

# **Statement by Joop Jansen**

## **Salmon farm expansion in the Marlborough Sounds**

### 1. Introduction

My name is Joop Jansen and I am and have been for 12 years a resident of Elie bay, a side bay of Crail bay in the Pelorus Sound. The Sound that will be impacted the most by the proposed salmon farm expansion.

I am also a member of the Kenepuru and Central Sounds Resident Association and have, as an active member of the marine committee, helped prepare several aquaculture submissions (concerning mussel farming) and have represented the Association on 2 hearings. In 2012 I was deeply involved in the Board of Inquiry process concerning the large scale salmon farm expansion by NZKS. Both activities have provided me with a thorough inside of the pros and cons of aquaculture in general and salmon farming in particular

As far as my personal tertiary education is concerned: I have studied Physics at the Technical University of Twente in the Netherlands and as such I am very well trained in how to conduct scientific research and how to interpret research results. As a scientist I am not impressed with the standard of the reports used to defend the proposed expansion of salmon farming in the Sounds. I have not been able to read the whole avalanche of documentation, but the ones I have read (Disease risk, Water column and Landscape) struck me as being produced with a firm eye on the final conclusion, being that salmon farming poses no risk / is not detrimental to the ecology of the Sounds. Without that conclusion the authors probably would not get paid for their effort. I would qualify such reports as pseudo-scientific and sometimes even a disgrace to science. But let me assure you this kind of reporting happens a lot when aquaculture is involved.

### 2. Specific concerns

In the MPI website describing this hearing it is mentioned that the purpose of this hearing is not reiterating what was stated in the submissions, but dwell on other reasons why one should oppose the expansion of salmon farming. And / or criticize the RMA process that this hearing is part of. This makes sense. You have, off course, thoroughly studied all submissions and therefore it must be crystal clear to you that salmon farming in the Marlborough Sounds is not a good proposition. That being the case, leads automatically to the conclusion that any expansion or relocation of salmon farming should not be under taken.

So in this statement I am not going to elaborate on the following subjects:

- 1) The hazard to navigation that the mid-channel farm poses, when they stick to the 'navigation light system' that is currently in use for marine farming in the Sounds. A 'system' that consists mainly of some weak white lights haphazardly placed on a farm.
- 2) The fact that at least part of the salmon feed has to be fish protein, to be able to claim any health benefits associated with salmon consumption. Fish protein that has to be sourced from overseas, contributing to the world wide over fishing problem. By the way, are you aware that a few years ago (in 2013) the Norwegian government put out a warning concerning overindulging on farmed salmon products. Women of child bearing age should not eat farmed salmon more than

twice a week due to potential toxicity. How one can link health benefits to toxicity is beyond me. No such warnings are necessary for wild salmon.

- 3) The heavy pollution of the seabed underneath salmon farms, whether they are in low flow, no flow or fast flow areas, resulting, in the end, in dead zones. And when that has happened, the whole RMA show can start again, because NZKS will want to move it's farms again.
- 4) The plight of the King Shags, an critically endangered bird, unique to the Sounds and casually sacrificed on the altar of misguided economic gain.
- 5) The pollution of the water column will be less obvious as that of the bentic, but it will spread through the whole of the Pelorus Sound (according to NIWA), where it will trigger algal blooms, like it does now in the Queen Charlotte. These might be toxic or not, that part is a game of Russian roulette, but either way it won't make the recreational fishermen and the mussel farmers very happy.
- 6) The degradation of an Outstanding Natural Landscape by plonking a number of ugly unnatural structures right in front of it. And they will be ugly, whatever the company promises and they will be noisy, because salmon need feeding barges every day. Barges with generators and waterblasting equipment for cleaning.

By the way it came to my attention that you have visited the area. In a helicopter. That gives you a nice overview and it is quick, which is good if you have only limited time to spare. But it is not the way that most visitors visit the area. They come in small boats and from sea level a barge and farm obstructing the otherwise limitless horizon of the Pelorus entrance, degrades the view and the landscape and seascape. When this hearing is over (and it almost is), you should perhaps take a day off and sail from Havelock to the Waitata reach on a sunny day. Just to get a feel for the area. So you really know what it is you are advising the minister about.

- 7) Salmon, like humans, are capable of developing diseases. Also like humans the occurrence and spread of disease is more likely when the target species is densely packed together, is subjected to uncomfortable temperatures, is fed a limited and unnatural diet and lives in a polluted environment. NZKS and MPI are still playing down the influence of the Rickettsia bacteria, but over the years it has become clearer and clearer that this pathogen is the main cause of the mass salmon mortalities in 2012, 2013, 2014, 2015 and in 2016. An unusual salmon mortality, by law, has to be reported, but it is up to MPI to do something with this information. Both NZKS and MPI try their damnest to keep all unusual salmon mortality off everybody's radar screen. A case in point is the latest report, which is concerned with the mortality in 2015 (the worst so far) and the subsequent Controlled Area Notice (CAN). This report was draft-ready in October 2016 and has been languishing in peer-reviews and drawers ever since. It is fair to assume the information in the report is so damning that it would have a negative impact on NZKS's bid for salmon farming expansion. Word has it is due for release in a couple of weeks, which coincides nicely with the end of the RMA process. I am quite sure the minister will ignore it.
- 8) Why expand a doomed industry in an already fragile environment like the Pelorus Sound? An environment that is already fragile due to other aquaculture (like mussel farming), forestry run-off and over fishing and is on the verge of collapsing (for more info, see MDC's State of the Environment report 2015, page 150). An industry that is doomed because of a water temperature that exceeds 17 C for several month's each year, stressing the salmon and together with a self polluted environment making them vulnerable to disease resulting in mass mortalities.

Hence NZKS's urgent need to move their farms to cleaner places. A slash and burn way of farming, a primitive practise long since abandoned in the modern world, but not by companies like NZKS. As a country we should not prop up a poorly run company that has no future (remember global warming), but has the means to tip the Sounds environment into the abyss.

### 3. The Process

And with that I have arrived at the meat and bones of my statement: the process, the RMA process, the dance we are performing at the moment. A dance that has to be performed according to the law and for which MPI has written the music and of which the outcome is certain. When the music stops the only chairs left will be occupied by MPI and NZKS and we are all supposed to go home happy that we have been allowed to participate in this democratic process.

A process that was sold to all stakeholders, by MPI, as open and unbiased, but it was, from the start anything but. Half way through the workgroup stage it was clear to all participants that years of preparation by MPI and NZKS had gone into it. And because of this long preparation they were able to confront the workgroup members with thousands of pages of reports. Written by so called experts and full of specialist jargon. Within the tight timeframe it was only possible to read and understand a fraction. MPI kept maintaining that they were just an independent facilitator of the discussion, but from the reports it was clear they were in favour of a massive expansion of salmon farming in the Sounds.

All 3 reports I have read (more or less) and tried to make sense of were obviously written with the end conclusion firmly in mind. An end conclusion that should show that salmon farming expansion is not a problem. In a proper scientific report you are supposed to investigate the facts, interpret them and then draw conclusions. Not the other way around: formulate your conclusion and then manipulate the facts so the suit your need.

As an example I would like to present the report on salmon disease by dr Diggles. He gives lots of facts, adds even more references to show how scientific everything is and then at the end he produces a number of risk assessment diagrams, without any references at all and which are deeply flawed. It would take hours and a few experts to point out all the flaws and come up with something better, but in all diagrams: a) the median is missing, b) the diagrams are non linear and are used in a linear way, c) environmental risk and economic risk are mixed together resulting in a nonsensical structure. These mistakes make the whole risk assessment meaningless and without that this report ends up without any useful conclusion.

Another example is the NIWA water column report. This report processes all feed and salmon waste data, supplied by NZKS. The data is run through the NIWA biophysical model which shows where the salmon pollution ends up in the Pelorus. The authors draw very few conclusions from the results, so I cannot fault them on that, but it strongly diminishes the value of the report.

What makes the value even less is the fact that the input data, supplied by NZKS, is suspect. For instance: look at this picture. These plastic rings are the Crail bay salmon farms. You might think this is the Waitata reach and, ahead of schedule, the farms have already been relocated. Or is NZKS having a try out of raising salmon on shore? No, these farms have simply been dumped on the beach in a remote corner of Clova bay and have been there since 2015 at least. A very sloppy way of disposing of unwanted farms. But wait, there is more. According to the feed data, supplied by NZKS, the Crail bay

farms are going to receive 1600 ton of salmon feed in 2017 and 2018! That will make a nice heap on the foreshore and the bird, rats and mice will have a feast. I guess they must have been feeding their salmon here in 2015 and 2016 as well. Easy to do: you can just dump it with a truck, no need of a barge.

My overall opinion of the RMA process using the 360 regulation is very negative. Looking back I would characterise the board of inquiry process in 2012 as a farce in which the central government had absolute the upper hand in determining the outcome, but at least there were serious discussions and the experts could be cross-examined.

The process we are in now goes beyond a farce, it is a joke, a sick joke. Over one million dollar of taxpayer money has been wasted on a process that has a pre determined outcome (determined by MPI and the minister). The public has no say what so ever. Any opposition will be and has been (in the working group) pushed aside and even if, pro forma, some of the critique finds its way in the final advise to the minister, he can simply ignore it. Because it is only an advise, nothing more.

Thousands of hours of unpaid work by alarmed citizens will disappear into the black hole of this advise, never to be seen again. All our arguments to save what's left of the ecology of the Sounds and to defend the marine environment are going to be trumped by very dubious short term economic gain. The government, equipped with the largest blinkers possible, only have eye for their goal of 1 billion dollar turnover by aquaculture by 2025. What happens after that date, they don't seem to care.

These politicians seem to be willing to take the risk of a total collapse of the Sounds marine ecology. We, the Sounds residents, are not willing to take that risk. And that's the only reason I am participating in this joke of a democratic process. My influence on the outcome will be zero, I realise that, but there is always the judicial review, following the unavoidable executive order of the minister. That review will put the date that the expansion will be set in concrete past the date of the general election. And when the people of New Zealand are willing to relegate the jokers that are in power now to the opposition benches and we have a change of government, then and only then might the outcome of this process be reversed. If that puts NZKS out of business, so much the better.