

**BOARD OF INQUIRY**

**NEW ZEALAND KING SALMON PROPOSAL**

**ADDITIONAL STATEMENT AND EVIDENCE FROM THE**

**KENEPURU AND CENTRAL SOUNDS  
RESIDENTS  
ASSOCIATION**

**(SUBMITTER NUMBER 0222)**

**24 July 2012**

# **Table Of Contents**

	<b><u>Paragraph</u></b>
• Introduction	1-5
• The Marlborough Sounds resource management plan	6-9
• Environmental	10-23
• Siting	24-27
• Ecological	28-42
• Amenity values	43
• Social Impacts	44-47
• Landscape values	48-54
• Navigational	55-58
• Economics	59-67
• Conclusion	68-69
• Statements of Evidence - Simulation of lighting impact	Schedule A
• Media: Waihinau Salmon Mortality	Schedule B
• Media: Dolphin Mortality	Schedule C
• Official Information Act Request	Schedule D



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**Additional Statement and Evidence from the Kenepuru and Central Sounds Residents Association Inc. ("Association") concerning The New Zealand King Salmon Co. Ltd ("NZKS") Proposal**

## **Introduction**

1. On 26 April, the Association submitted its initial submission in opposition to the NZKS proposal. Pursuant to paragraph 31 of the Board of Inquiry's notice as to procedure dated 6 June, the Association, following further consideration of the NZKS proposal and other sources, wishes to make this additional statement and presentation of evidence.
2. By way of background we note that the Association was established in 1991 and currently represents 170 households whose residents live full or part time in the Kenepuru and Pelorus Sounds. The Association's objects include, among others, to co-ordinate dealings with central government and promote the interests of residents of Kenepuru Sound and adjacent areas and to promote and act in the best interests of residents, ratepayers and persons associated with the Kenepuru and Central Pelorus Sounds area. AGMs of the Association are well attended. The Association's members have chosen to invest in these Sounds for leisure and/or business (for example, tourism, agriculture/forestry and aquaculture). A common philosophy revolves around the maintenance of the sustainability of a uniquely marine environment for the amenity and enjoyment of all.
3. As evidence of the high value our members place on this environment and their concern at what they see as an unsustainable threat to that environment, we attach as Schedule A to this Statement, a number of personal statements collected from a cross section of concerned members. We will refer to this evidence in the following paragraphs as appropriate.

4. The NZKS proposal effectively divides their application for eight new salmon farms into three management areas. The Association is particularly concerned at the impact of the proposed four new farms at the neck of the Pelorus Sound (Waitata, Tapipi, Kaitira and Richmond) and the proposed conversion of an existing aquaculture farm to salmon farming at White Horse Rock. These proposed new salmon farms, together with the existing farms at Waihinu Bay and Forsyth Bay, are referred to as the Waitata Reach Management Area by NZKS. Also of concern are the proposed Papatua and Melville Cove farms in what is referred to by NZKS as the Port Gore Management Area. We have received advice (forwarded to EPA) from NZKS's solicitors that NZKS has cancelled its agreement with Ngati Apa to purchase the Melville resource consent but reserves the right to reopen negotiations with Ngati Apa if Ngati Apa's appeal is successful.
5. In our initial submission we identified nine areas of concern with the NZKS proposal. We supplement and enlarge those concerns under each heading as follows.

### **The Marlborough Sounds Resource Management Plan**

6. **The Marlborough Sounds Resource Management Plan** (referred to herein as 'the Plan'): Whether it be on land or sea, the Sounds' population relies upon zoning plans for their investment decisions. The Association's members therefore have chosen to invest in these Sounds having the confidence of the Plan past, present and future. With the exception only of the White Horse Rock farm, all of the above proposed farms would be located contrary to the Plan. The Association urges this Board of Inquiry to respect the integrity of the Plan as designated by the Marlborough District Council.
7. Evidence of the value local residents place upon the high natural character of the Sounds and the areas targeted by NZKS can be found in Schedule A. The NZKS Proposal targets areas that are located in areas designated Coastal Marine Zone 1 (CMZ1). As we understand it, the activities proposed by the NZKS proposal are currently prohibited activities in CMZ1. The apparent willingness of NZKS to place at risk these values by converting high value public space and environment into an industrial zone for the practice of marginally sustainable and ecologically high risk commercial activities is demonstrably of high concern to residents, as evidenced by Schedule A.
8. The statements in Schedule A are evidence of the increasing concern by residents at the aggressive acquisition of public marine space for more farms. In the last two decades, residents have watched with increasing concern as the likes of Beatrix Bay have been ringed with a near continuous line of aquaculture farms around the coastal margins. The concentration of five new salmon farms in the Waitata Reach is seen as an outright commercially driven assault on the integrity of the CMZ1 designation. The only concern the Association has with the current placement of CMZ1 areas is that they should have been larger, for example by including middle bay areas as well.
9. The Association opposes the NZKS application for amending the Plan and seeking resource consents in what NZKS refers to as the Waitata Reach

Management Area and the Port Gore Management Area. The Association strongly supports the MDC's stance on opposing the applications, to uphold the integrity of the Plan.

## Environmental

10. **Faecal waste:** NZKS state at paragraph 312 of their overview that 20% of the feed inputs will be excreted into the water column and surrounding seabed. Subject to contrary expert advice we take that figure at face value. This process of excretion (discharges in lay terms) is referred to as "enrichment". In our view, based on these figures, NZKS is seeking the right to discharge into what they refer to as "the Pelorus Bay Management Area" 4600 tonnes per annum of untreated fish sewerage. It is our submission that NZKS have not adequately dealt with the significant adverse impact on the environment in a manner that justifies their request for a Plan change and associated Resource Consents to enable them to lawfully pollute the environment.
11. We understand that other submitters have a number of serious concerns with this issue of "enrichment" and the evidence submitted by the NZKS commissioned experts. These submitters, we understand, are providing additional evidence and have engaged experts to give evidence as to the negative environmental impacts of such enrichment. The Association intends to follow that debate closely and supports the stance taken by those submitters.
12. **Diseases:** Anecdotally, the Association has had reports that mortality in growing fish (but not smolt) is expected in the industry. The NZKS Overview Report discusses mortality but gives no detail as to the incidence of such mortality. The NZKS proposal assesses disease risk issues by way of an AEE document prepared by a Dr B Diggles. In our view, a deficiency of this assessment is that it also gives no data as to "normal mortality rates" in the juvenile and adult fish stocks held in the farms nor what causes mortalities. Rather Dr Diggles seems to prefer to concentrate on the risk of transferable disease and the apparent absence of such diseases in New Zealand.
13. In Dr Diggles' paper he seems to place great store on the effectiveness of stocking densities as a disease mitigation strategy. He variously refers to NZKS practices as "operating at reasonable, moderate and conservative" stocking levels. A deficiency of Dr Diggles' paper is that nowhere does he translate these words into actual figures or guidelines. There is no comment from Dr Diggles in the AEE or his evidence in chief as to whether the feed discharge rates sought by NZKS in their Draft Conditions of Resource Consent translate into "reasonable" stocking limits. We would like to **question** Dr Diggles a little further on this and other aspects of his evidence.
14. We **recommend** that if the NZKS proposal is approved the Resource Consent conditions extend to placing a requirement to maintain stocking levels at "moderate and conservative" levels and these levels be quantified and linked to controls on the amounts of fish feed and related products discharged in any given period.

15. **Unexplained surge in salmon mortality:** The recent alarming publicity (see Schedule B of this Statement) given to an outbreak of unusually high salmon mortality at NZKS's Waihinu Bay operation underlines the Association's concerns as to the sustainability of what is being proposed in a relatively concentrated area of marine space. The Association's concern is that the reported surge in what the industry refers to as "morts" is symptomatic of an underlying premise. Namely, the targeted areas are not suitable for large scale concentrated salmon farming operations as proposed by NZKS.
16. In order to get to the bottom of this surge in "morts" and better position the Association to **question** Dr Diggles and NZKS executives both on this event and its ramifications for the NZKS proposal, the Association has made an Official Information Act request. The request is to the Response Section of the Ministry of Primary Industry which we understand has oversight and responsibility for actual/potential adverse biosecurity events such as this event appears to be.
17. **Antibiotics/theraputants:** The surge in salmon morts at Waihinu Bay brings to focus another area of concern to the Association. It is clear from Dr Diggles' paper that mortality outbreaks due to certain types of diseases are often treated by the use of theraputants and other drugs mixed into the salmon feed. Unfortunately Dr Diggles' evidence seems fairly scant in terms of what the drugs might be, their effect on the food chain, and when and in what quantities they are administered. This seems to be a striking oversight compared to the pains at which authorities were keen to allay recent public concerns over gold kiwifruit possibly injected with antibiotics getting into circulation in the food chain. Clearly, this is an area which we would like to **question** Dr Diggles and/or his colleague Mr B Wyebourne (NZKS's fish feed expert).
18. Should the Board determine in favour of NZKS then we submit that the NZKS Resource Consents should carry suitable conditions and notification requirements reflecting the seriousness of this issue.
19. **Biosecurity issues:** As a separate class to the types of diseases covered in Dr Diggles' paper NZKS has assessed biosecurity issues by way of an AEE document prepared by a Mr B Forrest of the Cawthron Institute. Mr Forrest seems at some pains in his paper to suggest (page 18 of his report) that there is no or little correlation between the spread of the invasive sea squirt and the presence or absence of a salmon farm. However, a comparison of his map showing the spread of the sea squirt demonstrates a very high degree of correlation with the presence of existing or past salmon farms. We may wish to **question** Mr Forrest on this and other aspects of his report.
20. **Greywater discharges:** An AEE paper from Mr P Barter of the Cawthron Institute assesses the impact of grey water discharges on the surrounding environment and concludes that it is at worst minor. However, as we understand it, Mr Barter's calculations are based on a discharge of 100 litres per capita per day. So, assuming 9 people on a barge, that equates to approximately 1 cubic metre per day.

21. However, under the Draft Resource Consent conditions, NZKS is seeking the right to discharge up to 500 cubic metres per day from each barge (paragraph 48 of the draft RC). This discrepancy between Mr Barter's assessment and conclusion and the actual discharge volume level sought is exacerbated by the fact that of the 11 chemicals listed by Mr Barter as likely to be part of grey-water discharges, 9 are labelled as hazardous, with 6 of these labelled as being in the "acute aquatic hazard category". Naturally we would like to **question** Mr Barter a little more closely on this discrepancy and the impact it may have on his assessment as to the claimed insignificance of the proposed discharge and its composition.
22. **Noise:** In a remote and pristine environment as the Sounds, noise generated by industrial activities is particularly intrusive and unacceptable as evidenced by statement 4 in Schedule A attached. The suggested acceptable noise levels sought by NZKS seem excessive and should they be permitted to proceed with their proposal we **recommend** they be halved i.e. by measuring the decibel level at 125 metres rather than the suggested 250 metres. Nor should vessels servicing the farms be exempt from the noise limits. NZKS also proposes that a number of noise centres be exempt from even these low standards of compliance. Further elaboration is required from NZKS as to what exactly is the noise level to be expected from the likes of navigational aids or pressure valves. As far as we can ascertain, NZKS does not commit to any special noise dampening materials to be placed around engines, pumps etc. This should be rectified and we would like to **question** NZKS on what measures they propose in terms of the use of sound dampening materials. Subject to independent review, then if the proposal goes ahead, the Resource Consents should stipulate the amount, quantity and type of sound dampening materials to be used and where.
23. **Lighting:** We discuss elsewhere the adverse impacts of the proposed creation of light pools that would be created by the proposed concentration of salmon farms on marine navigation. At this point we stress the concerns of the Association about the industrialisation of this area. These concerns are neatly illustrated by the adverse impact of the proposed lighting programme, (as evidenced by statements 2 and 3 in Schedule A).

## Siting

24. NZKS has clearly and openly ignored the Plan as all but one of the proposed sites are outside the areas designated for marine farming. It also seems to have escaped the attention of NZKS that it is seeking to locate five large salmon farms at the "neck" or entrance to Pelorus Sound, a major navigational and fish migratory channel. Further, NZKS wishes to create a precedent by seeking consent to establish these fish farms on areas adjacent to headlands. This runs contrary to the Association's understanding that over the years it has become accepted the placement of aquaculture operations in headland areas is not appropriate.
25. There is already a restricted/narrow passageway into Pelorus Sound. This is an

area which is very popular with recreational boats for both fishing and scallop gathering. The siting of these farms will reduce the effective free waterway at the Waitata Reach by one third. In a rough sea situation this becomes of critical importance.

26. Further, this passage is used at least twice yearly by migratory fish species such as snapper, kingfish, hapuka and kahawai. The proposed industrial-type density of salmon farms in this narrow bottleneck will concentrate the presence of predator species such as seals, barracouta and sharks. In our view, NZKS has not attempted to assess what we consider will be a significant adverse environmental impact on other fish species using this “predator trap”. See also the section on Ecological issues below. This deficiency in the NZKS proposal is an area on which we would like to **question** NZKS further.
27. NZKS states that it considered other areas for the location of its operations but formed the view the alternatives were unsuitable. In the Association’s view, rather than target these pristine areas by way of a Plan change, we believe NZKS should have given more attention to the research and development of subsea offshore fish farming which is gaining attention and momentum in offshore jurisdictions. (See, for example, “Offshore Aquaculture in the United States: Economic Considerations, Implications and Opportunities. July 2008. US Department of Commerce” and “Appraisal of the opportunity for offshore aquaculture in UK waters. Project report: FC0934. April 2006”.) NZKS seems to have considered only the easy option of sheltered inshore fish farming targeting areas that due to their high environmental values, had been placed off limits.

## Ecological

28. **Encouragement of New Predator Populations:** As we see it the NZKS proposal will, from an ecological point of view, have adverse environmental effects by concentrating the number of predators (seals, sharks and other fish species). The NZKS proposal does not dispute the presence of salmon farms creates colonies of fur seals. Indeed, the NZKS proposal goes on at some length as to how it has developed methods to better protect its salmon from the constant presence of hungry fur seals. There is no assessment by NZKS as to the impact on other fish not so protected! We would like to **question** NZKS further on this apparent oversight.
29. In terms of other predator fish species, tour charter operators regularly visit salmon farm sites to show their clientele fur seals and to catch bait species such as barracouta in close proximity to the salmon farms. (As evidenced by statement 1 of Schedule A). Again, it seems clear that salmon farms also attract sharks. It is common knowledge among residents that a not so amusing pastime for salmon farm staff in earlier times was to encourage feeding frenzies of sharks by regularly dumping morts into the sea. NZKS recently and publically confirmed that in the past, staff at the Waihinu Bay operation did carry out this practice. Whilst we are encouraged by the NZKS assurance that this will not happen going forward, we fear the damage has been done and the proposed concentrations of salmon farms will result in an increased “resident”



shark population.

30. Further, NZKS itself acknowledges that sharks will be attracted to salmon farms because of the large number of “attractive stimuli” generated by salmon farms. Any increase in the number of resident sharks in the Sounds is also of great concern to the large number of residents and visitors who go swimming in the Sounds. In our view the King Salmon application is deficient in that its assessment of environmental effects seems to downplay this very significant adverse environmental impact. Indeed, on page 29, section 71 of Paul Taylor’s evidence in chief, it seems to suggest this is an area requiring extra study and research. The Association concurs and suggests any Resource Consents granted should contain as a condition that NZKS commission independent research on this aspect.
31. **Resident and Migratory Fish:** It is our submission that from the NZKS material alone, it can be established as fact that predatory species such as seals, sharks and barracouta are attracted to salmon farms. The Association’s view is that it should be accepted as fact the NZKS proposal will create significant predator populations at each of the proposed salmon farms. The issues not addressed by the applicant or their experts include the effect on resident fish species, for example blue cod and migratory fish such as snapper, kahawai, kingfish and groper which seasonally enter and exit Pelorus Sound and which would be required to pass through the predatory trap at Waitata Reach to be created by the NZKS proposal.
32. Sounds’ residents understand and value highly the need to have a healthy and sustainable fishery within the Sounds. Accordingly, there is anxiety that the likes of the NZKS proposal with its associated massive discharges of fish feed and fecal waste may impact negatively on the marine food chain. NZKS acknowledge (Taylor and Dempster) that the long term effects of bio-accumulation (within fish) is seldom considered. They note a significant impact of fish farms on wild fish populations may come from waste salmon feed. This may affect the wild fish population in many ways, for example, by changing their reproductive capabilities for better or worse and increasing the contaminants and heavy metals in their flesh. At section 3.4 and 3.11, we note their comments as to the lack of specific information available to assess how the quality et al of wild fish in the vicinity of salmon farms may be affected. We support the Taylor and Dempster recommendations about the need for independent monitoring of key contaminants in wild fish and of waste feed loss. If the proposal goes ahead, NZKS should be required to carry out and report on such monitoring via Resource Consent conditions.
33. **Seabirds:** A unique attribute of the Sounds is the location of a small Australasian gannet colony in Beatrix Bay, close to the Waitata Reach Management Area. This colony is one of only a handful on mainland New Zealand. Clearly the proposed farms are well within feeding range of these magnificent birds. Whilst the NZKS proposal states it has measures in place (an over cover net) to prevent gannets diving in to the pens, there is no discussion from NZKS as to the risk of gannet mortality arising from use of these nets, as evidenced by statement 1 of Schedule A in this respect.

34. All the following proposed salmon farms - Kaitira, Waitata, White Horse Rock, Tapipi, Richmond and Papatua are within the roosting and feeding ground of the rare NZ King Shag (total population est 650). Shags are bottom feeders. They are potentially threatened by salmon farms through entanglement and competition for their preferred food by predatory fish and seals. It is the impact on habitat for feeding that is of great concern. NZKS's proposal maintains that by siting the farms more than 100 metres from King Shag roosting sites it will avoid King Shag mortality. There is no evidence to support this claim. "The impact of salmon farming goes way beyond 100 metres"(R. Schuckard personal communication).
35. We are appalled at NZKS's policy of shooting indigenous black billed gulls which they consider to be a threat to their economic interest.
36. **Dolphins:** Marine mammals are a particularly special part of our Sounds' environment, and so it was with much regret that we read of the six dolphin deaths recorded at salmon farms since 1999. (As evidenced in Schedule C). Of particular concern to Marlborough Sound's residents is the fate of the endangered Hector dolphin which is sighted in the Outer Sounds and listed internationally as a "Species threatened with Extinction". We were concerned at the shift of NZKS's expert, Mr MW Cawthorn in "Marine Mammals and Salmon Farms", from his first submission to his evidence in chief. In particular, the discrepancies between the two.
37. In Mr Cawthorn's initial evidence (Tab.16 Appendix 9) on page 28 he talks about the NZKS staff since 2006 being required to log any dolphins or whales in the immediate vicinity of the farms and that:

*"...there has never been any reported incident in which either of these animals has collided with, become caught or entangled in a farm."*

However, in Mr Cawthorn's evidence in chief, he now appears to be aware of the dolphin mortalities referred to above and enumerates these on page 3. Nevertheless, he still seems confident that notwithstanding this shift in his position that dolphin mortalities related to salmon farms will be few and far between. The Association is not comforted by this and is of the view that any increase in dolphin mortalities is unacceptable. We may wish to **question** Mr Cawthorn further on this issue.

38. Further reading on the internet indicates there has been a considerable amount of research done around salmon farms overseas and mussel farms here in NZ, showing aquaculture can negatively impact on dolphins and seals in various ways – through farm operational noise, vessel strikes, entanglement in nets, exclusion from traditional feeding zones, and (conversely) by creating artificial feeding areas where dolphins and seals congregate to feed on either the farm's waste feed, morts, and/or bait fish attracted to the area. The biggest issue seems to be with the predator nets - the size of the mesh and maintaining adequate tension on the nets; and that the most difficult nets to maintain are those on the polar circle cages (which are proposed for the Papatua site). On page 33

Mr Cawthorn mentions the problems encountered with the polar circle nets in Australia and that: *“high incidences of both seal attacks and dolphin entanglements have occurred.”*

39. King Salmon’s proposed Papatua site is right on the edge of Cook Strait and is exposed to violent weather conditions on a regular basis. Therefore we believe the question must be asked: Can they adequately maintain this farm and its protective nets in severe weather events? Can NZKS categorically assure the Board that no more dolphins will be caught in any of its cages?

40. We also note concerns at the possible impacts of underwater lighting on salmon farms, as Mr Cawthorn’s report (page 30) states, *“The lighting of salmon pens at night is more likely to aid rather than hinder foraging around cages by seals and dolphins, however currently there is little to no research available on this subject.”*

41. We believe any large expansion of salmon farming in the Sounds could have further severe impacts on our unique marine mammals. We would like to question Mr Cawthorn on aspects of his evidence discussed above.

42. The Association concludes that with respect to possible adverse ecological impacts there should be zero tolerance as to any doubt as once the farms are established, the negative impact is permanent.

## **Amenity Values**

43. A constant theme of the concerns raised by the Association and its members has been the potential impact of the NZKS proposal on the recreational and other activities currently carried out. The proposed concentration of salmon farms will only, in our view, exacerbate these negative impacts. Accordingly, we strongly endorse the words of the NZKS expert D Bamford, who in commenting on tourism and recreation effects at point 57 of his statement of evidence notes “Marine farms have the potential to affect recreational and tourism activity in a number of ways”. At point 57.4 Mr Bamford notes, and we endorse these sentiments, “The effects of marine farms also need to be assessed on a cumulative basis. While one marine farm may have no effect on recreation in a specific area, several marine farms in the vicinity would increase the footprint and operational activity and may begin to affect an areas’ (sic) natural character and the amenity values of users”.

## **Social Impacts**

44. **Accommodation Barges:** Staff living permanently at salmon farm sites around the Sounds will increase the impact of this activity in the area, in contrast to mussel farms which are only serviced sporadically. In effect these barges will add small “communities” into some of the remotest, pristine areas of our Sounds and the Board should inquire as to how these “communities” would operate. The Taylor Baines & Associates “Social Impact Assessment” paper of March 2012 includes a Draft Social Impact Management Plan (Appendix 7), which attempts to address some of our concerns. However, the

assessment is deficient in that it does not spell out clear policies for their staff (particularly in their time off) such as “No Firearms”, or “No Trespassing on Private Property” or “No feeding of salmon farms to sharks”.

45. NZKS also suggests, on page 86, that NZKS will “identify...and establish...contact with property landowners within 2km of each proposed site.” We submit this is an insufficient distance as in the outer Sounds, all property owners within a radius of at least 10kms will be very concerned about the day to day management of the salmon farm and conduct of the permanent resident staff and should be included in such consultation. Such a limited proposed consultation range implies Sounds’ property owners are a static group who do not boat around or fish or enjoy other recreational activities throughout their area. This is demonstrably not true as evidenced by Schedule A.

46. **Other Impacts on Residents:** Lighting, noise, odours and visual impacts could all become new issues for landowners in the Sounds who might suddenly have a new element, which they quite reasonably would never have anticipated in the CMZ1, added into their local environment. Residents experienced in living in the Sounds know prevailing wind and weather conditions and time of the day all have a considerable impact on how significant the effects from lighting, noise and odours etc can be from earlier attempts at salmon farming (as evidenced by statement 4 of Schedule A). No landowner would choose to have a salmon farm in front of their residence.

47. The NZKS proposal is at odds with policies 4 - Integration, 6 - Activities in the Coastal environment and 18 - Public open space in the NZ Coastal Policy Statement 2010. Rather these policies all support our submission on the need to preserve the integrity of the coastal marine area. On that basis alone the NZKS proposal should be rejected.

## **Landscape Values**

48. **Structures:** The structures associated with aquaculture have significant negative impacts on the land and seascape of our coastal environment. The areas of the outer Sounds throughout Waitata Reach and Port Gore where many of the proposed salmon farms are sought to be sited, are special places and deserving of their CMZ1 status in the Plan. The areas are special because they are large and stunningly beautiful land and seascapes with:

- Prominent headlands and islands many of which are also DOC Reserves,
- Many marine mammals and seabirds,
- The cleanest, most unpolluted water in the Sounds,
- Contrasting areas of virgin coastal forests with a few small remnant pockets of clear farmlands, and
- Proximity to Cook Strait and the open sea.

49. There are many bays which are largely uninhabited and undeveloped wilderness areas with few or no lights, man-made structures, noise, roads, or indeed power/telephone-lines. This sharply contrasts with the highly

developed inner Sounds areas. The areas subject to the NZKS proposal include some of the most remote and hardest to access areas left in the Sounds. They also include many of the best fishing/diving/shell-fish gathering spots in the Sounds, and so are extremely popular with recreational fisher-people. These attributes will all be significantly degraded if the NZKS proposal goes ahead.

**50. Outstanding Natural Landscape Values:** The proposed salmon farms at Kaitira and Papatua would lie adjacent to areas identified as having Outstanding Landscape Values in the Plan. Of relevance to the Outstanding Natural landscape issue, is the recent Environment Court decision re Port Gore (No. 2012 NZ EnvC 72) where the Court required three marine farms to be removed due to their adverse effects on the natural character of that coastline. Here all the Association and its members are seeking is that the integrity of the Plan be maintained.

**51. Landscape Sensitivity:** There will be significant cumulative effects on the land/seascape in the “bottleneck area” of four proposed salmon farms in the Waitata Reach Management area. Indeed, Boffa Miskell, who prepared the “Natural Character, Landscape & Visual Amenity Effects” for NZKS, backs this up at page 96 ....”*Natural character of wider sea-scape in Waitata Reach is considered high throughout.*”

*52. And again, “The three proposed salmon farm sites on the south-east side of the Waitata Reach are located in a remoter, more open and generally less modified coastal environment and where landscape and visual sensitivity is greater, thereby amplifying the magnitude of effect, resulting in an increase in level of potential significance of proposals in this coastal environment.”*

**53. NZ Coastal Policy Statement:** The New Zealand Coastal Policy Statement 2010 includes several objectives and policies that the NZKS proposal cuts across. These include:

- Objective 2 – To preserve the natural character of the coastal environment and protect natural features and landscape values,
- Policy 6 – Activities in the coastal environment, (1) part (h).
- Policies 13, 14 and 15, which are about preserving, restoring and protecting natural character, features and landscapes.

**54.** We submit that NZKS has not made a convincing argument for these objectives and policies to be set aside.

## **Navigational**

**55.** Some of the proposed salmon farms in the application are basically extensions of the coastline. In effect, this extends the speed restrictions on boats to 200 metres from the outer edge of the salmon farm as opposed to 200 metres from the coastline. In the case of the Waitata and Kaitira proposed farms this would reduce the amount of unrestricted navigable water between these points by 50%, i.e. down to about 1,000 metres.

56. The siting of many of the farms will make boating difficult and in the case of smaller vessels possibly even dangerous. The public should have the right as they do now to be able to boat from point to point in public marine space. This proposal by NZKS would seriously compromise this.

57. Based on the Association's analysis of the NZKS proposal, it seems that where the light ranges overlap a navigator will see up to 25 lights, each flashing 5 times every 20 seconds right in the centre of the Waitata Reach channel. We are seriously concerned this lighting effect may cause confusion to boat traffic as to what are headlands and where the shoreline is. This point and a graphic depiction of the likely lighting pools which will be created is evidenced in statement 3 of Schedule A attached.

58. In summary, our concerns from a navigation aspect are that the proposed siting of the farms will not allow clear boating passage from land point to land point and the lighting scheme proposed will create confusion at night or in times of low visibility.

## Economics

59. Attached to the Association's original submission was an appendix from one of our members setting out various comments on the NZKS AEE covering economic matters in the context of the benefits or otherwise of the NZKS proposal. The economic consultant engaged by NZKS (J Fairgray) in his evidence in chief did the Association the courtesy of responding to some of the points made in our submission. After due consideration, the Association remains unconvinced that the economic benefits are as significant as suggested and certainly do not justify the attack on the integrity of the Plan in the targeted high value environment in the manner requested by NZKS. We make some additional comments as follows:

**60. Economic benefits minor:** There have been some suggestions by NZKS that the proposal will generate significant economic benefits to the region. One of these so-called benefits is increased employment in the region. That this is overstated is clear from Mr Fairgray's evidence in chief. On page 53, Mr Fairgray says "The additional *direct employment* generated by the NZKS proposed development...over the 2011-2021 period...represents an addition of 0.06% per year to the total employment in the Northern South Island. So represents **a very small change** at the district and regional level". Further in the same paragraph, Mr Fairgray states that "The additional *total employment* generated would see an increase...representing an addition of 0.18% per year over the period 2011-2021 to total employment in the northern South Island, so would be **a very small change** in the regional context".

**61. Confidential information:** The Association does not find it credible that on the one hand NZKS wants a Plan change so it can use for its own profit public marine space, claim economic benefits and a project of national significance but prevent a transparent review of its claims on the basis that the input data/information is based on un-auditable confidential information. We believe Mr Fairgray still does not properly address this point and accordingly his conclusions require further questioning.

**62. Economic rent:** In New Zealand, at law, the Crown is the owner of petroleum and certain other minerals. The Crown imposes a royalty regime on petroleum discovered and subsequently extracted. Here, the Crown “owns” the targeted marine space. As far as we can ascertain, NZKS proposes that it uses this asset for free. This seems an anomaly and we would like to question Mr Fairgray on the impact on the economic viability should a commercial rent be charged and how that might be calculated.

**63. Value-add:** In our initial submission, the Association took issue with Mr Fairgray’s advancing the argument that the project had a potential \$1bn in value-add by 2036. As we understand it, much of the claimed value-add comes from the likes of wages or incomes (marginal GDP) that might be earned by New Zealanders as a result of the NZKS proposal going to plan. Our view is that these wages and incomes are not consideration for the appropriation of the targeted environment to be put at risk by NZKS. The wages and incomes are simply consideration to New Zealanders for services provided to NZKS.

**64. Opportunity costs/Externalities:** Mr Fairgray acknowledges there are potential opportunity costs (also known as externalities) from salmon farming (page 18) which may occur from limiting the opportunity for social and leisure activities. But because of the difficulty of measuring these externalities (since there is no price on them) he does not attempt to quantify them. The Association has sought to articulate some of these adverse social and recreational impacts as evidenced by Schedule A (attached).

**65. Model assumptions:** As evidenced by the likes of statement 4, Schedule A, Sounds’ residents have seen a number of salmon farm operations come and go as optimistic financial scenarios do not play out. Given the public space and high value environment involved, the Association does not believe that it is appropriate to leave it to market forces to see if NZKS has in fact got it right in terms of this proposal. It is firstly residents and then New Zealanders as a whole who are ultimately left with the mess. The financial analysis and economic model presented by NZKS in terms of the economic case makes certain assumptions. We would like to question Mr Fairgray on some of these such as the choice of discount rate and whether it fairly reflects the high risk nature of this project and if adjusted accordingly, the impact on the economic feasibility of the NZKS proposal.

**66. Area affected by salmon farming:** There is comment in the evidence in chief provided by Mr Fairgray that the amount of sea-space used by salmon farming is “...0.12% of the approximate 150,000 ha of seabed that exists within the Marlborough Sounds” (page 63) and as this represents such a small surface and seabed area relative to the total, then any impact will be minor. However, the Association and many other submitters have been at pains to point out that the actual impact is not limited to the physical area of the salmon farm cages but rather spreads much wider than that as water ebbs and flows and tides spread contaminants, predator populations become established and so the chain of impact spreads.

67. **Mis-statements to the Minister:** The EPA is required to assess various criteria when advising the Minister as to if the NZKS proposal should go forward as a proposal of national significance. Naturally, in a proposal such as this, the EPA would be expected to provide comments on whether the economic benefits are minor or significant. Looking at the relevant section of the EPA advice to the Minister, the Association is concerned that the EPA may have misunderstood the economic claims of NZKS and significantly mis-stated the economic benefits to the Minister. The Association has decided to make an Official Information Act request of the EPA to get to the bottom of this issue. At the time of writing, we had not received the response and attach as Schedule D a copy of the OIA request. When we receive that response, we may wish to question Mr Fairgray further on this aspect.

## Conclusion

68. The Association wishes to record its view that, given the enormity of what is being proposed by NZKS, the process has been and is still too rushed and there has been inadequate consultation with those most directly affected by these proposals – residents of the Sounds. NZKS claims’ that it has carried out adequate consultation with the likes of the Association, rings hollow as evidenced by statement 1 of Schedule A and its account of the NZKS consultation that took place at the Association’s last AGM.

69. The Association is strongly of the view that, based on its review of the NZKS proposal, the benefits are minimal and the adverse impacts significant.

Pat Williams  
President  
Kenepuru and Central Sounds Residents Association

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### Kenepuru & Central Sounds Residents Association Inc.

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## **SCHEDULE A**

### **Statements from Kenepuru & Central Sounds Residents Association members evidencing the Association's concerns**

1. Pat Williams (adverse impacts on natural character, site selection, consultation and ecological impact)
2. Warren Wood (adverse navigational impacts)
3. Colin Roper (adverse lighting impacts, including diagram)
4. Kristen Gerard (adverse sustainability risks, adverse social impacts, encouragement of predators, adverse visual/landscape impacts)
5. Wayne Saville (adverse impacts on natural character)
6. Adrian Harvey (adverse impacts)

**Statement from Pat Williams on involvement with the Marlborough Sounds and why I am opposed to the King Salmon Applications.**  
**July 2012**

Upon graduating Bachelor Agricultural Science at Massey I followed a career in Research and Development within the Agricultural Chemicals Industry. This background enables me to better interpret the scientific references quoted in the King Salmon application.

I acknowledge I am not a marine scientist and respect that in many cases, the subject of their investigations is a wild species living in a natural environment - pelagic fish, seabirds etc - thus finite results cannot be expected from their investigations. However I note the all too frequent use of the phrase “not likely to affect”.

This phrase, whilst no doubt technically correct, opens the conclusion drawn to immediate or subsequent contradiction by other scientists or in fact by the subject species itself.

Following some 15 years in this R&D career my wife and I opened a garden centre, Williams Gardens in Wellington and then concurrently a sheep/beef farm with an equestrian centre.

In 2000 we decided to seek out the ideal location for our retirement. We searched from Warkworth through Nelson/Tasman to Wanaka before finding ‘our piece of paradise’ in the Marlborough Sounds, moving here in March 2002.

Now living the dream in Waitaria Bay in the Kenepuru Sound, we can enjoy boating throughout the Kenepuru and Pelorus Sounds.

Our favourite places are the bays from Maud Island through Waitata Reach and around to Forsyth Island. There are five King Salmon farms planned here: Richmond, Tapipi, Waitata White Horse Rock and Kaitira.

I recognised the opportunity to share my experiences and so registered my boat and obtained a Local Launch Operator licence. I run small group tours, maximum five people, collecting guests travelling to local lodges. It should be noted I clock up around 200 hours a year which compares to the average NZ recreational boat of less than 20 hours.

Soon after our arrival in the Sounds I became involved in local activities and administration. We joined the Kenepuru & Central Sounds Residents Association of which I am now President. I worked to increase local commitment and membership has doubled to around 180 (a member being a rate-paying household).

The two areas of greatest concern upon which I challenge the King Salmon applications are **site selection** and **ecological impact**.

**Site Selection:**

Paragraph 128, page 40 of the King Salmon report lists “factors to be considered” re site selection.

(a) *Zoning of water space (as designated by the local council's Coastal Plan).*

King Salmon have clearly and openly ignored the Marlborough District Council Coastal Plan as all but one of the sites is outside of the areas designated for marine farming.

(b) *Recreational, commercial and cultural fishing users.*

People choose to invest in the Kenepuru and Pelorus Sounds for the recreational opportunities the extensive waterways provide.

While marine farming, predominantly Greenshell mussels, is quite extensive along the coastline, what remains uncluttered becomes all the more precious. The seascape from Maud Island reserve through Waitata Reach to the Chetwode Islands is nothing short of absolute pristine landscape.

Regrettably for him, Captain Cook failed to find this channel as the Chetwodes obscured his view. But it was known to the whalers as a safe retreat and subsequently charted by Lieutenant Chetwode.

Ketu Bay is a focal point for recreational boaties and during the late spring through summer months it is common to find some 20 to 30 small craft enjoying the harvest of scallops and Blue Cod in Ketu along with the neighbouring Richmond, Port Ligar and Waitata Bays.

The King Salmon farm plans are a significant threat to these recreational opportunities.

(f) *Proximity of sensitive habitats etc*

Kaitiri and White Horse Rock farms are located within the breeding and feeding ground of the rare NZ King Shag.

(g) *Landscape values, natural character and visual effects.*

The well-earned classification of 'outstanding natural landscape' extends from Waitata through Kaitira, Coldaff Point and Titi Island reserve. Again in Port Gore the 'outstanding landscape' classification is well earned.

King Salmon's 'Evidence in Chief' document illustrates in \*diagramatic form (Attachment Map 6) the location of Outstanding Landscape zones, yet immediately adjacent to these they propose to place the Kaitira and Papatua farms.

Many of us enjoy eating salmon but to compromise the unique and rapidly disappearing regions of natural character must **not** be an option.

(j) *Navigation*

King Salmon Evidence in Chief Map 8 'Pre-site selection analysis' clearly shows the five farms Richmond through Kaitira lying immediately adjacent to a 'major navigation route'.

The evidence of David Walker states: “*Waitata, Tapipi, Richmond, Kaitira and White Horse Rock: they will be objects which will need to be navigated around. Other than that the farms pose no issue*”.

The more relevant interpretation is why should we have to “just navigate around them?”

It is all very well for a master of the Interisland ferries with immense navigational experience and skill to “just navigate around them” but for the vast majority of boatmen traversing this narrow passage it is not such a simple matter, especially given a 20 knot wind against a racing tidal flow.

**Thus there are significant breaches in five of the ten criteria the applicant lists as critical to site selection.**

In effect the applicant has listed factors to consider and then immediately chosen to ignore them.

I will later conclude this statement with an impression of ‘lip service and box ticking’.

#### **Corridor of impact:**

Five farms are planned for the narrow entrance to Pelorus Sound. The effective ‘free waterway’ at Waitata Reach is reduced by one third.

The word **impact** can be seen or defined in a number of ways.

A new house on bare land is an impact and tolerable in itself. But place five houses there and you have a subdivision. What we are seeing proposed at Waitata Reach is in effect an industrial subdivision on hitherto an open unencumbered natural water space.

The consequence is to create a **corridor of impact** which is significant in terms of all considerations be they ecological, environmental, navigation, landscape or amenity value.

#### **Ecological:**

There are three areas of potential challenge namely seabirds, predatory mammals/fish and the third is resident and migratory fish species.

#### **Seabirds:**

The two main bird species at the Pelorus sites are Australasian gannets and NZ King Shag.

The farms are within the regular feeding ground of gannets from the Waimaru Colony (one of about four on mainland New Zealand).

First impressions are lasting and so I recall my first visit to the Waihinu salmon farm where a dead gannet floated on the pond.

The applicant states they have measures in place, an over-cover net, to prevent gannets diving into the farms. There is no supporting evidence to demonstrate the effectiveness of these nets (eg gannet mortality before and after their use) so the question remains: Will gannets be attracted by the juvenile salmon in the cages and dive at 100kph to a depth of 10 metres and become entangled and drown?

All the following farms: Kaitira, Waitata, White Horse Rock, Tapihi, Richmond and Papatua, are within the roosting and feeding grounds of the rare NZ King Shag (total estimated population 650).

Shags dive and are bottom feeders. They are potentially threatened by salmon farms through entanglement and competition for their preferred food by predatory fish and seals.

A salmon farm worker told me: *“Shags are a bit of a problem, we just knock them on the head and toss them away”*.

In their application they maintain by siting the farms more than 100 metres from King Shag roosting sites they avoid King Shag mortality. There is no evidence to support this claim.

### **Predatory Mammals and Fish:**

It is an indisputable fact from observation that salmon farms attract and create colonies of seals, sharks and barracouta.

In my role of tour charter operator, if I wish to show my guests a seal I go to a salmon farm. If I want to catch them bait, I drop a lure alongside a salmon farm and straight away ‘bang’ - one hooks a barracouta. Throw a dead fish onto the surface of the sea and up pops a shark fin.

The attraction of salmon farms to fur seals is acknowledged in the report from Cawthron and Associates to Mark Gillard as below:

*“Fur seals will continue to be attracted to salmon farms and will haul out as close to the sites as possible. However successful prevention of seal predation on farmed salmon will avoid adverse effects on fur seals through habituation and possible dependence on farms for sustenance.”*

This conclusion draws an interpretation: There will be no harm to the seals or to the salmon if proper management is applied. However it states categorically that seals will continue to be attracted to salmon farms.

Barracouta and sharks are both predators of resident fish species such as Blue Cod and both are irrefutably dominant in the vicinity of salmon farms.

*“Considering the acuteness of shark senses, it is reasonable to assume most sharks would be attracted to a number of stimuli associated with fish farms, including the presence of the live fish being farmed, the presence of any dead fish in the cages, the odour trail generated during feeding, sounds caused by the farming operation or*

*structures, the physical presence of the structures, and the presence of wild fish around the farm.” (Taylor and Dempster report for King Salmon)*

So it can be established as fact that predatory species such as seals, sharks and barracouta are attracted to salmon farms. As a consequence a significant population of predators exists.

**The questions not addressed by the applicant nor their expert references are:**

**Given the high population of predators at salmon farms what is the effect on (1) resident fish species, example Blue cod and (2) Migratory fish\*\* passing through the predatory trap at Waitata Reach?**

**\*\* Migratory fish:** The following are some of the fish which seasonally exit and enter Pelorus Sound: Snapper, Kahawai, Kingfish, juvenile Hapuka.

**Consultation:**

In the Evidence in Chief Bruce Cardwell lists the Kenepuru & Central Sounds Residents Association as a community group with which he has consulted.

Below I copy his original request for 10 minutes to be heard at the annual meeting. I gave him 10 minutes. He told us of his work experience, then: “I’ll meet you for a beer in the bar afterwards”.

He said not a word relating to the King Salmon farm expansion plans.

I have subsequently by email made requests for information from the same representative, for example, the GPS co-ordinates of farms. This I received but it can scarcely be termed consultation. An opportunity to consult was given but it was not delivered.

*From Bruce Cardwell 25/02/12*

*Hi Pat*

*I made contact with you last year in regards to the NZ King Salmon application to the Environment Protection Authority. I am a member of KCSRA and also work with NZKS coordinating the consultation process in Marlborough for the EPA. Would it be possible to have a time slot-10 minutes to address the AGM or after the completion of the AGM about the process, so everyone can be fully informed and answer any questions. Kind regards, Bruce*

**Conclusion:**

There is a consistent trend within the King Salmon evidence of giving lip service to an issue then ticking the box.

In this personal statement I have identified the fact that criteria for site selection were listed to be subsequently ignored. The example of consultation with the members of Kenepuru & Central Sounds Residents Association is another example of the same.

The residents of Kenepuru and central Pelorus Sounds are arguably the group most affected by the King Salmon plans - it is our front lawn.

I support the Marlborough District Council Zone Plan which would prohibit salmon farming in all of Coastal Zone 1, Waitata Reach through Kaitira and Port Gore.

I also oppose the White Horse Rock farm as in my experience within Pelorus Sounds, the negative impacts will destroy the natural character and ecology of this uniquely unspoiled water space.

**Pat Williams, resident and part time charter boat operator.**

**Personal statement from Warren Vaughan Wood. 7140 Kenepuru Road, Double Bay, Kenepuru Sound, RD2 Picton.**

My wife and I with three children moved to Kenepuru Sound in 1973, when we bought Raetihi Guest House, which we owned and managed for 11 years. The reason for settling in the Marlborough Sounds was in order to work for ourselves, and have a better life-style for our children.

I am a Master Foreign Going, with a C.L.M. endorsement, having been employed as a Pilot for Southland Harbour Board and Lyttelton Harbour Board. I studied for, and was qualified as Pilot for Marlborough Sounds (including Pelorus) but was unable to fulfill the requisite 40 trips in and out of Picton due to the commitment of owning and tutoring at our Marlborough Maritime School. In 1968 I was awarded a Silver Medal from the Humane Society for my role in a rescue off the Canterbury Coast.

I am a yachtsman, and represented my province in centreboard boats and my country in keelboats. I have tutored at Nelson School of Fisheries and at Marlborough Maritime School and have held appointments as examiner for statutory and Coast Guard Certificates.

I have been asked by members of the Kenepuru & Central Sounds Residents Association to comment on the King Salmon applications for nine salmon farms as someone who has lived in the Marlborough Sounds for 39 years, has operated my own 12 metre launch, sailed extensively in the Sounds and been an expert witness for navigation in numerous marine farm applications, with submissions for and submitters against in some cases.

I find it incredible that having read the evidence of David Walker, Brian Lear and Geraint Bermingham, that they can see no reason these applications should not be upheld.

I can recall giving evidence on behalf of submitters against a marine farm on Opani-Aputa Point, Crail Bay, where I used an example of a foreign yachtsman, seeking shelter under a lee and finding he/she could not get close enough in the conditions which can prevail in the Marlborough Sounds, because of a marine farm.

In the past I have recommended port and starboard lateral marks/lights in reaches, (e.g. entrance to Kenepuru Sound, Nydia Bay and Yncyca Bay etc.) but this was not upheld.

I also proved by observation and measurement, that in the lee of a long line, there is a reduction of 2/3 wave height for sheltering small craft. Contrary to evidence submitted, due to draughting/ducting the wind speed increases close to the shoreline where wind is squeezed between high land forms. A headland is a point about which a substantial number of vessels make a significant alteration of course. These courses are true and proper courses, bearing in mind, weather conditions and geographical form which could be compromised by the placement of a salmon farm.



As in the past, I have always put myself in the position of a foreign yachts person and they should not have their safety jeopardised. It cannot be assumed that local "boaties" have any navigational ability! One life lost is one too many when a sailor is seeking shelter, and their efforts are hindered by the wrongful placing of a salmon farm.

**Warren V. Wood (Capt.)**

## **Statement from Colin Roper on the lighting of the proposed King Salmon farms in the Waitata Reach Pelorus Sound, July 2012**

I live in Waitaria Bay in the Kenepuru Sound. My background includes 22 years in the RNZAF, 14 years as aircrew, in Iroquois helicopters and Orion maritime patrol aircraft. As a result I am familiar and confident with navigation by day or night, the use of charts and appropriate navigation aids and am especially aware of the value of the “Mark 1 eyeball”, keeping a good look-out and the retention of good night vision.

I have crewed in the delivery of a 10.6 m yacht from Waikawa to Auckland where about half of the transit was at night. That trip was all coastal and the night navigation was by chart, using coastal beacons and GPS, backed up by hand bearing compass for position fixing.

My wife and I own a 10 metre yacht and have navigated the Waitata Reach twice at night using radar, chart, GPS fixing and the Maud Island light and Ninepin Rock light on the Chetwodes. There are very few other lights visible, including the mussel farm lights each side of the reach which are very dim.

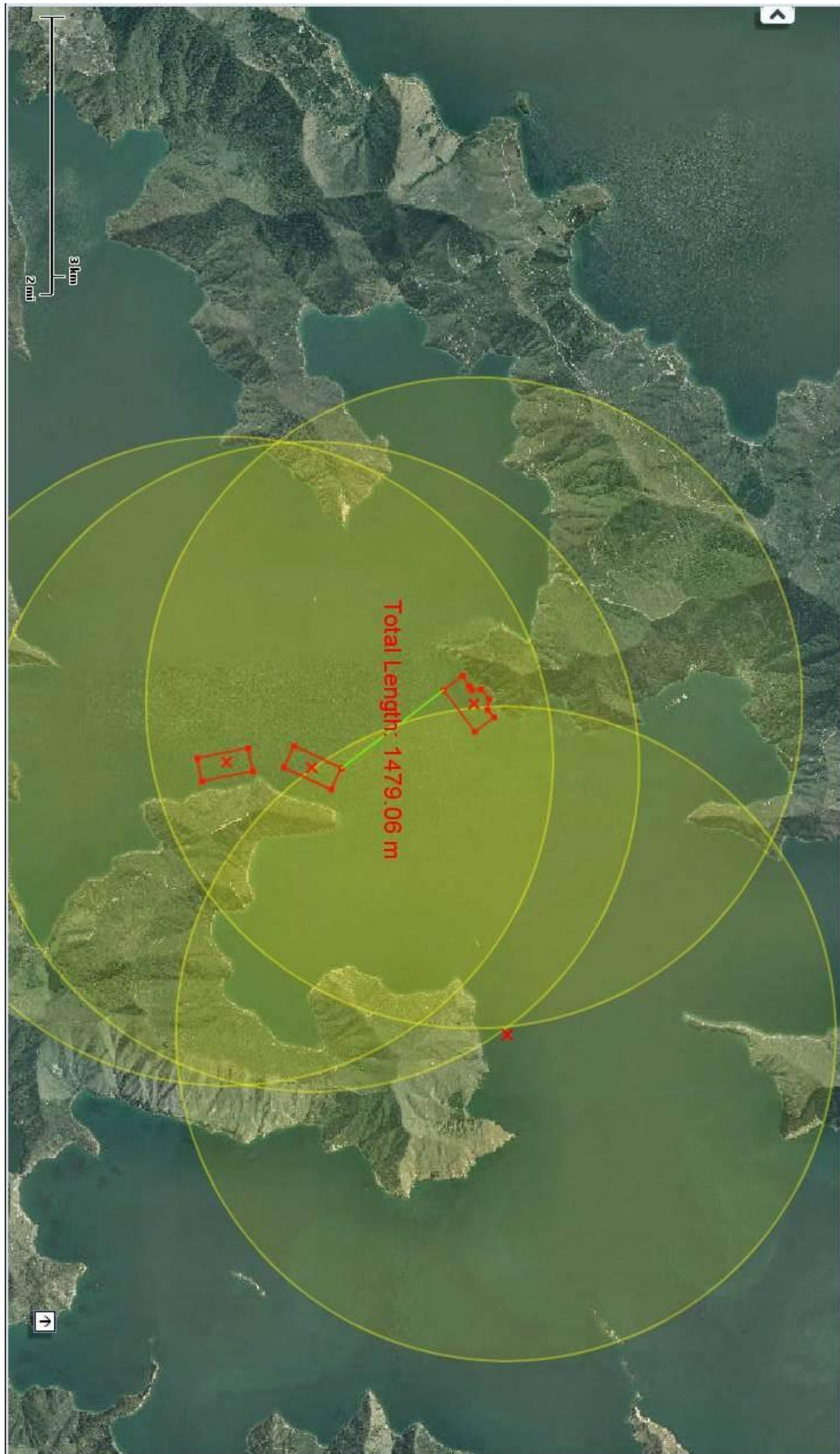
The lighting for the proposed salmon farms in the Waitata Reach concerns me because I understand there will be about 5 lights per farm, each flashing 5 times every 20 secs which will be visible for up to 2 nautical miles. By my reckoning anyone transiting the reach will have salmon farm lights visible for about 6.5 nautical miles and where the light ranges overlap will see up to 25 lights, each flashing 5 times every 20 secs. I am also informed the intention is to illuminate the water column within the farms which will add to the visible light. At 5 to 6 knots in clear conditions a boat's crew will be staring at a proliferation of flashing lights for an hour. It is hard to believe that so many lights will not affect night vision which is so important to night navigation, possibly make other vessels harder to see, cause confusion and irritation and simply become light pollution.

In David Walker's expert opinion, in his “Statement of Evidence in relation to navigation” which he wrote for King Salmon, I note that he approves of the current lighting used on a salmon farm in Queen Charlotte Sound. As an amateur, I would only say that if that is increased by a factor of 4 or 5 in a short distance, there will be too many flashing lights, visible from too many farms, too close together.

There is only one way in or out of the Pelorus Sound and that is via the Waitata Reach. Day or night boats will have to steer around these proposed farms. The effect of the farms being roughly opposite and adjacent headlands will herd vessels into a constricted passage with many boats on opposing courses in close proximity around the farms. Most of these boats will be driven or sailed by amateurs, some with a very vague notion of the give way rules at sea. They will often be travelling fast, perhaps in marginal control, especially in rough and windy conditions. More Salmon farms as proposed in the Waitata Reach? No thanks.

**Colin Roper**

*On the following page I have illustrated the effects of lighting in the area where the farms are proposed.*



**Statement from Kristen Gerard on involvement with the Marlborough Sounds, and why I am opposed to the King Salmon Applications, July 2012.**

I was born in 1961, a fifth generation member of a Pelorus Sound family who arrived in this area in the 1850s and established themselves as loggers/saw millers and farmers. In 1983 I married Michael Gerard a farmer of Elie and Hopai Bays in the Pelorus Sound.

As well as raising three children, I have been actively involved in many community groups: Pelorus Sound Branch Women's Division Federated Farmers, the first Marlborough Conservation Board (1990-93), Homewood Memorial Hall Board, Clova Bay Rural Fire Force, Hopai Sports Club Committee, Sounds Hunting Competition Committee, the Kenepuru and Central Sounds Residents Association, the Significant Natural Areas Working Group (for Council) and the Sounds Advisory Group (since its inception in 2002.)

Michael and I farm sheep and beef animals, plus some areas of exotic and native forestry on our 1150 ha property. We have participated in the Marlborough District Council's Significant Natural Areas programme, put Conservation Covenants on some areas, fenced out waterways, and carried out a major wilding pine eradication programme.

We have never been involved in aquaculture ourselves but for many years accepted its slow increase in the area as mostly the marine farms were owner operated by local families, which helped the local community flourish.

In 1988 after much discussion with local residents and users of the Sounds, the Proposed Marlborough Sounds Maritime Planning Scheme was drawn up, identifying areas suitable for marine farming along with recognised anchorage, log-loading and stock-yard sites. It was largely accepted that marine farms should not be sited next to Reserves or headlands. No-one anticipated mid-bay farms, or indeed that they should ever extend in a continuous coastal ribbon-type development and beyond. Some of the early marine farmers thought a figure of 10-30 % occupation of a bay's coastal fringe would be "Best Practice".

However by the early 1990s, as aquaculture boomed, big companies started to apply for sites outside the designated areas and squeeze out the local family operators who had mostly understood and respected the integrity of the area. These big companies, outsiders and speculators, wanted a slice of the pie anywhere and everywhere. Our farm has approx 9kms of coastal frontage, and we soon realised most of it was likely to be compromised by this development. Our property values, visual and recreational values and our main navigational channels would all be affected if we didn't start getting involved in the Consent Hearings process.

When the Marlborough Sounds Resource Management Plan (MSRMP) came into being, it drew on all the years of planning and consultation that had gone on before and the understandings reached on the areas where aquaculture was considered appropriate and where it was not. As with all processes there were concessions made and although the prohibited areas - Coastal Marine Zone 1 (CMZ1) - are a major part of the Plan, in hindsight they should have been enlarged even further to include the

middles of bays, as well as limitations put on the amount of aquaculture which could happen in any given area. However, it has given Sounds' residents certainty (till now) that no development or commercialisation could take place in the prohibited zones.

Within our home patch at Elie and Hopai Bays, we have a small area of CMZ1 which was implemented to create a buffer zone to preserve and protect the historical land and water sports day which has been held annually at Hopai since 1920. This zone also protects the high landscape values of the bay and provides an area of open water space for recreational use within the wider largely commercialised Beatrix and Crail Bay Basin.

### **Our Concerns re: King Salmon.**

Our main concern with the King Salmon application is that, if it succeeds, it will in effect tear eight holes in the MSRMP CMZ1 areas and thus have the potential to create a precedent which could have flow-on effects for any of the other CMZ1 areas in the Sounds.

These CMZ1 areas are hugely important to all the Sounds' residents who need certainty about the areas in which they live and the application and implementation of the Council's regulations and by-laws. We expect the present zoning to be upheld and ensure complete protection against any encroachment on those special areas which have been deemed CMZ1. If some of these areas are "lost" to commercialisation it may well impact on the lifestyle we have chosen and our experience of the place.

Over the last 30 years, we have seen three different fin-fish farm ventures in our immediate neighbourhood "crash and burn" and thus have adopted a very cautious attitude to the recent King Salmon applications.

The first two farms in Elie and Crail Bay in the 1980s failed for various reasons – disease and high water temperatures caused high death rates and this in turn led to major problems with sharks on one of the sites.

The third more recent fish-farm in Crail Bay, (Pacifica), also attempted to farm salmon and kingfish with only varying degrees of success. In 2011 King Salmon took over the operation and removed all the remaining fish stocks at maturity. At this present time, the polar circle cages remain (empty) on the two sites, and some are starting to break down.

Evidence in the King Salmon application refers to these circle type cages being difficult to maintain effectively and that if the predator nets are not properly tensioned at all times, they become a weak point for predators to attack through. We therefore question King Salmon's decision to use these cages at Papatua as we do not believe they will be able to withstand the severe weather/wave conditions that frequently batter that area.

While the Crail Bay Pacifica farm was active we also had to live with severe noise from the feeders (which were audible inside our home over 2kms away), and from the workboat/barge movements. Although King Salmon intend to use a quieter form of feeder, there would still be noise issues from its various workboats coming and going

and (on some of the farms) the 24/7 presence of a barge. Night-time work-boat noise and lighting is particularly annoying, and would especially impact on those outer Sounds areas where there are presently no other similar full-time commercial activities.

Social impact issues were also created by the salmon farm workers in Crail Bay, when during their down-time they aggravated local landowners with their hunting activities.

We also know that seagulls around the salmon farm were shot and after pressure from residents and the Sounds Advisory Group, King Salmon adopted a “No Guns” policy; however I am still uncertain about how definite this policy is after reading the King Salmon Application.

We all know that salmon farms suffer from on-going seal interest and attacks and it is on record that efforts were made to re-locate the most troublesome seals from some Sounds’ salmon farms to the West Coast, but that they returned within just a few days.

Many of the attractions of life in the Sounds are based around recreational water activities (fishing, diving swimming etc.) and observing marine wildlife – seals included, but we are well aware that salmon farms do attract larger-than-normal numbers of predatory fish/sharks/ and seals, and are understandably nervous about the potential for shark numbers to increase in the Sounds. It is quite likely that the wild fish stocks and seabirds will also be impacted by the change in their environment, and King Salmon have not adequately addressed these impacts, rather adopting a monitoring and wait and see approach.

Having regularly boated around the Sounds over the last 30 years, we are well aware of the navigational challenges imposed by aquaculture structures on the water. These are required by law to be properly lit, yet for those of us who boat at night, the less lights there are, the better the night vision. We have also found marine farm lights to be highly unreliable, a fact which is backed up by regular reports on this very issue to the Council’s Environment Committee.

Adding more aquaculture structures into the Sounds waterways is also incrementally impacting on the areas’ boaties, who are continually having to avoid more and more of the coastal waterways. Weather, wind and tides often dictate which passage vessels will choose, sometimes hugging the shoreline is best, other times not. With each new aquacultural activity granted, a little more of the public’s open water space is not only completely lost, but also impeded, as boats within 200m of that area must also decrease their speed to under 5 knots.

The Marlborough Sounds is a world-renowned area for the beauty of its land and seascapes, which combined are what make New Zealand distinctive. Those of us who have the privilege of living here meet many tourists, both kiwis and foreigners, throughout the year who keep reminding us of our good fortune to live in such a place.

They all without exception comment on the natural beauty of the Sounds, and how important it is to preserve and protect it for future generations.

Putting salmon farms into the CMZ1 areas of the Sounds where there is presently no other aquaculture, will create a detrimental effect on adjacent land and scenic values and impose unnatural man-made features on an area which should be dominated by land and seascapes.

The whole atmosphere within those immediate areas will be immediately changed, and thus may spoil or even destroy the values of the place for the people who have chosen to live or enjoy their recreation there.

There is also a huge visual/landscape variation within the Sounds itself – from the calmer, more developed areas of the inner Sounds, to those outer wilder places, many of which are about as remote as you can get, with completely undeveloped bays, forests and beaches.

These areas of the Sounds look, sound and even smell different!

Although we live here in the Sounds year round, our experiences between our home farm and the holiday bach in Port Gore are very different, and we consider ourselves extremely fortunate to be able to reside and recreate in such a magnificent part of New Zealand.

Kristen Gerard

**Personal statement by Wayne & Jennifer Saville, 2459 Kenepuru Rd, R.D.2 Picton as to their objections to the application of King Salmon, July 2012.**

This statement is to convey my objections for the applications by King Salmon, to construct farms in our waterways. I strongly oppose this application.

Firstly I will outline my prior years in an effort to give the reader a profile of myself. I was born in Christchurch in December 1943, a descendant of family who arrived on Lyttelton in December 1850 on board the Randolph.

I was educated as first year pupil at Cashmere High School to the 4th form, then took an apprenticeship in mechanical engineering (1959).

By 1967, a partner and I established our own business manufacturing hydraulic equipment for the agricultural industry, later going into structural building components and arms and hydraulic cylinders for container side lifter trucks. At the peak of our business we were heavily involved with repairing ships equipment; the concern covered over four acres, and employed 45 staff.

About this time I started visiting the Kenepuru Sound with my (future) brother in law. We spent many weekends at Te Mahia in a caravan, boating out of there to the outer Pelorus Sounds to places including Ketu, Bulwer, Ligar, Waitata, Chetwodes, and occasionally to D'Urville. This was years before mussel rafts.

I was a keen diver, and gathered scallops no further than 15ft below our boat, from the surrounding bays; these times are well gone now.

I cannot remember not having a boat of some type, from row boat to the largest, an Athol Bums built by Pop Gorgenson, (late of Waikawa) at 52ft weighing 45 tonnes. This boat took us everywhere in any weather. My boating years covered yachts as well, and it was the visits to Kenepuru on our holidays, that I realised the untouched beauty the Sounds held, then deciding that this was where I wanted to retire

This I did, purchasing our home in 2001 to become permanent residents.

My keen attraction to the Sounds and boating saw me become a member of six different Boating clubs, being commodore of the Banks Peninsular Cruising Club from 1983-85, and Royale Portage Bay Club 2006-2008, of which I'm still an active committee member.

Over the years I have seen this area filled with mussel farms, some bays so badly infested, you cannot get to the beaches without a dinghy.

The gun emplacements at Post Office Point on the entrance to Ketu are a historic place and visited by many boating people. It will be a sad thing to have to look down on a large, noisy commercial operation, as planned by KS. This bay Ketu offers one the best calm, quiet mooring places in the Pelorus. We always use it while transiting to Nelson or D'Urville



You may wonder why I have gone on about my past and material things, well there is good reason. If you take a cross section of residents of the Sounds, you will find most retired here are very capable, intelligent, successful people, who have done their hard lines, and come to enjoy one of the world's most unique and valuable places, mostly untouched by the cold, unbending corporates of today which care only about money - "Bugger the future generations".

The proof of this is the cavalier attitude the King Salmon have towards our council, who have taken years to set in place a "PLAN" to save some areas for the people to enjoy. Would you trust a company that went behind the Marlborough District Council's back to push their barrow to benefit themselves? They knew it would not get past the District Plan.

I strongly object to the KS application, and any other such like proposals for any type of extended use of OUR waterways.

Under the current licence, they would have 35years tenure and pay NO RENT OR COSTS. Guess who picks up the pieces when it all goes to custard and it will. The ratepayer again.

In conclusion, I object to any change to the current district plan.

**Wayne Saville**

**Personal statement from Adrian M H Harvey, Totaranui, Clova Bay, Pelorus Sound, July 2012.**

My name is Adrian Harvey. I live in Clova Bay in the Pelorus Sound. I am a fifth generation resident.

I am a Vice President of the Kenepuru and Central Sounds Residents Association (KCSRA), a Waitaria Bay Hall Trustee and I was a Fire Warden for Marlborough North Fire Authority from 1973-1993.

I have lived most of my life in Clova Bay but am not Sounds bound!

The Harvey family were some of the first white settlers in the Pelorus Sound and since then there have been big mistakes made on the land which I and other like-minded residents have noted.

As a lay person who has lived most of my 60 years in the Pelorus Sound I have seen dramatic changes to the environment on land and sea.

When marine farming started in the 1970s it was like a gold rush to apply to grow mussels. In the beginning there were almost no rules except that the farms had to be coastal. It has been seen that the industry was getting out of hand and moratoriums have been applied but once these are lifted, the mad rush begins again.

It has now grown to be a large part of the Pelorus Sound's commercial activities, to the detriment of the blue cod fishery for which the Sounds was famous and which is now in a state of collapse.

Until the blue cod fishery went into decline the inner Pelorus had a wide variety of fish available-blue cod, groper, trumpeter, rig shark, snapper, sea perch, hag fish, flounder and kawahi to name but a few.

Serious mistakes have been made on the land. We do not want these repeated on the water. The early settlers, including my family, were subsistence farmers. In the 1960s farming in the Pelorus became more intensive for about the next twenty years; then economy of scale meant only the biggest survived.

From the early 1970s on, the foresters moved in taking up cheap farm land to plant hectares of exotic trees. This industry is now running into severe problems removing the trees from **unsuitable sites**. Another case of lack of foresight.

When mussel farming started to take off, with free water space and the small cost of a licence making it a very attractive proposition, this is when I feel the blue cod fishery and other indigenous fish species began their decline.

Now we have a vast amount of water space taken up by mussel/fish farms which has helped destroy most of the blue cod spawning grounds that a young boy growing up in the deep Pelorus once enjoyed.

It is for these reasons that I oppose any further fish farm or mussel farm licences let alone increasing the marine farming areas over and above what the Marlborough District Council (MDC) has allocated.

If this so called progress continues to destroy our unique environment I would no longer wish to live here. We have all made mistakes be it in farming, forestry or marine farming in this area, but there must be a limit, unless the powers that be wish this to become an industrial zone with all its detrimental effects on the Sounds world famous eco-system.

**Adrian Harvey**

## SCHEDULE B

### Media coverage of Waihinau Bay Salmon Mortality event

Salmon dying at controversial Marlborough farm | Stuff.co.nz 8/07/12 6:57 PM

**stuff.co.nz**

**NATIONAL**

## Salmon dying at controversial Marlborough farm

MICHAEL FIELD Last updated 12:00 08/07/2012

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Salmon are mysteriously dying at a premier salmon farm as its owners, majority controlled by a Malaysian tropical rain forest logger and palm oil operator, call for free access to Marlborough Sounds to increase production by over 160 percent.

New Zealand King Salmon (NZKS) say they've declared "code red" at Waihinau farm in the sounds after "higher-than-normal mortality rate".

Tonnes of dead fish have been dumped in sealed containers at a landfill.

... government ordered board of inquiry is reviewing NZKS's plan to lift salmon production from 8500 tonnes a year worth \$115 million from five farms to 30,000 tonnes from 14 farms.

Using the sounds rent free, they aim to earn a \$1 billion worth of exports by 2025.

Industry sources involved with Waihinau told the Sunday Star-Times that NZKS hired a tug to tow the entire farm out into Pelorus Sound to wash it in a bid to stop the die off.

"We held it out there for weeks," a source said, "and kept at it until the fish stopped dying."

They struggled to get it into position because of a large pile of salmon faeces and fish pellets.

NZKS CEO Grant Rosewarne said towing of farms was normal and environmental best-practice in salmon farming.

He said testing by the Ministry of Primary Industries shows the Waihinau salmon is pathogen-free.

"The King salmon species combined with New Zealand's remote location and strict bio-security measures means the country has never been affected by major disease outbreaks and that record remains intact," he says.

NZKS had voluntarily put declared "code red" pending more tests.

They think the dying is linked to an "unfortunate combination of events such as towing to a new site or high summer temperatures or seal aggression or a combination of all three."

Rosewarne says burying dead fish was "common practice" but after local media questioned use of a landfill, they switched rendering as "no micro-organism can survive rendering, which is conducted at temperatures that guarantee sterility".

Lobby group Guardians of the Sound say that NZKS should not be allowed to expand while the deaths remain a mystery.

"If this disease can manifest in the wild fish population, this will be a disaster."

Most submitters to the inquiry oppose NZKS citing pollution and disease and other fear the way the farms are luring shark deep into the sound.

Conservation Minister Kate Wilkinson says the sounds are national significant and she was concerned at the "cumulative effects, of the discharge of contaminants, principally fish feed and fish excretions, on water quality in the area."

NZKS will discharge up to 42,000 tonnes of fish feed into the sounds every year and this could "significantly adversely affect ecological and other values."

Blenheim based consultants Aura Sustainability Ltd says the planned nutrient load would have an "extremely significant environmental impact".

<http://www.stuff.co.nz/national/7241937/Salmon-dying-at-controversial-Marlborough-farm> Page 1 of 2

## SCHEDULE C

### Media Coverage of Dolphin Mortalities in Salmon Farms

**Dusky dolphin dies in King Salmon farm net**

*North Express 18th July 2012*

**Penny Wardle**

A dusky dolphin has drowned after being caught in a salmon farm penstock net at New Zealand King Salmon's Muriwai farm in Polaris Sound.

The 1.75 metre dolphin was identified by Conservation Department staff in June 14.

A report sent to the Auckland Region's King Salmon and DOC staff company shows it moved the dolphin, thought to have died about two days earlier.

An autopsy report from the Massey University Institute of Veterinary, Animal and Biological Sciences said the male dolphin probably died after being entangled in the net then strangled. There were two cross-shaped net marks on its head and extensive riba marks over its body.

DOC marine technical adviser, Andrew Barker of Nelson, said the department had records of six dolphin deaths in salmon farms since 1986.

All but the latest were mentioned in the King Salmon application to the Environmental Protection Authority for consent to develop nine new marine farms in the Muriwai Sound.

The dolphin, which died last month, was probably caught in a pocket in the net which formed when it was lifted by currents, he said. The dolphin could have been driven and out but probably panicked and died within minutes.

King Salmon learned from such deaths and changed management accordingly, Mr Barker said.

In 2011, a dusky and a bottlenose dolphin died at the Coal Bay farm. King Salmon had bought from a company which used lighter production nets, he said. The nets had since been removed and the farm, in Polaris Sound, was not operating, he said.

In 2010, a Hector's dolphin was caught between two pens at the Hauraki farm in Queen Charlotte Sound. Farm design had since changed so nets covered entire farms, said Mr Barker.

Two dusky dolphins were caught in the Muriwai farm in 2011.



**Dolphin deaths** A dusky dolphin died after being caught in a net at a New Zealand King Salmon farm in Polaris Sound. Three dusky dolphins are pictured off Hokitika.

**Photo: Simon SARGENT/STILL LIFE**

**INSIDE**

**Seals in salmon farms, page 3**

## SCHEDULE D

### Copy of Official Information Act Request to the EPA

*Reply to: Pat Williams*  
*President KCSRA*  
*Manaroa Road*  
*RD2 Picton 7282*



July 20th<sup>th</sup> 2012

S. Gardiner  
General Manager  
Nationally Significant Proposals  
Environmental Protection Authority  
Private Bag 63002  
Waterloo Quay  
Wellington 6140

Dear Sarah

#### **Official Information Act Request – New Zealand King Salmon Proposal (NZKS)**

I write in my capacity as President of the Kenepuru and Central Sounds Residents Association (Association). The Association has recently been committing a significant amount of its resources in respect of the above proposal.

On 3 November 2011 the Environmental Protection Authority (EPA) made a recommendation to the Minister of Conservation under section 146 of the Resource Management Act that in EPA's view the NZKS proposal was a proposal of national significance that should be referred to a Board of Inquiry for decision for the reasons set out in the EPA report attached to the EPA's recommendation.

As part of its submissions the Association has been considering the economic benefits claimed by NZKS (relevant factors in terms of section 142 (3) of the RMA). The Association is concerned that it appears the EPA advice to the Minister is incorrect.

At paragraph 41 of the EPA advice it is stated:

*"NZKS's Assessment of Environmental Effects states that: "In terms of impact on the Nelson and Marlborough regions, and for the wider top of the South Island, the Economics Report ...estimates that, if NZKS achieves the full capacity of the proposed farms by 2020, the growth rate of both regional economies would be....three to four times the average growth rate of other sectors.."*

This appears to be a gross misstatement to the Minister of the potential economic impact of the NZKS proposal. The EPA seems to be suggesting that the regional economies will grow at a rate 3 to 4 times greater if the NZKS proposal goes ahead than it would otherwise. However, as far as we can ascertain, this is not what the NZKS economic expert is saying.

Rather, he is suggesting something significantly more modest (see paragraph 2.8 of the first Assessment of Environmental Effects from J.Fairgray, and paragraph 3.5 of his evidence in chief) ie that the growth rate of the salmon farming and processing sector would be 3 to 4 times the average growth rate of the regional economies.

The Association's concerns are that the Minister may well have been misled by the EPA advice. Accordingly, we would be grateful if you could:

- Supply us with a copy of the relevant page(s) from the NZKS proposal which the EPA quote above was sourced,
- Advise us as to why EPA made the statement above, if it is not to be found in the NZKS proposal,
- Advise if the EPA advice to the Minister and/or economic aspects of the NZKS proposal were independently reviewed and if so, provide us with a copy of any such reviews,
- If there were no independent reviews of any aspects of the economic claims by NZKS, please explain why EPA included paragraph 41 in its advice to the Minister,
- Clarify exactly what EPA was trying to say to the Minister.

We note the above requests are made pursuant to the Official Information Act.

The information is required as it is fundamental to the national significance of the NZKS proposals and is required for the purpose of questioning NZKS representatives at the pending Board of Inquiry hearing on the NZKS proposals. Accordingly we would appreciate your urgent attention to this matter.

Yours sincerely

Pat Williams  
Chairman  
Kenepuru and Central Sounds Residents Association

cc Hon Kate Wilkinson  
Minister of Conservation  
Private Bag 18 888  
Wellington

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**Kenepuru & Central Sounds Residents Association Inc.**  
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Vice President Adrian Harvey  
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