1998
24. Ngāti Apa ki te Rā Tō Ngāti Kuia, and Rangitāne o Wairau Claims Settlement Act 2014
25. Ngāti Toa Rangatira Claims Settlement Act 2014
26. Ngāti Koata, Ngāti Rārua, Ngāti Tama ki Te Tau Ihu, and Te Ātiawa o Te Waka-a-Māui Claims Settlement Act 2014

## 11.3 Iwi Management Plans

27. Ngāti Tama ki Te Waipounamu Management Plan 2018
28. Te Ātiawa O Te Waka-A-Māui Iwi Environmental Management Plan (IEMP) 2014
29. Ngāti Kōata No Rangitoto Ki Tonga Trust Iwi Management Plan, 2002

30. Nga Taonga Tuku Iho Ki Whakatu Management Plan

## 11.4 Case Law

31. Golden Bay Marine Farmers v Tasman District Council W19/2003 at [405]

## 11.5 Meeting minutes

32. Marlborough Aquaculture Review Working Group 2018. Notes of Marlborough Aquaculture Review Working Group workshop on Tuesday 26 June.

## 11.6 Memoranda

33. Memorandum from James Bentley, Boffa Miskell to Pere Hawes, MDC dated 5 April 2019. Proposed AMAs and their natural character, landscape, and amenity effects.

# 12 Appendices

# Appendix 1: Proposed Variation 1 Provisions and Planning Maps

(see schedule of changes)

# Appendix 2: Marlborough Aquaculture Working Group

The MARWG was created to help the Council create a sound framework for aquaculture that would be accepted by key stakeholders. This Appendix provides details on membership of the MARWG and its technical advisory group (TAG), what the group was tasked with, what they did and how often they met.

## Group membership

The Working Group included council officers, elected members and a range of government and industry representatives, including:

- One MDC staff member - Pere Hawes (Policy)
- Councillors Trevor Hook and David Oddie
- The Mayor
- One representative from Fisheries New Zealand (a business unit of the MPI)
- Two representatives from the Sounds Advisory Group
- Up to two representatives from the Kenepuru and Central Sounds Residents Association
- One representative from the Department of Conservation
- One representative from Sanfords Limited
- One representative from Talleys Fisheries Limited
- Up to two representatives from Marine Farming Association
- One representative from Aquaculture New Zealand
- One representative from the Marlborough Sounds Integrated Management Trust

The working group received expert advice from a TAG which included:

- A lawyer
- A consultant planner
- A landscape architect
- A scientific technical advisory group made up of marine scientists from MDC, NIWA, Cawthron Institute, Department of Conservation, Aquaculture NZ and MPI.

## The specific roles of the MARWG

The MARWG was asked to:

- review and where appropriate modify the proposed CMU boundaries and locations
- review and help develop the values table for each CMU
- provide feedback on the proposed objectives, policies, and rules in the Aquaculture section.

The remit of the MARWG did not include:

- reviewing any other provisions in the PMEP that had already been notified
- reviewing the spatial allocation for salmon farming[68].

## The review process

The MARWG met 16 times between February 2017 and June 2019. The Council provided the MARWG with a starting proposition / key parameters for the review process which are set out at section 1.3 of this report.

The MARWG meetings were chaired by Councillor Trevor Hook and attended by Councillor David Oddie. The councillors provided a facilitation role only, and they did not attend the meetings where proposed provisions were discussed. This was in order to avoid any perception of conflict of interest.

The review process involved:

- Dividing Marlborough's coastal marine area into CMUs for the purpose of the review process;
- Establishing the natural and human use values that exist in each CMU from existing sources of information;
- Using this information to review the appropriateness of the location of existing marine farms;
- Confirming a spatial allocation for existing marine farms considered to be appropriate by establishing AMA's;
- Considering the potential to relocate inappropriate marine farms or inappropriate lines to alternative locations in the same CMU or an alternative CMU;
- Considering the potential for marine farms to create cumulative benthic and water column effects and developing a method to address the potential for cumulative effects;
- Considering the opportunity for marine farming to occur in offshore waters.

On a number of occasions, the MARWG required technical support with the above tasks. On these occasions, requests were made to the TAG. Responses to questions were provided in writing and were considered as part of the MARWG's agenda.

As the review process developed, especially the process of considering the appropriateness of existing marine farms in each CMU, principles for managing marine farming emerged. These principles were recorded and used by the MARWG as a basis for preparing proposed MEP provisions. The final stage in the review process was considering and confirming the MEP provisions to be recommended to the Council.

[68] The salmon farming allocation process is subject to an external process through the MPI. For efficiency reasons, it was considered appropriate to retain this as a separate process.

# Appendix 3: How RMA, NZCPS and RPS provisions relate to aquaculture topics

(graphics created by Perception Planning)

# Maori Values

| | | | | | |
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| RMA | Provide for relationship of Maori with water and other taonga (s6e) | | | | Take into account principles of TOW (s8) |
| NZCPS | | Recognise traditional and continuing relationships (Policy 2a) | Recognise Maori values and provide for identification and management of areas or sites (Policy 2g) | Incorporate Matauranga Maori, provide for Maori involvement in decision making and provide opportunities to exercise kaitiakitanga (Policies 2(c), (d) and (f) | Involve iwi in preparation of plan, with effective , early and meaningful consultation (Policy 2 b) |
| RPS Objectives | | Relationships with water, sites and other taonga recognised and provided for (Obj 3.4) | Management has particular regard to spiritual and cultural values and accommodates tikanga Maori (Obj 3.3) | Decision making processes give particular consideration to values of tangata whenua and (Obj 3.6) / Strong rellationship between the Council and Malborough's tangata whenua iwi (Obj 3.2) | Principles of TOW are taken into account in all functions (Obj 3.1) |
| RPS Policies | | | | Decision makers should insure kaitiakitanga, mauri, mahinga kai etc are maintained (Pol 3.1.3) | Applicants should consult early (Pol 3.1.2) |

# Landscape

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|---|---|---|---|---|
| RMA | Provide for protection of outstanding natural features and landscapes (s6b) | | | Maintenance and enhancement of amenity values (s8) |
| NZCPS | Avoid adverse effects on outstanding features and landscapes (Policy 15(a)) | Avoid significant effects and avoid, remedy, mitigate other effects on other landscapes and natural features (Policy 15(b)) | Identify, assess and map (Policy 15) | Recognise the need for public open space within the CMA (Policy 18) |
| RPS Objectives | Protect outstanding natural features and outstanding natural landscapes (Obj 7.1) | | | Enhance landscapes with high amenity value (Obj 7.2) |
| RPS Policies | Protect by avoiding adverse effects on oustanding natural features and landscapes (Pol 13.1.1) | Recognise and provide for and ARM adverse effects on characteristics and qualitities that contribute to natural features and landscapes (Pol 13.2.1) | Map areas identified as having outstanding or significant values (Pol 13.1.2) | |

# Natural Character

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|---|---|---|---|---|---|
| RMA | Provide for preservation of natural character and protection from inappropriate development (s6a) | | | | |
| NZCPS | Identify, assess and map (Policy 13(c)) | Avoid adverse effects on outstanding natural character (Policy 13(1)(a)) | Avoid significant effects and avoid, remedy, mitigate other effects on natural character in other areas (Policy 13(1)(b)) | Promote restoration by identifying areas and providing for restoration (Pol 14) | |
| RPS Objectives | Establish degree of natural character (Obj 6.1) | Preserve and promote the restoration of natural character and protect from inappropriate development (Obj 6.2) | | | |
| RPS Policies | Mapping and criteria (Pol 6.1.1-4) | Avoid adverse effects on outstanding natural character (Pol 6.2.1) | Avoid sig adverse effects, having regard to significance criteria (Pol 6.2.2) | Avoid reducing degree of nat char in high or very high areas (Pol 6.2.4) | Potential to restore (Pol 6.2.5) | Encourage and support restoration (Pol 6.2.8) |

# Public access

| | | |
|---|---|---|
| RMA | Provide for maintenance and enhancement of public access to and along the coastal marine area (s6d) | |
| NZCPS | Maintain and enhance public open space and recreation opportunities (Obj 4) | |
| RPS Objectives | Public are able to enjoy amenity and recreational opportunities of coast (Obj 9.1) | Public access to and along the coast only restricted where necessary (Obj 9.2) |
| RPS Policies | Areas of high importance for public access includes CMA (Pol 9.1.1) | |

# Amenity values

| | |
|---|---|
| RMA | The maintenance and enhancement of amenity values(s7(c)) |
| NZCPS | Recognise that coastal environments have features which contribute (Pol. 1 (2f)<br>Need for a precautionary approach to development and use of coastal resources that impact amenity values (Pol.3. 2c)<br>Promote efficient use of occupied space (Pol.6. (2e) (ii))<br>Ensure that the location and treatment of local space is compatible (Pol.18a) |
| RPS Objectives | The maintainence and enhancement of the ecological physical, and cultural qualities and amenity values that contribute to the character (Obj.4.3) |
| RPS Policies | Integrate management of natural and physical resourced within the environment (Pol. 4.3.1)<br>Identify qualities and values that contribute to Marlborough Sounds' character and protect them from subdivision, use and development (Pol.4.3.2)<br>Encourage enhancment of qualities and values that contribute to the character of Marlborough Sounds (Pol. 4.3.4)<br>Recognise that Marlborough Sounds has a dynamic environment (Pol.4.3.5) |

# Biodiversity

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|---|---|---|---|---|
| RMA | Protection of significant indigenous vegetation and habitats of indigenous fauna (s6c) | | | |
| NZCPS | Avoid adverse effects of actvities on threatened, rare or protected taxa and ecosystems and Avoid significant adverse effects of actvities on important, vulnerable indigenous fauna (Pol 11) | | | |
| RPS Objectives | Protect intrinsic values of remaining biodiversity in terrestrial, freshwater and marine environments (Obj.8.1) | | Increase in area/extent of biodiversity and restoration or improvement areas that have been degraded (Obj. 8.2) | |
| RPS Policies | Identify sites, areas and habitats with significant indigenous biodiversity value (Po.8.1.1) | Avoid adverse effects consistent with NZCPS incl on identified habitats (Policy 8.3.1, 8.3.2) | Promote importance of biodiversity to public and landowners (Pol. 8.2.11) | A variety of means will be used to assist the protection of biodivesity (Pol. 8.2.1) |

# Aquaculture

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|---|---|---|---|---|---|---|---|
| NZCPS | Recognise the contribution of aquaculture to the social, economic and cultural well-being (Pol 8) | Recognise that there are activities that have a functional need to be located in the coastal marine area (Pol 6(2)(c)) | | | Recognise the need for high water quality for aquaculture activities (Pol 8) | | |
| RPS Objectives | Recreation contributes to people's health and wellbeing, tourism industry, whilst (Obj 13.3) | Structures in the coastal environment are appropriately located (Obj 13.10) | Activities take place in appropriate locations and within appropriate limits (Obj 13.2) | Equitable and sustainable allocation of public space (Obj 13.M) | Maintain and where necessary, enhance water quality (Obj 15.1) | Efficient safe use of the coastal marine area for water transportation (Obj 13.15) | Minimise organic or inorganic material disposal or deposition (Obj 13.12a) |
| RPS Policies | | Consider whether some uses can only be located (Pol 13.2.2) | Consider adverse effects on established activities that depend (Pol 13.2.2) | Sustainable use and development of Marlborough's natural resources supports (Obj 4.1) | | | |
| Coastal Plan Objectives | | | Coastal marine area able to be used for anchoring boats in appropriate locations (Obj 13.7) | | | | |

# Appendix 4: Part 7A of the RMA

The provisions in Part 7A of the RMA specifically relate to controlling occupation and allocation of coastal marine space for aquaculture. The provisions in this part of the RMA are very complex. There are some key requirements for allocation rules in a regional coastal plan. These include:

- ***Section 165F*** - a proposed regional coastal plan may include provisions to address the effects of occupation of the common marine and coastal area (including limits on character, intensity, scale of activities, size of space) and to manage competition for occupation of space. Applications can be processed and heard together.
- ***Section 165G -*** a proposed regional coastal plan may include a rule which specifies its method for allocating space in the common marine and coastal area for aquaculture. This method could be by public tender or any other method. *Section 165I* requires the method of offering authorisations to be made available by public notice.
- ***Section 165H*** - a regional council must have regard to and be satisfied about certain matters before including an allocation rule in a proposed regional coastal plan (see Chapter 7 of the report for details).
- ***Section 165J*** has the effect that a person cannot apply for a coastal permit authorising occupation of the space unless they hold an authorisation for that space and activity (or are the holder of an existing coastal permit for that space and activity); once an allocation rule has legal effect[69]. The granting of an authorisation does not confer any right to the grant of a coastal permit in respect to that space (ie a consent to occupy is not guaranteed and could be refused) under *s165R*. Authorisations can by transferred between parties under *s165S* and authorisations will lapse after two years if a coastal permit is not applied for, subject to certain circumstances (*s165T).*
- ***Section 165K*** gives the Governor-General powers to direct a regional council by Order in Council, not to proceed with a proposed allocation of space, or, in proceeding, to give effect to matters specified in an Order. The section sets out the purposes for which such an order can be made, and what the Order can cover.
- ***Section 165L*** gives a regional council an option to request that the Minister approve a method of allocation of authorisations (either by public tender or another method), where there is actual or anticipated high or competing demands for coastal permits, which the council considers cannot be managed effectively through the regional coastal plan (either because there is no allocation rule, or the rule is unlikely to be effective). *S165N* sets out the details of that approval process. If a ministerial approval method is triggered, *s165M* provides for a stay on applications until the allocation process has been notified. *S165O* covers the period of approval and *s165P* sets out the process that must be followed by the regional council to carry out the allocation process.
- ***Sections 165U to 165X*** set out details about the public notice of offer of authorisations (165U), what an offer for an authorisation should cover (165V), the procedure that the regional council should follow in accepting any offers for authorisations (s165X); and that if an offer is accepted, an authorisation must be granted (s165Y).

[69] *S165Q* provides for similar restrictions, where a Ministerial approval process is being followed.

- ***Section 165ZB*** provides the Minister of Aquaculture with powers to suspend the receipt of applications for coastal permits for aquaculture activities, where requested to do so by a regional council. These powers are to be used in the case where the provisions of a regional coastal plan are ineffective to manage the high or competing demands for permits for aquaculture; and the regional council requires time to implement changes to the plan or some other method to deal with the demand. Such a suspension prevents further applications for a certain period, and with certain exceptions, as set out in *S165ZC.* The process for determining whether to grant such a request from the regional council is set out in *s165ZD,* and there is an option to extend the suspension (*s165ZE)* when more time is needed to put in place plan provisions.
- ***Section 165ZF*** provides for regional councils to request direction from the Minister of Aquaculture to process and hear together applications for permits for aquaculture, to enable this process to be more efficient and better able to assess cumulative effects. The process for the Minister to consider that request is set out at s165ZA; and provisions s165ZB to 165ZFH cover the joint processing of applications.
- **Subpart 3 (sections 165ZG - 165ZJ)** deals with matters related to applications by existing consent holders for coastal permits, including preferential processing rights, how other applications are to be dealt with in order to prevent gazumping, and criteria to be used in assessing coastal permit applications. This includes any available monitoring data and the applicants conduct in relation to previous compliance with regional plan provisions and resource consent conditions (s165ZJ).
- **Subpart 4** deals with plan change requests and concurrent applications for coastal permits in relation to aquaculture activities, where at the commencement of s55 of the RMA Amendment Act (No 2) (2011) aquaculture was a prohibited activity in the regional coastal plan and that rule was still operative when the plan change request was made.

# Appendix 5: Assessing the appropriateness of the objectives of proposed Variation 1

*Table 14: The appropriateness of the proposed objectives*

| Text | Commentary |
|---|---|
| **Objectives** | **13.21: Provide for marine farming in appropriate locations while protecting and maintaining the values of Marlborough's coastal environment**<br><br>**13.22: Marine farms are operated sustainably, kept in good order, and individual and cumulative adverse effects are addressed.** |
| **Relevance** | |
| Directly related to addressing a resource management issue? | Yes, the sustainable management of aquaculture. The objectives provide the starting point for a framework for the Council's response to Policy 8 of the NZCPS, which must be balanced with consideration of other objectives and policies of the NZCPS, including Policy 3, 6, 11, 13, 14, 5 and 18. |
| Will achieve one or more aspects of the purpose and principles of the RMA? | Yes. Achieves s5 RMA. By making provision for marine farming in appropriate locations, objective 13.21 enables people to provide for their economic and social wellbeing, while at the same time maintaining environmental bottom lines. The objective seeks to protect and maintain other key values, which although not named, are assumed to include s6 matters, e.g. natural character, public access, outstanding landscapes, biodiversity etc. Objective 13.22 will assist to maintain the quality and amenity of the coastal marine environment and help achieve the efficient use and development of natural and physical resources, which are relevant s7 matters. |
| Relevant to Māori environmental issues? sections 6(e),6(g),7(aa), 8) | The objectives are not inconsistent with Māori environmental values. Objective 13.21 requires cultural values to be protected and maintained (s6) alongside provision for aquaculture. Objective 13.22 provides for kaitiakitanga, through addressing adverse and cumulative effects. |
| Relevant to the Council's statutory functions or assists to give effect to | The proposed objectives are relevant to the Council's statutory functions under s30(1)(d) which relates to activities in the coastal marine area, and in particular s30(1)(d)(ii) which relates to the occupation of space in |

| Text | Commentary |
|---|---|
| another higher-level plan or policy (NZCPS, RPS)? | the common marine and coastal area, and s30(fb)(ii) which relates to the establishment of a rule in a regional coastal plan to allocate space in a coastal marine area under Part 7A of the RMA.<br><br>The objectives assist the Council to give effect to Policy 8, Objective 6 and Policy 6 of the NZCPS in particular. They also assist the Council to give effect to other objectives and policies in the RPS, and in particular Objective 13.2, Policy 13.2.2, Objective 8.2, Objective 4.3, Policy 4.3.2, Objective 9.1, Objective 6.2, Objective 7.2. |
| **Usefulness** | |
| Will effectively guide decision-making? | Yes. Objective 13.21 provides a strong and directive objective that a balancing exercise is required when considering aquaculture proposals, and that aquaculture will only be appropriate where other values are maintained. Objective 13.22 addresses the issues that must be considered when considering aquaculture proposals. |
| Meets sound principles for writing objectives?<br><br>(specific; states what is to be achieved where and when; relate to the issue; able to be assessed) | The objectives are clearly worded and address the identified issues. While they do not cover specifics about when and where (other than "appropriate locations"), this detail is provided in the supporting policies. |
| Consistent with other objectives? | Yes. The objectives provide a framework for considering aquaculture proposals and are intended to be read alongside the other objectives and policies in the PMEP. In particular, the objectives support and should be read alongside the objectives in the RPS and regional coastal plan which relate to Maori values (Chapter 3), landscape (Ch 7), natural character (Ch 6), public access, amenity values, indigenous biodiversity and use of the coastal environment and allocation of coastal space. Objective 13.21 is consistent with Objective 13.2 which states that activities take place in appropriate locations and within appropriate limits. |
| **Achievability** | |
| Will it be clear when the objective has been achieved in the future? Is the | Yes, the supporting provisions which include the identification of CMUs, AMAs, policies and methods clearly articulate the appropriate locations for aquaculture. The values for each CMU are articulated in the values |

| Text | Commentary |
|---|---|
| objective measurable and how would its achievement be measured? | table. Achievement can be measured against this framework. The monitoring and adaptive management provisions have clear indicators (total free sulphides) thresholds and stated methods for measuring effects on ecological functioning, which can be used to test whether the objectives are being achieved. |
| Is it expected that the objective will be achieved within the life of the Plan or is it an aspirational objective that will be achieved sometime in the future? | It is expected that the objectives will be implemented during the lifetime of the plan. Having said that, coastal permits for marine farms will have a period of 20 years at least, so it will take time to achieve these goals. |
| Does the council have the functions, powers, and policy tools to ensure that they can be achieved? Can you describe them? | Yes, the Council has the appropriate functions and powers under s30(d) and (fb), to manage uses and occupation of the coastal environment and to include rules which allocate space in a coastal marine area under part 7A. The supporting provisions clearly draw on the powers and policy tools in sub-part 7A of the RMA to allocate authorisations to occupy the coastal marine environment, via a rule in the regional coastal plan. Monitoring and reporting conditions will be placed on new permits, which will be used alongside an adaptive management framework to ensure that adverse and cumulative effects are addressed. The Council has a duty to gather information on the state of the environment, monitor the efficiency and effectiveness of policies rules or other methods in its RPS or plan, and keep records under s35 of the Act. These requirements will assist the Council to do that. These tools are described in detail in the report. |
| What other parties can the Council realistically expect to influence to contribute to this outcome? | Marine farmers, Department of Conservation, MPI, Ministry for Fisheries. |
| What risks have been identified in respect of outcomes? | A number of risks have been identified, which are set out in section 6.2.9 of this report. The Council has insufficient information to confirm whether the current level of marine farming is having irreversible effects on the marine environment. This risk is being managed by implementing an adaptive management approach.<br><br>There is also a risk that the allocation mechanism may be less successful than anticipated, and that this will result in a less than optimum occupation of space.<br><br>It will take time for marine farmers to relocate to the AMAs and in the short term, there is a risk that a greater |

| Text | Commentary |
|---|---|
| | area of space will be occupied. |
| **Reasonableness** | |
| Does the objective seek an outcome that would have greater benefits either environmentally or economically/socially compared with the costs necessary to achieve it? | Yes. On the basis of available information on the likely economic costs and benefits and anticipated environmental effects, it is expected that the benefits of implementing the objectives, along with the rest of proposed Variation 1: Marine Farming provisions, will outweigh the costs. |
| Who is likely to be most affected by achieving the objective and what are the implications for them? | Marine farmers are most likely to be affected by the objectives (and supporting policies and rules), although other users of the common marine and coastal area will also be affected to some extent. The objectives and supporting provisions will provide certainty and clarity for marine farmers as to the framework that will be used to manage the impacts of marine farming and how rights to occupy space for marine farming will be allocated and authorised. |

# Appendix 6: Method, criteria and values of the CMUs

## Criteria used for defining Coastal Management Units

The size and shape of each CMU is based on catchments, key features and values. A standard set of criteria was used to divide the Sounds: starting at the large scale and progressively dividing the region into smaller and smaller parts, before fine-tuning the individual CMU boundaries. The following criteria were used:

Large scale

- Coastal natural character areas
- DOC biogeographic zones
- Landscape units as defined in "Natural Character of the Marlborough Coast: Defining and Mapping the Marlborough Coastal Environment" (Boffa Miskell et. al., June 2014)
- National Transportation Routes

Medium scale

- Underlying geography to define catchment areas
- Marlborough Shellfish Quality Programme catchment units
- Patterns of existing development
- Runoff potential
- Land zoning and land cover
- Water depth and flow patterns (to define the CMU seaward boundaries)

Small scale

- Final adjustments based on whether each CMU contained values that varied enough from neighbouring areas to treat it differently.

In the open water, when close to the coast or offshore islands, the area within 500 metres from the shore is considered to be "near-shore" waters and is treated as a separate CMU.

## Values recorded for each CMU and AMA

The MARWG identified a consistent set of values for the Sounds. The characteristics of the values were identified and recorded in detail for each CMU as follows:

*Table 15: CMU values identified by MARWG*

| **Value** | **Characterised by** |
|---|---|
| Natural character | Outstanding landscapes, absence of marine farming |
| Ecological | Significant marine sites, benthic habitat, mammals, seabirds, conservation land |
| Social | Landscape, amenity, public access, heritage, settlement areas |

| Value | Characterised by |
|---|---|
| Economic | Production, employment, processing facilities, farm-tourism, commercial fishing |
| Navigation | Safe navigation, safe anchoring, public access |
| Iwi | Areas of cultural or spiritual significance, archaeological sites, customary commercial sites, regional agreements |

# Marlborough Environment Plan Marine Farming provisions: Topics and Options

June 2018

| | Topic | Options/Discussion | Pros and cons | Drafting examples | Recommendations |
|---|---|---|---|---|---|
| 1. | Location of marine farming provisions | Policy in Coastal Env chapter 13 | This is where it was in the draft MEP before it was removed.<br>Some provisions in Chapter 13 may need amending anyway e.g. Objective 13.1. | | Include marine farming provisions into Chapter 13. |
| 2. | | Stand-alone marine farming policy chapter '13A' | Would need to exclude marine farming from Chapter 13 (to avoid double ups and uncertainty about which policies apply) and as a consequence repeat much of the policy framework in a new chapter. | | |
| 3. | Clear definition of what the marine farming rules apply to. | Provisions have been developed with mussel farms in mind. Could also apply to other bivalves, such as oysters, and other species such as seaweed.<br>Different provisions would need to apply for farms where fin fish are grown and where feed is added. | | Waikato Regional Coastal Plan refers to *'conventional longline structures'.*<br><br>*The term 'conventional longline structures' refers to the use of existing longline structure technology and layout, and includes any future technological changes that do not substantially alter the concept of a longline layout (e.g. the use of single backbone lines and circular floats).*<br>*(Note to Rule 16.5.4).*<br><br>And excludes discharge of feed and pharmaceuticals from controlled activities – requires discretionary activity consent and only in Zone C.<br><br>And allows other types of farming (excluding fin fish and feeding) in zones as a discretionary activity (longlines are controlled activity) (Rule 16.5.5C). | What is an appropriate definition for the mussel type farming we have been discussing?<br>Inter-tidal oyster farming rack structures – are these included in framework similarly to mussels?<br><br>Framework discussed below only applies to bivalves.<br><br>Provide specific provisions for marine farms where feed is added (fin fish) with discretionary activity status and specific policy to guide decision makers, including on addition of feed and pharmaceuticals. |
| 4. | Marine farming issue statement | Two issue statements in draft MEP provisions: | No specific discussion at MARWG meetings about issues statements. | Tasman Resource Management Plan has combined benefits/effects issue statement: | Combined issue statement: |

| | Topic | Options/Discussion | Pros and cons | Drafting examples | Recommendations |
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| | | Recognising the benefits that Marlborough's marine farming industry contributes to community economic, cultural and social wellbeing.<br><br>Marine farming activities may have adverse effects on other processes, values and uses of the coastal environment. | At first glance these seem to cover off both sides of the issues. | *How to provide opportunity to achieve social and economic benefits from aquaculture, while maintaining, enhancing or protecting natural character, landscape, ecological, public access, recreational and amenity values, and the values important to the tangata whenua iwi, while avoiding, remedying or mitigating adverse effects.*<br><br>Waikato Regional Coastal Plan has combined benefits/effects issue statement:<br>*Marine farming is recognised as being an important industry within the Waikato Region, contributing social and economic benefits to the local, regional, and national economy. However, because marine farming occupies coastal space, it has the potential to conflict with a range of other uses and values. If not managed in a sustainable way, marine farming development may have adverse environmental effects, including cumulative effects, on the coastal environment.* | Marlborough's marine farming industry contributes to community economic, cultural and social wellbeing. However, it has the potential to have adverse effects, including cumulative adverse effects, on other processes, values and uses of the coastal environment if not managed well. |
| 5. | RPS | | | | |
| 6. | General marine farm specific RPS objectives | There is currently no objective in the MEP relating to marine farming benefits, or marine farming generally. | If there are no provisions on the benefits of marine farming, there is nothing to direct decision makers to consider economic benefits. However, if most farming is controlled or restricted discretionary, then benefit provisions will not be used in most cases unless benefits are explicitly put in as matters of discretion or control within a rule.<br><br>If a benefits policy is too vague it may be used to justify plan change applications in prohibited overlay – | From draft MEP:<br>*A sustainable marine farming industry that contributes to the economic, social, and cultural wellbeing of Marlborough while protecting and maintaining the natural and human use values of Marlborough's coastal environment.*<br><br>From draft MEP:<br>*Marine farms are operated sustainably and kept in good order.*<br><br>Waikato Regional Coastal Plan objective*:*<br>*Marine farming developed in an efficient and sustainable manner which avoids adverse* | Suggested marine farm benefits objective for the RPS:<br>A sustainable marine farming industry that contributes to the economic, social and cultural wellbeing of Marlborough while protecting and maintaining the values of Marlborough's coastal environment. |

| | Topic | Options/Discussion | Pros and cons | Drafting examples | Recommendations |
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| | | | which may detract from an otherwise strong policy framework. | *effects on the coastal environment as far as practicable.*<br><br>Auckland Regional Coastal Plan objective: *Established aquaculture activities are provided for and are not compromised by other uses or by activities that degrade water quality.* | |
| 7. | Objectives and policies to set out framework in plan. | Explains and sets up framework in plan. | | | For the purpose of managing aquaculture:<br>a) the coastal marine area is divided into coastal management units (CMU)<br>b) The natural and human use values of the CMA, each CMU and AMA are identified in Values Report 2018<br>c) Aquaculture management areas (AMA) are identified in accordance with Policies x and y where aquaculture is appropriate.<br>d) Other than in the open coastal CMU, aquaculture is not appropriate outside an AMA.<br>e) The allocation of space with AMA is managed using the authorisations process set out in Part 7A of the RMA, guided by Policy xxx (allocation)<br>f) Existing aquaculture is provided for at its existing scale as near as possible to the current location within AMA's.<br>g) Where it is necessary to relocate existing aquaculture to manage adverse effects on values, the equivalent space in an AMA in another location is provided. |
| 8. | Objectives and policies at RPS level to guide plan change decisions if private plan changes for new AMA's are received. | No marine farm specific RPS policy, leave future plan change decisions to be decided on a case by case assessment against RPS values policies and NZCPS and RMA. | Low level of certainty for both community and industry. | | Example RPS Policy:<br>Within inshore CMU's establish AMA's to provide for existing marine farms. AMA's will generally be located:<br>a) In the coastal ribbon between 100 and 300 metres from mean low water springs in order to protect natural and human use values of the coastal marine area of the Marlborough Sounds; |
| 9. | | Provide some policy to reflect desired framework, e.g.<br>- avoid aquaculture in Queen Charlotte Sound, | Higher level of certainty, low flexibility. Reflects work of MAWRG. | Generic effects on values are well covered by existing MEP objectives and policies.<br><br>Draft MEP policy : | |

| | Topic | Options/Discussion | Pros and cons | Drafting examples | Recommendations |
|---|---|---|---|---|---|
| | | - only provide for new aquaculture space if a proper assessment of effects (including cumulative effects) shows an acceptable impact on identified values,<br>- utilise existing space first before creating new space,<br>- allow moving of AMA if it will get better outcomes. | Policy would need to be future focussed, not just describe existing framework. Must identify when/if a new AMA may be appropriate. | *Policy 13.20.10 - In order to protect natural and human use values of the coastal marine area of the Marlborough Sounds, the coastal ribbon between 100 metres from mean low water springs and 300 metres from mean low water springs is the appropriate location for marine farms.*<br><br>Draft MEP policy identified the following issues to be considered when deciding if marine farm is appropriate:<br>*(e) where a comprehensive assessment of the seafloor beneath the marine farm and its immediate environs has not been documented, the extent to which:*<br>*(i) areas mapped as having significant marine biodiversity value within 20 metres of the marine farm may be adversely affected by the continued operation of the marine farm;*<br>*(ii) there are reef habitats, cobble habitats or algae beds that may be at risk from the continued operation of the marine farm;*<br>*(f) the navigational risks associated with the marine farm, including:*<br>*(i) impacts on small craft navigation;*<br>*(ii) the adequacy of compliance with previous navigational requirements for the marine farm; and*<br>*(iii) the extent and nature of complaints on navigational matters received by the Council about the marine farm;*<br>*(g) where a discharge of feed proposed as part of the marine farm operation, then the policies 13.20.17 and 13.20.18 also apply;* | b) Away from headlands, known reefs and other valued marine benthic habitats in order to protect the biodiversity values of those habitats;<br>c) Away from jetties, publicly accessible beaches and safe and accessible mooring and anchoring sites in order to protect the recreational amenity values of the Marlborough Sounds;<br>d) Outside areas identified as having high or outstanding natural character values, and outside areas identified as outstanding natural landscapes, in order to protect the values and characteristics of those areas;<br>e) Outside areas known to provide core or seasonal feeding habitat for threatened species, including NZ King Shag and dolphins [species names and additional species?];<br><br>Suggested RPS Policy 2:<br>Additional AMA's (AMA's that are not to provide for marine farms existing at the time of notification of this variation) are not appropriate in:<br>a) Queen Charlotte Sound to protect the high recreational and scenic amenity values [any other values need naming?] present in that area.<br>b) Areas identified as high or outstanding natural character;<br>c) Areas identified as outstanding natural landscapes<br>d) Significant ecological areas.<br><br>Suggested RPS Policy 3:<br>*Additional AMA's may only be provided for when:*<br>*(a) the assessment required by Policy X (adaptive management) demonstrates that additional marine farms can be provided for within* |

| | Topic | Options/Discussion | Pros and cons | Drafting examples | Recommendations |
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| | | | | *(h) whether public access for recreational opportunities near the marine farm is or has been significantly affected by the presence of the marine farm;*<br>*(i) for marine and terrestrial natural character and landscape, the nature of the existing environment in which the marine farm has been operating and whether the marine farm is likely to have an adverse effect on this environment in the future; and*<br>(j) *the effects on amenity values in relation to lighting and noise arising from the operation of the marine farm.*<br><br>Policy to direct marine farms to AMA's from the Tasman Resource Management Plan:<br><br>*To enable the AMAs to be used as discrete locations where aquaculture may occur in a way that adequately manages adverse effects on… (22.1.3.2)*<br><br>*To prohibit aquaculture activities outside the locations identified in policies… (22.1.3.3)*<br><br>*To promote efficient utilisation of the AMAs for aquaculture activities... (22.1.3.7)*<br><br>Draft MEP Policy:<br>*Areas of Marlborough's coastal marine area where no application for marine farming can be made are identified on the Prohibited Marine Farming Overlay. The prohibition is applied to:*<br>*(a) protect areas of the coastal environment where ecological, iwi, heritage, landscape, natural character, open space, scenic or* | *Marlborough Sounds generally, and a specific CMU in particular, without contributing to cumulative adverse effects on water column and benthic indicators of ecological; and*<br>*(b) An assessment of the seafloor beneath a proposed AMA and its immediate environs has been completed which shows that there are no*<br>*(i) areas mapped as having significant marine biodiversity value within 20 metres of the marine farm that may be adversely affected by the operation of a marine farm;*<br>*(ii) there are no reef habitats, cobble habitats or algae beds that may be adversely affected by the operation of the marine farm;*<br>*(c) the location of an AMA and subsequent marine farm and marine farm activities will avoid significant adverse effects and avoid, remedy or mitigate other more than minor adverse effects on the natural and human use values of the coastal environment, including:*<br>*(i) popular and safe navigation routes and anchorages*<br>*(ii) public access for recreational opportunities near the proposed AMA;*<br><br>*The identification of natural and human use values will be guided by the MEP and the Values Report 2018.*<br>(d) *there will be more than minor adverse effects on amenity values including visual effects and effects from lighting and noise arising from the operation of the subsequent marine farm.* |

| | Topic | Options/Discussion | Pros and cons | Drafting examples | Recommendations |
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| | | | | *amenity values are significant; and*<br>*(b) avoid the occurrence of conflicts with other activities in the coastal environment including recreational, residential and navigational activities.*<br><br>Waikato Regional Coastal Plan:<br>*Ensure marine farms are located, constructed, and maintained in a way which does not compromise safe recreation and navigation (Policy 6.1.2).* | |
| 10. | Adaptive management – for existing farms | Specify monitoring programme and trigger points for review of plan if monitoring shows specific effects – as recommended by TAG. | | Waikato Regional Coastal Plan monitoring method:<br>*Environment Waikato, in conjunction with marine farm applicants and farmers, will gather further information, including base-line data, on marine farming in the Region and its environmental effects (including cumulative effects), to support further policy development and resource consent decision making in relation to marine farm development. This information will also be used to monitor the sustainability of the marine farms within the Firth of Thames. This information will include, but will not be limited to, the effects on natural coastal processes (e.g. currents, hydrodynamic regimes, sediment transport processes and nutrient cycling processes), natural character, benthic communities, marine ecology, habitats of native flora and fauna and coastal water quality, and will be relevant not only to the marine farm site, but also to the potential impacts on the wider geographical area. (method 17.5.4)* | Include adaptive management policy in RPS Policy to set out required monitoring and trigger points when the plan will be reviewed, as suggested by TAG. |
| 11. | Objectives and policies - regional Plan/coastal Plan level | | | | |
| 12. | Priority for existing aquaculture | Policy to guide how space will be allocated, giving priority to existing | Will give a level of certainty for existing and future users about | | Example of priority policy for Regional Plan, Coastal Plan Policy : |

| | Topic | Options/Discussion | Pros and cons | Drafting examples | Recommendations |
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| | | farms, and when additional space may be allocated. | pattern of allocation preferred by council, to be used in making allocation decisions, either by rule or by authorisations, as discussed below. | | Allocating space in AMA's to existing marine farms first before making space available for new or extended marine farms.<br>Making space available in AMA's for new marine farms or to extensions of existing marine farms only when:<br>a) space previously used for an existing marine farm becomes available because the resource consent for an existing marine farm lapses or expires and no new application for the existing space is made by the existing consent holder; or<br>b) monitoring in accordance with Policy X (adaptive management) shows that additional marine farming activities can be undertaken within an AMA without having significant adverse effects on the Values of the Marlborough Sounds. |
| 13. | Benefits of aquaculture for discretionary activities | A regional/coastal plan level policy to guide decision makers on how to take into account the benefits of aquaculture when considering applications where they have discretion to consider benefits. | May or may not be useful depending on the final activity status for marine farms. May be most useful for discretionary activities for example in open coastal water. | Draft MEP:<br>*Policy 13.20.9 – When considering the benefits of the proposed marine farm or extension to an existing marine farm, take into account social, cultural and economic benefits, including:*<br>*(a) local and regional employment opportunities;*<br>*(b) opportunities for iwi development and/or for iwi to enhance kaimoana stocks for customary purposes;*<br>*(c) research and training opportunities;*<br>*(d) contribution to the marine farming industry as a whole in Marlborough; and*<br>*(e) opportunities to complement or supplement natural fish and shellfish stocks.*<br><br>Bay of Plenty Regional Coastal Environment Plan policy: | Suggested regional plan/coastal plan policy :<br>When considering the benefits of the proposed marine farm or extension to an existing marine farm, take into account social, cultural and economic benefits, including:<br>(a) local and regional employment opportunities;<br>(b) opportunities for iwi development and/or for iwi to enhance kaimoana stocks for customary purposes;<br>(c) research and training opportunities;<br>(d) contribution to the marine farming industry as a whole in Marlborough; and<br>(e) opportunities to complement or supplement natural fish and shellfish stocks. |

| | Topic | Options/Discussion | Pros and cons | Drafting examples | Recommendations |
|---|---|---|---|---|---|
| | | | | *When considering aquaculture proposals, the potential benefits to be taken into account include, but are not limited to:*<br>*(a) Local employment opportunities;*<br>*(b) Opportunities for enhancing Māori development, particularly in areas where alternative opportunities are limited;*<br>*(c) Research and training opportunities – which would grow the community's knowledge base and up skill the labour force;*<br>*(d) Opportunities to supplement or complement natural fish and shellfish stocks; and*<br>*(e) The contribution of the proposal to primary and secondary industries and the overall regional and national economy.* | |
| 14. | Removal of unused structures when aquaculture moved to new AMA | Require old structures to be removed when farm moved. Consider a possible exception for screw anchors, as discussed below.<br><br>Policy to guide whether structures can remain or must go following relocation of a farm. For example: Screw anchors can remain, provided they are carefully cut off at sea floor level. Block anchors should be reused as first preference. They may remain if it is impractical to move them and they won't be an impediment to navigation or safe anchoring etc. | | Draft MEP:<br>*Policy 13.20.21 – Consent holders for marine farms involving structures in the coastal marine area will be required to remove the structures from the site:*<br>*(a) on expiry of the coastal permit, unless a new coastal permit is granted to allow marine farming to continue on the site; or*<br>*(b) if marine farming activity ceases on the site.* | Suggested regional plan/coastal plan policy – removal of structures:<br>Consent holders for marine farms involving structures in the coastal marine area will be required to remove the structures from the site:<br>(a) on expiry or surrender of the coastal permit, unless a new coastal permit is granted to allow marine farming to continue on that site; or<br>(b) if marine farming activity ceases on the site, whether or not the coastal permit has expired or been surrendered.<br>An exception may be made to the requirement to remove all structures for anchoring structures in the following circumstances:<br>(c) the anchoring structure is a screw anchor, and the screw anchor is cut off at sea floor level and the part of the screw anchor protruding from the seafloor is removed; or<br>(d) the anchoring structure is a block anchor, and the block anchor cannot practicably be removed or reused and the remaining block |

| | Topic | Options/Discussion | Pros and cons | Drafting examples | Recommendations |
|---|---|---|---|---|---|
| | | | | | anchor will not be an impediment to navigation or safe anchoring. |
| 15. | Testing viability of structures in open coastal CMU | Provide policy support for structures (not farms) to experiment with viability in open coastal water. | | | Regional plan/coastal plan policy – Experimental Structures<br>Provide for structures for short terms (2-5 years) within the open coastal CMU for research and to test the viability of structures for marine farming (but not for marine farming production purposes). |
| 16. | Marine farms in open coastal CMU | Marine farms will likely be discretionary in open coastal water CMU. In addition to the general policy on marine farms, and on coastal values, we may need policy to guide decision makers as to when a farm is appropriate | Should only consider this policy if there is something to add to the other policy in the plan, this should not repeat or overlap with other policy. | | Regional plan/coastal plan policy – Marine farms in Open coastal CMU<br>Marine farms within the open coastal CMU may be considered appropriate when: *What are the relevant considerations for a policy of this type?* |
| 17. | Adaptive management – for new farms | All new farms (including in open coastal CMU) to have monitoring and adaptive management conditions, to be granted on small scale, then upscaled as monitoring shows adverse effects are within acceptable levels. | | Draft MEP:<br>*Policy 13.20.19 – Marine farms may be required to be developed, monitored and managed in a staged and/or adaptive manner, where:*<br>*(a) the potential adverse effects cannot be adequately predicted;*<br>*(b) new species are farmed, or new technology is used; or*<br>*(c) the location, scale or type of marine farm warrants a precautionary approach.*<br><br>From Tasman Resource Management Plan:<br>*To adopt a cautious and adaptive approach to aquaculture in subzones… limiting the extent of development until the significance of any adverse ecological effects of aquaculture is better known (22.1.3.12).*<br><br>*To allow successive stages of mussel farming development when Council is satisfied that the risk of adverse ecological effects is manageable* (22.1.3.13). | Example regional plan/coastal plan policy – Adaptive Management for new marine farms:<br>1) Marine farms may be required to be developed, monitored, and managed in a staged or adaptive manner, where:<br>(d) the potential adverse effects cannot be adequately predicted;<br>(e) the species farmed or technology used is new for the Marlborough Sounds, or for that location in particular; or<br>(f) the location, scale or type of marine farm warrants a precautionary approach<br>(g) the marine farm is in a location not extensively farmed in the past.<br>2) Staged or adaptive management will include:<br>The first stage of each resource consent may not be exercised until a baseline survey is complete;<br>(h) A first stage of development may be authorised of up to 50% of the space or inputs of the total farm area and inputs granted. |

| | Topic | Options/Discussion | Pros and cons | Drafting examples | Recommendations |
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| | | | | *To manage aquaculture involving filter feeding bivalves (excluding mussels) and/or other extractive species in …, by requiring that any development be staged through:*<br>*(a) authorising a first stage of development, with requirements to monitor and report on environmental effects resulting from farming the space at the full intensity of development allowed for that stage;*<br>*(b) allowing successive stages of development under the same consent, when Council is satisfied that the risk of adverse ecological effects is managed in accordance with policy 22.1.3.6. (22.1.3.14)*<br><br>From Waikato Regional Coastal Plan:<br>*Where assessment shows that the adverse effects of an authorised marine farm are not significant, provide for small extensions that:*<br>*a) avoid adverse effects on areas of ecological significance;*<br>*b) maintain access to the shoreline from the coastal marine area;*<br>*c) maintain navigational safety and recreational values;*<br>*d) maintain natural character and amenity values. (6.1.1C)*<br><br>From Waikato Regional Coastal Plan:<br>*Resource consents for marine farming that involve fed and multi-trophic aquaculture in the Coromandel marine farming zone will include conditions requiring a staged development of the marine farm. Each resource consent will be divided into a series of stages.*<br>*The staging of each consent will be relative to the limit specified in Policy 6.1.1B and proportional to the allocation provided to the applicant under Method 17.5.2A. Stage 1* | Subsequent stages may be authorised for 75% and 100% subject to compliance with the monitoring, reporting, analysis, and adverse effects criteria set out below.<br><br>(i) Each stage will require monitoring and reporting on environmental effects resulting from farming the space for a minimum of two production cycle at the full intensity of development allowed for that stage. The monitoring data from each stage will be reported and analysed.<br><br>(j) If the reported and analysed data shows:<br>i. there are no significant adverse effects, including cumulative effects, and<br>ii. the thresholds in Policy (adaptive management monitoring) are not exceeded, and<br>iii. the resource consent conditions have all been complied with,<br>then subsequent stages of the marine farm development may proceed. |

| | Topic | Options/Discussion | Pros and cons | Drafting examples | Recommendations |
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| | | | | *will allow discharge of up to 50% of the nitrogen and feed authorised by the discharge consent issued under Rule 16.5.5E. Stage 2 will allow discharge of up to 75% of the nitrogen and feed authorised by the consent. Stage 3 will allow discharge of up to 100% of the nitrogen and feed authorised by the consent.*<br>*The first stage of each resource consent may not be exercised until a baseline survey is complete. Development to the next stage may not occur until permission is granted to do so by the Waikato Regional Council. The Council will not grant that permission until:*<br>*1. monitoring of a minimum of two production cycles at full development of that stage is complete;*<br>*2. the monitoring data has been analysed in comparison to predetermined thresholds;*<br>*3. there are no significant adverse effects occurring including cumulative effects; and*<br>*4. compliance against resource consent conditions held for the marine farming activity has been assessed* (method 16.5.8). | |
| 18. | Monitoring policy | Set minimum monitoring requirements for marine farms in policy and state it should be applied to all new consents. | The RPS level adaptive management monitoring policy may cover all that is required for existing marine farms. If there are additional items that are more appropriate to monitor at the individual farm, then this should be included in the policy in the regional plan. | From Tasman Resource Management Plan:<br>*To provide for the monitoring of actual and potential effects of aquaculture in subzones ….on species, habitats, and ecological processes within Tasman Bay/Te Tai o Aorere and Golden Bay/Mohua so that any individual and cumulative ecological effects are better understood. (22.1.3.19)* | Are there any additional monitoring requirements for marine farms in addition to the cumulative effects adaptive management monitoring requirements discussed above? |
| 19. | Precaution | Provide a precautionary approach to new marine farms. Limit development of new farms until effects are well understood. | Where adverse effects are unknown but potentially significant, and in relation to climate change effects, a precautionary approach should be adopted (NZCPS Pol 3). | Auckland unitary plan:<br>*Apply a precautionary approach, such as adaptive management, when assessing applications for aquaculture activities that propose using species, techniques or locations not previously used for aquaculture and where the adverse effects* | Marine farms outside an AMA are inappropriate and are prohibited.<br>Policy in the RPS will guide creation of new AMA's when good information is available, and effects understood. |

| | Topic | Options/Discussion | Pros and cons | Drafting examples | Recommendations |
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| | | | | *are uncertain, unknown or little understood but are potentially significant.* | |
| 20. | Consent term | Rely on the general guidance on maximum term for structures and occupation in MEP of 20 years (Policy 13.2.3). | 20 years is the minimum term for marine farming in RMA. Marine farmers submitted against this policy in MEP asking for longer term Certainty for marine farmers (as well as community) was a guiding principle of the aquaculture review.<br><br>Could be appropriate to grant longer term if adaptive management policies allow for triggering a review of consent if monitoring shows cumulative adverse effect in future. | | Policy option 1 for regional plan/coastal plan – Consent term<br>Resource consents for marine farms shall generally be granted for the terms set out below:<br>a) For resource consents for existing marine farms in AMA's a term of 30 years is generally appropriate,<br>b) For resource consents for new farms in an AMA, a term of 20 years is generally appropriate,<br>c) For resource consents for new farms in the open coastal CMU, a term of 20 years is generally appropriate,<br>d) For resource consents for marine farming structures for the purpose of experimentally testing new structures in the open coastal CMU, a term of 2 years is generally appropriate. |
| 21. | | Set specific policy for marine farms regarding term. | | | |
| 22. | | Special clause for experimental structures in open coastal CMU to restrict length of term and length of lapse period - short term i.e. 2 years | Ensures enough time for testing, but reduces the risk experimental structure consent being used to justify visual effects of new farm as part of existing environment. | | Suggested policy specifically for open coastal CMU:<br>For resource consents for marine farming structures for the purpose of experimentally testing new structures in the open coastal CMU, a term of 2 years is generally appropriate. |
| 23. | | Bay by bay expiry dates | Allows all farms in bay to be considered at the same time, allowing for better timing of investigations and consideration of cumulative effects.<br>May mean slightly shorter, or longer consent terms for different farms if they are consented at different times. | | Policy option 2: policy on Common CMU expiry dates:<br>Resource consent durations for applications required for marine farming of the RMA will generally be set to the next common CMU expiry date listed Table X. The dates listed Table X show the initial expiry and review dates for consents within that CMU. Future dates for expiry of consents within that catchment must occur again every 20 years thereafter. Future dates for review |

<table>
<tr><th></th><th>Topic</th><th>Options/Discussion</th><th>Pros and cons</th><th>Drafting examples</th><th>Recommendations</th></tr>
<tr><td></td><td></td><td></td><td></td><td></td><td>of consents within that catchment must occur again every 10 years thereafter.<table><tr><td>CMU</td><td>Review date</td><td>Expiry date</td></tr><tr><td>A Bay</td><td>2030</td><td>2040</td></tr><tr><td>B Bay</td><td>2032</td><td>2042</td></tr><tr><td>etc</td><td></td><td></td></tr></table></td></tr>
<tr><td>24.</td><td rowspan="2">Review of consents</td><td>If monitoring shows cumulative adverse effect consents may need to be reviewed to reduce impact. Could rely on plan change process to reduce allowable aquaculture and then use s128 to review consents.</td><td>Will apply equally to all consents. Plan change will take some time, and review can't be done until plan is operative.<br>Provides for thorough inquiry into monitoring and appropriate collective response.</td><td></td><td rowspan="2">Include policy on review of consents to guide consent conditions – what circumstances should trigger a review of consent conditions?</td></tr>
<tr><td>25.</td><td>Alternatively, could review consents without a plan change – could have policy to guide review clauses on consents so this is possible.</td><td>Would only allow review of consents granted after 2019 (others may not have review clause that can be used). Older consents would continue – may create an inequity between different farms. Would not address problems quickly. Quicker than waiting for plan change, for the consents that are able to be reviewed in this way.</td><td>From Tasman Resource Management Plan, 22.1.3.21:<br>"To provide for a formal review mechanism within consents issued for aquaculture in subzones …, so that feedback and learning from monitoring can be utilised to review the appropriateness of conditions of consent."</td></tr>
<tr><td>26.</td><td>Removal of rubbish</td><td>Not discussed at MARWG, but common condition on existing marine farming consents.<br>Alternatively, could remain silent on topic and could be considered on case by case basis during consents.</td><td></td><td>From Draft MEP:<br>Policy 13.20.22 – Marine farm owners/occupiers shall monitor for and collect marine farming related debris and litter from their marine farming operation. Marine farmers will also be encouraged to monitor and collect marine farming related debris and litter from the adjoining shoreline and surrounding coastal marine area for the</td><td>Suggested regional plan/coastal plan policy – Removal of rubbish:<br>Marine farm owners/occupiers shall monitor for and collect marine farming related debris and litter from their marine farming operation.<br>Marine farmers will also be encouraged to monitor and collect marine farming related debris and litter from the adjoining shoreline and</td></tr>
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| | | | | *duration of any coastal permit issued for a marine farm.* | surrounding coastal marine area for the duration of any coastal permit issued for a marine farm. |
| 27. | Enable change to layout | Where change in layout is required for operational purposes, but same length and depth of lines. | | Draft MEP:<br>*Policy 13.20.24 – Enable a change to the layout of structures on an established marine farm using long-line culture as of 9 June 2016, where there is no change to the area occupied by structures.*<br><br>Auckland Regional Coastal Plan:<br>*Provide for minor extension or realignment of established aquaculture activities where:*<br>*(a) this improves their efficient use;*<br>*(b) the established marine farm is fully developed before a minor extension is sought;*<br>*(c) adverse effects on other values and uses are avoided, remedied or mitigated;*<br>*(d) adverse effect on those characteristics and qualities that contribute to the identified values set out below are avoided (F2.15.3)* | Suggested regional plan/coastal plan policy – Change in layout:<br>Enable a change to the layout of structures on an established marine farm within an AMA, using long-line culture, where there is no change to the total area occupied by structures, and there is no increase in the total length or depth of lines. |
| 28. | Rules | | | | |
| 29. | Rules for iwi granting space | | | The Waikato Regional Coastal Plan identifies Coromandel marine farming zone as having 20% set aside for settlement areas. Rest of zone available by tender, but only after the 20% has been declared aquaculture settlement area. (method 17.5.2A) | *Technically we are creating new space - does the plan need to address this issue?* |
| 30. | Method to ensure that existing marine farms have priority over adjacent space and can't be 'gazumped' by another applicant. | Plan specifies which existing marine farmers can apply for which space (e.g. a list of consent numbers associated with particular AMA's). | A lot of certainty for existing users. Not a lot of flexibility – may lead to lack of efficiency of framework if space allocated to a particular user and not taken up leaving space unused. Could be time limited to provide for other new marine farm applications to be made after a certain period, providing for future flexibility. | | Either of these methods could be used with controlled activity status for existing farms who have space allocated by the plan schedule, or through the authorisations process.<br><br>*Would plan schedule or authorisations outside the plan be preferred?*<br>*Would a staging of offering authorisations address the risk and cost of moving a lot of farms at once?* |

| | Topic | Options/Discussion | Pros and cons | Drafting examples | Recommendations |
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| | | | Will require lengthy schedules or appendices to the plan.<br><br>Requires allocation decisions to be made at plan making stage, potentially increasing time and complexity of hearings.<br><br>Farms would move over time as their existing resource consents expire. May mean adjacent farms move at different times, could lead to 'untidy' occupation pattern with different farms at different distances from shore. May be perceived as farms taking up more space overall for period of time until all farms move. | | |
| 31. | | Use an 'allocation of authorisation' process as set out in RMA (not necessarily with associated tender), giving preference to existing and adjacent marine farms. | Can address competing interests for space. Allocation of space would happen outside the plan making process (although policy in plan could guide that allocation) keeping the allocation debate outside the plan making process, short hearings process Authorisations are offered through formal process and prior to resource consent applications being made.<br><br>RMA allows authorisations to be allocated by method other than tendering – in this case space could be allocated on a 'grandparenting' basis for existing farms initially. Space unallocated via grandparenting could be offered via another process (e.g. tendering). | | |

| | Topic | Options/Discussion | Pros and cons | Drafting examples | Recommendations |
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| | | | The authorisations process adds an extra step in the process with costs to both council and marine farmers.<br><br>Authorisations expire after 2 years – within which consent must be applied for. Consents must be given effect to within 3 years. This process would require farms to move within 5 years of authorisations being offered. Potentially would mean early movement of farms prior to expiry of current consent. May not allow optimum economic use of existing consents.<br>Offering of authorisations could be staged bay by bay stagger moving and spread costs of moving over time for those with multiple marine farm sites.<br><br>Would mean farms move within predictable 5 year period. Reduces time it takes to reach 'optimum' occupation pattern. | | |
| 32. | | Use rules to control who can apply for particular space, e.g. a condition that space can only be applied for by existing adjacent marine farm until certain date. | Allows for certainty for existing users for a period of time. Less certainty after time period.<br><br>Can be used to encourage farms to move to new more desirable location, away from existing consented space (would need condition of rule to be surrendering of consent for existing space).<br><br>Requires complex set of lengthy rules to address each allocation situation. Easy to address for small seaward shifts of farms adjacent to | | |

| | Topic | Options/Discussion | Pros and cons | Drafting examples | Recommendations |
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| | | | an AMA, more complex and difficult for farms moving from current locations. Medium-high risk of gazumping of existing users by competing applications. (low risk of gazumping for farms staying in existing location (s165ZH requires existing consent holder's application be processed before another application).<br><br>Could use s165F to require competing applications to be heard together, with policy to favour existing and adjacent marine farms relocating to new space. (although applications must still be decided in order they are received, so may not provide high level of certainty of outcome).<br><br>For non-adjacent farms moving to new space couldn't use controlled activity status as would need to retain discretion to turn down an application in the situation of competing applications. | | |
| 33. | Controlled activity rule for existing farms using any of the above methods of allocation. (noting that controlled may not be viable for farms moving to totally new location under allocation by rules option) | Controlled Activity for: | | Conditions for controlled activity in Tasman plan include:<br>- Ecological management plan is submitted.<br>- Sets total ha for all farms in any one subzone (cap on cumulative space)<br>- Must use longline and surface buoys<br>Control over:<br>- Ecological effects, biosecurity, monitoring and ecological management plans.<br>- Natural character<br>- Scale, location | Conditions to be eligible for controlled activity could include<br>Allocated space according to one of the options above<br>Same surface area<br>Same number of lines<br>Same length of lines?<br>Distance from adjacent farms?<br><br>Would need to control layout, design of structures to manage visual effects and visible for navigation. |

| | Topic | Options/Discussion | Pros and cons | Drafting examples | Recommendations |
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| | | | | - Treaty values<br>- Navigation<br><br>Conditions in Waikato plan (16.5.4) include max size (12.5ha) and minimum accessway between farms (75m). Also require management plan which includes disease management, and marine mammal and bird interaction plan, potential for genetic effects on wild populations. Bond is required to cover costs of removal of structure in event of default by owner. | Could also include control over removal of rubbish, and wilding pines as landscape mitigation.<br>*Anything else that needs to be controlled?* |
| 34. | Very detailed standards in rule vs general matters of control and detail addressed in conditions of consent. | | More similar to a permitted activity than a consent required activity.<br><br>High level of certainty for particular matters, low flexibility for innovative solutions unless activities goes to discretionary activity.<br><br>Similar level of certainty could be gained with directive policy on outcome, with more flexibility for method. | Conditions in Waikato Regional Coastal Plan controlled activity (16.5.4) are very detailed in manner of permitted activity standard (number position of buoys, markers, maintenance, commencement, and lapse terms).<br><br>Policy in Bay of Plenty Coastal Environment Plan sets out what needs to be provided with application:<br>*Aquaculture applications shall contain a draft management plan*<br>*that includes, but is not limited to, the following:*<br>*A design plan for the layout and (a) structure of the farm;*<br>*(b) A maintenance programme for all structures associated with*<br>*the farm, together with a system to record maintenance;*<br>*(c) An environmental effects monitoring programme that*<br>*corresponds to the scale of the potential effects of the*<br>*proposed aquaculture activity;*<br>*(d) A navigation lighting plan and maintenance programme, with* | |

| | Topic | Options/Discussion | Pros and cons | Drafting examples | Recommendations |
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| | | | | *approval in principle from the Bay of Plenty Harbourmaster;*<br>*(e) Details of landing facilities or other off-site facilities that form*<br>*part of the proposal; and*<br>*(f) A biosecurity monitoring plan.*<br>*(Policy AQ3)* | |
| 35. | Change of layout for existing farm. | Controlled everywhere | Would allow farms to change layout prior to moving into AMA which could exacerbate any effects of existing location. | | Recommended approach: Provide for changes in layout as a controlled activity within an AMA, and as a discretionary activity for existing farms outside AMA prior to moving. |
| 36. | | Controlled only in AMA, discretionary elsewhere. | Within AMA with similar conditions to establishment consent, would allow flexibility of layout, while still managing effects of concern. | | |
| 37. | A new marine farm (farm not existing), or an increase in area or lines of an existing farm, within an AMA.<br><br>Space could be available because not sought by existing users, consent not implemented or expires without renewal, or to fill in any 'gaps' between existing farms. | Make 'extra space' available after authorisation timeframe has passed (using one of the options above) as a consentable activity, without using an authorisations allocation process. | Competing applications can be made. Council can put on hold and hear competing applications at the same time.<br><br>Policy could give preference to existing marine farm. But still medium-high cost risk to existing users of new farms gaining adjacent space.<br>Could use in combination with a timeframe within which only existing user can apply for space to give certainty for a period of time to existing users. | Waikato Regional Coastal Plan limits extensions to:<br>- 1% or 10 ha<br>- Not been extended in past 5 years<br>- Extension area contiguous with existing area<br>- Requires baseline and ongoing survey | *Should we provide priority for existing marine farms when allocating 'extra' space?*<br><br>Allocation by authorisations allows council to control timing and ensure cumulative effects adequately addressed. |
| 38. | | Offer 'extra' space through an authorisation process. Tendering could be used. Priority could be used for existing farms seeking extensions over entirely new farms.<br><br>Tendering for space in AMA for new farms, i.e. where an existing farm does not seek new consent on expiry, or consent lapses. | Allows space to only be released when council is confident adverse effects can be adequately addressed, including cumulative effects. | | |

| | Topic | Options/Discussion | Pros and cons | Drafting examples | Recommendations |
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| | | Tendering for space in AMA not needed for existing farms, (extra space) after existing farms have had a chance to apply for extensions. | | | |
| 39. | Farms that don't comply with Controlled activity conditions | Restricted Discretionary | | This is Restricted Discretionary in Tasman Resource Management Plan, Discretionary if not using long lines. | |
| 40. | Structures (not farm) in open coastal CMU for testing viability. | Discretionary | Working group indicated desire to make it possible to test structures in the open coastal CMU, which would otherwise be prohibited in rest of CMA. | | Suggested approach: Make test structures a discretionary activity. Policy in plan to guide consent term as recommended above. |
| 41. | Marine farms outside AMA | Prohibited | Also prohibited in Aquaculture Exclusion Area in Tasman plan. (25.1.4.7)<br>See also options for moving lines to avoid reefs below. | | |
| 42. | Screw anchors left behind when farm or lines are moved. | Permitted | No cost for consent process.<br>Can only be subject to standard conditions listed in plan. | | Suggested approach: Permitted activity, provided they are not in sensitive ecological area and cut off at sea floor level |
| 43. | | Require consent | Cost to applicant of consent process.<br>Allows case by case assessment and tailored conditions. | | |
| 44. | Block anchors left behind when farm or lines are moved. | Permitted | No cost for consent process.<br>Can only be subject to standard conditions listed in plan. | | Suggested approach: Require a consent for block anchors left behind. Retain discretion over whether it will be an impediment to navigation or safe anchoring, or risk of washing up on shore. |
| 45. | | Require consent | Cost to applicant of consent process.<br>Allows case by case assessment and tailored conditions. | | |
| 46. | Older farm deemed pre RMA with no seabed survey (approx. 322 farms) found by later seabed survey to have reef habitat or other sensitive habitat under the farm. It would be ideal to move the lines above the reef to another location. | If extra available space in an AMA in the CMU the lines above the reef could be moved to another location (provided for as controlled activity in same CMU or restricted discretionary for a different CMU under rules above). If there is no extra available space in an AMA, then moving lines to another location would be prohibited. | | | |

| | Topic | Options/Discussion | Pros and cons | Drafting examples | Recommendations |
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| 47. | | Could rely on plan change to identify and zone new space as AMA to provide for affected farms. | This keeps the very clear and certain framework of the plan intact.<br>Plan changes take time so this may be an unattractive option for the marine farmer.<br>Does not allow flexibility in location for marine farms.<br>Will allow adverse effect on reef to continue as a controlled activity under current framework – worse environmental outcome than moving the farm. | | Suggested approach: Rely on plan change process to create and remove space in these circumstances. |
| 48. | | Make marine farms in these circumstances in otherwise 'prohibited area' a discretionary activity, if they are being moved from existing farm to avoid effects on reef. | Could be limited to existing farm of existing size. No increase in farm area, just change in location.<br>Provides flexibility to get a better environmental outcome than current situation.<br>Council would still need to do a plan change to remove that area above the reef from the AMA, so that another applicant doesn't apply for the space (would be at least a restricted discretionary activity under recommended framework above, so any application, could be declined, so risk is small).<br>Complicates plan framework and makes it less certain and clear that marine farms not desirable in areas outside AMA's. | | |

# Appendix 8: Ecological effects of removing inshore mussel lines

CAWTHRON
The power of science®

31 July 2017 ID:1734

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New Zealand

Dear Pere and Steve

**Ecological effects of removing inshore mussel lines: Where mussel farms are currently located 50 m from MLWS, will a 50 m movement of the farm seaward result in positive ecological effects relative to the current farm layout?**

Marlborough District Council has requested a cursory desktop assessment of the ecological effects of a proposed relocation of inshore mussel lines to beyond 100 m from the shore (mean low water springs). This is to address a request from the Council's Aquaculture Review Working Group (ARWG) on behalf of industry representatives.

Mussel farming can have a range of effects on the marine environment, and some effects are likely to be occurring in the mussel farms under consideration (those with lines between 50 m and 100 m from shore). The purpose of this advice letter is not to assess the extent to which these effects (either positive or negative) are occurring, rather, to assess the ways in which these effects might change with the movement of lines from inshore to the outer edge of farms.

An overview of the ecological effects of aquaculture (MPI 2013) identifies key components of the environment that may be considered in such an assessment. We employ this guidance, and Cawthron's institutional knowledge gained from monitoring of mussel farms in other areas of New Zealand, to identify the key components of the environment that may be affected by relocation of mussel lines. Effects on marine mammals and seabirds[1], wild fish, and biosecurity are expected to change little, or not at all, in the face of minor relocation of farming structures. Accordingly, our assessment below is limited to effects on the water column and seabed.

In general, our assessment assumes that that mussel farming intensity does not change, however if many mussel lines were relocated and mussel droppers were extended to take advantage of greater water depths, the implications of an overall increase in farming pressure may need to be considered.

[1] Under the assumption that moving inshore lines to the outer boundaries of farms does not collectively encroach into mid-bay habitats or important species areas (e.g. feeding habitats); particularly within smaller or more enclosed bays.

**Water column**

In the absence of an increase in mussel farming intensity, important effects on the water column are unlikely to occur. One possible consideration is that mussels in the outer part of the farm may experience faster current speeds[2], and it is conceivable that moving lines to the outer side of the farms could result in slightly higher grazing on seston by mussels. This effect is expected to be very minor, if it occurs at all. However, if an overall increase in farming pressure was to occur (see above) this effect may warrant further consideration. If the outer edge of the farms are exposed to greater current speeds, there will be greater potential for farm biodeposits (mussel faeces and pseudofaeces, crop, and fouling organisms) to be dispersed more widely (overall, this effect may be neutral or positive).

Removal of inshore lines could also lead to changes in current speeds in the near-shore environment. This could occur as a result of: (1) removal of lines that had previously restricted water movement, or (2) changes in the funnelling of water as it flows around the farm; this could cause either an increase or decrease in near-shore current speeds, depending on the hydrodynamics at the site. Changes to near-shore current speeds are particularly difficult to predict in the absence of site-specific hydrodynamic information. However, given that these effects likely to be minor, and to vary between sites, we do not consider that they would be an important factor in environmental change associated with line movement.

**Seabed**

Potential effects of mussel farming on the seabed include:

- Enrichment of the seabed by biodeposits
- Smothering of the seabed by biodeposits
- Provision of hard surfaces for settlement, and increased diversity in seabed structure via shell drop-off
- Shading of photosynthesising organisms
- Protection from disturbance (e.g. dredging and trawling).

Nearshore habitats are generally more diverse than areas further offshore. This is because both depth and exposure to wave action changes relatively quickly in the shallow sub-tidal, which is thus likely to comprise a variety of substrate types. Some habitats of special interest are found in deeper waters, however deep and gently sloping seabeds may be dominated by fine sediments. In the Marlborough Sounds, the inshore edges of near-shore mussel farms

[2] Along a relatively straight coastline, if the seabed is flat, it is difficult to predict how current speeds will change away from shore. However, if the seabed depth increases substantially from inshore to offshore, the offshore currents may be faster than nearshore currents. In the presence of headlands and complex coastlines, more detailed assessment is required to predict difference in current speeds.

are likely to be substantially shallower than the outer edges. Therefore, the comparison at hand is:

> *Are effects of mussel farming effects on shallower habitats likely to be worse than effects of mussel farming on deeper areas?*

**Depth differences between inshore and outer edges of farms.**

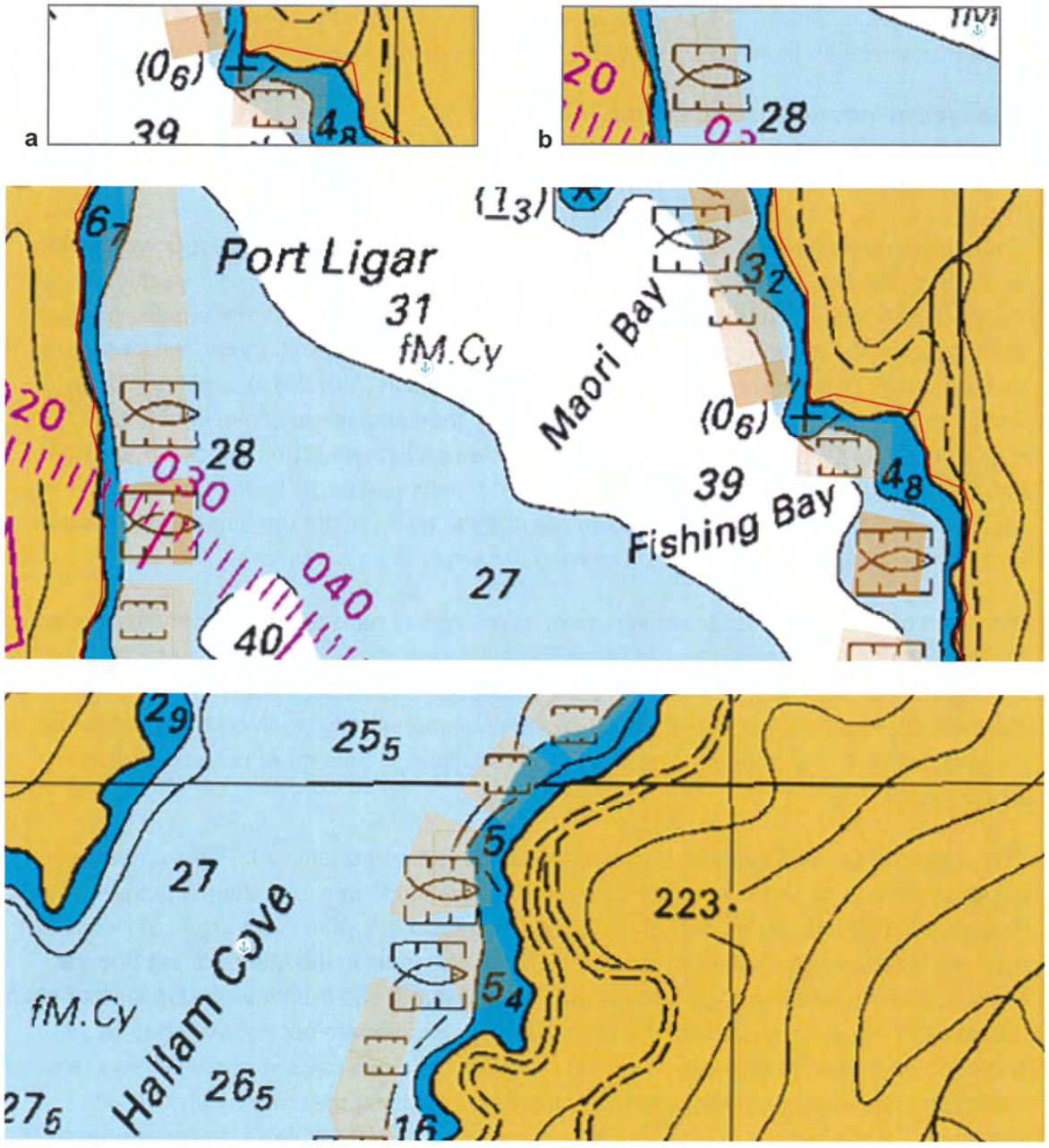



Figure 1. Examples of the location of near-shore mussel farms (orange-tinted blocks) in Marlborough; from 'Cruise Guide to the Marlborough Sounds' (http://www.cruiseguide.co.nz/maps/). Dark blue shading indicates areas shallower than 10 m below chart datum (~ lowest astronomical tide). Light blue shading indicates areas between 10 and 30 m below chart datum. = *approx*. 200 m.

Farms closer to the shore are likely to sit above much greater depth ranges than farms further from the coast, however this is not necessarily the case. The substantial variability existing in farm placement can be seen in information available from Marlborough District Council mapping resources (see Figure 1). For example, 50 m offshore from a very steep coast the seabed may be relatively flat (Figure 1a) while a farm over a moderate slope can sit over a seabed with a depth range from less than 10 m to greater than 30 m water depth (Figure 1b). Accordingly, if ecological effects change with depth, some farms will have much greater potential for line movement to have ecological implications than others.

**Changes in mussel farming effects with depth**

We consider each of the potential effects of mussel farming on the seabed in terms of the likelihood of the effect changing with depth.

*Enrichment* effects and s*mothering* effects may be less problematic in deeper waters for a number of reasons. Firstly, greater depth causes wider distribution of waste and other fallen material from farming structures. This will be more evident where current speeds are faster than those on the inshore-side of the farm. Communities in the soft, muddy sediments found in deeper waters are generally more tolerant of deposition (MPI 2013), and have been shown to return to control conditions more quickly than coarser, shallower habitats (Davidson 2014). However, some valuable species and biogenic (formed by organisms) habitat can also be found in deeper waters; e.g. brachiopod beds, hydroid trees and horse mussel beds. If such habitats or species are likely to be found on the outer edge of farms and within the depositional footprint, moving lines may have a negative effect.

*Provision of hard surfaces* for settlement of other organisms is a possible beneficial effect of mussel farming. Shell deposits add heterogeneity to the seabed, both on the surface and in the structure of sediments, as broken shell adds texture to seabed sediments and habitat. Seabed heterogeneity can have a positive effect on community biodiversity, and this may be more desirable in the deeper areas than in the shallows, where more heterogeneity may already exist.

The effects of *shading* by mussel farms have not been well-quantified. Photosynthesising organisms, such as seaweeds, are more likely to live in the shallows than in deeper waters, thus shading effects are more likely to be detrimental in the shallows. Large seaweeds are most abundant in the shallow subtidal of high current areas in the Marlborough Sounds. Seaweeds in the Marlborough Sounds may be much reduced from their historical distribution (Handley 2016), but the causes of any distribution changes are not known. They could, however, be related to changes in fishing pressure that have caused trophic effects (e.g. reduction in blue cod numbers potentially increasing grazing pressure by urchins on seaweeds), and changes in land use affecting water clarity throughout the inner Sounds. Regardless of the cause, any shading effect on seaweeds relating to inshore mussel lines is expected to be localised and minor.

Protection from *disturbance* (e.g., by bottom-contact fishing) can be a positive effect of mussel farming. However, inshore mussel lines are more likely to be in areas that have an

inherently lower risk of disturbance due to the shallower water depths and proximity to unsuitable substrata (e.g. cobbles, rocky reef). Protective effects may therefore be more beneficial on the outer edges of mussel farms.

It is apparent that there are some potential ecological advantages to moving mussel lines to deeper waters, provided the deeper waters do not harbour important species and habitats. However, we also note that disturbance during the removal of mussel farm mooring equipment has potential to have short-term negative effects on the surrounding seabed, which may lessen the environmental benefit of line-movement. These effects may include disturbance of the seabed, smothering of surrounding organisms, and destruction of species growing on the artificial habitat provided by mussel farm structures (e.g. hydroid trees have been observed growing on mooring blocks). It is not known whether species of special value would be included in the communities affected by removal of these structures. Any effects that occurred during the movement of mussel lines would, however, be expected to be quite localised and short term.

**Summary**

Ecological effects of moving mussel farms away from the shore are expected to be minor and mainly positive, assuming that: lines are not placed over sensitive habitats or community types (e.g. brachiopod beds, hydroid trees); and feeding habitats of marine mammals or seabirds are not likely to be encroached upon. Positive effects of line movement may take the form of:

- Enrichment and smothering effects being less localised
- Enrichment and smothering effects occurring in more resilient habitats (i.e., on deeper, soft sediments)
- Positive effects on environmental heterogeneity occurring on deeper, soft sediments
- Shallow areas suitable for seaweeds would experience less shading.

Positive changes are unlikely to occur at all farms, and in many cases effects are likely be subtle, and difficult to detect. Some negative effects could occur associated with the disturbance of the seabed during removal of inshore mussel lines, and establishment of new farming structure on the outer edge of the farms.

Changes are more likely to occur where there is a large depth range between the inner and outer area of the farm. Moreover, some farms installed prior to the Resource Management Act 1991 were not required to undertake ecological investigations and there is potential for older farms to have been placed over notable habitats, whereas an assessment of ecological effects is now required. These newer farms are therefore unlikely to be positioned over diverse habitat, or habitats of special value such as rocky reefs. Therefore, positive effects are less likely to result from moving mussel lines in farms established post-1991.

An assessment of the depth range at a given farm, and a simple ecological assessment could be considered to establish the value of moving lines on a case-by-case basis. An ecological assessment would consider:

- the difference in habitat type in and around the lines currently in the 50 – 100 m zone (i.e., that currently under mussel lines), and the outer edge of the farm
- the habitat diversity in the 50 – 100 m zone
- whether the habitat/seabed type in the 50 – 100 m zone type is well represented in nearby un-farmed areas.

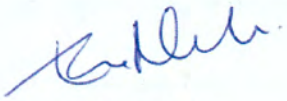
If large changes were to occur with respect to mussel crop (via longer droppers being installed) or substantial encroachment into mid-bay areas or special habitats (e.g. marine mammal or seabird habitat), further assessment of effects would be appropriate.

Finally, a programme of seabed monitoring of mussel farming areas in Marlborough Sounds would allow for more accurate predictions regarding the implications of management changes, such as movement of farms.

We trust that this assessment is of use. Feel free to contact us if you have any further questions.

Yours sincerely

Scientist



Emma Newcombe
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Reviewed by

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# Appendix 9: Proposed AMAs and their natural character, landscape and visual amenity effects.

Boffa Miskell

# Memorandum

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| | |
|---|---|
| Attention: | Pere Hawes |
| Company: | Marlborough District Council |
| Date: | 5 April 2019 |
| From: | James Bentley |
| Message Ref: | Aquaculture Provisions – Natural Character, Landscape & Visual Effects of proposed changes |
| Project No: | C16091A |

**Proposed Aquaculture Management Areas and their natural character, landscape and visual amenity effects**

As part of the review of its District Plan, Marlborough District Council is proposing to adjust the footprint extent of aquaculture contained within the 'coastal ribbon' that is currently in the MSRMP and to designate these as Aquaculture Management Areas (AMA's). The majority of the surface structures of the 'farms' are contained within a narrow ribbon of approximately 150m in width, extending from 50m offshore of the MLWS to the 200m mark.

While most aquaculture areas are contained within Pelorus Sound (with a few areas in Queen Charlotte Sound) the majority of these farms will be subject to these proposed changes. A few areas will however, not be subject to these changes and include Admiralty Bay and Port Underwood. These excluded areas will not form part of this assessment.

**The proposal**

The Aquaculture Review Working Group (ARWG) – which includes the Council, intends to provide for aquaculture within AMAs and to adjust the dimensions of the AMAs which would involve a seaward extension of the current coastal ribbon.

It is proposed to move the ribbon of mussel farms further away from the shoreline (or MLWS) to a total distance of 100m (instead of 50m at present). This will ensure that there is a greater level of access provided to the coastal edge which will assist in improving amenity and recreational pursuits. It is also proposed to extend the mussel farms seawards. The ARWG is proposing to extend the surface structure of the farms to 200m (150m at present), so that the seaward side of the farm would be 300m from MLWS (as opposed to 200m in the MSRMP).

Furthermore, one of the options being considered for the physical layout in the AMA is to spread the existing lines throughout the space. Therefore, the density of visible lines will decrease. These changes will assist to improve the ecology of these areas as well as providing potential productivity gains.

The proposal is outlined graphically within the following diagram:

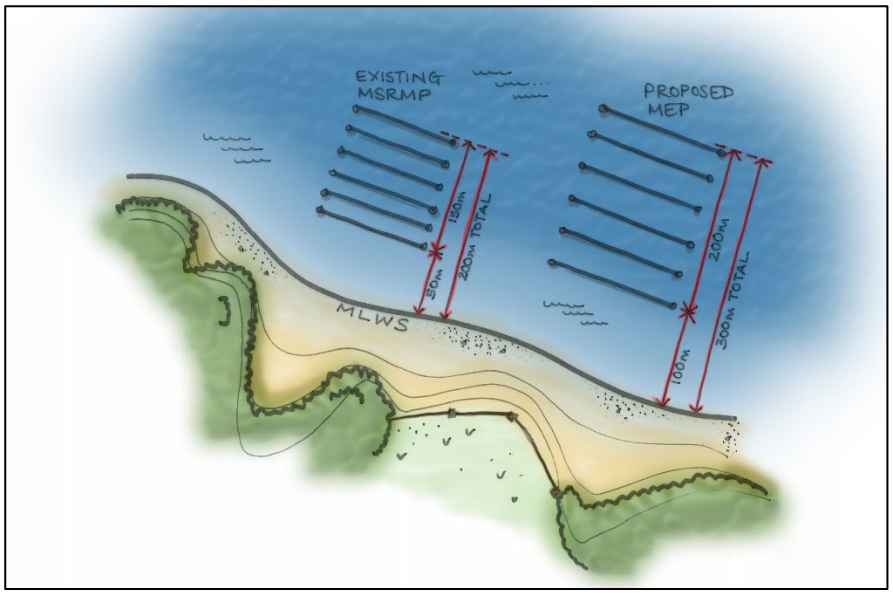


***Diagram 1: The existing arrangement (left) and the proposed AMA's (right). Note – this diagram is for illustrative purposes only.***

Implications of this change may affect natural character, landscape and visual aspects. This report assesses these proposed changes at a reasonably high level and recommends a set of principles that should be considered.

Through investigating and preparing this report, it is apparent that there are a number of mussel farms specifically that do not currently conform to the required distances within MSRMP. Some of these would have gone through a non-complying consent process and other are simply ill-aligned within the 50m-200m ribbon.

**Types of aquaculture**

It is acknowledged that different types of aquaculture can trigger different types of natural character, landscape and visual amenity effects. The vast majority of types of aquaculture subject to AMAs will be mussel farms. The differences between all types of aquaculture are listed in Appendix 1 of this memorandum.

**Methodology**

MDC and the ARWG have divided the Marlborough Sounds into 44 logical break-down units and referred to as Coastal Management Units or CMU's. They are typically divided along ridgelines, which divide one bay or area from another. They are **not landscapes,** but areas that form part of a broader set of 'nested' landscapes within the Sounds.

This memorandum considers two sample CMU's, as they are applicable to the proposed AMA's. Ultimately all CMU's will need to be assessed. Those included in this memorandum are:

| CMU | Location |
|---|---|
| 3 | Beatrix Bay |
| 12 | South of French Pass |

Existing aquaculture will be assessed as part of the existing environment and any effect will be measured against the change proposed.

The effects assessment will be assessed on a seven-point scale from very low to very high (see below). The scaling of effect has also been aligned with RMA terms, especially where minor would be placed on our scale, as well as indicating where 'significant' falls (as it relates more NZCPS Policies 13 and 15).

| **Less than Minor** | | **Minor** | **More than Minor** | | | |
|---|---|---|---|---|---|---|
| **Very Low** | **Low** | **Moderate – Low** | **Moderate** | **Moderate-High** | **High** | **Very High** |
| | | | | | **Significant** | |

Furthermore, the nature of the effect will also be assessed:

| **Nature of Effect** | **Use and Definition** |
|---|---|
| Adverse (negative) | The development would be out of scale with the landscape or at odds with the local pattern and landform which results in a reduction in landscape and / or visual amenity values. |
| Neutral (benign) | The development would be consistent with (or blend in with) the scale, landform and pattern of the landscape maintaining existing landscape and / or visual amenity values. |
| Beneficial (positive) | The development would enhance the landscape and / or visual amenity through removal or restoration of existing degraded landscape activities and / or addition of positive elements or features. |

**Selected Aquaculture Assessments**

| **Landscape Area: Beatrix Bay (3)** | |
|---|---|
| Description of Landscape Character | At a broad scale, Beatrix Bay forms part of the Inner Marlborough Sounds landscape, which is characterised primarily for its bush-clad hills, enclosing tranquil bays, is generally a sheltered and enclosed landscape where evidence of human activity is strong.<br><br>Nested within the Inner Sounds Landscape are numerous smaller landscapes. Beatrix Bay and adjacent Crail Bay forms one of a number of smaller 'nested' landscapes in the Inner Sounds. This smaller 'nested' landscape contains steep and vegetated slopes of Mt Stokes frame the eastern part of this landscape, whilst the vegetated peninsulas provide enclosure to the west. Aquaculture is evident along much of the shoreline with land development more prevalent along the lower slopes within the eastern and southern parts of this landscape. The western extent of this nested landscape marks the gateway from Pelorus into Tawhitinui Reach.<br><br>To the north, a very narrow low isthmus separates Beatrix Bay from Forsyth Bay. Land development is typically a mosaic of activities, including pastoral grazing, commercial forestry, roads, powerlines and houses. A number of slender peninsulas extend from the east into the coastal waters assisting to partly define embayments and include Te Puraka Point (defining broadly the southern extents of Beatrix Bay). Large tracts of indigenous vegetation are present within this landscape area, however mostly related to more elevated areas such as the slopes of Mt Stokes. Indigenous vegetation is also apparent in western parts of Beatrix Bay where it extends from the ridge to the coastline. |
| Landscape Values | Beatrix Bay has high landscape values. The highest landscape values relate generally to the least modified parts of the landscape and are identified as outstanding, which relate to the slopes of Mt.Stokes, and the slender peninsulas at the mouth of the embayment. The remaining landscape values, whilst not outstanding are strongly associated with the bay's relationship with the coastal edge, the relative calm and tranquil nature and relatively high level of naturalness. |
| Natural Character Values | Within the Marlborough Coastal Study, (June 2014) the level of natural character at the more detailed level (4/5) for the terrestrial component of the bay is generally high and very high towards the upper slopes of Mt. Stokes. The marine component is unrated; however it is anticipated that it would be moderate-high at a more local scale, due in-part to the presence of aquaculture in the bay.<br><br>The central waters of the bay retain higher levels of natural character than those closest to the foreshore. Parts of the bay that are unencumbered by structures (i.e. where there is an unfettered connection between the water and the land) also receives higher levels of natural character. |
| Amenity Values | Key amenity values relate to the intertidal area, the broad open waters of the bay and the enclosing landform containing the bay. The relative tranquillity of the bay, due to the lack of human settlement, is also a key attribute. |
| Changes proposed | To amalgamate existing aquaculture areas into AMA's, which are located between 100m and 300m from the MLWS and to extend existing lines to fill the additional 50m of space. To remove farms 8258 and 8259 and to potentially amalgamate lines into farms along western shore. |

| Landscape Area: Beatrix Bay (3) | | |
|---|---|---|
| **Likely effects** | **Assessment** | **Overall effect & nature of effect** |
| Landscape Character Effects | The creation of AMA's will not affect the landscape characteristics of the area as the changes proposed will not affect the area's land use, landform or landcover. Aquaculture will still be evident within the bay, within the same arrangement that currently exists. Due to size of the bay (notably the breadth of water space) and the relative small comparative scale of the aquaculture change, any landscape character effects will be very low and neutral. | Very Low, Beneficial |
| Effects on Landscape values | The changes proposed on the landscape values will be limited, due in part to the fact that the proposed changes will not inherently affect the landscape values, notably those that are valued the highest (outstanding areas). Whilst the intrinsic characteristics of the bay will remain (i.e. aquaculture will continue to form part of the character of the embayment) and the proposal will not alter that (notably the spatial arrangement and quantity), there will be some minor improvements to parts of the bay where aquaculture will be removed. Other beneficial effects will arise from the fact that greater accessibility to the coastal margin will be apparent, although a greater area of seascape will be occupied by infrastructure associated with the farms. It is considered that removing aquaculture away from areas of outstanding natural landscape or placing the 'removed' farms (8258 and 8259) to areas within the bay that can be better accommodated (see recommendations) would further improve the beneficial effects of the proposed changes on landscape values, rather than placing 'additional' farms next to areas of ONL. | Very Low, Beneficial |
| Natural Character Effects | Whilst the marine component is unrated within the broader 2014 Coastal Study, at a bay-scale, it is considered that the less-modified central waters would rate at least high natural character, with lower levels of natural character around the foreshore, due to the existing aquaculture. The proposal would extend aquaculture further (100m) into the open, less-modified central waters of the bay and occupying a greater footprint of space (200m as opposed to 150m) within the waters of the bay. In some areas, where individual farms will be removed (8258 and 8259), this have an increase locally in levels of natural character. This increase in natural character will also be noted around the foreshore of the entire bay, where the distance of the farms to the shoreline will be increased by 50m to a total distance of 100m. It is considered that the cumulatively, there is a net natural character benefit albeit very low. | Very Low, Beneficial |
| Amenity Effects (Visual) | The proposed changes will increase the accessibility to the water's edge and allow for small craft to sail around the inner perimeter of the bay. The farms will appear further from the shoreline, and any associated visiting vessels will also appear | Low, Beneficial |

| Landscape Area: Beatrix Bay (3) | | |
|---|---|---|
| | further away. From within the central waters of the bay, whilst the farms will occupy a greater occupation of marine space, this will be virtually unnoticeable to many boaties, due to the breadth of the bay and the greater level of absorption capability that other smaller bays. As a result, it is considered that the proposal, including the opportunity to have 'farm-free' bays, is an improvement to the existing arrangement of farms. | |
| Summary and Recommendations | Based on the assessment, it is concluded that the proposed AMA's will not result in any adverse landscape, visual or natural character effects, in fact the proposal is assessed as being beneficial overall, albeit to a low and very degree. The removal of two farms will locally improve the south-eastern corner of the bay coupled with the additional distance of the farms from the shoreline. The addition of further lines to farms on the north-western side of the bay will be low, due in part to the better absorption capability of this part of the bay, where a natural indentation of the bay enables the larger farms to be better integrated with the landform.<br><br>Recommendations:<br><br>To not increase farms 8228, 8229, 8230, 8231, 8232, 8233, 8234 and 8235 due to their location adjacent to the slender Whakamawahi Point peninsula and the ONL to any further than the recommended 300m.<br><br>To look at increasing the depth of farms to the immediate north of these farms (8236, 8237, 8238 and 8239) – if possible.<br><br>Agree to remove AMA from 8259 and 8258 farms (and increase lines on farms outlined in (2) above.<br><br>In the longer term, look at further protecting the landscape values of Te Puraka Point by avoiding locating farms adjacent to this slender landscape feature ONL. | |

| **Landscape Area: South of French Pass (12)** | |
|---|---|
| Description of Landscape Character | At a broad scale, the area south of French Pass forms part of the Outer Marlborough Sounds landscape, characterised by the areas exposure to the sea with a remote and rugged appearance. Features characteristic of the area include the swirling currents between the narrow passage at French Pass (Te Aumiti), highly weathered costal cliffs, jagged rock stacks and steep coastal hill country.<br><br>Numerous smaller landscapes are contained within the Outer Sounds Landscape. The eastern coastline and southern extents of D'Urville Island are part of the nested landscape of Eastern Tasman. LBU 10 forms part of this Eastern Tasman landscape and extends southwest of French Pass, containing the western facing bays and hillsides of the peninsula separating Current Basin and Admiralty Bay. The Croisilles French Pass Road extends northward along the ridgeline of the peninsula to French Pass situated just outside the LBU. The landform of the peninsula immediately south of French Pass contains a sequence of steep, rocky and broad bays exposed to the turbulent waters of Current Basin.<br><br>Two of the bays are Waikawa Bay and Okuri Bay, facing Tasman Bay. Both the bays are of a similar character in that the principal land use is pastoral grazing, with areas of pine plantations a small number of dwellings and some tracking. There are patches of indigenous vegetation in some gullies in the western facing land at Waikawa Bay and along the foreshore and patches in the eastern parts of Okuri Bay.<br><br>The marine component of Waikawa Bay retains no jetties or wharves, with the only modification being three mooring buoys and three marine farms (8010,8011 and 8012). The marine area of Okuri Bay is larger in size and there are no modifications other that one marine farm in the eastern part of the bay. There is a jetty and a slipway in Camp Bay to the north of Waikawa Bay, along with four moorings (three in Camp Bay and one further north in an unnamed bay). Other than the modifications listed above, there is no other modification in the water along this north-western facing peninsula. |
| Landscape Values | The highest landscape values in LBU 10 relate generally to the least modified parts of the landscape and are identified as outstanding, which relate to the seascape and rocky intertidal waters of Current Basin and the interconnected steep cleared slopes extending from French Pass southwards to Two Island Point. The remaining landscape values, whilst not outstanding are strongly associated with the relatively exposed and rugged nature of the seascape and the relative shelter provided by both the rural Waikawa and Okuri Bays. |
| Natural Character Values | Within the Marlborough Coastal Study, (June 2014) the level of natural character at the more detailed level (4/5) for the terrestrial component of the bay is unmapped with a small area of very high in Okuri Bay. The unmapped area would likely rate as moderate-high due to cleared state of the land for grazing. The marine component is rated as very high along the entire coastline and within both bays. This is principally due to the largely unmodified near-shore marine environment. |
| Amenity Values | The seascape in this area is inextricably linked to the land, creating dramatic open vistas and high levels of transient values. Much of the waters in Okuri Bay are free of structures, enabling a greater freedom of movement. |
| Changes proposed | To create four AMA areas, three (8009, 8010 and 8011) of which are proposed to be located between 100m and 300m from the MLWS and to extend existing lines to fill |

| Landscape Area: South of French Pass (12) | | |
|---|---|---|
| | the additional 50m of space and the fourth AMA to be located further out from the coast (8012).<br><br>Of the four AMA areas one is located within Okuri Bay (8009) and three in Waikawa Bay (8010, 8011 and 8012). | |
| **Likely effects** | **Assessment** | **Overall effect & nature of effect** |
| Landscape character Effects | The creation of AMA's will not affect the landscape characteristics of the area as the changes proposed will not affect the area's land use, landform or landcover. Aquaculture will still be evident within both bays, within the same arrangement that currently exists, albeit that 8012 will be located further from the coast. Due to size of the bays and the relative small comparative scale of the aquaculture change, any landscape character effects will be very low and neutral. | Very Low, Neutral (Waikawa); Very Low, Neutral (Okuri) |
| Effects on Landscape values | The changes proposed on the landscape values will be limited, due in part to the fact that the proposed changes will not inherently affect the landscape values, notably those that are valued the highest (outstanding areas). Whilst the intrinsic characteristics of the bay will remain (i.e. aquaculture will continue to form part of the character of both bays) and the proposals will not alter that (other than the spatial arrangement and location of farm 8012 further from the coast), there will be some minor improvements to the greater accessibility to the coastal margin. Although this will be offset by a greater area of seascape being occupied by infrastructure associated with the farms. It is considered that removing aquaculture from Okuri Bay completely (8009) and locating this within Waikawa Bay, would greatly improve the landscape values of Okuri Bay. Concentrating aquaculture in one bay (and away from any ONL) would ensure that the landscape values of Okuri Bay would be enhanced, and the dominance of the Bay's position as being exposed and rugged would be reinforced. | Waikawa Bay: **Very Low, Neutral** (based on proposal) and **Low, Adverse** (*Based on recommendations of moving farm 8009 into Waikawa Bay)*.;<br><br>Okuri Bay: **Very Low, Neutral** (based on proposal) and **Moderate, Beneficial** (*Based on recommendations of moving farm 8009 into Waikawa Bay)*. |
| Natural Character Effects | Whilst the marine component is mapped as very high for both bays, this very high rating extends along much of this landscape's coastline up to the southern part of D'Urville Island. The proposal would extend three farms further (100m) into the open, less-modified central waters of both bays and occupying a greater footprint of space (200m as opposed to 150m) within the waters of both bays. Farms 8012 is proposed to be moved further away from the rocky coastline, which will increase locally the inshore values of levels of natural character in this part of Waikawa Bay. This increase in natural character will also be noted around the foreshore of the entire bay, where the distance of the farms to the | Waikawa Bay: **Very Low, Neutral** (based on proposal) and **Low, Adverse** (*Based on recommendations of moving farm 8009 into Waikawa Bay)*.;<br><br>Okuri Bay: **Very Low, Neutral** |

| Landscape Area: South of French Pass (12) | | |
|---|---|---|
| | shoreline will be increased by 50m to a total distance of 100m.<br><br>Following on from the recommendations above, by removing aquaculture from Okuri Bay will increase the level of marine natural character at the most detailed scale (i.e. Level 5). The removal of the mussel farm in the north eastern corner of the bay, whereby removing all forms of modification from the water would change the 'moderate marine natural character' part of this bay to very high. This would be consistent with the remainder of the bay's marine natural character rating at this detailed scale. The rating at the Level 4 scale would remain the same at very high.<br><br>For Waikawa Bay the marine natural character rating for would remain as very high for the central component of the bay and moderate for the parts containing existing aquaculture. It is considered that further aquaculture would not significantly reduce the level of natural character around the shoreline of this bay, ensuring that any new mussel farms follow the existing pattern around the shoreline and are of similar shape, size, colour and density as those existing.<br><br>It is recommended to avoid aquaculture development north between Archway and Two Island Point due to the higher degree of natural character within both the marine and terrestrial component of the bay | (based on proposal) and **Moderate, Beneficial** (*Based on recommendations of moving farm 8009 into Waikawa Bay)*. |
| Amenity Effects (Visual) | The proposed changes will increase the accessibility to the water's edge and allow for small craft to sail around the inner perimeter of both bays. The farms will appear further from the shoreline (notably 8012), and any associated visiting vessels will also appear further away. From within the central waters of the bay, whilst the farms will occupy a greater occupation of marine space, this will be virtually unnoticeable to many boaties, due to the relative size of the bay and the greater level of absorption capability than that of other smaller bays. As a result, it is considered that the proposal, is a very low improvement to the existing arrangement of farms.<br><br>Considering the recommendations to remove farm 8009 from Okuri Bay would ultimately change the amenity effects. For Waikawa Bay, visually, there would be an increase in the number of buoys in the water due to the increase in mussel farms, which would further reduce the perceptions of naturalness of this part of the bay.<br><br>For Okuri Bay, there would be a net amenity benefit due to the removal of all aquaculture from the bay. | Overall, based on proposal of four AMAs in both bays: Very Low, Neutral.<br><br>Effects based on recommendations: Very Low, Adverse (Waikawa); Moderate, Beneficial (Okuri) |
| Summary and Recommendations | It is noted that aquaculture, or more specifically mussel farming is an established and recognised activity within this western part of the marine component of the Marlborough Sounds. Much of the land use in this part of the Marlborough Sounds holds a rural working character or is retired land which is regenerating. Both Okuri Bay and Waikawa Bay hold a similar terrestrial natural character rating, based on their | |

| Landscape Area: South of French Pass (12) | | |
|---|---|---|
| | predominance of cleared pastoral farming with small pockets of regenerating scrub.<br><br>Concentrating aquaculture in one bay along this coastline will ensure that the remaining bays retain very high levels of marine natural character at the more detailed scale (level 5). Whilst Waikawa Bay will experience a potential increase in natural character effects due to further mussel farm development, the form of the development is not new, and would build on the existing three mussel farms. Increasing mussel farm activity within this bay is not considered to significantly affect the existing natural character values. Being the smaller of the two bays, there are limits as to how much more aquaculture development this bay can accommodate. Concentrating further aquaculture between the existing mussel farms in Waikawa Bay would ensure that natural character effects are contained to the inner parts of the bay.<br><br>The land associated with Waikawa Bay is considered to be of moderate natural character due to its predominantly working agricultural character.<br><br>By concentrating aquaculture development (rather than spreading it into numerous bays) will also decrease wider-spread cumulative effects along this entire shoreline.<br><br>Whilst further erosion of naturalness will occur in one place (Waikawa Bay – which is smaller than Okuri Bay), an improvement in natural character in a larger bay (Okuri Bay) will be evident. | |

**Development of Key Design Principles to aquaculture changes – Recommendations**

Following on from the case studies, the following themes have emerged:

1. Larger, broader bays have a greater opportunity to accommodate changes to the ribbon arrangement of current farm locations than smaller bays, especially where the seascape is more expansive in scale.

2. Avoiding locating AMA's next to areas of ONL, or, if unavoidable, seek to ensure that the farms in these more sensitive locations are not expanded or 'built-on'. Avoiding placing farms off slender peninsulas, especially slender ONL peninsulas (such as Te Puraka Point). Again, where necessary, avoid expanding or building on these farms.

3. Small bays could become quickly 'dominated' by aquaculture when simply extending each farm by 50m. This may be the case where existing farms around the bay's perimeter encroach on the limited central waters of a bay, effectively filling the bay. A potential recommendation may indicate specific bays where this is the case.

4. Maintaining a better relationship with the adjacent landform and coastline. This will be enabling aquaculture to 'read' and respond to the coastline, where coastlines with indentations have the potential to better enable farms to be located into an area. Acknowledging that mussel farms are arranged in blocks of straight lines, this recommendation is concerned principally around where

aquaculture can be aligned better with the coastal edge, where small indentations, or a more complex coastline can often offer a greater ability to place and absorb farms, rather than a coastline that is relatively even and open where the farms retain little relationship with the landform. This is also subject to considering other matters, such as landcover (see Point 5 below).

5. Understand that the sensitivity of some bays (or stretches of coastline) are higher than other bays, and that by recommending relocation of aquaculture from some bays (or stretches of coastline) may improve the overall landscape, natural character and visual amenity values of that bay (or stretch of coastline), whilst not necessary adversely affecting other receiving bays (or stretches of coastline) to the same degree.

Note: As further studies are undertaken in other CMU's, further recommendations may be incorporated (and existing recommendations nuanced) into the above list.

**Appendix 1: Types of Aquaculture**

Different types of aquaculture can trigger different types of natural character, landscape and visual amenity effects. Typically, the following three forms of aquaculture are the most common in Marlborough and would be subject to the proposed AMA:

| Form of Aquaculture | Typical type of infrastructure required |
|---|---|
| Fin Fish (salmon farms) | • Generally regular, geometric, circular or square shapes, placed in lines or grids which reinforce geometry.<br><br>• More recent newer cages can be up to 100m in circumference, are usually dark in colour and are relatively low lying in the water.<br><br>• Light conditions can affect visibility, as the dark structure can appear more difficult to observe in overcast conditions or shade, but appear more visible in sunny, lighter coloured water.<br><br>• Feed hoppers may be attached to each cage.<br><br>• Brightly coloured buoys can be placed at the corners of the farm and bright coloured anti-predator netting can also make the farm more visible.<br><br>• Large feeder barges can often be located adjacent to farms. These can be structures capable of housing workers and comprise a ground floor workshop and first floor accommodation. These are often lit at night.<br><br>• Water quality effects, benthic effects and other ecological effects may result.<br><br>• Boats travelling to and from the cages, feeding and harvesting processes all generate marine activity and noise. |
| Sub-tidal Filter Feeders | • Includes Mussel lines and shellfish culture in baskets (e.g., oysters)<br><br>• Most mussel lines are visible as lines of grey or black plastic barrel shape buoys, generally evenly distributed along ropes, which themselves can sometimes be coloured. Orange coloured buoys are used at corners for navigation. The corners of the farm are marked with white low-level navigation lights at night.<br><br>• The plastic of the buoys is reflective. In sunny conditions, sunlight can reflect from buoys sometimes making these the most noticeable part of the farm.<br><br>• There are no set distances between buoys or ropes and the number and length of lines can vary. The density of buoys will influence the appearance of a farm, particularly when seen from distant viewpoints.<br><br>• The geometry of the lines can be relatively easily interpreted from the formal arrangement of the buoys.<br><br>• They are often located close to shore, however larger farms do exist off-shore.<br><br>• When carrying little weight (early in the process), these buoys are very visible, floating on the surface. When heavy, they are partially submerged.<br><br>• Buoys can be washed to shore in high wave energy areas.<br><br>• The farms are regularly visited by boats and barges servicing the farms and during harvest (generally at 15 – 18 month intervals) there can be discharges of seaweeds |

| | |
|---|---|
| | and algae that have accumulated on the lines, and noise, lights and activity associated with harvest. |
| Oyster Trestles | • Timber of metal frames support the mesh oyster bags and are sited on the foreshore in the intertidal area. They can restrict access to the coast.<br><br>• They are submerged when the tide is in, and are only visible when the tide is out, for a few hours each day at certain times.<br><br>• The rectangular trestles are often arranged in a geometric pattern.<br><br>• The trestles and mesh bags are often darkly coloured when revealed at low tide.<br><br>• Larger farms use tractors or other vehicles to gain access at low tide, churning up the foreshore. |

# Appendix 10: Economic Analysis of RMA Aquaculture Regulation in the Marlborough Sounds

1. The purpose of this report is to carry out an economic assessment of the Marlborough Environment Plan (MEP) proposals for mussel farms. The report may form part of a section 32 evaluation of an aquaculture variation that will be notified by Marlborough District Council.

## Proposed Marine Farming Provisions

2. The MEP proposes to establish one Coastal Marine Area (CMA) within which 45 Coastal Management Units (CMU's) will exist. Within each CMU in the enclosed waters Aquaculture Management Areas (AMA's) will be identified.

3. The AMAs are discrete areas that relate to the size and arrangement of existing marine farms. Each AMAs will be rearranged so that where possible they are at least 100m from MLWM (mean low water mark). This provides for the continuation of the pattern of ribbon development enabling an appropriate marine farm arrangement having regard to landscape, navigation and public access values as set out in the MEP.

4. Key Implications of proposed changes to MEP are as follows:

    a. No new marine farms areas are created other than areas to provide for the relocation or shifting of marine farms to ensure adherence to the identified AMA areas created within each CMU.

    b. Coastal permits for marine farms within AMAs will be processed as a controlled activity where the area of the marine farm is unchanged and it is to be located entirely within an AMA.

    c. The provisions provide for AMA's broadly encompassing the spatial extent of existing marine farms.

    d. The provisions will provide for the movement of marine farms further seaward to move farms away from the closer foreshore photic zone where marine biological productivity is greatest by reason of the penetration of solar energy into the benthos.

    e. Existing operators will be given a priority allocation within the AMAs.

5. The MEP introduces coastal occupancy charges to be used for the purpose of promoting the sustainable management of the coastal marine area. Coastal occupancy charges has been the subject of separate analysis [70] and MEP hearings.

[70] "Coastal Occupancy Charges", Executive Finesse Limited 2013

## Cost / Benefits of Proposed Changes

6. The following summarises the costs and benefits of the proposed changes:
    a. Benefits
        i. Creation of Coastal Management Units.
        ii. Change from discretionary to controlled activity status with in the AMAs.
        iii. Where a marine farm or part of a farm is shifted seaward there is potential to increase productivity through longer grow lines.
        iv. Creation of the open water CMU to discretionary marine farm activity.
        v. Improved access and amenity to the near shore area will improve the recreation marine economy.
        vi. Improved marine environment through protection of foreshore photic zone.
    b. Costs
        i. Costs associated with the requirement to shift marine farms or parts of farms to ensure they are within the AMA.

## Economic Impacts vs Financial Impacts of the Proposed Changes

7. There is no doubt that there are financial implications of the proposed changes to the industry as a whole and to individual marine farmers. However the broader economic impacts are likely to be less pronounced as the overall changes do not propose to significantly alter the size of the industry in Marlborough. Ie the proposal takes significant steps to provide for the relocation of farms to ensure the status quo.
8. The proposal provides the industry security and a high degree of certainty and while the industry is not expected to grow as a result of the MEP changes, any alternative to the proposals that generates less certainty for the industry could impact adversely on investment and value associated with the industry giving rise to a reduction in economic activity.

### Economic Impacts

9. The economic impacts from the proposed changes are considered minimal given there is expected to be little change to the overall size of the marine farm industry as a whole due to the proposal to provide for the relocation of existing farms to ensure they reside within the new coastal marine units. Overall the economic impacts of the proposed MEP are expected to be positive with minimal impact to the existing mussel industry.
10. The following areas are highlighted as areas where the economic impact may be significant but the impact is difficult to quantify:
    a. The creation of certainty for the industry from these proposals will likely result in more investment in research and development by the industry. The investment by the industry may result in improvements on farm or in processing. Further investment in R&D may result in product development leading to products commanding greater market value. Greater value for the products generated from the same water space may result in an increase in opportunities for economic growth. It is not possible to quantify this

increased investment and the resulting impacts in GDP, economic growth or employment opportunities however they could be significant.

b. The MEP creates an open water CMU which extends out to the 12 nautical mile limit. It provides for aquaculture in this CMU as a discretionary activity. Open water marine farming is subject to research trials and technology advancement both in New Zealand and overseas. The economic impacts from successfully operating marine farms in open waters are significant. It is not possible to quantify the potential impacts on the regional and national economy but the ability to farm significantly more water space could transform the industry.

The provision of the open water CMU at least provides for the opportunity to extend research trials and technology to address the challenges of open water marine farming.

c. It is considered that the recreation marine economy will benefit from the proposals through an improved and more accessible recreation marine area.

11. The proposal generates positive and negative financial impacts which are considered immaterial in relation to the economic impact on the industry. The financial effects will impact individual farms to differing degrees. It should be noted that the financial costs will generate some economic activity in:

    a. Marine services – through manufacture of new mussel lines and relocation services provided.

    b. Potential for increased expenditure in R & D as disposable income for farmers from lower costs of re-consenting processes is possibly redirected into R & D.

    c. The avoidance of expenditure from re-consenting processes negatively impacts on the professional and scientific services that would have been required to undertake consenting of mussel farms as a discretional activity.

### Financial impacts

12. There are financial implications of the proposed changes which will have some economic impact either one off or ongoing, these are:

    a. Relocation of lines to seaward side of farms could result in a small increase in grow lines and resulting production. This is considered insignificant in regard to the economy as a whole and the financial benefits will vary considerably from farm to farm.

    b. One off costs to relocate lines to seaward side of farms of $5,000 to $10,000 per line (depending on whether new lines are used during the relocation process).

    c. Reduction in consent renewal costs the change in status from discretionary to controlled. This is estimated to reduce the costs of re-consenting by 43% or $17.63 million.

13. As highlighted in paragraph 10 the financial impacts of the MEP will have impacts on economic activity increasing and reducing the activity in certain areas. The net financial impacts may result in increased expenditure in research and development. However any increase R & D expenditure is likely to have been a result of increased certainty created by the MEP changes.

## Economic Contribution of Aquaculture in the Marlborough Region

14. NZIER prepared the report for the Marine Farming Association in September 2015 on “The economic contribution of marine farming in the Marlborough Region”.

15. The key points were that aquaculture contributes to both regional and national economies by:
    a. Creating valuable output based on the natural resources of the marine environment through 588 farms covering 3,200 hectares.
    b. Providing employment (859 jobs) for about 3.7% of the Marlborough region's total labour force, with around 1.1% in marine farming and a further 2.6% in seafood processing.
    c. Generating export sales revenue of $276 million in 2014.
    d. Contributing 6% (162 million) to Marlborough's regional GDP, with $105 million (3.7%) from marine farming and $57 million (2%) from seafood processing.
    e. Mussel's contribution to regional GDP from farm and processing $147 million.
    f. Providing inputs to seafood processing in regions outside Marlborough.
    g. Delivering 62% of NZ's aquaculture by tonnes (62% of Greenshell mussels; 61% of salmon and 8% of oysters).
    h. Producing 60,000 tonnes of mussels (2014).
16. The industry is largely unchanged since the NZIER report was produced and is considered sufficiently up to date for the purposes of understanding the economic impacts of the proposed changes on the industry.

### Value of Consented Water Space

17. The value of farms varies significantly from farm to farm highlighting that farm valuations need to be based on the productivity able to be generated from the consented space. Typically water space has a value (excluding the value of the infrastructure) of between $2,000 to $3,000 per productive tonne. On this basis the value of the consented water space in Marlborough is $120 million to $180 million. This value is derived from determining the value of the farm from its production capability less the value of the infrastructure.
18. There is a high degree of uncertainty that currently exists about future consent renewals. The proposed plan provisions will create greater certainty and provide the farms an asset status which banks would be prepared to use as security for borrowing purposes. At present financial institutions do not recognise resource consents as assets for security purposes. While the MEP provisions will improve certainty of future consent outcomes (through controlled activity status) it is unlikely that this would result in a higher valuation for the marine farm assets. However, greater certainty may provide greater opportunity for the value of the farm, the consent enables, to be realised.
19. It is considered that the market still exhibits failings in valuing consented water space on a per hectare basis rather than for the productive capability of the area consented. Given the simple valuation approaches that remain it is probable that the improvements to market value from the provisions proposed that increase certainty may take time to be recognised by the market.

## Quantifying the Economic and Financial Changes

20. The table that follows summarises the economic and financial impacts of the changes.
21. An assessment of the financial costs has been derived from estimating the financial impacts of the change. The annual cost of the financial impact has been derived converting the total cost into an annual finance cost using a 6% yield. The annual finance cost has been compared to the annual

regional Gross Domestic Product GDP to provide a relative economic impact assessment. GDP is the value of economic activity and is the sum of the market values of the industry products produced.

22. The methodology highlights that the financial impacts of the proposed changes have little economic impact on the industry.

*Table 16: Economic and financial impacts of the proposed changes*

| **Description** | **Quantity Estimates** | **Financial Impact** | **Regional Economic Impact** |
|---|---|---|---|
| Relocation of lines to ensure marine farms reside within new coastal marine units | 587 farms<br>7,229 lines<br>Relocation impact no more than 2.5% of all lines = 180 lines in total.<br>Cost to relocate a line between $5,000 to $10,000 | Cost of between $900,000 and $1.8 million:<br>Or<br>$1,500 to $3,000 per farm.<br>Annual Finance cost (6%) = $90 to $180 per farm. | 0.00% of total regional GDP. |
| Reduction in consent renewal costs from changing status from discretionary to controlled | Re-consenting under discretionary status assessed at $41 million every 20 years.[71]<br>Re-consenting under controlled status assessed using similar assumptions $23.37 million. Ie 57% of the cost of re-consenting remain the same (costs for hearing and environment court are avoided.). | $17.63 million costs for consent renewal avoided.<br>Annuity of cost (6%) = $1.06 million. | 0.7% of total regional GDP |
| Creation of Open Water CMU | Potential increased mussel farm production.<br>Increased investment in R & D. | Unknown | Unknown – may generate significant economic impact. |
| Creation of Industry Certainty | Confidence generating an increase in investment in industry and in R & D.<br>Improved asset status and value through controlled | Unknown | Unknown – may generate significant economic impact. |

[71] NZIER "Proposed new national direction in aquaculture" March 2017 and MFA submission no. 76 on the "Proposed NES for Marine Aquaculture"

| | | | |
|---|---|---|---|
| | activity status. | | |
| Improved Recreation Marine Industry accessibility and environment | Increase recreation marine activity and value stemming from improved environment and access | Unknown | Unknown. |

## Conclusion of the economic analysis

23. The MEP proposals will generate positive economic outcomes for the region as a whole and likely net financial benefits to the industry while creating an improved marine environment.
24. The mussel industry in Marlborough contributes significantly to the Marlborough economy generating $147 million in GDP per annum.
25. The MEP proposals to establish AMAs within which existing marine farms are managed as controlled activities will have positive economic impacts to:
    a. Recreation marine activity (not assessed in this study).
    b. The Industry through the creation of greater certainty which may lead to:
        i. Investment in innovation and research associated with the industry (not assessed in this study).
        ii. Recognition of consents as assets able to be used for security with financial institutions.
    c. Industry investment in research and development as a result of maintaining the size and nature of the mussel industry farming activities.
26. The MEP provisions also creates an open water CMU providing a discretionary opportunity for marine farm activity which may increase farmed area and investment in research and development.
27. The study focused on the tangible financial impacts associated with the proposed changes to assess the economic impact on the industry and accordingly the region.
28. The conclusions that can be derived from the economic assessment is that the changes have little quantifiable economic impact to the industry as a whole but it is likely to generate positive economic value through the creation of greater certainty for the industry, improved recreation marine economy and potential for increase farm production and investment in research and development from the establishment of the open water CMU.
29. The conclusion that can be derived from the financial assessment of the proposed changes is that they will:
    a. Incur costs to farmers in relocation of lines on farms to ensure they are situated within the AMAs. The expected cost to the industry as a whole is unlikely to exceed $1.8 million but will impact on individual farms and farmers to differing degrees.
    b. Avoid costs in re-consenting by $17.63 million.[72]

[72] NZIER "Proposed new national direction in aquaculture March 2017 and MFA submission no. 76 on the "Proposed NES for Marine Aquaculture"

# Appendix 11: Flow chart comparing the Ministerial-led and Plan-led allocation processes

# Council may adopt a method for allocating authorisations via either of the following options:

**A**

Amend the plan (proposed or operative) through the **Schedule 1 process** to provide for a method of allocating authorisations

Before including a rule in a plan (proposed or operative) in relation to the allocation of space in the CMA, council must have regard to:

- reasons for and against the inclusion of the rule
- if the rule provides for a method of allocating authorisations other than by public tender;

  a) reasons why allocation other than by public tender is justified
  b) how this may affect the preferential rights of iwi **(s165H(1))**

The regional council must:

- prepare a report summarising the matters above and
- make the report available for public inspection when the rule is included in the plan (s165H(1A))

**B**

Request that the **Minister of Conservation** approves the use of a method of allocating authorisations

If council considers it desirable due to anticipated and competing demands for coastal permits, and the plan;

a) does not provide a rule in relation to a method if allocating authorisations or
b) does provide for a rule as above, but considers it will not manage effectively the competing demands for coastal permits

It may request that the Minister of Conservation approve an allocation method **(s165L(1) and 165L(2))**

A request must specify:

- If not public tender, what is the proposed method and why
- activities it applies to
- space in the CMA it applies to
- how and when it will be implemented
- reasons for the councils opinion that it is the desirable method

The request must be accompanied by information about the actual or anticipated high or competing demands **(s165L(3))**

## Notification

Rules in proposed plans and proposed plan changes have *immediate legal effect* if they relate to aquaculture activities **(s86B(3(e)))**

Following public notification of the proposed plan the allocation rule will therefore have *legal effect*

**Schedule 1 process**

Following notification:

- Submissions close (cl. 5(3))
  ⇒ 40 working days for a proposed plan or 20 working days for a proposed change or variation
- Further submissions (cl. 7(1))
  ⇒ 10 days after public notice for summary of decisions and submissions
- Hearing into submissions (cl. 8B)
  ⇒ Council must give at least 10 working days notice
- Decisions on provisions and submissions (cl. 10)
  ⇒ Released no later than 2 years after notifying
- Appeals (cl. 14)
  ⇒ Must be lodged within 30 working days of notice of decisions
- Variation shall be merged (cl. 16B)

Once a plan is operative, council must then give the Minister of Conservation four months notice before making an offer of authorisations **(s165I(3))**

The council then must notify the public and the EPA on the day the request is made to the Minister of Conservation **(s165L(5))**

The Minister of Conservation must consult all relevant ministers (including Minister of Aquaculture) and/or persons deemed appropriate and request any further information necessary **(s165N(1))**

The Minister's decision must be made within 25 working days of receiving the request (excluding time spent in consultation), by notice in the *Gazette* **(s165N(1))**

During this time in which the proposed allocation rule has legal effect, but has not yet become operative (the Schedule 1 process is ongoing);

No one can apply for a coastal permit for the occupation of space unless the holder has:

- An authorisation that relates to the space or activity or
- A coastal permit granted under an authorisation (in relation to the occupation of that space) **(s165J)**

However, if an application meets the criteria in s165ZH

*s165J does not apply*

and existing consent holders can continue to apply for coastal permits during this period **(s165J(4))**

s32 and s32AA do not apply to the inclusion of a rule in regards to the allocation of space in the CMA **(s165H(2))**

When the plan provides for a method of allocating authorisations;

No one can apply for a coastal permit for the occupation of space unless the holder has:

- An authorisation that relates to the space or activity or
- A coastal permit granted under an authorisation (in relation to the occupation of that space) **(s165J)**

s165ZH does not apply and existing consent holders cannot apply to continue occupation in the same space without an authorisation **(s165ZG(2) and s165J(2))**

No person can apply for a coastal permit to occupy space that is the subject of the request during the period between which the request is publicly notified and ending on the earlier of:

a) the day on which council publicly notifies that the request has been declined or
b) the day on which the approval of an allocation method is notified in the *Gazette* **(s165M)**

Once approved by the Minister, no person may apply for a coastal permit for occupation of the space, unless, the person is the holder of an authorisation that relates to that space and activity **(s165Q)**

However, if an application meets the criteria in s165ZH

*s165M and s165Q do not apply*

and existing consent holders can continue to apply for coastal permits **(s165M(4))**

Unless and until a rule in an operative plan makes aquaculture in that space a prohibited activity **(s165ZH(1)(b)(ii)**

## Offer authorisations

**(s165I and s165P)**

**1** **Issuing of authorisations**

⇒ the granting of an authorisation does not confer any right to the granting of a coastal permit, however; if a coastal permit is granted, the permit must be within the terms of the authorisation (including the time period specified)
⇒ the transfer of an authorisation does not take effect until written notice has been received by the council **(s165R and s165S)**

**Lapse of authorisations**

**2** An authorisation lapses after 2 years after the day on which it is granted, unless:

⇒ the time for lodging an appeal in respect of the decision has expired and no appeal has been lodged or
⇒ an appeal has been lodged and the court has given its decison on the appeal **(s165T)**

## Holders of authorisations apply for coastal permits

# Appendix 12: Analysis of the merits of the allocation process options against key criteria

*Table 17: Analysis of the allocation process options*

| | Timeliness | Gazumping | Orderly transition |
|---|---|---|---|
| **Plan allocation** | The Variation must be operative before the Council can issue authorisations. If the Variation is caught up in a lengthy appeals process it may not be operative in time to provide for expiring deemed permits in 2024.<br><br>It is very likely the plan will not be operative to provide for the 198 farms that expire earlier than 2024. It will realistically take at least 3 years to make the plan operative using the Schedule 1 process. | No one may make an application for a marine farm without an authorisation from the time the rule has legal effect – this is when the plan is notified.<br><br>(An exception is made for existing farms applying to occupy some or all of the same space, this does not affect gazumping but does affect 'orderly transition'). | Existing farms can apply to occupy (some or all of) their existing space until the plan is operative.<br><br>Time of risk for embedding current spatial allocation is until the plan is operative. (After this they must have an authorisation to apply.) |
| **Ministerial process** | Authorisations may be issued as soon as ministerial approval is granted – this may be as quickly as 25 days (plus any consultation time) after the request is made.<br><br>Likely to be in effect before 2024, and likely to capture majority of farms whose consents expire earlier. | No one may make an application for a marine farm without an authorisation from the time the application has been made to the Minister.<br><br>(An exception is made for farms applying to occupy some or all of the same space, this does not affect gazumping but does affect 'orderly transition'). | Existing farms can apply to occupy (some or all of) their existing space without an authorisation and there appears to be no time limit on this exception (s165Q is limited by s165M).<br><br>However, if marine farming outside an AMA is prohibited, no application can be made once the plan is operative.<br><br>Time of risk for embedding current spatial allocation is until the plan is operative, if the activity status outside AMA remains prohibited. If it changes to a different |

| | | | |
|---|---|---|---|
| | | | activity status (eg non-complying or discretionary) then existing farms can apply to remain in their current locations indefinitely. |

# Appendix 13: Scale and significance of the s32 evaluation

This appendix assesses the factors which determine the scale and significance of the proposals. The purpose of the assessment is to determine the depth of analysis which should be undertaken in a s32 assessment.

## Reasons for the change

- Proposed Variation 1 is the final component of the 10-year review of the RPS, regional plan and regional coastal plan for Marlborough.
- Changes are needed to give effect to Policy 8 of the NZCPS and the NESMA.
- Need for an efficient reconsenting process for existing farms, which provides certainty for industry and communities about where and how much marine farming will be accommodated.
- Address the adverse impacts, including potential adverse cumulative impacts, from the previous ad hoc approach to managing the location of marine farms.

## Degree of shift from the status quo

The new provisions present a significant departure from the existing approach. Some of the key differences are:

- The Operative Plan has three management zones (for the Sounds), proposed Variation 1 identifies just one.
- Other than distance from the foreshore, there are no other explicit controls on the location of mussel farms in the CMZ2 (Operative Plan). Proposed Variation 1 is much more directive over location.
- The activity status is less restrictive than the operative plan (controlled versus discretionary), once an authorisation has been obtained.
- Monitoring, review and adaptive management will be required for all consents.

*Table 18: Summary of the differences between the operative provisions and the proposed Variation 1 provisions*

| **Current plans:**<br>**Marlborough Sounds Resource Management Plan (MSRMP)**<br>**Wairau/Awatere Resource Management Plan (WARMP)** | **Proposed Marlborough Environment Plan – Aquaculture Section** |
|---|---|
| **Under the MSRMP**<br><br>Harvesting of marine farm produce from farms previously authorised by a current Coastal Permit, Marine Farm Lease or Licence (under the Marine Farming Act 1971) is a permitted activity.<br><br>Three Coastal Management Zones:<br><br>CMZ1<br><br>• New marine farms are prohibited | One Coastal Management Zone (CMZ).<br><br>45 CMUs which divide the sounds into unique parcels based on catchments, key features, and values.<br><br>AMAs within the CMUs. Most AMAs will be between 100-300 metres from the MLWM.<br><br>• Within AMAs, existing marine farms (using conventional longline structures or intertidal racks) are a controlled activity. |

| | |
|---|---|
| activities<br>• Existing marine farms with a current Coastal Permit, Marine Farm Lease, Licence applied for before 1 August 1996, or authorised by a new Coastal Permit, are controlled activities<br>• Marine farms listed in Appendix D2 of the MSRMP are discretionary activities.<br>CMZ2<br>• New marine farms located 50-200 metres from the MLWM are discretionary activities<br>• New marine farms located *closer* than 50 metres, or *further* than 200 metres, from the MLWM are non-complying activities<br>• Existing marine farms with a current Coastal Permit or current Marine Farm Lease or Licence applied for prior to 1 August 1996, or authorised by a new Coastal Permit, are controlled activities<br>• Marine farms listed in Appendix D of the Plan are discretionary activities<br>CMZ3<br>• This zone was created as a result of the New Zealand King Salmon Private Plan Change (Plan Change 24) and several concurrent applications<br>• Marine farms are located at three sites (Ngamahau, Waitata and Richmond) as a result of the *Board of Inquiry* hearing<br>• Marine farming shall be limited to the species King Salmon and is a discretionary activity<br>**Under the WARMP**<br>One Coastal Marine Zone (CMZ) - Mean High Water Springs to 12 Mile Limit<br>CMZ<br>• Any marine farm is a discretionary activity | • Marine farms within AMAs that require the discharge of feed (for example fin fish) are a discretionary activity<br>• Outside of AMAs, but within Enclosed Waters CMUs, marine farms are a prohibited activity<br>• In open water CMUs, marine farms are a discretionary activity<br>The council has adopted an authorisation allocation" methodology. Existing marine farming activities will be allocated authorisations for coastal space for the same total backbone or oyster rack length as the existing consented marine farm. Farms with authorisations can then apply for resource consent. |

## Who and how many will be affected?

### Marine farmers

Proposed Variation 1 will protect the existing interests of current permit holders and capacity is unlikely to change by more or less than 10%. This will retain the economic benefits associated with both aquaculture and coastal recreation in the Sounds. There will be costs associated with implementing proposed Variation 1, which will have financial implications for individual marine farmers and the industry as a whole (as discussed in more detail in section 6.2.3 of this report) but this will be offset by greater certainty and security regarding operating rights.

### Other users

The proposed Variation 1 provisions should positively affect other users of the near foreshore area, including through improvements to visual amenity, access, and marine ecology for recreational users. There is also expected to be some improvements in the ability to navigate safely through the Sounds. The new provisions acknowledge the range of non-farming values that people have for the Sounds, including recreation, ecology, and cultural heritage.

Prohibiting marine farms outside of the AMAs will give some certainty to the community that another aquaculture expansion won't happen in the enclosed waters of the Sounds without public input.

## Degree of impact on, or interest from, iwi/Māori

The coastal marine environment is of considerable significance and value to all iwi whose rohe includes the Marlborough Sounds.

Te Ātiawa have specifically indicated that they consider that the allocation of authorisations process set out in proposed Variation 1 denies opportunities for commercial iwi aquaculture. They would like to see the allocation process incorporate a public tender process, with first right of refusal provided to iwi.

## When will effects occur?

While the existing farms are in the process of relocating, it may appear that a greater extent of the coastal marine area is occupied. It takes time for farm structures to be dissembled and re-established. This will be a temporary effect because the provisions set a limit of five and a half years for relocation (from the point of grant of authorisation to implementation of the new coastal permit).

New permits are likely to be granted for 20 years. Any associated effects will be longer term (but not necessarily permanent).

## Geographic scale of the effects

The effects will predominantly be in those areas where AMAs are located and largely limited to the enclosed waters of the Sounds. In some CMUs there will be very little changes to the location of existing farms, such as in Port Underwood. In other CMUs, there is an expectation that farms will be relocated away from sensitive areas, and therefore in the future, there may be some bays where no aquaculture takes place.

## Types of effects

The social, economic, cultural, and environmental effects of proposed Variation 1 are discussed in Section 6.2 of this report.

There are expected to be significant positive long-term effects from implementation on the marine environment and biodiversity, public access, navigational safety, visual amenity, and the protection of outstanding natural character and outstanding natural features and landscapes. Impacts on economic well-being will be positive but unquantifiable, which is likely to have a flow-on positive effect on social wellbeing. The provisions help deliver on Part 2 RMA matters, but some iwi have identified adverse effects on cultural values.

## Degree of policy risk, implementation risk or uncertainty

The Council has managed risks of implementing proposed Variation 1 by:

- Developing the provisions with extensive input from the marine farming industry, DOC, MPI and the local community through the MAWRG,
- Engaging expert advice (legal and scientific) to assist with drafting
- Responding to industry concerns by developing provisions which avoid gazumping, allow for industry-led trading and which provide certainty of tenure.

There is a reasonable level of certainty that the allocation mechanism will be successful and effective.

Some areas of uncertainty and implementation risk remain with respect to:

- The degree of alignment with the NESMA, which is not cognisant of the particular issues and risks in this region.
- How marine farming enabled by proposed Variation 1 may affect marine ecosystem health - which will be addressed by long-term data collection and analysis.

Overall, the Council has weighed up the risks and considers that the proposed Variation 1 provisions provide an evidenced response to those risks. The benefits are considered to outweigh the risks.

## Conclusion on the scale and significance of the proposals

The proposed Variation 1 provisions are a significant departure from the current framework. Proposed Variation 1 implements a strategic and spatial approach to managing the locations of marine farms. Benefits are anticipated for all users as a result. There are implementation risks associated with the novel allocation and management methods which are proposed and continued gaps in knowledge regarding the effects of aquaculture on the marine environment. These risks have been actively addressed by extensive consultation to obtain support from key stakeholders and incorporating a monitoring and adaptive management approach.

Overall, the issues addressed by proposed Variation 1 are of high significance and at a scale which potentially affects most if not all users of the enclosed waters Sounds. For that reason, a detailed s32 assessment has been undertaken.