

Kenepuru & Central Sounds



Kenepuru & Central Sounds Residents Association Inc.

Ministry for Primary Industries

Private Bag 14
Nelson 7042

Email: aquaculture@mpi.govt.nz

Ross Withell

President KCSRA

2725 Kenepuru Road

RD 2

Picton 7282

email: president@kcsra.org.nz

WWW: kcsra.org.nz

7 August 2017

Dear Sir/Madam

Submission - Part 1 Re-consenting matters — 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 involvement in local environmental/conservation issues.

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)

Kenepuru & Central Sounds Residents Association Inc.

President	Ross Withell
Vice President	Andrew Caddie
Secretary	
Treasurer	Stefan Schulz
Chairman Roding Committee	Robin Bowron

president@kcsra.org.nz
vicepresident@kcsra.org.nz
secretary@kcsra.org.nz
treasurer@kcsra.org.nz
roding@kcsra.org.nz

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 MDC quite correctly refers to the Sounds from the perspective of its environmental values as the “Jewel in the Crown” of the region. However there was an increasing awareness by the Association that industry, the Regional Council 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. For example, one large inappropriate new mussel farm application that we opposed has been turned down at every stage, but the applicant’s deep pockets mean that they are now appealing yet again to the Court of Appeal.
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. We are well aware of (and applaud) the ground breaking litigation whereby the Supreme Court decided to stand fast in defence of the requirements of the New Zealand Coastal Policy Statement (NZCPS) and reject one of these farms targeted for inclusion in an area of Outstanding Natural Landscape. The nine farms were thus scaled back to three with significant staged adaptive management and environmental monitoring requirements.
6. With some disbelief we now realise that almost immediately the Ministry for Primary Industry (MPI) began planning how to circumvent the outcomes of the Board of Inquiry process. In due course MPI put forward its own ill-conceived proposal for the “missing” new salmon farms. We actively participated in the subsequent MPI controlled “review” process, which sought, we submit, to limit effective examination by the public, as best as it could.
7. We have actively participated in the process around the proposed Marlborough Environment Plan (MEP). We were startled to realise the pressure industry and MPI had placed on the Marlborough District Council to withdraw its chapter on Aquaculture from the notified MEP. We now have a representative on the MDC convened Aquaculture Review Working Group (ARWG) which is also considering the issue of existing marine farm renewal applications on a bay-by-bay process. This is hard work but a process with more potential to result in a good outcome for sustainable environmental values than the proposed NES.
8. We have spent a little time outlining the above so the reader can grasp that as an organisation we have travelled a hard road and learnt much. We have learnt how to maximise our limited means and resources, and to put forward and advocate for community expectations and values. We have commissioned our own legal advice and expert witness evidence. We have formed alliances with other like-minded local community and environmental groups to leverage our meagre resources. We have developed our own in-house expertise in depth in the relevant areas. To the chagrin of some we have performed very effectively.
9. In other words **we want to stress** that our submissions that follow are soundly based on science and legal principles and developed from hard won experience.
10. We are aware of the enthusiasm central government has developed for the marine aquaculture industry as evidenced by the release of the Government’s policy back in 2012 with its aspirational economic objectives. However we were comforted by the apparent and repeated commitment to sensible and environmentally sustainable development

including the preservation of environmental values as set out in that policy¹.

11. It needs to be **stressed** that KCSRA is equally supportive of marine farming in appropriate areas in the Sounds on that basis. However, over the last five years we have learnt that there is often a gap between “talking the talk” and “walking the talk”. We fear there is much in this proposed NES for marine aquaculture that, unfortunately, illustrates this gap all too well.
12. Finally, as a locally based community organisation **our focus** in this submission is on the adverse impacts of the proposed NES on the Marlborough Sounds. In particular, the intensively farmed marine space of the Kenepuru and Central Sounds areas².

Structure of this Submission

13. Due to limited time and resources, in this submission we focus on those parts of the proposed NES that deal with the proposed provisions for and their rationale around a new regime for replacement consents for existing marine farms in the Sounds. KCSRA may also, if time and resources permit, submit a further and separate submission on other aspects of the proposed NES e.g. those provisions dealing with biosecurity management plans.
14. By a country mile the main aquaculture operation in the Sounds is mussel farming³. Finfish (largely salmon) farming is an extremely contentious activity but as MPI has effectively taken over the placement of this activity the re-consenting aspects of the proposed NES seems of little relevance. Oyster farming in the Sounds seems to have taken a severe knock with the latest biosecurity debacle.
15. Accordingly, unless we say otherwise references to marine farming in this submission should be taken as references to **mussel farming**. We have also assumed that mussel farms will **not be** permitted to apply for and receive consents that will allow supplementary feeding.
16. In **Part A** we first deal with some overarching issues/concerns we have with the thrust, direction and assumptions seemingly behind the proposed NES. In **Part B** We then identify some more specific issues with the NES. Then in the attached **Schedule**, we respond to some of the questions MPI proposes in the discussion document.

PART A - Overarching Issues and Concerns

1. Issue – Public Rights & Values are Inappropriately Marginalised

- 1.1 Marine space in the Marlborough Sounds is public domain. Indeed, the NES identifies as a key problem the increasing competition with other users and records that a careful balance is required between aquaculture and other uses.
- 1.2 However the NES does not strike such a balance. Rather, it goes on to re-articulate the problem as one of conflict with industry which gives rise to investment uncertainty. The NES solution is this is to remove the public and public values from the re-consenting process. There is no balance at all. It is simply the environmental subsidisation of an

¹ The Governments Strategy and 5 Year plan to support Aquaculture – Hon D. Carter (2012).

² A key component of the area we refer to as the Central Sounds is the Pelorus Sound (Te Hoiere).

³ There are over 2,500 hectares of consented marine farm area in the Sounds, the bulk of which are in the waters of the Kenepuru and Central Sounds.

exploitive industry at the expense of the New Zealand public.

- 1.3 This will frustrate the proper evolution of the Marlborough Sounds. It assumes that the existing level of aquaculture will represent the optimal public utilisation of Marlborough Sounds public water space going forward. No industry (or other user) of public domain can ever be so precious as to justify an assumption that it represents the optimal use of public space going into the future.
- 1.4 It is no answer to suggest that this can be dealt with at the plan level through ‘appropriate area’ determinations. The purpose of a plan is to *accommodate* the future, not *dictate it*. Moreover, under the NES consented farms will be able to renew their consents, whether in appropriate areas or not, *before* any second generation plans even have the chance to take effect - and for terms that will out-survive the second generation plans.
- 1.5 Similar proposals to the NES were put to Cabinet following the Doug Kidd led Aquaculture Technical Advisory Group in 2009 but were rejected by Cabinet. Nothing has changed. The NES is fundamentally mis-founded, cutting as it does across public rights to participate in the consenting of activities in highly valued public domain. It should be withdrawn on this basis alone.

2 Issue – Investment Certainty, Consistency and Cost

- 2.1 Investment certainty, consenting consistency across regions, and costs are touted as reasons for circumscribing environmental tests and cutting the public out of the Marine farm re-consenting process.
- 2.3 We note there has been no lack of new investment in the Marlborough Sounds over the last couple of decades and this under a regime of either full discretionary or non complying activity status. Indeed the industry is now financially mature in the Sounds. If there is any threat to the maintenance of investment in the Marlborough Sounds it can only come from changing or evolving public values. Suffice to say investment certainty for an environmentally exploitive industry in highly valued public areas is no basis for suppressing the recognition of changing and increasing public values in those areas. To the contrary, no industry can have standing to deny the recognition of increasing public values in an area, not least for a nationally significant area such as the Marlborough Sounds.
- 2.4 Consenting differences across regions are touted as another issue the NES seeks to address. However regions are fundamentally different and thus demand fundamentally different approaches to marine farming matters. Moreover the significance of any apparent regional inconsistencies in the consenting process to the efficient operation of the industry nationally is not actually made out in the NES and in fact appears to be a weak proposition. How is marine farm investment in Marlborough affected by how aquaculture consenting occurs in, say, the Waikato region ?
- 2.5 Re-consenting cost is the final problem the NES seeks to address. We support an efficient and effective consenting process. However we cannot support any process that simply suppresses environmental and public values in order to save consenting costs. Cost has never been, and can never be, a basis for the suppression of public and environmental considerations. That might make consenting more efficient but it makes it less effective, frustrating as it does core principles of the Resource Management Act 1991 (RMA).
- 2.6 We also note the suggestion that reducing resource consent costs (reported by NZIER as between \$40M and \$80M in Marlborough - but based on unsupported industry analysis) has economic benefits through saving the industry this expense. Nothing could be further

from the truth. The costs saved by the industry through winding down the resource consent procedure will simply manifest themselves through the system as lost jobs to the region – and largely relatively high value jobs as well.

- 2.7 In this regard the NES will *actually add nothing to the national economy* (beyond moving wealth from the pockets of employees and support industries up to the pockets of farm owners) *whilst at the same time both jeopardising the environment and suppressing public rights and community values.*

3. Issue – Mass re-consenting is a chance for review

- 3.1 KCSRA and, we feel MDC, saw the date of 2024 as a chance for a review of existing mussel farm operations in the Sounds - a chance to step back and look at the good, the bad and the ugly aspects. Accordingly, we are disappointed at MPI’s attitude as expressed in the discussion document and in conversation with MPI representatives.
- 3.2 We would promote a wholesale level area by area re-consenting process for circa 2024 renewals as the most efficient and effective option for managing the process and any public and industry conflict. Such would enable public values and the public to be properly considered and heard and thus the optimal utility of public space to be found - whilst at the same time minimising costs and uncertainty for industry.
- 3.3 The NES approach seems instead to have been hurriedly prepared and pushed out under the guise of a National Environment Standard administrative measure that seems focussed **on avoiding** any environmental review of existing farms. This for an industry that has grown since the 1970’s in a fairly random way without any overview of sustainable environment assessment to date. Indeed that is precisely what MPI seems most concerned to avoid.

4. Issue - Administrative Convenience and the RMA

- 4.1 The discussion document’s overriding objective is ensuring existing marine consents are rolled over as easily as possible as their term expires. This is necessary, the discussion document believes, to ensure marine farmers’ investment will be protected and economic benefits will continue to accrue to marine farmers and thus the wider public.
- 4.2 Thus its actual focus is, we submit, on a small part of Part 2 of the RMA – “*providing for economic wellbeing*”¹ - and a small group of beneficiaries to the exclusion of all other required considerations.
- 4.3 To this end the discussion document proposes a structure that **will exclude** public values and public participation in reviewing the environmental sustainability and appropriateness of activities being carried out in public space. It will, we submit, severely restrict the Marlborough District Council from properly assessing aggregations of existing marine farms in terms of avoiding, remedying and mitigating any adverse effects of the activity. It seems to have been designed to cut across and avoid the likes of the NZCPS.
- 4.4 We submit that this focus is, at law, fundamentally flawed as it ignores or frustrates any consideration as to the other values of Part 2 of the RMA or established case law. Accordingly, it should be withdrawn.

¹ Section 5 (2) of the RMA

5. Issue - The single farm approach

- 5.1 A fundamental design/logic flaw in the proposed NES and discussion document is that the appropriate unit of examination is deemed to be **a single farm**.
- 5.2 This ignores the reality that in intensively farmed areas such as the Sounds there are often dozens of existing farms in low flush bays¹.
- 5.3 By this device the proposed NES is seemingly designed to frustrate any consideration of a cumulative effects assessment in the re-consenting or not of existing marine farms. Accordingly it needs to be withdrawn and this issue addressed so the MDC can consider matters on a bay-by-bay basis in a re-consenting situation.
- 5.4 In this regard it is undeniable that aquaculture in the Sounds, at least cumulatively, has a significant adverse effect on the Sounds environment. The NES seeks to allow the existing degree of aquaculture activity under section 43A(1)(b) of the RMA but section 43A(1)(3)(a) requires that resource consents must be required. These RMA provisions contemplate the management of significant adverse effects through the resource consent process. However, the NES process as proposed denies the management of significant cumulative effects through the legislatively required resource consent process. The NES process as proposed thus falls short of the required standard and should be withdrawn.

6. Issue - Effects of Existing Marine Farms are Ignored

- 6.1 As noted the focus of the proposed NES is on the re-consenting of existing mussel farms. A key and disturbing underlying assumption behind much of what is repugnant in the proposed NES is the assumption that the environmental effects of existing mussel farms are well known (impliedly benign) and their operations have been carefully managed, monitored and regulated over the years². ³On this basis environmental impact considerations in a re-consenting process can be and are largely ignored. The reality is, we submit, **vastly different**.
- 6.2 The spatial distribution of the existing mussel farms has much to do with convenience and adhocery and little to do with sound environmental planning design. There is no substance, we submit, to the view that an environmental assessment done for a single farm a decade or more earlier can be safely seen as still fit for purpose or even reflecting the current situation of a vastly expanded farming effort. The reality is that a lot of historical coastal permits (deemed or otherwise) do not meet today's environmental standards. Almost all existing farms have been consented or licensed devoid of any assessment of cumulative effects – certainly at an ecological level and generally at a landscape and natural character level as well. It cannot be denied that the intensity of the existing farming in some areas would not be re-consented if it were all applied for together today and properly assessed with the benefit of today's information and environmental standards.
- 6.3 Further, there has been little in the way of an effective holistic monitoring regime undertaken by the MDC. We do not wish to get into the whys and wherefores (but lack of resources and money figures largely) but that is the reality. The industry itself is also quite secretive about releasing production figures on even an aggregated bay-by-bay basis. The proposed NES provides no mechanism for requiring these and other production related matters to be collected by the MDC. **This oversight needs to be addressed.**

1 Thus in Beatrix Bay alone there are some 37 farms covering over 300 hectares.

2 See for example on the top right of page 13 of the MPI Discussion Document.

3

6.4 Perhaps the most staggering issue has been the avoidance, until quite recently, of the scientific fact that mussels are in fact prolific filter feeders near the bottom of the food web. They feed on what is in the water column - phytoplankton, zooplankton, fish eggs, larvae and other particulate matter. Thus they compete with and predate upon living organisms in the water column. The greater the intensity of mussel farming the greater the adverse impact on the wider ecosystem. It does not take much thought to realise that intensive mussel farming in low flush bays will be anything but environmentally sustainable. And so the latest science and referred to in the next section demonstrates.

7. **Issue - MPI has ignored or is unaware of the applicable Science and has ignored NZCPS**

7.1 An MPI representative was recently invited to give a more specialised briefing on the proposed NES to the MDC convened ARWG referred to above. Our representative initiated some discussion as to the MPI representative's view that the existing science supported that all was well from an environmental perspective as to the effects of the level of existing mussel farms on the likes of the water column. Part of the science relied on was an MPI and MDC commissioned biophysical study¹. In actual fact this demonstrated, in the likes of low flush intensely farmed bays such as Beatrix Bay, Clova Bay, Crail Bay and the Kenepuru Sound, the massive adverse impact mussels were having. The model predicts that up to **90% or more of zooplankton** in these areas is being consumed by the existing mussel farms. This is *all year round* in the Kenepuru Sound and over the ecologically important summer period in the other areas. The point at which 100% of zooplankton is consumed represents **system collapse** - i.e. wherein the ecosystem cycle has been rendered down to one of just nutrient-phytoplankton-cultured mussels-detritus². In other words, **a state when the only surviving marine creature in the ecosystem is that as is being cultured.**

7.2 In a recent Environment Court Case at which the KCSRA was a participant, one of the lead authors of that report, appearing as an independent witness and under oath, **confirmed these adverse outcomes.**

7.3 Not surprisingly the MPI representative at the ARWG meeting was forced to resile from his initial position.

7.4 The MPI representative also placed some reliance on a recent Coring study.³ Again his understanding of what that study showed in terms of the historical existence of indigenous shellfish communities in the Sounds and how that could be related to the current level of intensive mussel farming was quite wrong.

7.5 The proposed NES lacks any structure for the MDC to examine issues around ecological carrying capacity on a bay-by-bay basis when considering re-consenting. This is, we submit, a shocking oversight given the clear references in the Governments own policy as wanting to work to best practice and achieve sustainable environmental outcomes.

7.6 To its credit MDC has been working with the ARWG on developing a bay-by-bay approach. Part of the discussion at the ARWG has been working through the differences between the production carrying capacity of a bay and the ecological carrying capacity. If marine farming is exceeding the ecological carrying capacity then this will be having a significant deleterious effect on the wider ecosystem.

1 Brockhuizen, N., Hadfield, M., et al (2015) - A biophysical model for the Marlborough Sounds, Part 2 : Pelorus Sound

2 Predicting the carrying capacity of bivalve shellfish culture using a steady, linear food web model. Weimin Jiang, Mark T. Gibbs, Cawthron Institute, Nelson, New Zealand, November 2004

3 S Handley et al (2017) – A 1,000 year history of seabed change in Pelorus Sound , Marlborough.

- 7.7 In order to assist this discussion KCSRA prepared and circulated a technical paper proposing how this analysis might be carried out. That paper, among other things, looked at assessing the impact of the current level of marine farming on the base elements in the food and ecosystem web – phytoplankton and zooplankton. For phytoplankton KCSRA used the internationally recognised Aquaculture Stewardship Council (ASC) Bivalve Standard Version 1 Jan 2012. The ASC standard provides a method to review if marine farming is exceeding the ecological carrying capacity. In short, the KCSRA technical paper demonstrated, using the ASC standard, that things are not looking good in the likes of Beatrix and Clova Bays.
- 7.8 For zooplankton KCSRA referred to the Niwa Biophysical model¹, pointing out the extreme zooplankton depletion rates being reported in the Kenepuru Sound, Beatrix Bay, Clova Bay and Crail Bay areas, and suggests that a 20% depletion rate might be environmentally acceptable.
- 7.9 There is no suggestion in the NES discussion document that any such analysis has been carried out in order to justify the paper’s assertions and assumptions as to the lack of significant environmental effects from existing farms. Indeed MPI has relied on the NIWA Biophysical Model when it in fact shows that some areas are at risk of ecosystem collapse. We submit this analysis should have been done and on that basis alone the proposed NES is flawed and should be withdrawn.
- 7.10 The NES also assumes that the existing level of marine farming meets the landscape and natural character adverse impact standards as set out under NZCPS policies 13 and 15. These require the **avoidance** of significant adverse effects on landscape or natural character in **any** coastal marine area. Alarming, the MPI representative freely admitted that no regard has actually been had to these standards when making its determination that existing farms are appropriate. This notwithstanding that almost all existing farms were consented *before* the NZCPS standards were introduced.
- 7.11 As can be seen from the above we are rapidly developing the science and law around the existence and treatment of a range of cumulative effects, a matter that NZCPS policy 7 requires local authorities to identify and address in their regional plans. Indeed, the NES itself notes that NZCPS 7 is fundamental to the on-going consideration of existing marine farms - but then simply states that it does not actually address it.
- 7.12 As we see it the proposed NES slams the door shut on NZCPS 7 considerations on re-consenting. This is underlined by the proposed NES focus on single farms and limiting the MDC to designating areas as either inappropriate or appropriate.
- 7.13 This NES will curtail any ability of MDC to manage an area that is suffering adverse environmental effects from the intensity of existing marine farms. For example, if the science demonstrates that on the balance of probabilities the activity is creating significant adverse ecological effects and, say, desirably the intensity of the cumulative farming effort needs to be wound back, the proposed NES stands in the way. The NES affords no capacity to deny some or all of a consent application on these grounds. This is also the case for significant landscape or natural character effects which also need to be avoided under NZCPS 13 and 15.
- 7.14 We stress this scenario - which is a reality, we submit, in many of the low flush intensively farmed bays - envisages a **remedy**, which is quite different from classifying an area as inappropriate for any marine farming. We submit that the proposed NES prevents MDC from considering ways to avoid, remedy or mitigate these effects on a re-consenting. This is totally contradictory to both best management practice and the provisions of the RMA.

¹ Supra

7.15 Because of this the NES should be withdrawn with a view to it being reworked to properly accommodate the management of area by area level cumulative effects on re-consenting.

8. Issue - NES Stands to Frustrate the Determination of Appropriate Areas for Another Generation

8.1 The proposed NES stands to enable *all* existing resource consents, whether currently in appropriate areas or not, and whether likely to be in inappropriate areas or not under a second generation plan, to be renewed for up to 35 more years as restricted discretionary activities unless and until a second generation plan determines the area inappropriate for marine farming. This stands as a striking frustration of the NZCPS and core resource management principles.

8.1 We note MPI's fear that regional authorities will not have their second generation plans ready in time to meet the circa 2024 consent renewal rush and the suggestion that this justifies enabling all existing farms to renew now without any material assessment, and whether in appropriate places or not. The fact that we struggle to see why farms coming up for renewal circa 2024 is a basis for cutting across fundamental RMA principles aside, we note that the Marlborough District Council (MDC) is in fact well down the second generation plan path. It is extremely unlikely that the determination of appropriate areas for marine farming in the Marlborough region will not be legally effective before 2024. Indeed, they are likely to be determined and with legal effect under section 86B(3)(e) of the RMA within the next 12 months.

8.2 If the NES is gazetted as drafted there will undoubtedly be a rush of individual applications to renew existing marine farms in areas that are likely to be considered inappropriate under the Marlborough second generation plan before the Marlborough Plan takes legal effect. A large proportion of existing Marlborough farms are non-complying activities and virtually all of them are located closer than 100 meters to shore. There are also a small handful of existing marine farms in the Coastal Marine One zone where marine farming is not considered appropriate but where these few farms have, for historical reasons, been allowed to stay for one renewal under the original MDC plan.

8.3 It would obviously be a fundamental frustration of the proper planning process were the NES to effectively dictate what is considered appropriate places for marine farming for another generation just short of MDC *properly* determining that for itself.

8.4 In short, not only is the NES proposal to facilitate the re-consenting of all existing farms before second generation plans take effect *mis-founded* (i.e. circa 2024 consent costs should *not* ride above environmental concerns), but there is also no realistic prospect of this mis-founded concern actually manifesting itself in Marlborough in any event. This is because section 86B(3)(e) of the RMA will give the Marlborough plan immediate legal effect on notification, notwithstanding it may be some time beyond before it is operative independent of the existing plan.

8.5 The NES should be withdrawn with a view to it being reworked to properly accommodate regional authorities determining appropriate areas for farming. At the **very least** an NES should transition in the following manner:

- The NES should not take effect in a region until a second generation plan identifying appropriate areas for aquaculture in the region has legal effect under section 86B(3)(e) of the RMA. This is pertinent to Marlborough which is already well down the track of preparing aquaculture rules identifying

appropriate areas for aquaculture.

- The NES **should clarify** that, in terms of proposed Rule 5 of the NES, a regional council determines through a regional coastal plan that an area is inappropriate for existing marine farming ***when that regional coastal plan has legal effect under section 86B(3)(e) of the RMA.***

8.5 We note that the vast majority of the 2024 problem rests in Marlborough. If, in the extremely unlikely event a Marlborough second generation plan is not legally effective before 2024, then the provisions of section 165 ZF of the RMA can be invoked. These enable farms in areas to be grouped and assessed for renewal jointly - if that renders re-consenting more efficient and enables the better assessment and management of cumulative effects.

9. Issue – Proposed treatment of outstanding areas

9.1 As drafted the NES allows the regional authority to have regard to the effects of aquaculture on the values that make an area, feature or landscape outstanding. However, applications in outstanding areas cannot be publicly notified.

9.2 Protecting the integrity of outstanding areas is a core principle of the NZCPS. It was thus more than surprising for the KCSRA representative at a Marlborough ARWG meeting to be advised by MPI that the only reason the public is excluded from applications in outstanding areas is to make it easier for applications in these areas to proceed.

9.3 This is yet another feature of the NES that is repugnant to the core principles of the RMA. Clearly Parliament has not contemplated that a national environmental standard be used to prevent the public from participating in the consent procedure for activities in highly valued public domain simply because it will suppress the full consideration of those public values and thus make it more likely that the application will proceed.

9.4 Because of this the NES should be withdrawn with a view to it being reworked to properly accommodate the public's fundamental right to participate in resource consent applications for activities in highly valued public areas.

PART B - More Particular Issues

The above higher level issues demonstrate why the NES is fundamentally flawed and should be withdrawn.

For the sake completeness we note in this section that there are a plethora of more particular issues that, if anything, simply reinforce that the NES is flawed and should be withdrawn.

10. Solution Analysis Considered The Wrong Problem

10.1 Various options for addressing the problems identified by the NES are analysed in section 4. However, the NES identifies the problem as *only* being:

‘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.*¹

- 10.2 As noted in our comments above, the NES does not actually identify why ‘variable plan frameworks’ lead to uncertainty. More to the point, and biosecurity aside, the NES does not actually target ‘variable plan frameworks’ problem. Rather, it is made clear in Part 3 that the key driver of the NES is *conflict with public values* and it is undeniably clear that this is what the NES actually focusses on.
- 10.3 To this end neither the first order nor second order assessment criteria for solutions to the problem of ‘variable plan frameworks leading to uncertainty’, looked at in section 4, actually address the core issues actually identified by the NES in section 3. The result is that appropriate *industry* outcomes are found but the assessment does not even consider public value outcomes. The NES is thus wrong to conclude that the process adopted leads to appropriate RMA outcomes. It does not.
- 10.4 The NES also fails to consider as an option processes specifically added to the RMA to address re-consenting efficiency and cumulative effects, namely the likes of section 165ZF of the RMA. Under these provisions a regional authority may invoke a process of processing and hearing together applications for coastal permits to occupy space in a common marine and coastal area for the purpose of aquaculture activities *it if would be more efficient and would enable better assessment and management of cumulative effects of the permits.*

11. Dictation of Activity Status in Inappropriate Areas is Inappropriate

- 11.1 Proposed Rule 5 provides that if a regional council determines an area inappropriate for marine farming then applications to renew existing farms in that area are to be discretionary.
- 11.2 This addresses no issue or problem identified by the NES. If a regional authority has gone through the plan review process and determined an area as inappropriate for marine farming then it should simply be up to the regional authority to determine the activity status for marine farming in that area. It is perhaps telling that the NES seeks certainty *for industry* in *appropriate* areas for marine farming but then looks to deny the same courtesy *to the public* for marine farming in areas considered by a regional authority to be *inappropriate* for marine farming.
- 11.3 An NES has no place in denying the public the ability to attain certainty in inappropriate areas by dictating an activity status in these public areas. This should be removed from Rule 5.

12. Change of Activity

- 12.1 The NES contains provisions dealing with change of *species*. However, it does not address change of *activity*. This is relevant to, for example, spat farms. As it reads there appears to be nothing preventing an application to culture and grow *mussels* from being processed under Rule 6 if the existing consent is for *mussel* spat catching.
- 12.2 Mussel culturing has a significantly greater benthic and water column impact than mussel spat catching. Moreover, there are also spat farms that were only ever originally consented because they *are* spat farms, because industry claimed a vital need for spat, and where it was anticipated that the need and the appropriateness of the spat catching

¹ Section 4, page 17

facility would be fully reviewed on termination of the consent.¹

- 12.3 The NES should thus clarify that it does *not* apply to applications for a different *activity* than what the existing consent allows.

13. Change in Intensity of Farming

- 13.1 Standards for restricted discretionary activities under Rules 2, 6 and 9 do not prevent applications encompassing an *increased intensity* of farming. This is *not* appropriate as increasing farming intensity may have unacceptable benthic, water column, hydrodynamic, public access or other impacts.
- 13.2 An application for an existing farm that facilitates **any** increased intensity of farming must be treated as if it was a new farm and rendered subject to Rule 5 accordingly.

14. Prevention of Inappropriate Plan Review Occurring

- 14.1 The NES anticipates regional authorities addressing cumulative effects through the plan review process. We have noted that this will be frustrated to the extent that the NES nonetheless facilitates farms in inappropriate areas to renew in advance of a second generation plan taking effect.
- 14.2 This will also be an issue in advance of *third* generation plans taking effect for farms that might be considered to be in appropriate places currently. This is because farms will undoubtedly apply to renew their consents under the NES RD provisions in advance of any third generation plans taking effect if there is any risk they might lose space to help accommodate a reduction for cumulative effects. As such, properly addressing the effects will be frustrated for yet another generation.
- 14.3 If the NES is to proceed it must prohibit re-consenting if it has an effect of frustrating the consideration and addressing of cumulative effects through the plan review process. We note that there does not appear to be an easy way of achieving this, given consents must have a minimum term of 20 years. If this cannot be addressed then it represents yet another fundamental flaw in the NES.

15. Navigation and Realignment

- 15.1 We are generally comfortable with farms being able to realign within or into areas considered appropriate for marine farming. However, a re-alignment will also result in a new coastal permit and thus a new minimum 20 year term. As above, this needs to be controlled so that the ability to address cumulative effects at the plan review level is not frustrated (as noted above). If this can't be controlled then it represents another fundamental flaw in the NES.
- 15.2 We also note that navigation is not included as a discretionary matter under Rule 15. Whilst relocation within areas considered appropriate for aquaculture might ordinarily be appropriate from a navigational perspective it cannot be assumed that it always will be.
- 15.3 We also believe it should also be made clear that a realignment cannot result in any increase in intensity of activity.

¹ For example Site 8553 in Clova Bay, Pelorus Sound

16. Change of Species

- 16.1 Page 37 of the NES states that research has shown that farming filter feeding species does not significantly reduce the phytoplankton densities. This is *not* correct and we note that the research relied on in this statement is *not* cited. The reality is that bivalves and other filter feeders can be prolific filterers of the water column and intensive farming has the capacity to significantly change the ecosystem foodweb structure¹. This is particularly so in low flush estuaries such as the Kenepuru and central Sounds areas.
- 16.2 The NES itself acknowledges vast differences across different filter feeding species. For example, page 35 records that sponges appear to have very high filtration rates compared with even mussels.
- 16.3 The NES also overlooks zooplankton depletion – a potentially serious issue. We have noted that the best available science today estimates that existing mussel farming in the Kenepuru Sound and in some central Sounds areas is depleting **circa 90%** of zooplankton in the water column² - which effectively renders the cultured product **the only marine creature in the ecosystem**.
- 16.4 It is thus fundamental that ecological carrying capacity, including nutrient depletion or foodweb structure change, be subject to a full discretion for **any** species change proposal.

17. Discretionary Criteria Unnecessarily Restrictive

- 17.1 On that note we record that some discretions under the NES RD proposals appears to be deliberately restricted to matters such as *adopting measures* to avoid, remedy or mitigate the issue or to facilitate some *management* of the issue - rather than allowing the issue to be addressed through *consent decline*. These include effects on marine mammal and seabird interactions with the marine farm, biosecurity risks, noise, rubbish and debris and water quality and benthic effects. This issue transcends consents for renewal as well as for realignment **and species change**. Precluding the *decline* of consents on the basis of these effects is **not** justified in the NES and nor can it be justified. To this end the NES fails to meet appropriate environmental protection standards.

18. NZCPS 11

- 18.1 Noticeably missing is any regard to the requirements of NZCPS Policy 11. There is no basis for assuming that the existing level of marine farming is sustainable. Indeed, current jurisprudence³ suggests it may well not be. Again, it is simply an abrogation of core RMA principles to ignore these effects in considering consent renewals and to this end the NES fails to meet appropriate environmental protection standards.

19. Relationship of Rule 2 and Rule 5

- 19.1 There is no basis for granting marine farms in outstanding areas immunity to Rule 5. Thus, it should be clarified that Rule 2 *does not* apply to an application for a marine farm in an outstanding area if the area has been determined as *inappropriate* for marine farming by a regional authority.

¹ For example see *Weimin Jiang, Mark T. Gibbs supra* and the *Aquaculture Stewardship Council Bivalve Standard Version 1.0 Jan 2012*.

² *NIWA Biophysical Model supra*

³ Refer *RJ Davidson Family Trust v Marlborough District Council ENV-2014-CHC-34* [para 300].

20. Cost of Notification Not Relevant

- 20.1 Page 31 of the NES records that public notification is precluded because it will save time and cost in the consent procedure. The public have a fundamental right to participate in decisions affecting what is a highly valued public resource and cost is **not** a valid excuse for not doing so.

21. Effects of Aquaculture

- 21.1 We note that there are numerous obvious errors or understatements on the effects of aquaculture in Appendix G, the following being some examples:

- The NES suggests that the effects of existing marine farms on landscape and natural character have been assessed over time and cumulative effects will be assessed and dealt with at the plan making stage. Nothing could be further from reality. Landscape and natural character assessments have **not** been undertaken on existing farms to NZCPS standards and will not be appropriately dealt with at the plan making stage because the NES proposes to allow all existing farms to renew their permits without any landscape or natural character assessments *before* regional plans have the opportunity to address the issues through spatial allocation.
- As noted above, the NES is well wide of the mark in stating that filter feeding farms do not cause significant water quality issues. Recent work indicates that some mussel farms are depleting embayments of virtually all zooplankton to the point of ecosystem collapse¹.
- The NES states that currents can be altered by 30% by mussel farm structures and that the hydrodynamic effects of mussel farms have already been caused and are thus part of the existing environment. The reality is currents can be changed **up to 70%** by mussel farms². The current softening caused by suspended structures in the water column significantly increases the likes of siltation in affected areas and the alteration of tidal currents fundamentally changes nutrient delivery patterns. The NES suggestion that because these effects are already occurring they have ‘become part of the environment’ attempts to somehow ‘normalise’ adverse effects and is a nonsense. If adverse effects exist and can be remedied, mitigated or avoided then under the RMA *they must be*.
- In this part the NES does appear to acknowledge that cumulative plankton depletion effects may arise but suggests these are best dealt with at the plan stage. We have noted above that the NES in fact frustrates a plan from addressing these issues. Moreover, science and information changes, the environment changes and public standards change - all faster than plans change. Because of this there is a fundamental need to address ecological carrying capacity issues *at the consent renewal stage*. Further, and as already noted, the NES will facilitate the renewal of existing farms ahead of second generation plans coming through, thus pushing attempts to deal with cumulative effects out for yet another generation.

¹ NIWA Biophysical Model zooplankton depletion for Kenepuru Sounds, Clova Bay, Beatrix Bay and Crail Bay – existing mussel farm vs no mussel farm scenario. See also definition of ecosystem collapse *Weimin Jiang, Mark T. Gibbs supra*

² Plew DR 2011. *Shellfish farm-induced changes to tidal circulation in an embayment, and implications for seston depletion. Aquaculture Environment Interactions 1:13*

- The NES suggests that recreational fishing may often be enhanced by marine farming. However, this is most unlikely to be the case in the Kenepuru and central Pelorus Sound area of Marlborough where intensive farming is showing the consumption of virtually all zooplankton – including the likes of fish eggs and larvae¹, and where bays have lost up to 25% or more of their natural benthic habitat through mussel farm bio deposits.

Yours sincerely



Ross Withell

President
Kenepuru and Central Sounds Residents' Association

¹ NIWA Biophysical Model supra

Schedule One

The discussion document identifies various questions to which MPI is seeking a specific response. 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 ruse – being as it is one designed to:

- roll over for another 20 to 50 years (50 years because farms will be able to re-consent again under the NES in advance of any further system re-setting) all existing marine farms without any review against environmental principles, and
- exclude the public from any input as to the desirability or otherwise of on-going use of public space, and
- severely restrict local regulators scope under the RMA.

Nevertheless in order to assist we briefly consider and respond to a number of the questions formally raised by MPI in the discussion document.

Question One (See Page 25 of the discussion document): Is an NES for marine Aquaculture Required?

In short no. Section 165ZF of the RMA already offers a more appropriate solution to what is, in effect, the real problem targeted by the NES. Alternatively, prescribed bay by bay consenting systems would be more appropriate than an NES. For example, a dual consent structure for aquaculture incorporating a *master consent* for a bay or management area under which all farms in that area are primarily consented and pursuant to which aquaculture intensity and cumulative effects are addressed, and then individual marine farm coastal permits within the bay or management area to address any farm specific residual issues such as benthic matters.

Should Regional Authorities Decide Activity Status ?

Yes. The basis of NES interference is industry uncertainty due to different regional approaches across the country to aquaculture consenting. We have noted that this basis is at best difficult to discern, if not simply a fiction. The introduction of a standardised *and concessional* consenting process on this basis is, frankly, open environmental subsidisation of an exploitive industry at the expense of public values and utility.

We support consenting efficiency but not at the expense of consenting effectiveness. Whatever the system we submit that the scope and intensity of marine farming in certain areas of the Sounds needs to be holistically **and urgently** reviewed under the purpose and principles of the RMA and associated case law. A well designed and thought out NES may well be an appropriate way to go about that exercise.

The proposed NES totally **fails to meet** those environmental and legal standards. The MDC is currently attempting a bay-by-bay exercise, which KCSRA believes is a good start and preferable to what the proposed NES suggests.

Question Two (page 28) – Restricted Discretionary Activity (RDA) Status– appropriate?

We do not support RDA. Regional authorities should be left to determine appropriate activity status through the Schedule 1 process. A Discretionary Activity (**DA**) status approach is to be preferred for farms in appropriate areas - particularly in addressing that part of the problem as set out in the discussion document - community concerns over environmental limits and cumulative effects from existing marine farming. A DA status approach would also facilitate a better conversation around the question of **entitlements (or not)** to the proposed use of iconic public space in an exploitive way for extremely long time frames. **We understand that this is precisely what MPI wishes to avoid.** This is, we submit, unacceptable in a country that believes it is a first world democracy.

Question Three – Does the NES need to provide a rule framework for farms that fail to meet the NES requirements.

No. As already recorded, there is simply no basis for the NES dictating what activity status a marine farm should have when it is in an area determined *inappropriate* for marine farming through a public plan review process.

Question Four (Page 28) – Replacement Consents re supplementary feeding

Marine farming activities requiring supplementary feeding **should not**, under any circumstances, be given RDA status and KCSRA **does not support** their inclusion as proposed in the discussion document. We know so little about the effects that it would be foolhardy to “grandfather in” such activities as the proposed NES suggests. For a fuller discussion of this aspect see the submissions to the MPI convened Advisory Panel in the context of proposed new salmon farms in the Pelorus from organisations such as KCSRA, Friends of the Nelson Haven, EDS and other concerned submitters.

It is nothing short of ridiculous that, as proposed, salmon farms in the Marlborough Sounds that fail best management practice standards will nonetheless be entitled to renew their consents with existing feed levels *without any regard to their significant adverse effects*.

Question Five – (Page 28) – Appendix G – Analysis of Effects

In addition to the observations made at paragraph 21 above, **we have serious reservations with the misleading picture** Appendix G is designed to create. Very briefly we make a few comments to illustrate.

- The approach is to focus on a single farm model and make no attempt to assess cumulative effects.
- The benthic section makes no attempt to factor in a loss of important habitat as tackled by the Environment Court in the *Davidson Case*¹ in relation to the King Shag. The related comment about bird life effects being able to be ignored is at best ignorant.
- The Appendix is misleading in suggesting that benthic habitat recovers after three years. Case studies show that the time frame is more like 10 years in areas where all farms are removed. Further, given that the thrust of the proposed NES is to dramatically increase

¹ Supra

occupation this “assurance” is a little contradictory/insulting.

- There is no discussion that the “well known effects” include massive aggregations (up to 39 times over non marine farm areas) of predatory mobile populations of 11 armed starfish (*cosinasterias muricata*)¹. There is no hint from the discussion document that it a proven fact that a mussel farm generates deposits of 250 to 400 tonnes per hectare per annum.
- For some reason water column effects are not squarely addressed. What the appendix concentrates on is phytoplankton and slides past now known significant adverse zooplankton effects. See the body of the submission for more discussion concerning:
 - the alarming adverse impacts the NIWA Biophysical model identified re zooplankton, and
 - what using the ASC standard to assess effects on phytoplankton and ecological carrying capacity demonstrated, and
 - the conclusions from the NIWA Coring study.

Question 6 (page 29) – Approach to Supplementary feeding re-consenting

See our response to Question four above. Supplementary feed consenting should **not** be included in an NES.

Question 7 (page 29) – Supplementary feeding

See our response to Questions 4 and 6 above.

Question 8 (page 30) – Overlap of marine farms into ONL’s

No. There should in fact be **no** marine farms within proximity of outstanding areas, let alone with overlap.

Question 9 (page 30) – Overriding the NZCPS

We query the legal ability for the NES to override the NZCPS in the manner proposed. Existing marine farms in appropriate areas and in the proximity of ONL’s (as they are finally settled in the MEP) should only ever be considered for re-consenting on a **full discretionary basis with public participation**.

The NES is also fundamentally short of the mark in failing to accommodate NZCPS 11 matters. This is not only in relation to threatened species and their habitat, but also in regards to avoiding the likes of significant adverse effects on the Sounds estuary ecosystem through **cumulative benthic and water column effects**.

The NES also fails to recognise **NZCPS 21** which requires priority to be given to improving water quality where it has declined (including through aquaculture nutrient depletion) to the point it is having a significant impact on the ecosystem.

¹ Inglis and Gust (2013) Potential Indirect effects of shell fish culture on the reproductive success of benthic predators- Journal of Applied Ecology 2003, 40 1077 – 1089

Question 10 - (page 30) – What are the Values and Concerns Caused by Existing Marine Farms ?

Aquaculture brings some values to the Sounds and has some place in the Sounds. However it is **just another user of the Sounds public water space like everybody else and it needs to manage itself within that parameter.** The NES seeks to do otherwise though, inappropriately affording aquaculture preferential rights over Sounds water space.

In terms of concerns, refer to the body of this submission. Broadly, in some areas existing marine farms have an unacceptable cumulative impact on the benthic environment, on the water column and thus on the foodweb and thus the wider ecosystem, on natural character and landscape values, on public access and on navigation.

Question 11 - (page 30) – What status should existing marine farms have in ONL areas?

As noted, existing marine farms in appropriate areas that are in ONL's (as they are finally settled in the MEP) should only ever, we submit, be considered for re-consenting on a **full discretionary basis with public participation.**

Question 12 - (page 31) – Should any replacement consents have to be notified publicly?

Yes. As noted, there is no basis for the NES abrogating the notification principals established in sections 95 to 95G of the RMA. Regional authorities should be left to determine public notification in accordance with their plans and established RMA law on the matter.

Question 13 - (page 31) – Giving Councils a more lenient approach

Under the terms of the proposed NES lenient effectively means allowing the MDC to approach re-consenting with a view to awarding **controlled activity** status. We find **repugnant** the idea that future generations could be denied optimal utility of such highly valued public areas for periods for of up to 50 years on the at best nebulous if not fictional grounds as made out in the NES.

Question 14 - (page 31) – Not relevant to KCSRA.

Question 15 - (page 31) – The proposed NES identify specific sites for aquaculture due to unusual importance to the Industry.

No we do not agree. *It is not the role of an NES to make assessments of comparative values in an area.* This can only be done through a full public process such as a plan change or public resource consent process. Moreover, what might be considered important for the likes of spat catching today may not be tomorrow. For example hatchery spat is now set to see local wild spat a remnant of the past¹. There are also spat farms in the Marlborough Sounds that were once claimed as vital to the industry but which today sit virtually unused².

¹ See <http://www.sanford.co.nz/operations/innovation/spatz/>

² Site 8553 in Clova Bay is an example. Approved in 1995 against strong community opposition because of a claimed vital importance to the industry, it is now acknowledged by local farmers to actually be a relatively bad site and sits largely unused for the vast majority of the time.

Question 16 - (page 33) – Are there other ways in which the proposed NES could recognise councils future planning processes.

The proposed NES needs to be expanded to allow, encourage and facilitate MDC to take a bay-by-bay approach to re-consenting issues. This would allow a consideration of a range of cumulative adverse effects with DA status designed to facilitate MDC **effecting a reduction in intensity of the marine farming effort if required** under the likes of an adaptive management framework for ecological, landscape or natural character effects.

An NES should also **encourage** industry to adopt **environmentally positive** planning initiatives. A good example is the Marlborough initiative to relocate marine farms from inappropriate areas to appropriate areas – notably farms to the extent they are located within 100 meters of shore or that are in the current MDC coastal marine zone 1 (where marine farming is prohibited). The NES might achieve this through including a provision allowing or endorsing regional authorities to change an area from appropriate to *inappropriate* (i.e. without a schedule 1 plan change process) if:

- it is zoned appropriate because of an association with a farmed area that is in an *inappropriate* area (e.g. associated with a farm within 100 meters of shore or a farm in a CM1 zone); *and*
- a successful application is not made to relocate the *inappropriate* farm area to the appropriate farm area within a 3 year period of the appropriate area being made available.

Question 17 - 19 - (page 34) – Realignment of existing marine farms

Refer to our comments in the body of our submission. We note that KCSRA has seen far too many realignment proposals that appear in fact to be nothing more than a device to extend the life of the current term of the consent past a planning review time line and expand the area of the farm at the same time.

Accordingly, we submit the proposed NES is far too supportive of realignment proposals. Realignment proposals should not be given RDA status *unless and only to the extent it is the movement of a farm from an inappropriate area into an appropriate area*. Further, in order to cater for the ability to realign farms found to be inappropriate (due to say benthic impacts) the proposed NES should clearly give the MDC an ability/duty to shift such farms at its or concerned stakeholders instigation.

Question 26 – Should Spat Catching Farms be Excluded ?

Yes. As noted above, mussel farming has a significantly different and greater environmental impact than spat catching. In terms of benthic impacts, mussel culturing can deposit between 250 and 400 tons of bio-deposits onto the sea floor per annum¹. And in terms of water column, cultured mussels can each filter up to around 310+ litres of water a day² - leaving cultured mussels able to clear bays of nutrients faster than nutrients can be replenished by either tidal flushing or primary production³. On ecological grounds alone it would thus be inappropriate to consider a change from spat catching as nothing less than a **full discretionary activity**.

1 Hartstein and Rowden 2004, Hartstein and Stevens 2005

2 *The Nutritional Biology Of Perna Canaliculus With Special Reference To Intensive Mariculture Systems*. Roger P. Waite May, University of Canterbury, 1989

3 Refer KSCRA paper *supra* applying the methodology of the *Aquaculture Stewardship Council Bivalve Standard Version 1 Jan 2012*.

Note also that some spat farms in the Marlborough Sounds were only consented in the first instance because of a perceived urgent industry need for spat¹. Extensions to others have only been condoned by affected parties because it was required for spat catching purposes². It would obviously be inappropriate to facilitate a change of species (or activity) at these sites without a full public review of the appropriateness of such a change.

Other Questions 20 to 32 (pages 34 to 39) – Proposed provisions around changing the species to be farmed in an existing marine farm.

Refer to the specific comments in the body of our submission.

Subject to time and resources KCSRA may consider these specific questions in a later separate submission. However as a general comment it **beggars belief** that the proposed NES contemplates that a species switch from a non-supplementary fed species to one requiring supplementary feeding should be given a RDA status on a re-consenting application on a **farm by farm basis**. Accordingly, KCSRA is of the view that the existing pathway in the RMA is adequate and provides a better environmental framework for a review of cumulative effects than that suggested by the proposed NES.

Question 30 to 40 - (pages 40 to 44) – Provisions around better biosecurity management on marine farms.

As indicated earlier KCSRA will address these matters in a separate submission. However, as a general comment KCSRA has been closely involved in bringing to the public gaze the existence of disturbing unexplained mortality spikes in King Salmon Marlborough farms. Continued pressure for a thorough investigation by independent experts has led to revelations of an inadequate biosecurity plan, inconsistent application of the plan, a low awareness of biosecurity risks by management, and management practices not up to best international standards in relation to bio security matters³.

In the Marlborough Sounds KCSRA is quite nervous about the threat salmon farm generated *Rickettsia* like organisms (**RLO**) might pose to the few remaining and highly stressed treasured indigenous scallop beds.

In addition there have also been the recent revelations concerning the spread of a serious parasite from farmed Marlborough oysters to marine farms in Stewart Island and the consequential threat to iconic indigenous natural oyster beds resulting in belated efforts to restrict the spread of this organism. 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.

Clearly New Zealand needs to get serious **QUICKLY** about the biosecurity threat from intensive marine farming. Sadly, we feel that the proposed NES provisions fall well short of an appropriate response and lack clear guidance around auditing /monitoring requirements (particularly in light of the NES proposals surrounding facilitating change of farmed species). It needs to be withdrawn and reassessed in the light of these recent experiences.

1 Site 8553 Clova Bay supra

2 Site 8559 Clova Bay

3 See for example page 28 of the MPI Intelligence Report - NZ - RLO & T. maritimum 2015 Response (May 2017).