

To: Marlborough Sounds Working Group
From: Kenepuru and Central Sounds Residents' Association
Date: 13 October 2016

Subject : **Comments on the operation of the Marlborough Salmon Working Group (MSWG) and the MSWG Initial Advice Report Draft 20161006.**

Introduction

The Kenepuru and Central Sounds Residents' Association (**KCSRA**) agreed to have two representatives at the Ministry for Primary Industry (**MPI**) organised MSWG meetings. The representatives kept the KCSRA Marine subcommittee informed as best as able given the various strictures MPI appeared keen to impose on representatives. This and other matters around the generation of the applicable terms of reference gave our representatives and the committee cause for disquiet around the MSWG process. Accordingly by way of a memo dated 1 August and circulated to the MSWG the Marine sub committee thought it appropriate to clarify where KCSRA was coming from and raise certain concerns. Nevertheless KCSRA was reasonably comfortable where the finalised terms of reference landed.

In this paper we briefly comment on the process and our reactions and concerns with what transpired, the recommendations the MPI authors of the MSWG Initial Advice Report Draft (**MSWG Draft Report**) have arrived at, and record our alternative notes and recommendations.

1 Marlborough Salmon Working Group Terms of Reference.

Given the above it seems appropriate to refresh readers with the terms of reference regarding the role and aims of the MSWG and the agreed commitments of ALL its members :

Role : *The role of the Marlborough Salmon Working Group (MSWG) is to provide recommendations to implement the guidelines.*

Aims : *The aims of the MSWG are:*

- *to consider options for existing salmon farms in Marlborough to adopt the guidelines; and*
- *to ensure the enduring sustainability of salmon farming in Marlborough, including better environmental outcomes including landscape, amenity, social and cultural values.*

While non-binding, the recommendations will inform the future planning work on salmon farming in Marlborough.

Responsibilities : *The MSWG will be committed to consider all options to implement the guidelines in a timely, open, and fair process. Members will be dedicated to an examination of available information, thoughtful dialogue, and carefully crafted advice to provide the Marlborough District Council and central government with recommendations.*

KCSRA Comment : It is fair to say that the KCSRA participants, have been “unhappy” with the process as conducted by MPI. We share many of the sentiments expressed in the "open" email letter written by the SAG representatives to MPI and MDC (dated 23 September) regarding the process and procedures around the working of the MSWG.

In terms of the responsibility of MPI to conduct the MSWG in an open, fair and timely way, we record our view that the process was not timely, open and fair. In our view it failed on many counts and we cover a few examples as follows:

- **Openness** – Instead of openness, the MSWG was shrouded in confidentiality and secrecy. It was not made clear from the start what regulatory framework was considered (RMA s360A to 360 C), nor has it been satisfactorily explained how this untested and thus unknown statutory process would work. Many relevant questions were never answered, NZKS citing commercial sensitivity (for instance, which farms had mortality events, or the 2016 economic figures), or were evaded (biosecurity, current disease status).
- **Tactics** – under the guise of BMP guidelines implementation, the MSWG members were led down the garden path to the intended outcome of “relocation” of farms failing the benthic criterium of ES5. Only the potential sites that MPI/NZKS did not deem suitable were marked as such. Sites that the community members deemed unacceptable one day, were back for consideration the next day. The roadmap shows two routes: the normal RMA plan change route and the RMA aquaculture regulation route. Despite a clear preference for the normal route, that was never going to happen.
- **Fairness** – there was no level playing field. Some members (MPI, NZKS) knew exactly what the intended outcomes were, others (for instance the community representatives) did not. Work on salmon farming water space had started two years ago. Many of the same authors wrote the same reports as for the 2012 BOI process. The same heavily criticised and outdated techniques were employed again (e.g., the continued use of the input/output approach in the economic report for instance), the lack of any independent analysis of the large volume of self serving reports that were being put up as justification for looking at relocation as the primary option or indeed the only option.
- **Timely** – Pressure cooker timelines, seem the latest tool employed by MPI to wear the community representatives out. Bury them under an avalanche of reports (1500 + pages), give them little opportunity to read the reports through time restraints, impose confidentiality clauses to frustrate conferring with experts, and expect them to be experts in everything. And then hope that they will buckle under the pressure.

2 Ignoring the Obvious - Are the Sounds suitable for the expansion in scale and intensity as seemingly proposed ?

The other overarching issue that emerged from a KCSRA perspective was the assumption that the Sounds was a location well suited to Salmon farming. Accordingly, before addressing the so called findings of the MSWG Draft Report we set out what we see as an enlightening exercise, looking at the suitability of the current and proposed sites against NIWA sourced criteria.

From page 2 of the 2013 NIWA report looking at international regulations for best management practices¹:

1. **Farm location** - A number of current finfish farms are situated in sub-optimal locations, which results in poor fish performance and higher environmental impact. Consideration should be given to relocate these farms to more suitable environments (sheltered with high water velocities, >40 m deep and <17 °C).

So as we see it the question then becomes:

Which of the current and / or potential sites fit this description?

Existing Sites	Temp <17 °C	Flow > 10 m/sec	Depth > 40 m	Suitable?
Waihinau	No	No	No	No
Forsyth	No	No	No	No
Otanerau	No	No	No	No
Ruakaka	No	No	No	No
Crail Bay #1	No	No	No	No
Crail Bay #2	No	No	No	No
Clay Point	Yes	Yes	No	No
Te Pangu	Yes	Yes	No	No
Waitata	No	Yes	Yes	No
Richmond	No	Yes	No	No
Ngamahau	Yes	Yes	No	No

Potential Sites	Temp <17 °C	Flow > 10 m/sec	Depth > 40 m	Suitable?
Blowhole North	No	Yes	No	No
Blowhole South	No	Yes	No	No
Horseshoe Bay	No	Yes	No	No
Richmond Sth	No	Yes	No	No
Waitata mid-channel	No	Yes	Yes	No
Tio Point	Yes	Yes	No	No
Te Weka Bay	Yes	Yes	No	No

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

<http://www.mpi.govt.nz/news-resources/publications.aspx>

Motukina	Yes	Yes	No	No
Tipi Bay	Yes	Yes	No	No

If only high flow is suitable, then there is very, very little suitable water space in the Marlborough Sounds for salmon farming, as low flow bays make up most of the water space. High flow areas are the most productive biologically, have the highest biodiversity, are highly valued by the community and wanted for many other purposes than salmon farming. The two high flow areas identified, Waitata and Tory Channel are main Navigational routes, both are gateways into the Marlborough Sounds.

If the water temperature has to be between 12 °C and 17 °C, where 15 °C is the optimum temperature for raising Chinook salmon², then precious little water space is suitable in the Marlborough Sounds.

A third important requirement is sufficient water depth, 40 meters or more according to the NIWA report.

It is thus no surprise to KCSRA to read that NZKS is looking at other New Zealand locations for further expansion of its business³.

3 Solving existing farm issues versus selection of potential new sites

Another significant criticism we have of the MSWG process was that most of the substantive meeting time, most of the time and effort, most of the expert and other reports and material MPI supplied, was put towards or focussed on the "selection" of "potential relocation sites", rather than the stated aim of considering and developing options for existing salmon farms in Marlborough to adopt the BMP guidelines. We briefly touch on aspects of the process leading to this result.

3.1 Options considered for existing salmon farms to adopt the guidelines

The MSWG considered six options to implement the guidelines for the existing salmon farms in Marlborough. These options were:

1. Waste capture
2. Site remediation
3. Improving feed efficiency
4. Reducing stock density
5. Land-based aquaculture
6. Farm relocation

² Page 31 of C. Sim-Smith and A. Forsythe, Comparison of the international regulations and best management practices for marine finfish farming, NIWA, 2013.

³ New Zealand king Salmon Product Disclosure Statement - INITIAL PUBLIC OFFERING OF ORDINARY SHARES IN NEW ZEALAND KING SALMON INVESTMENTS LIMITED - 23 SEPTEMBER 2016

Options 1 to 4 **do not** involve alternative farm sites.

The alternative options of Waste capture or Site remediation to improve the benthic Enrichment Levels were seen as not realistic, because many of the existing sites in the Marlborough Sounds were thought to be too shallow and the technology does not really exist yet.

Improving the feed efficiency has shown promise in other countries and can always be done to complement the other strategies, but is in itself insufficient to reduce the benthic enrichment sufficiently.

Reducing stock density was simply deemed uneconomic. It was not seriously accepted as a viable strategy for BMP implementation on low flow sites, not even for some of the farms or for the unused farms such as the Crail Bay farms or the Forsyth farm, which do not even have a farm structure on the site.

Relocating to a Land-based aquaculture site requires a huge investment and was deemed uneconomic.

Which all too conveniently left the MSWG with “Farm Relocation within the Marlborough Sounds” as the only option for further consideration.

Without wishing to appear cynical, at the same time we cannot ignore the implication, that this outcome has much to do with the six farm sites that NZKS "missed out" on in the BOI inquiry process.

In conclusion we are, reluctantly, of the view that whilst ostensibly the MSWG (see the agreed aims of the T o R) was convened to advice on implementation of Best Management Practice Guidelines at existing NZKS FARM sites, this turned out not to be the case in practice.

Nevertheless we think it highly appropriate to make some quick comments as to existing farms and the MSWG Draft Report.

3.2 Existing Farms and Reducing Stock Density

2015 Compliance status of low flow sites and BMP guidelines benthic		
Existing Sites	BMP benthic compliant	Comment
Otanerau	No	Fallowing, reduced stocking density needed
Ruakaka	No	Fallowing, reduced stocking density needed
Waihinau	Yes	Fallowed; reduced stocking density needed
Forsyth	No	Fallowed, no farm on site
Crail Bay #1	Yes	Not farmed since acquisition in 2011; no farm
Crail Bay #2	Yes	Not farmed since acquisition in 2011 no farm

The two Crail Bay sites should be eliminated from the list of six low flow farms under consideration for reduction of stock density as they have no stock.

The table below, taken from the MSWG Draft Report (page 7) raises issues within KCSRA and we record those in the table (red type face).

Reducing stock density	
<p>Nutrient enrichment of the seabed is the direct result of deposition of uneaten feed and fish faeces. Reducing stock density within cages reduces the amount of feed required, and hence leads to an eventual reduction in seabed enrichment.</p> <p>Reducing stock density to appropriate levels would likely have a significant impact on fish production and economic farm viability. NZKS advise that reducing stock density at the six low-flow farms will lead to a significant loss in both economic return and jobs.</p>	<p>SWG views:</p> <p>The SWG generally support reducing stock density, but recognise that this would not fully resolve the environmental, fish health, and biosecurity issues at low-flow sites. The SWG also acknowledge that this is not an economically viable option for NZKS, and would likely cause significant negative effects including job losses [Further information and discussion required on economic and environmental viability of these sites if they are to achieve BMP guidelines].</p> <p>However, some SWG members believe this option needs to be canvassed further.</p> <p>Some MSWG members believe this is the ONLY option that needs to be canvassed further.</p> <p>Reducing stock density at 3 low-flow farms will lead to some loss in economic return as these farms account for 20% of production in 2015. But with the 3 new BOI farms increasing production, the capacity loss will not be problematic.</p>

In terms of the comment *"The SWG generally support reducing stock density, but recognise that this would not fully resolve the environmental, fish health, and biosecurity issues at low-flow sites."* KCSRA are prepared to concede that this may well be the case, but relocation will not fix it either. Further the issues at these sites are not limited to or arise solely from low flow status but also reflect other management failings for example:

- Environmental – farming within the environmental limits for these low flow farm sites should have happened years ago. Lack of regulations allowed NZKS to go for short term economic gain at the expense of the receiving marine environment.
- Fish health – Lack of regulations meant that NZKS did NOT follow Best Management Practices, compromising fish health in the long run, as it led to the presence of salmon pathogens in a farm.
- Biosecurity - NOT following Best Management Practices for biosecurity led to the spread of the salmon pathogens to ALL the NZKS salmon farms in the Marlborough Sounds.

In terms of the comment *"The SWG also acknowledge that this is not an economically viable option for NZKS, and would likely cause significant negative effects including job losses."* KCSRA are not willing to take at face value the NZKS information, such as what is 'economic' to do and what is not; the Economic report grossly over-states economic numbers produced using a methodology that even the recent MFA's economic report rubbishes.

It is misleading to put forward gross economic numbers and label them as ‘value add’ when they fail to take any account of the opportunity cost of the factors of production that are employed. In a cost-benefit analysis such as this the only relevant ‘value add’ to New Zealand is the difference between what the capital and employees make from working for NZKS and what that capital and those employees would make were they engaged elsewhere in the economy without the environmental cost. The actual net loss to New Zealand of adopting BMP at the existing sites will only be a fraction of the \$7.4M that is calculated under the misleading input-output PwC model.

3.3 Existing Farms and Farm relocation

Farm relocation	
<p>Relocating existing salmon farms to high-flow sites if appropriate can lead to a range of ecological and economic benefits. Relocation can reduce ecological impacts on the seabed and water column, and will enable farms to comply with the guidelines.</p> <p>Moving farms to high-flow sites can reduce seabed and water quality effects, improve fish health, resilience and husbandry, improve biosecurity management, and enable better monitoring and adaptive management, and thus may be more acceptable to the community than existing locations.</p>	<p>SWG views:</p> <p>The majority of the SWG supports this option as a short-medium term solution.</p> <p>Certain members generally agree that shifting existing farms to high-flow sites enables NZKS to comply with the guidelines within an acceptable timeframe, while remaining operationally and economically viable.</p> <p>Members agree that relocation must not lead to an increase in surface space nor in increase of Maximum feed discharges and must lead to a gain in social, cultural, and environmental outcomes.</p> <p>The members of the MSWG who do not support this option have the view that a full analysis of the technical reports has not been possible, options on existing farms has not received sufficient attention and there have been constraints for the MSWG to engage with external independent experts to assist with preparation and analysis on the technical matters. They have a lack of confidence that information and options presented has been adequately tested.</p>

In terms of the comment " *The majority of the SWG supports this option as a short-medium term solution.*"

KCSRA wishes to record that the concept of a majority as stated in the MSWG Draft Report is not correct! In saying this we assume the significant number of MPI staff in various roles at each meeting were not seen as voting representatives! Again at one meeting we were required to list and rank all of the sites, but not on the basis that we had accepted a site as appropriate, we merely ranked them as acceptable, maybe acceptable, unacceptable. We hope that has not now been construed as a majority exercise? In any event the number of unacceptable, maybe acceptable and acceptable votes per site, was counted. Three stood out as unacceptable for the community representatives, but at the next meeting they were back on the list of sites under consideration.

In our view NO formal count was undertaken, or a vote by way of a show of hands to substantiate a claim of a majority view.

In the final analysis we are firmly of the view that failing to meet resource consent conditions or BMP standards, does not give NZKS an entitlement to an alternative site. Despite repeated invitations from community representatives for a principled case or basis for including alternative sites as a BMP solution, this was never made out.

3.4 Biosecurity and Disease Issues

Attached to the KCSRA note to the MSWG dated 1 August was a KCSRA research paper on certain reported unusual mortality events in NZKS Marlborough Sounds farm sites between 2012 and 2015. These and other events have led to the issuing of a Controlled Area Notice by MPI Biosecurity in April 2016. We do not intend to traverse this ground again other than to note that the long term outcome is the appearance of two bacterial disease agents, one a Rickettsia-like organism, the other Tenacibaculum maritimum.

This development in our view, further underlines the question around the suitability of the Sounds for scaled up, intensive and expanded salmon farm operations, that MPI and NZKS are clearly advocating for.

In passing we also note an extract from page 2 (executive summary) of the 2013 NIWA document:

5. Fish health management - Where infectious disease risk can be demonstrated, single-year class production should be carried out at all sites with a short fallow period (1–3 months) between production cycles to limit disease transmission. Sites within close proximity of one another should stock the same year class.

The BMP guidelines for biosecurity is deficient in this respect. Neither rotational fallowing, nor single year class farming per AMA (aquaculture management area) are required. NZKS does not follow a regime of single year class farming, not in the low flow farms nor in the high flow farms. This is a significant salmon health risk. When bacterial pathogens are present in the environment, it is shown that short term fallowing is often enough to remove the pathogens.

4 Reaction to The MSWG Draft Report Recommendations as to suitable sites

The MSWG Draft Report at page 44 makes some recommendations for moving forward with certain proposed new sites - namely -

"The SWG:

Notes that six existing low flow salmon farms are unlikely to comply with the guidelines under existing stock densities.

Notes the considerable comprehensive research available to inform the site relocation project.

Recommends that the following six potential sites are considered as part of the proposed upcoming public consultation process on site relocation:

- Richmond Bay south (#106)
- Horseshoe Bay (#124)
- Tio Point (#156)
- Blowhole north (#34)

- *Blowhole south (#122)*
- *Mid-channel (#125)."*

In order to put our strong opposition to these notes and recommendations in context, it seems appropriate to flesh out the process that the authors of the MSWG Draft Report seemingly rely on in putting up these recommendations.

The SWG used a three-tiered approach to assess potential sites for salmon farm relocation.

- Tier 1 – Worthy of further consideration.
Site is appropriate to proceed for consultation to seek community input.
- Tier 2 – Significant questions remain.
Site has significant weaknesses, uncertainties, risks and threats as a potential relocation site, but is appropriate to proceed for consultation to seek community input.
- Tier 3 – Eliminated sites.
Site has highly significant weaknesses, uncertainties, risks and threats as a potential relocation sites and should not proceed for consultation.

The Tier 3 sites, all in Tory channel, were eliminated even before the Tory channel site visit on 10 August. The three Tier outcome above seems to have been based on a prioritisation exercise done on 9 September. From KCSRA meeting notes it seems the then facilitator asked each group (KCSRA, SAG, GOS, NZKS, TE ATIAWA, AQNZ) to rank each site from 5 options:

Site	Acceptable	Unacceptable	Might be acceptable	Do not know	Significant questions remain	Result
Blowhole Pt N	1	2	2	0	2	Unclear
Blowhole Pt S	1	2	2	0	2	Unclear
Mid Waitata	1	1	1	0	4	Unclear
Richmond Sth	1	1	4	0	0	maybe
Horseshoe Bay	1	0	5	0	2	maybe
Te Weka Bay	0	5	0	0	1	NO
Tio Point	2	0	0	1	3	maybe
Motukina	0	4	0	0	2	NO
Tipi Bay	2	4	0	0	0	NO

In the exercise, the stickers were marked as: “acceptable”, “might be acceptable” , “unacceptable” and “do not know”. The stakeholder groups had to grade each site with one of the four stickers. In addition, it was possible to add a “Significant questions remain” sticker. In the list above the

“Might be acceptable” has been added to the “acceptable” stickers. Then subtract the “unacceptable” and hey presto, the 3 groups appear. (Blow N 1, Blow S 1, Mid W 1) this is Tier 2. (Rich S 4, Hor B 6, Tio 2) this is Tier 1. (Weka -5, Motu -4, Tipi -2) this is Tier 3. “Significant questions remain” was ignored. This achieved ranking was in our view a set up in order to achieve the desired outcome of 6 sites.

The reality is that Tier 2 sites were **effectively eliminated** under this process as they were found to be “unacceptable” with too many significant issues and questions unanswered. Tier 2 sites should not be considered any further. They are unnecessarily provocative and will only aggravate and antagonise the community. These are the three sites in the Waitata Reach nearest to the entrance into the Pelorus Sound. The whole of the Waitata Reach is valued for its high natural character, it has been zoned CMZ1 for very good reasons. The Waitata Reach cumulative threshold for natural character and landscape modification has already been met with the BoI farms.

The KCSRA representatives **DO NOT** support the recommendation for Tier 2 sites.

Even with the Tier 1 sites “Significant questions remain”.

By way of example for the Richmond South and Horseshoe Bay sites:

- The Waitata Reach cumulative threshold for natural character and landscape modification has already been met with the two BoI farms.
- Richmond and Horseshoe Bay are valued for the recreational fishing they offer. There are scallops, it is a known blue cod area.
- Both sites are very close to Maud island, which is a bird sanctuary.

5 KCSRA alternative notes and recommendations

KCSRA believe a more realistic and supportable set of notes and recommendations arising from the MSWG would be along the following lines;

The MSWG:

Notes that it was unfortunate that the agreed terms of reference with its aims of improving management practices in existing NZKS farms was pushed to one side by MPI in favour of focussing on assessing alternative sites.

Notes that it was most unfortunate that much of the MPI supplied expert reports and material was sourced from consultants with a history of assisting/advocating for NZKS at the likes of the 2012 Board of Inquiry. This aspect was further compounded by the absence of independent expert review in a number of key areas that seriously weakened the likelihood of MPI achieving its desire to have the MSWG agree to a set of farm relocation sites.

Notes that the large volume of material, often supplied at the last minute but with the expectation that MSWG members would nevertheless be able to provide meaningful comment made for an unhelpful and time pressured environment that was not conducive to supporting positive outcomes.

Notes that there is no substantive case for putting forward the three Tier 2 proposed sites and **Recommends** that these be dropped out of any proposed public consultation process.

Notes that the MSWG process raised serious legal questions as to the wisdom of including the two Tier 1 sites located in the Waitata reach area which MPI have failed to address and **Recommends** that these should be comprehensively addressed and discussed before being put up as potential relocation sites in any proposed public consultation.

Notes that the two Tier 1 Waitata Reach sites raise substantive issues for public and commercial stakeholders (proximity to scalloping and fishing areas) and **Recommends** that these be further investigated and discussed before being put up as potential relocation sites in any proposed public consultation.

Notes the lack of substantive discussion as to how existing NZKS farm sites could be managed on a more sustainable basis in line with BMP guidelines and **Recommends** that NZKS, MPI and MDC with independent experts (such as Professor Black) and other stakeholders be directed to work to achieve this outcome.

For and on behalf of the KCSRA Marine sub committee by the KCSRA MSWG representatives,

Ross Withell

Hanneke Kroon