

Impact Summary: Options to include or remove biosecurity management requirements from the NESMA

Section 1: General information

Purpose

Fisheries New Zealand, a business unit of the Ministry for Primary Industries, and the Ministry for the Environment are solely responsible for the analysis and advice set out in this Impact Summary, except as otherwise explicitly indicated.

This analysis and advice has been produced for the purpose of informing final decisions to proceed with a policy change to be taken by Cabinet. The policy decision sought from Cabinet is whether to remove the biosecurity management requirements from the National Environmental Standard for Marine Aquaculture (NESMA) at this time.

The advice in this Impact Summary has been informed by targeted consultation with iwi, the aquaculture industry, and regional councils.

Key Limitations or Constraints on Analysis

In June 2019, a policy decision was made by Cabinet to proceed with the NESMA.¹ A Regulatory Impact Assessment was prepared to inform that decision.²

The NESMA, as considered by Cabinet in June 2019, contained draft regulations relating to:

1. The provision of a more certain and efficient replacement marine farm resource consent, realignment and change of species application process, while ensuring farms meet best environmental practice; and
2. The implementation of consistent biosecurity management requirements on all marine farms.

No change is proposed to the NESMA in relation to point 1 above.

The scope of this impact summary is limited to the consideration of whether to remove the draft regulations relating to consistent biosecurity management requirements from the NESMA at this time.

In this respect the options considered are whether to remove the biosecurity management requirements from the NESMA at this time or whether to continue to include the biosecurity management requirements in the NESMA, as was agreed by Cabinet in June 2019.

¹ ENV-19-MIN-0022

² <https://www.mpi.govt.nz/dmsdocument/36303-options-to-improve-management-of-existing-marine-aquaculture-and-reduce-marine-aquaculture-biosecurity-risks-regulatory-impact-statement>

Officials will provide further advice to Ministers in December 2020 on the best approach to ensure a comprehensive biosecurity regime across all aquaculture. Any future approach would be subject to separate Cabinet decisions and impact analysis at that time.

The following analysis in relation to whether to remove or include the biosecurity management requirements from the NESMA at this time is based on information with the following limitations and constraints:

- the information is derived from interviews, submissions and New Zealand specific literature. There is potential bias in the information provided and uncertainty in the magnitude of unquantified costs and benefits.
- for the purposes of assessing the costs and benefits of the proposal to remove biosecurity provisions from the NESMA at this time the counterfactual is continuing with the June 2019 Cabinet decision, i.e. to include biosecurity provisions in the NESMA and subsequently implement them.
- the recommendation to remove the biosecurity provisions is driven by an expectation that the benefit of a comprehensive regime across all aquaculture (i.e. improved biosecurity risk management) will be higher than that which would arise from regulation of biosecurity through the NESMA at this time.

Responsible Managers (signature and date):

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Date: 25 June 2020

Date: 25 June 2020

To be completed by quality assurers:

Quality Assurance Reviewing Agency:

Ministry for Primary Industries

Quality Assurance Assessment:

The MPI Regulatory Impact Analysis Panel has reviewed the Regulatory Impact Assessment *Impact Summary: Options to include or remove biosecurity management requirements from the NESMA* produced by MPI and dated June 2020. The review team considers that it **meets** the Quality Assurance criteria.

Reviewer Comments and Recommendations:

The review team notes that regulation aimed at achieving comprehensive management of aquaculture biosecurity risks is still under development, and will be the subject of further advice and analysis to Ministers in December 2020.

Section 2: Problem definition and objectives

2.1 What is the policy problem or opportunity?

Biosecurity is a set of preventive measures designed to reduce the risk of transmission of pests and infectious diseases. Biosecurity risk is defined as the likelihood of the occurrence of an adverse event and the magnitude of consequences to economic, environment, human health and/or socio-cultural values.

Biosecurity risk is a key risk to both the New Zealand coastal environment and the aquaculture industry. For the industry, key risks are losses in production and potential impacts to trade caused by the introduction or exacerbation of pests and diseases. This is particularly important given the goal under the Government Aquaculture Strategy for aquaculture to become a \$3bn industry by 2035.

For the wider environment, risks include:

- disease exacerbation and large stock escapes, which have been recorded from the salmon industry
- the spread of disease to natural populations, e.g *Bonamia ostreae* has the potential to have major ramifications to all of New Zealand's flat oyster populations
- the introduction of anthropogenic structures to the marine environment, such as those found on marine frames, which can serve as hubs for the settlement and transfer of non-indigenous biofouling species.

Effective biosecurity practices are therefore critical to safeguarding New Zealand's coastal environment (including indigenous biodiversity), as well as the aquaculture industry's production, global reputation and market access.

Currently, around 80% of existing marine farms have some degree of biosecurity practice in place. However, these practices and methods are often inconsistent, and effectiveness can vary substantially between farms. For example, there is variable:

- treatment or testing of stock moved around the country
- treatment of water intakes
- use of mechanisms such as footbaths.

The inconsistency in practice, and in some cases the lack of any biosecurity practices, arises for a variety of reasons including awareness, level of concern, underestimation of the potential consequence of inaction, previous experience with ineffective practices and the cost (perceived and real) of implementing measures³.

The industry has taken a voluntary and proactive approach to managing biosecurity risks through its A+ Sustainable Aquaculture Programme. The A+ Sustainable Aquaculture Programme is a management framework which covers a range aquaculture practices, including biosecurity. It involves a process of certification, reporting and review aimed at continuous improvement in aquaculture management.

³ A full assessment of aquaculture biosecurity practice is available at <https://www.biosecurity.govt.nz/dmsdocument/11743/direct>

However, there is currently no national requirement for consistent biosecurity management plans for marine farms. For on-farm biosecurity measures to be effective, measures need to be consistent across the country, and be comprehensive in terms of coverage of all farms. There is also no national requirement for consistent biosecurity management plans for land-based farms.

In addition, aquaculture activities are not the only pathway for marine biosecurity risks that impact marine farms and the wider marine environment. For example, recreational boating presents a biosecurity risk as boats are moved between locations. Regulation of all pathways is not within the scope of the NESMA.

In summary the policy problems are:

1. There are not consistent and effective biosecurity practices across the aquaculture system;
2. The biosecurity risks to marine farming, and the wider marine environment, come from multiple pathways; and
3. Achieving consistent and effective regulation and management practices across all marine biosecurity risk pathways or across the entire aquaculture system is not within the scope of the NESMA.

2.2 Who is affected and how?

The key parties affected will be the aquaculture industry and regional councils.

If the biosecurity provisions are retained in the NESMA, the aquaculture industry will face new costs related to developing and implementing biosecurity management plans. The industry will also receive benefit associated with the improvement to biosecurity risk management (although still not full and comprehensive).

With respect to regional councils, there are 8 major aquaculture regions in New Zealand. These regions are Northland, Auckland, Waikato, Bay of Plenty Tasman, Marlborough, Southland. Each of these regional councils would face significant additional compliance obligations under the biosecurity provisions in the NESMA.

These parties have identified key issues with respect to the biosecurity provisions of the NESMA, including the scope of activities that can be regulated through the NESMA, the need for consistency in approach to managing biosecurity for land-based aquaculture activities, and the capacity of regional councils to implement the proposed biosecurity requirements of the NESMA.

2.3 What are the objectives sought in relation to the identified problem?

The policy objective is to:

Develop and implement a nationally consistent and effective framework for biosecurity management across all types of aquaculture (marine and land-based).

This broad aquaculture biosecurity objective reflects the Government Aquaculture Strategy which has a key goal to grow the industry to \$3bn by 2035. To implement the Strategy, officials are assessing the future frameworks needed to enable this growth. This work clearly shows that marine and land-based aquaculture activities, and associated biosecurity risks and pathways, are increasingly interconnected. Without consistent requirements for biosecurity across marine and land-based aquaculture there is a heightened risk of pest and disease spread.

The need for greater focus on biosecurity across the aquaculture system was also recognised in the recent Koi Tū report on '*The future of food and the primary sector*'⁴.

⁴ Bardsley, Coates, Goldson, Gluckman, and Kaiser (June 2020) The future of food & the primary sector: The journey to sustainability [Koi Tū: The Centre for Informed Futures]

Section 3: Options identification

3.1 What options have been considered?

This advice is limited to the consideration of two options:

1. To include biosecurity management regulations in the NESMA (the status quo, based on the June 2019 Cabinet decision)
2. To remove biosecurity management regulations in the NESMA at this time (i.e. gazette the NESMA without the biosecurity requirements).

Analysis of Option 1

The benefits of including biosecurity management regulations in the NESMA are that there would be some improvement in the consistency and effectiveness of on-farm biosecurity risk management. The timing of these benefits would be linked to the replacement of existing resource consent applications or the approval of resource consent applications for new marine farms. Given that between 80-90% of all existing marine farm resource consents will not come up for replacement until 2024 and 2025, a large proportion of the benefit would not occur until 2024 at the earliest.

It is also of note that the effect of the regulations would be limited to biosecurity risks associated with on-farm practices and only those practices that fall within the power of regional council's to regulate through resource consents under the Resource Management Act. The regulations would not achieve complete management of the biosecurity risks that arise from, or apply to, marine farming. For example, an effective biosecurity system needs to manage aspects of stock health which are not possible within the scope of an RMA tool.

The disadvantages of including biosecurity management regulations in the NESMA relate to:

- the fact that the option would only be partially effective in achieving comprehensive biosecurity risk management (as described above)
- the financial cost (quantified in RIA for June 2019 Cabinet decision) to the industry and regional councils arising from the development, auditing, implementation and compliance monitoring of biosecurity management plans.

Analysis of Option 2

The benefits of excluding biosecurity management regulations from the NESMA at this time mainly relate to the avoided financial costs for the industry and regional councils that would otherwise arise from the development, auditing, implementation and compliance monitoring of biosecurity management plans.

Any future approach would be subject to separate Cabinet decisions and impact analysis at that time.

This advice will ensure the standards developed to date are appropriate, and that they are implemented through the best tool available, be that through an update to the NESMA, or through other tools under the Biosecurity Act, the Fisheries Act or other mechanisms.

Delivering improvements in a timely manner is also critical. The proposed provisions of the NES-MA would have seen farm level biosecurity plans in place by 2025. The advice to be provided in December 2020 will also look to ensure that improved biosecurity management is delivered in at least the same timeframes as would be the case if the biosecurity provisions had progressed in the proposed NESMA.

The main disadvantage of excluding the biosecurity management regulations from the NESMA is that the existing inconsistent approach to biosecurity management on marine farms remains in place until an alternative is implemented. That is, some regional councils will continue to set conditions around biosecurity, including requiring biosecurity plans (e.g. Waikato), and others will not (e.g. Marlborough). This risk can be mitigated by ensuring that the alternative mechanisms are delivered in the same timeframes as would be the case if the biosecurity provisions had progressed in the proposed NESMA.

3.2 Which of these options is the proposed approach?

Option 2, i.e. removing the biosecurity management regulations from the NESMA at this time, is considered to be the best immediate option. This is because:

- option 1 does not present a complete mechanism for managing biosecurity risks to and from marine farms; and
- officials are committed to providing further advice to Ministers in December 2020 on the best approach to ensure a comprehensive biosecurity regime can be developed across all aquaculture.

It is an interim step before a more comprehensive approach to the regulation of aquaculture biosecurity can be developed. Importantly it avoids the introduction of regulation under the NESMA that would:

1. only be partially effective in improving current practice
2. create significant financial cost for the industry and regional councils
3. potentially overlap / duplicate other regulatory mechanisms that may be recommended in December 2020.

It is acknowledged that option 2 will only partially resolve the problems outlined in section 2.1 above. That is, while removing the biosecurity management requirements from the NESMA at this time recognises that it is not within the scope of the NESMA to achieve consistent and effective management practices, option 2 will not, on its own, achieve consistent and effective regulation and management practices across all marine biosecurity risk pathways. However, as described officials are providing further advice to Ministers on the best approach to ensure a comprehensive biosecurity regime can be developed across all aquaculture.

Section 4: Impact Analysis (Proposed approach)

4.1 Summary table of costs and benefits

The costs and benefits of the proposal, i.e. to remove biosecurity provisions from the NESMA at this time, are predicted to differ depending on whether biosecurity risks would have been managed on an area-wide basis or farm-by-farm basis.

Affected parties	Comment:	Impact-area-based approach	Impact – farm-based approach
Additional costs of proposed approach, compared to taking no action			
Marine farmers (Regulated parties)	Continued exposure to current level of biosecurity risk	\$2.0M	\$26.9M
Regional councils and unitary authorities (Regulators)	Continuation of the nationally inconsistent approach to on-farm biosecurity management. Short term until alternative regulatory mechanism developed	Non-monetised, medium	
Wider government	Nil		
Other parties	Nil		
Total Monetised Cost	Biosecurity risk to marine farmers	\$2.0 M	\$26.9M
Non-monetised costs	Continuation of national inconsistency	Medium	

Expected benefits of proposed approach, compared to taking no action		Impact area-based	Impact farm-based
Marine farmers (Regulated parties)	Costs avoided due to not having to prepare biosecurity management plans	\$123K	\$1.5M
	Avoided costs associated with biosecurity monitoring	\$1.2M	\$11.9M
	Avoided costs associated with biosecurity auditing	\$697K	\$6.6M
	Costs avoided due to not having to change behaviours regarding biosecurity management	Non-monetised, medium	
Regional councils and unitary authorities (Regulators)	Training costs (one-off, spread over 2 years)	\$35K	
	Systems upgrades to reflect increased reporting and monitoring (one-off, spread over 2 years)	\$86K	
	Reviewing consents to add biosecurity plans (one-off in 2024)	\$0	\$430k
	Unrecovered annual monitoring costs (staff and consultants) for biosecurity plans (spread over 20 years)	\$0	\$6.5M

Wider government	Nil		
Other parties	Nil		
Total Monetised Benefit	Costs avoided for both marine farmers and regional councils associated with the development, auditing, implementation and compliance monitoring of biosecurity management plans	\$2.1 M	\$27.0M
Non-monetised benefits	Non-monetised costs avoided by marine farmers not needing to change behaviours	Non-monetised, medium	

4.2 What other impacts is this approach likely to have?

Removing the biosecurity regulations from the NESMA at this time is only an interim step. In December 2020, officials will provide Ministers with advice on the best approach to achieve comprehensive management of aquaculture biosecurity risks, including those risks that apply to and arise from marine and land-based farming. The approach which will be the focus of the December 2020 advice will likely have costs and benefits additional to those that have been identified above. Analysis of those costs and benefits will be completed in due course.

Section 5: Stakeholder views

5.1 What do stakeholders think about the problem and the proposed solution?

Engagement with iwi and stakeholders has occurred concurrently through the development of the NESMA.

From 2015-2017 the Ministry for Primary Industries worked with an Aquaculture Reference Group including the aquaculture industry, regional councils and non-governmental organisations. This exercise confirmed three subject areas of the NESMA – replacement consents for existing marine farms, change of species and biosecurity.

In late 2016 a draft discussion document on the subject matter of the proposed NESMA (including indicative provisions) was developed and further consultation with the Aquaculture Reference Group, regional councils more generally, and iwi around the country occurred. Consultation with the public and iwi authorities occurred from 4 June 2017 to 8 August 2017. 18 public meetings and hui were held, and a total of 107 submissions were received. Seventy five percent of the submissions commented on the biosecurity provisions. A majority of the submissions supported inclusion of biosecurity provisions, however most submissions in support were caveated in relation to the scope of the provisions and their cost.

More recently there has been ongoing consultation with the Aquaculture Reference Group and key stakeholders as part of the refinement of the NESMA and development of a technical document that would set out the criteria that biosecurity plans under the NES would need to meet. Through this process industry and regional council concern about the inclusion on biosecurity regulations in the NESMA has increased. Key issues identified include the scope of activities that can be regulated through the NESMA, the need for consistency in approach to managing biosecurity for land-based aquaculture activities, and the capacity of regional councils to implement the proposed biosecurity requirements of the NESMA.

The views of these stakeholders have been instrumental in the reconsideration of how to address the problems identified in section 2.1.

Section 6: Implementation and operation

6.1 How will the new arrangements be given effect?

The immediate step will be to remove the biosecurity regulations from the NESMA at this time. This would require an additional policy decision from Cabinet, which is recommended to occur at the same time the final NESMA regulations are agreed to. The NESMA would then proceed to be gazetted.

The decision to remove the biosecurity regulations would be communicated to key stakeholders once a Cabinet decision has been made.

Regional councils will continue to be able to use the resource consent processes associated with marine farms to manage on-farm biosecurity risks on a region- by-region and application-by-application basis. In this regard the NESMA will contain a matter of discretion on biosecurity risks so councils would still be able to consider and manage biosecurity on an application by application basis.

Officials will provide further advice to Ministers in December 2020 on the best approach to ensure a comprehensive biosecurity regime across all aquaculture.

Section 7: Monitoring, evaluation and review

7.1 How will the impact of the new arrangements be monitored?

It is anticipated that the impact of the proposal to remove the biosecurity regulations from the NESMA at this time will be short lived. This is because officials are providing further advice to Ministers on the best approach to ensure a comprehensive biosecurity regime can be developed across all aquaculture (see section 3.1 above).

Notwithstanding this, ongoing communication will be maintained with both industry and regional councils to ensure that the costs of removing the biosecurity regulations from the NESMA at this time, i.e. the costs associated with the continued exposure to current level of biosecurity risk (see 4.1 above), do not exceed those anticipated in this analysis.

7.2 When and how will the new arrangements be reviewed?

Officials will provide further advice to Ministers in December 2020 on the best approach to ensure a comprehensive biosecurity regime across all aquaculture. It is expected that this alternative mechanism will be in effect before 2025.