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All written comments received on the MPI salmon relocation proposal, grouped according to surname/business/organisation/lwi name.

Written Comments Number	Last Name	First Name
288	Envirolink Ltd	
592	Environmental Defence Society	

Written Comments No: 0288

Subject	submission
From	Tony Hewitt
To	aquaculture submissions
Sent	Wednesday, 22 March 2017 2:23 PM
Attachments	<<SupplierSalmonFarmRelocationtemplatesubmission.docx (1).pdf>>

Please find attached submission

Tony Hewitt

Mobile: [REDACTED]

Envirolink Ltd

Phone: [REDACTED], mobile: [REDACTED]
[REDACTED] Nelson 7173
[REDACTED] 7048

NEW ZEALAND

www.envirolink.co.nz

Salmon Farm Relocation

Ministry for Primary Industries

Private Bag 14

Port Nelson

aquaculture.submissions@mpi.govt.nz

To: The Salmon Relocation Advisory Panel

Introduction – who you are / where you work / and your role

I support the potential salmon relocation process being proposed by MPI because I believe the salmon farm relocation will provide for better environmental, social and economic outcomes.

I understand that by relocating farms from lower water flow sites to higher water flows sites fish performance will improve and therefore the health of the salmon. It will also have a lower level of effect on the seabed which will have positive environmental benefits.

Environmentally, adopting the Best Management Practice guidelines that were agreed by the Council and community is the future for aquaculture globally.

There will be more direct and indirect jobs created if this proposal goes ahead resulting in economic improvements for the communities in the top of the south.

Moving some farms away from baches to more remote locations will improve social amenities which is also a good thing especially from a navigation viewpoint.

What will this mean for you as a partner of King Salmon?

As a service provider in the area of environmental monitoring it makes good sense to our company for NZKSC to relocate these 6 farms to higher flow areas. The proposal is backed by good science and is supported by the majority of the community. The proposal is not seeking new growing space, but looking to optimise the productivity and environmental benefits of the identified new higher flowing areas. In short, I consider the proposal to be soundly researched and an obvious direction for NZKSC to head as a leading seafood company.

How will this affect your company?

We (Envirolink Ltd) provide monitoring service to NZKSC's Takaka Hatchery at Pupu Springs. While the proposal is unlikely to impact directly or immediately on our company, any further growth in NZKSC's business can only be positive in the long term for small businesses such as ourselves.

I **would not** like to be heard by the hearings panel.

Name: Tony Hewitt

Email:

Date: 22 March 2017

Phone:

Written Comment No:0592

Subject	FW: Proposal for potential relocation fo salmon farms in the Marlborough sounds - EDS submission
From	Madeleine Wright
To	aquaculture submissions
Sent	Tuesday, 28 March 2017 9:07 a.m.
Attachments	<<170327 statement S Brown landscape final.pdf>> <<170327 statement K Counsell economics final.pdf>> <<170327 EDS Submission KS MPI Regulations final.pdf>>

Good morning

Please see below and attached. It has just come to my attention there was an error in the original email address but no bounce back was received. Can you please confirm receipt. Please call to discuss if required: 0274687778.

Kind regards

Madeleine

From: Madeleine Wright

Sent: Monday, March 27, 2017 4:55 PM

To: aquaculture.submissions@mpi.govt.nz

Cc: Gary Taylor; [REDACTED]

Subject: Proposal for potential relocation fo salmon farms in the Marlborough sounds - EDS submission

Importance: High

Good afternoon

Please find **attached** a submission by the Environmental Defence Society Inc on the salmon farm relocation proposal along with statements by:

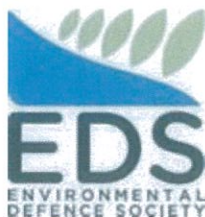
- Stephen Brown (landscape)
- Kevin Counsell (economics)

Please acknowledge receipt.

I would also like to request a hard copies of all of the proposal documents ahead of hearing. Is this possible?

Kind regards

Madeleine



Written Comment No:0592

Madeleine Wright

Environmental Defence Society

PO Box 91736 | Victoria Street West | Auckland 1142 | New Zealand

T: [REDACTED] | M: [REDACTED] | Email: [REDACTED]

For more information about EDS: www.eds.org.nz; www.edsconference.com

SUPPORT the work of EDS. Make a [DONATION](#).

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SUBMISSION ON MINISTRY OF PRIMARY INDUSTRIES POTENTIAL RELOCATION OF KING SALMON LTD SALMON FARMS IN THE MARLBOROUGH SOUNDS

SUBMITTER DETAILS

FULL NAME: Environmental Defence Society Incorporated
ADDRESS FOR SERVICE: PO Box 91736, Victoria Street West, Auckland 1042
CONTACT: Gary Vernon Taylor – Chief Executive
Madeleine Cochrane Wright – Counsel
TELEPHONE: [REDACTED]
EMAIL: [REDACTED]
DATE: 27 March 2017

INTRODUCTION

- 1 This is a submission on the Ministry of Primary Industries' (**MPI**) proposal to amend the Marlborough Sounds Resource Management Plan (**Regional Plan**) to enable relocation of 6 salmon farms in the Marlborough Sounds to areas where the Plan currently prohibits aquaculture¹ (**Relocation Proposal**).
- 2 The Environmental Defence Society Incorporated (**EDS**) is a not-for-profit, non-government national environmental organisation. It was established in 1971 with the objective of bringing together the disciplines of law, science and planning in order to promote better environmental outcomes in resource management. EDS has been active in assessing the effectiveness of the Resource Management Act 1991 (**RMA**) and planning documents in addressing key environmental issues including landscape, natural character, biodiversity, and coastal management. It has extensive previous involvement in assessing the appropriateness of salmon farming in the Marlborough Sounds.
- 3 EDS wishes to be heard in support of this submission. In particular it wishes to:
 - present legal submissions
 - call evidence by Stephen Brown (landscape) and Kevin Counsell (economics)It requests a presentation time period of 2 hours.
- 4 EDS opposes the Relocation Proposal in its entirety because it:
 - is an improper or unlawful use of the s360A regulation making power
 - does not achieve sustainable management of the environment
 - does not recognise and provide for matters of national importance
 - is inconsistent with Marlborough District Council's (**MDC**) statutory function to maintain indigenous biodiversity.
 - undermines strategic and integrated management of aquaculture in the Marlborough Sounds.

¹ Areas where aquaculture is prohibited under the Regional Plan are zoned Coastal Marine Zone 1.
EDS Submission on MPI Salmon Relocation Proposal

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- does not give effect to the New Zealand Coastal Policy Statement 2010 (NZCPS) the Marlborough Regional Policy Statement (RPS), or the Regional Plan
- is not consistent with the proposed Marlborough Sounds Environment Plan (Proposed Plan)
- will result in adverse effects and/or significant adverse effects (including cumulative effects) on landscape and natural character characteristics and values, indigenous biodiversity, and water quality
- this submission is made without prejudice to EDS's position that the process being followed is unlawful and/or outside jurisdiction.

5 The following issues are discussed:

- Summary & legal framework
- Process
- Proposed provisions
- Proposed sites – environmental effects
- Economic analysis

SUMMARY & LEGAL FRAMEWORK

Relocation Proposal

6 MPI proposes that its Minister recommends regulations under s360A RMA to amend the Regional Plan to enable relocation of up to 6 King Salmon Company salmon farm sites from existing lower-flow sites or unused sites to higher flow sites. The proposed relocation sites are:

- Waitata Reach, Pelorus Sound:
 - Blowhole North
 - Blowhole South
 - Waitata Mid-Channel
 - Richmond Bay South
 - Horseshoe Bay
- Tory Channel, Queen Charlotte Sound:
 - Tio Point, Oyster Bay

Empowering provisions

7 This is the first time the s360A regulation making power has been used. Section 360A states:

360A Regulations amending regional coastal plans in relation to aquaculture activities

(1) The Governor-General may, by Order in Council, amend provisions in a regional coastal plan that relate to the management of aquaculture activities in the coastal marine area.

(2) An amendment made under subsection (1)—

(a) becomes part of the operative plan as if it had been notified under clause 20 of Schedule 1; and

(b) **must not be inconsistent with, and is subject to, the other provisions of this Act** (for example, subpart 1 of Part 7A); and

(c) may be amended—

(i) under this section; or

(ii) in accordance with Schedule 1; or

(iii) under any other provision of this Act.

(3) In this section and sections 360B and 360C, amend provisions includes—

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- (a) omitting provisions (whether other provisions are substituted or not);
- (b) adding provisions.
- (**emphasis added**)

8 Section 360B sets out conditions that must be satisfied before s360A regulations are made:

360B Conditions to be satisfied before regulations made under section 360A

- (1) Regulations must not be made under section 360A(1) except on the recommendation of the Minister of Aquaculture.
- (2) **The Minister of Aquaculture must not make a recommendation unless the Minister—**
 - (a) has first had regard to the provisions of the regional coastal plan that will be affected by the proposed regulations; and
 - (b) has consulted—
 - (i) the Minister of Conservation; and
 - (ii) other Ministers that the Minister of Aquaculture considers relevant to the proposed regulations; and
 - (iii) any regional council that will be affected by the proposed regulations; and
 - (iv) the public and iwi authorities in accordance with subsection (3); and
 - (c) **is satisfied that—**
 - (i) the proposed regulations are necessary or desirable for the management of aquaculture activities in accordance with the Government's policy for aquaculture in the coastal marine area; and
 - (ii) the matters to be addressed by the proposed regulations are of regional or national significance; and
 - (iii) **the regional coastal plan to be amended by the proposed regulations will continue to give effect to—**
 - (A) any national policy statement; and
 - (B) **any New Zealand coastal policy statement;** and
 - (C) **any regional policy statement;** and
 - (iv) the regional coastal plan as amended by the proposed regulations will not duplicate or conflict with any national environmental standard; and
 - (d) **has prepared an evaluation report for the proposed regulations in accordance with section 32 and had particular regard to that report when deciding whether to recommend the making of the regulations.**
- (3) For the purposes of subsection (2)(b)(iv), the Minister of Aquaculture must—
 - (a) notify the public and iwi authorities of the proposed regulations; and
 - (b) establish a process that—
 - (i) the Minister of Aquaculture considers gives the public and iwi authorities adequate time and opportunity to comment on the proposed regulations; and
 - (ii) requires a report and recommendation to be made to the Minister on those comments and the proposed regulations; and
 - (c) publicly notify the report and recommendation.
- (4) For the purposes of subsection (2)(b)(iv), the Minister is not required to consult on matters that have already been the subject of consultation if the Minister is satisfied that the previous consultation related to subject matter that is in substance the same as that proposed in the regulations.
- (**emphasis added**).

9 The Minister's discretion under s360A is fettered. Plan provisions introduced by regulation must not be inconsistent with and are subject to the balance of the RMA, including Part 2, and must give effect to higher order planning instruments. Cost benefit analysis of proposed provisions under s32 RMA is required.

Environmental bottom line approach to plan making

10 The RMA was intended to install a regulatory regime to establish non-negotiable "*bio-physical bottom lines*" (in Part 2 RMA) to enable development within the capacity of the environment and the ecosystems that support it. Whatever the trade-offs in the circumstances of a particular development, a higher level trade-off in favour of sustainability (to safeguard life supporting capacity and avoid, remedy or mitigate adverse environmental effects) has already been made in legislation in

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advance². Beyond those bottom lines resource users would generally be left to make their own decisions³. Through establishing clear and consistent environmental limits the RMA was intended to achieve better environmental outcomes with fewer restrictions on use and development⁴.

- 11 In *Environmental Defence Society Inc v The New Zealand King Salmon Company Limited*⁵ (*EDS v King Salmon*) the Supreme Court confirmed that an environmental bottom line approach to the RMA and plan-making applies. Each document must “give effect to” or “implement” those that are superior to it in the planning hierarchy. What is required to “give effect to” a provision in a higher order document will depend on how specific and directive the language is. Some will be worded to give the decision-maker flexibility in how it is implemented. Others will be so directive that they are (in the ordinary sense of the word) rules. In the coastal environment the NZCPS sets directive environmental bottom lines in respect of (*inter alia*) indigenous biodiversity⁶, outstanding natural character, outstanding natural landscapes, and water quality.
- 12 The Supreme Court specifically considered the relationship between Policy 8 NZCPS which provides for aquaculture activities and Policies 13 and 15 which provide for preservation and protection of natural character and natural landscapes. It rejected the overall broad judgement approach to plan-making which would allow aquaculture development in areas “appropriate” in terms of Policy 8 but with serious adverse environmental effects⁷. It concluded:

[131] A danger of the “overall judgment” approach is that decision-makers may conclude too readily that there is a conflict between particular policies and prefer one over another, rather than making a thoroughgoing attempt to find a way to reconcile them. In the present case, we do not see any insurmountable conflict between policy 8 on the one hand and policies 13(1)(a) and 15(a) on the other. Policies 13(1)(a) and 15(a) provide protections against adverse effects of development in particular limited areas of the coastal region – areas of outstanding natural character, of outstanding natural features and of outstanding natural landscapes (which, as the use of the word “outstanding” indicates, will not be the norm). **Policy 8 recognises the need for sufficient provision for salmon farming in areas suitable for salmon farming, but this is against the background that salmon farming cannot occur in one of the outstanding areas if it will have an adverse effect on the outstanding qualities of the area. So interpreted, the policies do not conflict.**

[132] Policies 13(1)(a) and (b) and 15(a) and (b) do, in our view, provide something in the nature of a bottom line. We consider that this is consistent with the definition of sustainable management in s 5(2), which, as we have said, contemplates protection as well as use and development...
(emphasis added)

Relevant planning documents

- 13 The relevant planning documents are:
- NZCPS
 - RPS
 - Regional Plan
 - Proposed Plan
- 14 EDS considers that the Relocation Proposal fails to give effect to⁸:
- NZCPS. In particular⁹: Objectives 1, 2 and Policies 3, 11, 13, 15, 23 NZCPS.

² *The Stace Hammond Grace Lecture: Purpose and Principles in the Resource Management Act*, Hon Simon Upton, Waikato Law Review, Vol 3, pg.17-55, at pg. 42.

³ Hon Simon Upton, *Resource Management Bill: Third Reading*, New Zealand Parliamentary Debate, 4 July 1991, 3018-3020.

⁴ Hon Simon Upton, *Resource Management Bill: Third Reading*, New Zealand Parliamentary Debate, 4 July 1991, 3018-3020.

⁵ *EDS v King Salmon* [2014] NZSC 38.

⁶ Policy 11 NZCPS.

⁷ Paragraph 100.

⁸ As required under s360B(2)(c).

EDS Submission on MPI Salmon Relocation Proposal

- RPS. In particular¹⁰: Section 5.3 Coastal Marine, Section 7.2 Activities involving public resources, Section 8.1 Protection of visual features, and maps.

15 EDS considers that the Relocation Proposal is inconsistent with:

- Regional Plan. In particular¹¹: Chapter 2 Natural character, Chapter 4 Indigenous vegetation and habitats of indigenous fauna, Chapter 5 Landscape, Chapter 9 Coastal marine, and maps.
- Proposed Plan. In particular¹²: Chapter 4 Use of natural and physical resources, Chapter 5 Allocation of public resources, Chapter 6 Natural character, Chapter 7 Landscape, Chapter 8 Indigenous biodiversity, Chapter 13 Use of the coastal environment, Chapter 15 Resource quality (water, air, soil), and maps.

16 Section 360A does not give the Minister authority to override the RMA including the requirement to give effect to the NZCPS, or ignore relevant jurisprudence. In so far as the directive NZCPS provisions apply those must be given effect to.

PROCESS

17 EDS considers that the Proposed Relocation is an improper or unlawful use of s360A RMA because:

- It is a concurrent plan change/coastal permit application 'dressed up' as a plan-making exercise. The Proposed Relocation documents focus heavily on the specific environmental effects at the sites of the 6 potential salmon farms. Applications for coastal permits at the relocation sites are to be processed on a non-notified basis¹³. The Proposed Relocation documents should only focus on environmental effects to the extent necessary to determine whether the proposed areas to be rezoned are appropriate. The specifics of individual proposals should be assessed when a coastal permit is sought. Section 360A is a plan-making power only. Use for other purposes is invalid.
- In effect MPI is undertaking the role and shouldering most of the costs of a private plan change/consent application. This is not appropriate. Ability to apply for private plan change requests and concurrent applications for coastal permits in relation to aquaculture activities is anticipated and specifically provided for in Part 7A, Subpart 4 RMA. This option is available to King Salmon Ltd to achieve relocation of its existing farms. The s360A power was intended to be used to *"help councils change their plans where change is needed and cannot be achieved through the existing mechanisms"*¹⁴. It was not intended to be used to assist private, corporate applicants. Circumvention of Subpart 4 via s360A by MPI inappropriately restricts public participation, and raises issues invalidity and unlawful exercise of powers.
- Marlborough District Council¹⁵ is currently undertaking a full plan review. A combined regional policy statement, regional plan (including coastal plan), and district plan is proposed¹⁶. It is inefficient for MPI to amend a plan which is mid review. It undermines a strategic and integrated approach to aquaculture management. It does not give effect to the NZCPS's strategic planning approach.¹⁷ Removal of prohibited status and coastal marine area

⁹ But not limited to.

¹⁰ But not limited to.

¹¹ But not limited to.

¹² But not limited to.

¹³ Proposed Provisions, Appendix 1 at 35.3.3.3.

¹⁴ Hon P Heatley Minister of Fisheries & Aquaculture, Hansard In Committee 16/8/17 Volume 675, Page 20934, Part 4 Amendments to RMA.

¹⁵ A unitary authority.

¹⁶ Noting the aquaculture provisions have not yet been notified.

¹⁷ Policy 7. Also directly relevant are Policy 8.

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zoning in an *ad hoc* fashion to enable specific sites for a nominated entity is the antithesis of a strategic approach. Rezoning should be undertaken as part of a comprehensive and strategic process across the Sounds. It was available to King Salmon Ltd to submit on the Proposed Plan and to submit on the aquaculture provisions when notified.

PROPOSED PROVISIONS

- 18 Plan provisions are proposed but no s32 analysis provided. The consultation document states that a s32 analysis will be undertaken subsequent to consultation. This is not appropriate. Section 360A is a plan-making power. The focus of the Relocation Proposal should be on the proposed provisions. Without a s32 analysis of those provisions it is not possible for submitters to understand why MPI considers them to be lawful, efficient, and effective. It reinforces the non-strategic, *ad hoc* nature of the approach. It is poor planning and may itself be unlawful.
- 19 In addition, EDS considers that¹⁸:
- The relocation sites are located either wholly or partially in Coastal Marine Zone 1¹⁹ where aquaculture is prohibited. It is clear MDC considered aquaculture was not appropriate in those areas. Without a s32 analysis it is impossible to understand why, at a strategic level, removal of prohibited status is considered acceptable.
 - In any event, restricted discretionary activity status is not appropriate. If aquaculture is to be provided the decision-maker should retain full discretion. Non-complying or discretionary status should apply.
 - The restricted discretionary criteria fail to give effect to the NZCPS, RPS and Regional Plan. The matters over which discretion is reserved do not address landscape, natural character, indigenous biodiversity²⁰, or water quality in the Waitata Reach. This means those factors cannot be considered by the decision-maker thereby preventing assessment and control²¹ of adverse environment effects.
 - It is inappropriate for MPI to prevent notification of subsequent coastal permits on the basis that sufficient public participation will have occurred via the s360A process. The specifics of individual coastal permit applications should be subject to scrutiny. Prohibition of notification of subsequent coastal permit applications is inconsistent with the mandatory requirement that the regulation power only be exercised if the matters to be addressed are of regional or national significance²².

PROPOSED SITES – ENVIRONMENTAL EFFECTS

Landscape & natural character

- 20 Based on the expert opinion of Mr Stephen Brown (Statement of Stephen Brown to be filed prior to hearing) EDS is concerned that the Relocation Proposal fails to give effect to Policies 13 and 15 NZCPS. On Mr Brown's evidence none of the Waitata Reach proposed sites are appropriate. Specifically:

¹⁸ Without limiting general, broader concerns with the proposed provisions.

¹⁹ Under the Regional Plan.

²⁰ King Shag and marine mammals are addressed via management plans. This does not give effect to Policy 11 NZCPS. The King Shag management plan must only have the 'objective' of avoiding adverse effects this is not the same as ensuring adverse effects are avoided. Ability to decline consent because of specific effects on King Shag and other indigenous biodiversity must be provided for.

²¹ Including by decline of consent.

²² Section 360B RMA.

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- The proposed farms at Blowhole Point North and South will have an adverse effect on the Port Ligar ONL, and significant adverse effects on other coastal landscape and natural character values.
- The proposed Mid-Channel farm will have an adverse effect on the Western Waitata Coast ONL, and significant adverse effects on other coastal landscape and natural character values.
- The proposed farms at Richmond Bay and Horseshoe Bay will have an adverse effect on the Maud Island ONL/ONC, and significant adverse effects on other coastal landscape and natural character values.

21 The Relocation Proposal also fails to:

- Adequately identify and assess cumulative landscape and natural character effects.
- Provide adequate information on the specific design and nature of the proposed farms.
- Clearly explain how thresholds for determining adverse effects, significant adverse effects, and more than minor effects have been established and assessed.

Indigenous biodiversity

22 EDS is concerned the Relocation Proposal fails to give effect to Objective 1, Policies 3 and 11 NZCPS:

- The Waitata Reach relocation sites fall within the foraging of the King Shag breeding colony at Duffers Reef²³ and the satellite colony at Tawhitinui. The King Shag is endemic to New Zealand²⁴. It is a Nationally Endangered species in the Department of Conservation New Zealand Threat Classification System²⁵. It is identified as “*vulnerable*” by the International Union for Conservation of Nature and Natural Resources Red List²⁶. It is naturally rare and its population small²⁷. Policy 11(a)(i), (ii) and (iv) apply. Adverse effects of activities must be avoided on the King Shag itself and on its habitat. Policy 11 is absolute. There is no exception for “*appropriate*” activities. The Relocation Proposal suggests that the proposed sites will not have an adverse effect on the King Shag or its habitat because the proposed pen sites are either entirely or partially at depths towards the end range or outside of the foraging depth preferred by 74% of King Shags²⁸. No assessment of the cumulative effect of exclusion of foraging area by all proposed relocation sites, other existing aquaculture activities²⁹, and other marine structures, has been undertaken. Given the extent of effect of the depositional footprints of the proposed farms the cumulative excluded area is likely to be extensive. In the absence of such an assessment it is reasonable to conclude that the Proposed Relocation will adversely affect the King Shag and its habitat. Given the King Shags’ vulnerability Policy 3 NZCPS requires a precautionary approach to planning and decision-making be applied. This is not reflected in the Relocation Proposal documents.
- The depositional footprints of the proposed farm sites are extensive. At a number of sites the footprints impact, or have potential to impact, habitat/species that fall within Policy 11

²³ The King Shag is known to breed at less than 10 locations. The 4 main colonies at Duffers Reef, Trio Islands, Sentinel Rock and White Rocks: *Davidson EC* at [102].

²⁴ *RJ Davidson Family Trust v Marlborough District Council* 2016 NZEnvC at [88].

²⁵ *Davidson EC* at [97].

²⁶ *Davidson EC* at [100].

²⁷ Duffers Reef may represent around 30-40% of the world population with approximately 240 birds: *Davidson EC* at [103].

²⁸ 74% of King Shags prefer to forage in water 20-40m deep: Relocation Proposal AEE pg 78.

²⁹ Salmon farms and mussel farms.

EDS Submission on MPI Salmon Relocation Proposal

NZCPS.³⁰ How adverse effects or significant adverse effects are avoided is not clearly identified.

Water quality

- 23 The peer review of the NIWA's water quality report concludes that the water quality model (used at both the Pelorus Sound and Queen Charlotte Sound sites) has been "*stretched beyond the conditions for which it has been verified*"³¹. In that context there is no certainty that water quality is being maintained as required by Objective 1 NZCPS or that significant adverse effects on ecosystems and habitats from discharges are being avoided as required by Objective 23(1)(d) NZCPS. Additional modelling must be undertaken to ensure the NZCPS is given effect to.

ECONOMIC ANALYSIS

- 24 EDS considers that the economic impact analysis approach conducted by Price Waterhouse Coopers supporting the Proposed Relocation is flawed. It measures economic impacts only. A cost benefit analysis is more appropriate. Details provided in Statement of Kevin Counsell to be filed prior to hearing.



Madeleine Cochrane Wright – 27 March 2017

³⁰ 1. The combined depositional footprint of the Blowhole Point sites covers a strong rocky reef ecosystem. Policy 11(b)(iii) requires avoidance of significant adverse effects: Relocation Proposal AEE pg 56.

2. The Richmond Bay South site exhibits invertebrate fauna, an "abundance of mobile epifauna" and numerous fish species. Rocky reef habitat is proximate. Projected deposition footprint in Figure 6-16 avoids the reef system but Policy 11 is not clearly addressed: Relocation Proposal AEE pgs 73, 76.

3. The Horseshoe Bay site exhibits "extensive subtidal reef" which "supports a diverse reef community", with a unique shell/rubble habitat at its base. That habitat is considered to be uncommon in the Pelorus Sound. The AEE records that the projected depositional footprint avoids the reef but projection Figure 6-20 shows the footprint to extend into the reef just next to the unique ecological site. Figure 6-21 shows the cumulative deposition footprint of the proposed salmon farm and existing mussel farm to extend into the reef. Policy 11(2)(b)(iii) applies and is not clearly addressed: Relocation Proposal AEE pgs 86, 88.

4. The deposition footprint of the proposed site at Tio Point, Tory Channel is 62ha and is "likely to include the occasional notable ecological feature". Compliance with Policy 11 NZCPS is not clearly addressed: Relocation Proposal AEE pg 113.

³¹ Relocation Proposal AEE pg 103.

**STATEMENT OF EVIDENCE BY STEPHEN KENNETH BROWN FOR ENVIRONMENTAL DEFENCE SOCIETY
INCORPORATED IN RESPECT OF SUBMISSION ON MINISTRY OF PRIMARY INDUSTRIES POTENTIAL
RELOCATION OF KING SALMON LTD SALMON FARMS IN THE MARLBOROUGH SOUNDS
(LANDSCAPE)**

27 MARCH 2017

Introduction

1. My name is Stephen Kenneth Brown. I hold a Bachelor of Town Planning degree and a post-graduate Diploma of Landscape Architecture. I am a Fellow and the current President of the NZ Institute of Landscape Architects. I have practised as a landscape architect for 35 years. During that period I have specialised in landscape assessment and planning. This has included undertaking strategic landscape and natural character assessments in different parts of New Zealand. These projects and further professional experience details are set out in **Appendix A**.
2. Focusing on the Marlborough Sounds, I gave evidence in relation to the original King Salmon Board of Inquiry applications (2012) and also gave evidence in support of Sanford's two proposed 'replacement' mussel farms at Pool Head and Gannet Point, within Port Gore (2010).

Code of Conduct

3. I confirm that I have read the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2014 and that I agree to comply with it. I further confirm that I have considered all the material facts that I am aware of that might alter or detract from the opinions that I express, and that this evidence is within my area of expertise, except where I state that I am relying on the evidence of another person.

Scope

4. My evidence addresses the landscape (including seascape), natural character and amenity effects of the proposed relocated salmon farms.

The Proposals

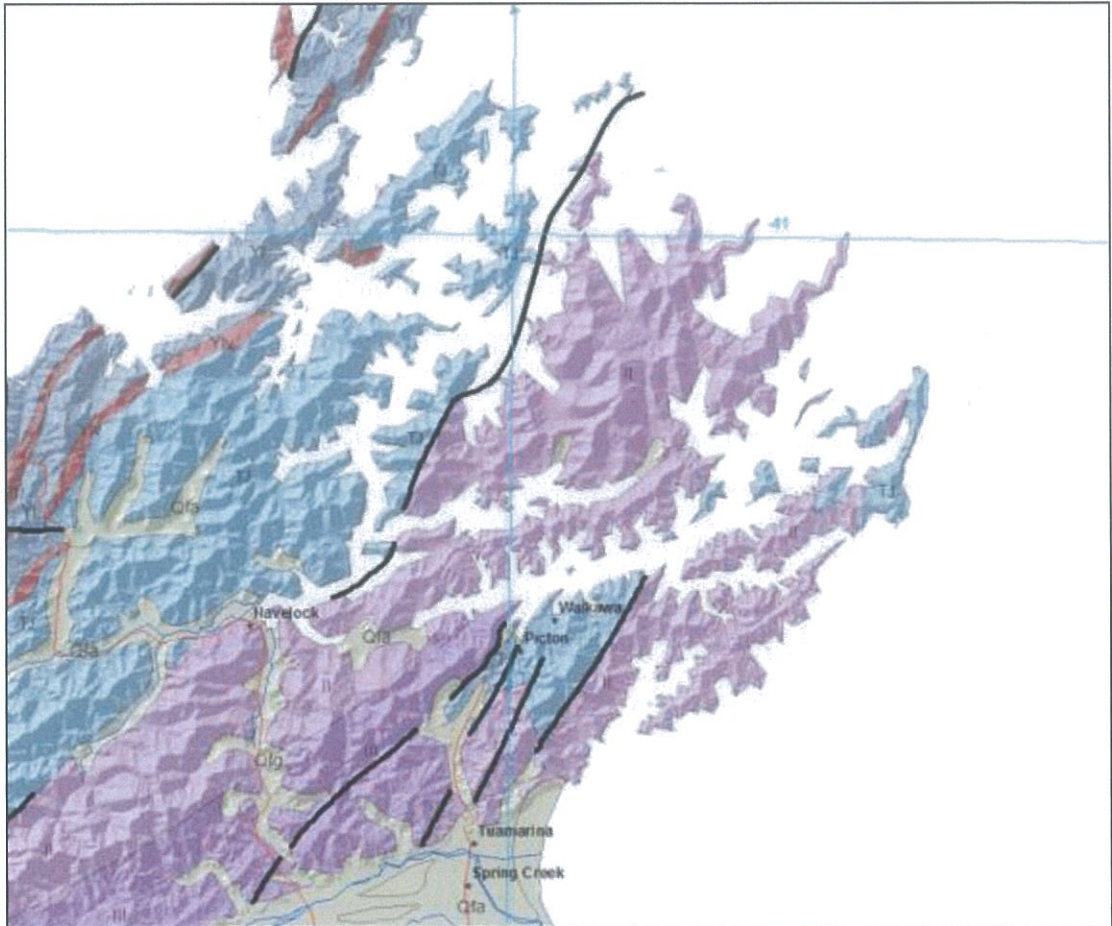
5. The nature of the proposals for all six sites are addressed in some detail in John Hudson's assessment. I do not intend to repeat those descriptions. However, I can confirm that I have taken the nature of each proposal into account in addressing the effects of the current proposals – as are discussed later in my statement.

Context - The Marlborough Sounds

6. The Marlborough Sounds remain one of this country's iconic landscapes and Dr Boffa summarises many of its key qualities very aptly at his paragraphs 3.1 to 3.8. Clearly, the Sounds display a very distinctive geological profile that has merged with the sea to form an equally expressive array of coastal landscapes; not quite as steep and dramatic as the 'fiords' within the Te Wahipounamu (South Westland) World Heritage Area at the other end of the South Island, but still highly expressive and distinctive, even iconic.
7. Throughout this endlessly varied and dynamic coastline a complex matrix of islands and finely wrought headlands gradually dip towards, and into, Cook Strait. Aligned in a north-easterly direction, the Sounds' array of peninsulas and islands are backed by a complex sequence of bays, coves and channels that have been formed by the drowning of valley systems, probably during the world-wide rise of sea level at the end of the Pleistocene Age. Geologists suspect that tilting of the entire block between the Whangamoa and Wairau Faults may have contributed to this characteristic sequence of islands and headlands intermeshed with both the open waters of Cook Strait and the much more enclosed and sheltered waters of the actual Sounds. Hardly surprising, therefore, the introductory section of Marlborough Online describes the Sounds in the following manner:

"Maori tradition speaks of the Marlborough Sounds as the shattered prow of an intricately adorned canoe by which the gods came from heaven. The Sounds are unique in New Zealand as the only land area sinking into the sea. The Sounds are a continuation of the Richmond Range, which has tipped into the sea. The bedrock they consist of formed 280 million years ago and has moved 53km since the Pliocene 7.7 million years ago. Sedimentary, volcanic, and mineral belts are found in close proximity. Concentrated deposits of nickel, chromium, cobalt, molybdenum and manganese are found in the mineral belts, and cause stunting of vegetation at low altitudes. Movement continues northwards at a rate of 6.6mm per year. This movement is a result of the Sounds being on the boundary of the Pacific and Indo-Australian plates. This active geology has led to dramatic ridges rising out of the sea, and a sheltered marine environment."

Source: **Marlborough Online**; Christopher Cookson:
<http://www.marlboroughonline.co.nz/index>.



Source: GNS Science: *Interactive Geological Map of New Zealand*; 1:1,000,000 scale (1972)

8. The Sounds' complex geology, stratigraphy and sea forms are augmented by its native forest remnants, including those forests focused on the higher slopes of D'Urville Island and Mounts Furneaux, Kiwi, Stokes and McMahon – between Port Gore and Kenepuru Sound – and the Bull Range west of Pelorus Sound. These major forest remnants are flanked by a lower lying, mixture of bush and shrubland cover, much of which has re-emerged over the last 10 or so years. This native 'shrubland' cover is very marked across the outer ridges and 'arms' flanking the likes of East / Onauku Bay next to Arapawa Island and at Port Gore, out to Cape Jackson. It is also apparent within parts of Queen Charlotte and Pelorus Sounds'.
9. Reflecting the Sounds' location at the intersection of the North and South Islands, its steeper slopes and gullies are the repository for a number of tree and shrub species that reach their southern limit in the Nelson / Marlborough area, including tanekaha,

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kohekohe, mountain cabbage tree (*Cordyline indivisa*), white maire, large leaved milk tree (*Streblus banksii*) and tree Hebe (*Hebe parviflora*), among others. Much more common on its high ground are hard beech forest, together with Halls totara, rimu, miro, kamahi, while on lower slopes and in wetter gullies, a mixture of pukatea, rimu, matai, tawa, miro and kahikatea form much of the local canopy. These are supplemented by understorey species including mahoe, kawakawa, nikau, various tree ferns, and climbers such as supplejack and kiekie. Manuka and kanuka dominate much of the regenerating canopy below and between these areas of more mature forest cover, and are rapidly colonising areas, such as the eastern side of Port Gore, where carbon trading is starting to supplant more traditional grazing.

10. While tui, native pigeon, fantails, robins, weka and tomtits utilise much of this cover, shags and gannets are also prevalent around the Sounds' shorelines, and dolphins are regular visitors to Queen Charlotte Sound, Pelorus Sound and the outer bays. Killer whales are also regular, though less frequent, visitors to Port Gore and the rest of the Outer Sounds.
11. Yet, they are a far from wholly natural / native domain: mussel farming, in particular lines the margins of most of the inlets and bays that flank Pelorus Sound seaward of Kenepuru Sound (including the mouth of that inlet). Mussel farming also dominates the littoral margins of large parts of Croiselles Harbour, Tawhitinui Reach, Admiralty Bay, Beatrix Bay, the inner most bay of Port Gore and – further to the east – East Bay and Tory Channel. Even though carbon credits have provided the financial incentive for extensive displacement of pastoralism by native 'scrub / shrubland farming', primarily within the Outer Sounds, areas of open pasture also remain clearly apparent around the likes of Cape Lambert, Guards Bay, Admiralty Bay, Tawhitinui Reach, parts of Arapawa Island and many of the more 'inshore' reaches.
12. Indeed, across most of the Marlborough Sounds, residual areas of open pasture, pockets of residential settlement (becoming more pronounced around Kenepuru Sound, Picton and up parts of Tory Channel) and – perhaps most obvious of all – pine forest, clearly disturb the landscape's natural gradients and patterns. They also disrupt much of the Sounds' visual cohesion and integrity as an 'outstanding natural feature' (Boffa: paragraph

3.7). Indeed, in 2008 The Wilding Conifer Strategic Plan for Inner Queen Charlotte Sound was released to address the removal of wilding and unwanted pines. This strategy, partly funded by King Salmon, was designed to implement sections of MDC's Regional Pest Management Strategy (2007).

13. Returning to the broader landscape of the Sounds as a whole, the following points capture some of the key qualities and related 'trends' that are revealed as one moves from the margins of Cook Strait towards the main settlements of Havelock and Picton:

- A. The margins of Cook Strait and 'Outer Sounds' consistently display a more rugged, wild and remote character than the reaches and inlets that are more sheltered and closer to the 'mainland'. The dynamic manner in which the likes of D'Urville Island, Port Gore, and Arapawa Island extend out into Cook Strait – via the likes of Cape Lambert, Cape Jackson and Cape Koamaru – is both dramatic and highly appealing. Some of the grandeur and elemental nature of this interaction, between land and sea, inevitably dissipates as one moves into the slightly calmer, more enclosed, reaches of Pelorus Sound, Queen Charlotte Sound and Tory Channel.
- B. At the same time, the predominance of mature native forest, intermixed with regenerating scrub / shrubland, that is so marked across much of D'Urville Island and – increasingly – down both sides of Pelorus Sound, Port Gore, and Queen Charlotte Sound, diminishes as one moves past the Tawhitinui Reach (Pelorus Sound) and Blumine Island / Endeavour Inlet (Queen Charlotte Sound). In saying this, I am also aware that the western and northern sides of D'Urville Island, together with the slopes and peninsulas north of Port Ligar, around Guards Bay, and from Melville Cove out to Cape Lambert, remain actively farmed and substantially in pasture – despite the wider 'naturalising' influence of the Emissions Trading Scheme.
- C. This transition is even more marked and sudden within Tory Channel: not only do the East and West Heads mark the point of entry to the Marlborough Sounds,

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they also mark the point of entry to a highly modified, working, coastal landscape.

- D. Within all of the Sounds – but even more markedly and abruptly within Tory Channel – the progression ‘inland’ from Cook Strait is paralleled by an increasing proliferation of farm houses, rural-residential development and small settlements. This starts with small residential pockets, such as those within Waihinu Bay (Pelorus Sound), Endeavour Cove and Camp Bay (Queen Charlotte Sound) and Te Awaiti Bay (Tory Channel), before culminating in a sequence of larger, more linear, coastal settlements near Kenepuru Road and Queen Charlotte Drive, closer to both Picton and Havelock.
- E. Commercial pine forestry is also a major feature of the Sounds in general. However, it is most marked within Pelorus Sound near Tawero Point – the south side of Tawhitinui Reach – and from there southwards, within Crail Bay, across the northern slopes of Arapawa Island, and flanking both sides of Tory Channel. Currently, the scars of harvesting are particularly obvious near Elaine Bay within the Tawhitinui Reach, around Nydia Bay, Maori Bay and the Hikapu Reach of Pelorus Sound. They are also evident at the mouth of Kenepuru Sound and across the backdrop to Hitaua Bay within Tory Channel.
- F. More uniformly spread throughout the Sounds is mussel farming. Some 568 operational marine farms¹ currently occupy 2,800ha of the Sounds’ 150,000ha of water space. These are found around the margins of bays and inlets stretching from Waiua Bay, near the top of D’Urville Island, to Oyster Bay on the south side of the Tory Channel. However, the greatest concentration of mussel farms is found in the vicinity of Admiralty Bay, Anakoha Bay and either side of Pelorus Sound. The sheltered waters of Forsyth Bay, Beatrix Bay and Crail Bay – immediately east of Pelorus Sound – together with Hallam Cove, Fitzroy Bay and Canoe Bay up the Tawhitinui Reach, and the northern shoreline of Kenepuru Sound, are all lined with mussel farms. By contrast, the inlets and coves flanking Queen Charlotte Sound are almost entirely devoid of marine farming: the only

¹ the Marine Farm Association Inc

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exceptions are both a salmon farm and mussel farms in East Bay – next to Arapawa Island – and the existing Ruakaka Bay Salmon Farm.

14. The various land use patterns and ‘trends’ reflected in this analysis paint a rather complex picture of the Marlborough Sounds. This has, over the last decade or so, been complicated by the advent of the Government’s Emission Trading Scheme, the marginal state of farming and forestry within many outer reaches, and a more limited public / private drive to limit – or at least manage – the effects of forestry and wilding pines. This has led to the sort of native shrubland regeneration that I have already described and the increased ‘ring fencing’ of the Sounds’ working landscapes.
15. For example, Mt Kiwi marks a clear point of division between two halves of a large inlet directly east of Pelorus Sound: Beatrix Bay, stretching up to a narrow land bridge at the edge of Forsyth Bay, is now increasingly dominated by regenerating shrubland, whereas Clova Bay and Crail Bay, to the south, remain marked by the checkerboard of pine forestry and large swathes of open pasture. Although marine farming – at both ends of this inlet – is also an important part of the overall landscape mix, it is less visually prominent and influential, apart from the ring pens of both salmon farms on the western side of Crail Bay.
16. The regeneration of native forest cover is also having a significant effect on the character of Queen Charlotte Sound. Presently, just Blumine, Long, Pickersgill and Motuara Islands, together with Clark Point – framing the northern end of East Bay – are currently identified as Outstanding Natural Landscapes (ONLs) on Map 78 of the MSRMP. Yet, it is clear that a combination of residual native forest and emergent shrubland / scrub is now lending the northern side of Queen Charlotte Sound – from Oterawhanga to the Endeavour Inlet and the Bay of Many Coves – a degree of coherence and perceived naturalness that it would have lacked in years gone by.
17. Similarly, while pockets of settlement, rural-residential development and dwellings are scattered throughout most of the Marlborough Sounds, such development frequently remains subservient (visually, as well as physically) to the larger landscape ‘building blocks’ of native coastal forest, pasture, exotic forestry and water / sea areas. This subservience is generally reinforced by the location of many dwellings, and areas of

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associated clearance, at the head of inlets or down their flanks, tucked in among bush and forestry. As a result, they often have a relatively low profile when viewed from the roads, major sounds and reaches that act as the major transport conduits through the Sounds. It is only as one gets closer to Picton, Kenepuru Sound and Mahau Sound that this pattern appreciably changes, with strings of localised settlements in individual bays – intermixed with less consolidated development on intervening slopes – giving rise to a much more obviously modified / cultural landscape.

18. This combination of factors has led me to suggest a division between the Inner and Outer Sounds. This correlates with a broad transition from those parts of the Sounds closer to Cook Strait, that convey a stronger feeling of being predominantly natural, into those reaches – closer to Havelock and Picton – that are generally more modified. This transition is also accompanied by a progressive reduction in the Sounds' endemic character, expressiveness and legibility, aesthetic appeal and visual coherence as one moves further 'inshore'.
19. Thus, the greater preponderance of pine forestry, open pasture and residential development found around Mahau Sound, Kenepuru Sound and Tory Channel not only changes the fundamental balance between natural and cultural (man-made) elements within the wider Sounds environment, it also homogenises and 'internationalises' the local landscape: there is less diversity and variety, less sense of natural sequence and succession, and less sense of being in the Marlborough Sounds or New Zealand – as opposed to other parts of the country or world. Furthermore, forestry and farming – particularly on steep, erodible slopes – generate a range of negative effects related to harvesting, earthworks, sediment generation and distinctly unnatural planting patterns and sequences.
20. This division is not, however, hard and fast. Thus the beech forest extending down from Mt Stanley to Penguin Bay and part of Fairy Bay within my Inner Sounds area merges with the dark waters of Pelorus Sound to create a quite stunning and seamless landscape sequence. Yet, it directly abuts, and contrasts with, rows of semi-mature pines directly across the Sound – on a prominent headland north of Four Fathom Bay – and the scars of past harvesting at the mouth of Nydia Bay. This sort of juxtaposition becomes increasingly

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common south of Tawhitinui Reach and reaches a zenith across the highly modified, extensively scarred, slopes that frame Tory Channel.

21. Of note in relation to the current applications, aquaculture does not readily follow the patterns of transition that I have just outlined. The need for clean water and higher nutrient loadings has effectively pushed marine farms into most of the bays, inlet and coves that stretch from Kenepuru Sound out to Croiselles Harbour and the margins of D'Urville Island. Thus while most of Queen Charlotte Sound remains free of marine farms at present, East Bay is the one major exception to this situation – with its mussel farms and salmon farm lying close to the northern tip of Arapawa Island and Cook Strait.
22. Consequently, aquaculture tends to run against the grain of other land use patterns that I have described, and this frequently leads to conflict between the more natural, scenic, qualities of the Outer Sounds as an activity that fundamentally relies on the marine environment and resources of the Sounds as a whole.

Landscape & Natural Character Values

23. Turning, therefore, to the related matter of Outstanding Natural Landscapes (ONLs) and Natural Character Values, I have reviewed Boffa Miskell's August 2015 report – "*Marlborough Landscape Study*" – prepared for the Marlborough District Council and the report – "*Natural Character of the Marlborough Coast*", June 2014 – jointly prepared by Boffa Miskell Ltd, Lucas Associates, Landcare Research and DoC, also for Marlborough District Council.
24. Rather than address the broad spread on ONLs and ONC Areas across the Marlborough Sounds as a whole, I will next provide a summary description of the landscapes / coastal environs found within the Waitata Reach, extending through to its intersection with the Tawhitinui Reach, and within Tory Channel. These descriptions are largely drawn from my 2012 evidence in relation to the original King Salmon applications, but remain pertinent to all three areas. In subsequent sections of this statement, I will also address the ONL and ONC 'overlays' if and where they arise in relation to each proposed marine farm site. I would, however, make the comment that despite the effects of past farming activity, on-going production forestry, existing marine farming and sporadic settlement, the Sounds

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remain liberally 'sprinkled' with areas identified as having high or outstanding landscape and natural character values. This is hardly surprising, given the very particular geophysical evolution of the Sounds and the, in many places, quite spectacular environment and recreational playground that this has created.

Pelorus Sound – The Waitata Reach

25. The channel mouth of the Waitata Reach, at the entrance to Pelorus Sound from Cook Strait, is initially defined by two key features: the twin promontories of Te Akaroa (West Entry Point) to the right and Kaitira (East Entry Point) almost straight ahead. Stretching south from Te Akaroa – affording a backdrop to both the outer Sound and an out-of-sight Port Ligar, is a broad sequence of forest / scrub covered ridges and hills that run from Turner Peak to Cone Peak, then towards a more remote Mt Shewell.
26. As one gets closer to the Sound's 'gateway' between both Points, the landscape is almost entirely dominated by the angled profile of Kaitira, covered in a swathe of pasture and the contrasting dark green, forest-covered mantle of undulating terrain down Pelorus Sound's western side. Despite the almost depauperate state of the pasture across Kaitira, there is little sense of human incursion or modification within this landscape, and the manner in which its water areas flow around and between the projecting headlands / peninsulas at the mouth of Pelorus Sound adds another, more dynamic, dimension to this highly appealing landscape.
27. It has a clear and legible structure, a strong sense of being remote, even wild and elemental (not uncommon on the edge of Cook Strait), and is conspicuously natural. It is also a distinctly New Zealand landscape, shaped by the amalgam of sharply etched terrain, clear blue seas and green / khaki bush. Even when in the centre of the Waitata Reach off Waihinu Bay – with its salmon farm and small settlement intermittently visible – the landscape remains substantially dominated by a continuum of natural landforms, forest cover, and remnant pasture. The relative absence of more 'structural' development – in the form of housing, power lines, roads and large blocks of forestry – clearly helps to create this impression, as does the closer proximity and greater visual presence of a sequence of natural headlands that define the rest of the Reach.

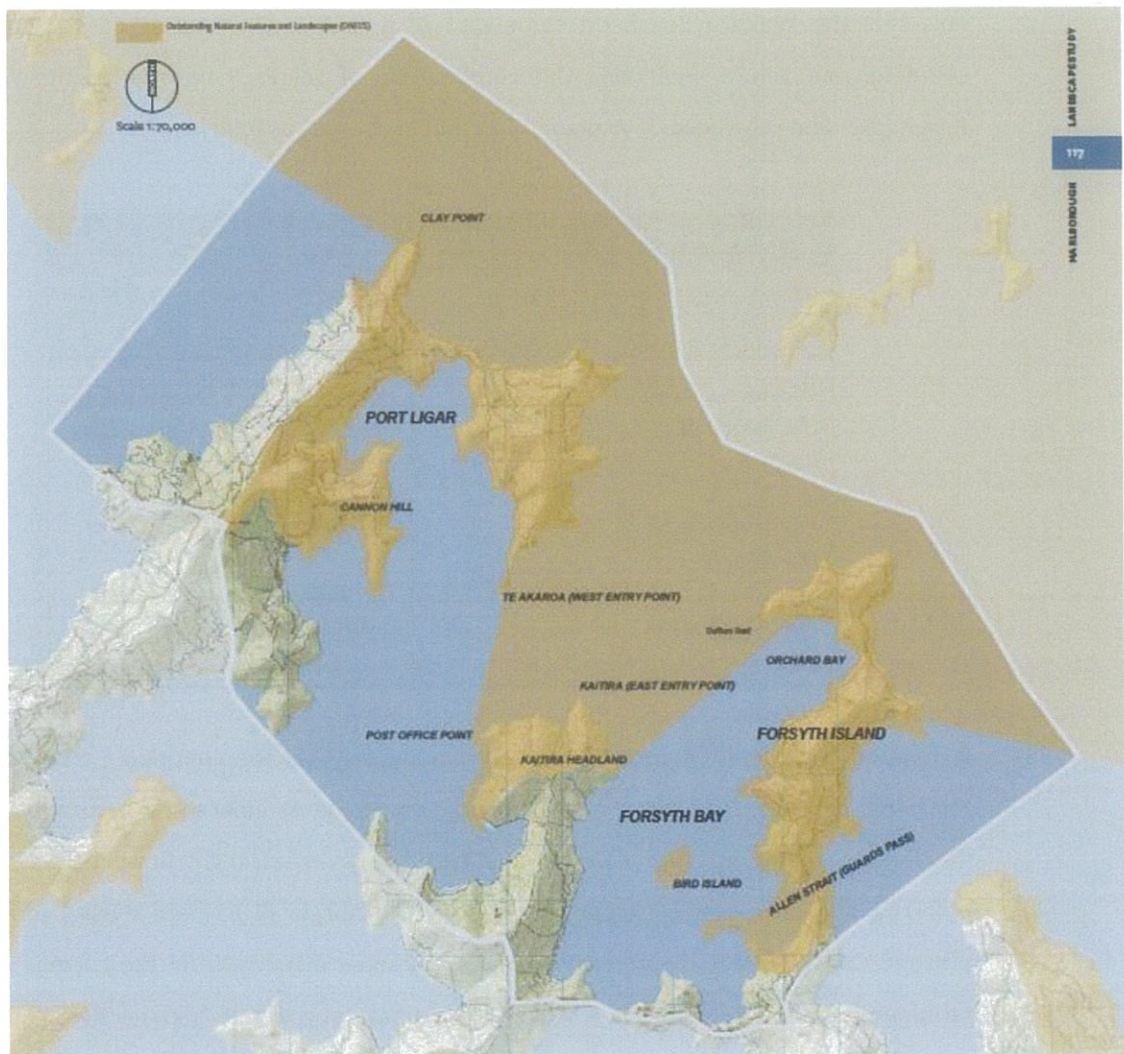
28. Travelling in the opposite direction, up past Maude Island, the western side of Pelorus Sound – backed by the range of hills and forests from Mt Shewell to Turner peak – remains largely as I have just described it: largely to predominantly natural and imbued with considerable aesthetic appeal. However, the eastern side of the harbour is less cohesive, with areas of pasture and forestry clearly apparent within Richmond Bay. Even so, the outer margins and headlands which frame that bay, as well as the Waitata Reach, are now largely covered in re-emerging shrubland. Although the same slopes are also dotted with wilding pines, this creates a landscape that, if not quite as natural and appealing in its own right as that across Pelorus Sound, is at least reasonably compatible with (even sympathetic to) it. The marked absence of development and structures down the eastern side of the Reach reinforces this connection and sympathetic connection.
29. In fact, while mussel farms are also tucked into the recesses of Port Ligar, Waihinu Bay, Waitata Bay, Horseshoe Bay and part of Richmond Bay, they are sufficiently removed from Pelorus Sound's main channel that – apart from Horseshoe Bay – they have little real impact on perceptions of the coastal environment and landscape in general.
30. Unfortunately, this is not the case elsewhere, so that nearby Forsyth Bay suffers from a proliferation of mussel farms down its CMA margins. Together with the rusting platform of an abandoned salmon farm, they do little to achieve a feeling of comfortable merger between man-made and natural elements, despite the spread of native shrubland around parts of the Bay's northern periphery.
31. Perhaps of more importance, the mouth of the Tawhitiui Reach and transition into the 'Inner Sounds' area south of that Reach is also marked by an increasing preponderance of open pasture, large scale forestry blocks and areas of recent or current pine harvesting. Mussel farms also line the series of bays both sides of Pelorus Sound, encroaching ever closer to its main channel, while housing also begins to regularly dot both the coastline and its hinterland south of North-west Bay.
32. Even so, the greater bulk of the Waitata Reach displays considerable appeal, assisted by the relative absence and / or concealment of development and modification that so clearly blights much of the Marlborough Sounds, including the majority of Pelorus Sound.

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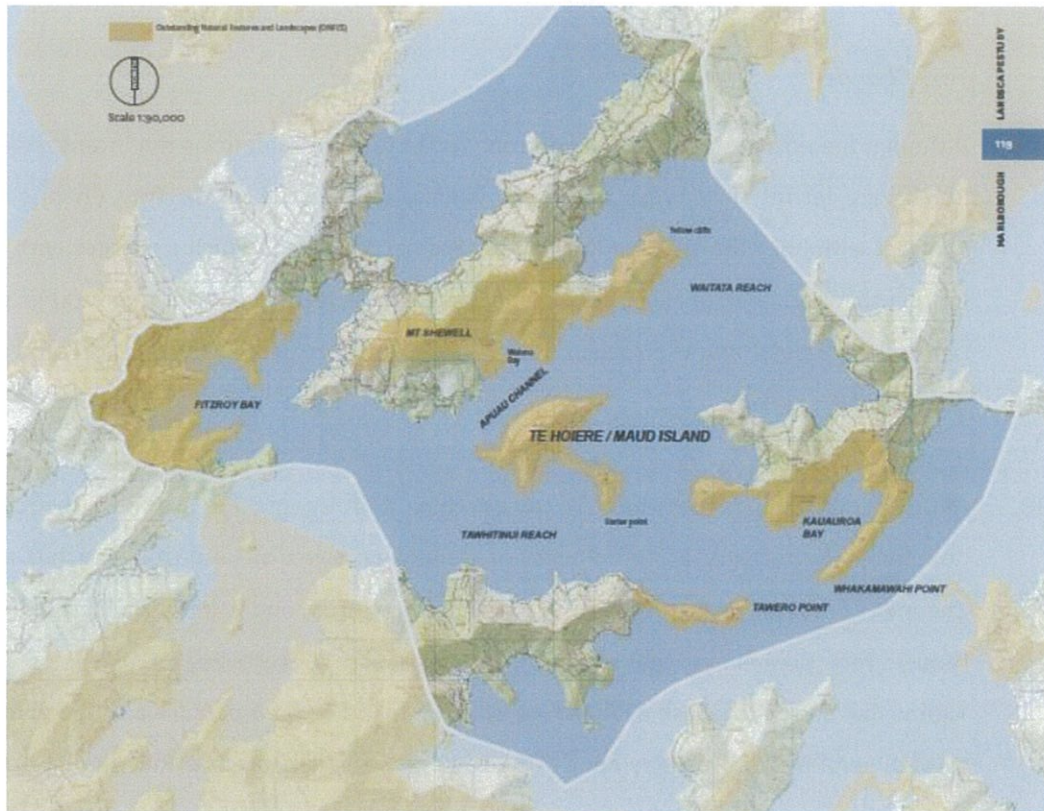
This sets the Waitata Reach on somewhat of a 'pedestal' in terms of its landscape character and values. Reflecting this combination of values, I have rated the Waitata Reach (excluding the head of Waihinau Bay and Port Ligar) as follows:

Waitata Reach			
Landscape Values Rating:		Natural Character Values Rating:	
<i>Western side of the Reach & Kaitira:</i>	Very High	<i>Western Side of the Reach:</i>	Outstanding / Very High
<i>Eastern Side of the Reach:</i>	High	<i>Eastern Side of the Reach:</i>	High
<i>The Reach as a Whole:</i>	Very High	<i>The Reach as a Whole:</i>	High

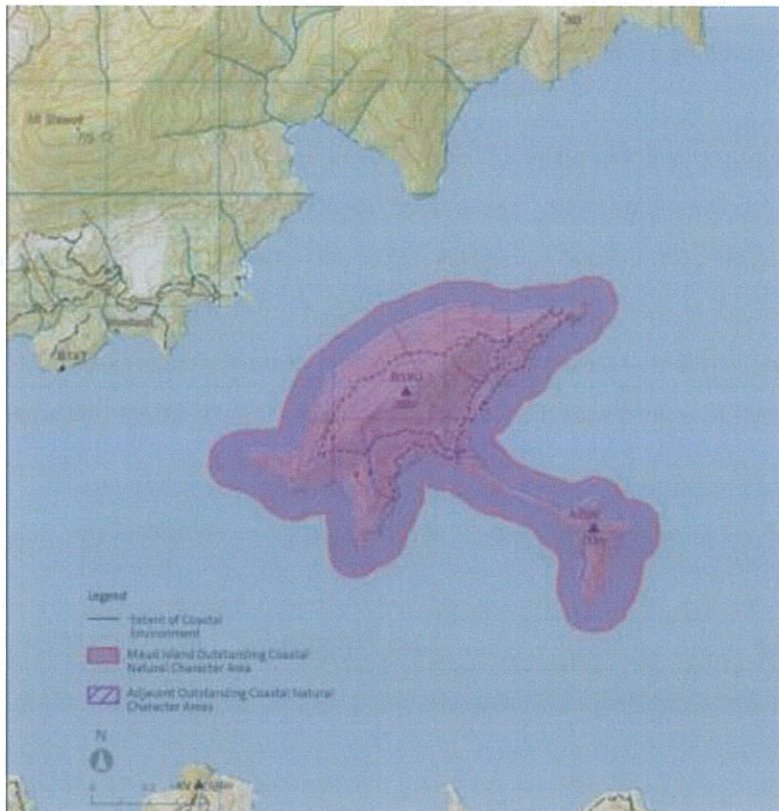
33. In relation to Natural Character values, it is apparent that the continuum from CMA to terrestrial margins, then up to the main ridge crests, is dominated by natural elements (landform, vegetation cover / extent and type, water areas, night-time character, etc), patterns, and processes – except within parts of Waitata Bay where mussel farms are present. Consequently, I would rate those areas some distance from the current marine farming operations as being Outstanding from a natural character perspective, and those affected by such activities as having a high level of natural character. Again, this means that all three headlands down the Waitata Reach's western shoreline – its most prominent features – would be rated as outstanding. On the opposite, eastern, side of Waitata Reach the greater prevalence of pasture and semi-mature native revegetation, from Kaitira to Richmond Bay, results in me rating these headlands slightly lower – typically High – for natural character.
34. The following maps identify the ONLs and ONC Areas identified for Marlborough District Council in 2015 and 2014 respectively:



ONLs Identified Within the Northern Waitata Reach



ONLs Identified Within the Southern Waitata Reach



ONCA Area Identified Covering Maud Island In The Southern Waitata Reach

Tory Channel

35. Although the entry into Tory Channel from Cook Strait is dramatic as the Interislander and Bluebridge ferries skirt West Head, the landscape revealed inside Tory Channel is, by contrast with both the Waitata Reach and Queen Charlotte – which it merges with, much more utilitarian and unexceptional: somewhat of a let-down after the drama of the narrow entry point and the rugged Straits landscape revealed on the outside of Arapawa Island and West Head.
36. Although the slopes between Te Awaiti Bay and Ngamahau are not as obviously dominated by forestry as those west of Deep Bay, signs of harvesting further up the Channel, combined with open pasture, areas of low scrub, and wilding pines, substantially reduce Tory Channel's appeal once inside its heads. A scattering of dwellings around Thoms Bay and at the base of Arapawa Island, flanked by bare pasture and the geometric rows of semi-mature forestry near Deep Bay – as well as behind Te Rua and Oyster Bays opposite – simply exacerbate such impressions.
37. Similarly, when travelling from the direction of Queen Charlotte Sound, the scars of forestry operations around Hitaua and Onapua Bays, power cables across the Channel (together with coloured warning posts and stanchions), and marine farms from Te Pangu Bay to Hitaua Bay, combine with pockets of residential development to confirm impressions of a working landscape. Given this pattern of activities and related land cover, I do not regard Tory Channel as displaying a high level of natural character value, let alone outstanding. Clearly, this assessment differs somewhat from that depicted on MSRMP Map 78, but appears to accord with the views expressed by Dr Boffa about this area.

<i>Tory Channel</i>	
<i>Landscape Values Rating:</i>	<i>Natural Character Values Rating:</i>
Low	Low / Moderate

Amenity – Community & Tourism Values

38. I am reluctant to comment on residential amenity values, as I have not been able to visit sufficient residential locations around the Sounds to analyse such values in any depth. However, I have been able to reach some conclusions about how the wider community might regard the areas that I have just discussed and their 'natural or physical qualities and characteristics' as contributing to the wider Sound's 'pleasantness, aesthetic coherence, and cultural and recreational attributes'.

Pelorus Sound – The Waitata Reach

39. The Waitata Reach is, as I have previously indicated, a gateway within the wider Sound, that reveals variable – though still relatively high – levels of natural character and visual / aesthetic cohesion. These values complement the Reach's important gateway function, while the fact that the outer headlands / point close to its main channel remain largely unfettered by development and man-made structures is very important relative to the impressions created when entering Pelorus Sound.
40. For those travelling in and out of the likes of Port Ligar, Waihinu Bay, Waitata Bay or even Richmond Bay, such impressions soon change as exposure to local dwellings, small settlements, mussel farms and the current salmon farm increases within each inlet. Yet, this does not diminish the significance of the journey to and from these places and the contrast engendered by the relative absence of development and human structures outside, and between, the bays. It is the perceived 'naturalness' of the main body of the Waitata Reach that – together with the more remote backdrop of forested hills to the west – helps to 'glue' this landscape together and prevent it from becoming a more chaotic collection of disparate elements and 'parts'. It also provides the setting for a variety of tourist retreats like the Tui Nature Reserve Eco Accommodation on the headland south of Waitata Bay and the rather more, down to earth sounding, Clova Cribs in Clova Bay.
41. I consider that Pelorus Sound has benefitted very appreciably from the sort of pastoral retirement and remediation that I have already described. In tune with this physical change, I see the landscape values of the Waitata Reach continuing to improve over time.

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From my perspective, this can only be a positive effect, both in relation to community perceptions of the Sound and the public's sense of pride and 'ownership' of it.

42. In making these points, I appreciate that for many Queen Charlotte Sound is regarded as being the main recreational gateway to the Sounds, while Pelorus Sound is more of a 'trader's entrance' – the 'working sound'. Even so, Pelorus Sound remains one of three key routes in and out of the Sounds, and Havelock is a key point of entry and departure for recreational use of the Sounds; not just Sanfords and its mussel farm fleet. Furthermore, Kenepuru Sound is a key residential sector within the Inner Sounds that generates considerable recreational activity: it is directly linked to Pelorus Sound as the only marine corridor out to Cook Strait and more remote parts of the Outer Sounds.

Tory Channel

43. I have already indicated that Tory Channel falls short of living up to any such expectations. Although its water area and some pockets of bush – even the pasture and forestry which I have largely derided – will have at least a degree of appeal for some, it is clear that Tory Channel does not exhibit the same unified character and appeal as other Sounds landscapes. It lacks the fundamental cohesion of elements, sense of structure and order, and aesthetic appeal that the likes of Pelorus Sound and most of Queen Charlotte Sound so clearly evoke. This is unfortunate, given the Channel's enticingly (and, at times, excitingly), narrow entry from Cook Strait, and the manner in which it is framed – both by the rounded, yet rather sculptural, profile of Arapawa Island's outer hills and ridges, and the narrow peninsula of jagged rocks of West Head.
44. However, once inside the Channel proper, there is little that is particularly natural or bucolic about the collage of images presented to tourists and others journeying up the Channel. There is, in fact, a very marked disparity between the sort of expectation created by Tory Channel's role as one of the most important tourist / traveller gateways / conduits in the country and the reality of its productive, but also fundamentally utilitarian, landscape. It sets a much lower amenity benchmark than is found at Port Gore, within the Waitata Reach or in neighbouring Queen Charlotte Sound.

45. Having said this, I appreciate that those living within the likes of Te Awaiti Bay, Thoms Bay or Maraetai Bay will have a somewhat different perspective about the values found within the Channel: perceptions that are much more attuned to local landmarks and accepting of both productive uses and their effects. In this context, Tory Channel clearly has an important role as a coastal environment that people occupy and work in. However, such a perspective – which is relatively uncritical of the sort of activities currently found within Tory Channel – is not particularly useful when trying to assess landscape sensitivities and effects in a discerning manner.

Review of the Assessment By John Hudson

46. In August 2016 I was engaged by MPI and DOC, along with other landscape architects² to undertake a comparative review of three different approaches to landscape assessment – two within the Marlborough Sounds and one of the Auckland Region – and to then attend two workshops:
- The first of which was held on 5th September focusing solely on ‘best practice’ in relation to the assessment of effects associated with development projects in general; and
 - A second, multi-disciplinary, workshop held on 16th September, which explored the different outcomes resulting from the two Marlborough Sounds assessments, undertaken by John Hudson and Boffa Miskell.
47. The review process stretching across both workshops was confused by ‘different questions’ being asked in relation to each assessment. Hardly surprising this resulted in different assessment criteria being employed for each study and different outcomes: truly a case of ‘apples, oranges and pears’. However, the exercise also afforded me the opportunity to analyse the Hudson report prior to it being peer reviewed by Drakeford Williams Ltd.
48. My initial comments in relation to the Hudson assessment was that it has a ‘very tight focus’: it addresses each marina farm proposal very directly – in terms of the description

² James Bentley (Boffa Miskell Ltd), Liz Gavin (Canopy) and Gavin Lister (Isthmus Group)

of each site and its landscape setting, the values found within that landscape / environment, and the various effects associated with each marine farm proposal. There is little real appreciation of the wider values found at the 'Reach' level, as opposed to the 'site' level. The photos and simulations accompanying the Hudson assessment are also tightly 'reined in': the 50mm lens perspective adopted may well replicate the single point-of-focus view that someone might have with their head locked in one position, but few of the photos provided offer an impression of each site's wider setting – within the wider landscapes of the Waitata Reach and Tory Channel. Consequently, there is only limited appreciation of the wider landscape context for each marina farm proposal and no understanding of the potential for cumulative effects – either in relation to other existing marine farms or other proposed marine farms. This is especially important, for example, in relation to the Blowhole Point North and Blowhole Point South sites, then the Mid Channel Waitata site – which have the potential to be viewed both simultaneously and sequentially.

49. I also now agree with the Drakeford Williams' review that the assessment contains too little information about the nature of the different marine farms proposed (both ring pens and rectilinear cages), including their size, height, colours and materiality, lighting, related activities and overall visibility. Unfortunately, the simulations provided are rudimentary and do little to assist in this regard.
50. Focusing more on the assessment methodology, the Drakeford Williams review also raises concern about:
- The way in which ratings are applied – both positively and negatively;
 - How the removal or co-location near existing marine farms affects impact ratings;
 - Whether views from existing residences have been taken into account in relation to the 'Potential Viewing Audiences' component of the Hudson assessment and why views from the Tui Nature Reserve have not been addressed in the assessment;
 - Where the threshold lies at which the overall effect becomes "more than minor"; and

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- The limited – indeed, virtually non-existent – evaluation of cumulative effects, even though at p.10 of the review it is pointed out that there was *“a strong emphasis on cumulative effects in the BOI NZKS hearing.”*

51. I agree with all of these concerns. Although the Drakeford Williams review concludes at p.12 that *“the Hudson study follows best practice methodology that is robust in principle and uses appropriate and consistent comparison measures”*, some sizeable information gaps are apparent in the assessment undertaken by John Hudson. In my opinion, all of these are significant issues and, at the second workshop the issue of scale was raised several time – both in respect of strategic level assessments and the different scales of landscape that may have to be addressed when evaluating the effects of a development proposal.

52. Turning then, the ratings attributed individual sites, the review reaches its own determinations about the effects associated with a marina farm at each site. Although the review largely agrees with John Hudson’s findings in relation to the effects of the Blowhole Point North proposal, its is also pointed out when addressing Associative Effects (p.15) that:

“I disagree that farm is located in a side bay. Location reduces size of the ‘gateway’ and brings working landscape further out into Pelorus Sound and at the entry into Cook Strait.”

53. In relation to the Blowhole Point South proposal, the Associative Effects section of the assessment table includes the following points (p.17):

- *Location reduces size of the ‘gateway’ and brings working landscape further out into Pelorus Sound and at the entry into Cook Strait*
- *Location opposite Kaitira*
- *Need further analysis information re gateway location and potential cumulative effects of this site in conjunction with Blowhole Point North.*

54. Subsequently, at p. 18, the review makes the following statement:

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"The Hudson report concludes re cumulative effects for Blowhole Point: 'The two most northern sites, being Blowhole North and Blowhole South, are considered as one small group. The distance between them and the separation caused by the landform and enclosing bays are sufficient to remove any adverse cumulative effects from occurring.' (Page 5)

I disagree. The two farms are located at the entry to Pelorus Sounds and in the area described as the Outer Sounds Outstanding Natural landscape in the MLS, and the Cook Strait (terrestrial) plus Pelorus Sound (marine) in the MCS. In other words, they sit at the boundary of the 'wild' landscape and 'working' landscape (as described in the report). While they are separated by a small headland, viewed from a distance they will be seen simultaneously or immediately one after the other, and in conjunction with a number of existing mussel farms.

In my opinion locating farms on two sites will have an effect on the ONFL values as the cumulative effects are more than low given the high associative and perceptual values of the gateway location."

55. As a result, this part of the review concludes by determining that the two Blowhole Point marine farm proposals would affect Pelorus Sound's 'high marine values' but would have 'no effect on the overall potential ONC', but they would – in combination – have 'potential adverse effects on Port Ligar, and the Forsyth and Kaitira ONF boundaries'.

56. The review goes on to disagree with the baseline Natural Science rating for the Mid Channel Waitata landscape and states at p.20 that:

"The [Hudson] report considered the site to have a low sensitivity due in part to the absorption capacity of the expansive scale of the Reach. I do not agree given the location of the site in the middle of the reach, which presumably is the most trafficked area and most visible from the water."

57. Although the Drakeford Williams review ultimately agreed with John Hudson's assessment of effects for both landscape and natural character, it also made the following points in relation to Natural Science, Perceptual and Associative factors (respectively):

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- *The methodology should be adjusted to allow for a site that sits well away from the landform and generally will be seen as part of the wider marine landscape, disassociated from landforms either side of the reach.*
- *Looking at the wider landscape setting, development of the Waitata Reach site would set a precedent as the first farm in the middle of the reach or strait in Marlborough Sounds.*
- *Travelling along Waitata Reach towards Cook Strait, farms at Waitata and Richmond 'channel' views out to the outer passage to the northeast, directly towards the proposed Waitata Reach farm, which elevates effects on perceptual and associative values.*

58. I agree with these comments, although in looking at the concluding ratings for this site, it is hard to see how the diminution of Natural Character values from a High level to a Moderate-Low level could be other than significant. This is especially mysterious given that the anticipated decline in landscape values from High to Moderate is rated as having a High-Moderate level of effect.
59. Finally, in relation to this part of the Drakeford Williams review, I note the following comment in relation to the Natural Science / Perceptual effects of the Horseshoe Bay proposal (p. 25):

- *The [Hudson] report notes re introduction of the proposed new structures. 'The proposal would be a "fit" with the extensive mussel farming at the site, although the fairly unobtrusive nature of the mussel farms and lack of other highly visible productive uses such as pasture/farming, has meant that character of this bay has remained moderately high in perceived naturalness.'*

I would be careful with statements like this (although it does have a modifier on it re the unobtrusiveness of mussel farms) because then the reverse would be that a site with no mussel farms is not a fit for a salmon farm. eg the Mid channel Waitata site.

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60. Concern is also raised about the, apparently un-assessed, effects of the same marine farm on Maude Island which faces both the Horseshoe Bay and Richmond South sites, and is subject to both ONF and ONC 'overlays. Given uncertainty over this issue, the review fails to reach any final conclusions about the effects of these marina farm proposals.
61. Within the next section of the review, focusing more explicitly on the cumulative effects of the proposed marina farms, especially within the Waitata Reach, the following statement is found at p.53:

"The cumulative effects on natural character and landscape values arising from the 5 additional sites proposed in 2016 therefore must be considered within the context of the pre and post BOI Waitata Reach landscape. Otherwise the effects of the proposal are likely to be negatively perceived as creeping cumulative effects. At the time of the hearing, it was generally agreed that:

- Waitata Reach had High natural character values and landscape values that ranged from High to Very High but were not as a whole considered Outstanding.*
- Cumulative effects of an additional four salmon farms would be High (at a minimum) on natural character values and at least Moderate on landscape values.*

The proposal introduces 2 farms at the West Entry Point, effectively replicating the earlier Kaipira farm in its gateway location, 2 farms either side of the Te Kaiangapii headland, one of the sequence of headlands along the reach, and most significantly a farm in the middle of Waitata Reach. It appears that the Waitata Reach farm would be the first salmon farm to be located in the middle of a water channel or reach, where it would have adverse effects on the seascape and sea horizon values described by Peter Rough and referenced earlier in this review. The night lighting of this farm would further decrease experiential values, particularly for local residents.

Based on this information, the additional of five salmon farms to create a total of seven farms since the BOI, and including a farm sited in the

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middle of Waitata Reach will have High to Very High cumulative effects on natural character. Given the high experiential values and visual amenity of Waitata Reach, I would expect cumulative effects on landscape values to be High.”

My Assessment of Effects

62. Taking all of the factors relevant to each proposed farm into account, I have reached my own conclusions about the effects of the proposed applications – both individually and cumulatively. These are derived from my review of the Hudson report, reading the Drakeford Williams peer review (just discussed), and also from reviewing the *Marlborough Aquaculture Report, Natural Character and Landscape Assessment on existing aquaculture locations within and adjacent to outstanding areas, Second Draft, August 2016*’ (prepared by Boffa Miskell Limited/Canopy NZ Ltd). The last of these documents addresses the potential for various parts of the Marlborough Sounds’ coastal environment – primarily its bays and reaches – to accommodate re-location and / or re-consenting of existing marine farms. It also takes into account both the 2015 delineation of ONLs across the Sounds and the corresponding identification of potential ONC areas for the Marlborough District Council.
63. John Hudson’s report and the review by Drakeford Williams both provide an indication of whether or they regard each marina farm site as comprising part of an ONL or ONC area. This is important in two respects:
- Firstly, it goes to the heart of the effects that development proposals – in this case the individual marina farms – are likely to have on nearby ONLs and ONC / HNC areas notwithstanding the fact that they are located physically outside them. This is, of course, the matter that the Supreme Court had to address in *King Salmon*³, addressing the effects that the Papatua ring pens would have on the ONL lining the coastline of part of Pig Bay at Port Gore. This is also the issue that Drakeford Williams raised in their review of the Richmond Bay and Horseshoe Bay marina farm proposals facing Maud Island, in questioning the

³ *EDS v King Salmon Co* 2014 NZSC [38].

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effects that each proposal would have on that island's outstanding landscape and natural character values.

- Secondly, it is critical in terms of looking at the effects of the marina farm proposals in a more cumulative fashion, at the 'Reach' level: within the Waitata Reach – including the outer entry point and 'gateway' to Pelorus Sound from Cook Strait, at the mouth of the Tawhitinui Reach, and within Tory Channel.

64. I will address this relationship to landscape and natural character 'overlays', together with the cumulative effects of the marina farms, in the course of addressing each proposal.
65. Focusing then on the effects associated with the six proposed marine farms, I would like to start by reversing the order of the applications, by addressing the Tio Point proposal, off Oyster Bay within Tory Channel first, simply because it is the easiest to assess. I will subsequently return to the application's order of farm proposals starting near the mouth of Pelorus Sound with both Blowhole Point sites before progressing through to the Richmond Bay and Horseshoe Bay sites.

Tio Point

66. Even though Tory Channel has unquestioned importance as the main conduit for tourists through the Marlborough Sounds and, by sea, from the North Island to the South Island, and vice versa, it is also the most compromised and 'industrialised' of the main passages through the Sounds. Its amalgam of bare slopes, extensive areas of production forestry and pockets of residential development is a sad indictment of the lack of self-awareness that still plagues much of New Zealand in relation to the impressions imparted to visitors to this country and locals alike. Contrasting with its spectacular entrance from Cook Strait, the main body of Tory Channel remains a manifestly, utilitarian landscape that various forms of rural production, together with pockets of marine farming and even isolated infrastructure elements, have turned into a tourism gateway that is substantially devoid of cohesion and significant aesthetic appeal.
67. The area near Tio Point and within Oyster Bay is no exception to this situation, with large tracts of production forestry dominating both sides of the bay and its outer headlands, while tracks cut through its homogenous carpet of pine trees. As within other areas of

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production forestry scattered throughout the Marlborough Sounds, the only sense of transition and sequence associated with this landscape is that provided by the different ages of individual tracts of forestry and their periodic harvesting. The homogenous carpet of pines spread across surrounding ridges and coastal slopes conceals most of the natural terrain and even where the forestry edge is more 'frittered' and broken – merging with stands of bush – it remains such a powerful factor within Tory Channel that little of the application site or surrounding site has any appreciable sense of naturalness. At a 'Reach' or 'channel' scale, the local landscape is also substantially devoid of cohesion and expressiveness, so that it's only real appeal is found in the Channel's sinuous profile, which continually begs the question: what's around the next corner?

68. Hardly surprising, therefore, no ONLs or other significant environmental overlays are located close to the proposed marina farm site.
69. This implies that the Tio Point proposal would exacerbate some of the utilitarianism of the current Tory Channel landscape and coastal environment, but any effects would ultimately be incremental and of a modest order over. Tory Channel's landscape and natural character values would be further eroded, but they're already at a rather low 'ebb'.

Baseline (Existing) Values:

Site Specific / Local:

Landscape – Low

Natural Character – Low to Very Low

Reach Scale:

Landscape – Low to Very High (Channel Entrance)

Natural Character – Low to High (Channel Entrance)

Post Development Values:

Site Specific / Local:

Landscape – Low

Natural Character – Low to Very Low

Reach Scale:

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Landscape – Low to Very High (Channel Entrance)

Natural Character – Low to High (Channel Entrance)

Effects:

Site Specific / Local:

Landscape – Low

Natural Character – Low to Very Low

Reach Scale:

Landscape – Low

Natural Character – Low

Blowhole Point North & Blowhole Point South

70. I have chosen to address these marine farm sites jointly, as they have less value and importance, in my assessment, as individual sites than they do cumulatively. The proposed marine farms at both Blowhole Point locations would be viewed at once simultaneously, as well as in sequence, from passing vessels either entering or leaving Pelorus Sound. Furthermore, both sites are physically proximate to Te Akaroa (West Entry Point), which together with the pyramidal form of Kaitira, frames the point of entry or 'gateway' to Pelorus Sound. The marine farms at both locations would therefore be viewed in close conjunction with this defining feature at the intersection of Cook Strait with Pelorus Sound.
71. I have already commented that marine farms on the edge of Pelorus Sound's main channel would break with 'tradition' insofar as such developments would extend beyond the limits of adjoining bays – like Beatrix and Horseshoe Bays – to line this key passage in and out of the Sounds. However, both of the 'Blowhole Point' proposals would also (in a most emphatic fashion) effect the landscape and natural character values at the very entrance to Pelorus Sound – along with Queen Charlotte Sound and Tory Channel, a key point of entry to, and departure from the Sounds as a whole.
72. Although the presence of more than 500 marine farms in bays both sides of Pelorus Sound, together with past farming activity, on-going forestry operations and a scattering of small-scale coastal settlements, have all contributed to the perception of Pelorus Sound as a sort of 'tradesman's entrance' to the Marlborough Sounds, it still serves as the main maritime corridor to and from Havelock and Kenepuru Sound, both of which contain sizeable residential and recreational communities (as I have already indicated). Moreover, the small settlements found at Port Ligar, Bulwer and North West Bay are also connected to one another, the mainland and Cook Strait by the umbilical cord of Pelorus Sound. This compounds the importance of the Waitata Reach as a key point of passage within the Sounds a whole.
73. Turning to the more specific values, identified in relation to both the Blowhole Point North and South sites, it is clear that both suffer from the rather discordant presence of forestry blocks on the adjoining coastlines. Yet, the landforms at this entryway to Pelorus Sound

remain dramatic and the coastline has a very dynamic relationship with the often turbulent, waters of Cook Strait. A mixture of bush and farmland also covers the hills, ridges and slopes enclosing the Sound's mouth, but these signs of modification are largely subsumed by the austere, even, attractively bleak, interplay of eroded landforms and foam-flecked seas at the edge of Cook Strait. It is a wild and remote part of the Marlborough Sounds, that's benefits from an absence of obvious signs of development apart from both forestry blocks and distance signs of mussel farming within the Waitata Reach proper.

74. While I therefore agree that any assessment focusing strictly on each site in relative isolation might well also home in on the pine forestry, other partially visible marine farms and bare ridgetops still subject to grazing, a Reach scale assessment would inevitably recognise the importance of the diverse array of coastal landforms framing the Waitata Reach, its highly expressive – at times, dramatic – interplay with the seas driving in from Cook Strait, and its raw, elemental qualities. I have no doubt that the hills enclosing the western side of the Waitata Reach, close to Port Ligar, combined with the Katira headland, are sufficiently natural to qualify for ONL status, while the very expressiveness of this landscape and its aesthetic appeal as a whole (viewed both statically and in the course of entering or leaving Pelorus Sound) contribute very appreciably to the two ONL 'overlays' that John Hudson's assessment identifies both subject sites as being located within:

- the "Outer Sounds" ONL (within Area 5: "Port Ligar, Forsyth Island and Kaitira Headland"); and
- the "waters between Te Akaroa and Kaitira" ONL (again within Area 5).

75. Accordingly, while I would rate the site specific effects associated with both Blowhole Point sites only slightly more highly than John Hudson and Drakeford Williams, it is my opinion that the real value of the northern Waitata Reach lies in its dramatic connection with Cook Strait and that many of the Reach's key values – its relative naturalness and lack of development, its dynamism and its sheer rawness – would be appreciably eroded by the introduction of either or both marine farms to the Blowhole Point North and South sites. Indeed, regardless of the level of effect ultimately generated by these marina farms, the key point is that they would diminish the ONLs values currently associated with the

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western coastline of the Waitata Reach and the waters at the mouth of Pelorus Sound from an outstanding to a less-than-outstanding level. Ultimately, few parts of the Waitata Reach and its adjoining bays would be free of marine farms.

Baseline (Existing) Values:

Site Specific / Local:

Landscape – Moderate

Natural Character – Moderate / High

Reach Scale:

Landscape – Outstanding

Natural Character – High

Post Development Values:

Site Specific / Local:

Landscape – Low / Moderate

Natural Character – Moderate

Reach Scale:

Landscape – Moderate / High

Natural Character – Moderate

Effects:

Site Specific / Local:

Landscape – High

Natural Character – High

Reach Scale:

Landscape – Very High

Natural Character – High

Mid Channel Waitata

76. The same important associations with a number of important ONLs also affect the Mid Channel Waitata proposal. Although not directly physically abutting the ONLs associated with Mt Shewell and the coastline through to Waitata Bay down the western side of

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Pelorus Sound, these ONLS are primarily viewed from, and have an important relationship with, the Waitata Reach and the various vessels using it. The catchment around the Mid Channel Waitata site is therefore at the centre of the catchment and receiving environment, which provides the platform for public views to both outstanding landscapes and is, as a result, critical to public appreciation of these ONLS.

77. Furthermore, even though the centre of the Waitata Reach is a body of water that has not been attributed ONL or ONC / HNC status in its own right, it remains a fundamental part of the physical and visual 'frame' that helps to define the western Waitata coastline that is attributed importance from a landscape standpoint. It is also an integral part of both ONLS's context and, in terms of the wider Waitata Reach, it displays considerable visual primacy and sensitivity because of its location 'mid stream', just south of the 'gateway' to Pelorus Sound from Cook Strait. As a result, it is also linked – sequentially – to the Blowhole Point sites and the 'gateway' role of the Waitata Reach. As such, it is critically important in terms of public appreciation of Pelorus Sound as a whole.
78. In addition, whereas the inner-most reaches and margins of Pelorus Sound are marked by residential development and its more central channel is flanked by production forestry, the area around the Waitata Reach still evokes a strong sense of naturalness because of the extensive tracts of native bush / forest that enclose it. Lacking the raw, elemental qualities that I have described in relation to both Blowhole Point sites, the area around the main body of the Waitata Reach combines a complex array of sunken valley landforms, largely covered by native forest, that are framed by the sinuous, little modified, waters of the main Waitata Channel and its margins. Indeed, of the entire Pelorus Sound, that section surrounding the subject site is most like the landscape of inner Queen Charlotte Sound, which remains largely (though not entirely) unadulterated by marine farming activities and structures.
79. This means that even though the landscape around the Mid Channel Waitata site offers a quite different landscape experience from the waters outside Kaitira and Te Akaroa (West Entry Point) there remains a certain continuity about the high level of landscape experience offered to those entering or leaving Pelorus Sound. Locating a marine farm in the centre of the Waitata Reach would inevitably change that experience, both in its own

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right and – cumulatively – in conjunction with the Blowhole Point developments. It would significantly erode the inherent naturalness of the Reach and, by shifting marine farming from its more peripheral margins and side bays to a place of considerable prominence, would have both a direct effect on perception of the nearby ONLs focused on Danger Point and Waihinau Bay. It would also lend the proposed marine farm an intrusive quality that is not as pronounced in relation to other marine farms, both existing and proposed. In my assessment, this would appreciably degrade the values associate with both nearby ONLs to an unacceptable degree.

Baseline (Existing) Values:

Site Specific / Local:

Landscape – Very High

Natural Character – High

Reach Scale:

Landscape – Outstanding

Natural Character – High

Post Development Values:

Site Specific / Local:

Landscape – Low

Natural Character – Low / Moderate

Reach Scale:

Landscape – Moderate

Natural Character – Moderate / Low

Effects:

Site Specific / Local:

Landscape – High

Natural Character – Moderate / High

Reach Scale:

Landscape – High

Natural Character – High

Richmond Bay & Horseshoe Bay

80. Located either side of the west-facing, Kauauroa Point / headland, I have again chosen to pair up these marine farm proposals as they share similar characteristics, landscape settings and relevant issues. Te Kaiangapipi Point is a prominent, elongated conical-shaped, headland, largely covered in a mixture of regenerating scrub / shrubland, that juts out into the Waitata Reach at its confluence with the Tawhitinui Reach. Both marine farms would sit partly within the bays – Horseshoe and Richmond – either side of Te Kaiangapipi Point, though not so deeply within them that they would be screened from Pelorus Sound or even lent a sense of separation from it. Both proposed farms would also face Maud Island, the subject of some concern for Drakeford Williams in their review.
81. However, the more immediate landscape context for both proposals comprises the slopes of Pohuenui Island, which are clearly in a state of transition at present – away from past forestry and farming – with coastal regeneration clearly evident, even though it is not in yet sufficiently established for a mature canopy to have yet emerged. Furthermore, existing mussel farms already line the littoral margins of both Horseshoe and Richmond Bays, while a scattering of dwellings and access tracks is apparent within parts of both bays. At the head of Richmond Bay, this development concentrates to form a small settlement – well away from the proposed marine farm site.
82. As a result, no ONLs or other environmental ‘overlays’ lie in close proximity to the subject sites, but, as I have also indicated above, both also face, and would be exposed to, the ONLs and ONC area identified across Maud Island and the ‘far’, western, side of the Waitata Reach – extending from near Mt Shewell to the Yellow Cliffs at the mouth of Waitata Bay. In addition, the southern end of Horseshoe Bay is enclosed by the distinctive, conical headland of Tapapa Point, which Boffa Miskell’s 2015 landscape study links to other coastal ridges and slopes across the southern end of Pohuenui Island and captures within a proposed ONF. John Hudson also indicates that both application sites would be adjacent to a ‘Terrestrial Sub-Area’ – the “Eastern Waitata Reach” – which is identified as having High natural character values, although the presence of existing marine farms sees those values rapidly tail off within both Richmond and Horseshoe Bays.

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83. In my assessment, both marine farms would be somewhat more recessive than the Blowhole Point North, Blowhole Point South and Mid Channel Waitata proposals. Nevertheless, they would still contribute to the accumulative impression of such development reaching out from side bays into the main channel margins of Pelorus Sound. Furthermore, it is my opinion that the presence of both marine farms must diminish the inherent naturalness of the Waitata / Tawhitinui Reaches near Maud Island, albeit in a less pronounced fashion than the three other Waitata Reach proposals because of their slightly more recessive location and the rather more, 'transitional' nature of the Pohenui Island shoreline 'behind' them.
84. Focusing very specifically on the two proposals' relationship with Maud Island and the rest of the Waitata Reach, it is important to recognise that Maud Island, Mt Shewell, the Apuau Channel coastline and much of the rest of the western Waitata Reach facing both application sites displays a high level of naturalness and is overlaid by a series of ONL 'overlays'. John Hudson's report also identifies it as being opposite a proposed, district level, ONF covering Tapapa Point.
85. From my point of view, there is currently a strong feeling of dichotomy between both sides of the Waitata Reach: one side more reflective of the Marlborough Sound's natural heritage and high landscape values, the other – down the eastern side of the Waitata Reach – much more productive in character and modified, in places scarred, by both past and current activities. As I have just indicated, the two proposed marine farms would exacerbate this juxtaposition to a degree.
86. However, this situation is changing at the proposed ONL across the 'bottom' of Pohenui Island indicates. The Horseshoe Bay marine farm proposal would exacerbate the feeling of encroachment, by marine farming, on Tapapa Point together with a wider sequence of ridges and promontories on the western to southern flanks of Pohenui Island that are now recovering from historic use for rural production. Exposure to both proposed marine farms – for those journeying in or out of Pelorus Sound – would counteract some of the landscape 'benefits' associated with this gradual transition, thereby eroding the sense of naturalness and aesthetic value increasingly attached to both Tapapa Point and nearby

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parts of Pohuenui Island that overlook a key intersection of the Waitata and Tawhitinui Reaches with the main body of Pelorus Sound.

87. I also believe that both proposals would have an adverse effect on the qualities of Maud Island, although I must reiterate that such effects would be less direct and obvious than those discussed in relation to Tapapa Point. Even so, it is my opinion that both marine farms have the potential to erode the ONL and ONC values of Maud Island, both directly and cumulatively, to the point where the Island and its coastal margins become less than outstanding in both respects. From my standpoint, this level of change remains at moderate / high, or 'significant', level and inappropriate, overall.

Baseline (Existing) Values:

Site Specific / Local:

Landscape – Moderate

Natural Character – Low / Moderate

Reach Scale:

Landscape – Very High / Outstanding

Natural Character – High

Post Development Values:

Site Specific / Local:

Landscape – Low / Moderate

Natural Character – Moderate

Reach Scale:

Landscape – Moderate

Natural Character – Moderate / High

Effects:

Site Specific / Local:

Landscape – Moderate / High

Natural Character – Low

Reach Scale:

Landscape – Moderate / High

Natural Character – Low

Conclusion

88. Based on these evaluations, it is my assessment that:

- The Tio Point is acceptable in terms of its landscape and natural character effects, although it would exacerbate the already apparent 'industrialisation' of Tory Channel – a key conduit for tourists, visitors and locals between the North and South Islands, and a key point of introduction to the Marlborough Sounds.
- The Blowhole Point North and Blowhole Point South proposals would have an adverse and unacceptably high level of effect in relation to ONL covering the coastline east of Port Ligar; While it is agreed (with the findings of the Hudson report) that the proposals would have limited effects individually and at the strictly local /site level, they would have a much more significant effect in the context of the Waitata Reach landscape and cumulatively. Overall, these proposals would have a very significant effect in relation to Pelorus Sound's 'gateway' to and from Cook Strait.
- The Mid Channel Waitata proposal would also have an unacceptably high level of impact on the ONLs covering much of the western Waitata coastline, including Mt Shewell and the area lining the Apuau Channel through to the Yellow Cliffs and Waitata Bay. Development at this site would result in an unprecedented level of incursion and intrusion into Pelorus Sound's main navigation channel, affecting both the water area that frames and contextualises public views of the Waitata Reach and intruding into the catchment that provides the platform for such engagement.
- The Richmond Bay and Horsehoe Bay proposals would also contribute to the accumulative effects generated by the other proposed marine farms within the Waitata Reach and would subtly erode the inherent naturalness and perceptual values of that Reach merging with the Tawhitinui Reach. Consequently, they would have a less pronounced, but still appreciable impact on the ONL and ONC values of Maud Island, and – again – of the Waitata Reach at a larger than 'site' scale. In addition, the Horseshoe Bay proposal would have a direct and significant effect on the ONL proposed for nearby Tapapa Point stretching across the southern coastline of Puhenui Island.

89. It is clear in relation to these findings that I have placed considerable weight on the cumulative, 'Reach scale' effects of the proposal. I do not believe that John Hudson has had adequate regard to these effects in his assessment for MPI, yet in my opinion they are ultimately determinative in relation to the acceptability or otherwise of the five marine farms proposed for Pelorus Sound and the Waitata Reach. I note that this interpretation of effects is also consistent with the Crown Law Office's evaluation of both the Board of Inquiry decision on King Salmon and the subsequent Environment Court decision in *KPF Investments Ltd v Marlborough District Council* ([2014] NZENVC 152)⁴. At paragraph 15 that advice states as follows:

The cumulative effects issues raised by the Board and Environment Court should still be carefully considered, particularly the effects on the King Shag, Maori (particularly Ngati Koata), natural character and landscape.

.....

90. This is supported by a detailed analysis at pages 6-9 of that advice, which makes it clear that the issue of cumulative effects in relation to the entire Waitata Reach were fundamental to both the original Board of Inquiry decision and the related Environment Court decision. In my opinion, this issue is still crucial to assessment of the effects generated by the currently proposed marine farms and I believe that my findings are consistent with the interpretation offered by Crown Law.
91. Overall, therefore, it is my opinion that only the Tio Point proposal is acceptable in terms of its landscape and natural character effects; the other five proposed marine farms would generate a range of effects – especially cumulative effects at a 'Reach scale' – that would appreciably degrade the often outstanding landscape values associated with much of the Waitata Reach and Pelorus Sound. They would also degrade the overall naturalness and aesthetic character of those water bodies.

⁴ Crown Law Office final advice to the Manager of Aquaculture, MPI on 11 October 2016 – obtained under the Official Information Act by EDS.

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92. The Tio Point proposal is considered acceptable, but only insofar as it would have an incremental effect on the landscape of Tory Channel that is already in a highly modified, and damaged, state. It does not provide a particularly auspicious gateway to and from the South Island, but the Tio Point proposal would do little to alter this reality.

Stephen Brown

BTP, Dip LA, Fellow NZILA, Affiliate NZPI

APPENDIX A – PROFESSIONAL EXPERIENCE

I have undertaken a large number of assessments of landscape and natural character characteristics and value in different parts of New Zealand:

- The Coromandel Peninsula: Natural Character & Amenity (2014)
- the West Coast Region: Landscape & Natural Character (2011-13)
- the Auckland Region: Outstanding Natural Features – Geological / Geomorphological / Ecological (2012)
- the Auckland Region: Amenity Values (2012)
- the Buller District (2011)
- The Auckland Region: Natural Character (2010 & currently)
- Otorohanga District (2009/10)
- the Thames Coromandel District (2006-12)
- the Kawhia and Aotea Harbour catchments (2006)
- the Mahia Peninsula and Wairoa District (2003)
- The Auckland Region: Landscape (2002-5 & currently)
- Waitakere City's Northern Strategic Growth Area Study: Landscape (2000)
- North Shore City: Landscape (1997-2000)
- Eastern Manukau City: Landscape (1995)
- Auckland's urban coastlines: Landscape (1995)
- Whangarei District: Landscape (1994 & 2005)
- the Far North District: Landscape (1994/5)
- Waiheke Island: Landscape (1988)
- the Auckland Region: Landscape (1982-4)

In 2006 I was part of a team under the 'umbrella' of Urbis Ltd that was awarded the (UK) Landscape Institute's Strategic Planning Award for the "*Landscape Value Mapping Study of Hong Kong*". My contribution included development of an assessment method and evaluation criteria that were employed in that study.

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I have assessed the landscape, amenity and natural character effects of many development projects, both within New Zealand and overseas. These include:

- Waterview Connection Project / SH16 & SH20 (2009-12) – for the NZ Transport Agency
- Eden Park Rugby World Cup 2011 (2006-10) – for the Eden Park Redevelopment Board
- Project Mill Creek Wind Farm (2010) – for Wellington City Council
- Project Central Wind (2009) – for Meridian Energy Ltd
- Moorabool Wind Farm (2009/10) in central Victoria – for WestWind Pty Ltd.
- Matiatia Village (2003-4) – for Waitemata Infrastructure Ltd.
- Waitemata Harbour Crossing Options Assessment (2002/3) – for Opus International and Transit NZ
- Weiti River Crossing Review (2000 – for the Auckland Regional Council.
- ALPURT B2 Waiwera River Crossing Review (1999) – for the Auckland Regional Council.
- Sylvia Park Commercial Centre Assessment (1999) – for Kiwi Property Management Ltd.
- Marsden Point Port (1997 & 2002) – for the Northland Port Corporation / Northport.
- Southdown Power Station Assessment (1995) – for Mercury Energy / Transalta
- the Channel Tunnel rail routes to Folkestone (in the UK 1985-7) – for the UK Department of Transport

**SUMMARY OF STATEMENT BY KEVIN COUNSELL FOR ENVIRONMENTAL DEFENCE SOCIETY
INCORPORATED IN RESPECT OF SUBMISSION ON MINISTRY OF PRIMARY INDUSTRIES POTENTIAL
RELOCATION OF KING SALMON LTD SALMON FARMS IN THE MARLBOROUGH SOUNDS
(ECONOMICS)**

27 MARCH 2017

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Introduction

1. My name is Kevin Counsell. I am a Senior Consultant at NERA Economic Consulting Limited in Wellington, part of a global economics consulting firm. I have a Master's degree in economics (with Distinction), an Honours degree in economics (First Class), and an undergraduate degree in Mathematics, all from Victoria University of Wellington. Of relevance to the issues arising in the present proceedings, my experience includes having undertaken economic analysis of resource management decisions, including assessing economic benefits.
2. Below is a summary statement of evidence. I will prepare a full statement for presentation at the Panel hearing.

Code of Conduct

3. I confirm that I have read the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2014 and that I agree to comply with it. I further confirm that I have considered all the material facts that I am aware of that might alter or detract from the opinions that I express, and that this evidence is within my area of expertise, except where I state that I am relying on the evidence of another person.

Summary of economic evidence

4. My evidence will focus on the economic report prepared by PricewaterhouseCoopers (PwC). PwC has used an economic methodology known as "input-output" (IO) analysis (also sometimes referred to as "economic impact analysis") to estimate the economic impacts of the salmon farm relocation on the Nelson and Marlborough regions. Using this methodology, PwC finds that relocating six salmon farm sites could add approximately \$49m per annum to Gross Domestic Product (GDP) in Nelson and Marlborough, with the construction of each site adding approximately \$3.2m as a one-off increase in GDP in this

region.¹ The Ministry for Primary Industries (MPI) has attributed these additions to regional GDP as “economic benefits”.²

5. However, as I will explain in my evidence, the IO analysis conducted by PwC is not a correct measure of the economic benefits of the proposed salmon farm relocation. Rather, the PwC analysis measures only the economic *impacts* of the relocation on the Nelson and Marlborough regions. Economic impacts are essentially the monetary flows in the economy that arise from any form of economic activity. IO analysis does not specifically identify which of these monetary flows are benefits and which are costs.
6. When considering trade-offs about how resources are best allocated, economists assess economic benefits using a concept known as “welfare”. In broad terms, welfare refers to the net benefits that economic actors receive from an action or transaction, such as salmon farming. The preferable approach to measuring welfare, and therefore net economic benefits, would be to use the methodology of cost benefit analysis (CBA). CBA seeks to measure all of the benefits and costs associated with economic activity. Its scope is broad enough to cover direct benefits and costs to consumers and producers, as well as environmental, cultural and recreational benefits and costs.
7. In comparing CBA with an analysis of economic impacts, the New Zealand Treasury has stated that:³

*“Economic Impact Analysis (EIA) differs from CBA in that it measures the economic impact of a project, that is to say the activity generated, **rather than the net benefit created**. Because it measures the activity generated, it treats costs as a benefit. Using an extreme example, if a project involved digging a hole in the ground and filling it in again, then the expenditure on labour employed would [under EIA] be treated as a contribution to the economy and therefore as a benefit. The cost would be ignored”. [emphasis added].*

¹ See page 46 of the PwC report, albeit that the results reported there cover nine sites. The \$49m and \$3.2m figures noted are as reported in the MPI discussion paper for six sites, at section 7.2.1.

² See, e.g., MPI discussion paper, at section 7.2.

³ New Zealand Treasury (2015), “Guide to Social Cost Benefit Analysis”, July, at paragraph [242].

8. Indeed, the Treasury's analogy of digging a hole in the ground and filling it in illustrates the issue: because IO analysis does not separately identify costs and benefits, it will always show economic activity (such as digging a hole and filling it in) as generating a positive impact on GDP. The point of analysing welfare is to identify which of those impacts are benefits and which are costs, and to allow these benefits and costs to be assessed using a common metric. This ensures that priority can be given to the types of economic activity that maximise net benefits.
9. In my evidence I consider the benefits and costs of the proposed salmon farm relocation from a conceptual standpoint. The relocated salmon farm sites result in an increase in production (relative to the existing farms with the Bethnic Guidelines implemented). To the extent that this result in higher profits from salmon farming, this could be considered as a benefit.
10. However, there would also be costs. For the relocated salmon farms there would be a range of environmental costs, including potential adverse effects on endangered King Shags, and potential adverse effects on water quality associated with increased production.⁴ Moreover, some of the salmon farms will be relocated into an area that is defined as an "outstanding natural landscape". Environmental resources often have important "non-use" values, and the characterisation of an outstanding natural landscape is consistent with this. Where these values are undermined this is a cost that should be incorporated into any measure of net economic benefits.
11. In summary, PwC's analysis shows only that the increased production at the relocated salmon farms will generate additional economic *impacts* – a tautological result. This does not necessarily imply economic *benefits* – a proper assessment of the economic benefits would recognise that the relocated farms will produce some benefits but will also incur a range of costs.

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⁴ As reported in the MPI discussion paper, at section 7.4.