

Kenepuru & Central Sounds



Kenepuru & Central Sounds Residents Association Inc.

Ministry for Primary Industries

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7 August 2017

Dear Sir/Madam

Submission - Part 2 Biosecurity Management Plan — Discussion Document - Proposed National Environment Standard (NES) for Marine Aquaculture

I submit this submission on the above Ministry for Primary Industries (MPI) discussion document in my capacity as President of the Kenepuru and Central Sounds Residents' Association (KCSRA).

Introduction

1. **Who we are:** KCSRA was established in 1991, and currently has around 260 household members, whose residents live fulltime or part-time in the Kenepuru and Pelorus Sounds. The KCSRA's objects include, among others, to coordinate dealings with central and local government, promote the interests of residents of Kenepuru Sound and adjacent areas, to promote and act in the best interests of residents, ratepayers, and persons associated with the Kenepuru and Central Sounds area.
2. **What we do:** Our website (www.kcsra.org.nz) demonstrates that KCSRA is very busy representing the interests of members in a wide variety of matters. For example, advocating for better and safer roads and the provision of public toilets in places of high visitor use, refurbishing small but locally important infrastructure, liaison and representations to the local council, and strategic involvement in local environmental/conservation issues.

Kenepuru & Central Sounds Residents Association Inc.

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Background

3. Why we are interested: An overriding and important aspect of the Sounds is the public “ownership” nature of the marine space. Since 2011/2012 our member’s unease at the seemingly relentless sprawl of marine farming in the Sounds (primarily mussel farming) has been communicated to successive committees. Members were alarmed at the prospect of the Kenepuru and Central Sounds, with its treasured land and seascapes and unique biological diversity, being downgraded to “an industrial zone”. Indeed the Marlborough District Council (MDC) quite correctly refers to the Sounds from the perspective of its environmental values as the “Jewel in the Crown” of the Marlborough region. However there was an increasing awareness by the Association that industry, the MDC and central government were largely ignoring the significant cumulative adverse environmental effects from aquaculture.
4. In true kiwi style KCSRA has done its bit to provide a measure of balance, sanity and reason to these unfortunate proposals, notwithstanding our limited resources and the voluntary nature of KCSRA. An area of particular concern has been the attempts to ram through massive increases in high impact salmon farming in the Outer Pelorus region of the Sounds.
5. We submitted in opposition at the 2012 Board of Inquiry to the King Salmon proposal for nine new salmon farms in the Sounds in areas hitherto off limits to high adverse impact marine salmon farming operations.
6. Contemporaneously with the BOI process, in 2012 a significant salmon mortality event took place at the King Salmon Waihinu farm. Questioning of NZKS expert witness at the BOI proved difficult. Nevertheless, KCSRA realised the importance of biosecurity considerations as a result of these unexplained mortalities and investigated. In due course for example, it obtained an MPI interim report after OIA requests and a complaint to the Ombudsman¹. This report showed that MPI was of the view that no direct cause was identified, nor a disease agent. In 2013 and 2014 no further mass mortalities were reported by NZKS to the media or MPI Biosecurity, but we have since learned that they kept happening.
7. In April 2015 the Marlborough Express broke the news about significant mortalities at the Waihinu farm, a multimillion dollar problem that would not go away². MPI Biosecurity initiated a response and this time their laboratory identified two pathogens in the farmed salmon, which retesting subsequently showed had also been present in the 2012 salmon. Further OIA requests from KCSRA led to a meeting with Biosecurity staff and the start of a formal relationship through the Response Liaison channel.
8. Given the difficulty of getting any or straight answers to these mortality events KCSRA prepared and published a technical paper “Salmon Mortality in the Pelorus – Why?”, documenting the existence of ongoing unexplained mortality spikes in NZKS’s farms in the Marlborough Sounds ³. Continued pressure for a thorough investigation by independent experts has led to the fairly slow preparation and release of a further MPI report⁴. MPI’s independent experts reviewed NZKS biosecurity arrangements and concluded that the biosecurity plan of NZKS is inadequate, inconsistent application of this

1 Salmon mortality 2012 – Interim investigation report into a Chinook salmon mortality event in Pelorus Sound – MPI information Paper prepared for NZKS

2 <https://www.google.com/url?q=http://www.stuff.co.nz/marlborough-express/news/67314620/Millionslost-after-warm-seas-kill-salmon>

3 June 2016 KCSRA Paper - Salmon Mortality in the Pelorus - Why?

<http://kcsra.org.nz/documents/salmonFarmMortality/160604%20KCSRA%20Paper%20-%20%20Salmon%20Mortality%20in%20the%20Pelorus%20-%20Why.pdf>

4 Intelligence Report - NZ-RLO & T. maritimum 2015 response MPI Technical Paper 2017/39 prepared for Governance Group by Jeannine Fischer and John Appleby (May 2017)

biosecurity plan by NZKS, a low awareness of biosecurity risks by NZKS management and also that NZKS's management practices were not up to best international standards in relation to biosecurity matters.

9. We need to be clear that KCSRA believes it has well founded reasons to be quite nervous about the threat salmon farm generated Rickettsia like organisms (RLO-NZ) might pose to the few remaining and highly stressed, treasured indigenous scallop beds in the Marlborough Sounds. As can be appreciated we are horrified at the casual attitude of NZKS management to Biosecurity matters that the MPI report records.
10. In addition there have also been the recent biosecurity revelations, concerning the spread of a serious parasite from farmed Marlborough flat oysters to marine farms in Stewart Island and the consequential threat to iconic Bluff oyster beds resulting in belated efforts to restrict the spread of this organism¹. It will no doubt be a year or two before we see a thorough MPI report into this matter but, the threats are clearly real when all farmed oysters in Marlborough and Big Glory Bay have to be removed.
11. We have spent a little time outlining the above so the reader can grasp that as an organisation we have traveled a hard road and learnt much in the area of Biosecurity .
12. Based on that hard won experience it is clear to KCSRA that there are real biosecurity risks with marine aquaculture operations in the Sounds and there must be real doubt whether we have a good system of checks and balances. To that extent the provisions of the NES and its attempts to address Biosecurity issues is a good thing. However we are not at all confident the NES provisions regarding biosecurity matters adequately address this issue.

Structure of this Submission

13. Due to limited time and resources, in this KCSRA submission we focus on those parts of the proposed NES that deal with those provisions regarding biosecurity management plans.
14. We first deal with some overarching issues / concerns we have with the thrust, direction and assumptions seemingly behind the proposed NES re Biosecurity management plans. Then in the **attached** Schedule, we respond to some of the specific questions MPI poses in the discussion document on this subject area.

¹<http://www.mpi.govt.nz/protection-and-response/responding/alerts/bonamia-ostreae/>

Overview Issue – Proposed Biosecurity Management

15. The policy objective of the proposed NES is, appropriately, to develop a consistent and efficient regional planning framework for on-farm biosecurity management. The proposed implementation is for the regional environment plans to have a rule inserted, specifying that regional and district councils may only grant a permit for a marine farm, that has an approved Biosecurity Management Plan (BM plan) for that farm. The permit itself will have a condition specifying that all BM plans have to be implemented and kept up to date. It is to be up to the Regional and District Councils to approve the BM plan for each farm and later on to check each farm for compliance with the permit conditions regarding the BM plan.
16. Structurally, will this accomplish improved biosecurity? **KCSRA has real doubts**. Firstly, KCSRA submits that good Biosecurity Management has to be implemented at a national level for marine aquaculture. It should not/cannot be left up to each regional or district council to interpret the specific biosecurity requirements, approve BM plans and implement a biosecurity inspection, auditing and surveillance scheme fitting those requirements. Nor indeed to carry out regular holistic (versus on a farm basis) reviews of the suitability of any implemented regime.
17. MPI Biosecurity, in a recently published Intelligence report about the salmon mortality investigation¹ lists a number of failings and shortcomings of biosecurity practices on and around salmon farms, such as:
 - A need for national direction by MPI on how councils should consider and address biosecurity issues, when making resource consent decisions for marine farming operations.
 - A need for implementation of international best practice for the prevention of disease. Separation of different year-classes of salmon and the regular fallowing of farm sites are key strategies employed internationally to mitigate disease risks in salmon farming operations.
 - A need for an adequate and workable Biosecurity Management Plan.
 - A need for consistent daily application of the prescribed actions detailed in the Biosecurity Management Plan.
18. Given these abject findings of failure in what all would regard as a high risk aquaculture operation it is unfortunate and disappointing that MPI and MfE have not taken the opportunity to introduce a gold standard for marine aquaculture biosecurity. Biosecurity for coastal areas has to be handled at a national level, as the consequences can play out on a national level. The ongoing spread of the *Bonamia ostreae* infection, first discovered in marine farms in the Marlborough Sounds two years ago, and now detected in marine farms in Stewart Island, thus posing an imminent threat to the Bluff oyster wild fishery, is a clear example of the need to deal with marine farm biosecurity incursions on a national level. It is also a good example of the threat posed by marine farming to wild fisheries in this case the Bluff oysters.
19. According to a MPI Biosecurity Technical paper prepared for the NES² the greatest benefits of biosecurity are achieved through **preventive rather than reactive action**.

¹Intelligence Report - NZ-RLO& T. maritimum 2015 response
MPI Technical Paper 2017/39 prepared for Governance Group
by Jeannine Fischer and John Appleby (May 2017)

²see page 23 of Georgiades, E.; Fraser, R.; Jones, B (2016). Options to Strengthen On-farm Biosecurity Management for Commercial and Non-commercial Aquaculture.

MPI Technical Paper No: 2016/47

Preventive biosecurity measures are for instance, aquaculture area management, increased inspection frequency, health surveillance, year class separation, fallowing, etc. The implementation of preventive biosecurity in New Zealand aquaculture should take advantage of the lessons learned internationally.

20. KCSRA submits that this is what is seemingly missing in the proposed NES marine Aquaculture framework; no clear National Regulations for Aquaculture Management Areas, no clear identification of what are Best Management Practice requirements and most importantly, a lack of detailed Aquaculture Surveillance and Monitoring Requirements as well as Permitted Environmental Standards.
21. According to a report¹ commissioned in 2013 by MPI, New Zealand is the only salmon farming country that does not have these types of National Regulations. NZ does not monitor the health of the salmon farms adequately, lacking even clearly defined mandatory mortality reporting requirements. Tasmania for instance has a salmonid health surveillance program in place initiated and managed by DPIPWE (Department for Primary Industries, Park, Water and Environment) for over 25 years. It has been instrumental in early detection of pathogens and diseases².
22. New Zealand lacks health surveillance programs for farmed marine species, the existing marine biosecurity surveillance programs are limited to a few high profile pests³. Even when a serious mortality event has occurred, such as the 2012 salmon mortality at a farm in the Marlborough Sounds, no follow up health surveillance checks are done, nor further investigation into the causes, despite the following recommendation in the Investigation Report⁴: *“No cause for the mortality event was identified by the investigation, however in retrospect sampling was only carried out after the peak mortality. Further investigation to identify the cause of this annual mortality increase, and whether it is related to the external ulcers, heart pathology and suspected intracellular parasites is recommended in the future.”*
23. Had this recommendation been acted upon, the suspected intracellular parasite NZ-RLO would have been identified in 2013 instead of 2015, maybe at a time when the pathogen was confined yet to the Pelorus Sound and eradication still a viable option.
24. KCSRA submits that the proposed measures in the NES for biosecurity fall far short of what is needed as outlined above. Having a biosecurity plan per farm is a start, but is only one aspect of what is needed. We submit that the current NES proposals in this area fall short of what even MPI has previously seen as necessary.
25. The MPI biosecurity report “Options to Strengthen On-farm Biosecurity” is a good example of this. The authors of that report saw a need for communication and education to foster an understanding of sound biosecurity practices, a need for good record keeping of biosecurity actions, a need for staff training in biosecurity and stock health management procedures. Any proposed Biosecurity Management plan should operate at the farm level as well as among neighbouring sites and within a defined aquaculture management area. This will require the establishment of an area-based management agreement. KCSRA **submits** in support of this holistic approach and urges the proposed NES on this issue be revisited to incorporate such elements.

1 Sim-Smith, C.; Forsythe, A. (2013). Comparison of the international regulations and best management practices for marine finfish farming.

NIWA client report AKL2013-13 prepared for the Ministry for Primary Industries.

2 Zainathan, S.C. (2012). Detection of Aquareovirus in Farmed Tasmanian Atlantic Salmon (*Salmo Salar*) . National Centre For Marine Conservation And Resource Sustainability.

3 Castinel, A; Forrest, B; Hopkins, G (2013). Review of disease risks for New Zealand shellfish aquaculture: Perspectives for Management. Cawthron Institute.

4 Norman, R. et al. (2013) Salmon Mortality Investigation -Pelorus Sound, see page 4 MPI Technical Paper 2013/19.

Biosecurity Management Plan template

26. KCSRA submits that not all types of marine aquaculture have the same impact on the environment, nor the same level of biosecurity risk or options for mitigating that risk. In the appendix K of the proposed NES for Marine Aquaculture, all marine farmers are treated as if they have identical farming practices and biosecurity risks. There is only a single template provided as the basis for the creation of a Biosecurity Management Plan document for every farm. This template basically treats all marine farms as finfish farms. A one size fits all approach. KCSRA submits that the proposed BM Plans as envisaged run the danger of being just a paper exercise, a ticking of boxes, instead of a way of managing and lowering the biosecurity risks.
27. Furthermore, the Biosecurity Management Plan template (Appendix K) appears to be a work in progress. It is we submit nowhere near finished by the looks of it. The template spans two columns, one column with the Guidelines plus one column with an example management policy. The Guidelines are grouped in twelve categories, with 32 items in total. The example column is only (partly) filled out for the first three categories, after that it is left to the marine farmer's imagination. KCSRA submits this template needs a whole lot more work from MPI so it is more prescriptive and complete.
28. KCSRA submits that a separate BM plan template needs to be created for several categories of marine farmers, grouping similar biosecurity risks, growing environments and growing methods and intensity. To begin with, a separate template is needed for land based, fresh water and marine based farms, as these have different biosecurity risk pathways. Closed containment land based farms have far fewer biosecurity risks than farms situated in the coastal marine environment. Templates should also be different for finfish, mussels, other types of shellfish, seaweed, paua, sea cucumbers, etc.
29. The coastal marine environment is a shared resource for all New Zealanders, but fin fish farmers are granted exclusive use of their consented water space, as opposed to for instance the mussel farmers who share their water space with other members of the public and cannot deny the public access. The table below lists some more differences between two groups with regards to biosecurity risk pathways and management.

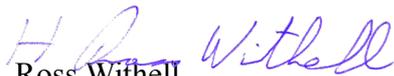
Finfish (salmon) farmers	Mussel Farmers
Exclusive use of public waterspace	Shared use of public waterspace
Daily visits of farm	Occasional visits of farm
Stock is kept in sea cages or net pens	Mussels hang on ropes
Fish escape risk	Shellfish are more or less stationary
Underwater lighting attracts bait fish	n/a
Farm attracts predators, seals, sharks, gulls	n/a
Farm attracts wild fish to feed pellets	n/a
Feed is an additional biosecurity risk	n/a
High water temperature – stress	n/a
Low dissolved oxygen - stress	
Toxic algal blooms – low dissolved oxygen	Toxic algal blooms – shellfish poisoning, a threat to human health

These and other differences need to be worked through and Biosecurity Management Plan templates reflecting these differences worked up. This should not be a one size fits all exercise.

Conclusion

Clearly New Zealand needs to get serious QUICKLY about the biosecurity threat from intensive marine farming. Sadly, KCSRA feels that the proposed NES provisions fall well short of an appropriate response and lack clear guidance around independent and accountable auditing /monitoring requirements (particularly in light of the NES proposals surrounding MPI's desire to facilitate easier approval to change the farmed species). It needs to be withdrawn and reassessed in the light of the recent experiences with disease /mortality outbreaks on salmon farms and the subsequent mortalities and now the parasite spread at oyster farms.

Yours sincerely


Ross Withell

President
Kenepuru and Central Sounds Residents' Association

Schedule One

The discussion document identifies various questions to which MPI is seeking a specific response regarding its biosecurity suggestions. As can be seen, KCSRA believes that the proposed NES needs to be withdrawn and extensively reworked so it truly is an environmental standard, rather than an administrative exercise in central government pushing operational and administrative responsibility on to ill equipped and resourced regional councils. Nevertheless in order to assist we briefly consider and respond to a number of the questions formally raised by MPI in the discussion document with regard to biosecurity management plans.

Questions 33 to 40 - (pages 40 to 44) – Provisions around better biosecurity management on marine aquaculture.

Question 33 - (Page 40) - Are Biosecurity Management Plans (BMP) Required for marine farms?

We submit that for the likes of reasons set out in paragraphs 6 to 12 of the body of this submission a properly designed, implemented and monitored on a national basis BMP for individual marine farms is long overdue.

Question 34- (Page 40) - is the timeframe of 2025 appropriate?

Bear in mind that KCSRA believes that there is a lot of work to be done to first get the framework of the monitoring and implementation up to best practice, let alone the operational detail. Only on this basis is the suggested time frame realistic. However just to be clear, once that framework has been constructed KCSRA believes full implementation among existing marine farms should be completed in three years.

Question 35 - (Page 40) - should there be a National (led by central government approach to BMP's?

KCSRA submits that there must be a National approach to BMP in the aquaculture sector. Unfortunately what is proposed by the MPI Discussion Document and indicative Regulations is NOT a national approach. Rather it is one where the national regulator (central government) is trying to foist the implementation and ongoing operational oversight and monitoring responsibility to those least able to carry out that role for, among other things, competency and resource reasons - local government. Further, whilst MPI in its current format has an inherent conflict of interest (being expected to be both an advocate and an impartial regulator) it is submitted local government has even more opaque governance issues and accordingly should not be so tasked.

Question 36 - (-Page 42) - is the suggested BMP template adequate?

KCSRA submits that the proposed template is VERY inadequate for the reasons set out in paragraphs 25 to 28 of the body of our submission.

Question 37 - (Page 42) - is a NES with a BMP approach the best way to address the real current short comings of biosecurity re aquaculture?

KCSRA submits that the current approach as set in the discussion document is deficient in a number of important areas as detailed and discussed in the body of this submission. A more detailed NES, with ownership of implementation and ongoing operational control at national level, is urgently required.

Question 38 - (page 42) - comment on the ability of regional councils, such as the MDC, to develop, certify, audit and enforce BMP's.

KCSRA submits for the reasons set out in our response to question 35 above that MDC is NOT the appropriate body to be tasked with such responsibilities.

Question 39 - (Page 43) - should existing marine farms with costal permits be required to put in place a BMP?

Subject to the reservations and recommended changes set out in this submission KCSRA submits that the answer to this question is an emphatic YES.

Question 40 - (Page 44) - should the holders of marine farm consents be permitted to entirely self regulate their compliance or otherwise of the requirements of the NES and BMP's or should MPI be responsible for their external independent review and enforcement?

KCSRA submits that it should be blindly obvious that MPI commissioned independent oversight IS required. KCSRA is astounded the question was raised. New Zealand's history of the consequences of self regulation causing systemic failure as typified by the leaky building debacle is example enough!