Ministry for the Environment
Manatū Mō Te Taiao

Ministry for Primary Industries
Manatū Ahu Matua

# Proposed National Environmental Standard for **Marine Aquaculture**

New Zealand Government

*Growing and Protecting New Zealand*

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This publication is also available on the Ministry for Primary Industries' website at
**http://www.mpi.govt.nz/news-and-resources/publications/**

MPI Discussion Paper No: 2017/23

ISSN: 2253-3907 (online)
ISSN: 2253-3893 (print)
ISBN: 978-1-77665-585-4 (print)
ISBN: 978-1-77665-584-7 (online)

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# Ministerial foreword

The proposed National Environmental Standard for Marine Aquaculture seeks to make consenting for existing marine farms more consistent and efficient, as well as providing for best practice biosecurity management and more flexibility to adapt to new opportunities. It is a joint initiative between us to support continued aquaculture productivity while also ensuring good environmental outcomes.

Marine aquaculture contributes significantly to New Zealand's economy, and is recognised worldwide for its sustainable practices. In 2015 it generated around $500 million in revenue, and employed over 3000 people. Maintaining this important industry requires addressing the unique challenges it faces. This includes ensuring the important values people hold in the coastal marine area are protected while recognising the industry's need for investment certainty.

At present, the rules for replacing the resource consents for existing marine farms vary between regions. Some of these rules may change as regional councils prepare their 'second generation' plans, over the next eight years, creating uncertainty. Added to the mix is the fact that up to 64% of marine farm consents will expire before 2025.

This situation challenges the industry's ability to attract investment in existing farms.

The proposed National Environmental Standard seeks to make the replacement consenting pathway more consistent and efficient while still allowing local decision makers to have discretion in some areas.

A major benefit of this proposal is to require all marine farms to implement a biosecurity management plan. Keeping our waters free of harmful organisms requires a coordinated approach across the whole aquaculture industry.

Finally, flexibility is important for the New Zealand aquaculture industry to maintain its competitive edge and adapt in a changing world. The proposed National Environment Standard provides a streamlined approach for marine farms to change species on their farms, enabling innovation in the industry.

We consider that the proposed National Environmental Standard is consistent with the purpose of the Resource Management Act 1991 in that it would promote the sustainable management of natural and physical resources. The proposed matters of discretion would ensure the adverse effects of aquaculture activities can be appropriately avoided, remedied and mitigated. It provides a nationally consistent rules framework, allowing regional councils to set appropriate consent conditions reflecting best environmental practice for aquaculture, and strengthening biosecurity management.

Iwi have particular interests in aquaculture – both as guardians of our coastal environment and as marine farmers. We believe this initiative will continue to affirm these interests.

We want to acknowledge the collaborative work of the aquaculture industry, environmental groups, local government and the Ministry for Primary Industries, Ministry for the Environment and Department of Conservation for their contribution to getting this proposal ready for consultation. We now seek your submissions on the proposal.

Hon Nathan Guy
Minister for Primary Industries

Hon Dr Nick Smith
Minister for the Environment

# Executive summary

This discussion document outlines a proposed National Environmental Standard for Marine Aquaculture.

The objective in developing the proposed standard is to:

> Develop a more consistent and efficient regional planning framework for the management of existing marine aquaculture activities and on-farm biosecurity management, while supporting sustainable aquaculture within environmental limits.

The proposed standard does not address industry growth outside of existing space, or creation of new space for aquaculture. These are government priorities, but will be addressed separately.

## We seek feedback on the proposed standard

We seek feedback on the proposed standard. We want to hear from the community, iwi authorities, regional councils, the aquaculture industry and other interest groups. We will also seek input from iwi authorities through targeted hui.

A series of questions are included throughout the document to prompt your thoughts, but we welcome any feedback you may have. Turn to Section 8 on page 51 for how to give us feedback.

## A brief history of aquaculture

Since 1970, marine aquaculture has grown to become a significant sector of New Zealand's primary production industry. The New Zealand industry is based primarily on the farming of Greenshell™ Mussels, Pacific Oysters and King Salmon. At present 1147 marine farms are located throughout New Zealand.

Many of the coastal permits for these existing marine farms were originally granted under legislation that preceded the Resource Management Act 1991. These permits will expire either before or during 2025.

## The drivers for this proposed standard

To continue to contribute to New Zealand's economy, marine aquaculture needs to stabilise its existing production. This would offer investors greater certainty to invest in better use of existing space, value-added production and new technologies.

Biosecurity practices on marine farms need to be implemented consistently and effectively to protect the environment, communities and the aquaculture industry from the introduction, exacerbation and spread of marine pests and diseases.

## The problems addressed by this proposal

*Consenting processes are complex and inefficient*

Marine aquaculture operates in public space, and increasingly competes with other uses and values. These include fishing, recreational use, cultural use, and community aspirations for the coastal marine area.

The Government's Aquaculture Strategy supports a well-planned and sustainable aquaculture industry.

Marine aquaculture is primarily managed by regional coastal plans. Regional councils apply different objectives, policies, rules and notification requirements when they consider:

- replacement consents for existing marine farms;
- changes of species on existing marine farms.

Regional councils also take different approaches to the management of marine aquaculture biosecurity.

Variations and regional inconsistency in aquaculture management can result from these different approaches. This can impose unnecessary and unjustified regulation which results in extra time and cost on applicants, consent holders, regional councils and interested parties. In some regions, ongoing second generation planning for marine activities (including aquaculture) is also occurring. The consenting processes for existing farms can be complex, uncertain and inefficient.

## Risks for investment, productivity, innovation and the community

There is a risk that uncertainty in the consenting process could undermine the confidence of investors. That risk is further affected by the coming expiry of up to 64% of coastal permits for marine farms, due by the end of 2025. There is a risk of a reduction in production, investment and innovation.

Uncertain and inefficient processes are also barriers to realising the economic, social and cultural benefits that existing marine farms can provide.

## The proposed option

The proposed standard will:

- classify as restricted discretionary activities applications for most replacement consents for existing marine farms and the change of species on existing marine farms;
- specify a confined list of matters of discretion for decision makers; this would give consent applicants more certainty of process, including clearer information requirements and matters for consideration, while still allowing management of existing marine farming within environmental limits into the future;
- specify that most applications will not be publicly or limited notified, other than to the holders of Statutory Acknowledgements;
- provide for small scale realignments of existing marine farms, particularly where realignments can be used to reduce adverse effects;
- require that all marine farms (existing and new) prepare, implement and keep up to date biosecurity management plans to manage biosecurity risks from farm activities.

### Costs and benefits

Agencies and industry agree that the proposal will probably reduce costs and deliver process and efficiency benefits for getting replacement consents for existing marine farms, changing farmed species and conducting on-farm biosecurity management.

The costs and benefits of the proposed standard have been broadly estimated. The lack of New Zealand data makes accurate figures difficult to estimate.

Feedback from the public and iwi authorities during the consultation process will be important in influencing further assessment of the costs and benefits of the proposal. The assessed figures will contribute to the decision on whether to go ahead with the proposed standard.

# 1. Introduction

## 1.1 Background to New Zealand's aquaculture industry

Since its establishment in the 1970s marine aquaculture has grown to become a significant sector of New Zealand's primary production[1]. However, over its history in New Zealand, aquaculture has been in direct competition with other uses and values in the coastal environment. It faces unique challenges and conflict compared to other primary industry sectors because of its use of public space.

Aquaculture has been subject to a number of legislative reforms, including major initiatives in 2004 and 2011, and ongoing Government support through non-legislative measures. Competition for public space in the coastal environment however continues to increase focus on resource consent processes for marine farms. This can be an issue particularly for existing marine farms that have decades of investment in a particular area. Competition for space, in conjunction with varying processes, create a lack of certainty and consistency for marine farms trying to obtain a replacement consent for another 20 – 35 years.

The Government is committed to environmentally sustainable, primary sector-led strengthening of the economy, and in 2012 developed the Aquaculture Strategy and Five-year Action Plan to Support Aquaculture. In August 2015 the Government announced a programme of stronger national direction and guidance on key environmental issues, including aquaculture. The focus of the proposed national environmental standard (the proposed NES) is:

- providing nationally consistent rules for coastal plans for the management of existing marine farms (including simpler and more certain provisions for replacement consents for existing marine farms, and for change of species);
- a nationally consistent approach to the management of biosecurity risks, co-ordinated with requirements under the Biosecurity Act 1993.

The aim is to provide greater certainty for investment in existing aquaculture while supporting better environmental outcomes. For biosecurity, the industry has taken a voluntary and proactive approach to managing risks. However, there is currently no nationally consistent requirement for biosecurity management plans for marine farms. This creates a high risk situation to the greater New Zealand environment and the aquaculture industry. A nationally consistent regulation could mitigate, manage and minimise these risks.

It is important to note that the scope of the proposed NES focuses primarily on stabilising existing aquaculture production. It does not aim to address opportunities for substantial growth or creation of new space for aquaculture. New marine farms are only addressed by the proposed NES insofar as ensuring that a consistent approach is taken to on-farm biosecurity, for both existing and new marine farms.

To assist with the development of options, the Ministry for Primary Industries (MPI) has been working with the Ministry for the Environment (MfE) and the Department of Conservation (DOC) and established an Aquaculture Reference Group comprising members of the aquaculture industry, regional councils, Te Ohu Kaimoana (The Māori Fisheries Trust) and the Environmental Defence Society (see Appendix A).

National direction is one element of a broader approach to supporting the aquaculture industry. Other elements being actively progressed (but that are not the focus of this discussion document) include:

- investing in research and development to improve productivity and the value of existing production;
- improving the understanding and monitoring of the environmental effects of aquaculture;
- partnering with regional councils to provide assistance in planning processes;
- engaging in regional planning and consenting processes;
- supporting industry in building social licence for the aquaculture industry;
- identifying and providing future capacity for growth.

## 1.2 The purpose of this discussion document

This discussion document has been prepared to:

- help you understand why a proposed NES is being considered for aquaculture and the options that were considered as part of the development of the proposal;
- outline the proposal, and its potential costs and benefits;
- help you prepare questions and feedback;
- guide you in making written submissions.

Your submissions will be used to assist in the preparation of a report and recommendations to the Minister for the Environment and the Minister for Primary Industries about whether to proceed with the proposed NES.

1 For the purposes of this discussion, marine aquaculture is referred to throughout the document as "aquaculture".

# 2. Aquaculture in New Zealand today

## 2.1 What is farmed and where

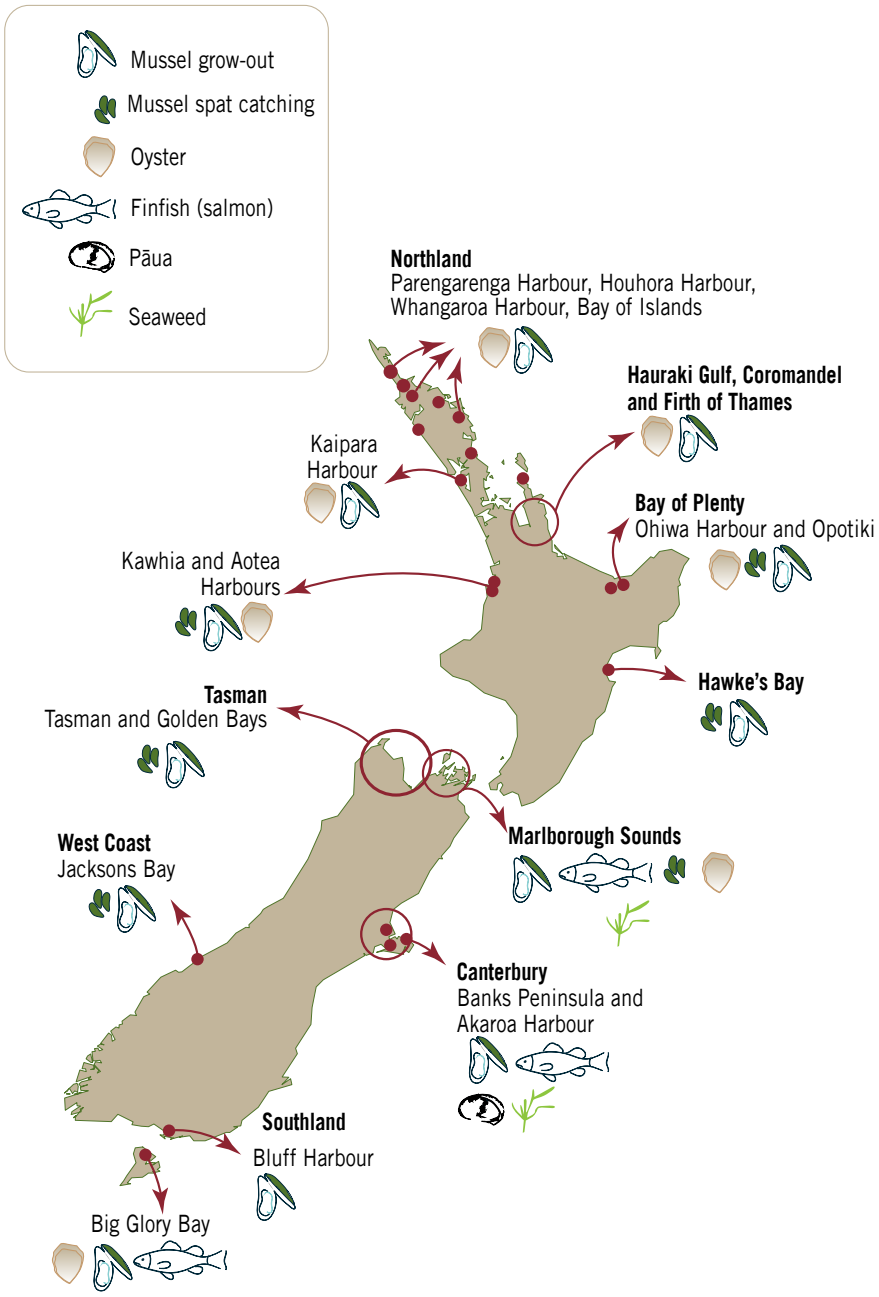
In New Zealand, three main species are farmed commercially: Greenshell™ Mussels, Pacific Oysters and King Salmon. There are also a number of other species farmed on a smaller scale (including Bluff Dredge Oysters and flat oysters). New Zealand research institutes and the aquaculture industry are experimenting with other species such as snapper, hāpuku and kingfish to assess whether they can be commercially farmed.

There are currently 1147 marine farms in New Zealand.[2] Aquaculture occurs in the majority of regions in New Zealand, however the key aquaculture regions are considered to be Northland, Auckland, Waikato, Bay of Plenty, Tasman, Marlborough, Canterbury and Southland, as shown in Figure 1.

A summary of the actual and potential effects of aquaculture on the environment is in Appendix B.

2 Covered by 1848 resource consents.

**Figure 1: Geographic locations of main aquaculture activities currently in New Zealand**



Iwi participation in aquaculture is significant in terms of Māori businesses and individual owners, operators and staff. Iwi own aquaculture assets throughout the main aquaculture regions, with iwi ownership being particularly significant in Northland, Auckland and Waikato in the mussel and oyster industries. Te Tau Ihu Iwi (the top of the South Island iwi) have interests in mussel and oyster farms in Tasman and Golden Bays and throughout the Marlborough Sounds, and Ngāi Tahu holds interests throughout the South Island.

## 2.2 Framework for managing aquaculture

In order to recognise the public nature of the coast, a right of occupation cannot be granted in perpetuity. In relation to marine farms, while the Resource Management Act 1991 (RMA) specifies that the term of a coastal permit for aquaculture activities can be no less than 20 years, it also restricts the term to no more than 35 years. There is also no guaranteed 'right of renewal' under the RMA; when a coastal permit expires, a new application must be made.

### Current permits for existing marine farms

Marine farms that were established prior to 1991 were originally authorised by a marine farm lease or license under the Marine Farming Act 1971. With the introduction of the RMA, these existing leases and licenses continued to authorise the marine farms, and any existing conditions continued to apply to the marine farms.

As part of the Aquaculture Reform (Repeals and Transitional Provisions) Act 2004 however, all existing leases and licenses were deemed to be coastal permits. To ensure a smooth transition from the previous management regime to the RMA, a deemed coastal permit for an existing marine farm was considered to include all the coastal permits that would be required for the activities under sections 12, 14 and 15 of the RMA, including for example occupation of the coastal marine area, disturbance of the seabed, take and discharge of seawater and discharges of feed. All of the deemed coastal permits were given a common expiry date of 20 years from the commencement of the new legislation. A significant number of coastal permits for existing marine farms therefore expire on either 31 December 2024 or 1 January 2025.

Marine farms that were established after the RMA came into force have been authorised either by a combination of coastal permits[3] and marine farming permits (if they were established prior to 2001) or by coastal permits only (for those established after 2001). Coastal permits for existing marine farms therefore have a wide range of expiry dates, typically between now and 2035.

### Marine and Coastal Area Act 2011

As aquaculture takes place in the coastal marine area, the Marine and Coastal Area (Takutai Moana) Act 2011 (the Takutai Moana Act) is also relevant. The Takutai Moana Act acknowledges the importance of the marine and coastal area to all New Zealanders and sets out a framework to protect their interests. The Takutai Moana Act defines two areas:

- the marine and coastal area – which extends from mean high water springs to 12 nautical miles offshore;
- the common marine and coastal area – which is the same as the marine and coastal area but excludes certain conservation areas and existing private titles. Private titles include any land that is owned by any person other than the Crown, and includes Māori customary land and Māori freehold land.

The Takutai Moana Act creates a special status for the common marine and coastal area, meaning neither the Crown nor any other person can own it.

### RMA framework for replacement consents and changes of species

When an existing deemed coastal permit or coastal permit expires, a replacement permit must be obtained from the appropriate regional council. The application process might involve limited notification to parties such as affected iwi, nearby land owners and occupiers or interest groups, including environmental groups, boaters and commercial or recreational fishers, or public notification.

Coastal permits for existing marine farms may specify that only a single species can be farmed, or may list multiple species. If a species is not listed on a coastal permit, then a marine farmer either needs to apply for additional or different species when the existing coastal permit expires and a replacement permit is being sought, or apply to change the conditions of an existing coastal permit to add or change species.

A series of planning instruments will be considered during the processing of an application for a coastal permit or for a change of conditions, including:

- the objectives, policies and rules of the existing regional coastal plan and any proposed regional coastal plan;
- the objectives and policies of the existing regional policy statement and any proposed regional policy statement;

3 For occupation of the coastal marine area and other activities such as disturbance of the seabed, take and discharge of seawater and discharges of feed.

- the New Zealand Coastal Policy Statement 2010 (NZCPS 2010), which contains objectives and policies of specific relevance to the management of aquaculture activities and coastal space more generally;
- relevant sections of the RMA, including sections 5-8 (the Purpose and Principles) which set out a series of matters to be considered for any use of natural and physical resources.

Matters of particular relevance to aquaculture contained in Part 2 of the RMA and in the objectives and policies of the New Zealand Coastal Policy Statement are outlined in Appendix C. Objectives, policies and rules contained in regional policy statements and regional coastal plans relevant to aquaculture vary throughout the country as they were developed based on local circumstances and the aims of local communities in relation to the management of the natural and physical resources of a particular region.

### Statutory Acknowledgements

Through Treaty settlement legislation a number of iwi around New Zealand have had their relationship with areas or features of the natural environment, including in the marine and coastal area, formally recognised in legislation. Recognition is provided by a number of mechanisms, including Statutory Acknowledgements. Statutory Acknowledgements are an acknowledgement by the Crown of mana in relation to specified areas – particularly cultural, spiritual, historical and traditional associations with an area. These acknowledgements are not a recent innovation, they date from the mid-1990s. The presence of a Statutory Acknowledgement in an area requires a council to have regard to it in forming an opinion as to whether the person specified in a Statutory Acknowledgement may be adversely affected by a consent application. Examples of Statutory Acknowledgements that would be relevant to aquaculture include:

- Schedule 101 of the Ngāi Tahu Claims Settlement Act 1998: Te Tai o Maahanui (Selwyn-Banks Peninsula Coastal Marine Area);
- Schedule 104 of the Ngāi Tahu Claims Settlement Act 1998: Rakiura/Te Ara a Kiwa (Rakiura/Foveaux Strait Coastal Marine Area);
- Ngāti Kōata, Ngāti Rārua, Ngāti Tama ki Te Tau Ihu, and Te Ātiawa o Te Waka-a-Māui Claims Settlement Act 2014/Ngāti Apa kit e Rā Tō, Ngāti Kuia and Rangitane o Wairau Claims Settlement Act 2014/Ngāti Toa Rangatira Claims Settlement Act 2014: Te Tau Ihu coastal marine area;
- Schedule 9 of the Te Uri o Hau Claims Settlement Act 2002: Statutory Acknowledgement for Kaipara Harbour coastal area.

### Biosecurity Act 1993

Biosecurity in New Zealand is primarily managed by MPI through the Biosecurity Act 1993, which underpins New Zealand's national biosecurity system in terrestrial and aquatic/marine ecosystems. The Biosecurity Act 1993 focuses on addressing biosecurity risks to New Zealand from harmful organisms through:

- border control: preventing harmful organisms from entering and establishing in New Zealand territory where possible;
- surveillance and response: if already established, harmful organisms can be monitored and an appropriate response initiated;
- pest management: the management of harmful organisms that are already established in New Zealand, by methods such as population management, controlling spread and proliferation, and mitigating impacts. Regional councils throughout New Zealand have an important role to play alongside MPI in pest management and control/eradication under the Biosecurity Act 1993.

Given the different roles and focus of the RMA and the Biosecurity Act 1993, both are important to achieving comprehensive protection from biosecurity risks for the coastal environment and its users (including the aquaculture industry). The Biosecurity Act 1993 focuses on harmful organisms and their movements, including surveillance and response (management, eradication, mitigation). The RMA focuses on the use, development and protection of natural and physical resources, and can be used to control the types of activities and resource use which could introduce or exacerbate biosecurity risks in the marine environment.

# 3. The problem

## 3.1 Summarising the problem

Aquaculture is different from other primary industries in that it is the only primary industry that exclusively occupies areas of public space (the common marine and coastal area) and is increasingly in competition with other uses and values, for example fishing (customary, commercial and recreational), other recreational users, and community aspirations for amenity values. The cultural values of Māori may be affected by aquaculture and there are also community concerns over environmental limits and cumulative effects. Use of this public resource for aquaculture requires careful balancing with other uses, users and values.

The problem to be addressed is best summed up as follows:

The Government's Aquaculture Strategy supports a well-planned and sustainable aquaculture industry. Aquaculture is primarily managed by regional coastal plans. Regional councils apply different objectives, policies, rules and notification requirements when they consider:

- replacement consents for existing marine farms;
- changes of species on existing marine farms.

Regional councils also take different approaches to the management of marine aquaculture biosecurity.

Variations and regional inconsistency in aquaculture management can result from these different approaches. Competition between uses of the coastal marine area can also result in conflict in consenting and plan-making processes. Variation, inconsistency and conflict can impose unnecessary and unjustified regulation which results in extra time and cost on applicants, consent holders, regional councils and interested parties. In some regions, ongoing second generation planning for marine activities (including aquaculture) is also occurring. The consenting processes for existing farms can be complex, uncertain and inefficient.

There is a risk that uncertainty in the consenting process could undermine the confidence of investors. That risk is further affected by the coming expiry of up to 64 percent of coastal permits for marine farms, due by the end of 2025. There is a risk of a reduction in production, investment and innovation.

## 3.2 What the proposal covers

The proposed NES focuses principally on managing the use of existing marine farms as an initial step to achieving one of the objectives of the Government's Aquaculture Strategy and Five-year Action Plan – to support efficient resource management planning and allocation processes that balances other use, ensures sustainability, and enables investment.[4]

Existing marine farms are defined as those farms:

- that hold a current coastal permit to occupy space in the coastal marine area;
- where the extent of the area occupied by the marine farm remains the same as authorised by the current coastal permit;
- where the structures remain materially the same as those on the current coastal permit, unless a change of species that requires a change in structures is sought;
- where the location of the structures remains the same as authorised by the current coastal permit, except that up to a third of the existing farm can be realigned (see section 3.3).

Two key areas are important to achieving the objective outlined above in relation to management of existing marine farms:

- the process and requirements for obtaining replacement consents for existing marine farms;
- the ability to change species being farmed and allow the industry to innovate within existing space.

In addition, biosecurity is a key risk to both the New Zealand coastal environment and the aquaculture industry. The proposed NES provides an opportunity to establish consistent requirements for all new and existing marine farms and to set expectations about biosecurity risk management for all farms.

## 3.3 What the proposal does not cover

The proposed NES does not cover the development of new space for aquaculture activities. This includes any farms where an increase in the area of the marine farm is sought and any existing farms that cannot meet the requirements noted in section 3.2 above.

As discussed in section 3.2, existing marine farms are defined in part by the fact that the location of the structures remains the same as authorised by the current coastal permit. The proposal provides for some small

4 *The Government's Aquaculture Strategy and Five-year Action Plan to Support Aquaculture*, p2.

realignment of existing marine farms, but the resolution of any existing marine farms that are "offsite" is outside the scope of the proposal beyond that allowance for realignment.

The proposed NES does not cover biosecurity risk management beyond a requirement for on-farm biosecurity management plans and management of biosecurity risks through conditions on replacement consents for existing marine farms.

The proposed NES does not specifically address strategic planning for the use, development and protection of the coastal environment (as required by Policy 7 of the NZCPS 2010), although this is fundamental to the ongoing consideration of existing marine farms.

## 3.4 Replacement consents for existing marine farms

In order to maintain its current contribution to the New Zealand economy, the aquaculture industry needs to stabilise its existing production, to provide the certainty to invest in better use of existing space, value-added production and development and adoption of new technologies. Confidence in the continuation of an activity is critical to continued investment and innovation in any industry. It is reasonable to expect that applications for replacement consents for existing marine farms will be processed without unnecessary costs and prolonged processes, provided existing marine farms are appropriately located, the farmers have been responsible operators and farms have been developed.

There is concern about the current process uncertainty for applications for replacement consents for existing marine farms.

Uncertainty in relation to the process is caused by a number of factors:

- activity classification in plans;
- notification provisions and practice;
- second generation regional plans;
- the treatment of existing marine farms within outstanding natural landscapes, outstanding natural features, and/or areas of outstanding natural character;
- a need for more in-depth strategic planning for aquaculture.

Ultimately uncertainty in relation to the process that an application for replacement consent for an existing marine farm might be subject to may lead to a reduction in the value of the marine farm, which limits a farmer's ability and incentive to borrow and invest new capital and invest in new technologies. The uncertainty also makes obtaining investors more challenging. It has been reported that investment confidence has reduced because of the uncertainty about process, and that this decrease in investment confidence is exacerbated by the fact that up to 64 percent of the coastal permits held by the aquaculture industry are due to expire over the next eight years.[5]

Each of the factors identified above in relation to uncertainty of process is discussed in more detail below.

### Activity classification

The RMA provides a range of activity statuses for activities that can be included in rules in plans:

- controlled activity – requires resource consent. The consent authority must grant a resource consent except if the marine farm is undertaken wholly or in part within a protected customary rights area, or has a more than minor effect on a protected customary rights area, or has insufficient information. The consent authority can impose conditions on the resource consent, but they are restricted to the stated matters of control and cannot be made so stringent as to mean the consent cannot be exercised.
- restricted discretionary activity – a resource consent is required for the activity and an application may be declined by the consent authority but only in relation to the matters which discretion is restricted to. If the consent is granted, conditions may be imposed but consideration is restricted to the stated matters over which discretion is restricted.
- discretionary activity – a resource consent is required for the activity and may be declined, or granted by the consent authority with or without conditions. The matters to be considered for a discretionary activity are wide, but any conditions of consent must come within the jurisdiction of the consent authority and be relevant under the RMA.
- non-complying activity – a resource consent is required for the activity and may be declined, or granted by the consent authority with or without conditions. The consent may only be granted if the consent authority is satisfied that the adverse effects on the environment will be minor or that the activity will not be contrary to the objectives and policies of the relevant regional coastal plan and/or proposed regional coastal plan.
- prohibited activity – no application for a resource consent may be made for the activity, and the consent authority must not grant a consent for it.

5 NZIER (2015) *NZIER overview of the impacts of re-consenting uncertainty and delay on aquaculture investment in New Zealand*. Memo to Aquaculture New Zealand.

Aquaculture activities on existing marine farms have different activity statuses in each of the main aquaculture regions, ranging from controlled to non-complying, as outlined in the table in Appendix D. A controlled activity status provides certainty that a replacement consent would be granted, as a council cannot decline a consent application. A restricted discretionary activity status does not provide certainty that a replacement consent would be granted, but, if the matters of discretion are confined, and the information requirements and matters that will be considered in assessing applications are clearer, greater certainty of process is provided. Discretionary and non-complying activity statuses, as noted above, allow a wide range of matters to be considered.

Currently:

- up to 37 percent of existing marine farms are classified as controlled activities by regional coastal plans;[6]
- all other existing marine farms are classified as discretionary or non-complying activities, or restricted discretionary activities with relatively wide matters of discretion;
- Marlborough District Council is the only regional council with a restricted discretionary activity rule with confined matters of discretion for existing marine farms, and that rule only applies to relatively few farms.

Up to 63 percent of existing marine farms therefore currently have an activity status in regional coastal plans that provides less certainty of process than desirable for stabilising current levels of production and investment confidence.

### Notification provisions

Over the last five years, 149 existing marine farms have sought replacement consents.[7] Thirty two of these applications were located in Northland under the current controlled activity rule, where the Regional Coastal Plan states that applications for controlled activities will be non-notified unless the Council considers that special circumstances exist. Of the remaining 117 applications for replacement consents, 43 percent were publicly notified, but a significant number of these applications were also for extensions of existing farms, rather than just replacement consents for the existing consented area.

Predicting future numbers of replacement consents that would be notified is not possible. While public participation through notification of resource consent applications can enhance the quality of decision making for new farms or significant changes to existing farms, the effects of existing marine farms that are seeking no or minor changes have already been realised and managed over the years. Thus, public participation should be based on the extent an existing farm is changing its impacts on the environment. In addition, the public can still participate in second generation regional coastal plan processes to ensure marine farms are not located in inappropriate areas.

For most existing marine farms therefore, the potentially lengthier process that results from notification of resource consent applications (with the resulting additional time and costs and potential impact on investment confidence) is not necessary.

### Second generation plans

Of the eight major aquaculture regions, six have first generation regional coastal plans that will be due for review prior to 2024. The other two regions (Auckland and Bay of Plenty) are a significant way through the development of their second generation regional coastal plans, with decisions having been released on both plans and appeals to the Environment Court currently being worked through.

Of those regions that are either currently reviewing or due to review first generation regional coastal plans, Northland is the most advanced, with a new plan likely to be publicly notified in mid-2017. On the basis of the draft plan released for consultation, it is likely that Northland Regional Council will propose that the existing controlled activity rule for most existing marine farms be retained.

Marlborough District Council has notified the proposed Marlborough Environment Plan, which includes second generation regional coastal plan provisions, but chose not to notify plan provisions relating to marine farming in the region, in order to provide more time to work with the industry and community on what those provisions should be.

The lengthy process of development of the interim aquaculture management areas (AMAs) in Tasman and the Wilsons Bay AMA in Waikato means it is considered unlikely that regional coastal plan provisions in these areas of Tasman and Waikato will change for some time.

For Marlborough, Canterbury, Southland and Waikato (apart from the Wilsons Bay AMA) the future planning framework for marine farming is therefore not clear, potentially affecting 1312 existing coastal permits (70 percent of the total coastal permits for existing marine farms). For marine farms in these regions, the planning

6 In Northland, some areas of Waikato and Marlborough. The number is only an estimate because establishing how many of the existing marine farms in Marlborough are classified as controlled activities is complicated, primarily because of the construction of the rule framework that applies in the Marlborough Sounds Resource Management Plan.
7 Farms seeking replacement consents were located in Marlborough and Northland.

framework that guides the consideration of applications for replacement consents may change from when the consent, lease or license was first granted. For example, there may be increasing competition for the coastal space, or overlays (such as areas of outstanding natural character or outstanding natural features and landscapes) may now apply to the areas where existing farms are located.

### Existing marine farms in outstanding areas, features and landscapes

Policies 13 and 15 of the NZCPS 2010 direct that adverse effects of activities on areas of outstanding natural character, outstanding natural landscapes and outstanding natural features are to be avoided. The judgement of the Supreme Court in *Environmental Defence Society Incorporated v The New Zealand King Salmon Company Limited* [2014] NZSC38 [17 April 2014] has also increased focus on the definition of areas that are considered to be outstanding, and the implications for consent applications in these areas.

A number of outstanding natural landscapes, outstanding natural features and areas of outstanding natural character in the coastal environment are identified in existing regional policy statements and regional coastal plans. Based on the areas currently identified, 18 percent of existing marine farms are located within areas mapped as outstanding in operative or proposed regional policy statements and regional coastal plans.

In Auckland, areas have been defined to be outstanding and the existing marine farms within those areas have been assessed to have no or minor effects on the values that make the area outstanding, but this type of assessment has not been carried out in any of the other major aquaculture regions.

There is a risk that replacement consents for some existing marine farms will either not be able to be obtained or will involve assessments and expert reports that will increase time and costs associated with gaining replacement consents for those farms that are located within areas that have been defined as outstanding.

### Strategic regional coastal planning

Policy 7 of the NZCPS 2010 requires regional councils to undertake strategic planning for the coastal environment through regional policy statements and regional coastal plans, including:

- considering where, how and when to provide for activities in the coastal environment;
- identifying areas of the coastal environment where activities are inappropriate, or may be inappropriate without consideration of effects through a resource consent process, and providing protection against inappropriate use in these areas;
- identifying coastal processes, resources or values that are under threat or at significant risk from adverse cumulative effects and including provisions in plans to manage these effects.

Policy 7 will be implemented through preparation of regional coastal plans over the next few years. While provisions in current regional coastal plans address existing marine farms, site by site consideration of the effects of individual farms through a resource consent process is the norm. The development of second generation regional coastal plans provides opportunity to better plan for areas that would be appropriate for aquaculture, to identify areas where aquaculture is considered to be inappropriate, and to better address the cumulative adverse effects of multiple marine farms.

Over time this development of plan provisions should reduce uncertainty about the process for marine farmers seeking replacement consents for existing marine farms. However, as noted in relation to the discussion of second generation regional coastal plans above, in a number of aquaculture regions in New Zealand, second generation regional coastal plans are only at an early stage. The development of a proposed plan to public notification can be a lengthy process, as can the process under Schedule 1 of the RMA following public notification of a proposed plan. For some of those marine farms whose coastal permits will expire between now and 2025 there is a risk that more in-depth strategic planning for aquaculture may not be completed in time to provide clear provisions and more certainty of process for those consent applications.

## 3.5 Realignment of existing farms

Realigning an existing farm means shifting its position. Below are some of the reasons why a marine farm may be realigned.

Existing marine farms that were authorised prior to the RMA, and some farms approved under the RMA, may be located over seabed habitat with important values (such as a reef), or within areas that are no longer considered to be entirely suitable for marine farming. For example, in Marlborough, marine farms were originally established primarily in a "coastal ribbon" extending from 50m to 200m offshore. In order to provide a wider buffer between marine farms and the shoreline to improve public access and protect ecological values along the shoreline, a more ideal siting in many locations would be between 100m and 300m offshore. In other instances, existing marine farms impinge to a very small extent on areas of

outstanding natural character, outstanding natural features or outstanding natural landscape, and realigning to avoid these areas would be beneficial.

Existing regional coastal plan provisions may unnecessarily restrict the ability of marine farmers to avoid these effects, by classifying changes to location as discretionary activities. The Auckland Unitary Plan and the Regional Coastal Plan for Northland both provide specific rules for realignment, but these are the only councils that do.

## 3.6 Change of species farmed

Aquaculture innovation and research in coastal environments can be achieved by two means:

1. Changes to existing farms to increase efficiency and productivity by:
   a) farming multiple species on the same structure;
   b) change in species;
   c) changes to structures;
   d) different growing techniques, such as increasing stocking densities, new technology, new additives, different timeframes for certain activities.
2. Experimental activities established for the sole purpose of trialling new marine farming methods or species and monitoring results and effects.

Currently only a few regional coastal plans contain comprehensive planning and consenting provisions to enable better and more innovative use of existing space. The aquaculture industry reports that this is discouraging industry innovation and transition to higher value species.

Depending on the region, existing coastal permits and their conditions do not allow flexibility. Many coastal permits are not drafted to enable the farming of additional secondary species or to change characteristics of the marine farm such as different structures, different configurations, and changes in best-practice lighting. The inability under a particular consent to change structures, configurations, or implement new best-practice methods of farming is a significant issue for many existing farms. Trials of new species (for example, farming of sea cucumbers and seaweed) and technologies, and integrated multi-trophic aquaculture could increase efficient use of space and productivity in the industry in the future as well as potentially reducing or mitigating ecological effects.

Feedback from the industry is that attempting to vary a coastal permit to change species can be costly. In the absence of flexible coastal permits or specific plan provisions, the ability for industry to undertake innovation and research activities usually requires either a new consent or an amendment to the conditions of an existing consent. The activity status for new consents varies between regions, with notification determined by the council on a case-by-case basis.

Despite the desire for innovation, farming technology or methods are usually limited to what was applied for in the consent application. The ability to trial new species and experiment on an existing farm is limited. Existing coastal permits do not tend to provide for this ability.

## 3.7 On-farm biosecurity management

Aquaculture biosecurity is about implementing measures to protect the environment, communities and the industry from the introduction, exacerbation and spread of marine pests and diseases. Aquaculture biosecurity focuses on excluding aquatic organisms (pests and diseases) that are harmful to aquaculture from New Zealand waters, and eradicating or managing them if they become established. The intention is to avoid, or minimise and manage the potential risks to people, the environment and the economy.

A report[8] prepared for MPI in 2016 noted that *"there is a large variation in biosecurity practices within the [aquaculture] industry and the high level of industry concern regarding pests and diseases is not always reflected in their biosecurity practices"*. Marine farmers adopting and maintaining effective biosecurity practices, and ongoing improvements to marine farm biosecurity, are critical to safeguarding New Zealand's indigenous biodiversity and wider environmental quality.

In addition to effects of biosecurity incursions on the environment, it is widely acknowledged that the aquaculture industry in New Zealand is vulnerable to the arrival of pests or diseases that could severely hamper production and investment. Pest or disease incursions could also undermine New Zealand's global reputation, market share and market access.

To date, marine farming in New Zealand has been largely free of aquatic pests and diseases, due in part to its relative geographic isolation and the distribution of marine farms. New Zealand's ocean currents, wildlife and recreational use of the coastal marine area and reliance on international and national shipping for trade and

8 Coast & Catchment (2016) *Managing Biosecurity Risk for Business Benefit – Aquaculture Biosecurity Practices Research*

goods distribution provides multiple potential pathways for pests and diseases to arrive, spread and proliferate. Some marine farm practices can also contribute to the risk of biosecurity events that affect marine farming and the wider marine environment, such as the movement of stock, genetic material, farm personnel, equipment and vessels between farms and regions.

Effective biosecurity measures at marine farm level are an essential part of the biosecurity tool box, collectively helping to maintain New Zealand's international reputation as a sustainable producer of high quality seafood, and a responsible user of the space and resources in the coastal environment. Comprehensive uptake of consistent and effective on-farm biosecurity practices is the most efficient and effective means of improving industry-wide resilience to pest and disease incursions. Currently, around 80 percent of existing marine farms have some degree of biosecurity practice in place. These practices and methods are often inconsistent, and their effectiveness can vary substantially between farms. For biosecurity measures to be effective, they need to be consistent across the country, both in respect of the methods adopted, and their application across all farms.

The aquaculture industry through Aquaculture New Zealand (AQNZ) has taken a strong lead by collaborating with central government to develop guidance on biosecurity practices for salmon, oysters and mussels through the *A+ Sustainable Aquaculture Programme* (A+ Programme). Further guidance is provided through MPI's *Aquaculture Biosecurity Handbook* (Biosecurity Handbook) and its associated technical document[9], which also includes a template biosecurity management plan to guide and encourage marine farmers to develop farm-level management plans. The AQNZ and MPI documents provide useful guidance, but the adoption of the A+ Programme and the measures in the Biosecurity Handbook remain voluntary, species-limited and currently high level.

The importance of aquaculture to the New Zealand economy and the potential for a significant adverse impact on both the quality of the environment and on production and market reputation from a biosecurity incursion warrants the development and implementation of a consistent national approach to marine farm biosecurity. The RMA and the Biosecurity Act 1993 have a part to play in achieving comprehensive protection for the industry. Regional councils as the consent authority for coastal permits have an important role in managing activities through resource consents that could result in the introduction or proliferation of harmful aquatic organisms. Therefore a dual response, through the Biosecurity Act 1993 with support from the proposed NES under the RMA is appropriate.

## 3.8 Policy objective

The policy objective of this proposal is to address the problems identified as within the scope of the proposal, as described in the preceding sections, by:

> Developing a more consistent and efficient regional planning framework for the management of existing marine aquaculture activities and on-farm biosecurity management, while supporting sustainable aquaculture within environmental limits.

The policy objective aims to retain communities' input to planning for aquaculture activities, but at a regional level at the plan making stage, rather than consent-by-consent. This recognises that each region has unique environmental characteristics and community views, and allows this to be reflected in a region's planning instruments.

9 *Options to Strengthen On-farm Biosecurity Management for Commercial and Non-commercial Aquaculture*, which can be accessed here: https://www.mpi.govt.nz/document-vault/13287

# 4. Options for solving the problem

This section looks at options for national direction for aquaculture and assesses their appropriateness for addressing the problems discussed in section 3 and for achieving the policy objective set out in section 3.8. There are a number of options available, each with different levels of enforceability and intervention.

The Ministry for Primary Industries, Ministry for the Environment and Department of Conservation have explored a number of options to address the problem of variable plan frameworks leading to uncertainty about the process for consent applications for existing marine farms or change of species and the need for a consistent approach to on-farm biosecurity management. Between 2013 and 2014 government agencies embarked on a process to identify issues to be prioritised for national direction. For aquaculture, this involved assessing a range of other options. From this process, 13 potential solutions were identified to address the problem.[10]

## 4.1 How we assessed the options

To assess options to address the problem, "first order" assessment criteria were developed to assess how well the option would address the policy objective in section 3.8. 'Second order' assessment criteria were developed to assess whether the option could be implemented effectively and efficiently.

10 See Appendix E.

### First order assessment criteria

1. **Delivers consistency**
   Does the option address unnecessary variation between councils in relation to controls on aquaculture?

2. **Increases certainty about consenting processes and requirements**
   Does the option increase certainty of processes and requirements (for example, requirements for the information to be supplied with consent applications, and the matters that will be considered by decision makers) for existing consent holders, while maintaining the underlying purpose of the RMA?

3. **Improves management of on-farm biosecurity risks**
   Does the option enable consistent and effective on-farm biosecurity management plans/procedures?

4. **Recognises future strategic planning for aquaculture**
   Does the option recognise and provide for future strategic planning by councils that identifies areas that are appropriate or inappropriate for aquaculture?

### Second order assessment criteria

5. **Effectiveness (timeliness/difficulty of implementation)**
   Are there any significant barriers or complexities to implementation? Does the option deliver a solution that can be implemented in a timely and effective manner, and particularly prior to 2024? Is it possible to monitor compliance with the option, and can it be enforced?

6. **Efficiency**
   To what extent are the benefits of the option expected to exceed the costs?

## 4.2 The options we assessed

The status quo (that is, the option of 'do nothing') and the 13 potential solutions were assessed against the assessment criteria. Six of these options are discussed below:

- a New Zealand Coastal Policy Statement for marine aquaculture;
- a national environmental standard for marine aquaculture;
- a combination of a New Zealand Coastal Policy Statement for marine aquaculture and a national environmental standard;
- Ministerially-directed changes to regional plans using section 25A of the RMA;
- regulations to amend specific regional coastal plans under sections 360A and B of the RMA;
- guidance.

Table 1 in Section 4.3 provides an analysis of the options against the assessment criteria. Appendix E summarises the assessment of the remaining options.

### New Zealand Coastal Policy Statement: Marine Aquaculture

Part 5 of the RMA provides for the Minister of Conservation to issue an NZCPS "to state policies on matters in order to achieve the purpose of this Act in relation to the coastal environment of New Zealand". An NZCPS with specific objectives and policies on aquaculture has the potential to enable a nationally consistent policy approach to how aquaculture activities are addressed by councils in regional policy statements and coastal plans. In general, an NZCPS is useful for providing the policy context to rules (both in regional plans and an NES).

An NZCPS may be prepared on any matter where the Minister of Conservation considers it useful for achieving the purpose of the RMA in relation to the coastal environment. Section 58 of the RMA sets out a range of matters the Minister may have regard to when deciding whether it is desirable to prepare an NZCPS. These matters are broad, and the policy objective in this discussion document could partly be addressed by an NZCPS.

While more specific objectives and policies relating to replacement consents for existing marine farms, change of species and biosecurity risk management could be included in an NZCPS: Marine Aquaculture, the existing NZCPS 2010 already includes policies on aquaculture, harmful aquatic organisms and strategic planning. These policies and others in the NZCPS 2010 already provide an integrated framework for coastal management and the management of aquaculture in the coastal marine area. The provision of more specific objectives and policies through an NZCPS: Marine Aquaculture might increase consistency and process certainty by providing greater direction to the development of regional coastal plans, but interpretation and implementation of those objectives and policies by regional councils is still likely to vary across the country, reducing the effectiveness and efficiency of an NZCPS: Marine Aquaculture as an option. Implementation of objectives and policies in an NZCPS: Marine Aquaculture through plan changes to regional coastal plans could also be a lengthy process and may not be fully completed by 2024/25. In relation to the other criteria outlined in section 4.1, the NZCPS 2010 already provides guidance in relation to biosecurity and strategic planning.

There are also existing work programmes underway associated with the NZCPS 2010. For example, DOC is undertaking an effectiveness review of the NZCPS 2010 and will submit a report to the Minister of Conservation assessing the effectiveness of the NZCPS on RMA policies and plans and other decision making.

In the context of the existing objectives and policies of the NZCPS 2010, the work programmes that are underway, the degree of process certainty sought, and the implementation timeframes, the addition of further policy through an NZCPS: Marine Aquaculture is not considered to be an efficient or effective planning approach to the problems identified in section 3 of this discussion document. An NCZPS: Marine Aquaculture is therefore not considered to meet the criteria outlined in section 4.1.

### National environmental standards

NESs are legally enforceable regulations made under sections 43 to 44 of the RMA. They are essentially nationally consistent rules that in most cases replace regional plan rules for a particular activity.

An NES may be absolute, so that local rules cannot be more lenient or stricter than the standard, or it may provide specifically for some local variation. Where councils are allowed by an NES to be more stringent or more lenient there is a risk of continued inconsistency. This can be addressed however by careful consideration of where an NES provides for leniency or stringency, and only providing for it where it is warranted. An NES may contain rules, qualitative or quantitative standards, exemptions from standards, and notification requirements.

An NES would provide one set of consistent rules and standards for replacement consents for existing marine

farms, minor realignment of existing marine farms and consents for change of species, and could provide consistent direction on measures to address biosecurity risks at a farm-specific level. It can also be developed and implemented in a reasonably short time frame, and well ahead of the expiry of the majority of the current coastal permits for existing farms. The inclusion of specific rules relating to change of species (as part of an application for a replacement consent) would provide a pathway for marine farmers to change species immediately that the NES was Gazetted. Provisions could be included to recognise future strategic coastal planning by councils. An NES therefore meets all of the assessment criteria outlined in section 4.1 above.

### NZCPS: Marine Aquaculture and NES: Marine Aquaculture

A combined approach involving both an NZCPS: Marine Aquaculture and an NES: Marine Aquaculture could be taken. This would provide a consistent set of rules, and provide more detailed and specific aquaculture objectives and policies than those currently in the NZCPS 2010.

This option has the advantages of the NES: Marine Aquaculture discussed in the section above, in combination with more detailed and specific aquaculture policy, which might be of assistance to decision makers administering an NES: Marine Aquaculture.

As noted earlier, however, the benefits of an NZCPS: Marine Aquaculture are marginal, costs are expected to be high, development and implementation of an NZCPS could be lengthy, and it is not considered to meet the criteria outlined in section 4.1. The option of both an NZCPS: Marine Aquaculture and an NES: Marine Aquaculture is seen to be less effective than an NES: Marine Aquaculture alone at meeting the criteria set out in section 4.1.

### Direct changes to regional plans

Two sections of the RMA provide for the Minister for the Environment or the Minister of Aquaculture to intervene directly in regional plans.

#### Section 25A RMA

Section 25A of the RMA enables the Minister for the Environment to direct a regional council to prepare a change to its regional plan that addresses a resource management issue relating to its functions under section 30. The Minister for the Environment could therefore direct selected regional councils to prepare plan changes to regional coastal plans to include new provisions for replacement consents for existing marine farms, change of species and the management of biosecurity risks. Once prepared, the plan change would be subject to the normal Schedule 1 process under the RMA.

This option could address consistency issues and provide more certainty of process, but achievement of these aims would be contingent on comprehensive direction being given to councils on how regional coastal plans were to be prepared. Differing drafting and interpretation between councils is still likely to result in inconsistency, and the RMA Schedule 1 process might result in plan provisions that differ significantly from the original ministerial direction. A separate direction would have to be made to each regional council in order to implement this option, and the likely timeframes for each council to develop a plan change and complete the RMA Schedule 1 process mean that this option cannot be implemented in a short time frame. Ministerially directed plan changes are generally better suited to the purpose of making small corrections to individual plans rather than addressing a wide ranging issue in multiple plans.

#### Section 360A-B RMA

Sections 360A and 360B of the RMA enables provisions in a regional coastal plan that relate to the management of aquaculture activities in the coastal marine area to be amended by regulation. Specific objectives, policies, rules and/or other methods for replacement consents for existing marine farms, change of species and management of biosecurity risks could be added to regional coastal plans by regulation under section 360A.

Sections 360A and 360B of the RMA contemplate changes being made to provisions of 'a' regional plan. To make changes at a national level using these sections, changes would need to be made to all relevant individual regional plans. While specific provisions can be included in regional coastal plans by use of the powers under s360A of the RMA, a specific process of consultation and consideration of comments needs to be followed for including these provisions in plans. Sections 360A and 360B of the RMA can only be used to amend operative regional coastal plans, and so cannot efficiently recognise future planning processes.

While less time-consuming than the RMA Schedule 1 process, the number of regional coastal plans that would need to be amended could result in complex and time consuming processes to establish new provisions. The need to make changes across multiple regional coastal plans also means that this option would not be cost-effective to implement.

### Guidance

National guidance could set out the matters that should be considered for replacement consents for existing marine farms or consents for change of species, and the approach that should be taken to notification of consent applications. Initial guidance has already been developed in relation to biosecurity management plans through MPI's Biosecurity Handbook and the aquaculture industry's A+ programme.

Guidance is not considered to be effective or efficient as a standalone option, but would be a useful complementary measure to support statutory or regulatory approaches. It can be developed in a relatively short time frame, and generally at low cost when compared to other options, with significant benefits in terms of providing implementation assistance for statutory or regulatory options.

## 4.3 Which is the best option?

Analysis of the viable options to address the defined problem is outlined in Table 1 over the next 4 pages.

## Table 1: Initial/Preliminary assessment of options against criteria

| Option | Description | Criteria | | | | | |
|---|---|---|---|---|---|---|---|
| | | First order | | | | Second order | |
| | | Delivers consistency | Increases certainty around consenting processes and requirements | Improves management of on-farm biosecurity risks | Recognises future strategic planning for aquaculture | Effectiveness Timeliness/ Implementation | Efficiency: Extent to which benefits expected to exceed costs |
| **Status quo** | No policy intervention. | No | No | No | Yes | Partial | Partial |
| | | Activity status and rules for existing marine farms vary between regions, resulting in inconsistency and uncertainty in some regions as to how applications will be processed. In the absence of flexible coastal permits or specific plan provisions, applications to change species can be time-consuming and costly, resulting in a constraint on innovation.<br>Existing consent holders can apply for replacement consents for existing marine farms well-before expiry to manage risks posed by uncertainty of process. Section 127 of the RMA does provide for applications to be made to change consent conditions relating to the species being farmed.<br>There is no nationally consistent framework for biosecurity management under the RMA. | | | Future strategic planning would be anticipated to continue, consistent with the policy direction of the NZCPS 2010. | No barriers to implementation, as the status quo is what is happening now.<br>Whether a solution to the problems identified can be delivered in a timely and effective manner is reliant on timely implementation of 2nd generation plans to deliver higher degree of process certainty.<br>Arguably low cost to Council as work is being undertaken, however high cost to industry and others needing to engage on individual applications for replacement coastal permits. | |
| **NZCPS: Marine Aquaculture** | Set specific objectives and policies for aquaculture. Regional councils must amend plans to give effect to NZCPS. | Partial | Partial | No | Yes | No | No |
| | | An NZCPS: Marine Aquaculture would provide national policy guidance and could deliver a degree of consistency if policies were sufficiently directive to guide development of consistent rules. As regional coastal plans are reviewed an NZCPS: Marine Aquaculture would continue to apply, maintaining a consistent approach.<br>Regional interpretation and implementation would lead to some variability in regional rules, reducing consistency, certainty of process and effectiveness.<br>It is unclear whether an NZCPS: Marine Aquaculture would deliver the required level of process certainty.<br>Policy alone is not seen as an effective method of improving the management of on-farm biosecurity risks, as it cannot compel action. | | | Would reinforce need to undertake strategic planning for aquaculture. | Requires either a Board of Inquiry or Minister-established consultation process prior to approval.<br>Would require separate implementation by each council. If directed, plan changes to meet an NZCPS: Marine Aquaculture would be made without Schedule 1 processes. | Unlikely that benefits would exceed costs given the potential variable outcomes resulting from regional planning.<br>High costs and potential delays associated with development and implementation of an NZCPS. |

| Option | Description | Criteria | | | | | |
|---|---|---|---|---|---|---|---|
| | | First order | | | | Second order | |
| | | Delivers consistency | Increases certainty around consenting processes and requirements | Improves management of on-farm biosecurity risks | Recognises future strategic planning for aquaculture | Effectiveness Timeliness/ Implementation | Efficiency: Extent to which benefits expected to exceed costs |
| **NES: Marine Aquaculture** | Regulations that:<br>• replace rules in regional plans relating to replacement consents for existing marine farms and change of species.<br>• set requirements for on-farm biosecurity management plans. | Yes | Yes | Yes | Yes | Yes | Yes |
| | | Would ensure consistency through introduction of one set of rules and standards for aquaculture replacement consents for existing marine farms and consents for change of species, and provide certainty about activity status and matters that will be considered in making decisions on consent applications. A national framework for on-farm biosecurity management under the RMA would be achieved for new and existing farms.<br>Councils would be able to make more lenient rules which would reduce consistency but increase certainty of process.<br>As regional plans are reviewed, the NES would continue to apply, maintaining a consistent approach. | | | Would recognise future strategic planning by regional councils that identifies areas that are appropriate or inappropriate for aquaculture. | Requires a Minister established consultation process, but likely to be faster than the same process for an NZCPS.<br>Councils would need to change plans, but no further consultation process required.<br>Can be implemented well in advance of 2024/25. | Estimated benefits expected to significantly exceed costs (NZIER analysis). |
| **NZCPS: Marine Aquaculture and NES: Marine Aquaculture** | Prepare both an NZCPS: Marine Aquaculture to set objectives and policies, and an NES: Marine Aquaculture to set rules. | Partial | Yes | Yes | Yes | No | No |
| | | In addition to relevant NZCPS2010 policies, would provide more specific and targeted policy to guide the replacement consents for existing marine farms, change of species and on-farm biosecurity NES provisions.<br>Differences in interpretation of objectives and policies in an NZCPS: Marine Aquaculture may be translated into decision making on consent applications, reducing clarity for all parties.<br>Would ensure consistency through introduction of one set of rules and standards for aquaculture replacement consents for existing marine farms and change of species, and provide certainty about activity status and matters that will be considered in making decisions on consent applications.<br>A national framework for on-farm biosecurity management under the RMA would be achieved.<br>Councils would be able to make more lenient rules which would reduce consistency but increase certainty of process.<br>As regional plans are reviewed, the NZCPS and NES would continue to apply, maintaining a consistent approach albeit with some potential reduction in clarity of decision making as discussed above. | | | Would reinforce need to undertake strategic planning for aquaculture. | New RMA provisions for a combined process for NZCPS and NES may assist in reducing costs and improving timeliness.<br>Compared to NES alone option, this option would take longer to implement with marginal benefits. | While costs are expected to be higher than the NES only option, NZIER analysis suggests the benefits of an NES: Marine Aquaculture are expected to exceed costs.<br>Costs of developing an NZCPS: Marine Aquaculture however would be greater than the marginal benefits that would result.<br>Overall therefore costs are expected to exceed benefits for this option. |

| Option | Description | Criteria | | | | | |
|---|---|---|---|---|---|---|---|
| | | First order | | | | Second order | |
| | | Delivers consistency | Increases certainty around consenting processes and requirements | Improves management of on-farm biosecurity risks | Recognises future strategic planning for aquaculture | Effectiveness Timeliness/ Implementation | Efficiency: Extent to which benefits expected to exceed costs |
| **Ministerially directed plan change (s.25A)** | Minister for the Environment to direct regional councils to prepare a plan change to provide for replacement consents for existing marine farms, change of species, and on-farm biosecurity management. | Partial | Partial | Partial | No | No | No |
| | | Could achieve a fairly high level of consistency, but differing council drafting, interpretation and the outcome of RMA Schedule 1 consultation processes might lead to variation.<br>Has the potential to improve certainty, depending on the final outcome of directed plan changes following RMA Schedule 1 process and on how plan changes are implemented.<br>Consistency would be likely to decrease over time as plans are reviewed. | | | Plan changes can only apply to the current plan. | Plan changes go through normal RMA process (Schedule 1) which must be done for all relevant regions, and could be onerous. | Development of plan changes by each region is not likely to be an efficient option and would be costly for councils, industry and submitters. |
| **s.360A regulations** | Amends provisions in regional coastal plans that relate to aquaculture. | Partial | Partial | Partial | No | No | No |
| | | Would achieve a high level of consistency and certainty initially through introduction of prescriptive planning and consenting rules for existing marine farms and on-farm biosecurity management in each regional coastal plan.<br>Consistency would be likely to decrease over time as plans are reviewed. | | | Regulations can only amend current plans. | Requires a Minister established consultation process.<br>Implementation is expected to be complex as regulations must be customised to amend each regional coastal plan. Timeliness of implementation is likely to be protracted compared to some other options. | Inefficient due to high implementation costs and outcomes that are not future proof. |

| Option | Description | Criteria | | | | | |
|---|---|---|---|---|---|---|---|
| | | First order | | | | Second order | |
| | | Delivers consistency | Increases certainty around consenting processes and requirements | Improves management of on-farm biosecurity risks | Recognises future strategic planning for aquaculture | Effectiveness Timeliness/ Implementation | Efficiency: Extent to which benefits expected to exceed costs |
| Guidance | Central government to prepare guidance material around planning and consenting for replacement consents for existing marine farms, change of species and on-farm biosecurity management to support any of the other options discussed above. | Partial | Partial | Partial | Yes | No | No |
| | | Achievement of criteria is dependent on which of the options discussed above the guidance is supporting.<br>In all cases guidance will increase the likelihood that a particular criteria will be achieved. | | | Guidance can be written to recognise the role of future planning for aquaculture. | Effective when considered in combination with other options.<br>Relatively quick to develop and implement. | Will increase benefits of any option that it is combined with.<br>Low cost to develop and implement. |

## 4.4 Preferred option – a National Environmental Standard

Based on this assessment an NES: Marine Aquaculture is identified as the preferred option to address the problem and achieve the policy objective, with guidance to support its implementation, particularly in relation to the development of on-farm biosecurity management plans.

An NES meets all of the assessment criteria. It has the ability to provide the prescriptive national direction required to increase consistency and certainty of process for replacement consent applications for existing marine farms and for change of species, and to achieve a consistent approach to on-farm biosecurity management. An NES can specify an activity status, notification requirements and matters to be considered in making decisions on consent applications in a way that can provide certainty of process and support sustainable aquaculture within environmental limits. An NES can also clarify how existing marine farms within and adjacent to outstanding areas will be considered.

Future strategic planning for aquaculture can still occur and is recognised through the careful crafting of the proposed NES provisions, as discussed in section 5.2 of this discussion document. An NES can therefore support the existing policies of the NZCPS 2010.

A significant advantage of an NES is that it can be implemented in a timely and effective manner. Following consultation and the completion of an RMA section 32 evaluation report for the proposed regulations, if a decision is made to proceed with an NES it can be prepared and Gazetted within relatively short timeframes when compared to the RMA Schedule 1 process for regional coastal plans or the development of an NZCPS: Marine Aquaculture and its implementation through changes to regional coastal plans. A consistent approach to replacement consents for existing marine farms can therefore be established well before the majority of current coastal permits expire, and address uncertainty of process and improve investment confidence in the aquaculture industry.

For the reasons outlined above, an NES is preferred over an NZCPS: Marine Aquaculture and is considered to be significantly more effective than any of the other options considered. As discussed in section 5 of this discussion document, guidance material, while only partially effective on its own, when combined with an NES provides a comprehensive approach to addressing the problems identified for existing marine farms and on-farm biosecurity management.

**Q**

1. Do you think an NES for marine aquaculture, including guidance material, is required? Alternatively do you think the status quo (where regional councils decide the activity status for replacement consents for existing marine farms and consents for change of species which can vary from controlled to non-complying) should be maintained?

# 5. How an NES: Marine Aquaculture would work

## 5.1 Overall framework

An NES: Marine Aquaculture will achieve the policy objective in section 3.8 by providing a consistent overall planning framework for replacement consents for existing farms and change of species on farm, while allowing some flexibility for councils to address local circumstances. Nationwide requirements for aquaculture biosecurity management plans will also be imposed. The proposed NES: Marine Aquaculture includes:

- restricted discretionary activity status for replacement consents for most existing marine farms;
- a set of matters that councils' discretion will be restricted to when assessing applications for replacement consents;
- no public notification of replacement consent applications for existing farms, unless the farm is located in an area that has been determined by the council through regional coastal planning processes to be inappropriate for aquaculture;
- a restricted discretionary activity status for small realignments of existing marine farms that are less than 10 hectares in size;
- a restricted discretionary activity status for changing species on marine farms, with matters of discretion determined by the type of species change being proposed;
- a national requirement for all marine farms to have biosecurity management plans.

## 5.2 Replacement consents for existing marine farms

This section of the discussion document discusses the proposed NES in relation to the process and requirements for obtaining replacement consents for existing marine farms.

An indication of how NES provisions relating to replacement consents for existing marine farms might look is contained in Appendix F. The intent of the NES is described below.

### Existing marine farms are classified as a restricted discretionary activity

The proposed NES recognises that existing marine farms have either:

- been in the water for a significant period of time (some of them for 30 or more years); or
- that an initial assessment under the RMA was completed at the time that consent applications for the site were first made and that a complete reassessment is not necessary when consents are replaced.

On this basis, replacement consents for existing marine farms are proposed to be restricted discretionary activities. In order to be considered an existing farm, a marine farm must hold at least a current coastal permit to occupy the coastal marine area, and may hold a series of other consents as well such as a coastal permit to disturb the seabed to place anchors and a consent to take and discharge seawater and organic material during harvest. For a marine farmer to be able to apply for a replacement consent as a restricted discretionary activity under the proposed NES, the farm must also:

- be located in the same location as authorised by the current coastal permit for occupation;
- be occupying the same, or less area, than authorised by the current coastal permit;
- be using structures and anchoring systems that are materially the same as the current ones;
- be farming the same species as those authorised by the current coastal permits.

If the marine farm cannot meet these requirements then:

- if no current permit is held, or the extent of area occupied is proposed to increase, the application is considered to be for new space and is not covered by the NES; or
- consent can be applied for a change of species under other provisions of the NES, which would allow structures and anchoring systems to change; or
- consents can be applied for realignment (see discussion on pages 33-34 of this discussion document); or
- the application is considered under the regional planning framework of the relevant region, rather than being covered in the NES.

While councils have the discretion to grant or decline consent applications for restricted discretionary activities,

the matters that can be considered are more restricted than for discretionary or non-complying activities, where all relevant effects can be considered. Environmental, social and economic effects that may arise from existing marine farming and an assessment of their significance are outlined in Appendix G.

Specifying through the proposed NES that all existing marine farms are restricted discretionary activities will resolve the issue of different activity classifications across the country and provide some increased certainty of process for marine farmers, while ensuring that environmental, social and cultural effects are still taken into account as necessary.

Other activity classifications were considered as part of the development of the proposed NES. Under section 68A of the RMA aquaculture activities are not allowed to be classified as permitted activities in a regional coastal plan. A controlled activity would have the advantage of requiring that replacement consents be granted for existing farms, and would provide the most effective way of addressing the certainty issues discussed in section 3. However, a number of these farms have not been subject to previous assessment under the RMA (for those marine farm leases and licenses that became deemed coastal permits under the RMA in 2004) and a small number of existing farms are potentially located in areas where consent would be unlikely to be granted in the future, for example due to navigational issues that have arisen since the coastal permits were originally granted. Because most existing pre-RMA farms have not been subject to an assessment of environmental effects (and in particular an assessment of seabed effects), classifying them as controlled activities would effectively determine that the existing location is "suitable".

Classifying existing marine farms as discretionary or non-complying would not provide the increased certainty of process advantages that a restricted discretionary activity does, and would therefore not assist in resolving the issues for existing marine farms outlined in section 3 of this discussion document.

## A few, focused matters of discretion outline what councils can consider when making decisions on consent applications

Under a restricted discretionary activity classification, the matters that a council can consider when making a decision on a consent application are specified. Careful drafting is required to ensure that matters are not phrased so widely that the activity becomes a de facto discretionary activity.

As noted earlier, environmental, social and economic effects that may arise from existing marine farming and an assessment of their significance are outlined in Appendix G. Many of the effects of marine farms are a function of their location and will have been assessed when coastal permits were first granted. For example, effects on navigation are a function of the physical location of the farm when it is first proposed and the type of structures being used. Effects on landscape and natural character depend principally on the location of the farm in relation to those values, and in many cases will have been assessed when coastal permits were first granted. Many regional councils have considered their existing marine farms in the development of their first generation regional coastal plans, and identified any marine farms where effects are of concern. For those councils that have begun and/or substantially progressed second generation coastal plans, existing marine farms have been subject to a second, more detailed, round of consideration, particularly in light of the changing requirements of the RMA and the NZCPS 2010. The net effect is that existing farms first consented under the RMA have been subject to consideration of effects, and some marine farm leases and licenses granted before the RMA have been considered through first and second generation regional coastal plans.

It is therefore possible to develop a focused list of effects that should be subject to matters of discretion for replacement consents for existing farms. At this stage, effects that are considered to be relevant are:

- timing of occupation – particularly in relation to seasonal activities such as spat catching, where the original coastal permits issued may have been contingent on only a limited period of occupation of a site each year;
- continued reasonable public access and navigational safety – through the layout, positioning, lighting and marking of marine farms, and ensuring integrity and security of marine farm structures, including anchoring systems;
- adverse effects on seabed features such as reefs and biogenic habitats[11] underneath and in close proximity to the marine farm;
- marine mammal and seabird interactions with marine farms – particularly entanglement, but not habitat exclusion;

11 The habitat created for other species (including nursery areas for fish) by the physical structure and density of various animal and plant species, either individually or collectively. Examples include beds of horse mussels, bryozoans, sponges, hydroids, kelp, red algae, rhodoliths and sea grass. Biogenic habitats may be present on hard (reef) or soft (sediment) substrates.

- effects on biosecurity;
- effects of noise, rubbish and debris.

In relation to adverse effects on seabed features such as reefs and biogenic habitats, many of the marine farms that were established under the RMA will have had seabed assessments undertaken as part of the original consent application process. Some farms may also have ongoing seabed monitoring information available. It is intended that this information can be used as part of the application for any replacement consent, rather than new information having to be provided. The key matter to consider is whether these types of habitats are present beneath an existing marine farm and, if they are, whether significant adverse effects on them can be avoided, remedied or mitigated.

For marine mammals, effects of larger offshore farms will potentially be greater than inshore farms, particularly where they occur close to or on migration routes. A specific matter of discretion is recommended for adverse effects of offshore farms on marine mammals. For the purposes of the NES offshore farms are defined as farms that are 100 hectares in size or larger that are not located within enclosed waters such as harbours, sounds or bays.

Administrative matters such as consent duration and review, information and monitoring requirements, and the imposition of administrative charges, coastal occupation charges, financial contributions and bonds are also proposed to be matters that councils could consider when processing applications to replace consents for existing marine farms.

In addition, some further specific matters are relevant to marine farms where supplementary feeding is required as part of normal operations (such as finfish farms):

- conditions to avoid, remedy or mitigate water quality and seabed effects, including fallowing and rotation;
- effects on seabed features such as reefs and biogenic habitats further away from the marine farm;
- use of additives, antibiotics, therapeutants and antifouling;
- effects of underwater lighting (used to manage the rate at which fish mature) and operational lighting from structures such as barges and sea pens;
- discharges of odour.

Section 165ZJ of the RMA requires a regional council to consider the compliance history of the consent holder when considering applications for replacement consents for existing marine farms. Consideration was given as to whether to include a matter of discretion in the NES in relation to this, but it was concluded that this would essentially duplicate section 165ZJ. The matter of compliance history will be considered however for each replacement consent application, consistent with section 165ZJ, in addition to the requirements of the NES.

**Q**

**2.** Do you think restricted discretionary is an appropriate status for replacement consents for existing marine farms? How would other activity statuses address the issues identified in section 3 of this discussion document?

**3.** Does the NES need to provide a full rule framework, including discretionary activity rules for those marine farms that cannot meet the requirements to be a restricted discretionary activity?

**4.** Do provisions covering replacement consents for existing marine farms where supplementary feeding occurs require additional terms to define what qualifies to be a restricted discretionary activity?

**5.** Do you have any feedback on the analysis of effects contained in Appendix G?

Q

6. Should applications for replacement consents for existing marine farms where supplementary feeding occurs be treated differently under the proposed NES or not addressed at all?

7. Do the provisions covering replacement consents for existing marine farms where supplementary feeding occurs require additional matters of discretion?

## Existing marine farms in areas defined as outstanding natural features, outstanding natural landscapes or areas of outstanding natural character in the coastal marine area will be treated slightly differently

Under Policies 13 and 15 of the NZCPS 2010 adverse effects on areas of outstanding natural character, outstanding natural features and outstanding natural landscapes in the coastal environment are to be avoided. For applications for replacement consents for existing marine farms in these areas, the proposed NES would classify them as restricted discretionary activities, but an additional matter of discretion would apply. This additional matter of discretion will require councils to consider the effects of activities associated with the existing marine farm on the values and characteristics that make an area, feature or landscape outstanding.

The most significant effects of existing marine farms on outstanding natural features, outstanding natural landscapes and areas of outstanding natural character are considered to occur when an existing marine farm is located within the particular area or feature. In order to provide certainty, it is proposed that the additional matter of discretion applies only to farms located within[12] an area or feature, rather than also to those adjacent to them or in close proximity.

The additional matter of discretion refers to the effects of the existing marine farm on the values and characteristics of an area that make it outstanding. Some regional councils, for example Auckland Council through the Auckland Unitary Plan, have assessed the effects of existing marine farms on the values of outstanding areas and concluded that the farms do not compromise the outstanding values. This type of assessment and conclusion would also be possible under the additional matter of discretion.

It is also the intent of the proposed NES that the additional matter of discretion will apply to outstanding natural features, outstanding natural landscapes, and areas of outstanding natural character in the coastal environment that are identified in both proposed and operative regional planning documents. A schedule of existing marine farms that are located within areas of outstanding natural character, outstanding natural features and/or outstanding natural landscapes in the coastal environment is contained in Appendix H. These are the marine farms that the additional matter of discretion would currently apply to.

Of the 11 regions listed in Appendix H, four have operative regional statements or regional coastal plans where the identification of outstanding areas was undertaken prior to the NZCPS 2010. All four regions have completed work that provides an indication (either through proposed regional coastal plans or through relevant studies) of outstanding areas under the NZCPS 2010. The challenge for the proposed NES is how to recognise this work.

In the West Coast and Southland regions, the work completed indicates that a small number of existing marine farms are located in areas that have recently been identified as outstanding. In this situation, it is necessary for the proposed NES to recognise that these farms either are, or are likely to be, in outstanding areas, and for the additional matter of discretion to apply.

The situation is somewhat more complicated in Marlborough, where, as a result of work carried out for the Proposed Marlborough Environment Plan (which includes the proposed regional coastal plan), the number of existing marine farms located in areas of the Marlborough Sounds that are considered to be outstanding have decreased. Under the operative regional coastal plan, 122 existing marine farms are located in outstanding areas. Under the proposed regional coastal plan, this number drops to 39 existing farms. Including reference to both operative and proposed regional policy statements and regional

12 Within is defined as a marine farm that has more than 1 percent of its consented area within an identified mapped outstanding natural landscapes, outstanding natural features or areas of outstanding natural character.

coastal plans in the proposed NES means that 96 existing marine farms would have their effects on the values of outstanding areas considered, whereas under the proposed regional coastal plan, they would not be located in an outstanding area. The outstanding area provisions of the Proposed Marlborough Environment Plan have been notified, but not yet been considered by any decision making body of the Council. The number and extent of outstanding areas in the proposed plan will not be confirmed until Council decisions are made and appeals have been settled.

For those existing marine farms located in Marlborough that are in outstanding areas in the operative plan but not the proposed plan, it should be noted that the expiry dates of the majority of their coastal permits are in 2024 or later. Assuming that the provisions of the proposed regional coastal plan are operative by then, a much smaller number of farms would be subject to the additional matter of discretion.

Appendix H does not include those marine farms that either share a boundary with an outstanding area or impinge on that area to a very small extent (up to 1% of the consented area) due to margins of error in mapping used for the marine farms and the outstanding areas.

If, after public consultation, the proposed NES for aquaculture is confirmed, it is likely that it would come into force before some councils review their current regional coastal plans, and while some councils are in the review process. A variety of different terms are used to describe outstanding natural features and landscapes and areas of natural character, as outlined in Appendix I. For the avoidance of doubt, the intent is that the additional matter of discretion contained in the proposed NES would apply to existing marine farms in all of the areas listed in Appendix I.

While Policy 11 of the NZCPS 2010 provides similar policy support as Policies 13 and 15, but to areas of indigenous biological diversity, a similar matter of discretion for effects of existing marine farms on these areas is not recommended for inclusion in the NES. Areas identified by regional councils under Policy 11 to date have tended to be either wide in extent, sometimes without clear boundaries, or very confined. Recommended matters of discretion in relation to significant seabed values such as reefs or biogenic habitats, and in relation to the management of marine mammal and seabird interactions with marine farms are considered to provide appropriate flexibility for councils to ensure that decisions on consent applications have regard to the requirements of Policy 11.

**Q**

**8.** Should the extent of an acceptable overlap of existing marine farms with outstanding areas due to margins of error in mapping be defined?

**9.** Outstanding natural features, outstanding natural landscapes and areas of outstanding natural character have been identified as requiring a specific matter of discretion because of the direction provided by the NZCPS 2010. Are there other areas/values that should also be identified, such as those listed in Policy 11 of the NZCPS 2010?

**10.** If so, what are these areas/values and what are the potential effects of concern caused by existing marine farms on those areas/values?

**11.** Should the activity status be different for replacement consents for existing marine farms in outstanding natural features, outstanding natural landscapes and areas of outstanding natural character? If so, what should it be?

## Consent applications for most existing farms will not be publicly notified

Councils take different approaches to the notification of consent applications for replacement consents for existing marine farms. These range from non-notified with no written approvals to full public notification. Public notification can add substantial costs and time to the processing of consent applications, and the proposed NES would therefore require that consent applications would not be publicly notified.

The potential effects of the existing forms of aquaculture currently operating in New Zealand are well understood. Where concerns have been expressed about existing marine farms through public notification of replacement consents to date, concerns have often been about whether the particular location is an appropriate location for marine farming. This is a matter that is better considered at the time that regional coastal plans are developed – for example through the consideration required to give effect to Policy 7(b) of the NZCPS 2010.

Some Statutory Acknowledgements across the country recognise the relationship of tangata whenua with the coastal marine area. Any groups with Statutory Acknowledgements in or relating to the common marine and coastal area could be provided for through limited notification to them of applications for replacement consents for existing marine farms, if regional councils determined that they were affected parties.

**Q**

**12.** Are there certain types of aquaculture for which replacement consent applications should be publicly notified?

## Councils will be able to set more lenient activity classifications for existing farms through their regional planning processes, if they choose to in consultation with their communities

Section 43B(3) of the RMA states that a rule that is more lenient than a national environmental standard prevails over that standard, as long as the NES expressly permits the rule to be more lenient. The proposed NES provides that councils can include more lenient rules for replacement consents for existing marine farms that are classified as restricted discretionary activities through the proposed NES.

The ability for councils to be able to set more lenient rules was anticipated to be used in two ways when the Resource Legislation Amendment Bill was drafted:[13]

- to allow for cases where some local variation is anticipated, but the Government wishes to increase the consistency of plans; and
- where the intention of an NES is to establish a minimum level of development that is permitted, but also enable local authorities to permit more development (if their communities agree) through the plan-making process.

The first of these points describes the situation for aquaculture. At present, the activity status that councils use to classify aquaculture activities for existing marine farms varies from controlled to non-complying. Two regions – Northland and Marlborough – through their original coastal planning processes in the 1990s included controlled activity rules for some existing marine farms. The draft Regional Plan for Northland (due to be notified in mid-2017) continues the controlled activity approach for the majority of existing marine farms.

Allowing councils to set more lenient rules than provided for in the proposed NES for aquaculture will allow this local flexibility to continue. If a council wishes to set a more lenient rule it will need to undertake an active consideration of whether or not to set more lenient rules following the gazettal of the NES. Where, through regional coastal planning processes in conjunction with their communities, councils decide to utilise a controlled activity status for existing marine farms, the Government acknowledges that a full consideration of the

13 Resource Legislation Amendment Bill 2015: Departmental Report no. 2 (September 2016)

environmental, social, economic and cultural effects will have occurred. In this context, a controlled activity status would be appropriate.

This type of planning consideration of existing farms has already occurred in Northland.

**Q**

**13.** Are there advantages or disadvantages to allowing councils to take a more lenient approach that you would like us to be aware of?

## Some areas will be exempt from this part of the proposed NES

Two regions – Tasman and Waikato – have areas specifically zoned for aquaculture within their regional coastal plans. Both of these areas have been zoned following extensive public consultation processes, and in the case of the Tasman zones long running Court proceedings. Both areas are also subject to adaptive management and co-ordinated monitoring of effects. Some of the Tasman zones have only begun to be used for permanent marine farming relatively recently.

Because these areas are specifically zoned for aquaculture and have an overall planning and consenting structure that aims to manage cumulative effects, it is not seen as appropriate or necessary to alter the rules through the proposed NES: Marine Aquaculture.

**Q**

**14.** Do you agree that the areas zoned specifically for aquaculture in Tasman and Waikato should be exempted from the provisions of the proposed NES relating to replacement consents for existing marine farms?

## There is a question about whether replacement consents for sites of particular importance to the aquaculture industry should be recognised differently in the proposed NES

Some areas around New Zealand hold particular importance for marine farming.

Areas that currently hold particular importance for marine farming include those where juvenile shellfish (spat) are collected from the wild for growing to maturity on marine farms. For example, Wainui Bay, in the Tasman District, is of particular importance to the aquaculture industry for mussel spat catching, as it has provided a consistent and reliable source of mussel spat since first being farmed around 1980. The site, which comprises 7 consents over approximately 16 hectares of space in the coastal marine area, provides about half of the spat that is used for mussel farming in the Marlborough and Tasman regions. Mussels grown from Wainui Bay spat account for an estimated $126 million in annual revenue from domestic and export sales.

The proposed NES may be able to recognise sites of particular importance, including for example through activity classification and/or matters that will be considered for replacement consent applications. Sites that are currently important, such as the spat-catching farms at Wainui Bay could be specifically recognised. The NES could also provide for sites of particular importance and we are interested in views around this.

**Q**

**15.** Do you agree that there are sites that should be recognised in the proposed NES because of their particular importance to aquaculture? If so, what sort of provisions do you think would be appropriate?

## Councils' future planning for aquaculture and its effect on existing farms will be recognised in the proposed NES

Policy 7(b) of the NZCPS 2010 requires councils, in preparing regional policy statements and plans, to identify areas of the coastal environment where particular activities and forms of use and development are either:

1. inappropriate; or
2. may be inappropriate without the consideration of effects through, for example a resource consent application.

Taken in conjunction with the requirements on regional councils under section 30(1)(a) of the RMA to achieve integrated management of natural and physical resources, strategic planning of the use of the coastal marine area is required. If through its regional coastal planning processes a council in future identifies an area where aquaculture is inappropriate, the proposed NES should support this. It is therefore proposed that a discretionary activity rule be included in the proposed NES for existing marine farms that may, in the future, be determined through local planning processes to be in inappropriate locations.

**Q**

**16.** Are there other ways in which the proposed NES could usefully recognise councils' future planning processes?

## Small realignments of existing farms are also classified as a restricted discretionary activity

There are circumstances where existing marine farms are not ideally positioned in their current locations, particularly with regard to effects on the seabed environment, but where they are not necessarily in inappropriate locations. Recognising this, the proposed NES provides for small realignments of existing marine farms as a restricted discretionary activity.

"Small" realignments are defined as those that do not exceed a total of one-third of a 10 hectare marine farm.[14] Two thirds of any farm where a realignment is proposed must remain within the currently consented area, and the farm must not have been realigned in the previous ten years (to avoid the issue of incremental "creep" of marine farms to different locations). Existing marine farms larger than 10 hectares will not be covered by the proposed NES as the size of any realigned area would be too large and the effects of realigning potentially more than minor. Realigning larger farms also falls more into the category of new space, which the proposed NES for aquaculture is not addressing.

Where a small realignment is proposed into an area that is identified in an operative or proposed regional coastal plan as non-complying or prohibited for new aquaculture, or into an outstanding natural feature, outstanding natural landscape or area of outstanding natural character identified in an operative or proposed regional policy statement or regional coastal plan the proposed NES will not apply. Realignments into areas identified in operative or proposed regional policy statements and regional coastal plans as having significant ecological values will also not be provided for by the proposed NES. A proposed realignment could result in new effects in these areas, and it is not considered appropriate to classify these activities as restricted discretionary.

For the small realignments of existing marine farms that are proposed to be covered by the NES, the same confined list of matters of discretion identified for replacement consents for existing marine farms would apply. In addition, because a small area of new space would be occupied by any realigned area, additional matters that would be considered in processing any consent application would be:

- effects on historic heritage;
- effects on the seabed associated with any anchoring system;
- surrender of the previously occupied space that is proposed to be realigned;
- conditions to avoid, remedy or mitigate effects on marine mammals and seabirds.

Councils would follow the normal statutory tests under the RMA in determining whether or not to notify an application. There would also be no allowance in the proposed NES for councils to set more lenient activity classifications for realignment.

Small realignments will result in the positioning of farms over space which has not previously been farmed, which will be subject to the undue adverse effects (UAE) test under Part 9A of the Fisheries Act 1996. The UAE test is undertaken by MPI and is an assessment as to whether or not the aquaculture activities authorised by the coastal permit will have an undue adverse effect on commercial, recreational or customary fishing.

14 Analysis shows that approximately 95% of marine farms across the country are less than 10 hectares in size (with a median size of 3 hectares).

**Q**

**17.** What are your thoughts on the size restriction that is proposed to apply to realignments covered by the proposed NES?

**18.** Is there further guidance that should be provided in the proposed NES in relation to realigning existing marine farms?

**19.** Are there other specific matters that councils should be able to consider for applications to realign existing marine farms? Are the matters that have been identified all relevant?

### 5.3 Change of species

An indication of how NES provisions relating to change of species might look is contained in Appendix F. The intent of the NES is described below.

#### Existing marine farms may wish to add a different species, or completely change the species farmed

At the time of making an application for a replacement consent for an existing marine farm, the farmer may wish to add one or more species to their farm or completely change the species that are farmed. The proposed NES would recognise this scenario as different to seeking a replacement consent for the same species as are currently authorised.

A marine farmer may also wish to change species during the life of a consent. Two pathways would be available to allow for this. As currently provided for by the RMA, an application could be made under section 127 of the RMA for a change of consent conditions. In accordance with section 127(3) of the RMA, any application for a change of consent conditions is treated as if it was an application for a discretionary activity. If a marine farmer did not wish to apply for a change of consent conditions as a discretionary activity, a replacement consent could be sought before the expiry of the current consent (known as "evergreen consenting") and the provisions of the proposed NES used.

In considering the current and likely species that might be farmed in New Zealand, Cawthron Institute developed categories of species and cultivation methods, as outlined in Appendix J. Not all species will be farmed the same way – for example mussels are farmed on longlines, whereas scallops are farmed in baskets and salmon are farmed in pens. The proposed NES has been developed not only in terms of the species, but also the structures and form of farming. In most cases, the proposed NES does not distinguish between addition of a species or a wholesale change in species. The change could be anything from one longline converted to growing seaweed in a mussel farm for example, to a complete conversion to oysters. Feedback from the industry is that interest in a complete change in species was not common, and the addition of one or more species was more likely.

**Q**

**20.** Should the proposed NES address change in farmed species?

**21.** Should the proposed NES limit the species it relates to?

#### The proposed NES for change of species will only apply to current farms

With constant innovation of species and forms of farming, there is potential for farming a much wider range of species in the future with effects unknown at this stage. The proposed NES would only apply to marine farms granted consent prior to the date of the gazettal of the regulation, and therefore only apply to farms already existing at the time of gazettal. The definition of an existing marine farm will be same as outlined for the regulation for replacement consents for existing marine farms in section 5.2 of this document.

## There are four categories for a change in species

There are four categories proposed for classifying a change in species, based on the changes that would need to be made from the current consented farm:

**Category 1** – this is where the change in species will not result in any physical changes to the farming structures. Category 1 will apply where there is no change to:

1. Anchors; and
2. Surface structures such as buoys, lighting and floating backbone lines; and
3. Sub-surface structures.

Only species that can be grown on the existing structures will be captured by Category 1, as they have the least effects when compared with the current farmed species and structures. An example of a Category 1 change would be the addition of clams to an existing Pacific oyster farm as these would use the same growing structures as had already been consented for the Pacific oysters.

**Category 2** – this is where a change in species results in a changed sub-surface structure, but has the same anchors and surface structures as the consented farm. The sub-surface structures are the elements between the seabed and the water surface. An example of this would be the conversion of some mussel lines to scallop baskets. The floating backbone lines on the surface would not change, and the anchoring system would not change (so there is no addition seafloor disturbance) but the lines would be modified to suspend trays or baskets.

## Finfish, paua and sponges are treated a bit differently

Not a lot is known about the effects of growing sponges and paua[15] as neither of these species are farmed on marine farms at commercial scales in New Zealand. Because of the insufficient information on the effects of these species, only Categories 3 and 4 apply to the farming of paua and sponges. For example, sponges appear to have very high filtration rates compared with bivalves, but the level of associated water column effects and seabed biodeposition are unknown. These categories have more extensive matters of discretion to allow for the consideration of a wider range of potential effects

**Category 3** – this category captures the addition of one or more non-fed species or paua where a change in the structures (other than just the subsurface structures) is required: there may be different surface structures, anchoring systems and/or subsurface structures. An example of this would be the installation of geoduck tubes underneath an existing mussel farm. Geoduck can be grown in PVC tubes that are dug into the sandy substrate along the intertidal zone during low tide. Once the juvenile geoducks have burrowed themselves deep enough into the substrate to be out of reach of predators, the PVC tubes are removed. However the initial establishment of the geoduck necessitates disturbance to the seafloor and additional structures.

**Category 4** – this category is specific to finfish and includes adding another species to an existing finfish farm for polyculture, or changing from one finfish species to another finfish species. Finfish have their own category due to the lack of information about the effects of changing to another species of finfish,[16] and in particular the feed conversion rates and feed content that may be different for different species. An example of a Category 4 change of species would be the addition of mussel lines around the edge of salmon pens, or the farming of sea cucumbers underneath a salmon farm. Category 4 does not apply to a complete change in species from a finfish species to another species such as a bivalve. This is in order to preserve high value space suitable for finfish.

Category 4 does not distinguish between finfish that are herbivores that graze on vegetation-based pellets such as butterfish, and those that require a high protein diet such as salmon. There may be different effects associated with each diet.

**Q**

**22.** Are the categories based on change in structure an appropriate approach? If not, can you suggest any other approach that might be suitable?

**23.** Are there any other categories?

**24.** Should herbivorous finfish be treated differently from carnivorous finfish?

15 Reference to paua covers any of the three paua species in NZ – Black-foot paua, yellow-foot paua and virgin paua. While black-foot paua is far more abundant and larger, it is also the main species currently harvested recreationally, culturally and commercially, and is the species which is farmed. Yellow foot paua is a quota species.

16 Because finfish species other than King salmon are generally not farmed in New Zealand currently.

## All four categories are restricted discretionary activities

Whilst aquaculture activities cannot be a permitted activity due to Section 68A of the RMA, consideration was given to a controlled activity status, particularly as Categories 1 and 2 would result in either no change to the existing structures or changes only to the sub-surface structures respectively. The activity status is proposed to be restricted discretionary for all categories, with very limited matters of discretion for Categories 1 and 2 in relation to any proposed new species. A restricted discretionary activity status would still give the ability for councils to decline a consent where the specified effects were too significant to be effectively managed.

A consistent restricted discretionary activity status will resolve the issue of different activity classifications across the country and provide some increased certainty of process for marine farmers, while ensuring that environmental, social and cultural effects are still taken into account as necessary. It will also allow flexibility for farmers to innovate and enable more efficient use of consented space.

**Q**

**25.** Is restricted discretionary an appropriate status for most changes in species?

## Spat catching farms are excluded from the change of species provisions of the proposed NES

Farms established for the purpose of catching spat (juvenile shellfish) are excluded from the change of species provisions of the proposed NES. The reason for this is that spat catching farms have considerably different effects from a production farm and some spat catching farms could be inappropriate for production farms. While a short-term seasonal spat catching farm may be appropriate in one location, a full-scale commercial marine farm may not be.

While it is seasonal, spat catching farms require much more intensive management including lifting, inspecting, reseeding and growing-on of the spat over a shorter period compared with a production farm with a typical 15 -18 month growing cycle. A spat catching farm may also have more frequent and intensive surface water activity than a production farm, although over a shorter period of time.

**Q**

**26.** Should spat catching farms be excluded?

## Not all changes in species are covered by the proposed NES

There are four scenarios which would not be covered by the proposed NES and would need to be addressed by the relevant regional coastal plan provisions:

- a complete change in farmed species to non-fed species or paua where a change in all structures is required; or
- a complete change in farmed species from finfish to a non-fed species or paua; or
- a complete change in farmed species from a non-fed species to finfish; or
- the addition of, or a complete change in, species farmed to crayfish, scampi or crabs.

Category 3 only provides for the addition of one or more species where none of the existing structures remain the same, so does not provide for the situation where complete conversion is sought and the structures do not remain the same. Likewise Category 4 does not apply to full conversion from finfish to another species other than finfish. There may also be situations where complete conversion of a farm from a non-fed species to finfish is proposed.

While it would be ideal to have a comprehensive NES that covered every scenario of changes in species, there is the potential for a default discretionary rule to not be stringent enough. There may be situations where one of the above changes in species is not appropriate and an NES may not reflect these specific nuances. Councils would have to provide additional rule frameworks in their regional coastal plans to address the scenarios not covered by the proposed NES.

**Q**

**27.** Are there any other forms of farming or species that should be excluded?

## Focused matters of discretion outline what councils could consider when making decisions on consent applications for change of species

Under a restricted discretionary activity classification, the matters that a council can consider when making a decision on a consent application are specified. Careful drafting is required to ensure that matters are not phrased so widely that the activity becomes a de facto discretionary activity. It is expected that matters of discretion would only be considered where they are relevant to the proposal. The matters of discretion are equivalent to those that would apply to applications for replacement consents for existing marine farms, but include some additional or different matters to account for the effects of changing species on a marine farm.

There is the potential for effects to arise from the introduction of a species into a region where it does not naturally occur. Therefore, there are three matters of discretion that would apply to all categories:

- the on-farm management of pests and disease;
- the suitability of species, particularly with the import of species into a new area and the potential genetic effects on wild populations of escapees; and
- any cultural considerations with the translocation of what are often referred to as taonga species.

Biosecurity issues and genetic effects have situation-specific implications that need to be considered in any change of species. There may be instances or locations where a consent application for a Category 1 change of species should be declined for these reasons, which is why a restricted discretionary activity status was considered appropriate.

It is proposed that Category 2 has an additional matter of discretion relating to hydrodynamic effects. Because a Category 2 change of species would result in a different sub-surface structure, there may be changes in the surrounding environment through the alteration of water flows (e.g. altered direction, reduced current speeds) and dampening of wave action. Floating longline and intertidal rack culture are likely to have intermediate effects on water currents, given that there is spacing between lines/racks for water flow. However, orientation of subtidal floating lines perpendicular to waves could lead to an increased dampening effect. As mussel farms occupy a greater cross-sectional area than other emerging methods, farming of new bivalve species may be expected to have comparable or lesser effects on hydrodynamics.

Water quality was considered as a potential effect of changing the species in Categories 1 and 2; in particular the depletion of phytoplankton. However the majority of species in these two categories will be filter feeding species. Research has shown that farming filter feeding species does not significantly reduce the phytoplankton densities, and it was therefore considered that there is unlikely to be significant further reduction in phytoplankton accompanying a change in species. For this reason water quality and depletion of phytoplankton are not included as matters of discretion for Categories 1 and 2.

For Categories 3 and 4, because the matters of discretion are focused on the change of species and any necessary change in structures, it is possible to develop a targeted list of effects that should be subject to matters of discretion. At this stage, effects that are considered to be relevant are:

- details of the structures – location, extent, type, scale, anchoring systems and integrity of marine farm structures, including the layout, positioning (including density);
- continued reasonable public access and navigational safety;
- timing of occupation;
- marine mammal and seabird interactions with marine farms – particularly entanglement, but not habitat exclusion;
- management of noise;
- measures to avoid, remedy or mitigate adverse effects on seabed values and the seabed underneath the marine farm;
- measures to avoid, remedy or mitigate adverse effects on water quality in terms of organic enrichment;
- effects of seabed disturbance.

Tangata whenua values may also be relevant when considering applications for change of species. The extent of those effects may vary with location and species, and input will be sought as to what these matters should be through targeted hui with iwi authorities at the same time as the more general public consultation process on the proposed NES.

In addition, administrative matters such as the imposition of administrative charges, bonds or alternative mechanisms to recover the cost of the repair or removal of abandoned or derelict farms and reinstatement of the environment are also proposed to be matters that councils could consider when processing applications to change species. Information, monitoring and reporting requirements are also matters that can be considered.

**Q**

**28.** Do you have any feedback on the scope of matters of discretion?

**29.** Should change of species involving finfish require additional matters of discretion?

## Changes of species in areas identified as outstanding natural features, outstanding natural landscapes or areas of outstanding natural character in the coastal marine area will have an additional matter of discretion

Under Policies 13 and 15 of the NZCPS 2010 adverse effects on areas of outstanding natural character, outstanding natural features and outstanding natural landscapes in the coastal environment are to be avoided.

There are likely to be situations where a marine farm is located within one of these areas and wishes to change species. As all the structures remain the same in Category 1, there are unlikely to be any adverse effects on the values of areas of outstanding natural character, outstanding natural features and outstanding natural landscapes in the coastal environment. However for Categories 2, 3 and 4, there is proposed to be an additional matter of discretion that requires councils to consider the effects on the values and characteristics that make an area, feature or landscape outstanding.

It is the intent of the proposed NES that the additional matter of discretion will apply to outstanding natural features, outstanding natural landscapes, and areas of outstanding natural character in the coastal environment that are identified in both proposed and operative regional planning documents. These areas may be identified as mapped, or identified by GPS or NZTM coordinates, or clearly named and identified by description of physical boundaries, or named if it is a physical feature that has clear boundaries (e.g. a harbour).

**Q**

**30.** Outstanding natural features, outstanding natural landscapes and areas of outstanding natural character have been identified as requiring a specific matter of discretion because of the direction provided by the NZCPS 2010. Are there other areas/values that should also be identified?

**31.** Should the activity status be different for changing species on existing marine farms in outstanding natural features, outstanding natural landscapes and areas of outstanding natural character? If so, what should it be?

## Consent applications for most changes of species will not be publicly notified

Because of the range of approaches in regional coastal plans and resource consent processing by councils in relation to changes of species, there are also varying approaches to notification of consent applications. Public notification can add substantial costs and time to the processing of consent applications. Given the limited changes to structures envisaged by Categories 1 and 2, the proposed NES would require that consent applications for these Categories would not be publicly notified.

As there is less certainty as to the effects and a larger list of matters of discretion for Categories 3 and 4, applications for Categories 3 and 4 will not be precluded from public or limited notification so councils will follow the normal statutory tests under the RMA in determining whether or not to notify an application.

Some Statutory Acknowledgements across the country recognise the relationship of tangata whenua with the coastal marine area. Any groups with Statutory Acknowledgements in or relating to the common marine

and coastal area could be provided for through limited notification to them of applications for change of species on existing marine farms, if regional councils determined that they were affected parties.

**Q**

**32.** Are there certain species or types of species where consent applications should be publicly notified?

## Councils will be able to set more lenient activity classifications for existing farms through their regional planning processes, if they choose to in consultation with their communities

As with replacement consents for existing marine farms, it is proposed that councils can include more lenient rules for replacement consents for changes of species on existing marine farms that are classified as restricted discretionary activities through the proposed NES. The statutory basis for this is outlined in section 5.2 of this document.

Allowing councils to set more lenient rules than provided for in the proposed NES for aquaculture will allow local flexibility to continue. For example, a community might be comfortable with any change to a longline bivalve species as a controlled activity and the proposed NES would enable a more lenient rule.

## Some areas will be exempt from this part of the proposed NES

Two regions – Tasman and Waikato – have areas specifically zoned for aquaculture within their regional coastal plans. Both of these areas have been zoned following extensive public consultation processes, and in the case of the Tasman zones long running Court proceedings. Both areas are also subject to adaptive management and co-ordinated monitoring of effects. The Tasman zones have also only begun to be used relatively recently. In addition, in the 2011 reform, the regional coastal plans for both areas were altered by legislation to provide for a greater range of species to be farmed on the existing marine farms.

Considering the history of these areas it is not seen as appropriate or necessary to alter the rules through the proposed NES for aquaculture.

### 5.4 Biosecurity – ensuring effective biosecurity management on farms

An indication of how NES provisions relating to on-farm biosecurity management plans might look is contained in Appendix F. The intent of the NES is described below.

## The NES proposal for marine farm biosecurity would integrate activities undertaken by marine farmers under the Resource Management Act 1991 with the existing responsibilities of MPI, regional councils and marine farmers under the Biosecurity Act 1993

Biosecurity in New Zealand is primarily managed by MPI through the Biosecurity Act 1993, which underpins New Zealand's national biosecurity system in terrestrial and aquatic/marine ecosystems. The Biosecurity Act focuses on harmful organisms and their movements, including surveillance and response (management, eradication, mitigation). It does this at a national level and regional level. Under the Biosecurity Act MPI takes a lead role in dealing with pests that are considered a national priority, DOC manages pests on the conservation estate, and regional councils are responsible for preparing regional pest management strategies and for ensuring the control of pests within their geographic boundaries.

The RMA focuses on promoting the sustainable management of natural and physical resources. The RMA seeks to achieve sustainable management by taking an effects-based approach to activities on a case-by-case basis. The RMA therefore has an important role to play in aquaculture biosecurity by managing such effects through the resource consent process on a case-by-case basis for each specific marine farm site, helping to control the types of activities that could result in adverse biosecurity effects in the marine environment.

## All marine farms would need to prepare, implement and maintain Biosecurity Management Plans by 31 January 2025

A key objective of the proposal is to achieve consistent and effective biosecurity practices in marine farming nationally, and at each specific marine farm site. The proposal also seeks to provide regional councils with a consistent national framework for assessing and managing (through biosecurity management plans, monitoring and

enforcement) the biosecurity effects of marine farming. To this end, the NES would:

- require the adoption of consistent biosecurity practices nationally between farms and regions, to ultimately achieve a high level of effective defence and response against pests and diseases;
- inform farm design, configuration and management in order to best manage biosecurity risks (e.g. allocation of space, fallowing areas, awareness of natural water currents) particularly where there are multiple farms in close proximity.

The NZCPS 2010 has been prepared under the RMA, and is consistent with the Act's purpose of the sustainable management of natural and physical resources. Policy 12: Harmful Aquatic Organisms of the NZCPS 2010 requires all regional policy statements and plans to provide for the control of activities that take place in or near the coastal marine area that could result in adverse effects on the coastal environment caused by the release or spread of harmful aquatic organisms (i.e. biosecurity risks). Policy 12 provides for conditions to be included in resource consents that help manage (i.e. avoid, remedy or mitigate) the risks of such effects occurring. The policy specifically identifies the establishment and relocation of stock and equipment required for, or associated with aquaculture as being a potential cause of the introduction or spread of harmful aquatic organisms, and that such activities can be controlled through resource consents.

In order to be consistent with the purpose of the RMA and with the requirements of Policy 12 of the NZCPS 2010, the potential biosecurity effects on and from marine farms should be considered when determining coastal permit applications under s12 of the RMA. The proposal will support this.

Given the vulnerability of the aquaculture industry to biosecurity risks and the potential for poorly managed marine farms to impact the natural environment, the NES would help to drive the adoption and implementation of effective and nationally consistent biosecurity measures on every marine farm. A consistent approach to managing biosecurity risks will help avoid, remedy or mitigate potential economic, social, cultural and environmental effects.

The proposed NES would also be part of the wider management of marine biosecurity in New Zealand under the Biosecurity Act 1993.

The date of 31 January 2025 has been proposed in recognition that up to 64% of the coastal permits for existing marine farms expire by this date, and a requirement for consistent approaches to on-farm biosecurity management can efficiently be incorporated into the consideration of applications for replacement consents.

**Q**

**33.** Do you think it is necessary for all marine farms to prepare, implement and keep up to date Biosecurity Management Plans (BioMP)? What concerns would you have if it were required? What (if any) exceptions should be made and why?

**34.** Is the deadline of 31 January 2025 appropriate, and why?

**35.** Is a nationally consistent approach to BioMPs necessary to achieve an appropriate level of marine farm biosecurity nationally or should regional differences be accommodated?

## Applications for coastal permits to occupy space in the coastal marine area for marine farms would not be granted unless a Biosecurity Management Plan meets specific criteria as part of the coastal permit process

From the date it comes into force the NES would require coastal permit applications for the occupation of space in the coastal marine area[17] for a marine farm (for either a new farm, or a replacement permit for an existing farm) to include a comprehensive Biosecurity Management Plan (BioMP) at lodgement. A coastal permit would not be able to be granted unless the BioMP submitted with the application has been assessed and is certified by the regional council (the consent authority responsible for administering coastal permits). Regional councils may choose to engage qualified external parties to assess BioMPs and to assist with auditing compliance where necessary.

17 As required by s12(1)(b) and (2)(a) of the RMA.

Each BioMP would need to be tailored to address the specific biosecurity risks of each farm (i.e. the type of species to be farmed, the location and operational requirements, etc.). It is anticipated that 'global' BioMPs could be prepared for multiple sites where there are commonalities between farms (for example one 'global' BioMP could be developed to apply to all the mussel farms in Beatrix Bay, Marlborough Sounds).

The matters to be included in a BioMP would be specified in a separate document which would be incorporated by reference, as allowed for by Schedule 1AA of the RMA. MPI will work closely with biosecurity experts to develop the externally referenced document well in advance of the NES being Gazetted. It is anticipated this document will be informed by current best practice, including MPI's Aquaculture Biosecurity Handbook (https://www.mpi.govt.nz/document-vault/13293) and associated technical report.[18] For example, it could include, but not be limited to the following topics from the BioMP template contained in the Aquaculture Biosecurity Handbook, and included as Appendix K to this document:

- Stock movements and containment
- Stock feed and feeding
- Waste management
- Water supply and monitoring
- Equipment, vehicles and vessels
- People and property management
- Staff training and education
- Record keeping
- Contingency plans and measures
- Monitoring and Reporting
- Auditing.

Outlining these matters in an externally referenced document would make it easier to update them by Gazette as necessary (for example as biosecurity requirements change and evolve over time) rather than needing to update the NES. The externally referenced document would also provide criteria to guide applicants when preparing BioMPs, and to guide regional councils when assessing BioMPs to determine if the measures proposed will be effective in avoiding or mitigating the biosecurity risks for a given marine farm. The externally referenced document will also provide guidance on the extent to which biosecurity risks that cannot be avoided should be mitigated, to ensure that such risks are minimised to the extent practicable.

Regional councils would be required to assess the BioMP against the criteria set out in the externally referenced document, as part of the coastal permit application process. Given the level of expertise required, some regional councils may choose to engage external expertise to assist with this process. As mentioned earlier, regional councils would be able to recover the cost of assessing BioMPs by passing the cost of processing the coastal permit application to the applicant[19] as is currently the case.

A BioMP submitted with a coastal permit application for a new farm, or a replacement farm, would only be accepted by the regional council once the regional council is confident that implementing the measures described in it would effectively address the biosecurity risks associated with that farm. Only at that point could the coastal permit application be granted.

Section 88 of the RMA requires resource consent applications that are incomplete to be returned. Once the NES is Gazetted, applications for coastal permits that do not include a BioMP would also be considered incomplete under s88(3)(a), and would be returned to the applicant without being lodged.[20] Also in line with standard practice under the RMA, inadequate BioMPs would be subject to further information requests[21] as necessary to ensure that the regional council processing the coastal permit application has enough information to make a decision against the criteria set out in the externally referenced document.

Approximately 64% of the coastal permits held by existing farms will expire by 31 January 2025. New (replacement[22]) coastal permits will need to be sought for these marine farms in order to continue operating after that date, and BioMPs would need to be included as part of those applications. Applications for replacement permits follow the same process as for new permits, so would be returned if they are lodged without a BioMP, and would be subject to further information requests if they do not meet the criteria set out in the externally referenced document. Under the proposed NES therefore, the majority of marine farms could be expected to have a certified BioMP in place by the end of the replacement permit process, to be implemented and kept up to date thereafter as part of complying with the coastal permit conditions.

In the event that an applicant refuses to provide further information requested by a regional council, or provides incomplete or inadequate information, the regional council may progress the application to a decision without the

18 *Options to Strengthen On-farm Biosecurity Management for Commercial and Non-commercial Aquaculture*, which can be accessed here: https://www.mpi.govt.nz/document-vault/13287

19 As provided for under s36 of the RMA.
20 As directed by s88(3A) of the RMA.
21 As provided for under s92 of the RMA.
22 As provided for under s124 or 165ZH of the RMA.

benefit of the requested information. Doing so may result in the application being declined.[23] If an application for a replacement permit is declined, the right to occupy space for the marine farm would then end when the coastal permit expired. If the marine farm continued to occupy space without the necessary coastal permit, the consent holder could be subject to enforcement action by the regional council. Including a BioMP that avoids or mitigates biosecurity risks associated with that farm as part of a coastal permit application is therefore critical for both new marine farms, and replacement permits for existing farms.

**Q**

**36.** Do you think the BioMP template in MPI's Aquaculture Biosecurity Handbook covers all the matters that are needed? What if any changes would you make and why? What level of detail do you think is needed for BioMPs to be effective?

**37.** Is requiring a BioMP using an NES under the RMA the best approach to nationally requiring a Biosecurity Management Plan for aquaculture?

**38.** How would regional councils certify, audit and enforce BioMPs? Could external professionals be used to provide the required skills and expertise?

## Biosecurity Management Plans would need to be submitted with applications for replacement coastal permits for existing marine farms under the provisions for replacement consents for existing marine farms

The proposed NES describes the matters to be considered when preparing and processing applications for replacement coastal permits, and notes that the biosecurity section of the NES applies to those applications. The proposed matters of discretion that apply to replacement coastal permits for existing marine farms include the management of biosecurity risks

## Existing coastal permits for marine farms not replaced by 31 January 2025 would be reviewed

As approximately 36% of existing coastal permits for marine farms do not need to be replaced before 31 January 2025, it is proposed that regional councils be required to review[24] relevant coastal permits for an existing marine farm for the purpose of ensuring that those coastal permits require the consent holder to supply a BioMP certified as meeting the criteria specified in the externally referenced document, and that the BioMP is kept up to date and implemented.

An NES can require consent reviews under s43A(1)(f) of the RMA. The proposed NES would require that these reviews be completed by 31 January 2025. The review would be limited to determining whether each existing coastal permit already includes conditions that satisfy the matters to be addressed by a BioMP, and bringing permits which do not include such conditions up to date with the NES requirements. It is anticipated that few of the remaining 36% of coastal permits currently include such conditions. Guidance will propose model conditions that may be adopted. It is not proposed to require review of any other conditions.

As the review would be initiated by the regional council (albeit required by the NES), there is no provision for regional councils to recover the costs of such reviews.

23 under s104 (6) RMA

24 As provided for under s128(1)(ba) of the RMA.

**Q**

**39.** Is it appropriate for existing coastal permits to be reviewed and required to prepare BioMPs in order to comprehensively address biosecurity risks to industry and New Zealand's wider marine environment? If not, why not?

## Comprehensive guidance material would be developed before the NES is Gazetted to help the industry prepare BioMPs, including monitoring and reporting programmes

Comprehensive guidance material would be developed which sets out the topics to be addressed when preparing a marine farm BioMP, including the level of detail required to allow the plan to be certified and approved by Council.

Input into the development of the guidance material would be sought from industry, regional councils and marine biosecurity experts to make sure that the guidance material is clear and pragmatic, scale-able to different farm sizes, and is applicable to different farm types. The guidance material would address current species, and be adaptable to new species. It would also be receptive to new methods, developments in best practice and changes in measures to respond to new biosecurity risks.

MPI would also work closely with AQNZ as it develops BioMPs for salmon, mussels and oysters as part of the A+ sustainable management framework. It is anticipated that this work would underpin the 'global' BioMPs discussed earlier in this section.

The implementation of measures set out in BioMPs would be critical to successfully contributing to New Zealand's marine biosecurity, protecting both marine farms and the wider marine environment. Marine farms would be required by consent conditions on coastal permits to monitor and record the implementation and maintenance of their biosecurity measures, and submit regular reports to the regional council. Regional councils would receive the monitoring reports produced by each farm, and would periodically undertake audits to ensure that certified BioMPs are being implemented and kept up to date. Regional councils may recover the costs associated with monitoring as provided for by s36 of the RMA, and may also choose to set a fixed charge where appropriate.

## Guidance material would help regional councils to consistently assess and certify BioMPs, review existing coastal permits and with implementation

A key driver for developing the NES is to achieve a nationally consistent standard of on-farm biosecurity, so that all marine farms operate with an effective level of biosecurity. Essential to achieving that consistency, and therefore effective marine farm biosecurity nationally is a consistent approach to assessing, reviewing and auditing BioMPs across the country.

MPI will work with industry (including AQNZ), regional councils and biosecurity experts over the coming year to develop comprehensive guidance material to assist regional councils. The guidance material would:

- help regional councils to assess whether a BioMP submitted with a coastal permit application meets the criteria and covers the matters set out in the externally referenced document. Regional councils would assess each BioMP to determine whether implementing the plan would avoid or mitigate the biosecurity risks associated with that farm to the extent practical. Regional councils may choose to engage external expertise to undertake such assessments and/or provide advice;
- include some example conditions to give regional councils a strong lead on drafting and inserting conditions on existing coastal permits, such that they are both consistent with those placed on new and replacement coastal permits, and are nationally consistent;
- inform regional councils on how to develop and administer ongoing auditing programmes to regularly audit and enforce the implementation of BioMPs as part of their monitoring and enforcement roles.

While the costs of audits would be passed on to the marine farmer, an incentive-based approach could be implemented where consistently good implementation of biosecurity measures aligned with the certified BioMP for a farm is 'rewarded' with less frequent auditing. Farms with poor performance would therefore be incentivised to improve compliance with their BioMPs to reduce the frequency and costs of auditing requirements. High risk or consistently non-compliant farms would likely be subject

to more frequent auditing, and associated auditing costs passed on from the regional council.

**Q**

**40.** Is marine farm monitoring and reporting as well as external auditing and enforcement of BioMP implementation and effectiveness justified? If not why not?

## BioMPs to be kept up to date

BioMPs would be living documents which could be updated from time to time as appropriate to improve their effectiveness, to reflect changes in the farm or in best practice in biosecurity processes, to accommodate responses or learnings from biosecurity incursions in New Zealand or overseas, and to respond to changes in biosecurity risks over time.

Updated BioMPs would need to be submitted to the regional council and re-assessed prior to implementing new processes or measures. The regulation and guidance material would set out the circumstances where a certified BioMP could be amended, and the associated process and timeframes.

# 6. Implementing the NES

## 6.1 Who will be responsible for implementing the NES?

Regional councils (and unitary authorities) will be responsible for giving effect to and enforcing the NES for replacement consents for existing marine farms and change of species. The rules contained in the NES will supercede any rules in regional coastal plans (unless a council has made a decision following the gazettal of the NES to include more lenient rules in its plans where this is allowed for) and provide the rule framework for councils to consider consent applications against.

Regional councils, central government and industry will be responsible for implementing the NES in relation to biosecurity management plans for marine farms. The proposed exemption for the Tasman aquaculture zone requires a co-ordinated approach between all three in order to be most effective and ensure that it integrates with the requirements of the Biosecurity Act.

## 6.2 How the NES will affect existing plans

In general, national environmental standards prevail over a rule in a plan if there is duplication or conflict with that rule. Where plan provisions duplicate or conflict with an NES, councils are required to remove that duplication or conflict from their plans without using an RMA Schedule 1 process. Whilst plans are being amended to be consistent with the NES councils can simply process consent applications under the NES provisions.

Under the proposed NES a rule in a plan can be more lenient than the NES rules in relation to replacement consents for existing marine farms (but not for realignment) and for a change of species on an existing marine farm. Going forward, councils will need to make a clear decision to include more lenient rules in their regional coastal plans after the NES has been Gazetted, supported by an evaluation under section 32 of the RMA. Existing more lenient rules could remain.

Rules in regional coastal plans will not be able to be more stringent than the NES.

## 6.3 How the NES will affect existing and new coastal permits

The proposed provisions covering replacement consents for existing marine farms and realignment will not directly affect existing coastal permits, until a resource consent holder decides to apply for a replacement consent (either in the normal course of events as the consent term nears expiry or through the "evergreen" consenting provided for by the RMA). The proposed exemption for the Tasman aquaculture zone and the Wilsons Bay zone in Waikato means that the provisions for replacement consents for existing marine farms will not affect these areas at all.

Where an existing farm cannot meet the requirements of the proposed NES provisions relating to the area of space to be occupied or the location of the marine farm (i.e. the marine farmer wishes to increase the area occupied, or change the location more than allowed for through the realignment provisions, or the farm is offsite), replacement of the existing consent is not considered to fall within the NES. This is because greater or different areas of occupation are new aquaculture space (with the exception of activities covered by the realignment provisions of the proposed NES). In these circumstances, the existing regional coastal plan provisions relating to new space would apply.

The proposed change of species provisions provide a pathway for marine farmers to apply for a change of species at the time that they apply for a replacement consent. The proposed provisions for replacement consents for existing marine farms and the change of species provisions are linked so that at the time a replacement consent is sought for an existing marine farm, a change of species can also be sought. If a marine farmer wishes to change species during the term of an existing consent, an application would have to be made for either a new consent under the replacement consent provisions in the NES, or to change the conditions of the existing coastal permit under section 127 of the RMA, as a discretionary activity. In the case of a change to conditions, while the application would not be processed under the NES provisions, those provisions would provide some guidance to regional councils on the matters that should be considered.

The proposed biosecurity provisions will affect existing and new coastal permits as described in section 5.4 of this document.

## 6.4 Timeframes for implementation

If an NES: Marine Aquaculture is progressed, it is intended that the regulation would come into force immediately after being publicly notified in the New Zealand Gazette. Subject to the outcome of this consultation and final Cabinet approval, MPI anticipates that the regulations would be Gazetted and come into effect by mid-2018.

If an NES: Marine Aquaculture was implemented, MPI would undertake ongoing monitoring to assess its effectiveness at addressing the problems that have been identified in this discussion document. MPI would also continue to develop and implement guidance material to assist regional councils, the community and the aquaculture industry to implement the NES.

# 7. Costs and benefits arising from the NES

## 7.1 A preliminary analysis

A preliminary qualitative and quantitative assessment of the costs and benefits[25] of the proposed NES has been undertaken in order to support the consultation process. To inform this work NZIER was commissioned to undertake a preliminary economic analysis of the proposed national direction by way of a national environmental standard.

The preliminary economic analysis concluded that the estimated benefit outweigh the estimated costs. The results are sensitive to assumptions about the impact of the proposed NES on certainty around council processes, so low (15.9 benefit/cost ratio) and high (20.8) scenarios were developed. Halving of the certainty benefit through sensitivity analysis sees the benefit/cost ratio drop to between 9.1 and 11.7.

NZIER indicated that most of the costs associated with the proposed NES can be estimated with a reasonable degree of certainty. However, because of the lack of New Zealand data it is difficult to determine and quantify the benefits with great confidence. Hence NZIER's figures should be regarded as an order of magnitude calculations rather than a definitive measure.

Feedback from the public and iwi authorities during the consultation process will be important to informing further assessment of the costs and benefits of the proposal. However, agencies and industry agree that the proposal will likely lessen costs and deliver process and efficiency benefits in relation to replacement consents for existing marine farms, change of species and on-farm biosecurity management.

More detailed analysis will be undertaken after consultation, when proposals for regulations (standards) are presented to the Minister for the Environment and Minister for Primary Industries and ultimately to Cabinet for approval. Section 32 of the RMA requires that an analysis be undertaken of the appropriateness of the objectives in meeting the purpose of the RMA, and the costs and benefits of the proposals.

## 7.2 Costs and benefits to other users and the environment

### Benefits

Environmental benefits would arise from the national environmental standard ensuring the key effects of aquaculture are appropriately managed through relevant matters of discretion. This should lead to improved environmental outcomes over time, particularly as marine farms operating under deemed coastal permits apply for replacement consents. There would also be environmental benefits through the national environmental standard enabling the realignment of existing farms (e.g. if an existing marine farm was partially located over a reef it would be able to realign to a more suitable position).

All users of the coastal environment would benefit from improved and more consistent biosecurity management.

Benefits would as such accrue from the reduction of costs associated with submitting on and appealing consent applications.

### Costs

In some cases users of the coastal environment may have less opportunity to comment on specific consent applications due to the national environmental standard precluding notification (note: Statutory Acknowledgements will continue to be recognised, where applicable, for all consent applications made under the proposed NES), however people still have the ability to engage in the process of determining appropriate and inappropriate places for aquaculture through future regional coastal plan processes. The proposed NES presents a limited range of matters that would be considered at the consenting stage, focusing discussion on resource use, alternative uses and occupation of the space at the plan making stage.

Local environmental issues may be under-valued at the consenting stage, but only if the community hold different views or where there is local concern, for instance about the impact of marine farms just beyond the boundaries of outstanding areas. Local concerns can be expressed at the plan making stage by assessing the appropriateness of aquaculture.

25 Section 2 of the RMA defines "benefits and costs" as including benefits and costs of any kind, whether monetary or non-monetary

## 7.3 Costs and benefits to regional councils

### Benefits

The greater certainty provided by the national environmental standard would lead to more straightforward consent processing for existing marine farms which should reduce costs and delays to regional councils. The simplified process would be particularly beneficial and provide efficiencies to regional councils during times when consent expiries spike (e.g. 2024/25 in some regions).

The national environmental standard would enable plans to be more lenient so where regional councils and communities have appropriately planned for aquaculture a controlled activity status can be used.

The realignment provisions of the national environmental standard would better and more efficiently enable councils and marine farmers to address site specific concerns regarding the placement of certain farms (where concerns exist).

Regional councils would benefit from a nationally consistent biosecurity management regime, particularly through the implementation guidance which would be provided to ensure biosecurity management plans are effectively developed, assessed and audited.

### Costs

Councils would need to become familiar with the NES and implement it (such as staff training). These are transitional costs and are likely to be negligible (with the exception of biosecurity, which is discussed further below).

Some regional councils may choose to initiate specific plan changes to ensure their plan rules are fully consistent with the NES to avoid confusion. It is important to note that many regional councils are scheduled to undertake coastal plan reviews in the next few years so it is likely these councils would incorporate any changes in response to the NES into the wider coastal plan review. This review would include strategic planning for where aquaculture should be located, as required by NZCPS 2010. NZIER estimates the total cost to all councils for implementation is likely to be between $1m and $2.5m over a seven year period.

Costs associated with implementation of the biosecurity component of the national environmental standard are largely around the assessment of biosecurity management plans (i.e. increasing capability/capacity within council where necessary, or contracting this out to relevant experts). Most of these costs are recoverable under the RMA. However, there would be non-recoverable costs to some councils (and ultimately ratepayers) in 2025 where the council has to initiate a review of consent conditions to ensure all marine farms have an effective biosecurity management plan in place.

**Q**

**41.** Have the range of costs and benefits arising from the proposed national environmental standard, and who might bear the costs or receive the benefits, been accurately reflected? Are there any costs and benefits that have been overlooked?

**42.** Are the estimates of costs and benefits accurate? Do you have information on costs and benefits that could assist the second stage of our assessment (of the impacts of the final proposal)? Do you have any information on costs and benefits that have not been quantified at this stage?

Auditing of biosecurity management plans is estimated by NZIER to cost a total of $210,000. Once again, councils would be able to recover this cost from the consent holder.

## 7.4 Costs and benefits to the aquaculture industry

### Benefits

The biggest cost saving of the national environmental standard for the aquaculture industry would arise from the greater certainty about the process for replacement consents for existing marine farms through nationally consistent activity status, matters of discretion and notification requirements, and clear direction on marine farms in and adjacent to outstanding areas. This would also lead to a reduction in some of the predicted costs associated with the consenting process (in some cases completely), and a reduction in costs associated with Environment Court appeals.

The national environmental standard would enable plans to be more lenient so where regional councils and communities have appropriately planned for aquaculture a controlled activity status can be used – this would provide even greater certainty for marine farmers.

The increased certainty would have an immediate stabilising effect and would give industry the opportunity to turn attention to investment in new opportunities for growth such as better use of existing space, value-added production, marketing and new technologies and species.

NZIER estimates the benefit of the national environmental standard with regard to replacement consents for existing marine farms would be between $40m and $80m.

For larger industry corporations a benefit would accrue from the consistent approach to activity status, matters of discretion, and notification for replacement consents for existing marine farms across regions. This is important as the aquaculture industry is becoming increasingly rationalised around a small number of large players whose operations extend over multiple regions.

There would be improved environmental and/or productivity outcomes through the national environmental standard enabling the realignment of existing farms.

The national environmental standard would enable innovation and transition into new (and potentially higher value) species on existing farms through simplified and more certain processes to change species, particularly where effects are well known. This would allow for innovative responses to changes in markets and would improve industry flexibility (e.g. farming of different species subject to environmental constraints).

Industry would benefit from the national environmental standard prescribing a consistent approach to biosecurity management plans across regions. This would ensure improved biosecurity management practices across all marine farms and would align with Aquaculture New Zealand's A+ sustainable management programme. Managing biosecurity risks is fundamental to the ongoing sustainability of aquaculture in New Zealand.

### Costs

The industry would potentially face increased costs when engaging in plan making processes, particularly around where aquaculture is appropriate and the extent of outstanding areas. However, this increase is likely to be negligible as it would be offset by not having to submit on the matters prescribed by the national environmental standard (i.e. a narrower range of matters would be up for debate).

The impact of existing marine farms on the values and characteristics of outstanding areas will remain unknown until future specific planning or landscape studies have been undertaken on the interaction of marine farms and specific outstanding areas (for example, as has occurred through the Auckland Unitary Plan).

The industry would bear a small cost to prepare and implement biosecurity management plans, however this would be negligible to most marine farmers, especially those covered by the "global" biosecurity management plans. There would be an ongoing cost to industry associated with the monitoring and auditing of biosecurity management plans, however these costs should reduce over time as knowledge increases and processes are standardised.

## 7.5 Costs and benefits to government

### Benefits

The government benefits through a national environmental standard that supports its aquaculture policies and biosecurity objectives, and that supports the purpose of the RMA.

The government also benefits from the efficiency of addressing this issue through a national environmental standard rather than through a series of repeated regional changes.

### Costs

The government would face implementation costs, which would include liaising with councils, producing guidance material, monitoring implementation and effectiveness of the standard. It is estimated that this would cost $300,000, spread over four years.

The government would face ongoing engagement in regional coastal plans (particularly by DOC and MPI). Any increase in cost would be negligible as engagement already occurs and would continue given the role of agencies in supporting planning for aquaculture under NZCPS 2010.

# 8. Next steps – give us feedback

## 8.1 Get involved – submit or participate

An eight-week period is provided to allow for consultation with regional councils, the public and interest groups. During this period MPI will be holding meetings around the country to make presentations and answer questions about the proposed NES. These meetings will be advertised on MPI's website.

Input from iwi authorities will be sought through targeted hui at the same time as the more general consultation process on the proposed NES.

Anyone can make a written submission on the subject matter of the proposed NES. Please include the following information with your submission:

1. your name and postal address, phone number, and email address (where applicable);
2. the part or parts of the proposed NES you are submitting on;
3. whether you support or oppose the part of parts of the proposed NES;
4. your submissions, with reasons for your views;
5. any changes you would like made to the proposed NES;
6. the decision you wish the Minister for the Environment and the Minister for Primary Industries to make.

You must forward your submission to the Ministry for Primary Industries, Private Bag 14, Port Nelson 7042, or by email to aquaculture@mpi.govt.nz, in time to be received no later than 5pm, Tuesday 8 August 2017.

Note: Your written submissions and any attached information (including your name but excluding your contact details) may be published on the MPI website and may be required to be disclosed in response to any requests under the Official Information Act 1982.

## 8.2 What happens to submissions?

MPI will analyse all written submissions that are received. Submissions received during public meetings and hui will also be included in that analysis. MPI will then prepare a summary of the submissions received, which will contribute to a report and recommendations on the proposed subject matter of the NES: Marine Aquaculture to the Minister for the Environment and the Minister for Primary Industries.

An evaluation under section 32 of the RMA will also be prepared. The section 32 evaluation must examine the extent to which the objectives of the proposed NES: Marine Aquaculture are the most appropriate way to achieve the purpose of the RMA, and the extent to which the proposed provisions are the most efficient and effective way of meeting the objectives.

The report and recommendations and section 32 evaluation will then be provided to the Minister for the Environment and the Minister for Primary Industries for consideration. If the decision is to proceed with an NES: Marine Aquaculture, the Parliamentary Counsel Office will be instructed to draft the necessary regulations.

Once the drafting stage is complete, the Minister for the Environment and the Minister for Primary Industries will recommend to the Governor-General that the NES be made by order in council. It is anticipated that the NES: Marine Aquaculture will be Gazetted by mid-2018.

## 8.3 Your feedback: discussion questions

We welcome feedback on the questions in Sections 4, 5 and 7.

Also, send us submissions on any aspect of the proposed standard.

# 9. Glossary

## Acronyms

**AQNZ:** Aquaculture New Zealand

**DOC:** Department of Conservation

**MfE:** Ministry for the Environment

**MPI:** Ministry for Primary Industries

**NES:** National environmental standard

**NPS:** National policy statement

**NZCPS:** New Zealand coastal policy statement

**NZCPS 2010:** New Zealand Coastal Policy Statement 2010

**NZIER:** New Zealand Institute of Economic Research

**RMA:** Resource Management Act 1991

**UAE test:** Undue adverse effects on fishing test

## Glossary

**Aquaculture:** has the same meaning as 'aquaculture activities' in section 2 of the RMA.

**Aquaculture Planning Fund:** a fund administered by MPI to help regional councils with the costs of coastal planning for aquaculture.

**Aquaculture Reference Group:** group established in 2015 to provide expert advice to MPI, MfE and DOC on options for development of national direction for marine aquaculture under the RMA. The Aquaculture Reference Group is made up of suitably qualified members representing industry, local government, Te Ohu Kaimoana, and the Environmental Defence Society.

**Aquaculture Strategy and Five-year Action Plan:** adopted by the Government in 2012 to support sustainable growth of the aquaculture industry.

**Biosecurity:** The exclusion, eradication or effective management of risks posed by introduced pests and diseases.

**Coastal environment:** has the meaning given in Policy 1 of the NZCPS 2010.

**Coastal marine area:** has the meaning given in section 2 of the RMA.

**Coastal permit:** has the meaning given in section 87(c) of the RMA.

**Finfish:** "True" fish so as to be distinguished from shellfish. For example, salmon, kingfish and hāpuku.

**Greenshell™ mussels:** one of the two main shellfish species grown in New Zealand, Greenshell™ is the commercial trademark for New Zealand's green-lipped mussels (*Perna canaliculus*) produced through subtidal long-line aquaculture.

**King Salmon:** the main finfish species grown in New Zealand (also known as Chinook salmon and *Oncorhynchus tshawytscha*).

**National direction:** legislative tools that sit under the RMA that are used by the government to set a consistent direction on topics of national importance.

**National environmental standard:** regulations issued under section 43 of the RMA which prescribe technical standards, methods or other requirements for environmental matters.

**National policy statement:** instruments issued under section 52(2) of the RMA which state objectives and policies for matters of national significance.

**New Zealand coastal policy statement:** instruments issued under section 57 of the RMA which state policies in order to achieve the purpose of RMA in relation to the coastal environment of New Zealand.

**Pacific oysters:** one of the two main shellfish species grown in New Zealand, commonly farmed on intertidal racks or in baskets (also known as *Crassostrea gigas*).

**Regional coastal plan:** has the meaning given in section 43AA of the RMA.

**Regional council:** has the meaning given in section 2 of the RMA (also includes unitary authorities).

**Regional policy statement:** has the meaning given in section 43AA of the RMA.

**Resource consent:** has the meaning given in section 87 of the RMA (a resource consent for an activity in the coastal marine area is known as a coastal permit).

**Reverse sensitivity:** describes the situation when people involved in a newly established activity complain about the effects of pre-existing activities.

**Schedule 1 process:** process set out in the RMA by which a regional council prepares or changes a regional policy statement or regional coastal plan.

**Spat catching:** Spat catching is the process of obtaining juvenile mussels and oysters (spat) by placing specialised structures (long-lines and ropes) in areas where there are large numbers of spat in the water. The spat attaches itself to the ropes and is then transferred onto growing structures. Note: this definition does not include the harvest of green-lipped mussel spat from seaweed washed ashore at Ninety Mile Beach.

**Undue Adverse Effects (UAE) test:** MPI assesses the effects of proposed marine farms on fishing through the undue adverse effects on fishing test. A proposed marine farm cannot proceed if it would have "undue" adverse effects on recreational or customary fishing, or commercial fishing for non-quota management system (QMS) stocks. And, unless an aquaculture agreement or compensation declaration is reached, a proposed marine farm cannot proceed if it would have undue adverse effects on commercial fishing for QMS stocks.

# Appendix A: National Direction for Aquaculture Reference Group

The National Direction for Aquaculture Reference Group was established in June 2015. The purpose of the Reference Group was to provide expert advice and recommendations to the Ministry for Primary Industries, Ministry for the Environment and the Department of Conservation on the scope and content of formal national direction for marine aquaculture under the Resource Management Act 1991.

Membership of the Reference Group was as follows (organisations are identified in brackets, noting that the members of the group were not directly representing their organisations in their role as members of the Reference Group):

- Rebecca Clarkson (Aquaculture New Zealand)
- Graeme Coates (Aquaculture Direct)
- Ted Culley (Sanford Ltd)
- Jim Dollimore (Biomarine Ltd)
- Mark Gillard (New Zealand King Salmon Ltd)
- Pere Hawes (Marlborough District Council)
- Gary Hooper (Aquaculture New Zealand)
- Laws Lawson (Te Ohu Kaimoana)
- Jo Noble (Bay of Plenty Regional Council)
- Raewyn Peart (Environmental Defence Society)
- Graeme Silver (Waikato Regional Council)
- Ken Swinney (Environment Southland)

The Reference Group met eight times between August 2015 and March 2017, as follows:

- Friday 7 August 2015
- Friday 23 October 2015
- Wednesday 2 March 2016
- Tuesday 19 July 2016
- Friday 19 August 2016
- Monday 19 September 2016
- Monday 5 December 2016
- Monday 13 March 2017

# Appendix B: Summary of effects of aquaculture

This appendix provides an overview of the actual and potential effects of aquaculture. Information on ecological effects has been drawn from the Ministry for Primary Industries document *Overview of Ecological Effects of Aquaculture*.

The three principal types of aquaculture currently operating in New Zealand (sub-tidal mussels, inter-tidal oysters and sea pen salmon farming) can have ecological effects as outlined in Figures B1, B2 and B3.

**Figure B1: Diagram illustrating the actual and potential ecological effects of long-line mussel farming**

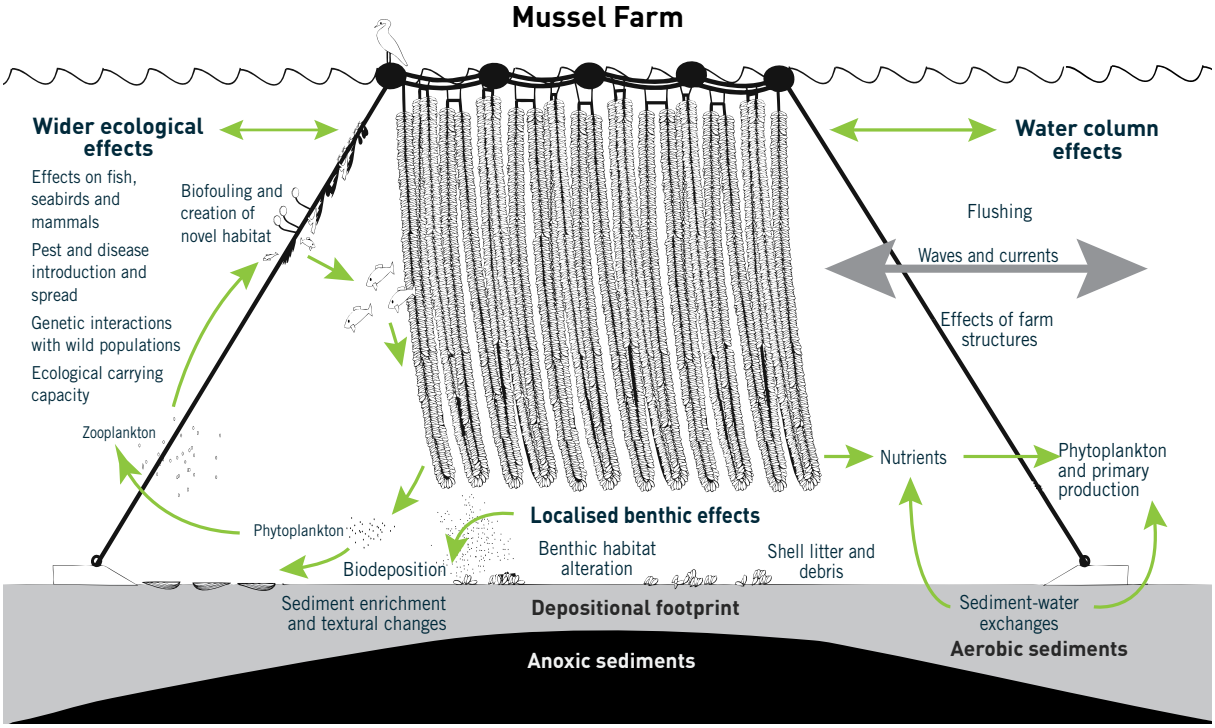



**Figure B2: Diagram illustrating the actual and potential effects from elevated intertidal oyster cultivation**

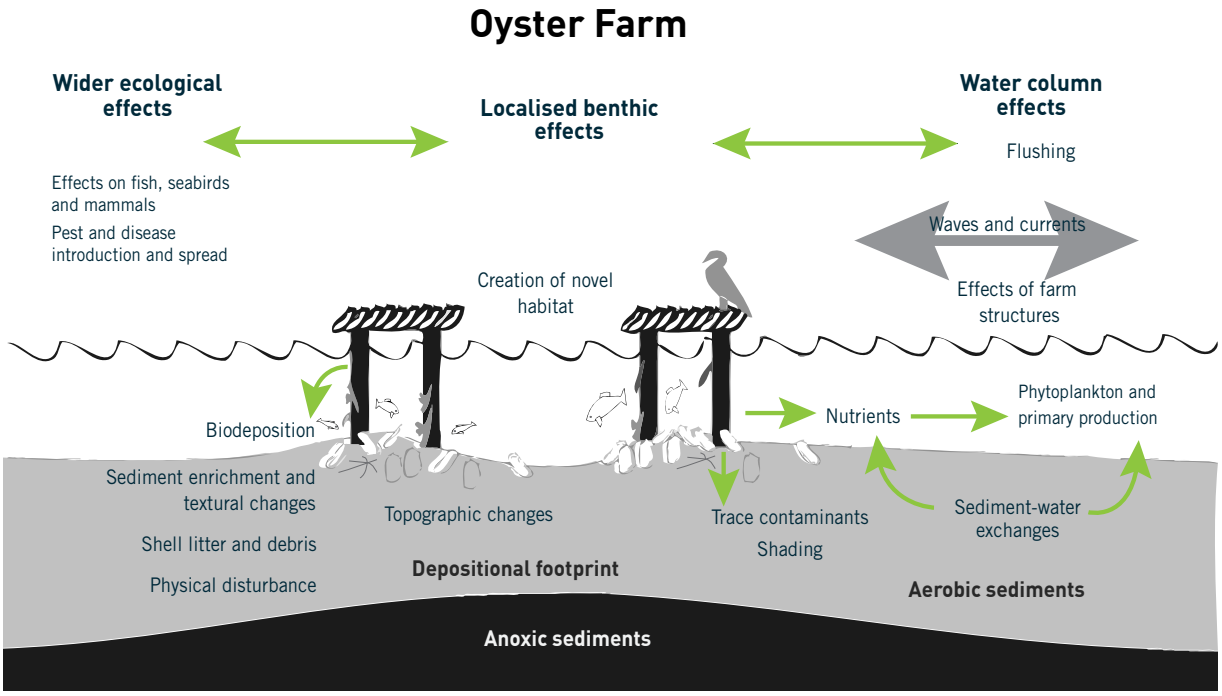
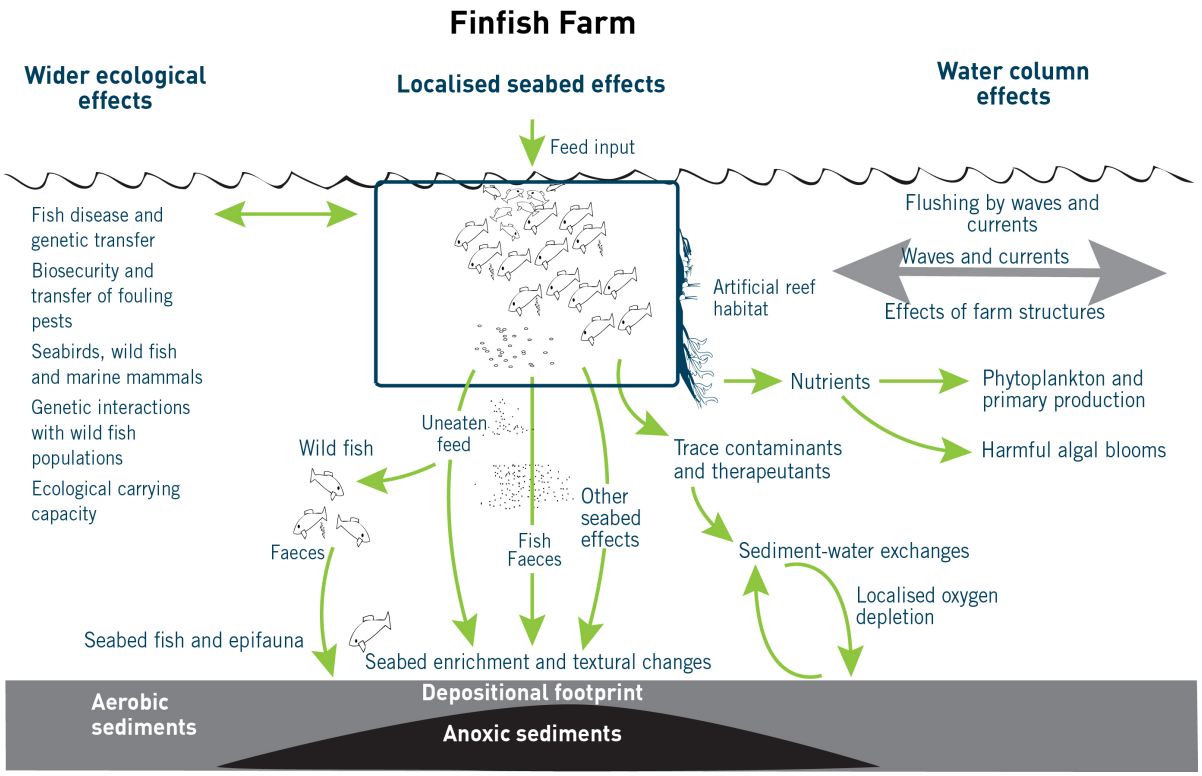


**Figure B3: Schematic of actual and potential ecological effects from finfish aquaculture**




Note: therapeutants are not currently used in finfish aquaculture in New Zealand.

Table B1 provides a high level outline of the potential effects of farming shellfish.

**Table B1: Potential effects of farming shellfish**

| Effect | Description |
|---|---|
| Water column | • phytoplankton depletion and changes in planktonic community composition<br>• dissolved nutrient and particulate release into the water column<br>• effects from biofouling communities |
| Benthic (seabed) | • localised organic enrichment of the seabed beneath the farm<br>• smothering of benthic organisms by biodeposits<br>• biofouling drop-off and debris altering the composition of the seabed<br>• seabed shading by structures that could affect localised algal productivity under the farm |
| Marine mammal interactions | • habitat exclusion or modification leading to less use or less productive use<br>• potential for entanglement<br>• underwater noise disturbance |
| Wild fish | • attraction of wild fish to aquaculture structures (creation of artificial habitat)<br>• alteration of existing fish habitats |
| Seabirds | • entanglement (resulting in birds drowning)<br>• habitat exclusion<br>• providing roost sites closer to foraging areas<br>• aggregation of prey fish |
| Biosecurity | • potential to facilitate establishment and spread of pests and diseases |
| Escapee and genetic effects | • changes to the genetic distinctiveness, fitness, adaptability and diversity of local wild populations |
| Additives | • current shellfish aquaculture does not require the ongoing use of chemicals and antibiotics<br>• intertidal oyster farming racks constructed from treated timber have potential to leach trace contaminants |
| Hydrodynamic alteration of flows | • farm structure altering and reducing current speeds, potentially affecting biological processes, such as phytoplankton production and depletion<br>• effects on stratification through vertical mixing and partial blocking of some water layers<br>• wave dampening may affect shoreline habitat and sediment transport |
| Landscape and natural character | • mussel farm buoys visible as horizontal structures on the water surface<br>• inter-tidal oyster racks fully visible at low tide and partially visible at high tide<br>• both will affect landscape and natural character, depending on the values of the surrounding area, and may lead to effects on people's perception of an area |
| Noise | • noise generally associated with harvesting activities<br>• spat catching operations require more intensive management and can result in greater levels of noise |
| Seabed disturbance | • initial short term disturbance associated with construction of a marine farm |
| Recreation and public access | • shellfish farms occupy public space in the coastal marine area and can therefore reduce recreational opportunities in a particular area<br>• access generally available through and around a marine farm<br>• creation of artificial habitat and effects on wild fish can result in improved fishing possibilities |
| Navigation and safety | • shellfish farms occupy space in the coastal marine area and represent a potential hazard to other users |
| Amenity | • visual effects as described in relation to landscape and natural character<br>• noise effects as described above<br>• potential for generation of rubbish and debris<br>• level of effect depends on proximity to a particular site |
| Effects on tangata whenua values | • effects on sites of significance to tangata whenua, such as waahi tapu<br>• effects on taonga species<br>• effects on mahinga kai<br>• effects on mauri of the coastal marine area<br>• effects on ability to exercise kaitiakitanga and other mana whenua responsibilities |

Table B2 provides a high level outline of the potential effects of farming finfish.

**Table B2: Potential effects of farming finfish**

| Effect | Description |
|---|---|
| Water column | • nutrient enrichment effects<br>• depletion of dissolved oxygen |
| Benthic (seabed) | • localised organic enrichment of the seabed beneath the farm<br>• biofouling drop-off and debris<br>• seabed shading by structures<br>• widespread biodeposition |
| Marine mammal interactions | • habitat exclusion or modification<br>• potential for entanglement<br>• underwater noise disturbance<br>• attraction to artificial lighting |
| Wild fish | • effects on existing fish habitats<br>• attraction of wild fish to farm structures<br>• consumption of waste feed |
| Seabirds | • entanglement (resulting in birds drowning)<br>• habitat exclusion<br>• providing roost sites closer to foraging areas<br>• aggregation of prey fish |
| Biosecurity | • potential to facilitate establishment and spread of pests and diseases |
| Escapee and genetic effects | • competition for space with wild fish<br>• alteration of the genetic structure of wild fish populations<br>• transmission of pathogens from farmed stocks to wild fish populations |
| Effects from additives | • accumulation of metals from use of antifoulants and additives in fish feed<br>• use of therapeutants to treat stock[1] |
| Hydrodynamic alteration of flows | • finfish cages altering and reducing current speeds<br>• effects on stratification through vertical mixing and partial blocking of some water layers<br>• water dampening may affect shoreline habitat and sediment transport |
| Landscape and natural character | • finfish pens and barges visible as both horizontal and vertical structures on the water surface<br>• consequent effects on landscape and natural character, depending on the values of the surrounding area, and may lead to effects on people's perception of an area (i.e. its wildness and naturalness) |
| Noise | • continuous low-level noise from on-site generators<br>• intermittent noise from activities such as net lifting and cleaning |
| Seabed disturbance | • initial short term disturbance associated with construction of a marine farm |
| Recreation and public access | • finfish farms occupy public space in the coastal marine area and can therefore reduce recreational opportunities in a particular area<br>• access generally around a marine farm, but not 'permeable' structures in the way shellfish farms can be<br>• effects on wild fish (for example through waste feed consumption) can result in improved fishing possibilities |
| Navigation and safety | • finfish farms occupy space in the coastal marine area and represent a potential hazard to other users |
| Amenity | • visual effects as described in relation to landscape and natural character<br>• additional visual effects from night-time lighting of accommodation structures and sea pens for operational reasons<br>• noise effects as described above<br>• potential for generation of rubbish and debris<br>• wildlife attraction effects (seals establishing haul-out sites in close proximity, potentially increased numbers of seabirds, can affect public use of nearby jetties and shoreline)<br>• level of effect depends on proximity to a particular site |
| Effects on tangata whenua values | • effects on sites of significance to tangata whenua, such as waahi tapu<br>• effects on taonga species<br>• effects on mahinga kai<br>• effects on mauri of the coastal marine area<br>• effects on ability to exercise kaitiakitanga and other mana whenua responsibilities |

[1]Note: therapeutants are not currently used in finfish aquaculture in New Zealand

# Appendix C: RMA Part 2 requirements and NZCPS 2010 objectives and policies

## How aquaculture is currently managed under the Resource Management Act 1991

The RMA's purpose is to promote the sustainable management of natural and physical resources. Sustainable management means managing the use, development and protection of natural and physical resources in a way or at a rate which enables people and communities to provide for their social, economic and cultural well-being and for their health and safety while:

- sustaining the potential of natural and physical resources to meet the reasonably foreseeable needs of future generations; and
- safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and
- avoiding, remedying or mitigating any adverse effects of activities on the environment.

Section 6 sets out matters of national importance, which include:

- preservation of the natural character of the coastal environment, (including the coastal marine area);
- protection of outstanding natural features and landscapes from inappropriate subdivision, use and development;
- protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna;
- maintenance and enhancement of public access to and along the coastal marine area, lakes and rivers;
- the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu and other taonga;
- the protection of historic heritage from inappropriate subdivision, use and development;
- the protection of protected customary rights.

Section 7 sets out other matters that all persons exercising functions and powers under the RMA must have particular regard to, including:

- kaitiakitanga;
- the ethic of stewardship;
- the efficient use and development of natural and physical resources;
- the maintenance and enhancement of amenity values
- intrinsic values of ecosystems;
- maintenance and enhancement of the quality of the environment.

Section 8 requires all persons exercising functions and powers under the RMA to take into account the principles of the Treaty of Waitangi.

Part 7A of the RMA contains provisions managing the occupation of the common marine and coastal area. Section 360A-C contains powers enabling the Minister responsible for Aquaculture to recommend regulations to amend aquaculture-related provisions in a regional coastal plan by regulation.

## New Zealand Coastal Policy Statement 2010

The New Zealand Coastal Policy Statement 2010 (NZCPS 2010) takes an integrated approach to the management of the coastal environment and sets seven policy objectives and 29 supporting policies in order to achieve the purpose of the RMA in relation to the coastal environment of New Zealand. Councils are required to give effect to these policies in their plans, and consent authorities must have regard to them when considering applications.

A number of these policies are relevant to aquaculture. Policy 8 of the NZCPS 2010 specifically recognises the importance of and provides for aquaculture. Overall the NZCPS 2010 creates a framework of policies relating to the management of the coastal environment that help to determine where aquaculture is appropriate. Relevant policies include:

- Policy 2 sets out different ways in which the principles of the Treaty of Waitangi and kaitiakitanga should be taken into account in relation to the coastal environment.
- Policy 7 (Strategic planning) requires consideration of where, how and when to provide for both land and water based activities in the coastal environment and to identify where uses are appropriate. Policy 7 also requires councils identify coastal processes that are under threat or at significant risk from adverse cumulative effects and how those cumulative effects can be avoided.
- Policy 8 specifically recognises the importance of aquaculture to social, economic and cultural wellbeing of people and communities. This includes providing for aquaculture in appropriate places in the coastal environment and ensuring that development in the coastal environment does not make water quality unfit for aquaculture activities in areas approved for aquaculture.

- Policy 11 provides for the protection of indigenous biological diversity in the coastal environment, consistent with section 6(c) of the RMA.
- Policy 12 provides for control of activities which could result in the release or spread of harmful aquatic organisms.
- Policy 13 provides for the preservation of natural character in the coastal environment, protecting if from inappropriate subdivision, use and development, consistent with section 6(a) of the RMA.
- Policy 14 provides for restoration or rehabilitation of the natural character of the coastal environment by identifying opportunities for restoration or rehabilitation.
- Policy 15 relates to protecting natural features and landscapes of the coastal environment from inappropriate subdivision, use and development. The basis for this is section 6(b) of the RMA, which identifies this as a matter of national importance.

# Appendix D: Current activity status for existing marine farms

**Table D3: Current activity status for existing marine farms**

| Region | Provisions in regional coastal plan | Typical approach to notification |
|---|---|---|
| **Northland** | Controlled* or discretionary (depends on the location and type of aquaculture activity)<br>**Roughly 75% of farms located in Marine 3 Management Area* | Typically non-notified |
| **Auckland** | Restricted discretionary | Typically non-notified |
| **Waikato** | Controlled* or discretionary* (depends on the type of aquaculture activity)<br>**Most mussel farms in Wilsons Bay Marine Farming Zone are controlled; all other farms discretionary* | Either non-notified or limited notified |
| **Bay of Plenty** | Controlled outside of high values areas, restricted discretionary within these areas | Notified in high value areas, non-notified elsewhere |
| **Tasman** | Controlled, restricted discretionary or discretionary (depends on the type and scale of aquaculture activity) | Non-notified |
| **Marlborough** | Controlled, restricted discretionary or discretionary | Typically non-notified for controlled, limited notified for restricted discretionary |
| **Canterbury** | Discretionary | |
| **Southland** | Discretionary | Either non-notified or limited notified |

# Appendix E: Options assessment

Section 4 of this discussion document contains an analysis of six potential options for resolving the problems identified in section 3 of the discussion document. Fourteen options (including the status quo) were evaluated overall. This appendix provides a brief analysis of the seven options that are not discussed in section 4 of the discussion document:

- Minister amendment of plans prior to approval;
- Legislative reform;
- Enhanced central government participation in regional plan processes;
- Use of the Aquaculture Planning Fund to assist with strategic planning;
- Amending the NZCPS 2010;
- National planning standards;
- Industry standards.

## Minister amendment of plans prior to approval

Clause 19, Schedule 1 of the RMA allows the Minister of Conservation to amend regional coastal plans prior to approval. Clause 19 may be used to make technical amendments to plans, but not more substantive changes.

This option can only be used at the end of a plan review process. Until those plan reviews are initiated there would be ongoing uncertainty about the process for considering application for replacement consents for existing marine farms and changes of species, and incomplete management of biosecurity risks. Implementation would also be complex and time consuming as issues would need to be considered on a region by region basis.

## Legislative reform

The government could propose amendments to the RMA and the Fisheries Act, or develop new aquaculture-specific legislation to stabilise existing aquaculture production.

While this would provide a high level of certainty through prescriptive statutory provisions, it might not allow for council planning (particularly the strategic planning for the coastal environment envisaged by Policy 7 of the NZCPS 2010) and it would separate consideration of aquaculture from other activities and uses of the coastal environment. The development of new legislation or changes to legislation is likely to be complex, costly and unable to be completed within the timeframes required.

## Enhanced central government participation in regional plan processes

The government could increase their involvement in regional planning and continue to make submissions to regional councils on second generation plans and on consent applications where necessary, in an attempt to have greater influence over the outcome. Any submissions would still be subject to council decisions however, and may not increase certainty about consenting processes and requirements.

## Use of Aquaculture Planning Fund to assist with strategic planning

Strategic planning for aquaculture could be encouraged, and funding provided, through MPI's Aquaculture Planning Fund. Work is already underway to identify projects that might be suitable to support, but this is unlikely to be a viable option on its own. Strategic planning would still be completed by each regional council, and may continue to result in differing consenting processes and requirements.

## Amend NZCPS 2010

The NZCPS 2010 could be amended to more explicitly provide for recognising existing aquaculture, and to provide greater direction as to how existing marine farms in outstanding areas should be treated. This option is not considered to be effective or efficient however, particularly given the current effectiveness review of the NZCPS 2010 as a whole. Amending the NZCPS 2010 is likely to be complex and costly, and implementation through changes to regional coastal plans is unlikely to be able to be completed within the timeframes required.

## National planning standards

There are new provisions in the RMA, introduced by the Resource Legislation Amendment Bill, for national planning standards. These standards are designed to set nationally consistent parameters (structure, format or content) for regional policy statements and plans to support implementation of national environmental standards, national policy statements, New Zealand coastal policy statements or regulations made under the RMA. National planning standards may specify objectives, policies and rules to be included in plans. The first set of national planning standards are recommended to be minimum requirements for the structure and form of policy statements and plans, definitions and electronic functionality and accessibility of policy statements. Planning standards need to be translated into plans before they have effect however, and any national planning standards for aquaculture would not be able to be prepared until the first set of standards has been prepared. This option would therefore not offer a timely response to the problems identified.

## Industry standards

The A+ Sustainable Aquaculture Framework is a voluntary standard that promotes best practice, including biosecurity measures. It provides high level guidance for salmon, oyster and mussel farming. As a standalone measure it cannot contribute to increasing process certainty for replacement consents for existing marine farms, and because of its voluntary nature it cannot ensure comprehensive uptake of biosecurity management measures.

# Appendix F: Indicative NES provisions

The purpose of this appendix is to provide an indication of what regulations contained in an NES: Marine Aquaculture could look like. Should the proposal proceed a final NES will be prepared by the Parliamentary Counsel Office in accordance with that office's requirements and drafting guidelines.

## Proposed provisions for replacement consents for existing marine farms and for realignment for the National Environmental Standard: Marine Aquaculture

**Note: the provisions relating to biosecurity management plans also have effect for any application covered by these provisions**

1. a) Regulations 2-19 apply to existing marine farms where the same species as authorised by a current coastal permit is to be farmed.
   b) Where an application for a replacement consent for an existing marine farm includes a proposal to change the species being farmed, regulations 20 to 44 apply. As outlined in those regulations, matters of discretion outlined in regulations 12 – 15 will also apply.

### Replacement consents for existing marine farms within outstanding natural features, outstanding natural landscapes, and/or areas of outstanding natural character in either a regional policy statement or regional coastal plan

2. Existing marine farms[26] located within[27] outstanding natural features, outstanding natural landscapes and/or areas of outstanding natural character that have been identified[28] in proposed or operative regional policy statements or regional coastal plans are a restricted discretionary activity[29] if the requirements under 3 are met.
3. Requirements:
   a) At the time of application under 2, the marine farm holds a current coastal permit[30] for occupation of the coastal marine area (pursuant to the Resource Management Act 1991); and
   b) The application is for a marine farm in the same location as authorised by the current coastal permit; and
   c) The consented area to be occupied is the same or less than that which is authorised by the current coastal permit; and
   d) The structures and anchoring systems are materially the same as those authorised by the current coastal permit;[31] and
   e) The species to be farmed are only those authorised by the current coastal permit; and
   f) For aquaculture requiring supplementary feeding, feed limits shall not exceed those contained in conditions on the current coastal permit.
4. a) Where an application for consent for an existing marine farm cannot meet the requirements of 3(a) or (c), the application is classified as an application for new space and is not covered by these provisions.
   b) Where an application for consent for an existing marine farm cannot meet requirement 3(b) and it is not proposed as a realignment under 9, the application is classified as an application for new space and is not covered by these provisions.

### Replacement consents for existing marine farms in areas identified as inappropriate for existing aquaculture in regional coastal plans

5. Where, following the gazetting of this national environmental standard, a regional council determines through a regional coastal plan that an area of the coastal marine area is inappropriate for existing aquaculture, existing marine farms located within that area are a discretionary activity.

### Replacement consents for existing marine farms in all other areas

6. Existing marine farms located in areas other than those defined in 2 or 5 above are a restricted discretionary activity if the requirements under 7 are met.
7. Requirements:
   a) At the time of application under 6, the marine farm holds a current coastal permit for occupation of the coastal marine area (pursuant to the Resource Management Act 1991); and
   b) The application is for a marine farm in the same

26 For the purposes of this regulation, marine farm is defined as a single contiguous spatial area used for aquaculture activities (as defined in section 2 RMA) that has a coastal permit for the occupation of the coastal marine area and which may also have 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 deposition or discharges in the coastal marine area.
27 Within is defined as a marine farm that has more than 1% of its consented area within an identified mapped outstanding natural feature, outstanding natural landscape or area of outstanding natural character.
28 In this context, 'identified' means: mapped, or identified by GPS or NZTM coordinates, or clearly named and identified by description of physical boundaries, or named if it is a physical feature that has clear boundaries (e.g. a harbour).
29 The NES activity statuses supersede equivalent existing rules in coastal plans (e.g. an NES restricted discretionary rule will supersede an equivalent restricted discretionary rule in a regional coastal plan).
30 This includes deemed coastal permits and therefore covers all marine farm leases and licenses. It collectively refers to the bundle of coastal permits for aquaculture, including any discharge permits.
31 For the avoidance of doubt, 'the same as authorised' includes the colour, height, reflectivity and bulk of structures.

location as authorised by the current coastal permit; and

c) The consented area to be occupied is the same or less than that which is authorised by the current coastal permit; and

d) The structures and anchoring systems are materially the same as those authorised by the current coastal permit; and

e) The species to be farmed are only those authorised by the current coastal permit; and

f) For aquaculture requiring supplementary feeding, feed limits shall not exceed those contained in conditions on the current coastal permit.

8. a) Where an application for consent for an existing marine farm cannot meet the requirements of 7(a) or (c), the application is classified as an application for new space and is not covered by these provisions.

b) Where an application for consent for an existing marine farm cannot meet requirement 7(b) and it is not proposed as a realignment under 9, the application is classified as an application for new space and is not covered by these provisions.

### Realignment of existing marine farms (excluding fed aquaculture) in all other areas

9. Realignment of existing marine farms (excluding marine farms for aquaculture requiring supplementary feeding) that are located in areas other than those defined in 5 above is a restricted discretionary activity if the requirements under 10 are met.

10. Requirements:

a) At the time of application under 9, the marine farm holds a current coastal permit for occupation of the coastal marine area (pursuant to the Resource Management Act 1991); and

b) The existing marine farm shall not exceed 10 hectares in size; and

c) The application is for the realignment of an existing marine farm, provided:

i) No part of the existing authorised area has been realigned in the last ten years, and

ii) A minimum of two-thirds (2/3) of the existing authorised area remains, and

iii) The new area is no more than one-third (1/3) of the existing authorised area, and

iv) The new area is contiguous to the existing authorised area, and

v) The new area will not be located within an area identified as non-complying or prohibited for new aquaculture in an operative or proposed regional coastal plan, and

vi) The new area will not be located within outstanding natural features32, outstanding natural landscapes, areas of outstanding natural character, and/or significant ecological areas that have been identified in an operative or proposed regional policy statement or regional coastal plan; and

d) The consented area to be occupied is the same or less than that which is authorised by the current coastal permit; and

e) The structures are materially the same as those authorised by the current coastal permit (with the necessary modifications in location as required by the realignment); and

f) The species to be farmed are only those authorised by the current coastal permit.

11. a) Where an application for consent for an existing marine farm cannot meet the requirements of 10(a) or (d), the application is classified as an application for new space and is not covered by these provisions.

### Matters of discretion for restricted discretionary activities under this regulation

12. Discretion is restricted to the following matters in relation to all restricted discretionary activities under this regulation (for replacement consents for existing marine farms/realignment):

a) The duration and lapsing of the consent and review conditions

b) Timing of occupation in relation to seasonal activities such as spat catching

c) The layout, positioning (including density), lighting and marking of marine farm structures within the marine farm site, in relation to:

i) ensuring continued reasonable public access (including recreational access) in the vicinity of the marine farm

ii) navigational safety, including the provision of navigation warning devices and signs

d) Integrity and security of the structures, including the anchoring systems

*e) [tangata whenua values, such as effects on waahi tapu, taonga] – note that this is a placeholder matter that needs further discussion with iwi authorities as part of the consultation process for the proposed NES: Marine Aquaculture*

f) Significant adverse effects on reefs and/or biogenic habitat underneath and within 20 metres of the marine farm

g) Management practices to minimise marine mammal and seabird interactions with the marine farm, including entanglement

32 Note regional coastal plans may not use the exact wording for the terms listed in this bullet point, e.g. Marlborough Sounds Resource Management Plan uses the term Area of Outstanding Landscape Value.

h) Adverse effects of offshore farms[33] on marine mammals

i) Management of biosecurity risks

j) Management of noise, rubbish and debris

k) Information, monitoring and reporting requirements

l) Administrative charges, coastal occupation charges, financial contributions and bonds (or alternative mechanisms to recover the cost of the repair or removal of abandoned or derelict farms and reinstatement of the environment).

13. In addition to those matters listed in 12, the following are additional matters of discretion in relation to a restricted discretionary activity for all aquaculture requiring supplementary feeding under this regulation:

    a) Management of effects on water quality and benthic values

    b) Significant adverse effects on reefs and/or biogenic habitat

    c) Use of antibiotics, therapeutants and antifouling

    d) Fallowing and rotation

    e) Underwater lighting

    f) Any other lighting of structures

    g) Discharges of odour.

14. In addition to those matters listed in 12 (and 13, if applicable), the following additional matter of discretion in relation to a restricted discretionary activity for an application made under 2:

    a) Effects of the aquaculture activity on the values and characteristics that make the area, feature or landscape outstanding.

15. In addition to those matters listed in 12 (and 13, if applicable), the following additional matters of discretion in relation to a restricted discretionary activity for an application made under 9:

    a) Effects on historic heritage

    b) Effects on benthic values and the seabed underneath the marine farm associated with the proposed anchoring system

    c) Requirements to surrender consent for space no longer occupied as a result of realignment

    d) In the newly occupied space, adverse effects on marine mammals and seabirds.

### Notification

16. Applications for a coastal permit under 2 or 6 will not be publicly or limited notified, unless a statutory exception applies.

17. Applications for a coastal permit under 5 or 9 will not be precluded from public or limited notification so councils will follow the normal statutory tests under the RMA in determining whether or not to notify an application.

### Ability for plans to have more stringent or lenient activity classification

18. Councils may, through their regional coastal plans, set activity classifications for consent applications for existing marine farms that are more lenient than those contained in 2 and 6.

### Certain marine farms are exempt from this regulation

19. The National Environmental Standard (with regard to replacement consents for existing marine farms) will not apply to existing farms in Tasman Aquaculture Management Areas and Waikato Wilsons Bay.

## Proposed change of species provisions of the National Environmental Standard: Marine Aquaculture

20. Regulations 21 – 44 apply to existing marine farms where:

    a) a different species from that authorised by a current coastal permit is to be farmed;

    b) different species from those authorised by a current coastal permit are to be farmed.

21. Categories 1, 2 and 3 do not apply to the farming of finfish. Category 4 does apply to finfish.

22. Categories 1 and 2 do not apply to the farming of paua or sponges.

### Category 1

23. A change in farmed species[34] as part of an application for a replacement consent for an existing marine farm is a restricted discretionary activity if the requirements under 24 are met.

24. Requirements:

    a) At the time of application under 23, the marine farm is subject to a current coastal permit[35] for occupation of the coastal marine area (pursuant to the Resource Management Act 1991); and

    b) The location of the marine farm is the same as authorised by the current coastal permit; and

    c) The location, method and form of all structures, including anchoring systems, buoys, surface and sub-surface structures and navigational lighting remains materially the same as authorised by the current coastal permit.

25. In addition to the matters of discretion under 12, discretion is restricted to the following matters in relation to all restricted discretionary activities under 23:

    a) Management of biosecurity risks arising from the

33 That is, marine farms that are not located within enclosed waters such as harbours, sounds, bays and those that are not located close to the coast in more open waters. Offshore farms are more likely to pose exclusion risks for marine mammals, particularly for example migrating whales.

34 This includes one or more additional species, or a complete change in species.

35 This includes deemed coastal permits and therefore covers all marine farm leases and licenses. It collectively refers to the bundle of coastal permits for aquaculture, including any discharge permits.

farming of the new species; and

b) The genetic effects of escapees on wild populations; and

c) Cultural effects from the translocation of taonga species.

### Category 2

26. A change in the form of subsurface structure to provide for a change in farmed species as part of an application for a replacement consent for an existing marine farm is a restricted discretionary activity if the requirements under 27 are met.

27. Requirements:

    a) At the time of application under 26, the marine farm is subject to a current coastal permit for occupation of the coastal marine area (pursuant to the Resource Management Act 1991); and

    b) The location of the marine farm is the same as authorised by the current coastal permit; and

    c) The consented area to be occupied is the same or less than that which is authorised by the current coastal permit; and

    d) The location and method of anchoring systems, buoys, surface structures and navigational lighting remain materially the same as authorised by the current coastal permit.

28. In addition to the matters of discretion under 12, discretion is restricted to the following matters relating to the new species and new or altered sub-surface structures in relation to all restricted discretionary activities under 26:

    a) Management of biosecurity risks; and

    b) The genetic effects of escapees on wild populations; and

    c) Cultural effects from the translocation of taonga species; and

    d) Hydrodynamic effects.

### Category 3

29. A change in farmed species by the addition of one or more non-fed species or paua as part of an application for a replacement consent for an existing marine farm, where a change in the structures (other than just the subsurface structures) is required, is a restricted discretionary activity if the requirements under 30 are met.

30. Requirements:

    a) At the time of application under 29, the marine farm is subject to a current coastal permit for occupation of the coastal marine area (pursuant to the Resource Management Act 1991); and

    b) The location of the marine farm is the same as authorised by the current coastal permit; and

    c) The consented area to be occupied is the same or less than that which is authorised by the current coastal permit.

31. Where an application cannot meet the requirements under 30, it is classified as new space and is not covered by these provisions.

32. Discretion is restricted to the following matters for all restricted discretionary activities under 29:

    a) The duration and lapsing of the consent and review conditions;

    b) Location, extent, type, scale, anchoring systems and integrity of marine farm structures, including the layout, positioning (including density), lighting and marking of marine farm structures within the marine farm site in relation to:

        i) ensuring continued reasonable public access (including recreational access) in the vicinity of the marine farm; and

        ii) navigational safety, including the provision of navigation warning devices and signs; and

    c) Timing of occupation; and

    d) *[Tangata whenua values such as effects on waahi tapu and taonga] – note that this is a placeholder matter that needs further discussion with iwi authorities as part of the consultation process for the proposed NES: Marine Aquaculture*

    e) Management practices to minimise marine mammal and seabird interactions with the marine farm, including entanglement; and

    f) Adverse effects of offshore farms on marine mammals; and

    g) Management of biosecurity risks; and

    h) The genetic effects of escapees on wild populations; and

    i) Cultural effects from the translocation of taonga species; and

    j) Conditions to manage noise; and

    k) Measures to avoid, remedy or mitigate adverse effects on benthic values and the seabed underneath and within 20m of the marine farm; and

    l) Measures to avoid, remedy or mitigate adverse effects on water quality in terms of organic enrichment; and

    m) Effects of seabed disturbance; and

    n) Information, monitoring and reporting requirements; and

    o) Administrative charges, bonds or alternative mechanisms to recover the cost of the repair or removal of abandoned or derelict farms and reinstatement of the environment.

### Category 4

33. A change in farmed species by the addition of one or more species to a finfish farm, including a change to another finfish species, as part of an application for a replacement consent for an existing marine farm, is a restricted discretionary activity if the requirements under 34 are met.[36 37]
34. Requirements:
    a) At the time of application under 33, the marine farm holds a current coastal permit for occupation of the coastal marine area (pursuant to the Resource Management Act 1991); and
    b) The location of the marine farm is the same as authorised by the current coastal permit; and
    c) The consented area to be occupied is the same or less than that which is authorised by the current coastal permit.
35. Where an application cannot meet the requirements under 34, it is classified as new space and is not covered by these provisions.
36. Discretion is restricted to the following matters for all restricted discretionary activities under 33[38]:
    a) The duration and lapsing of the consent and review conditions; and
    b) Location, extent, type, scale, anchoring systems and integrity of marine farm structures, including the layout, positioning (including density), lighting and marking of marine farm structures within the marine farm site in relation to:
        i) ensuring continued reasonable public access (including recreational access) in the vicinity of the marine farm; and
        ii) navigational safety, including the provision of navigation warning devices and signs; and
    c) Timing of occupation; and
    d) *[Tangata whenua values such as effects on waahi tapu and taonga] – note that this is a placeholder matter that needs further discussion with iwi authorities as part of the consultation process for the proposed NES: Marine Aquaculture*
    e) Management practices to minimise marine mammal and seabird interactions with the marine farm, including entanglement; and
    f) Management of biosecurity risks; and
    g) The genetic effects of escapees on wild populations; and
    h) Cultural effects from the translocation of taonga species; and
    i) Conditions to manage noise; and
    j) Measures to avoid, remedy or mitigate adverse effects on benthic values and the seabed; and
    k) Measures to avoid, remedy or mitigate adverse effects on water quality in terms of organic enrichment; and
    l) Effects of seabed disturbance; and
    m) Use of antibiotics, therapeutants and antifouling; and
    n) Fallowing and rotation; and
    o) Underwater lighting; and
    p) Any other lighting of structures; and
    q) Discharges of odour; and
    r) Information, monitoring and reporting requirements; and
    s) Administrative charges, bonds or alternative mechanisms to recover the cost of the repair or removal of abandoned or derelict farms and reinstatement of the environment.
37. For an application to add one or more species under 23, 26, 29 or 33 on a marine farm located within outstanding natural features, outstanding natural landscapes and/or areas of outstanding natural character that have been identified[39] in operative or proposed regional policy statements or regional coastal plans, the following additional matter of discretion shall apply:
    a) Effects of the aquaculture activity on the values and characteristics that make the area outstanding.

### Notification

38. Applications for a coastal permit under 23 or 26 will not be publicly or limited notified, unless a statutory exception applies.
39. Applications for a coastal permit under 29 or 33 will not be precluded from public or limited notification so councils will follow the normal statutory tests under the RMA in determining whether or not to notify an application.

### Ability for plans to have more stringent or lenient activity classification

40. Councils may, through their regional coastal plans, set activity classifications for consent applications for existing marine farms that are more lenient than those contained in 23, 26, 29 and 33.

### Certain marine farms are exempt from this regulation

41. All regulations in this National Environmental Standard (with regard to change of species) will not apply to existing farms in Tasman AMAs and Waikato Wilsons Bay.
42. All regulations in this National Environmental

36 For example, this will cover a change in fish species within the existing net pen structures, or the addition of extra growing structures such as oyster trays to existing structures, or polyculture.

37 This does not apply to a complete change in species from fin fish species to another form of marine farming.

38 In practice, only the relevant matters of discretion would be considered.

39 In this context, 'identified' means: mapped, or identified by GPS or NZTM coordinates, or clearly named and identified by description of physical boundaries, or named if it is a physical feature that has clear boundaries (e.g. a harbour)

Standard (with regard to change of species) will not apply to the farming of spat.[40]

43. This regulation applies only to marine farms granted consent prior to the date of the gazettal of this regulation.

### Other activities not captured by the Categories and to be managed by the relevant regional coastal plan

44. The following activities are not covered by this regulation:
    a) A complete change in farmed species to non-fed species or paua where a change in all structures is required; and
    b) A complete change in farmed species from finfish to a non-fed species or paua; and
    c) A complete change in farmed species from a non-fed species to finfish; and
    d) The addition of, or complete change in farmed species to scampi, crayfish or crabs.

## Proposed on-farm biosecurity management plan provisions of the National Environmental Standard: Marine Aquaculture

### New and replacement coastal permits for marine farms:

45. A regional council may grant a coastal permit for a marine farm only where a Biosecurity Management Plan has been lodged and assessed by the regional council as meeting the criteria specified in [the externally referenced document] to avoid or mitigate the associated biosecurity risks.

### Coastal permits expiring after 31 January 2025

46. Review of consent conditions to implement biosecurity management plans:
    a) By 31 January 2025 consent authorities with regional council responsibilities must, under section 128(1) of the RMA, have completed a review of coastal permits associated with aquaculture activities in the coastal marine area of that region for any coastal permit that was granted prior to the NES being Gazetted, and which does not have a consent condition which requires the preparation and implementation of a Biosecurity Management Plan for the purposes of effective on-farm biosecurity.
    b) The purpose of the review is to ensure that those coastal permits require the consent holder to supply a Biosecurity Management Plan which meets the criteria specified in [the externally referenced document] and that the Biosecurity Management Plan is kept up to date and implemented.

It is also proposed that guidance to accompany the above NES clause will suggest model requirements as follows

Where a review undertaken in accordance with clause 46(a) of the NES: Marine Aquaculture identifies an existing costal permit that does not include a condition requiring a Biosecurity Management Plan to be prepared, implemented and kept up to date, the consent authority will need to impose a condition requiring that:

a) A Biosecurity Management Plan which addresses, but is not limited to the matters set out in [the externally referenced document] will need to be prepared and submitted to the consent authority within six months of the completion of the review under s128(1) of the RMA, for assessment against[41] the criteria specified in [the externally referenced document] and other such matters as necessary to ensure that implementing the Biosecurity Management Plan will achieve effective biosecurity; and
b) All certified Biosecurity Management Plans are implemented and kept up to date for the duration of the marine farm activity, and are regularly monitored, with the monitoring results reported annually to the consent authority. The implementation of each Biosecurity Management Plan will be externally audited from time to time, as directed by the consent authority; and
c) Changes and updates to Biosecurity Management Plans can be undertaken at any time for the purpose of improving the effectiveness of biosecurity measures, including adopting new technology, methods and practices, or in response to improved understanding of biosecurity risks and responses. Any changes to a Biosecurity Management Plan will need to be submitted to the consent authority for confirmation that the Biosecurity Management Plan remains consistent with the criteria specified in [the externally referenced document] and will effectively avoid or mitigate biosecurity risks associated with that marine farm. Any changes resulting from the updates should not be implemented prior to certification of the updated Biosecurity Management Plan.

40 This exclusion applies to marine farms consented solely for the purpose of spat, or the addition of spat farming to an existing farm.

41 The regional council processing an application for a coastal permit would need to assess the accompanying Biosecurity Management Plan to determine whether it addresses the criteria set out in the externally referenced document, and implementing the Biosecurity Management Plan will suitably avoid or mitigate the biosecurity risks associated with that marine farm.

# Appendix G: Effects of existing marine farms

| Effects | Assumptions about the relevance of those effects for consideration of applications for replacement consents | Comments |
|---|---|---|
| **Environmental** | | |
| **Landscape** | • Landscape values are predominantly affected by above water structures<br>• That there would be no change in landscape effects as a result of the continuation of the farm, although the assumption is that any changes to the landscape that have occurred over time or cumulative effects will be assessed and if necessary would be dealt with at the plan making stage<br>• In outstanding areas, effects on the values that have resulted in those areas being defined as outstanding need to be managed, in order to be consistent with the requirements of the NZCPS | |
| **Natural character** | • That there would be no change in natural character effects as a result of the continuation of the farm, although the assumption is that any changes to natural character that have occurred over time or cumulative effects will be assessed and if necessary would be dealt with at the plan making stage<br>• In outstanding areas, effects on the values that have resulted in those areas being defined as outstanding need to be managed, in order to be consistent with the requirements of the NZCPS | |
| **Benthic (seabed)**<br>• **Enrichment**<br>• **Shell accumulation**<br>• **Sedimentation**<br>• **Smothering**<br>• **Shading**<br>• **Modification of ecosystems** | • Mussel and oyster farms can have benthic effects as a result of shell drop off and mild enrichment, but these effects are confined to the farm site and immediately adjacent<br>• Salmon farms have benthic effects as a result of feed discharges and fish waste. Areas of greatest effect occur under the net pens, but can spread beyond the farm boundaries<br>• Significant ecological features should be protected from the effects of aquaculture<br>• Significant ecological features could occur under farms and be affected by all three types of farming<br>• Significant ecological features (e.g. reefs) in the near vicinity to fed aquaculture could be affected<br>• Benthic effects from mussel and oyster farming are well understood in relation to existing farms<br>• Benthic effects from fed aquaculture are well understood and can be modelled and monitored, but ongoing management is needed to ensure they do not exceed adverse effects limits as specified by their coastal permits<br>• Presence of sensitive ecological features should be considered | In farms where there is little water flow, organic enrichment of the benthos creates anaerobic and acidic conditions which result in elevated levels of sulphides and ammonium.<br>Benthic effects are normally restricted to swathes of seabed directly below growing lines and less than 30 m wide.<br>Benthic effects are reversible. Residual effects may be detectable up to 3 years after a mussel farm has been removed<br>Aggregations of shell provide a reef-like habitat for a variety of mobile fauna including fish, crustaceans, starfish, sea urchins, and other echinoderms<br>Where mussel farms are located over seabeds of fine sediment or mud, the variety and density of fish and crustaceans is usually greater in mussel farms than in adjacent areas<br>Where mussel farms are located over seabeds of fine sediment or mud, they do increase habitat heterogeneity.<br>Shell deposits on the seabed below farms slow the flow across the seabed and increase sedimentation rates |
| **Water quality**<br>• **Water quality effects**<br>• **Effects on water column community composition**<br>• **Modification of ecosystems** | • Mussel and oyster farms do not typically cause significant water quality issues<br>• Fed aquaculture can, although benthic effects are typically the more limiting factor | Nutrient enhancement may promote algal and phytoplankton growth rates within and around farms.<br>Changes in plankton community composition, caused by the reduction in phytoplanktivores and selection of fast growing planktonic species, may affect primary productivity. |

| Effects | Assumptions about the relevance of those effects for consideration of applications for replacement consents | Comments |
|---|---|---|
| **Biosecurity**<br>• **Pests**<br>• **Disease**<br>• **Escapees** | • Biosecurity issues need ongoing management | Farms structures and the high density of cultured mussels may also act as reservoirs for the incubation of problem organisms.<br>Problem species associated with vessels |
| **Wild fish** | • Mussels and oysters do not have effects on wild fish populations – note that demersal habitat effects are addressed under benthic effects<br>• Waste feed from fed aquaculture can attract wild fish and provide a supplementary diet, but should be self-regulating, as waste feed is wasted profit for the farmer<br>• Use of underwater lighting can attract wild fish to a marine farm | |
| **Vessel movements** | • That there would be no change in the number of vessels and husbandry required to service the farm.<br>• That vessels would take the same route to access and service the farm | |
| **Hydrodynamics disruption** | • Existing farms have already caused these effects and they have become part of the existing environment | Mussel farm lines and floats reduce wave action and current speeds within farms, but this effect is not well understood (Cole 2001).<br>Current speeds within farms may be 30% of those outside farms (Cole 2001). |
| **Marine mammals and seabirds**<br>• **Entanglement**<br>• **Habitat exclusion** | • Risk of entanglement appears relatively low and can be managed through management plans<br>• Indications in recent consent replacements have been that habitat exclusion is not an issue for existing farms, but is for new space | |
| **Increased bird life** | • Both a positive and negative effect, but not considered to be significant | |
| **Wind disruption with structures** | • Only likely for fed aquaculture as a result of above water cages and barges<br>• Effect not significant and does not need to be controlled | |
| **Noise**<br>• **Above water**<br>• **Underwater** | • Above water noise could be controlled by noise standards<br>• Underwater noise has generally been assessed as not significant | |
| **Additives**<br>• **Antifouling**<br>• **Feed additives**<br>• **'Therapeutants' (e.g. treatment of disease)** | • An ongoing activity that needs to be managed | |
| **Disturbance of the seabed** | • Disturbance of the seabed only occurs as the farm is constructed. Farms are existing, so no further disturbance of the seabed is necessary. | |
| **Phytoplankton depletion** | • Effect is wider than can be considered on a consent by consent basis<br>• Needs to be dealt with at the planning stage, through specific provisions for aquaculture and/or through policies on baywide management | The phytoplankton depletion halos are usually limited to within 80 m of farm (Grange & Cole 1997), but may extend further in some instances |
| **Cumulative effects** | • Effect is wider than can be considered on a consent by consent basis<br>• Needs to be dealt with at the planning stage, through specific provisions for aquaculture and/or through policies on baywide management | |

| Effects | Assumptions about the relevance of those effects for consideration of applications for replacement consents | Comments |
|---|---|---|
| **Cultural** | | |
| **Sensitive Māori sites**<br>**Historic heritage sites**<br>**Mahinga kai and traditional food baskets** | *Needs to be identified further through public consultation process* | |
| **Social** | | |
| **Recreation** | • Recreational fishing is often enhanced. These opportunities will continue<br>• Maybe adverse effects on public access, although the assumption is that this was assessed when the farm was first considered and if necessary would be dealt with at the plan making stage | |
| **Access through the marine farm** | • With the exception of realignment, existing farms are required to remain in the same location and use the same structures. Existing public access will therefore not be further affected, although the assumption is that this was assessed when the farm was first considered and if necessary would be dealt with at the plan making stage | |
| **Public exclusion** | • Maybe adverse effects as a result of public exclusion, although the assumption is that this was assessed when the farm was first considered and if necessary would be dealt with at the plan making stage | |
| **Increased boat ramps and facilities** | • For existing marine farms, facilities will not increase | |
| **Local market supply** | • Positive effect | |
| **Marketing for the community through branding** | • Positive effect | |
| **Navigation and safety** | • Existing sites pose a navigational risk, although their long-term establishment in those locations should lower the risk. Consent conditions will be required to ensure they continue to be marked and lit as required by the Maritime Transport Act | |
| **Amenity**<br>• **Litter**<br>• **Visual amenity (views, effects of lighting)**<br>• **Wildlife nuisance** | • That the structures and activity associated with the farm does not change | Litter under marine farms includes rope, growing lines, the ties for securing them to backbones, and whole mussel floats |
| **Economic** | | |
| **Jobs** | • Industries have been established to support aquaculture<br>• The company employs people to service the farm<br>• Number of people employed will not change, unless the farm increases production through innovation<br>• Positive effect | |

| Effects | Assumptions about the relevance of those effects for consideration of applications for replacement consents | Comments |
|---|---|---|
| **Income into the local community** | • That the farm is serviced locally<br>• That there are supporting industries and services that provide support to the farm<br>• That a range of other businesses are associated with the farm<br>• That the supporting businesses rely on the continuation of the farm | |
| **Establishment of subsequent and supporting industries** | • That a range of other businesses are associated with the farm<br>• That the supporting businesses rely on the continuation of the farm<br>• Positive effect | |
| **Investment in the farm** | • That there is significant investment in the farm structures, growth and development | |
| **Exclusion of trawling, dredging and commercial fishing** | • Effects have already been assessed, either through the processing of the marine farm lease/licence by MFish, or by the UAE done by MFish/MPI as part of a resource consent process. | |

# Appendix H: Existing marine farms in outstanding areas

| Marine farms within outstanding areas identified in **operative** regional coastal plans or regional policy statements | Marine farms within outstanding areas identified in **proposed** regional coastal plans or regional policy statements | Marine farms within outstanding areas identified in **draft** regional coastal plans or regional policy statements (or relevant studies) |
|---|---|---|
| **Northland** | | |
| Regional Policy Statement for Northland was made operative in 2016.<br>It identifies Outstanding Natural Features, Outstanding Natural Landscapes, and Areas of Outstanding Natural Character.<br>There are no marine farms located within outstanding areas in Northland. | Not applicable | Not applicable |
| **Auckland** | | |
| Auckland Unitary Plan was made operative in part in 2016.<br>It identifies Outstanding Natural Features, Outstanding Natural Landscapes, and Areas of Outstanding Natural Character.<br>There are 54 marine farms located within outstanding areas in Auckland (identified by consent ID):<br>31657 31698<br>31668 31698<br>31669 31699<br>31670 31700<br>31671 31701<br>31672 31708<br>31673 31709<br>31675 31710<br>31677 31711<br>31678 32898<br>31679 33589<br>31680 33590<br>31681 33591<br>31682 33592<br>31683 33624<br>31684 33631<br>31685 33634<br>31686 33765<br>31687 33766<br>31688 34983<br>31689 35149<br>31690 37484<br>31691 37969<br>31692 39696<br>31693 44082<br>31694 44093<br>31695 44247<br>31697 | Not applicable | Not applicable |

| Marine farms within outstanding areas identified in **operative** regional coastal plans or regional policy statements | Marine farms within outstanding areas identified in **proposed** regional coastal plans or regional policy statements | Marine farms within outstanding areas identified in **draft** regional coastal plans or regional policy statements (or relevant studies) |
|---|---|---|
| **Waikato** | | |
| Waikato Regional Policy Statement was made operative in 2016.<br>It identifies Outstanding Natural Features and Landscapes.<br>There are no marine farms located within outstanding areas in Waikato. | Not applicable | A Natural Character Study of the Waikato Coastal Environment was completed in 2016.<br>It identifies Areas of Outstanding Natural Character.<br>There are 9 marine farms located within outstanding areas in Waikato:<br>MF 422<br>LI 278 (consent number 112652)<br>MF 939<br>MFL 466 (consent number 112702)<br>MFL 341 (consent number 112666)<br>MPE 374 (consent numbers 113500.01.02 and 940739.01.02)<br>LI396 (consent number 112699, along with extension consent number 125444)<br>LI373 (consent number 112682, along with extension consent number 124771)<br>LI361 (consent number 112676, along with extension consent number 124769) |
| **Bay of Plenty** | | |
| Regional Policy Statement for the Bay of Plenty was made operative in 2014. It identifies Areas of Outstanding Natural Character.<br>The Regional Coastal Environment Plan was made operative in 2003. It identifies Outstanding Natural Features and Landscapes.<br>There are 4 marine farms located within outstanding areas in Bay of Plenty:<br>MF 243 (consent number 63058.0.01-CC)<br>LI 25 (consent number 63054.0.01-CC)<br>LI 43 (consent number 63057.0.01-CC)<br>Consent number 68205.0.01-CC | Decisions on the Proposed Regional Coastal Environment Plan were released in 2015. It is currently under appeal.<br>It identifies Outstanding Natural Features and Landscapes.<br>There are 4 marine farms located within outstanding areas in Bay of Plenty:<br>MF 243 (consent number 63058.0.01-CC)<br>LI 25 (consent number 63054.0.01-CC)<br>LI 25 (consent number 63054.0.01-CC)<br>LI 43 (consent number 63057.0.01-CC)<br>Consent number 68205.0.01-CC | Not applicable |
| **Hawke's Bay** | | |
| Not applicable | Not applicable | Not applicable |
| **Wellington** | | |
| Not applicable | Not applicable | Not applicable |

| Marine farms within outstanding areas identified in **operative** regional coastal plans or regional policy statements | Marine farms within outstanding areas identified in **proposed** regional coastal plans or regional policy statements | Marine farms within outstanding areas identified in **draft** regional coastal plans or regional policy statements (or relevant studies) |
|---|---|---|
| **Tasman** | | |
| Not applicable | Not applicable | Tasman District Council has consulted on a draft Golden Bay Outstanding Natural Features and Landscapes plan change.<br>It identifies Outstanding Natural Features and Landscapes.<br>There are 7 marine farms located within outstanding areas in Tasman (note: not including farms excluded by the NES provisions):<br>RM060291 (MFL115)<br>RM060292 (MFL116)<br>RM160060 (MFL117)<br>RM071050<br>RM120877 (MFL118)<br>RM160059 (MFL117)<br>RM071049 |
| **Marlborough** | | |
| Marlborough Sounds Resource Management Plan was made operative in part in 2003 (and fully operative in 2011).<br>It identifies Areas of Outstanding Landscape Value.<br>There are 122 marine farms located within outstanding areas in Marlborough (identified by Marine Farm ID):<br>8002 8141<br>8003 8142<br>8004 8143<br>8005 8144<br>8006 8165<br>8007 8166<br>8008 8167<br>8009 8177<br>8013 8178<br>8076 8181<br>8077 8182<br>8078 8183<br>8079 8184<br>8080 8185<br>8081 8187<br>8082 8190<br>8104 8191<br>8105 8201<br>8106 8202<br>8108 8203<br>8109 8228<br>8133 8229<br>8134 8230<br>8136 8231<br>8140 8232 | The Proposed Marlborough Environment Plan was notified in 2016.<br>It identifies Outstanding Natural Features and Landscapes and Areas of Outstanding Coastal Natural Character.<br>There are 39 marine farms located within outstanding areas in Marlborough (identified by Marine Farm ID):<br>8002 8227<br>8003 8274<br>8004 8299<br>8005 8321<br>8006 8325<br>8007 8326<br>8008 8327<br>8013 8500<br>8058 8508<br>8059 8543<br>8060 8591<br>8073 8592<br>8082 8630<br>8083 8631<br>8084<br>8104<br>8105<br>8106<br>8164<br>8165<br>8166<br>8167<br>8196<br>8203<br>8225 | Not applicable |

| Marine farms within outstanding areas identified in **operative** regional coastal plans or regional policy statements | | Marine farms within outstanding areas identified in **proposed** regional coastal plans or regional policy statements | Marine farms within outstanding areas identified in **draft** regional coastal plans or regional policy statements (or relevant studies) |
|---|---|---|---|
| 8233 | 8479 | | |
| 8234 | 8480 | | |
| 8235 | 8481 | | |
| 8236 | 8482 | | |
| 8262 | 8497 | | |
| 8263 | 8500 | | |
| 8264 | 8505 | | |
| 8279 | 8508 | | |
| 8280 | 8511 | | |
| 8282 | 8512 | | |
| 8283 | 8514 | | |
| 8285 | 8515 | | |
| 8286 | 8516 | | |
| 8287 | 8517 | | |
| 8288 | 8518 | | |
| 8291 | 8519 | | |
| 8292 | 8520 | | |
| 8293 | 8530 | | |
| 8298 | 8531 | | |
| 8299 | 8539 | | |
| 8300 | 8540 | | |
| 8321 | 8541 | | |
| 8322 | 8542 | | |
| 8323 | 8543 | | |
| 8324 | 8544 | | |
| 8325 | 8545 | | |
| 8326 | 8547 | | |
| 8327 | 8548 | | |
| 8342 | 8550 | | |
| 8351 | 8590 | | |
| 8352 | 8592 | | |
| 8353 | 8595 | | |
| 8396 | 8621 | | |
| 8397 | 8631 | | |
| 8456 | 8636 | | |
| 8478 | 8637 | | |
| **West Coast** | | | |
| Not applicable | | The Proposed West Coast Regional Coastal Plan was notified in 2016.<br>It identifies Outstanding Natural Features and Landscapes and Areas of Outstanding Coastal Natural Character.<br>There is 1 marine farm located within outstanding areas in the West Coast (identified by consent number):<br>RC00398/1-RC00398/3 | Not applicable |

| Marine farms within outstanding areas identified in **operative** regional coastal plans or regional policy statements | Marine farms within outstanding areas identified in **proposed** regional coastal plans or regional policy statements | Marine farms within outstanding areas identified in **draft** regional coastal plans or regional policy statements (or relevant studies) |
|---|---|---|
| **Canterbury** | | |
| Canterbury Regional Policy Statement was made operative in 2013.<br>It identifies Outstanding Natural Features and Landscapes.<br>There are 12 marine farms located within outstanding areas in Canterbury:<br>CRC063319.1 & CRC011429<br>CRC001854.1 & CRC001853.1 & CRC063359.1<br>CRC081362.1<br>CRC136970<br>CRC081357.1 & CRC000947<br>CRC154277<br>CRC155086<br>CRC930117B.2 & CRC062878.2<br>CRC930117A.3, CRC062873.2 & CRC062903<br>CRC122028<br>CRC141982<br>CRC980537 | Not applicable | Not applicable |
| **Southland** | | |
| Not applicable | Not applicable | An Invercargill Coastal Landscape Study was completed in 2013.<br>It identifies Outstanding Natural Features and Landscapes.<br>There are 7 marine farms located within outstanding areas in Southland:<br>AUTH-203100-V1<br>AUTH-300182-V1<br>AUTH-301983<br>AUTH-203101-R1<br>AUTH-301644<br>AUTH-301645<br>AUTH-301646 |

# Appendix I: Outstanding area terms

Section 6(b) of the RMA requires that the protection of outstanding natural features and landscapes is recognised and provided for. Policy 15(a) of the NZCPS2010 requires that adverse effects of activities on outstanding natural features and outstanding natural landscapes in the coastal environment are to be avoided. Policy 13(1) (a) of the NZCPS2010 requires that adverse effects of activities on areas of the coastal environment with outstanding natural character are to be avoided.

Regional coastal plans use a variety of terms to describe these areas:

- Outstanding natural landscapes.
- Outstanding natural features.
- Areas of outstanding landscape value.
- Outstanding natural features and landscapes.
- Coastal natural character areas (outstanding).
- Natural character areas (outstanding).
- Areas of outstanding natural character.

For the avoidance of doubt, where the proposed NES: Marine Aquaculture provisions for replacement consents for existing marine farms or the change of species provisions make reference to outstanding natural features, outstanding natural landscapes and/or areas of outstanding natural character that have been identified in proposed or operative regional policy statements or regional coastal plans, the proposal is that the NES will apply to any area as named above.

# Appendix J:
# Categories of species and cultivation methods

From the Cawthron report *Grouping Aquaculture Species by Ecological Effects*:

**Table G1: Categories of species and cultivation methods**

| Category | Current and likely future farmed species |
|---|---|
| Floating subtidal invertebrates | • Mussels<br>• Oysters<br>• Scallops<br>• Pacific oysters<br>• Flat oysters<br>• Paua<br>• Sponges |
| Elevated intertidal shellfish | • Pacific oysters |
| Floating subtidal macroalgae | • All species of macroalgae |
| On ground geoduck | |
| Elevated subtidal shellfish | • Toheroa<br>• Geoduck |
| On-ground sea cucumbers | |
| Caged finfish | • Salmonid fish<br>• Other finfish |

# Appendix K: Biosecurity Management Plan template

| Guidelines | Example management policy |
|---|---|
| **Stock health management** | |
| Stock health should be maintained to optimum levels. | A veterinary health management plan is developed and implemented |
| **Stock movements and containment** | |
| Only stock of known health status should be introduced onto the farm. Health status should be equal or better than stock already present. | Stock will only be accepted from a facility/farm/site with biosecurity and health management plans, where pest and disease surveillance is carried out (or following batch certification) and where no unexplained mortalities have occurred in the last 6 months. |
| If stock of unknown health status is to be introduced (e.g. wild broodstock, seed stock), these stock should be isolated in separate production units or dedicated quarantine facilities while their health status is evaluated (e.g. diagnostic testing). | Uncertified or unknown status stock will be held in a specialised quarantine facility, with full separation of water, personnel, equipment, feed, etc. until the status of the stock can be ascertained by e.g. inspection and diagnostic testing. |
| Where it is considered by your biosecurity advisers that an unacceptable risk still exists, broodstock should be indefinitely quarantined with the aim of producing progeny that would replace that broodstock (e.g. high-health or specific pathogen free progeny). | Where stock status cannot be determined to be acceptable, stock will be held permanently in quarantine, with progeny actively tested out of the quarantine. |
| Within-farm stock movements to areas of equal or higher health status should only occur following a documented consideration of pest and disease risks | Stock will not be moved within farms from areas of higher risk to areas of lower risk, except where absolutely essential and only after a written risk assessment and mitigation process has been carried out and management is satisfied the risks can be successfully mitigated. |
| Precautions should be undertaken to prevent the within farm spread of pests, or disease until such situations are resolved. | Outbreaks of pest and/or disease on the farm will result in an immediate movement standstill onto, within or off the farm. |
| Prevent stock escapes. | Holding units on the farm will be appropriately designed and maintained to minimise the potential for escapes. |
| **Water** | |
| The water supply should be assessed for biosecurity risk and appropriate action(s) taken. | Intake water will be screened to prevent entry of feral animals and will be filtered and sterilised for supply to sensitive life stages. |
| Locate water intake and outflow pipes for land-based farms to avoid cross-contamination. | Effluent pipes will be located so that discharge water does not directly enter intake pipes. |
| Regularly monitor and maintain infrastructure that treats incoming water. | A maintenance programme will be established and followed for water treatment equipment. |
| Water flow within the farm should minimise the potential for spread of pests and diseases to different production units. | |
| Open system farms should consider epidemiological separation of populations (e.g. fallowing, year class separation). | |
| **Equipment, vehicles and vessels** | |
| Assess all equipment, vehicles and vessels entering the farm for biosecurity risk and appropriate action(s) taken. | |
| Standard operating procedures and dedicated infrastructure should be in place for cleaning and disinfection of equipment, vehicles and vessels. | |
| The farms should have dedicated delivery and loading areas. | |
| **People management** | |
| Assess all staff and visitor access to farms for biosecurity risk and appropriate action(s) taken. | |
| Manage farm access (e.g. access controls and signage). | |
| All visitors should be briefed regarding on-farm biosecurity | |

| Guidelines | Example management policy |
|---|---|
| Preventive measures for pest and disease entry and spread should apply to all farm staff and visitors (e.g. dedicated changing areas, ante rooms, separate production areas, footbaths and hand washing facilities). | |
| Restrict staff and visitor access to sensitive areas (e.g. broodstock, hatcheries, quarantine areas). | |
| **Property management** | |
| The farm should have a clearly established biosecurity zone (e.g. secure perimeter fencing or otherwise well-defined boundary). | |
| Close and lock farm entrances to prevent unauthorised entry. Lock entrances during all nonvisitor hours. | |
| **Staff training and education** | |
| The farm should have a nominated staff member responsible for oversight of on-site biosecurity. | |
| All staff should understand the farm biosecurity plan and their responsibilities for its implementation. | |
| Training should be provided to staff on the aspects of the biosecurity plan (including identified pest and disease risks) relevant to their position description. | |
| **Feed and feeding** | |
| Assess all feeds entering the farm for biosecurity risk and appropriate action(s) taken. | |
| Wildlife, scavengers and vermin | |
| Control or exclude predators, wildlife, vermin and other organisms (e.g. aquatic life) from land-based systems. | |
| Control, exclude or prevent aggregations of predators, wildlife, vermin and other organisms (e.g. aquatic life) from open water systems. | |
| **Record keeping** | |
| Maintain records to trace stock, and their associated health status, onto, within or from the farm. | |
| Maintain records for all aspects of the biosecurity plan (e.g. staff training, inspection and maintenance of farm infrastructure and equipment, visitor logs). | |
| **Waste management** | |
| All waste should be assessed for biosecurity risk to the farm and environment and appropriate action(s) taken | |
| Containment, handling and disposal of waste should be conducted in a biosecure manner | |
| **Auditing** | |
| Conduct audits of on-farm biosecurity plans and their implementation at regular prescribed intervals. | |
| **Contingency plans** | |
| The farm biosecurity plan should include contingencies for direct (e.g. outbreak) and indirect incidences (e.g. storms, earthquakes) that may influence on-farm biosecurity. | |
| All farm staff should be aware of the contingency plans and understand what to do in the event of an incident. | |

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