

Salmon Farm Hearing 8 May 2017.

Introduction

Let me introduce myself.

My husband Joop and I are blue water sailors and sailed our sailboat from the Netherlands to New Zealand, where we arrived at the end of 1994. I have a Masters of Science degree in Electrical Engineering from a Dutch university, which still comes in handy as I maintain the Sounds Community Connect wireless internet.

We lived and worked in Auckland till we retired. Since 2012 we have lived here in the Pelorus Sound and were submitters in the Board of Inquiry process.

In 2015 I wrote a paper with Andrew Caddie of KCSRA on salmon farming mortality in the Marlborough Sounds. I also agreed to become the MPI Biosecurity liaison person for the Kenepuru and Central Sounds Resident's Association (KCSRA).

I have also participated in the Marlborough Salmon Working Group (MSWG) as a community representative for KCSRA.

This plan from the Ministry of Primary Industries, MPI, is a demand for six new salmon farms for King Salmon. It feels like a repeat of the 2012 BOI nightmare of nine new salmon farms for New Zealand King Salmon, although some things have changed since then:

- Seemed 2012 a one off with the dead and dying salmon at Waihinau, about 25% or 125.000 fish, these large salmon mortality events kept happening. Around 15% of **all** King Salmon's salmon died in 2013, again in 2014 and yet again in 2015.
- In 2015 MPI biosecurity, yes the Ministry of Primary Industries is both the promoter and the inspector of aquaculture, well they finally took action and this time they did find two salmon disease causing bacteria, in the dead salmon and also in the salmon from 2012 which they retested. So now we finally know, what contributed if not actually caused the yearly summer mortality events. New Zealand is no longer free of salmon diseases.
- These bacteria have spread to all the other King Salmon's farms, contaminating the Queen Charlotte Sound and Tory Channel as well.
- To prevent these bacteria from spreading to salmon farms outside of the Marlborough Sounds or to the wild salmon, a Controlled Area Notice has been put in place, which restricts the movements of King Salmon's boats and equipment and enforces strict biosecurity rules.

And this is the company that MPI Aquaculture Promotion is helping to expand salmon farming further. King Salmon has been plotting with MPI, how to acquire the six salmon farms in the Sounds that they did not get via the BOI.

The aim of this proposal, dressed up as "salmon-farming relocation", is in fact a massive salmon farming expansion plan, this time mostly in the Waitata Reach of the Pelorus Sound.

Process

The role of the Marlborough salmon working group was “to provide recommendations to implement the Best Management Practice Guidelines” .

The stated 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.

This all sounded good, getting the BMP guidelines finally implemented was a good thing. What we, the community members, were not told at the outset was, that actually the guidelines would not be implemented at the existing farms, but would be part of the consent conditions when a farm was “relocated” to a new location. Was the BOI in comparison an open process, with a clear understanding that King Salmon was after nine new salmon farms, this time the real aim, 6 new salmon farms, was all cloaked in secrecy and confidentiality until slowly, slowly all was revealed and after many questions, the RMA process to be used was disclosed as well.

Nobody of the community representatives had even heard about Section 360A, no wonder as this is another first for the Marlborough Sounds.

Section 360A bypasses the normal process via the Marlborough District Council, it bypasses the Environment Court and allows the Minister of Primary Industries to make regulations to change a regional coastal plan if necessary or desirable for the management of aquaculture activities.

In this case changing the zoning of the current Marlborough Sounds Regional Management plan, to allow for up to 6 new salmon farms. We were sold it was “like for like”, but this is as if for each rotten apple that you hand in and you are handed back five new clean fresh apples. And we, the people of Marlborough have to believe that it is a fair exchange.

The current production of the 6 farms up for relocation can be achieved by just one of the new farms and the grab for six new farms is just plain greed and shows a total disregard for the accumulative effects of so much pollution of the water column as well as the benthic. Large increases of Nitrogen and phosphorus run-off into the NZ rivers and streams are cause for alarm, as it degrades the water quality and is causing loss of biodiversity.

The MDC’s State of the Environment Report from 2015 also reported that:

- The Marlborough Sounds biodiversity is NOT in good shape.
- The issues include: fewer fish, not as many species, serious loss of biogenic habitats, sedimentation in estuaries and biosecurity incursions.

This proposal for a massive expansion of salmon farming mirrors what has happened on the land with the dairy conversion and the intensification of agriculture. It is the last thing that the Marlborough Sounds need.

The community members rejected the three farm locations at the entrance of the Pelorus Sound out of hand, but they were not taken off the list. The community members rejected relocation of unused or never used farms, but that was not accepted either. In turn, King Salmon rejected 3 of the 4 sites in Tory Channel, as they were too small and deemed uneconomical and these sites were immediately deleted from the list.

Do I need to inform you, that the advise report of the working group was written by MPI, that the conclusions are not shared by the community representatives, that the expert reports were often written by the same experts as hired by NZKS for the Board of Inquiry. Some of the reports, the Economic report for instance, were not finished and not available before the advice report was written. The working group was only there for window dressing, to test the waters, to be seemingly consulting with the people of Marlborough. Some experts like Dr. Diggles for the disease risk were not properly briefed and had to rewrite sections of the report. Many reports, like the one written by dr. Diggles were not peer reviewed. The timeframes are all too short, the working group was to digest 2000 pages of reports in a matter of weeks, you must know about that sort of time pressure, having had to read 600 submissions in a month. The drop in sessions had minimal attendance, their appeal minimal.

Window dressing again. The time frames are too short, MPI or MHW on their behalf, is doing a quick job on submissions, instead of a thorough one.

The Advice Panel sounds maybe OK on paper, but you do not make any decisions, you (or is it MPI again?) only write another advice report for the Minister, who does not have to follow any advice and can do as he pleases. I am well aware that whatever effort I have put in to make my views known, will not make the least bit of difference.

The Section 360A route should not be taken, because it denies the people of Marlborough their democratic rights.

Submission statistics, with some remarkable facts.

The Marlborough Salmon relocation report on written comments, produced for MPI by MWH only created an overall picture.

Looking at the Location statistics of where the submitters came from, it was clear to me that the number of submissions coming from the Marlborough Sounds was unbelievably low, with 3 from the Marlborough Sounds and 1 from the Pelorus Sound. Not one submission from the Kenepuru, Mahau Sound or Queen Charlotte Sound, nor any of its bays. I don't know who did the counting, but it does not add up.

I have personally sent in 10 submissions with the following addresses:

Full Address on submission	region	submitters	MWH
Kenepuru Road, RD 2, Picton, Marlborough	Kenepuru	2	0
Sandy Bay Road, RD2, Picton	Sandy Bay	2	0
St. Omer Road, Kenepuru Sound, RD2, Picton	Kenepuru Sound	1	0
Waitaria Bay, Kenepuru	Waitaria Bay or Kenepuru	1	0
Elie Bay Road, Crail Bay, Pelorus Sound	Crail Bay or Pelorus Sound	2	1
Elie Bay Road, Crail Bay, Marlborough Sounds	Crail Bay or Marlborough Sounds	2	3
		10	3

The MWH location Table 3-1 *does however provide an indication of the spread of people interested in the proposal.*

My conclusion is that that claim is false. Even if 3 of the addresses above have been counted as Picton addresses (which is where the mail centre is for the rural delivery, not where they live), it still does not explain why only 3 of the 7 other addresses have been counted. 45 Submissions based on the submission form of the KCSRA website have been sent in, most of them from members living in the Kenepuru and Central Sounds area.

There are no submissions at all from the Queen Charlotte Sound, its Bays or Tory Channel. This is just not credible. Batch owners have not been counted either as interested parties from the Sounds.

This report on written comments only reports the supporting and opposing numbers of submissions, but did not split any of the other tables based on these subgroups, which did not make it very useful when you wanted to know for instance what were the main issues raised in the for and against submissions.

The analysis I did is based on the 595 submissions in the Summary_submission spreadsheet of 13 April 2017.

A few errors were found and corrected in the 20 April version and the 24 April version.

Of the 7 “not stated” submitters who did not state if they were for or against the proposal I found 6 (partly) opposed and 1 neutral (no text in the submission).

About NZKS

Reading through the submissions I found that at least 220 were from NZKS employees. Only a fraction of these indicated Picton or Nelson as location.

In addition 54 businesses with direct links to NZKS put in a submission.

I also found that NZKS employed Bridget Kendrick as the submission facilitator, who organised that submissions were written. (An email from her can be found in the submission of Kernohan engineering (number 0408).)

All 220 NZKS employees support the proposal; they sent in 37% of all submissions and 52% of the supporting submissions.

All 54 Businesses supported NZKS and the proposal; they sent in 9% of all submissions, 12.8% of all supporting submissions.

In total 274 supporting submissions are from NZKS employees or businesses linked to NZKS; they sent in 46% of all submissions, 65% of all supporting submissions.

These 274 submitters all have a vested interest in NZKS. Employees were so worried about job losses, that they had to be reassured by NZKS management I am told.

If these submissions are excluded, then 321 submissions were received, 170 opposing the plan, 151 supporting the plan.

About Wish to be heard

When it comes to “wish to be heard” , which to me says something about engagement, 58 (34%) of the opposing submitters wished to be heard and only 37 (8.7%) of the supporting submitters, as well as the neutral harbourmaster wished to be heard.

The opposing submissions raised on average 7 issues or themes, the supporting submissions only 4 issues.

Opposing: Environmental Concerns (153), Concerns regarding Process (138), Loss of natural Landscape (114), King Shag (103), Cumulative effects (98), Navigational Risks (82) and Impact on Recreation (67).

Supporting: Economic benefits (381), Environmental Benefits (353), Benthic Environment (180), Social Benefits (169), Increased fish health (132), Increased amenity (130), Best Practice / Scientific evidence (129).

Opposing	Raised	Supporting	Raised
Environmental Concerns	153	Economic benefits	381 (107)
Concerns regarding Process	138	Environmental Benefits	353 (79)
Loss of natural Landscape	114	Benthic Environment	180
King Shag	103	Social Benefits	169
Cumulative effects	98	Increased fish health	132 (10)
Navigational Risks	82	Increased amenity	130
Impact on Recreation	67	Best Practice / Scientific evidence	129

What is missing from in the issues / themes list is “jobs”, which was mentioned at least 123 times in the supporting submission summaries and “job security” mentioned 33 times. Another is NZKS employee and NZKS business partner, themes that showed up a lot.

Other missing issues / themes are: high water temperature, algae blooms, expansion of salmon farming, adverse benthic impacts, Board of Inquiry Decision, undemocratic process.

Submission Summary spreadsheet – Inconsistencies in Themes/Issues

Written comments reasons/themes for this submission are:

0493 - Hanneke Kroon– 17 pages long. Issues are – 5 : Concerns regarding the process, 9 : Effects on marine mammals, 11 : Environmental concerns, 41 : Water quality concerns, **6: Cumulative effects, Biosecurity concerns, Fish** 5 Issues in total

What is missing is the numbers and the theme Fish does not exist.

0598 Friends submission – 229 pages long. Issues are – 25 : Loss of natural character/landscapes, 6 : Cumulative effects 2 Issues in total

0485 KCSRA submission – 131 pages long. Issues are – 8: Economic concerns, 11: Environmental concerns, 17: Impacts on nearby scallop beds, 5: Concerns regarding the process, 25: Loss of natural character/landscapes, 23: King Shag, 2: Benthic environment, 41: Water quality concerns, 18: Impacts on recreational users, 29: **Navigational risks, Biosecurity concerns**, 38: Technological 11 Issues in total

0081 NZKS employee submission – half a page. Issues are – 7: Economic benefits, 10: Environmental benefits, 22: Increased health of fish stocks 3 Issues in total

0482 NZKS company – 80 pages long. Issues are – 7: Economic benefits, 10: Environmental benefits, 11: Environmental concerns, 35: Social benefits, 22: Increased health of fish stocks, 6: Cumulative effects, 21: Increased efficiency of farms, 3: Best practice/scientific evidence, 4: Biosecurity concerns, 23: King Shag, 14: Food source/climate change, 27: Natural fish stocks, 9: Effects on marine mammals, 26: Maori values, 36: Social impacts, 1: Assessment of alternatives
16 Issues in total

More errors

0424 – Opposing submitter. Issues are – **5: Concerns regarding the process**, 11: Environmental concerns, 25: Loss of natural character/landscapes, 23: King Shag, 6: Cumulative effects, **5: Concerns regarding the process, Assessment of alternatives, Precautionary approach**, 26: Maori values

0473– Opposing submitter. Issues are – **Fish**, 5: Concerns regarding the process, 11: Environmental concerns, **2: Benthic environment, Biosecurity concerns**, 17: Impacts on nearby scallop beds, 29: Navigational risks, 41: Water quality concerns, 32: Planning/legal framework

NZKS and mussel farming

King Salmon has applied for a new mussel farm. Blowhole Point South must be the most coveted water space in the Pelorus Sound. The same water space is claimed for a salmon farm, a NZKS mussel farm and a Marlborough Aquaculture Limited mussel farm.

Show diagram

NZKS and the alternative facts

New Zealand King Salmon is the world's largest aquaculture producer of King salmon.

Show FAO statistic

Sounds good, but why is it? Why did Canada and Chile stop farming King Salmon.

Possible Reasons: low food conversion rate, sensitive to certain diseases?

Why does NZKS farm king salmon?

NZKS have no choice what salmon to farm, as only king salmon is allowed in New Zealand. In Tasmania they farm Atlantic salmon.

From 2nd half of 2016 report to the stock exchange:

Show mortality graph

Key fish performance metrics were in line with expectations for the period, with feed conversion ratio (FCR) and mortality rate at 1.76x and 4.6% respectively

The FCR is much higher than for Atlantic salmon (FCR 1.2 to 1.4) and the 4.6% mortality rate only applies to the 2nd half of 2016 the winter time when the water temperatures are OK for the salmon. **The overall mortality rate for 2016 is 13.7%.**

From Grant Rosewarne's submission:

There were no further mortality problems with the Waihinu farm in 2016.

Why? Well, there were **NO fish in 2016 in the Waihinu farm**, except a few in November and December 2016.

Where were the fish dying this time, if not in Waihinu and not in Forsyth?

Show 2x graph of feed at Ruakaka

All the mass mortalities happen during summer and beginning of autumn. Could it have something to do with the higher water temperatures, which stresses the salmon who cannot regulate their own body temperature? Is it, because the optimal growth temperature for *Piscirickettsia salmonis* is 15 – 18 °C, which corresponds with water temperatures reported during most disease outbreaks in salmonid culture, according to Dr. Diggles?

Show graph with temperature

Low flow happens all year round, not just in summer. It is water temperature that varies and is highest at the end of summer. It is sustained high water temperature, not Low Flow that correlates with the mass mortalities.

Swap order for relocation farms

Mark Preece NZKS: Crail Bay (2x) > Waihinu > Forsyth > Otanerau > Ruakaka

MPI: Ruakaka > Otanerau > Waihinu > Forsyth > Crail Bay (2x)

King Salmon: First relocate those farms that are not in use, as it gives the biggest economic benefit, which is the only consideration for NZKS and their shareholders.

MPI: First relocate Ruakaka, as its consent expires in 2021 and it cannot be renewed. New farms will have new licence terms, probably between 20 and 35 years. An added bonus.

Community representatives: Do not relocate any of the low flow farms. Instead apply all the Benthic guidelines and farm within the ecological carrying capacity of the site. Unsuitable sites, such as Crail Bay can be used to grow mussels.

The future for the Marlborough Sounds

Imagine that today's Proposal from MPI was for 5 Marine Reserves in the Waitata reach instead of 5 Salmon Farms. Would we still have to discuss the possible negative environmental impacts on the endangered King Shag? These birds do not feed under marine farms, but they might find Marine Reserves excellent feeding grounds. Imagine what a marine reserve can do for the health of the scallop beds, which are in such bad shape at this moment. How it would improve the biodiversity and ecosystems.

There is only one Marine Reserve in the Sounds, Long Island in the Queen Charlotte Sound.

I quote from the Marlborough Sounds Cruising Guide:

The diving and snorkelling here is exceptional with fish, crays and paua ranging in sizes that are considered rare outside of a marine reserve.

I could go on and on about the benefits, but do you know it is going to be a **reality** in another part of New Zealand?

Remember, about a year ago, the government announced plans for two recreational fishing parks, one for the Hauraki Gulf and the other for the Marlborough Sounds.

A year on and the government just announced the follow up plans: for the Hauraki Gulf 13 , yes thirteen, new Marine Protected Areas. And for the Marlborough Sounds: up to 6 new Salmon Farms.

What would the people of Marlborough prefer: 6 Marine Protected Areas or 6 New Salmon Farms.

The advice to the Minister of Primary Industries has to be:

Do not proceed with this Proposal for Salmon Farm Relocation in the Marlborough Sounds!