Review of Proposed Marine Farm Sites

For

The Ministry for Primary Industries

Prepared by
Hudson Associates Landscape Architects

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CONTENTS

Executive Summary 4
Introduction 5
Assessment Process 5
Context and Assessment across the scales 5
Methodology 5
Salmon Farm Design and Visibility Distances 6
Cumulative Effects 7
Overview - Assessment Scoring 14
Site Location Map 15

Proposed Sites
- Site 34 - Blowhole Point North (Waitata Reach) 16
- Site 122 - Blowhole Point South (Waitata Reach) 24
- Site 125 - Mid Channel (Waitata Reach 31
- Site 106 - Richmond Bay (Waitata Reach) 38
- Site 124 - Horseshoe Bay (Waitata Point) 45
- Site 42 - Tipi Bay (Tory Channel) 53
- Site 82 - Motukina Point (Tory Channel) 61
- Site 156 - Tio Point (Tory Channel) 69
- Site 47 - Te Weka Bay (Tory Channel) 77

Existing Sites
- Waihinau Bay 85
- Forsyth Bay 92
- Crail Bay (2 Sites) 99
- Ruakaka Bay 106
- Otenerau Bay 113

Figures and Attachments

Figure A - Location Map for Waitata 9

Figure B - Waihinau, KPF & Forsyth 10
Figure C - Waihinau, KPF, Forsyth, Kaitira, Waitata, White Horse Rock, Tapipi & Richmond 10
Figure D - Waihinau, KPF, Forsyth, Waitata & Richmond 10
Figure E - Waitata & Richmond 10
Figure F - Blow Hole Point North, Blow Hole Point South, Mid Channel, Waitata, Richmond, Richmond Bay South & Horseshoe Bay 10

Figure G - Location Map of all sites 15

Figure 1: Site 34 - Photo from Aircraft 16
Figure 2: Site 34 - Location Map of Proposed Site 16
Figure 3: Site 34 - Photo from Boat 16
Figure 4: Site 122 - Photo from Aircraft 24
Figure 5: Site 122 - Location Map of Proposed Site 24
Figure 6: Site 122 - Photo from Boat 24
Figure 7: Site 125 - Photo from Aircraft 31
Figure 8: Site 125 - Location Map of Proposed Site 31
Figure 9: Site 125 - Photo from Boat 31
Figure 10: Site 106 - Photo from Aircraft 38
Figure 11: Site 106 - Location Map of Proposed Site 38
Figure 12: Site 106 - Photo from Boat 38
Figure 13: Site 124 - Photo from Aircraft 45
Figure 14: Site 124 - Location Map of Proposed Site 45
Figure 15: Site 124 - Photo from Boat 45
Figure 16: Site 42 - Photo from Aircraft 53
Figure 17: Site 42 - Location Map of Proposed Site 53
Figure 18: Site 42 - Photo from Boat 53
Figure 19: Site 82 - Photo from Aircraft 61
Figure 20: Site 82 - Location Map of Proposed Site 61
Figure 21: Site 82 - Photo from Boat 61
Figure 22: Site 156 - Photo from Aircraft 69
Figure 23: Site 156 - Location Map of Proposed Site 69
Figure 24: Site 156 - Photo from Boat 69
Figure 25: Site 47 - Photo from Aircraft 77
Figure 26: Site 47 - Location Map of Proposed Site 77
Figure 27: Site 47 - Photo from Boat 77

Figure 28: Waihinau Bay - Photo from Aircraft 85
Figure 29: Waihinau Bay Location Map 85
Figure 30: Waihinau Bay - Photo from Boat 85
Figure 31: Forsyth Bay - Photo from Aircraft 92
Figure 32: Forsyth Bay Location Map 92
Figure 33: Forsyth Bay - Photo from Boat 92
Figure 34: Crail Bay - Photo from Aircraft 99
Figure 35: Crail Bay Location Map 99
Figure 36: Crail Bay - Photo from Boat 99
Figure 37: Ruakaka Bay - Photo from Aircraft 106
Figure 38: Ruakaka Bay Location Map 106
Figure 39: Ruakaka Bay - Photo from Boat 106
Figure 40: Otanerau Bay - Photo from Aircraft 113
Figure 41: Otanerau Bay Location Map 113
Figure 42: Otanerau Bay - Photo from Boat 113

Semi-submerged barge model - Oblique View 35
Appendix 1 119

EXECUTIVE SUMMARY

The Ministry for Primary Industries is considering a proposal that provides for The New Zealand King Salmon Co. Ltd. (King Salmon) to relocate 6 existing salmon farms within Marlborough Sounds to alternative sites that are better suited to salmon production. Hudson Associates has undertaken an assessment of the landscape, visual and natural character effects of the exchange. Key findings will inform decision making, along with reporting from other experts on topics such as navigation and benthic quality.

A total of seventeen potential new farm sites have been considered by Hudson Associates during a lengthy assessment process. Eight of those original sites have progressively been eliminated, leaving a total of nine remaining potential sites– being those considered for more detailed assessment of effects which has been carried out within this report.

For each of the proposed sites, as well as for each existing salmon farm proposed for removal, a Baseline evaluation for Landscape and Natural Character has been made. The characteristics and key values have been identified for each site and an assessment has then been made of the effects that will occur with the proposed changes. The method uses professional judgement to assess the baseline, degree of change and resultant effects considering natural science, perceptual/sensory and associative factors, in line with the NZ Institute of Landscape Architects Best Practice Guide for landscape assessment. The NZILA 7-point scale is used:

Very High/High/High-Moderate/Moderate/Moderate-Low/Low/Very Low.

This report has found that the degree of change for the majority of sites would comprise a 1-point change on the rating scale (e.g. a change from Moderate to Low-Moderate), although there is a greater change for a small number of sites. (Proposed sites which were earlier assessed as likely to have an unacceptable degree of change were eliminated from further consideration, and are therefore not included in this report.) Positive changes have been assessed for areas where existing salmon farms are to be removed (i.e. a move "up" the rating scale), while negative changes (a move "down" the rating scale) have been assessed for vacant areas where new salmon farms are proposed.

Two of the proposed sites are located within an Outstanding Natural Landscape (ONL), and adjacent to an Outstanding Natural Feature (ONF), as assessed at the district scale in the Proposed Marlborough Environment Plan. One further site is partially adjacent to an ONF identified in both the Operative and Proposed Plans. A key finding of this report is that, of these three sites, none are assessed as adversely affecting the key values that cause the areas to be considered outstanding at that scale. The assessment also finds that for the other sites, none of which are within/adjacent to an ONFL at district level, there will be no significant adverse landscape effects. (Under the MEP, ONFLs have not been assessed separately at the regional scale. The MEP considers that an ONFL at the district scale will also be an ONFL at the regional scale[1]). All sites fall within the Marlborough Sounds Outstanding Natural Landscape (ONL), which is defined as Outstanding at a national scale. None of the sites are assessed as adversely affecting the key values that cause the Sounds to be outstanding at that national level due to the scale of the proposed farms in relation to the scale of the Sounds ONL.

No proposed sites are in areas proposed as Outstanding Natural Character (ONC) and similar results to landscape are assessed for all levels from District through to National.

The categorisation of areas as ONF or ONL in the proposed Marlborough Environment Plan is subject to the submissions and hearing process. Nothing in this document should be taken as endorsing that categorisation.

Site Ratings – Existing and Resultant (i.e. with new salmon farm or existing farm removed).

Salmon Farm Site	Location	Existing Baseline		Resultant State	
		Natural Character	Landscape	Natural Character	Landscape
Proposed New Site (Potential Addition)					
34: North Blowhole Point	Pelorus Sound	Moderate	High-Moderate	Low - Moderate	Moderate
122: Blowhole Point	Pelorus Sound	Moderate	High-Moderate	Low - Moderate	Moderate
125: Mid-channel Waitata North	Pelorus Sound	Moderate	High	Low-Moderate	High-Moderate
106: Richmond South	Pelorus Sound	High-Moderate	High-Moderate	Moderate	Moderate
124: Horseshoe Bay	Pelorus Sound	High-Moderate	High-Moderate	Moderate	Moderate
42: Tipi Bay	Tory Channel	High-Moderate	Moderate	Low	Low-Moderate
82: Motukina Point	Tory Channel	Moderate	Moderate	Low	Low-Moderate
156: Tio Point	Tory Channel	Moderate	Moderate	Low-Moderate	Low -Moderate
47 Te Weka Bay	Tory Channel	High-Moderate	Moderate	Moderate	Low-Moderate
Existing Site (Potential Removal)					
Waihinau Bay	Pelorus Sound	Moderate	High-Moderate	High	High
Forsyth Bay	Pelorus Sound	Moderate	High-Moderate	High-Moderate	High
Crail Bay (2 Sites)	Pelorus Sound	Moderate	High-Moderate	High-Moderate	High
Ruakaka Bay	Queen Charlotte Sound	Moderate	High-Moderate	High	Very High
Otanerau Bay	Queen Charlotte Sound	Low	Low-Moderate	Low-Moderate	Moderate

[1]MDC proposed ONFLs have been assessed at a district scale; Marlborough Landscape Study 2015, pg. 104; MDC proposed ONFLs have not been assessed separately at regional and district levels; an ONFL in Marlborough is considered to be an ONFL at both levels; Marlborough Landscape Study 2015, MDC, Pg. 20.

INTRODUCTION

The Ministry for Primary Industries is considering a proposal that provides for New Zealand King Salmon to relocate 6 existing salmon farms within Marlborough Sounds to alternative sites that are better suited to salmon production. As part of this process, Hudson Associates have been engaged to assess the landscape and natural character effects of the exchange. The findings of this assessment will be one of the topics that informs the decision making, with other topics including navigation and benthic quality.

The six existing salmon farm sites being considered for relocation are:

- Ruakaka Bay (Queen Charlotte Sound)
- Otanerau (Queen Charlotte Sound)
- Forsyth Bay (Pelorus Sound)
- Crail Bay (2 farms) (Pelorus Sound)
- Waihinau (Pelorus Sound).

The final nine sites under investigation as new alternative locations are:

- Site # 34 Waitata Reach (North of Blow Hole Point)
- Site # 122 Waitata Reach (South of Blow Hole Point)
- Site # 125 Waitata Reach (Mid channel between Waihinau and Ketu Bays)
- Site # 106 Waitata Reach, Richmond Bay (North of Te Kaiangapipi Point)
- Site # 124 Waitata Reach, Horseshoe Bay (South of Te Kaiangapipi Point)
- Site # 42 Tory Channel (Tipi Bay)
- Site # 82 Tory Channel (East of Motukina Point)
- Site # 156 Tio Point (Entrance to Oyster Bay)
- Site # 47 Tory Channel (Te Weka Bay)

ASSESSMENT PROCESS

The assessment has been undertaken by considering the requirements of RMA s6(a) and s6(b), along with Policy 13 and 15 of the NZCPS. The assessment accepts the interpretation of Policy 13 proposed by Boffa Miskell Ltd on the relationship between Landscape and Natural Character. This places greater emphasis on the natural sciences and limited weight to perceptual aspects when assessing Natural Character, while the assessment of Landscape places full weight on the combined factors of natural sciences, perceptual/experiential, and associational. The assessment therefore considers all three aspects separately then distils the characteristics and values for each aspect. The results are then evaluated and a separate conclusion reached for natural character and landscape (including visual amenity), with the appropriate weighting as outlined above given to the three aspects to reach these conclusions.

The assessments in this report have been influenced by information gathered from previous studies[2], as well as by ecological benthic assessment work carried out recently for each of the proposed sites[3]. Information from earlier studies frequently relates to values at a larger scale than the site specific interests of this assessment, and the site-specific benthic assessments of the proposed new sites have been undertaken for that reason. Each of the sites considered in this report has been visited by boat and visually assessed with regards to landscape and visual values by Hudson Associates over the 24th and 25th of June 2015. This has been supplemented by two aerial surveys over the Marlborough Sounds (13th November 2015 and 18th July 2016) and two subsequent site visits by boat to Tory Channel (21st July 2016 and 10th August 2016). More detailed terrestrial information than that available in the larger-scale studies has not been gathered for each site, as salmon farms do not impact directly on terrestrial ecology.

CONTEXT AND ASSESSMENT ACROSS THE SCALES

Landscape and Natural character assessment takes place across a range of scales. Previous work carried out for Marlborough District Council[4] has assessed the natural character and natural landscapes and features of Marlborough at the District scale[5], or Level 3/4 scales[6], with values (including Outstanding values) identified for both landscape and natural character at those levels. Some natural character values have also been identified at a more localised level (Level 5), where information has been available, although prior to work carried out by Niwa as part of this proposal, no natural character values had been identified at the level 5 or site-specific scale at the sites considered in this report.

This study is concerned for the main part with assessment at the localised site scale. Values identified for an area or feature at a district-scale or Level 3/4 scale will often be more general than those identified for a specific site, and at the site-scale not all high-level/wider context values might apply.

The sites considered in this study fit within the District/Level 3/4 framework provided by previous work, but are assessed here in greater detail at the site-specific scale. Having said that, consideration has also been given within this assessment to possible effects on the larger-scale values identified in previous work.

Higher –level values identified in previous work are attached to the back of this report as part of Appendix 1 Context (with excerpts from the previous studies).

It should be noted that the 2015 Marlborough Landscape Study, which informs the proposed MEP, has not assessed district and regional ONFLs separately, due to Marlborough District Council having both district and regional governance[7]. District and regional-scale values are therefore not separately identified in the MEP.

Also, the scale of assessment used in the 2015 Marlborough Landscape Study does not align perfectly with that used in the Marlborough Natural Character Study, so comparisons are difficult.

[2] Marlborough Landscape Study, MDC, August 2015; Natural Character of the Marlborough Coast, MDC, June 2014.
[3] Ecological Benthic Assessments for Proposed Salmon Farm Sites – Parts 1 and 2; Niwa, June 2016
[4] Marlborough Landscape Study, August 2015; MDC; Natural Character of the Marlborough Coast, June 2014; MDC.
[5] Description of scale used in the Marlborough Landscape Study, August 2015; MDC
[6] Description of scale used in the Natural Character of the Marlborough Coast, June 2014; MDC.

[7] MDC proposed ONFLs have been assessed at a district scale; Marlborough Landscape Study 2015, pg. 104; MDC proposed ONFLs have not been assessed separately at regional and district levels; an ONFL in Marlborough is considered to be an ONFL at both levels; Marlborough Landscape Study 2015, MDC, Pg. 20.

METHODOLOGY

There are a variety of methods employed throughout the country which provide a framework for the assessment of Natural Character and Landscape. While the specific categories and factors considered are often dependent on the type of proposal and scale of the project, an assessment of Landscape and/or Natural Character will essentially address three components. These components are the Baseline, the Change, and the Effect.

Baseline: This stage draws on a description and characterisation process which outlines the values of the existing environment associated with each of the proposal locations. The baseline considers the respective Natural Science, Perceptual/Sensory and Associative values of each location and ranks each location on a 7-point scale. Within this particular assessment, once the baseline has been determined, a judgement is then made on the level of **Sensitivity** that is inherent in the identified location. Adjustments to the site sensitivity can be made in order to better reflect specific sensitivities relating to the proposal (which in this instance is sensitivity to Salmon Farms).

Proposed Change: This stage determines the nature and degree of change that will occur as a result of the proposal.

Effect: This stage reveals the overall level of effect that will occur from the proposal by considering the relationship between the "Baseline" (including Sensitivity) and the "Degree of Change". The effect is considered to be the difference to the Baseline value that will occur as a result of the proposal.

This process has been undertaken as separate assessments for both Natural Character and Landscape. As previously mentioned, a Landscape Assessment considers the Natural Science, Perceptual/Sensory and Associative values (the landscape is made up of a combination of these factors), while a Natural Character Assessment is weighted toward the identified Natural Science values (with some weight given to Perceptual/Sensory values and almost none given to Associative). For this assessment, in baseline ratings for Natural Science values, marine ecology has been given a slightly heavier weighting, as salmon farms will have no physical effects on terrestrial ecology.

This approach of separating out Landscape and Natural Character as discrete assessments is so that a distinction can be made between the RMA s6(a) and s6(b), along with the respective provisions of the New Zealand Coastal Policy Statement. The methodology used in this study uses a 7 point scoring system based on the NZ Institute of Landscape Architects Best Practice Guide for Landscape Assessment:

Very High/High/High-Moderate/Moderate/Moderate-Low/Low/Very Low.

The Landscape and Natural Character assessment sheets in the body of this report contain this 7 step ranking from Low to Very High, with ranking based on detailed written comments within each section of the assessments. The Effects assessment sheet has a similar written commentary.

The results of the detailed assessment process, have been tabled and depicted graphically, and are shown in the following section OVERVIEW – ASSESSMENT SCORING.

Part of the assessment of each site in this study has been to determine if the site should qualify for Outstanding status at the localised site-scale. An expert judgement has been made as to whether the values at the site, when considered in combination, meet the threshold for classification as an Outstanding Feature or as having Outstanding Natural Character. The ONFL threshold is generally accepted as being "usually so obvious in general terms that there is no need for expert analysis."[8]

Note:

In the initial stages of this Site Swap Proposal, there was a particular need for fine-grained analysis to determine and compare differences between individual sites. In order to illustrate our landscape assessment process, a detailed scoring system was developed, which sat underneath the 7-point scoring scale and produced graphs to act as a visual aid. The scoring system was simply a numeric face for the subjective judgements incorporated in the written assessments, combined with a ranking for sensitivity and the degree of change. The scoring system enabled a finer analysis of effects than simply relying on words such as 'moderate', because the word 'moderate' covers a 1 point range with a score spanning 3.5 – 4.5 on a 7 point scale. We realised early on that the level of effect, for the majority of sites, would fall within a 1 point range. However, the scoring system would have allowed for subtle differences to have been highlighted between all of the sites which would have given a clearer comparison.

The scoring system had initially been used to provide greater insight than simply comparing the consented hectare coverage of farms for removal with the hectare coverage of the proposed farms, which would not compare effects. However, due to the complexity of the scoring system, its critical reception by some and the ongoing refinement of sites throughout this process, we have now removed this entirely from our assessment. This leaves many sites with a rating change of 1 point (Moderate/high to Moderate) on the 7 point scale, but the fineness of the change is disguised by the coarseness of the single point change within the 7 point scale. The written commentary within each site assessment seeks to address the issues pertinent to the change for each site.

SALMON FARM DESIGN AND VISIBIITY DISTANCES

In 2011 tables were developed By Boffa Miskell Ltd. to assess the visibility of salmon farms from various distances[9], for the NZKS Plan Change application heard by the BOI in 2012 (final decision issued February 2013). The visibility distance assessments were generally accepted, and seem to have been challenged only on the basis that assessments may have been done in overcast conditions. The visibility distance tables were based on existing salmon farms at the time at Clay Point, Te Pangu and Forsyth Bay. Clay Point and Te Pangu were (and still are) white steel cage structures with white and green netting. (The design of the Forsyth Bay farm in 2011 is not known at this time).

[8] *Clearwater Mussels Ltd v Marlborough District Council* [2016] NZEnvC 21 at 78

[9] Proposed Salmon Farms Marlborough Sounds, Natural Character Landscape and Visual Amenity Effects Final Report Prepared for King Salmon; Boffa Miskell, August 2011, pg. 24.

The tables described visibility of salmon farms as:

Viewed from water:

Distance	0-.5km	.5km – 1km	1-2 kms	2-3kms	3kms and beyond
Impact on View	Dominant	Prominent	Visible	Partially visible or minor part of the view	Components become difficult to see

Viewed from elevated land-based views:

Distance	0-1km	1-2.5kms	2.5-5kms	5kms and beyond
Impact on View	Dominant	Prominent	Visible	Partially visible or minor part of the view

The above visibility tables have been used as a guide for the assessment of visual effects in this report, for residences within the viewing range determined by the tables, and for boat traffic passing the sites. Visual assessments in this report have also taken into account that visibility distances/visual prominence/visual dominance of salmon farms at the proposed sites is likely to be less than assessed in the Boffa Miskell 2011 tables – and could be quite substantially less, given that the farm designs proposed use dark recessive colours and in some cases circular forms with a lower profile and a more organic shape. The use of dark recessive colours on structures and netting will provide a substantially less visual intrusion into the environment than white structures and netting.

It is also noted that many other factors also affect visual effects, including light conditions, sun angle, backdrop, wave conditions, angle of view, distance, structure design and colour. These distances are therefore general rather than specific to every situation. Even on a clear day, a range of variables will contribute to visibility distance at the various sites, and the perception of whether a farm is visually prominent, dominant or otherwise, including site attributes, context, and individual viewer biases.

The navigational reports[10] provided for this assessment (with vessel tracking maps) have been used to determine boat routes in the vicinity of the proposed sites, and the approximate distances of those routes from the sites. It is noted that the vessel tracking maps provided may be limited in their tracking of pleasure boats, as not all private vessels have been tracked.

For Waitata Reach – where circular forms are proposed at some sites, it is a recommendation of this report (refer to the Site Assessment pages) that circular forms be used throughout the Reach. The circular design has a lower profile and more organic shape, and use throughout the Reach will contribute to visual consistency. (This is with the proviso that the size of the farm also be a consideration, and designed to be appropriate to the size/scale of the proposed bay or site). For Tory Channel, rectangular pens are recommended as the existing farms use this design and consistency is important when the farms are in relatively close proximity.

CUMULATIVE EFFECTS

Waitata Reach

Waitata Reach is an area of transition between the exposed waters of Cook Strait and the Inner Pelorus Sound, mapped as starting at the southern end of the Waitata Reach, at Tawhitinui Reach[11]. The entrance to Waitata Reach, and the change from the wild open Cook Strait to the inner waters of Waitata, where wind is funnelled through Tawhitinui Reach, is marked at the northern end by a pair of exposed, rugged headlands – Kaitira and Te Akaroa.

Waitata Reach itself can be characterised as an expansive stretch of water about 12kms long, and from 2-3.5kms wide, enclosed to either side by steep landforms which drop to the sea in a series of headlands, with bays of various sizes and small sub-bays set the length of the Reach. Landforms through the Reach are rugged and dramatic, expressive of the still relatively exposed maritime conditions. The Waitata waters are wider and open to the elements, while much of the Inner Sounds to the South is narrower but can receive strong winds that are funnelled over from Croisilles. There are long views up and down the Reach, with the horizon-line being water in the views out towards Cook Strait.

Landform through the Reach is varied, with high hills and areas of extremely low elevation, clearly legible as the tops of ridges inside a drowned valley system. The area is part of the most submerged of the Marlborough land ecosystems (Bulwer[12]). Identifiable landform features include Te Akaroa and Kaitira headlands, a narrow isthmus landform at Port Ligar, the Yellow Cliffs at the southern entrance of Waitata Bay, and Maud Island and Tapapa Point in the south – which marks the entry/exit to/from the adjoining Tawhitinui Reach.

The coastal edge through the Reach is typically rocky and abrupt, with slopes rising steeply and suddenly from the water, and the edge eroded by the ongoing coastal processes. Towards the south as the Reach nears the more sheltered Inner Sounds narrow beaches start to appear.

The Reach appears as highly natural and feels remote, due to the expansive scale and largely unmodified landform, the large areas of regenerating native vegetation and the sparsely scattered structures, although a productive character is also clearly evident throughout the Reach. There is a mix of productive uses including forestry, pastureland, and marine farming, with a high number of mussel farms through the side bays of the Reach and a small number (3) of salmon farms, all serviced regularly by work boats.

There are also a small number of baches tucked unobtrusively into the folds of the bays, and associated visible modifications include roads and tracks, jetties and powerlines.

Vegetation patterns through the Reach are generally fragmented and quite complex. There are large areas of regenerating native vegetation, and although for the most part this is in the early stages there are also some areas of very high[13] quality at the south-west end of the Reach, most notably the remaining indigenous forests on the more elevated slopes of Mt. Drew (south side of Waitata Bay) and regeneration on Maud Island at the south end of the Reach. Maud Island also has nationally threatened fauna and is predator free, and is considered distinctive, rare and internationally important. [14]

[10] Navigational Risk Review for Proposed Pelorus Sound Salmon Farms, Navigatus Consulting Ltd, December 2015; Navigational Risk Review for Proposed Tory Channel Salmon Farms, Navigatus Consulting Ltd, July 2015.
[11] Marlborough Landscape Study; MDC; August 2015

[12] Natural Character of the Marlborough Coast; MDC, June 2014, pg. 118.
[13] Natural Character of the Marlborough Coast; MDC, June 2014, pg. 125
[14] Marlborough Landscape Study; MDC; August 2015,pg. 118.

The Reach is valued for recreational activities such as boating, fishing and diving, although on the whole it is less well-used for recreation than some other areas of the Sounds (such as the popular Queen Charlotte Sound).

Visual amenity in the Reach is of a high value. The Reach has been categorised as a High Amenity Landscape[15], but not outstanding in terms of landscape or natural character.

There are long-standing mana whenua, mana moana and tangata whenua associations with Pelorus Sound as a whole, and evidence of early Maori settlement clustered around Port Ligar and Orchard Bay, including a Pa and identified traditional waka routes through the Waitata Reach.

There is also evidence of early European settlement at Port Ligar, and an historic gun emplacement at Post Office Point on the Kaitira headland.

There are a number of scenic reserves in the Reach, with Te Kopi and Sir Bernard Fergusson Scenic reserves in Waterfall Bay, Port Ligar, and Bulwer Scenic Reserve in Waitata Bay.

Port Ligar has been identified as being of national significance for king shag feeding and breeding habitat.

Forsyth Bay lies adjacent and to the east of Waitata Reach, opening onto the Reach at the northern end on the seaward side of the Kaitira - Te Akaroa Gateway. Boat traffic heading east from the Reach can track around the northern end of Forsyth Island, or the more sheltered southern end through Forsyth Bay and Allen Strait.

Key Characteristics

- Exposed, rugged headlands mark the northern end of the Reach and the entrance from Cook Strait to the Pelorus Sound (the "gateway" to the Sound)
- The Reach is a transition area between the exposed waters of Cook Strait and the sheltered and tranquil bays of Inner Pelorus Sound
- Expansive scale; distant enclosure but not dominated by surrounding landforms
- Rugged, dramatic and visually identifiable landforms (Te Akaroa and Kaitira headlands, a narrow isthmus at Port Ligar, the Yellow Cliffs at the southern end of Waitata Bay, and Maud Island and Tapapa Point in the south),
- A series of headlands through the Reach, forming a series of bays and sub-bays to either side of the central open waters;
- Comparatively low elevation (part of the most submerged of the Marlborough land ecosystems) ;
- Slopes typically rising steeply and abruptly from the coastal edge;
- Long views up and down the Reach, with the horizon line being water in views towards Cook Strait;
- Exposure to the elements within the main Channel; enclosure and shelter inside the bays to either side;
- Coastal edge rocky and eroded by ongoing coastal processes
- Narrow beaches start to appear towards the south
- Appears as highly natural – has low levels of landform modification and limited structures; mixed uses and a productive character is also clearly apparent;
- Modifications include vegetation clearance, forestry, pastureland, marine farming, buildings, jetties, tracks and roads and powerlines;
- Mostly early-stage vegetation regeneration, but some areas of very high quality vegetation (elevated slopes of Mt Drew, Maud Island);
- Fragmented vegetation patterns;
- Popular for recreational uses such as boating, fishing and diving, although not as well used as other parts of the Sounds such as Queen Charlotte Sound;
- Transient values of wildlife, exposure to changing weather and water conditions, changing character of the water depending on weather, dark night sky)
- Historic features, including evidence of early European settlement and a gun emplacement
- Cultural features, including evidence of early Maori settlement and use (a Pa and waka routes)
- Te Kopi and Sir Bernard Fergusson Scenic reserves in Waterfall Bay, Port Ligar
- Bulwer Scenic Reserve in Waitata Bay
- Areas of national significance for king shag feeding and breeding habitat at Port Ligar
- Maud Island is internationally important for its distinctive and rare fauna and predator free status
- A High Amenity landscape

Key Values

- An area of transition from wild open sea conditions to sheltered tranquil bays to the south (Inner Pelorus Sound/Tawhitinui Reach)
- Northern end is the "gateway" between Cook Strait and the Sounds, marked by rugged headlands
- Sense of expansiveness
- Sense of distant enclosure from surrounding landforms;
- Long views, including horizon line of water looking towards Cook Strait;
- Dramatic, rugged and highly expressive landforms
- Identifiable landforms (vivid and memorable)
- Remote
- High perceived naturalness, but within the context of a mixed-use productive/regenerating character and with scattered structures visible
- Numerous marine farms (mussel and 3 salmon) subservient to dominant perceived naturalness
- Mix of exposure in the Channel and enclosure/shelter inside the bays
- Complex and fragmented vegetation patterns, with forestry and pasture; large areas of regeneration occurring
- Mostly early-stage indigenous vegetation regeneration, but some areas of very high quality indigenous vegetation (Mt Drew, Maud Island)
- Working route for regular plying and presence of working boats servicing multiple marine farms in the Reach and side bays
- High visual amenity
- High transient values
- Associative and bio-physical values of Te Kopi and Sir Bernard Fergusson Scenic reserves in Waterfall Bay, Port Ligar
- Associative and bio-physical values of Bulwer Scenic Reserve in Waitata Bay
- Areas of national significance for king shag feeding and breeding habitat at Port Ligar
- Maud Island is internationally important for its distinctive and rare fauna and predator free status
- Recreational uses through the Reach (less popular use than some other parts of the Sounds)
- Cultural values including a Pa and waka routes
- Historical features including a gun emplacement

[15] Marlborough Landscape Study, MDC; August 2015

Within Waitata Reach and beyond the bounding headlands to the north, five new salmon farm locations are being proposed. As part of this proposal, the existing Forsyth and Waihinau farms will be removed, resulting in a net increase of three farms. Three further three farm locations were also considered in the early stages of the site swap proposal, but these are no longer being pursued for reasons including landscape effects. The cumulative effects of the five proposed salmon farms have been considered for potential effects on landscape, visual amenity and natural character values at the national, regional, Reach and localised scale.

Most of the marine area is not considered as having outstanding natural character or landscape values in the Operative or Proposed Plan, with the exception of the Proposed Plan identifying the gateway waters as having outstanding landscape values and Maud Island as having outstanding landscape and natural character values. High natural character rating has been assigned to the eastern terrestrial areas and very high ratings have been assigned to the south western hills, but neither of these areas have been elevated to outstanding natural character in the Proposed Plan.

Apart from the gateway and Maud surrounds, the waters of the Reach are entirely considered to have high amenity values. Mussel farms are located in many side bays, such as Waitata, Wahinuau, Port Ligar, Horseshoe and Blowhole (north and south), but these are generally absent from Waitata Reach itself, with marine farming being confined to the existing salmon farms. For this reason, mussel farms are not considered to contribute to the cumulative effects assessment within Waitata Reach, with this assessment focusing primarily on the effect of 5 salmon farms additional to those existing or consented.

When considering the cumulative effects on Natural Character, weight has been given to the findings of natural science values over experiential aspects. When considering Landscape, equal weight has been given to natural science, experiential and associational values. Being a marine based activity with no physical effect on terrestrial, particular consideration has been given to benthic information where this has been available when determining the baseline and effect of change. From the particular benthic studies carried out for the site swap exercise, no site or cumulative effects have been identified that cannot be managed through feeding limits.

When considering cumulative effects in Waitata Reach, it has some relevance to refer to the King Salmon Board of Inquiry (BOI) Decision, which granted consent for two new salmon farms (Waitata and Richmond). In referring to this, it should be noted that no two cases are the same, each case needs to be considered on its merits and that new cases are not bound by the findings of previous cases.

The figures on the following page referred to various combinations of these farm sites;

- Blowhole Point North
- Blowhole Point South
- Forsyth Bay
- Horseshoe Bay
- Kaitira
- KPF
- Mid Channel
- Richmond
- Richmond Bay South
- Tapipi
- Waihinau
- Waitata
- White Horse Rock

The image below (Figure A) displays the relative location of these locations.

Figure A

To refresh, the following sequence illustrates the process that has occurred over the last 4 years since the start of the BOI process:

a) There was one existing salmon farm (Waihinau) and one consented (KPF) in Waitata Reach and one existing salmon farm in Forsyth Bay. See Figure B.
b) The application to the BOI was for five new salmon farms: Kaitira, Tapipi, Richmond, Waitata White Horse. This application was made in addition to existing farms. The Board found that the adverse cumulative effect would be decisive. See Figure C.
c) The BOI declined White Horse, Kaitira and Tapipi, and granted Waitata and Richmond. Together with the existing two farms (Waihinau and KPF), this gave a total of four farms in the local Waitata Reach area and one in Forsyth Bay. See Figure D.
d) The Environment Court declined the KPF site on appeal and King Salmon have offered Waihinau and Forsyth for removal as part of the site swap process. This leaves two farms in Waitata Reach where the BOI accepted four. See Figure E.
e) The current site swap proposal is for five new farms dispersed along the 12km length of the Reach: Horseshoe, Richmond South, Mid Channel, Blowhole South and Blowhole north. See Figure F.

When considering cumulative effects, the BOI did not define an upper threshold for the number of farms that could occur, but did consider the merits of the five application sites. Three farms were declined (Kaitira, Tapipi and White Horse Rock). In making this finding, the Board was mindful of the ongoing presence of the existing Waihinau Salmon Farm and the proposed KPF farm. This farm was an existing mussel farm that had been granted consent for conversion to a salmon farm by Marlborough District Council. It was located off Danger Point between Waihinau Bay and Port Ligar. The consent was under appeal to the Environment Court at the time of the BOI, so was considered to exist in terms of their considerations. The five application farms and two existing farms were all within a cluster approximately 4km by 6km.

It is relevant to note that the site swap proposal has farms located at southern end and beyond the northern end of Waitata Reach, being over a distance of more than 12km. This reduces the cluster effect that the BOI needed to consider.

In granting consent for the two new salmon farms, the BOI considered that four farms were acceptable in terms of cumulative effects within this cluster and within this part of Waitata Reach. The four farms are the two new farms of Richmond and Waitata, the existing farm of Waihinau, and the consented farm of KPF. The Environment Court subsequently declined the KPF appeal and King Salmon propose to remove Waihinau as part of the site swap proposal. Therefore, in terms of the current cumulative effects assessment, there are two existing salmon farms when four were accepted by the BOI.

When assessing cumulative effects, the sites have been considered in terms of the following:

- Simultaneous: where two or more salmon farms are seen at the same time from the same viewpoints,
- Successive: where two or more salmon farms are present in views from the same viewpoint but cannot be seen at the same time as the viewer needs to turn his or her head,
- Sequential: where two or more salmon farms are not present in views from the same viewpoint and cannot therefore ever be seen at the same time if the observer moved around the arc of view. Here the observer has to move through the landscape/seascape area.

Simultaneous

The visibility table above indicates that at 2-3km a salmon farm is partially visible or a minor part of the view, and over 3km the components become difficult to see. The distance from the southernmost proposed farm (Horseshoe) to the northern most farm (Blowhole North) is over 12km.

There will be a series of individual locations along the length of Waitata Reach from which simultaneous views of up to three salmon farms within 3km will be obtained. These are small areas where the 3km distance around each farm overlap, and occur at a series of points if travelling by boat along the length of the Reach. There is a similarity to the situation approved by the BOI, with one area where three farms would be seen simultaneously within 3km in the mid Reach cluster. The difference between the BOI situation and the site swap situation is that there will be several areas along the Reach where simultaneous views can be obtained rather than one area.

Figure B

Figure C

Figure D

Figure E

Figure F

Simultaneous views will be obtained from Tui Nature Reserve, located at an elevated position on the ridge south of Yellow Cliffs. They already obtain a view of the existing Richmond salmon farm at a distance of approximately 3.7km, and will obtain views of Richmond South at a slightly lesser distance and Horseshoe at over 4km. The proposed mid channel farm will be over 5km away. The visibility distance table suggests that between 2.5-5km the farm will be 'visible' while beyond 5km it will be 'partially visible or a minor part of the view'. It is considered that there will be adverse cumulative effects on the simultaneous views obtained by the Tui Nature Reserve, but these will not be significant due to the backdrop, scale and character of the setting and distances involved.

Successive

The more common cumulative effect through the reach is likely to be in relation to successive views, as there will be a number of locations where two or three farms will be within viewing range, but which cannot be seen at the same time without the viewer turning their head. This successive cumulative effect occurs primarily through the middle of Waitata Reach. In the situation approved by BOI, there was also a reasonably sized area where three farms (Waitata, Waihinau and KPF) would have been seen successively within 3k.

Sequential

The most expansive cumulative effect will occur with sequential views, which occur as a viewer moves through the Reach by boat. Considering the length of the Reach in sequence from south to north, the proposed southern salmon farms of Horseshoe and Richmond South will be separated by and seen against the landform backdrop of Te Kaiangapipi. Both will be located off to the side of the main channel in a similar way to that of Richmond North, which was approved by the BOI. It is recommended that the proposed farms adopt round pens and dark recessive colouring for all structures in this high amenity landscape.

Approximately 6km north of Horseshoe/Richmond South, boat traffic will then come to the mid channel site. This will be seen in association with the existing Waitata and Richmond salmon farms. The expansive nature of the setting will be the primary mitigating factor for this sequential cumulative effect, with the Reach being 3km wide in this area, plus the low dark coloured structures and absence of a mid-channel barge. The BOI granted consent for the two new farms in this area, knowing that two farms already existed, giving a total of four consented farms. Two existing farms (Waihinau and KPF) will be/have been removed, so the addition of the single mid channel farm needs to be seen in the context of two farms being removed from the cluster of four in this area. The sequential number of farms will therefore be three in this area, which is one less than granted by the BOI.

North of the gateway landforms of Kaitira-Te Akaroa, boat traffic may take varying routes to the east, north or west. Those travelling east via Forsyth Bay will be over 2km from Blowhole South and more than 3km from Blowhole North. The route through Forsyth will be experienced with the existing Forsyth Salmon Farm removed, which reduces sequential effects on that route. Boats travelling north out of Waitata Reach will see the two Blowhole sites at 1-2km, depending on their route, while boats travelling west will gain closer views. As discussed in the individual site assessments, the immediate settings for the two Blowhole sites is modified in terms of land and marine use, with pasture, pine plantation and existing marine farms. At the site scale, this local area is not considered to have landscape values sufficient to qualify it as outstanding. The cumulative effect of these two farms on the local scale is not considered to be significant, while the effect on the gateway district scale is no more than minor due to the scale of the setting and the low impact on the key values of this wider area.

CONCLUSION

It is relevant to note that there are sequential effects all the time as boat traffic moves through the Reach, many of which can occur as permitted activities e.g. buildings located in groups or successive pine plantations.

The separate cumulative effects of simultaneous and successive are similar in nature to those circumstances encountered by the BOI, yet considered acceptable by the consents granted for the cluster concerned. The difference between the BOI situation and the site swap situation is the more dispersed nature of the sequential effect, with the farms being spread more thinly over 12km rather than concentrated into a 6km length. Another difference is the removal of the farm in Forsyth Bay, which extended the effects beyond the 12km length of the Reach. Additionally, the farms in Crail Bay are being removed. While some distance from Waitata Reach, their removal should not be discounted when considering sequential effects over an extended area.

The primary mitigation for sequential effects is the overall length of the Reach at more than 12km, the broad and dominant scale of the setting and the modifying characteristics that already exist. While acknowledged as having a high perceived naturalness, this is qualified by recognition of a productive character that is also clearly evident throughout the Reach. The current productive features and characteristics remain subservient to the perceived naturalness due to the scale and dominance of the setting. The sequential cumulative effect of the additional salmon farms will not alter this weighting.

There will be adverse effects on visual amenity from close views, which is inevitable, but in most cases the areas are not identified as outstanding in terms of natural character or landscape values. None of these close views will have significant adverse effects on the key values of the areas of high visual amenity including the dominant scale or backdrop of the setting and the context of a mixed-use productive/regenerating character.

The only area where landscape values are mapped as outstanding is in the Proposed Plan beyond the gateway at Blowhole North and South. In these bays, the site specific characteristics and values are not assessed as outstanding for landscape values due to the degree of terrestrial and marine modification present in the specific locations. Cumulative effects at these two bays will not be significant due to the dominance of the landform and existing modifications present. When the Blowhole cumulative sequential effects are considered at the wider gateway and reach scale, as identified in the Proposed Plan and characterisation above, the scale and location of the two farms is such that the effects on the key values that cause parts of the wider gateway and reach to be identified as Outstanding in the Proposed Plan will be no more than minor.

Te Kura Te Au/Tory Channel

Te Kura Te Au/Tory Channel can be characterised as a long narrow stretch of water (1-1.5kms wide and roughly 15kms long), strongly enclosed by steep landform, and with a complex shoreline formed by repeated headlands and numerous bays – both deep and shallow, along its length. There are some long views up and down the Channel, but generally the sense of enclosure is dominant. The Channel is part of the Outer Sounds, and serves as the "gateway" to the South Island from the North. Entry from Cook Strait is through a narrow gap between rocky and dramatic headlands with coastal cliffs and outlying rocks, and is marked by a strong change in character from the open Cook Strait with a wild, remote feel, to a strongly enclosed, much more sheltered and tame working-landscape character.

Tory Channel has both natural and cultural patterns, but the managed character of the land is the defining characteristic. Through the Channel there is a complex pattern of pine forestry, buildings, pasture, native vegetation regeneration, wilding pines, and marine farming, all of which detract from feelings of remoteness and naturalness. Mussel farms are in the bays either side of the Channel and three salmon farms in the main channel, all serviced regularly by work boats.

Vegetation patterns are generally complex and fragmented. There are areas of native vegetation regeneration, but most is in the early stages. There are more advanced areas in the south-west of the Channel at Kaitapeha, considered to be of high value[16].

Areas of high marine natural science value have been found in the Channel[17], and the rocky coastal edge, with its exposed bluffs and small cliffs in places, is evidence of the ongoing natural coastal erosion processes typical of the Outer Sounds. In general Te Kura Te Au/Tory Channel is regarded as having much lower naturalness and landscape values than other parts of the Sounds. It has a strong role as a thoroughfare, and a subsequent high amount of boat traffic. It is not generally recognised as having particularly high values for tourism or recreation, or high visual amenity values, compared with other parts of the Sounds.

There is evidence of early Maori settlement/activity throughout Te Kura Te Au and the Arapawa Island areas, and it has always been known as having a role as a "food basket" and "engine room" for the whole of Totaranui (Queen Charlotte Sound).[18] There are two Maori Heritage sites at Te Awaiti Bay) [19].

The first whaling station in New Zealand was established in Tory Channel at Te Awaiti and is reputed to be the first European settlement in the South Island. There is also the Geopreservation site on East Head.

Key Characteristics

- Provides the "Gateway" between North and South Islands, and the main transportation route for boat traffic between the islands; strong role as a thoroughfare; high boat traffic;
- Entrance at Cook Strait marks a dramatic change in character from wild, open sea to a strongly enclosed, much more sheltered and tamed landscape.
- A Geopreservation site on East Head
- Predominantly "working-landscape" character, with structures and productive uses throughout the Channel detracting from naturalness;
- Visible modifications include cleared vegetation and pasture, pine forestry, marine farms (mussel and salmon), buildings, power lines, tracks and jetties.
- Narrow, long stretch of water, strongly enclosed by landform;
- Complex shoreline formed by a repeated series of headlands and bays along the length of the Channel
- Steep slopes with a rocky coastal edge; exposed bluffs and small cliffs display ongoing natural coastal erosion processes;
- Complex and fragmented vegetation patterns, with a mix of regenerating native scrub, exotic plantation forestry (pine), and wilding pines;
- High marine natural science values; some areas of high vegetation values (at Kaitapeha)
- Less recognition as a recreation/tourism location than other parts of the Sounds
- Evidence of early Maori settlement and two Maori Heritage sites at Te Awaiti Bay; Channel has a recognised role as the "food basket" of Totaranui;
- New Zealand's first whaling station was established at Te Awaiti Bay.

Key Values

- North-east end is recognised as the "gateway" between North and South Islands;
- A Geopreservation site on East Head;
- Channel is recognised as a main transportation route, and the link for boat traffic between the Islands;
- Predominantly "working-landscape" character of mixed productive uses; known for its mix of uses
- Lowered remoteness and naturalness inside the Channel, with modifications clearly evident
- Sheltered
- Some long views but overall strongly enclosed
- Complex landforms – headlands, shallow and deep bays
- Complex and fragmented vegetation patterns with low coherence generally; mixed pine forestry, wilding pines, pasture and mostly early regenerating native vegetation
- High marine natural science values; some area of high vegetation values (at Kaitapeha)
- Expressive coastal edge
- Known as the "food basket" of Totaranui; two Maori Heritage sites at Te Awaiti Bay;
- Historic whaling station at Te Awaiti Bay
- Lowered recognised recreational values.

Of the four sites considered along Tory Channel, three have been recently discounted due to adverse effects, particularly adverse benthic effects. The three discounted farms are Tipi Bay, Motukina and Te Weka. The only remaining proposed farm is Tio Point, mid-way along the length of Tory Channel.

The Tio Point area is not considered to be outstanding in terms of landscape or natural character values, and lies outside any area of high marine natural character. As with the rest of the Sounds, it is considered by the Proposed Plan to be a high visual amenity landscape.

The Tio Point site lies on the southern side of Tory Channel opposite the existing salmon farm at Clay Point and in the bay adjacent to existing Te Pangu salmon farm. The cumulative effects that will occur will be simultaneous, successive and sequential with the two existing salmon farms.

[16] Natural Character of the Marlborough Coast; MDC, June 2014, pg. 131
[17] Ibid, pg. 85

[18] Board of Inquiry, NZKS Decision, 23 Feb 2013; pg 262
[19] Marlborough District Council Smart Maps: Heritage Sites.

Simultaneous

The primary viewing audience will be from boat traffic within Tory Channel, with the main viewing platform expected to be from the inter-island ships. However, Tory Channel is also known to be popular with pleasure craft, which would follow a similar route due to the narrowness of the channel.

Simultaneous views of the existing Te Pangu and proposed Tio Point salmon farms can be obtained on the southern side of the channel. Such views from passing ships will be limited to closer distances due to intervening landform when approaching from the west.

When approaching from the east simultaneous views of Te Pangu and Tio Point can be obtained from distances over 3km. As described by viewing distance tables, salmon farm structures are prominent up to 3km but the farms become difficult to discern at greater distances.

From both east and west views, the sites will be seen against backdrops of rising landform and recessed into bays. Additionally, the Tio Point headland separates the Tio Point salmon farm from the Te Pangu salmon farm. Landform enclosing the Clay Point farm also prevents all three farms being fully seen simultaneously except over the very short length of Tory Channel immediately north of the farms. At this location (around Te Uira-Karapa Point), the existing Clay Point salmon farm can also be seen on the northern side of the Channel.

Successive and Sequential

A simultaneous cumulative effect already occurs over this short distance for the two existing farms, and the addition of a third farm will compound this situation. There will be an adverse cumulative effect due to the increased density, but the severity of this effect is mitigated by the relatively short distance (less than 3km) over which all three farms can be seen together. The productive character of the Channel and dominance of the landform and backdrop also help reduce the severity of effects to a point where they will not be significant in this high amenity landscape.

Being so close to each other, the successive and sequential cumulative effects for all three farms are considered to be similar to the simultaneous and not be significantly adverse in this visual amenity landscape.

Overview - Assessment Scoring

Marine Farm Site	Elements	Location		Baseline Assessment				Before Proposal			After Proposal	
				Natural Science	Perceptual/ Sensory	Associative		Natural Character	Landscape		Natural Character	Landscape
Propsed New Site (Potential Addition)												
34 Blowhole Point North	3x Circular Square Pens + Barge	Pelorus		Moderate	Moderate	High		Moderate	High - Moderate		Low - Moderate	Moderate
122 Blowhole Point South	3x Circular Square Pens + Barge	Pelorus		Moderate	High - Moderate	High		Moderate	High - Moderate		Low - Moderate	Moderate
125 Mid Channel Waitata	5x Circular Square Pens + Service Vessel	Pelorus		Low	Very - High	Moderate		Moderate	High		Low - Moderate	High - Moderate
106 Richmond Bay South	4x Rectangular Pens + Barge	Pelorus		High - Moderate	High - Moderate	Moderate		High - Moderate	High - Moderate		Moderate	Moderate
124 Horseshoe Bay	4x Rectangular Pens + Barge	Pelorus		High - Moderate	High - Moderate	Moderate		High - Moderate	High - Moderate		Moderate	Moderate
42 Tipi Bay	4x Rectangular Pens + Barge	Tory		High - Moderate	Low - Moderate	High - Moderate		High - Moderate	Moderate		Low	Low - Moderate
82 Motukina Point	5x Rectangular Pens + Barge	Tory		Moderate	Low - Moderate	High - Moderate		Moderate	Moderate		Low	Low - Moderate
156 Tio Point	4x Rectangular Pens + Barge	Tory		Moderate	Moderate	High - Moderate		Moderate	Moderate		Low - Moderate	Low - Moderate
47 Te Weka Bay	5x Rectangular Pens + Barge	Tory		High - Moderate	Low - Moderate	High		High - Moderate	Moderate		Moderate	Low - Moderate
Existing Site (Potential Removal)												
Waihinau Bay	Rectangular Pens + Barge	Pelorus		Moderate	High - Moderate	HIgh		Moderate	High - Moderate		High	High
Forsyth Bay	Rectangular Pens + Barge	Pelorus		Moderate	High - Moderate	Moderate		Moderate	High - Moderatre		High - Moderate	High
Crail Bay	Circular Pens + Barge (Site 1) Circular Pens (Site 2)	Pelorus		Moderate	High - Moderate	Moderate		Moderate	High - Moderate		High - Moderate	High
Ruakaka Bay	Rectangular Pens + Barge	Queen Charlotte		Moderate	Moderate	High - Moderate		Moderate	High - Moderate		High	Very High
Otanerau Bay	Rectangular Pens + Barge	East Bay		Low	Low - Moderate	Moderate		Low	Low - Moderate		Low - Moderate	Moderate

Site Location Map

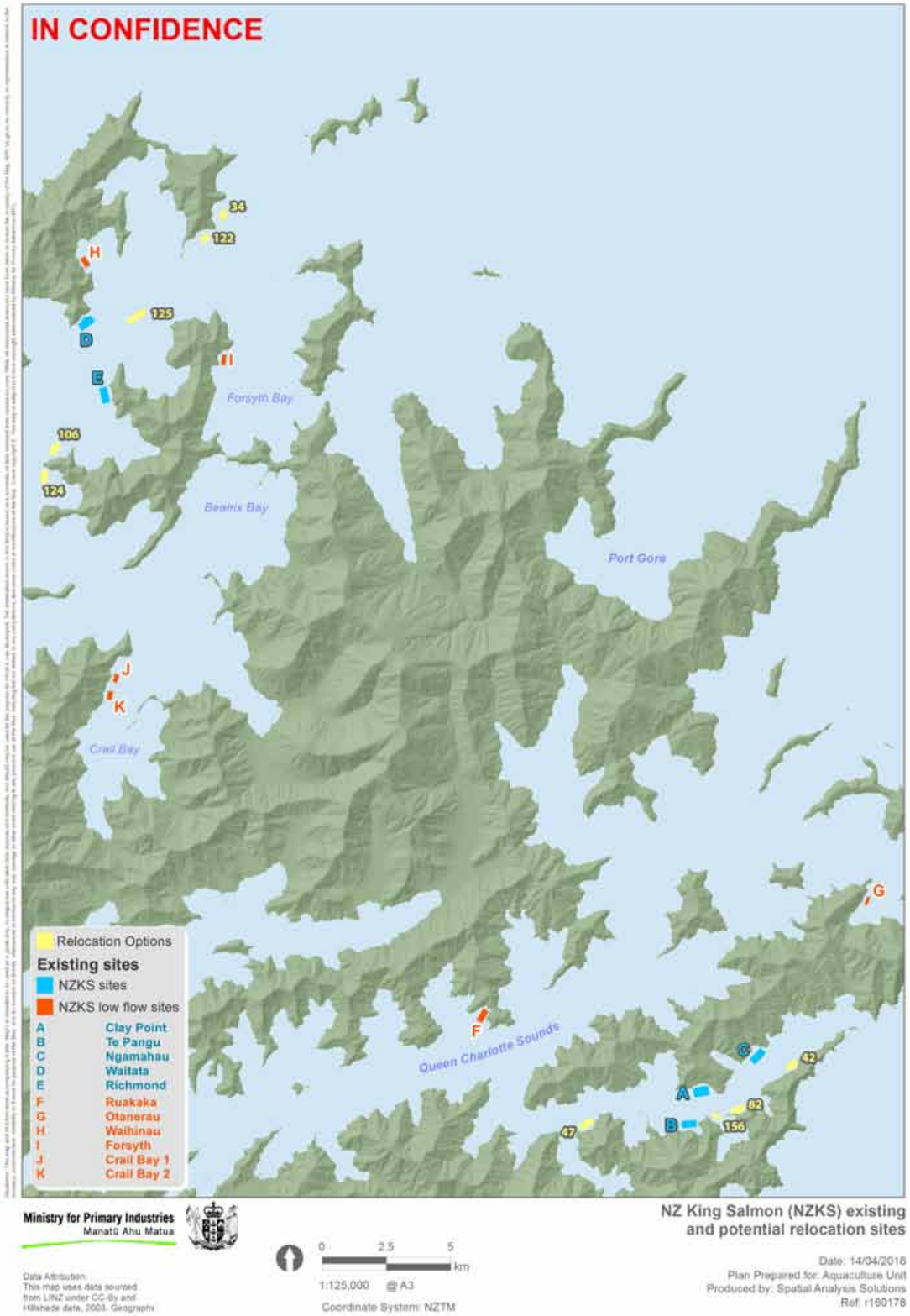


Figure G: Location Map of all Sites

Site: 34 -Blowhole Point North

Figure 1: Site 34 - Photo from Aircraft

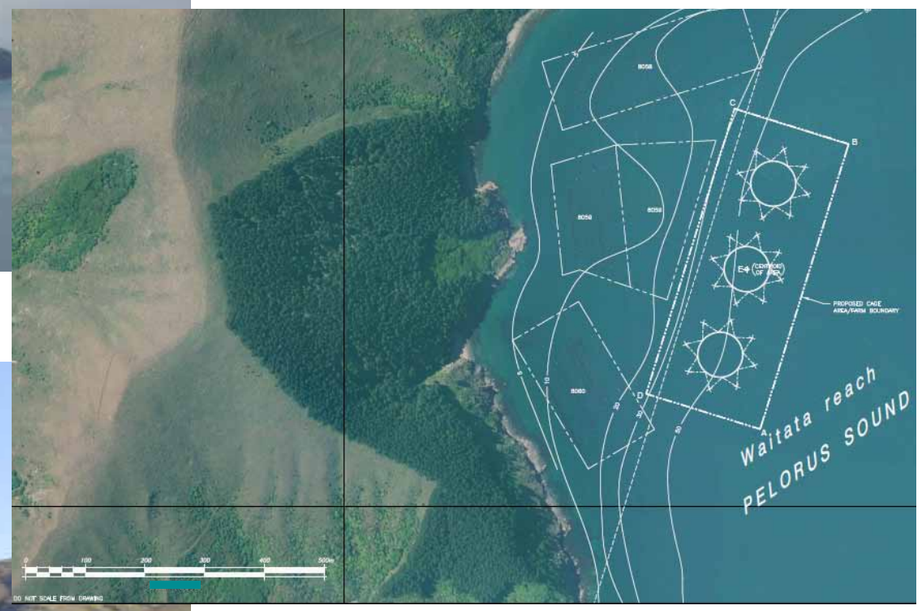


Figure 2: Site 34 - Location Map of Proposed Site

Figure 3: Site 34 - Photo from Boat

PROPOSED SITE 34: BLOWHOLE POINT NORTH

Site Specific Assessment: Natural Character, Natural Features & Landscapes

***Location*:** East side of Te Akaroa (West Entry Point) – east-facing bay; next bay south of Harris Bay and Oke Rock; Outer Pelorus Sound.

Wider Context: Recent Natural Character Study[1]
Site is not in any area proposed as ONC.
Terrestrial Area 2 – Cook Strait. Site is not in any Terrestrial Sub-Area identified as having High/Very High natural character values at Level 4/5.
Marine Area C – Pelorus Sound. Site is within Marine Sub-Area Pelorus Heads, identified as having High abiotic/biotic value at Level 4/5.
Wider Context: Recent Landscape Study[2]
Site is part of the Outer Sounds Landscape.
Site is inside proposed ONL (Outer Sounds Outstanding Natural Landscape) defined at the district scale, and inside an ONF (the waters between Te Akaroa and Kaitira Headland - district scale) within Area 5: Port Ligar, Forsyth Island and Kaitira Headland.
Wider Context: Operative Resource Management Plan
Site is not adjacent to or in any Area of Outstanding Landscape Value.

Site Natural Science Baseline

Geomorphology (Landform)[3]
Landform adjacent to the site is unmodified (except for tracking visible to the north) and comprises a main headland (Te Akaroa) at the entrance to Pelorus Sound. Te Akaroa headland's main ridge travels generally south, with a number of spurs coming off that ridge to drop into the sea. The proposed site sits within a reasonably wide bay formed by two main spurs coming off the ridge to form a shallow enclosure. (A third lesser spur bi-sects the main bay, creating two sub-bays within the whole.)

The bay and adjacent hill-slopes are east-facing, and sit off to the side (to the north) of the entrance into Pelorus Sound between the Kaitira and Te Akaroa headlands. The bay is fully exposed to the open sea. The coastal edge here is abrupt and rocky, with slopes rising steeply behind the bay.

Terrestrial Ecology
Terrestrial
Vegetation is highly modified, and comprises a large area of plantation forestry, a large area of pasture, and some regenerating indigenous vegetation (mainly on the lower slopes and gullies). Regeneration is in the early stages. There are some wilding pines spreading out from the plantation area. Exposure and maritime influence is extreme.

There will be some existing natural character value in the regeneration occurring on lower slopes and gullies, although the extensive pine planting will be causing some disruption to natural patterns such as water and nutrient cycling, chemical properties of the soil and the succession of the indigenous vegetation.

Rating: Low - Moderate

Marine Ecology
The proposed site is at the north end of Pelorus Sound, on the edge of Cook Strait, inside area (Pelorus Heads) previously identified as having High abiotic/biotic value at Level 4/5.

Key High natural science values previously identified in Marine Sub-Area Pelorus Heads at the 4/5[4] level are:
- Largely unmodified section of coast extending into the entrance of Pelorus Sound to Kaitira and Te Akaroa;
- High current communities flanking the main channels.
- Includes the offshore main channel entering Pelorus Sound.
- Adjoins Coastal Marine Area B[5].

The coastal margin at this site is modified by mussel farming.

Recent ecological benthic assessment of the site[6] has determined that the sandy mud substratum beneath the site supports an epifaunal community that is sparse and mostly composed of common taxa. Small biogenic clumps of associated organisms mainly comprising ascidians and hydroids are present in a scattered distribution. These types of associations are considered to have ecological value in supporting benthic biodiversity in the region (Davidson *et al* 2011), however the biogenic clumps found on the mud habitat within the site boundaries were relatively small and were sparsely distributed. Brachiopods were found within the site but the presence in the vicinity of the site of dense zones or beds that would constitute a brachiopod community, could not be confirmed nor absolutely discounted. The site was characterised as exhibiting moderate to high current speeds. Reef patches and kelp communities fringing the shoreline provided habitat for paua and kina, and the varied shoreline habitats and adjacent subtidal zone is blue cod habitat. Scallops were relatively abundant within the site. The reef patches, along with the nearby bedrock reef are considered to be significant ecological features.

Summary of Natural Science Characteristics
- Steep headland slopes (east-facing) behind a bay on the edge of the open sea;
- Wide, open character bay;
- Abrupt rocky coastal edge, with slopes rising steeply straight from the water's edge;
- Largely unmodified landform;
- Modified vegetation: mix of pine forestry, pasture, areas of regenerating coastal scrub on "edges" (lower slopes and gullies; around plantation boundaries);
- Coastal margin modified by mussel farming;
- Marine epifaunal community that is sparse and mostly comprised of common taxa.

Natural Science Baseline Rating:
- Moderate

Key Natural Science Values:
- Largely unmodified landform;
- Some modification of the coastal margin with three existing mussel farms;
- Marine epifaunal community that is sparse and mostly comprised of common taxa;
- Early-stage regenerating indigenous vegetation on lower slopes and gullies;
- Modified land cover through pasture and block of pine plantation on the steep slopes.

Rating: High-Moderate

[1] Natural Character of the Marlborough Coast, MDC, 2014; pg.73.
[2] Marlborough Landscape Study, MDC, 2015.
[3] Broader geomorphological aspects have been covered previously; Refer to Natural Character of the Marlborough Coast, MDC, 2014.
[4] Not confirmed for this individual site.
[5] Coastal Marine Area B: D'Urville Island – Northern Cook Strait; Natural Character of the Marlborough Coast, MDC, 2014. Natural Character value of this Area is identified as of High value only (ie it is not Outstanding).
[6] Ecological Benthic Assessments for Proposed Salmon Farm Sites, Part 1; Niwa, April 2016.

Site Perceptual/Sensory Baseline

Coherence

The terrestrial backdrop is not highly coherent, mainly due to the vegetative patterns in some parts (forestry boundaries) being highly visually incongruent with the underlying landform, but also due to the mix of vegetative cover. The vegetation is a mix of pine plantation, pasture; areas of regenerating indigenous vegetation around "edges", and in lower slopes and gullies, and wilding pines. Although the forestry is visually simple (as is the pasture), patterns across the slopes are fragmented and the mix of vegetation types is visually complex. This reduces the appearance of the backdrop as one coherent whole. There is also a high visual contrast between the pine plantation and the other types of vegetative cover, which emphasises the discordant nature of the plantation's geometric boundaries which don't relate to landform.
Rating: Low

Vividness and Memorability

In itself this bay does not appear either especially vivid or highly memorable. Within the context of the wider Sounds it is not especially striking in terms of scale, landform, or aesthetic attributes. It does form part of the "gateway" entrance to Pelorus Sound, and may have greater vividness and memorability at that scale, when the Sound is approached from the open sea. However, the site is tucked off to the side of the passage between Kaitira and Te Akaroa, and upon approaching the Sound it is assumed that attention will tend to be focused straight ahead, on views further ahead. The appearance of the current discordant vegetative elements at this site may actually increase memorability when compared to other landforms making up the gateway to Pelorus Sound, with the lack of coherence and perceived naturalness on the slopes here emphasised. When considered at the bay/inlet scale, however, it seems unlikely that this bay would form a key component in a viewer's memory of the Pelorus Sound.
Rating: Moderate - Low

Perceived Naturalness

From a distance the bay does appear natural, as landform is unmodified and there are few structures visible. Perceived naturalness is reduced by the forestry and its geometric boundaries at odds with the underlying landform, with these characteristics also reducing visual amenity. Upon approach, the presence of mussel farms becomes evident along the length of the bay, and taken together with the adjacent plantation forestry, creates somewhat of a working landscape character. However, no other structures are visible on land, and the scale of the natural landform and seascape still dominates. Experiential values are high due to the remote location (reached only by boat) and the expansive seascape vistas, with the sense of remoteness and "being in nature" or "wildness" amplified by proximity and exposure to the open sea.
Rating: Moderate

Expressiveness

The landform is expressive of its formative processes, being unmodified, and clearly legible as part of a drowned valley system. This is the case for the whole Sounds area. In terms of its wider context then, this site does not have particular features which are any more expressive of formative of coastal processes than much of the rest of the Sounds. Vegetation here is not highly expressive of its context, being highly modified and mostly in pine or pasture.
Rating: Moderate

Transient Values

Exposure to the coastal elements – extreme changes, wind and open sea; very dark night sky which amplifies the sense of remoteness. Changing character of the sea depending on weather. Boat traffic generally comprises working boats on east-west route.
Rating: Very High

Summary of Perceptual/Sensory Characteristics:

- Rugged landform; rocky coastal edge expressive of on-going erosion processes;
- Complex mix of vegetation – pine plantation, pasture, regenerating indigenous vegetation, wilding pines – visually complex with fragmented and "unnatural" vegetation patterns;
- Mussel farms are the only visible structures;
- Edge of the open sea; long open-sea vistas and exposure to the elements;
- Naturally dark night skies;

Perceptual/Sensory Baseline Rating:

- Moderate

Key Perceptual/Sensory Values:

- Working landscape character;
- Moderate perceived naturalness;
- Visually complex backdrop; Low visual coherence;
- Visually dominant landform, vegetation and seascape;
- Sense of exposure, ruggedness;
- Feeling of expansiveness;
- Sense of remoteness;
- Some memorability associated with proximity to gateway to Pelorus Sound.

Site Associative Baseline (ONL and ONF only)

While there has been no direct input into this assessment from the local community, information has been incorporated from social impact reporting on salmon farms in the Sounds, and from recently completed Cultural Impact and Tourism and Recreation assessments.

Tangata Whenua

Research undertaken shows the historical and widespread activity of each of Te Tau Ihu tribes (Ngāti Koata, Ngāti Kuia, Ngāti Apa ki te Rā Tō, Ngāti Toa Rangatira, Te Ātiawa o Te Waka-a-Māui, Ngāti Rangitāne o Wairau, Ngāti Tama ki Te Tau Ihu and Ngāti Rarua) in Kura Te Au (Tory Channel), Tōtaranui (Queen Charlotte Sound) and Te Hoiere (Pelorus Channel). Every tribe has at some point fished, had kāinga or pā (whether temporary or permanent), or is able to relate kōrero tūpuna in and around these waterways[7].

it is recognised that some iwi may have an interest in an area that is historical (e.g. as a result of historical occupation of an area with accompanying wāhi tapu and other sites of significance), while current mana whenua, mana moana, tāngata whenua is held by another iwi. Additionally, there are instances where mana whenua, mana moana, tāngata whenua interests are overlapping and shared by two, or more iwi. (The term 'mana whenua, mana moana, tāngata whenua' seeks to encompass all the various Māori interests that exist in the areas under investigation).[8]

For mana whenua, mana moana and tangata whenua there will be physical and spiritual values relating to the protection of taonga, mauri, customary uses and practices and the exercise of kaitiakitanga in Te Hoiere.[9], as well as values relating to mahinga kai, manaaki tangata, and traditional and contemporary waka routes[10]. Values which have been previously identified[11] in Te Hoiere include:

[7] Draft Cultural Impact Assessment; Maximise, 2016, pg 7.
[8] Ibid; pg. 4
[9] Board of Inquiry, NZKS Decision, 23 Feb 2013; pg 248.
[10] Draft Cultural Impact Assessment; Maximise, 2016, pg 15 and Attachment 2.
[11] Board of Inquiry, NZKS Decision, 23 Feb 2013; pg 253.

- Mauri of the waterway/moana;
- Taonga species (including King Shags and dolphins, which are considered taonga and taniwha by Ngati Kuia);
- Traditional waka routes along the eastern side of Waitata Reach;
- Customary scallop fisheries in Waitata Reach
- Reef fishing spots

More recently Ngāti Kuia have advised that this site is near a wāhi tapu/site of significance for Ngāti Kuia. Ngāti Kuia have a very high cultural interest in this site, not only is it at the entrance to Te Hoiere, it is the place of Te Ana O Kaikaiawaro. Traditional practices around this site include navigation, koha, tapu and utu. More information about this site will be revealed through Ngāti Kuia undertaking and reporting on further investigations. The Ngāti Kuia recommendations for site 34 are unknown at this stage[12].

In 1991 work to record coastal (terrestrial) sites of significance to iwi in the Pelorus Sound was undertaken, although the findings are confidential.[13]

Historic

No historic features have been identified at the proposed site.[14]

Shared and Recognised

Waitata Reach is classified by DOC under the ROS system as 'accessible waters' for recreation, which implies a degree of modification to the natural environment and the likelihood of encountering other users and uses of the area. The main recreation and tourism activities in Waitata Reach, as elsewhere in the Marlborough Sounds, are recreational fishing and boating. Other key activities include sightseeing cruises, walking/hiking, fishing and sailing, and diving. The entrance to Pelorus Sound and around the Chetwode and Forsyth Islands is one of three sites listed nationally as either spectacular or popular for diving opportunities. Ketu Bay in particular is a popular scallop-dredging site for recreational fishermen. (Kayaking is largely focused in inner Pelorus Sound – around the Kenepuru Sound and Tennyson Inlet areas.) Pelorus Sound is less popular for sailing due to the gusty nature of the winds and the shallow upper reaches.

The Waitata Reach is described as experiencing a moderate level of fishing activity. There is a shift by the guided fishing operators to go out past the Pelorus entrance to fish the D'Urville, Stephen and Chetwode Islands surrounds[15]. The Pelorus Mail Boat's Outer Sounds route takes in the bays (Waitata, Richmond, Bulwer and Port Ligar) of Waitata Reach once a week on Fridays[16]. In general the Pelorus Sound does not have the same popularity and high use for recreation and tourism as does the Queen Charlotte Sound.[17]

The proposed site lies adjacent to the gateway to Pelorus Sound, which has associational values of transition between the wildness of Cook Strait and shelter of the Marlborough Sounds. The proposed site sits to the NW side of the passage between Te Akaroa and Kaitira headlands, which is recognised as the gateway to/from Pelorus Sound.

Associative values are more related to the wider context than to this site itself.

Summary of Associative Characteristics:

- Te Hoiere (wider Pelorus Sound) has important physical and spiritual values for mana whenua, mana moana and tangata whenua relating to the protection of taonga, mauri, customary practices and the exercise of kaitiakitanga in Te Hoiere;
- Site is near a wahi tapu/site of significance for Ngati Kuia;
- Traditional and contemporary waka routes through Waitata Reach;
- Recreational use of the wider Outer Pelorus Sound –holidays, boating, fishing.
- Adjacent to recognised gateway to Pelorus Sound

Associative Baseline Rating:

- High

Key Associative Values:

- Physical and spiritual values associated with mana whenua, mana moana, tangata whenua taonga, mauri, customary practices and the exercise of kaitiakitanga;
- Near a wahi tapu/site of significance for Ngati Kuia;
- Recreational uses of the wider Outer Pelorus Sound;
- Adjacent to recognised gateway to Pelorus Sound

Summary: Key Values

	Key Values	*Baseline Rating*
Natural Science	• Largely unmodified landform; • Some modification of the coastal margin; • Marine epifaunal community that is sparse and mostly comprised of common taxa; • Early-stage regenerating indigenous vegetation on lower slopes and gullies; • Modified land cover through pasture and block of pine plantation on the steep slopes.	Moderate
Perceptual/Sensory	• Working landscape character; • Moderate perceived naturalness; • Visually complex backdrop; Low visual coherence; • Visually dominant landform, vegetation and seascape; • Sense of exposure, ruggedness; • Feeling of expansiveness; wildness • Sense of remoteness; • Some memorability associated with proximity to gateway to Pelorus Sound.	Moderate
Associative	• Physical and spiritual values associated with mana whenua, mana moana, tangata whenua taonga, mauri, customary practices and the exercise of kaitiakitanga; • Near a wahi tapu/site of significance for Ngati Kuia; • Traditional and customary waka routes; • Recreational uses of the wider Outer Pelorus Sound; • Adjacent to recognised gateway to Pelorus Sound	High

[12] Draft Cultural Impact Assessment; Maximise, 2016, pgs 18-19.
[13] Board of Inquiry, NZKS Decision, 23 Feb 2013; pg 254.
[14] Marlborough District Council Smart Maps: Heritage Sites.

[15] Personal communications – Del Carrodus, Havelock and Sounds Water Taxis, 7 June 2016
[16] www.mail-boat.co.nz/mailruns.html
[17] NZ King Salmon Potential Salmon Farm Relocation in Marlborough Tourism and Recreation Assessment (TARA); TRC Tourism Ltd. August 2016, pgs, 18 - 28

Conclusion: Proposed Site 34 Natural Character Assessment

(Note: This study considers marine and terrestrial environments together for the assessment of natural character baseline).

Landform here is largely unmodified; the coastal margin has some modification from mussel farming. There is some indigenous vegetation renewal. The coastal margin has been modified here and there is mostly sparse benthic ecology at the site. Natural character is reduced by the presence of extensive forestry and pasture, and the presence of the mussel farming; perceived naturalness is reduced by the presence of forestry and mussel farm structures. The forestry may be removed in future, but the currently the site has reduced aesthetic values. The wider area has been identified as having High Natural Science values at level 4 by the proposed MEP technical assessment, but this relates to the marine values. Terrestrial values in the wider area (Level 4) are not rated as high or very high by the proposed MEP technical assessment. Nor does the area rank as having Outstanding Natural Character when both terrestrial and marine values are considered together in the MEP. When Natural Character is considered for terrestrial and marine combined for this site swap assessment at level 4-5, the Natural Character baseline for the site itself is considered to be moderate.

Natural Character Baseline Rating: Moderate

Outstanding Natural Character:

The site is not considered to meet the threshold to be classified as Outstanding Natural Character. This conclusion is in agreement with the current MDC rating, with areas proposed as ONC in the 2014 Natural Character of the Marlborough Coast study, and with the proposed MEP.

Conclusion: Proposed Site 34 Landscape Assessment

At the site there is a sense of remoteness, expansiveness and exposure to the elements, due to the location on the edge of the open sea. However there is somewhat of a working landscape character. Perceived naturalness is reduced by the presence of pasture and a fairly extensive block of exotic forestry and the presence of mussel farms, although landform, vegetation and seascape remain dominant visually. The complex mix of vegetation, and the visually dominant forestry with its geometric boundaries also reduce coherence and visual amenity. The site has some memorability by way of being adjacent to the recognised gateway to/from Pelorus Sound. Associative values are more related to the wider context than to this site itself.

The site is part of the wider Sounds, which is an Outstanding Natural Landscape at the National Scale. It also lies inside an area proposed as ONL (Proposed MEP, but not in Operative MSRMP) at the district scale, and is within a feature proposed as an ONF in the MEP (but not in Operative MSRMP) at the district scale (the waters between Te Akaroa and Kaitira Headland)[18].

The conclusion drawn from this assessment is that this particular bay and its adjacent hill-slopes, when assessed at the site scale (Level 4/5), do not meet the threshold for ONF. This is due to reduced natural science and reduced perceptual/sensory values (including visual amenity), at the site-scale. Associative values in relation to the site's role within the Pelorus gateway are also reduced at the site-scale due to the expansiveness of the gateway. In addition, this assessment considers that terrestrial and marine components should be considered as one for the purpose of ONFL assessment. These factors, along with the degree of modification to land cover (pasture and pine plantation) and the coastal margin (with existing mussel farms and benthic modifications) at this site prevents the site from appropriate qualification as Outstanding at the site scale.

Landscape Baseline Rating: High-Moderate

[18] MDC proposed ONFLs have been assessed at a district scale; Marlborough Landscape Study 2015, pg. 104; MDC proposed ONFLs have not been assessed separately at regional and district levels; an ONFL in Marlborough is considered to be an ONFL at both levels; Marlborough Landscape Study 2015, MDC, Pg. 20.

PROPOSED SITE 34: NORTH BLOWHOLE POINT

Assessment of Effects from the Proposal

Proposed Change:

- Three circular above-water structures, comprising plastic tube rings with netting. The plastic frame and the netting will be black in colour, and up to 77m diameter.
- Barge moored at one end of the farm.
- Underwater mooring structures – anchoring the farm in place. These will not be visible above water;
- Lighting and Navigation Structures: at each corner of the farm (underwater mooring corners). Lighting will be visible from a minimum distance of one nautical mile, and possibly up to two nautical miles.[19] Lighting is likely to be in synchronised flashing, to show the form of the farm at night.
- A barge for servicing the farm. This assessment makes the assumptions that:
  - the barge will be located as close as possible to the adjacent landform, enabling the landform to backdrop that structure;
  - the barge will be the more recent architecturally-designed model, in a dark recessive colour.

Potential Viewing Audience/Visual Appraisal:

The proposal will be visible from the air, but will mostly viewed by boat traffic. Boat traffic may include water taxis, tour operators, workboats servicing marine farms, commercial fishing vessels, cargo boats, logging boats and recreational vessels (fishing/diving/transport to holiday homes). The proposal will be seen by boat traffic:

- entering the Pelorus gateway from the east (between the Chetwode Islands and Forsyth Island);
- entering the Pelorus gateway from the north (between Nukuwiata Island and Te Akaroa headland);
- entering the Pelorus gateway from the south from Forsyth Bay;
- leaving Pelorus Sound.

The navigational surveying of vessel routes made available for this assessment has shown that the majority of boats passing the proposal will be work boats, fishing boats, and some pleasure boats in the summer months. Those heading to French Pass travel close by the site and may even need to deviate slightly to north if the site is constructed.[20] Views will mostly be transitory, as boats pass the site. Views from small boats will be more side on, with viewers more likely to perceive the structure's height out of the water. Views from larger boats will be from a greater elevation, with viewers more likely to see the circular form of the structure, and more of its total area.

Pelorus Sound has been determined to have significantly less vessel activity than other areas of the Marlborough Sounds. Of the limited boat traffic that exists in Pelorus Sound, a high proportion of the summer boat traffic (with a good proportion of that being pleasure boats) passes this site in summer[21].

From the vessel tracking maps provided it appears that both work boats and pleasure boats travelling between inner Waitata Reach and Admiralty Bay will pass the site at distances varying from alongside the proposal, to up to 1.5km distance, as they move between Pelorus Sound and the passage between Nukuwaiata Island and Te Akaroa headland. If at up to 0.5km distance a white-coloured salmon farm can be expected to be "dominant[22]", visual dominance at this distance will be reduced here by the proposed farm design (dark colours; circular forms with a lower profile out of the water) and the site attributes present (lowered coherence; productive character), At distances of 0.5-1km visual "prominence" will be reduced for the same reasons. At 1-2kms views of structures may be faint. "

The vessel tracking suggests that boats travelling from inner Waitata Reach (or Port Ligar) towards Cook Strait will be unlikely to travel closer to the site than 1km. If visual effects for a white-coloured salmon farm can be expected to be "prominent" at this distance, effects for a farm with dark recessive colour is likely to be reduced to "visible" or possibly even less.

From the vessel tracking maps it appears that boats travelling past the Pelorus Sound between Cook Strait and Admiralty Bay, are unlikely to pass closer than roughly 2.5kms. At this distance visibility of salmon farms has previously been assessed from water as "partially visible or a minor part of the view". It seems likely that visual effects will be very low from this distance with the proposed farm design and site attributes present.

No dwellings will have views of this proposal.

Perceptions of salmon farms by recreational boaties were surveyed in 2015. Results showed that just over half the boatie respondents reported no effect of salmon farms on their experience of the Sounds, while almost one-third reported a negative effect. The most common negative effect reported by boaties was visual blight (12 percent), a feeling of displacement from the bay (10 percent), and course change or navigational risk (6 percent). However salmon farms also commonly attract boaties and visitors on charter vessels. People's responses to the presence of salmon farms varies a great deal, depending on the nature of occupancy, and the experiences, personalities and attitudes of the individuals concerned. [23].

Site Sensitivity:

This site has a baseline value of Moderate for both Natural Character and Landscape. The high flow rate does reduce the sensitivity of the benthic environment. The physical site characteristics are considered appropriate for the absorption of a Salmon Farm in terms of Landscape values, however the location is within an area proposed as an ONF at the District Scale and associated with a key entry point into the Sounds. This is considered to increase the site's sensitivity to the addition of a salmon farm.

Assessment of Landscape Effects

For detailed assessment of effects refer to the table below.

Conclusion: Proposed Site 34 – Effects on Natural Character

There will be adverse effects on the perceptual/sensory aspect of natural character from this proposal, including some loss of a sense of wildness, remoteness and naturalness, and some reduction in night sky darkness. It is considered that the site's existing productive character and its visual complexity – which contributes to the moderate natural character baseline rating, means that the site is not highly sensitive to change with regard to perceptual/sensory values. It is therefore considered that the site will be able to receive and absorb the proposed degree of change from a perceptual/sensory point of view.

The coastal margin has been modified here by existing mussel farms, and there is mostly sparse benthic ecology at the site. Modelling of potential benthic effects recently carried out[24] has indicated that at a feed rate of 4000 tonnes/year enrichment beneath the proposed cages would be at an acceptable level, although epifaunal taxa considered sensitive to depositional effects would be displaced/excluded beneath the cage area. At a feed rate which does not exceed Enrichment Stage 5, the Natural science effects are therefore assessed as not being significant.

On balance the proposal is assessed as having a limited adverse effect. It is considered that any adverse effects on natural character arising from the proposal will not be significant at level 4/5 scale, with effects on the perceptual/sensory aspect of natural character mitigated by the proposed design of the barge and farm (dark circular forms), and with the visually complex backdrop and working-landscape character providing further mitigating factors. Natural science effects are assessed as adverse but not significant. Overall the result will be a Low-Moderate natural character rating.

[19] Navigational Risk Review for Proposed Pelorus Sound Salmon Farms, Navigatus Consulting Limited; December 2015; pg 24. Visibility range of 1 nautical mile is recommended as a minimum for lighting, with range being able to be increased to 2 nautical miles economically.
[20] Navigational Risk Review for Proposed Pelorus Sound Salmon Farms, Appendix B; Navigatus Consulting Limited; December 2015
[21] Navigational Risk Review for Proposed Pelorus Sound Salmon Farms, Pg 18; Navigatus Consulting Limited; December 2015).

[22] Proposed Salmon Farms Marlborough Sounds, Natural Character Landscape and Visual Amenity Effects Final Report Prepared for King Salmon; Boffa Miskell, August 2011, pg. 24.
[23] The Social and Community Effects of Salmon Farming & Rearing: A Case Study of the Top of the South Island; Taylor Baines & Assocs & Quigley & Watts Ltd; Nov 2015, pgs. 37 - 40.
[24] Ecological Benthic Assessment for Proposed Salmon Farm Sites – Part 2: Assessment of Potential Effects; Niwa, June 2016.

It is considered that natural character effects at the Level 3 scale[25] will not be significant. Values at this scale are broad, and the site is only a very small part of the context at this scale. The site is not in an area proposed as Outstanding Natural Character at the Level 3 scale. Effects on the Marlborough Sounds natural character values at a regional and national scale are considered to be insignificant.

Conclusion: Proposed Site 34 – Effects on Landscape Character

The proposal will result in a higher number of visible structures at the site than currently exist, and there will be limited resultant adverse effects on landscape character, including a reduction in perceived naturalness and sense of remoteness. However, it is considered that visual effects will be mitigated by the use of a circular form in a receding colour – which will have a lower profile than the standard square farms, and will also appear as a softer intrusion into the environment than a square form when seen from an elevated viewpoint. Using the boat like design for the barge will also help mitigate its visual effects. It is also considered that the proposal will be a fit with the site's existing "working landscape" character – the site is clearly used for productive purposes, and in general the wider localised context of Waitata Reach/Pelorus Sound is known as an area with a complex mix of uses, including productive ones. The site is not considered highly sensitive to change, due to the visual complexity and low coherence of the backdrop, and it is considered that the expansive context will provide for absorption of the proposal, meaning the site can accept the proposed degree of change. It is considered that there will be only a small reduction in visual amenity.

The site is near a wahi tapu/site of significance for Ngati Kuia. Effects on values are presumed to be adverse, but the significance of this adverse effect will need to assessed by Ngati Kuia. The resultant landscape rating may need to change following further information on this. At this stage (pending further advice from Ngati Kuia) it is considered that any adverse landscape and visual effects arising from the proposal at the site scale (Level 4/5) will not be significant in nature, and will be mitigated to an acceptable level. With those mitigation measures proposed, the proposal is assessed as having a limited adverse effect, which would result in a Landscape rating of Moderate.

The site is inside area proposed as ONL at the district scale, and lies adjacent to an area (Te Akaroa Headland) proposed as ONF at the district scale due to exceptional biophysical and associative values, and very high sensory landscape values.[26] Most pertinent to this site are values relating to the role of the area as the "gateway" to Pelorus Sound. It is accepted that the headland adjacent to the site has associative values linked to the recognised "gateway" into Pelorus Sound. It is considered that the proposal will have a less than minor effect on those district-scale associative values because the expansive scale of the entrance, and the complex articulation of landforms and views in the lead up to the entrance between the headlands (Kaitira and Te Akaroa) will mean that the receiving environment will be able to accept the proposal visually to the extent that area's "gateway" role will not be compromised or diminished. Biophysical (natural science) values at the site itself are moderate only.

Regional-scale outstanding values have not been separately identified by MDC[27]. It is considered that as values which have informed the identification of the ONFL here at a district scale will not be affected by this proposal, any larger-scale regional outstanding values will also not be affected by this proposal. Regional-scale values will be broader again in nature, and at that scale the site forms only a very small part of the context. It is also considered that at the national level outstanding values will remain intact. Values at this scale are very broad and the site forms only a very small part of the context at this scale. Cumulative effects are discussed in a separate part of this report.

[25] Natural Character of the Marlborough Coast, MDC, 2014
[26] Marlborough Landscape Study, MDC, 2015; pg 116.

[27] MDC proposed ONFLs have been assessed at a district scale; Marlborough Landscape Study 2015, pg. 104; MDC proposed ONFLs have not been assessed separately at regional and district levels; an ONFL in Marlborough is considered to be an ONFL at both levels; Marlborough Landscape Study 2015, MDC, Pg. 20.

Site 34 Assessment of Effects				
Character Component (NZCPS)	*Existing Character*	*Assessment of Effects*		
	Key Site Values	*Baseline Rating*[28]	*Effects*	***Mitigation** (Including site characteristics and proposal design features).*
Natural Science [29]	• Largely unmodified landform; • Modified land cover though pasture and block of pine plantation on the steep slopes; • Early-stage regenerating indigenous vegetation on lower slopes and gullies; • Some modification of the coastal margin with three mussel farms; • Marine epifaunal community that is sparse and mostly comprised of common taxa;	Moderate	• No change to landform or landcover. • Further modification to the coastal margin, with adverse benthic effects and in-water effects, and resultant adverse effects on marine ecology. Modelling has indicated that at a feed rate of 4000 tonnes/year, enrichment levels below the cages will be at an acceptable level, although epifaunal taxa considered sensitive to depositional effects would be displaced/excluded beneath the cage area.	
Perceptual/ Sensory[30] Values	• Working landscape character; • Moderate perceived naturalness; • Visually complex backdrop; Low visual coherence; • Visually dominant landform, vegetation and seascape; • Sense of exposure, ruggedness; • Feeling of expansiveness; wildness • Sense of remoteness; • Some memorability associated with proximity to "gateway" to Pelorus Sound.	Moderate	• The new structures will be seen within the context of a working landscape and will not appear at odds with that. The existing forestry and/or pasture will remain the more dominant visual element at the site. • The backdrop here is visually complex and existing coherence is low, meaning the receiving environment is less sensitive to change, and visual effects can be more easily absorbed. Visual effects will be reduced by the use of a receding khaki barge and black colour for the structures and netting. The circular form will have a lower profile than the standard square form, as well as being a softer intrusion into the environment when seen from an elevated viewpoint. • Visual effects will be amplified by the positioning of the above-water structures outside the enclosure of the headlands on either side (when taking a line from headland to headland). The proposed position will make the proposal appear less "tucked away". Effects could be reduced by placing the above-water structures inside the enclosure of the headlands on either side. • Perceived naturalness will drop, but due to the expansiveness of the site's context, the natural elements of steep slopes, vegetated landform and seascape will continue to be visually dominant. The expansive context provides some absorption for the proposal; • The feeling of remoteness and sense of wildness will be adversely affected, but as structures are already present; and due to the expansiveness and openness of the site, it is not considered that the reduction in remoteness or wildness will be significant. There will be some reduction of night sky darkness due to lighting on the structures. The significance of that is considered reduced because existing mussel farms at the site are lit, and there are also more limited viewing opportunities for this site (with no residences viewing the site). • The significance of adverse effects on visual amenity and perceived naturalness will increase due to the numbers of passing boats viewing the proposal in summer months, with a proportion of those being pleasure-boats. However, views will be transitory, and the design is a mitigating factor. • Surveys of social perceptions carried out in 2001 and 2012 for the Marlborough District Council[31].suggest that the growth in marine farming activities (including salmon farming) was not seen by national and regional visitors as having had a deleterious effect on the valued qualities of the Marlborough Sounds over this period.[32] • It is not considered that the proposal will impact greatly on the experience of the gateway due to the gateway's width, the scale of the headlands either side, the complex articulation of landforms in views on approaching the gateway, and the proposal's location in a side-bay.	• Working landscape character – proposal is a fit with; • Visually more complex backdrop with low coherence receives structures more readily; • Expansive context provides for greater absorption; • Use of a visually recessive black colour for structures and netting; • Use of a circular form; • Barge design and recessive khaki colour reduces visual impact of the proposal.
Associative Values[33]	• Physical and spiritual values associated with mana whenua, mana moana, tangata whenua taonga, mauri, customary practices and the exercise of kaitiakitanga; • Near a wahi tapu/site of significance for Ngati Kuia; • Traditional and customary waka routes; • Recreational uses of the wider Outer Pelorus Sound; • Adjacent to recognised gateway to Pelorus Sound	Moderate-High	• Effects on waka routes and the wahi tapu/site of significance are assumed to be adverse, but the significance of this adverse effects will need to be assessed by a CIA (resultant ratings may need to change); • A Tourism and Recreation Assessment (TARA) has concluded that for this proposed site there is no direct known impact on recreationalists or tourists with the possible exception of this site being a "special" – or secret – recreational fishing spot for fishers. Adverse effects have been assessed as being minimal. • It is not considered that the proposal will impact greatly on the experience of the gateway due to the gateway's width, the scale of the headlands either side, the complex articulation of landforms in views on approaching the gateway, and the proposal's location in a side-bay away from the passage between Te Akaroa and Kaitira headlands.	• Pelorus Sound is known as a Sound with a complex mix of uses, including recreation, production (pasture farming, forestry, marine farming), and indigenous regeneration; • There is considerably less recreational use of the Sound for boating than in other Sounds. • The scale of the gateway is expansive in comparison to the scale of the bay and proposed farm. This, along with existing modifications to the terrestrial land use, and coastal margin structures and their effect of reducing perceived naturalness, mitigates the perceptual and associational effects.
Overall Baseline Natural Character[34]		Moderate		
Overall Baseline Landscape[35]		High-Moderate		
Resultant Natural Character			Low-Moderate	
Resultant Landscape			Moderate	

[28] In all scoring a 7-point scale is used: Very Low/Low/Low-Moderate/Moderate/Moderate-High/High/Very High.
[29] Includes geomorphological (landforms) and ecological (flora, fauna, habitat, biodiversity and natural systems and processes).
[30] Includes visual and aesthetic values such as coherence, vividness, memorability, perceived naturalness, expressiveness, and transient values.
[31]. Corydon Consultants Ltd, 2001 and Corydon Consultants Ltd, 2012.
[32] The Social and Community Effects of Salmon Farming & Rearing: A Case Study of the Top of the South Island; Taylor Baines & Assocs & Quigley & Watts Ltd; Nov 2015, pg. 69
[33] Includes cultural (Tangata Whenua), historic, and shared and recognised values.
[34] The Overall Baseline rating is reflective of the site's sensitivity to change. In the Marlborough Sounds environment a highly natural site will have higher perceptual ratings as well as high natural science ratings, and will be more sensitive to change. The more modified a site is, the lower the ratings tend to be for both natural science and perceptual/sensory ratings, and the less sensitive a site will be to change.
[35] Ibid

Site: 122 - Blowhole Point South

Figure 4: Site 122 - Photo from Aircraft

Figure 5: Site 122 - Location Map of Proposed Site

Figure 6: Site 122 - Photo from Boat

PROPOSED SITE: 122 BLOWHOLE POINT SOUTH

Natural Character & Natural Features and Landscapes: Site Specific Assessment

Location: Northeast side of Te Akaroa headland (West Entry Point) – south-facing bay at the side of the northern part of the passage between Te Akaroa and Kaitira headlands; Outer Pelorus Sound.

Wider Context: Recent Natural Character Study[1]

Site is not in any area proposed as ONC.

Terrestrial Area 2 – Cook Strait. Proposed site is not in any Terrestrial Sub-Area identified as having High/Very High natural character values at Level 4/5.

Marine Area C – Pelorus Sound. Proposed site is within Marine Sub-Area Pelorus Heads, identified as having High abiotic/biotic value at Level 4/5.

Wider Context: Recent Landscape/ONFL Study[2]

Site is part of the Outer Sounds Landscape.

Site is inside proposed ONL (Outer Sounds Outstanding Natural Landscape) defined at the district scale, and inside an ONF (the waters between Te Akaroa and Kaitira Headland - district scale) within Area 5: Port Ligar, Forsyth Island and Kaitira Headland.

Wider Context: Operative Resource Management Plan

Proposed site is not adjacent to or in any Area of Outstanding Landscape Value.

Site Natural Science Baseline

Geomorphology (Landform)[3]

Landform adjacent to the proposed site comprises a main headland at the entrance to Pelorus Sound – Te Akaroa (West Entry Point). Two spurs come down from the height of the headland to enclose a small, wide-mouthed bay, which is the site of the proposal. The bay is generally south-facing, and open to the main channel of the entrance to Pelorus Sound - opposite Kaitira headland and the entrance to Forsyth Bay.

The spur enclosing the bay to the north-east is short and drops suddenly into the sea, enclosing the bay only shallowly. The spur on the south-west side encloses the bay to a similar depth, and then forms a smaller side-bay to the south, before narrowing and dropping more gradually into a low, elongated and thin peninsula, enclosing the proposed site from the entrance into Port Ligar. The slopes of Te Akaroa behind the proposed site rise steeply from the coastal edge at the site, which is rocky with a narrow strip of beach at low tide. The elevation of the headland is relatively low (378masl). Slopes adjacent to the site are almost unmodified – a track is visible extending west-east horizontally across Te Akaroa headland behind the proposed site. The coastal edge is unmodified.

Terrestrial Ecology

Vegetation is modified, and comprises a mix of plantation forestry (to the north-east), pasture, and regenerating indigenous vegetation. Indigenous regeneration is mainly on the lower slopes and gullies of the headland, but it is starting to spread upwards., and has reached around half way up slopes in places. The slopes have a moister, southerly aspect, and while regeneration is still in the early stages, some secondary broadleaf species are present. There are large groupings of pines (and some wilding pines) on the peninsula landform to the south-west.

There will be existing natural science value in the regenerating vegetation, although the pine planting to the north-east will be causing some disruption to natural patterns such as water and nutrient cycling, chemical properties of the soil and the succession of the indigenous vegetation.

Rating: Low-Moderate.

[1] Natural Character of the Marlborough Coast, MDC, 2014.

[2] Marlborough Landscape Study, MDC, 2015.

[3] Broader geomorphological aspects have been covered previously; Refer to Natural Character of the Marlborough Coast, MDC, 2014.

Marine Ecology

The proposed site is at the north end of Pelorus Sound, on the edge of Cook Strait, inside area previously identified as having High abiotic/biotic value at Level 4/5.

Key high biotic values previously identified in Marine Sub-Area Pelorus Heads at the 4/5 level are:

- Largely unmodified section of coast extending into the entrance of Pelorus Sound to Kaitira and Te Akaroa;
- High current communities flanking the main channels;
- Includes the offshore main channel entering Pelorus Sound;
- Adjoins Coastal Marine Area B[4].

The coastal margin here is modified by the presence of a mussel farm.

Recent ecological benthic assessment of the site[5] has determined that most of the site is positioned over a sandy mud/shell gravel habitat supporting a moderately abundant mixed community of macroalgae and diverse invertebrates. Brachiopods common to the Sounds were found at positions throughout the site in dredge and grab samples A large reef extending to the southeast of Blowhole Point (and to within ~230 m of the site boundary) provides habitat for a diversity of macroalgae, and sessile and mobile fauna, and associated reef, demersal and pelagic fish species. This reef, together with smaller patches of bedrock, cobble and sand around the shoreline are considered to be significant ecological features. Blue cod habitat is located inshore of the site and the currents are slightly stronger than at North Blowhole Point[6] (which have been classed as moderate-high speed).

Rating: High-Moderate

Summary of Natural Science Characteristics:

- Shallowly enclosed bay; edge of the main channel; close to the open sea;
- Backed by steep headland slopes; relatively low elevation;
- Elongated peninsula land form descending from the headland to the south-west;
- Areas of regenerating indigenous vegetation, extending up the headland to around mid-level; early stages;
- Largely unmodified landform;
- Some modification of the coastal margin with existing mussel farm;
- Pasture and edge of pine plantation on the upper slopes;
- Moderately abundant mixed benthic community; Reef 230m northeast of site boundary (at Blowhole Pt).

Natural Science Baseline Rating:

- Moderate

Key Natural Science Values:

- Largely unmodified landform;
- Some modification of the coastal margin with existing mussel farm;
- Moderately abundant mixed benthic community; Reef 230m northeast of site boundary (at Blowhole Pt);
- Pasture and edge of pine plantation on the upper slopes;
- Early stage regenerating indigenous vegetation on lower slopes and gullies.

Site Perceptual/Sensory Baseline

Coherence

The terrestrial backdrop is not highly coherent, mainly due to the area of plantation forestry on the east side of the bay. The forestry is visually dominant, and boundary lines are largely geometric and incongruent with the underlying landform. The vegetative patterns over much of the headland are simple and consistent – being a mix of pasture and regeneration, but this is complicated by the highly visually-contrasting forestry, which reduces the appearance of the backdrop as one coherent whole. There are also groups of pines to the south-west on the peninsula, further complicating the vegetative context. It is understood that these may be removed in time, but the existing environment includes their presence, which lacks coherence.

Rating: Moderate - Low

[4] Coastal Marine Area B: D'Urville Island – Northern Cook Strait; Natural Character of the Marlborough Coast, MDC, 2014. Natural Character value of this Area is identified as of High value only (ie it is not Outstanding).

[5] Ecological Benthic Assessments for Proposed Salmon Farm Sites, Part 1; Niwa, April 2016.

[6] Ibid; pg 28.

Vividness and Memorability
This site is high in memorability by way of its being inside (although off to the side of) the gateway to/from Pelorus Sound, between Te Akaroa and Kaitira headlands. The site's proximity to the elongated peninsula descending to Te Akaroa headland also increases its memorability, as this landform stands out vividly within the wider context. Slopes immediately adjacent to the site are not particularly vivid.
Rating: High

Perceived Naturalness
The bay does appear quite highly natural, as landform is almost entirely unmodified. Perceived naturalness is reduced, however, by the highly visible forestry, with its geometric boundaries at odds with the underlying landform, by the pastoral land cover and by the presence of a mussel farm. The landform and seascape dominate, although the dark forestry is also a prominent element, contrasting strongly with other vegetation types. Experiential values are high due to the remote location (reached only by boat) on the edge of the open sea, with a feeling of expansiveness, and open-sea vistas. Visual amenity is high, but again, reduced by the "unnatural" and visually discordant geometric boundaries of the forestry.
Rating: Moderate - High

Expressiveness
The rugged landform here is expressive of its formative processes, being clearly legible as part of a drowned valley system, as is the whole of the Marlborough Sounds. The rocky slopes and coastal edge behind the site is also expressive of the extreme maritime conditions in this location. (The peninsula just south of this site - being a drowned ridge-crest, is particularly expressive of this part of the Sounds being the most submerged of the Marlborough land systems).
Rating: Moderate - High

Transient Values
Exposure to the coastal elements – wind and open sea; dark night sky which amplifies the sense of remoteness. Wildlife. Boat traffic[7].
Rating Very High

Summary of Perceptual/Sensory Characteristics:

- Open-character bay near the open sea;
- Edge of the gateway to/from Pelorus Sound;
- Steep rugged slopes above a rocky coastal edge;
- Elongated peninsula to the south-west, with very low elevation;
- Vegetative patterns are mixed, with pastoral, pine and regeneration being the major components;
- A forestry block is present, and wilding pines;
- No visible terrestrial structures, but mussel farm in the coastal margin;
- Naturally dark night sky

Perceptual/Sensory Baseline Rating:

- High-Moderate

Key Perceptual/Sensory Values:

- Working landscape character
- Fairly simple vegetative patterns for the most part, but overall reduced visual coherence;
- Visually dominant landform and seascape;
- Highly expressive landforms;
- Memorability associated with gateway location and the adjacent distinct landform (elongated peninsula);
- Sense of exposure, ruggedness;
- Sense of expansiveness;
- Sense of remoteness.

[7] Refer to Navigational Risk Review for Proposed Pelorus Sound Salmon Farms, Appendix B; Navigatus Consulting Limited; December 2015
[8] Draft Cultural Impact Assessment; Maximise, 2016, pg 7.
[9] Ibid; pg. 4
[10] Board of Inquiry, NZKS Decision, 23 Feb 2013; pg 248.
[11] Draft Cultural Impact Assessment; Maximise, 2016, pgs 15 and Attachment 2.

Site Associative Baseline

While there has been no direct input into this assessment from the local community, information has been incorporated from social impact reporting on salmon farms in the Sounds, and from recently completed Cultural Impact and Tourism and Recreation assessments.

Tangata Whenua
Research undertaken shows the historical and widespread activity of each of Te Tau Ihu tribes (Ngāti Koata, Ngāti Kuia, Ngāti Apa ki te Rā Tō, Ngāti Toa Rangatira, Te Ātiawa o Te Waka-a-Māui, Ngāti Rangitāne o Wairau, Ngāti Tama ki Te Tau Ihu and Ngāti Rarua) in Kura Te Au (Tory Channel), Tōtaranui (Queen Charlotte Sound) and Te Hoiere (Pelorus Channel). Every tribe has at some point fished, had kāinga or pā (whether temporary or permanent), or is able to relate kōrero tūpuna in and around these waterways[8].

It is recognised that some iwi may have an interest in an area that is historical (e.g. as a result of historical occupation of an area with accompanying wāhi tapu and other sites of significance), while current mana whenua, mana moana, tāngata whenua is held by another iwi. Additionally, there are instances where mana whenua, mana moana, tāngata whenua interests are overlapping and shared by two, or more iwi. (The term 'mana whenua, mana moana, tāngata whenua' seeks to encompass all the various 'Māori' interests that exist in the areas under investigation).[9]

For mana whenua, mana moana and tangata whenua there will be physical and spiritual values relating to the protection of taonga, mauri, customary uses and practices and the exercise of kaitiakitanga in Te Hoiere.[10], as well as values relating to mahinga kai, manaaki tangata, traditional and contemporary waka routes[11]. Values which have been previously identified[12] in Te Hoiere include:

- Mauri of the waterway/moana;
- Taonga species (including King Shags and dolphins, which are considered taonga and taniwha by Ngati Kuia);
- Traditional waka routes along the eastern side of Waitata Reach;
- Customary scallop fisheries in Waitata Reach
- Reef fishing spots

At this stage there have been no Maori Heritage Sites or additional values publically identiified[13] which relate to this site in particular. More information may become available as consultation continues. In general values relating to the context as a whole will apply.

In 1991 work to record coastal (terrestrial) sites of significance to iwi in the Pelorus Sound was undertaken, although the findings are confidential.[14]

Historic
No historic features have been identified at the site. [15]

Shared and Recognised
Waitata Reach is classified by DOC under the ROS system as 'accessible waters' for recreation, which implies a degree of modification to the natural environment and the likelihood of encountering other users and uses of the area. The main recreation and tourism activities in Waitata Reach, as elsewhere in the Marlborough Sounds, are recreational fishing and boating. Other key activities include sightseeing cruises, walking/hiking, fishing and sailing, and diving. The entrance to Pelorus Sound and around the Chetwode and Forsyth Islands is one of three sites listed nationally as either spectacular or popular for diving opportunities. Ketu Bay in particular is a popular scallop-dredging site for recreational fishermen. (Kayaking is largely focused in inner Pelorus Sound – around the Kenepuru Sound and Tennyson Inlet areas.) Pelorus Sound is less popular for sailing due to the gusty nature of the winds and the shallow upper reaches.

[12] Board of Inquiry, NZKS Decision, 23 Feb 2013; pg 253.
[13] Marlborough District Council Smart Maps: Heritage Sites.
[14] Board of Inquiry, NZKS Decision, 23 Feb 2013; pg 254.
[15] Marlborough District Council Smart Maps: Heritage Sites.

The Waitata Reach is described as experiencing a moderate level of fishing activity. There is a shift by the guided fishing operators to go out past the Pelorus entrance to fish the D'Urville, Stephen and Chetwode Islands surrounds[16]. The Pelorus Mail Boat's Outer Sounds route takes in the bays (Waitata, Richmond, Bulwer and Port Ligar) of Waitata Reach once a week on Fridays[17]. In general the Pelorus Sound does not have the same popularity and high use for recreation and tourism as does the Queen Charlotte Sound.[18] The site lies at the side of the passage between Te Akaroa and Kaitira headlands, which is recognised as the gateway to/from Pelorus Sound, and has associational values of transition between the wildness of Cook Strait and shelter of the Marlborough Sounds.

Summary of Associative Characteristics:

- Physical and spiritual values associated with mana whenua, mana moana, and tangata whenua taonga, mauri, customary practices and the exercise of kaitiakitanga
- Traditional and contemporary waka routes through Waitata Reach;
- Passage between Te Akaroa and Kaitira headlands is recognised as the gateway to/from Pelorus Sound;
- Recreational use of the wider Outer Pelorus Sound –holidays, boating, fishing.

Associative Baseline Rating:

- High

Key Associative Values:

- Physical and spiritual values associated with mana whenua, mana moana, and tangata whenua taonga, mauri, customary practices and the exercise of kaitiakitanga;
- Traditional and contemporary waka routes through Waitata Reach
- Passage between Te Akaroa and Kaitira headlands is recognised as the gateway to Pelorus Sound;
- Recreational uses of the wider Outer Pelorus Sound.

Summary: Key Values

	Key Values	*Baseline*
Natural Science	• Largely unmodified landform; • Some modification of the coastal margin with existing mussel farm; • Moderately abundant mixed benthic community; Reef 230m northeast of site boundary (at Blowhole Pt); • Pasture and edge of pine plantation on the upper slopes; • Early stage regenerating indigenous vegetation on lower slopes and gullies.	Moderate
Perceptual/ Sensory	• Working landscape character to some degree; • Fairly simple vegetative patterns for the most part, but overall reduced visual coherence; • Visually dominant landform and seascape; • Highly expressive landforms; • Memorability associated with gateway location and the adjacent distinct landform (elongated peninsula); • Sense of exposure, ruggedness; • Sense of expansiveness; • Sense of remoteness.	High-Moderate
Associative	• Physical and spiritual values associated with mana whenua, mana moana, and tangata whenua taonga, mauri, customary practices and the exercise of kaitiakitanga; • Traditional and contemporary waka routes through Waitata Reach; • Passage between Te Akaroa and Kaitira headlands is recognised as the gateway to/from Pelorus Sound; • Recreational uses of the wider Outer Pelorus Sound.	High

[16] Personal communications – Del Carrodus, Havelock and Sounds Water Taxis, 7 June 2016
[17] www.mail-boat.co.nz/mailruns.html
[18] NZ King Salmon Potential Salmon Farm Relocation in Marlborough Tourism and Recreation Assessment (TARA); TRC Tourism Ltd. August 2016, pgs, 18 - 28

Conclusion: Site 122 Natural Character Assessment

(Note: This study considers marine and terrestrial environments together for the assessment of natural character baseline).

Landform is largely unmodified. There is early-stage indigenous vegetation renewal on lower slopes and gullies, extending well up headland slopes in places. The coastal margin is modified by marine farming; there is moderately abundant mixed benthic community at the site. Natural science value is reduced by the presence of the mussel farm, and the forestry and pasture. These factors also reduce perceived naturalness, although the landform and expansive seascape still dominates visually. Perceptual/sensory values are high-moderate.

The wider area has been identified as having High Natural Science values at level 4 by the proposed MEP technical assessment, but this relates to the marine values. Terrestrial values in the wider area (Level 4) are not rated as high or very high by the proposed MEP technical assessment. Nor does the area rank as having Outstanding Natural Character when both terrestrial and marine values are considered together in the MEP. When Natural Character is considered for terrestrial and marine combined for this site swap assessment at level 4-5, the Natural Character baseline for the site itself is considered to be moderate.

Natural Character Baseline Rating: Moderate

Outstanding Natural Character:

The site is not considered to meet the threshold to be classified as Outstanding Natural Character, due to reduced natural science values and reduced perceptual/sensory values. This conclusion is in agreement with the current MDC rating, and with areas proposed as ONC in the 2014 Natural Character of the Marlborough Coast study.

Conclusion: Site 122 Landscape Assessment

There is a sense of remoteness and expansiveness at the site, due to the location on the edge of the open sea. Perceived naturalness, coherence and visual amenity is reduced by the presence of a block of exotic forestry, with geometric boundary edges at odds with the landform. The site has high memorability due to associative values relating to its location, and also due to an adjacent unusual landform. Natural science values are reduced by the modified coastal margin and modified vegetative land-cover, but the presence of regenerating native vegetation contributes to a slightly higher rating than the nearby site 34.

Landscape Baseline Rating: High-Moderate

Outstanding Natural Feature/Landscape

The site is part of the wider Sounds, which is an Outstanding Natural Landscape at the National Scale. It also lies inside an area proposed as ONL (Proposed MEP, but not in Operative MSRMP) at the regional scale (the Outer Sounds Landscape) and is adjacent to a feature proposed as an ONF in the MEP (but not in Operative MSRMP) at the district scale (Te Akaroa headland).[19].

The conclusion drawn from this current assessment is that this particular site, when assessed at the site scale (Level 4/5), does not meet the threshold for ONF due to reduced natural science and perceptual/sensory values (including visual amenity) at the site-scale. Associative values in relation to the site's role within the Pelorus gateway are also reduced at the site-scale due to the expansiveness of the gateway. In addition, this assessment considers that terrestrial and marine components should be considered as one for the purpose of this ONFL assessment. These factors, along with the degree of modification to land cover and the coastal margin at this site, prevent the site from appropriate qualification as Outstanding.

[19] Marlborough Landscape Study, MDC, 2015.

PROPOSED SITE 122: BLOWHOLE POINT

Assessment of Effects from the Proposal

Proposed Change:

- Three circular above-water structures, comprising plastic tube rings with netting. The plastic frame and the netting will be black in colour and approximately up to 77m diameter.
- Underwater mooring structures – anchoring the farm in place. These will not be visible above water;
- Lighting and Navigation Structures: at each corner of the farm (underwater mooring corners). Lighting will be visible from a minimum distance of one nautical mile, and possibly up to two nautical miles.[20] Lighting is likely to be in synchronised flashing, to show the form of the farm at night;
- A barge for servicing the farm. This assessment makes the assumptions that:
  - for all sites where a barge is included, the barge will be located on the shoreline side of the farm, as close as possible to the adjacent landform, enabling the landform to backdrop that structure;
  - the barge will be the more recent architecturally-designed model, in a dark recessive colour.

Potential Viewing Audience/Visual Appraisal:

The proposal will be visible from the air, but will mostly viewed by boat traffic. Boat traffic may include water taxis, tour operators, workboats servicing marine farms, cargo boats, logging boats and recreational vessels (fishing/diving). The proposal will be seen by boat traffic:

- entering the Pelorus gateway from the east (between the Chetwode Islands and Forsyth Island);
- entering the Pelorus gateway from the north (between Nukuwiata Island and Te Akaroa headland);
- leaving Pelorus Sound.

The navigational surveying of vessel routes made available for this assessment has shown that the majority of boats passing the proposal will be work boats, and pleasure boats in the summer months - typically travelling close to the proposed site if heading to French Pass[21]. Views will mostly be transitory, as boats pass the site. Views from small boats will be more side on, with viewers more likely to perceive the structure's height out of the water. Views from larger boats will be from a greater elevation, with viewers more likely to see the circular form of the structure, and more of its total area.

There will be a high proportion of the Pelorus Sound's summer boat traffic (with a good proportion of that being pleasure boats) passing this site in summer. Pelorus Sound has been determined to have significantly less vessel activity than other areas of the Marlborough Sounds[22].

From the vessel tracking maps provided it appears that both work boats and pleasure boats travelling between inner Waitata Reach and Admiralty Bay will pass the site at distances varying from alongside the proposal, to up to 1km distance, as they move between Pelorus Sound and the passage between Nukuwaiata Island and Te Akaroa headland. If at up to 0.5km distance a white-coloured salmon farm can be expected to be "dominant[23]", visual dominance will be reduced here by the proposed farm design (dark colours; circular forms with a lower profile out of the water) and the site attributes present (lowered coherence; productive character). At distances of 0.5-1km visual prominence will be reduced for the same reasons.

The vessel tracking suggests that boats travelling from inner Waitata Reach towards Cook Strait will be unlikely to travel closer to the site than roughly 1km. If visual effects for a white-coloured salmon farm can be expected to be "visible" at this distance, effects for a farm with a dark recessive colour is likely to be reduced. Beyond 1-2kms views of the structures may become faint. Boats travelling from Port Ligar eastwards towards Cook Strait may pass slightly closer to the farm (possibly around 0.8km), and so visual effects may be between "visible" and "partially visible".

From the vessel tracking maps it appears that boats travelling past the Pelorus Sound between Cook Strait and Admiralty Bay will be at a distance of around 4kms from the farm. Given the farm design and site characteristics it seems unlikely that the farm will be visible.

Perceptions of salmon farms by recreational boaties were surveyed in 2015. Results showed that just over half the boatie respondents reported no effect of salmon farms on their experience of the Sounds, while almost one-third reported a negative effect. The most common negative effect reported by boaties was visual blight (12 percent), a feeling of displacement from the bay (10 percent), and course change or navigational risk (6 percent). However salmon farms also commonly attract boaties and visitors on charter vessels. People's responses to the presence of salmon farms varies a great deal, depending on the nature of occupancy, and the experiences, personalities and attitudes of the individuals concerned[24].

The site will not be viewed by dwellings.

Site Sensitivity:

This location has a baseline value of Moderate for Natural Character and High-Moderate for Landscape. The high flow rate does reduce the sensitivity of the benthic environment. This site is considered to have a low sensitive to a Salmon Farm in terms of the natural science aspects of natural character. The physical site characteristics are considered appropriate for the absorption of a Salmon Farm in terms of Landscape values, however the location is within an area proposed as an ONF at the District Scale and associated with a key entry point into the Sounds. This is considered to increase the site's sensitivity to the addition of a salmon farm.

Assessment of Landscape Effects

For detailed assessment of effects refer to the table on the following page.

Conclusion: Proposed Site 122 – Effects on Natural Character

There will be adverse effects on the perceptual/sensory aspect of natural character from this proposal, including some loss of a sense of wildness and remoteness, and some reduction in night sky darkness. It is considered that the site's existing productive character and its moderate-low coherence, mean that the site is not highly sensitive to change, and will be able to receive and visually absorb the proposed degree of change. Overall it is considered that adverse effects on the perceptual/sensory aspect will not be significant, and will be mitigated sufficiently by the proposed design of the farm. The site's aesthetics attributes are further mitigating factors. The coastal margin has been modified here by existing mussel farming; there is a moderately abundant mixed benthic community. Recent modelling of potential benthic effects[25] has shown that a reduced feed rate (to 5000 tonnes/year) can be achieved which has the Enrichment Stage at an acceptable level (not exceeding ES5) on the seabed beneath the site. (Although brachiopods are likely to be displaced/excluded beneath the cages and effects may extend some way into the wider primary footprint, brachiopods at the site are currently only sparsely distributed.) There is potential for some impacts to diverse communities on the reef to the northeast of the site (at Blowhole Point). Natural science effects are assessed as being adverse, but not significant.

On balance it is therefore considered that adverse effects on natural character arising from the proposal will not be significant at the site (level 4/5) scale, taking into account the high flows, presence of existing mussel farm and character of the proposal and context. Effects are assessed as slightly elevated here due to potential benthic effects on near-by reef communities.

It is not considered that natural character effects at the Level 3 scale[26] will be significant. Values at this scale are broad, and the site is only a very small part of the context at this scale. The site is not in an area proposed as Outstanding Natural Character at the Level 3 scale. Effects on the Marlborough Sounds natural character values at a regional and national scale are not considered to be significant.

[20] Navigational Risk Review for Proposed Pelorus Sound Salmon Farms, Navigatus Consulting Limited; December 2015; pg 24. Visibility range of 1 nautical mile is recommended as a minimum for lighting, with range being able to be increased to 2 nautical miles economically.
[21] Navigational Risk Review for Proposed Pelorus Sound Salmon Farms, Appendix B; Navigatus Consulting Limited; December 2015
[22] Ibid; pg 18.
[23] Proposed Salmon Farms Marlborough Sounds, Natural Character Landscape and Visual Amenity Effects Final Report Prepared for King Salmon; Boffa Miskell, August 2011, pg. 24.

[24] The Social and Community Effects of Salmon Farming & Rearing: A Case Study of the Top of the South Island; Taylor Baines & Assocs & Quigley & Watts Ltd; Nov 2015, pgs. 37 - 40.
[25] Ecological Benthic Assessment for Proposed Salmon Farm Sites – Part 2: Assessment of Potential Effects; Niwa, June 2016.
[26] Natural Character of the Marlborough Coast, MDC, 2014

Conclusion: Proposed Site 122 – Effects on Landscape Character

The proposal will result in a higher number of visible structures at the site than currently exist. A high proportion of the Pelorus Sound's boat traffic does also pass this site, although much of it is working boats heading to or from French Pass. It is considered that effects will be well mitigated by the use of a circular form in a receding colour – which will have a lower profile than the standard square farms, and will also appear as a softer intrusion into the environment when seen from an elevated viewpoint. The proposed barge will be back-dropped by landform, and tucked into a bay, reducing adverse visual effects. Given the existing character at the site, and the expansive context, and given that up-close views will be transitory only, it is considered that the adverse effects on visual amenity will be limited, and not significant.

There will be adverse effects at a site scale (level 4/5) on landscape character resulting from the proposal, including a reduction in perceived naturalness and sense of remoteness. However, it is considered that the proposal will fit with the site's existing "working landscape" character. Pelorus Sound is known as an area with a complex mix of uses, including productive uses. The site is considered to have some sensitivity to change due to the associational factors, but with the visual complexity and low coherence of the backdrop, and the expansive context, it is considered that the site will be able to accept the proposed degree of change, with minimal effects on associative values. On balance, with mitigation measures proposed, it is considered that overall adverse effects on landscape character will not be significant, resulting in a Moderate landscape rating.

Adverse landscape and visual effects from the proposal on district-scale landscape values will also not be significant. The site is inside area proposed as ONF (marine and terrestrial), due to exceptional biophysical and associative values, and very high sensory landscape values[27] – assessed at the district scale. It is accepted that the headland adjacent to the site has associative values linked to the recognised "gateway" into Pelorus Sound. It is considered that the proposal will have a less than minor effect on the values at the district scale, due to the expansive scale of the context, which will be able to visually absorb the proposal.

It is not considered that the level of landscape and visual effects arising from this proposal will compromise those values which have informed the classification of the Outer Sounds Landscape as Outstanding at the Regional scale. Values at this scale are very broad, and the proposed Outer Sounds ONL already includes extensive areas of marine farming, including salmon farms. It is considered that at that scale the reduction in perceived naturalness will be very small, due to the expansiveness of the landscape, and the site being only a very small part of that context. Cumulative effects are discussed in a separate part of this report. It is considered that at the Regional and nation scale, the Outstanding values will remain intact.

[27] Marlborough Landscape Study, MDC; pg 116.

Site 122 Assessment of Effects				
Character Component (NZCPS)	*Existing Character*		*Assessment of Effects*	
	Key Values	*Baseline Rating*[28]	*Effects*	***Mitigation** (Including site characteristics and proposal design features).*
Natural Science [29]	• Largely unmodified landform; • Some modification of the coastal margin with existing mussel farm; • Moderately abundant mixed benthic community; Reef 230m northeast of site boundary (at Blowhole Pt); • Pasture and edge of pine plantation on the upper slopes; • Early stage regenerating indigenous vegetation on lower slopes and gullies.	Moderate	• No change to landform or landcover. • Further modification to the coastal margin, with possible adverse benthic effects and in-water effects, and resultant adverse effects on ecology. Recent modelling of potential benthic effects has shown that at a feed rate of 5000 tonnes/year enrichment levels would be at an acceptable level on the seabed beneath the site. Brachiopods are likely to be displaced/excluded beneath the cages and effects may extend some way into the wider primary footprint, although Brachiopods at the site are currently only sparsely distributed. There is potential for some impacts to diverse communities on the reef to the northeast of the site (at Blowhole Point).	
Perceptual/ Sensory[30] Values	• Working landscape character; • Fairly simple vegetative patterns for the most part, but overall reduced visual coherence; • Visually dominant landform and seascape; • Highly expressive landforms; • Memorability associated with gateway location and the adjacent distinct landform (elongated peninsula); • Sense of exposure, ruggedness; • Sense of expansiveness; • Sense of remoteness.	High-Moderate	• The new structures will be seen within the context of a working landscape and will not appear at odds with that. • The backdrop here has moderately low visual coherence, meaning the receiving environment is able to receive the proposal more easily and absorb the visual effects of the proposed farm. Visual effects will be reduced by the use of a receding black colour for the structures and netting. The circular form will have a lower profile than the standard square form, as well as being a softer intrusion into the environment when seen from an elevated viewpoint. • The proposed barge will be back-dropped by landform and tucked into the bay, reducing visual effects; • Perceived naturalness will drop, but due to the expansiveness of the site's context, it is considered that the natural elements of vegetated landform and seascape will continue to be visually dominant. The expansive context provides some absorption for the proposal; • The most expressive landform associated with this site is the elongated peninsula to the south-west, at a distance of about 700m from the proposal. The proposed structures will not be back-dropped by the peninsula, as they lie to the north of it. It is not considered that the proposed structures would significantly distract from or adversely affect the views or experience of that landform. There will be some (although shallow) enclosure of the structures by landform from the peninsula and bay south of Blowhole Point. • The feeling of remoteness and sense of wildness will be adversely affected, but as structures are already present, and due to the expansiveness and openness of the site, it is not considered that the reduction in remoteness or wildness will be significant. There will be some reduction in night sky darkness due to lighting on the structures. The significance of that is considered reduced because existing mussel farms at the site are lit, and there are also more limited viewing opportunities for this site (with no residences viewing the site). • The significance of adverse effects on visual amenity and perceived naturalness will increase due to the numbers of passing boats viewing the proposal in summer months, with a good proportion of those being pleasure-boats. However, most all year boats are working vessels, views will be transitory, and the design is a mitigating factor. • Surveys of social perceptions carried out in 2001 and 2012 for the Marlborough District Council31.suggest that the growth in marine farming activities (including salmon farming) was not seen by national and regional visitors as having had a deleterious effect on the valued qualities of the Marlborough Sounds over this period.32	• Working landscape character, which assists the proposal's "fit"; • Existing backdrop has moderately-low visual coherence: is a more complex backdrop which is less sensitive and able to receive structures more readily; • Expansive context provides for greater absorption; • Use of a visually recessive black colour for structures and netting will reduce visual effects; • Use of a circular form is a softer intrusion into the environment; • Locating the barge in a position which allows the adjacent landform to act as a backdrop.
Associative Values[33]	• Physical and spiritual values associated with mana whenua, mana moana, and tangata whenua taonga, mauri, customary practices and the exercise of kaitiakitanga • Traditional and contemporary waka routes through Waitata Reach • Passage between Te Akaroa and Kaitira headlands is recognised as the gateway to/from Pelorus Sound; • Recreational uses of the wider Outer Pelorus Sound.	High	• A Tourism and Recreation Assessment (TARA) has concluded that for this proposed site there is no direct known impact on recreationalists or tourists with the possible exception of this site being a "special" – or secret – recreational fishing spot for fishers. Adverse effects have been assessed as being minimal. • No site specific issues have been raised in CIAs to date. Effects on waka routes will need to be assessed by a CIA. Mana whenua, mana moana, tangata whenua values may not be considered intact at the site given the existing modification of the coastal margin, and it may be that adverse effects on those values are therefore considered reduced. • The site has slightly higher sensitivity in terms of its location within the gateway to Pelorus Sound, and so adverse effects will be slightly elevated for that associative value. But it is not considered that those effects will be significant due to the gateway's expansive width, the large scale of the headlands either side, and the site's position back-dropped by landform and modified land use means the site is able to absorb the structures visually.	• Pelorus Sound is known as a Sound with a complex mix of uses, including recreation, production (pasture farming, forestry, marine farming), and regeneration of indigenous vegetation. • There is considerably less recreational use of the Sound for boating than in other Sounds. • The scale of the gateway is expansive in comparison to the scale of the bay and proposed farm. This, along with existing modifications to the terrestrial land use and coastal margin structures and their effect of reducing perceived naturalness, mitigates the perceptual and associational effects.
Overall Baseline Natural Character[34]		Moderate	Resultant Natural Character	Low-Moderate
Overall Baseline Landscape[35]		High-Moderate	Resultant Landscape	Moderate

[28] In all scoring a 7-point scale is used: Very Low/Low/Low-Moderate/Moderate/Moderate-High/High/Very High.
[29] Includes geomorphological (landforms) and ecological (flora, fauna, habitat, biodiversity and natural systems and processes).
[30] Includes visual and aesthetic values such as coherence, vividness, memorability, perceived naturalness, expressiveness, and transient values.
[31] Corydon Consultants Ltd, 2001 and Corydon Consultants Ltd, 2012.
[32] The Social and Community Effects of Salmon Farming & Rearing: A Case Study of the Top of the South Island; Taylor Baines & Assocs & Quigley & Watts Ltd; Nov 2015, pg. 69
[33] Includes cultural (Tangata Whenua), historic, and shared and recognised values.
[34] The Overall Baseline rating is reflective of the site's sensitivity to change. In the Marlborough Sounds environment a highly natural site will have higher perceptual ratings as well as high natural science ratings, and will be more sensitive to change. The more modified a site is, the lower the ratings tend to be for both natural science and perceptual/sensory ratings, and the less sensitive a site will be to change.
[35] Ibid

Site: 125 - Mid Channel Waitata

Figure 7: Site 125 - Photo from Aircraft

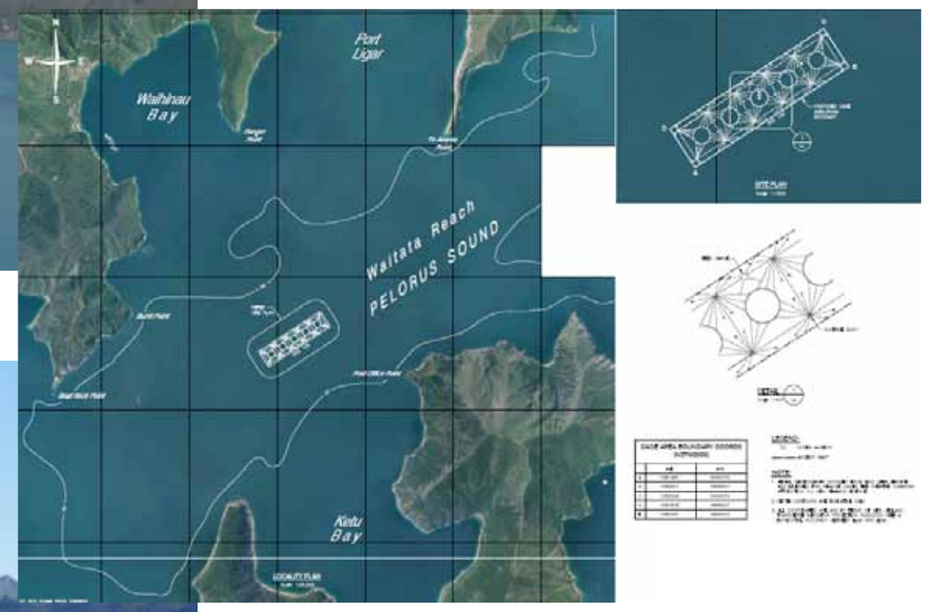


Figure 8: Site 125 - Location Map of Proposed Site

Figure 9: Site 125 - Photo from Boat

PROPOSED SITE 125: MID-CHANNEL WAITATA NORTH

Natural Character & Natural Features and Landscapes: Site Specific Assessment

Location: Mid-channel in the north of Waitata Reach, south-east of Waihinau Bay.
Wider Context: Recent Natural Character Study[1]
Site is not in or adjacent to any area proposed as ONC.
Surrounding Terrestrial Area (land-based views of site) – 3 Bulwer.
Marine Area C – Pelorus Sound. Proposed site is not in any Marine Sub-Area identified as having High or Very High abiotic/biotic values at Level 4/5.
Wider Context: Recent Landscape/ONFL Study[2]
Site is part of the Outer Sounds Landscape.
Site is not adjacent to (terrestrial) or in (marine) area proposed as ONFL; Site lies inside area proposed as high amenity.
Area 5: Port Ligar, Forsyth Island and Kaitira Headland.
Wider Context: Operative Resource Management Plan
Proposed site is not adjacent to or in any Area of Outstanding Landscape Value.

Site Natural Science Baseline

Geomorphology (Landform)[3]
The proposed site is not adjacent to any landform, but sits mid-channel in the Waitata Reach. Waitata Reach comprises the outer part of Pelorus Sound, connecting Tawhitinui Reach at Maud Island to Forsyth Bay and the open waters of Cook Strait beyond Port Ligar. The Reach measures approximately 12km long (between headlands), with the width varying between 2km and 4km. It is considered part of the Outer Sounds.

To the north-west of the site are two bays, with the most northern (Port Ligar) being the larger. Both bays are fairly open to the mid-channel. The smaller more south-western bay (Waihinau) faces more-or-less directly towards the proposed site. Port Ligar Bay comprises two areas – the more interior part is more enclosed on each side by small headlands; the outer part of the bay faces more directly towards the proposed site.

To the south-east of the site is another moderately-sized bay (Ketu), enclosed to the north-east by the slopes of Kaitira headland (East Entry Point). In the distance to the north is Te Akaroa headland (West Entry Point); and beyond Kaitira and Te Akaroa headlands to the north-east are the open waters of Cook Strait.

The land surrounding the proposed site (land type Bulwer) is typified by lower elevations (being the most submerged of the Marlborough land systems), and has an irregular and heavily indented rocky coastline, with a typically abrupt coastal edge, and steep coastal slopes.

Modifications to surrounding landform includes visible networks of tracks across slopes, and small areas with dwellings and jetties, particularly at Port Ligar and Waihinau Bays.

Terrestrial Ecology
There are large areas of pasture retained around Port Ligar and on Te Akaroa headland, as well as large blocks of exotic forestry in both these areas too, but landforms surrounding the proposed site are largely characterised by the regeneration of native bush and shrublands. Vegetation patterns tend to be fairly fragmented.

Rating: Moderate.

Marine Ecology
Recent ecological benthic assessment of the site[4] has determined that the site is situated over an almost flat, sandy mud substratum. There were no ecological features of special significance identified beneath the cage area nor in the vicinity of the proposed farm. Habitats and taxa identified at the site can be considered to occur widely in the greater area of Waitata Reach and Pelorus Sound (e.g. Davidson et al 2011, DoC 1995, McKnight and Grange 1991). The site is deep and is subject to strong currents.

The wider Pelorus Sound seabed has historically been modified by dredging,[5]

Rating: Very Low

Summary of Natural Science Characteristics:

- Mid-channel site in the Outer Pelorus Sound (Waitata Reach); deep with strong currents;
- Historically much of Pelorus Sound was dredged, at times unregulated;
- No benthic features of ecological significance.

Site Natural Science Baseline Rating:

- Low

Key Natural Science Values:

- Mid-channel position; deep with strong currents;
- No benthic features of ecological significance.

Site Perceptual/Sensory Baseline

Coherence
The site is part of a highly coherent plane (surface of the water), which is viewed/experienced either from surrounding landform, or on-water, from boats. Within the shelter of the surrounding landforms the surface of the water here is often calm; at other times the surface is more disturbed and complex, depending on weather. The changing character of the water can affect views across the proposed site. The lack of permanent structures in the inner waters of the channel provides a simple, expansive horizontal element, enclosed at a large scale within landform.
Rating: Very High

Vividness and Memorability
The site's context (Waitata Reach/Outer Pelorus Sound) is memorable for its distinction from other stretches of water in the vicinity: it is calmer and more enclosed than Cook Strait to the north, but more rugged and remote than Inner Pelorus Sound. The site itself is also on the way to the recognised entry/exit passage to/from Pelorus Sound (between Te Akaroa and Kaitira), although it is at a distance of approximately 4kms from the gateway and its enclosing headlands (East and West Entry Points). It is also associated by way of its position with the journey to baches/dwellings in Waihinau Bay and Port Ligar.
Rating: High

Perceived Naturalness
There is high perceived naturalness at the site, due to the lack of structures on the water, and a general lack of structures on surrounding landform, with those structures present being distant from the site. Views of the site and its expansive seascape context, whether from a position on land or sea, add to visual amenity, and to the feeling of being in a highly natural setting. The level of perceived naturalness is reduced somewhat by the context of highly managed land to the north of the site, with large areas of pasture and exotic forestry, planted in visually dominating dark geometric blocks.

[1] Natural Character of the Marlborough Coast, MDC, 2014; pg.73.
[2] Marlborough Landscape Study, MDC, 2015.
[3] Broader geomorphological aspects have been covered previously; Refer to Natural Character of the Marlborough Coast, MDC, 2014.
[4] Ecological Benthic Assessments for Proposed Salmon Farm Sites, Part 1; Niwa, April 2016.
[5] The History of Benthic Change in Pelorus Sound, Marlborough; Niwa, February 2015.

The coastal margin of this part of the Waitata Reach is also modified (particularly on the western side) by mussel farms, and a salmon farm in Waihinau Bay. There are also consented salmon farms at the headland between Waihinau Bay and Waitata Bay, and south of the headland between Ketu and Richmond Bays. The experience of the site from water is also part of a journey through the wider Reach, with different levels of perceived naturalness being experienced on the journey.
Rating: High

Expressiveness
The site's context is expressive of its formative processes, being clearly legible as a drowned valley system. The relatively low elevation of landforms in this area is also expressive of the fact that this area is the most submerged of the Marlborough land ecosystems.[6] The close-up experience of on-going coastal erosion processes are removed from the on-water experience of this site.
Rating: High

Transient Values
Wildlife; changing character of the surface of the water; wind and mid-channel exposure; long open views; sense of remoteness and expansiveness; boat traffic[7].
Rating: Very High

Summary of Perceptual/Sensory Characteristics:

- Simple context – surface of the water;
- Surrounding wider context of landforms are distant;
- Proposed sites are viewed from water and distantly from surrounding land;
- High memorability location approaching recognised entry/exit point to/from Pelorus Sound;
- High perceived naturalness with no structures, or structures only seen at a distance as part of the wider context;
- Surrounding terrestrial areas characterised by pastoral land, forestry to the north; regenerating indigenous vegetation; terrestrial modifications include dwellings, jetties and tracks across slopes, and marine farms indicative of working landscape – slightly reduced perceived naturalness at the site by clearly visible context of managed landscape;
- Mid channel exposure with long views towards the open sea
- Surrounding natural elements of seascape and landforms dominate visually;
- Sense of remoteness and expansiveness;
- High visual amenity;
- High transient values at the site due to its exposed position.

Site Perceptual/Sensory Baseline Rating:

- Very High

Key Perceptual/Sensory Values:

- Highly coherent and simple water context;
- Changing surface character depending on weather;
- Expansive; with the scale being set by the horizontal plane of the water and the distance between adjacent enclosing landforms;
- Exposed;
- High perceived naturalness; within a largely regenerating but mixed character distant terrestrial backdrop;
- Visual context includes aspects of modified land use on surrounding areas including forestry, pastoral use and marine farms, indicative of working landscape;
- Very High transient qualities

[6] Natural Character of the Marlborough Coast, MDC, 2014, pg. 118.
[7] Refer to Navigational Risk Review for Proposed Pelorus Sound Salmon Farms, Appendix B; Navigatus Consulting Limited; December 2015
[8] Draft Cultural Impact Assessment; Maximise, 2016, pg 7.
[9] Ibid; pg. 4
[10] Board of Inquiry, NZKS Decision, 23 Feb 2013; pg 248.
[11] Draft Cultural Impact Assessment; Maximise, 2016, pg 15 and Attachment 2.
[12] Board of Inquiry, NZKS Decision, 23 Feb 2013; pg 253.

Site Associative Baseline

While there has been no direct input into this assessment from local community, information has been incorporated from social impact reporting on salmon farms in the Sounds, and from recently completed Cultural Impact and Tourism and Recreation assessments.

Tangata Whenua
Research undertaken shows the historical and widespread activity of each of Te Tau Ihu tribes (Ngāti Koata, Ngāti Kuia, Ngāti Apa ki te Rā Tō, Ngāti Toa Rangatira, Te Ātiawa o Te Waka-a-Māui, Ngāti Rangitāne o Wairau, Ngāti Tama ki Te Tau Ihu and Ngāti Rarua) in Kura Te Au (Tory Channel), Tōtaranui (Queen Charlotte Sound) and Te Hoiere (Pelorus Channel). Every tribe has at some point fished, had kāinga or pā (whether temporary or permanent), or is able to relate kōrero tūpuna in and around these waterways[8].

It is recognised that some iwi may have an interest in an area that is historical (e.g. as a result of historical occupation of an area with accompanying wāhi tapu and other sites of significance), while current mana whenua, mana moana, tāngata whenua is held by another iwi. Additionally, there are instances where mana whenua, mana moana, tāngata whenua interests are overlapping and shared by two, or more iwi. (The term 'mana whenua, mana moana, tāngata whenua' seeks to encompass all the various 'Māori' interests that exist in the areas under investigation).[9]

For mana whenua, mana moana and tangata whenua there will be physical and spiritual values relating to the protection of taonga, mauri, customary uses and practices and the exercise of kaitiakitanga in Te Hoiere.[10], as well as values relating to mahinga kai, manaaki tangata, traditional and contemporary waka routes[11]. Values which have been previously identified[12] in Te Hoiere include:

- Mauri of the waterway/moana;
- Taonga species (including King Shags and dolphins, which are considered taonga and taniwha by Ngati Kuia);
- Traditional waka routes along the eastern side of Waitata Reach;
- Customary scallop fisheries in Waitata Reach
- Reef fishing spots

At this stage there have been no Maori Heritage Sites or additional values publically identiified[13] which relate to this site in particular. More information may become available as consultation continues. In general values relating to the context as a whole will apply. In 1991 work to record coastal (terrestrial) sites of significance to iwi in the Pelorus Sound was undertaken, although the findings are confidential.[14]

Historic
No historic features have been identified at the proposed site.[15]

Shared and Recognised
Waitata Reach is classified by DOC under the ROS system as 'accessible waters' for recreation, which implies a degree of modification to the natural environment and the likelihood of encountering other users and uses of the area. The main recreation and tourism activities in Waitata Reach, as elsewhere in the Marlborough Sounds, are recreational fishing and boating. Other key activities include sightseeing cruises, fishing and sailing, and diving. Ketu Bay in particular is a popular scallop-dredging site for recreational fishermen. (Kayaking is largely focused in inner Pelorus Sound – around the Kenepuru Sound and Tennyson Inlet areas.) Pelorus Sound is less popular for sailing due to the gusty nature of the winds and the shallow upper reaches.

The Waitata Reach is described as experiencing a moderate level of fishing activity. There is a shift by the guided fishing operators to go out past the Pelorus entrance to fish the D'Urville, Stephen and Chetwode Islands surrounds[16]. The Pelorus Mail Boat's Outer Sounds route takes in the bays (Waitata, Richmond, Bulwer and Port Ligar) of Waitata Reach once a week on Fridays[17]. In general the Pelorus Sound does not have the same popularity and high use for recreation and tourism as does the Queen Charlotte Sound.[18]

[13] Marlborough District Council Smart Maps: Heritage Sites.
[14] Board of Inquiry, NZKS Decision, 23 Feb 2013; pg 254.
[15] Marlborough District Council Smart Maps: Heritage Sites.
[16] Personal communications – Del Carrodus, Havelock and Sounds Water Taxis, 7 June 2016
[17] www.mail-boat.co.nz/mailruns.html
[18] NZ King Salmon Potential Salmon Farm Relocation in Marlborough Tourism and Recreation Assessment (TARA); TRC Tourism Ltd; August 2016, pgs, 18 - 28

Overall the Waitata Reach is known for a mix of uses and activities. Pastureland, forestry, regenerating indigenous bush, marine farming and recreation all take pace inside this predominantly natural setting. Marine farming is mainly on the western side of the Reach, as are the scattered dwellings and jetties. Associative values relate to the wider context, of which these sites are a part, rather than being particularly tied to these sites.

Summary of Associative Characteristics:

- Physical and spiritual values associated with mana whenua, mana moana, and tangata whenua taonga, mauri, customary practices and the exercise of kaitiakitanga
- Traditional and contemporary waka routes through Waitata Reach
- Wide mixed of uses and activities through the Waitata reach;

Associative Baseline Rating:

- Moderate

Key Associative Values:

- Physical and spiritual values associated with mana whenua, mana moana, and tangata whenua taonga, mauri, customary practices and the exercise of kaitiakitanga;
- Traditional and contemporary waka routes through Waitata Reach
- Wide mix of uses and activities, including recreation and tourism, through the Waitata reach.

Summary: Key Values

	Key Values	*Rating*
Natural Science	• Mid-channel position; deep with strong currents; • No benthic features of ecological significance.	Low
Perceptual/Sensory	• Highly coherent and simple water context; • Changing surface character depending on weather; • Expansive; with the scale being set by the horizontal plane of the water and the distance between adjacent enclosing landforms; • Exposed; • High perceived naturalness; within a largely regenerating but mixed character terrestrial backdrop; • Visual context includes aspects of modified land use on surrounding areas including forestry, pastoral use and marine farms, indicative of working landscape; • Very High transient qualities.	Very High
Associative	• Physical and spiritual values associated with mana whenua, mana moana, and tangata whenua taonga, mauri, customary practices and the exercise of kaitiakitanga • Traditional and contemporary waka routes through Waitata Reach; • Wide mix of uses and activities through the Waitata reach.	Moderate

[19] MDC proposed ONFLs have been assessed at a district scale; Marlborough Landscape Study 2015, pg. 104; MDC proposed ONFLs have not been assessed separately at regional and district levels; an ONFL in Marlborough is considered to be an ONFL at both levels; Marlborough Landscape Study 2015, MDC, Pg. 20.

Conclusion: Proposed Site 125 - Natural Character Assessment

The Reach appears as highly natural and feels remote, due to the expansive scale and largely unmodified landform, the large areas of regenerating native vegetation and the sparsely scattered structures, although a productive character is also clearly evident in the surrounding area. The vegetation patterns are distant and have an initial appearance of uniformity, however on closer inspection have diverse patterns of native vegetation combined with productive elements. Although the perceptual/sensory values are notable, due to influence of the wider context (e.g. broad scale of the reach, expansiveness, irregular coastal edge and varied landforms/land cover) the natural science values at the site scale (Level4/5) bring down the overall natural character value.

Natural Character Baseline Rating: Moderate

Outstanding Natural Character:

The site is assessed as not meeting the threshold for outstanding natural character, due to the low natural science values. This conclusion is in agreement with the areas proposed as ONC in the 2014 Natural Character study and Proposed MEP.

Conclusion: Proposed Site 125 - Seascape Assessment

Perceptual/sensory values at the site are very high. This will be the case whether the site is experienced from on-water, or from surrounding landforms, where the site contributes to visual amenity and the experience of the wider natural setting. Associative values are moderate, but relate to the wider context of the Reach, terrestrial and marine, rather than being tied to this particular site. Natural science values are assessed as low only.

Seascape Baseline Rating: High

Outstanding Natural Feature/Landscape

The site is part of the wider Sounds, which is an Outstanding Natural Landscape at the National Scale. It is not in any area proposed as ONL at the district scale, and is not adjacent to or inside any area proposed as ONF at the district scale[19]. At the district scale the site lies inside area proposed as high amenity.

This assessment concludes that the site (level 4/5 scale) is not part of an ONF, due to the more immediate terrestrial context being a mixed character landscape, with often fragmented patterns and reduced natural science values. The site makes an important contribution to the visual amenity of the wider context, but as that context is considered to be a high visual amenity context, rather than Outstanding at the district scale, the site is considered to be correctly classified as high amenity also. This assessment considers the sites to be too distant from existing ONFs to be closely associated with them.

PROPOSED SITE 125: MID-CHANNEL WAITATA NORTH

Assessment of Effects from the Proposal

Proposed Change:

- Five above-water circular structures up to approximately 77m diameter each placed in a straight line through the middle of Waitata channel towards the north end. Cage structures to comprise plastic tube rings with netting, black in colour;
- Farm to be serviced by a semi-submerged circular, or similar in appearance, barge (up to 15m diameter) located within the farm boundary;
- Underwater mooring structures – anchoring the farm in place. These will not be visible above water;
- Lighting and Navigation Structures: at each corner of the farm (underwater mooring corners). Lighting will be visible from a minimum distance of one nautical mile, and possibly up to two nautical miles.[20] Lighting is likely to be in synchronised flashing, to show the form of the farm at night.

Potential Viewing Audience/Visual Appraisal:

For the most part views will be from boat traffic. Boat traffic may include water taxis, tour operators, workboats servicing marine farms, cargo boats, logging boats and recreational vessels (fishing/diving/transport to holiday homes). It will be seen by boat traffic travelling through Waitata Reach between the south-west end and the north-east end, and by traffic travelling between bays on the east and west sides of the Reach.

The navigational surveying of vessel routes provided for this assessment has shown that the majority of boats passing the proposal will be work boats (relatively high volume), with a small number of pleasure boats in the summer months. Views will mostly be transitory, as boats pass the site. Views from small boats will be more side on, with viewers more likely to perceive the structure's height out of the water. Views from larger boats will be from a greater elevation, with viewers more likely to see the circular form of the structure, and more of its total area.

Boats are likely to pass in close proximity to the proposed sites.[21] Boats travelling up the Waitata Reach may travel alongside the farm, or may travel along a route at a greater distance. If travelling up the Reach about half way between the farm and land, boats will be at a distance of about 0.5kms (on either side of the salmon farm) as they pass the farm. If at up to 0.5km distance a white-coloured salmon farm can be expected to be "dominant[22]", the dominance will be reduced here by the use of a lower-profile form (the circular design) with a dark, recessive colour. The visual effects will be amplified by the coherent surface on which the farm appears, (the surface of the water), but the horizontal plane here will act as the scale against which the farm will be perceived, (just as a landform acts as a vertical scale), and the expansiveness of that horizontal plane will also act to diminish visual effects at this distance.

Similarly, visual effects from 0.5-1km distance on the approach to the farm can be expected to be reduced from the "prominent" expected for a white-coloured farm with a higher out-of-water profile, for the same reasons. Beyond 1-2kms views of the structures may become faint.

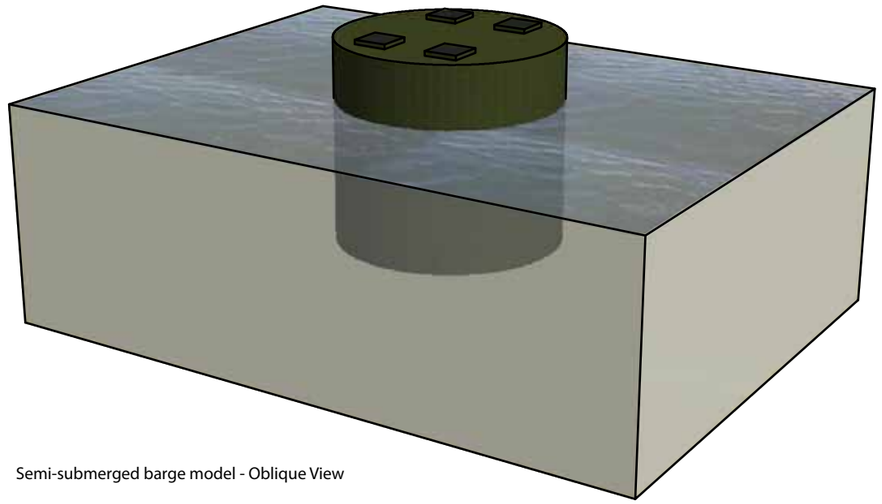
This site has a different barge than other location within this Site Swap Assessment. This site proposes a semi-submerged circular, or similar in appearance, feed barge (up to 15m diameter and 2.9m above the waterline) located within the farm boundary. This is considered to have less of an impact on perceptual values, when compared to the alternative of having a permanently inhabited barge on site. Hudson Associates have been involved in the development of this structure which is considered to have a low profile and recessive appearance in comparison to the proposed pens.

Perceptions of salmon farms by recreational boaties were surveyed in 2015. Results showed that just over half the boatie respondents reported no effect of salmon farms on their experience of the Sounds, while almost one-third reported a negative effect. The most common negative effect reported by boaties was visual blight (12 percent), a feeling of displacement from the bay (10 percent), and course change or navigational risk (6 percent). However salmon farms also commonly attract boaties and visitors on charter vessels.

People's responses to the presence of salmon farms varies a great deal, depending on the nature of occupancy, and the experiences, personalities and attitudes of the individuals concerned. [23]. Neighbours have not reported noticeable adverse effects from salmon-farm lighting, whether it be from the accommodation block, navigational aids or under-water lighting.[24]

Residences in Waihinau Bay are at a distance of approximately 3-3.5kms from the site, and Tui Nature Reserve to the south is at a distance of approximately 4kms. At these distances day-time views are assessed as "visible" for white-coloured farms. Visual effects will be reduced due to the low-profile form and dark recessive colour, possibly to "partially visible"; lights may be faintly discernible at night from Waihinau Bay if lights with a 2 nautical mile (3.7km) range are installed.

Maud Island Gun Emplacement Track is the only public walking track in the Waitata Reach – with a viewing distance of greater than 5kms. Views will be unlikely.



Semi-submerged barge model - Oblique View

Site Sensitivity:

This location has a baseline value of Moderate for Natural Character and High for Landscape. The water depth and high flow rate does reduce the sensitivity of the benthic environment. This site is considered to have a low sensitive to a Salmon Farm in terms of natural character. The site is also considered to have a low sensitivity due to the absorption capacity of the expansive scale of the Reach, and the productive/mixed use character of its surrounding context.

[20] Navigational Risk Review for Proposed Pelorus Sound Salmon Farms, Navigatus Consulting Limited; December 2015; pg 24. Visibility range of 1 nautical mile is recommended as a minimum for lighting, with range being able to be increased to 2 nautical miles economically.
[21] Navigational Risk Review for Proposed Pelorus Sound Salmon Farms, Appendix B; Navigatus Consulting Limited; December 2015
[22] Proposed Salmon Farms Marlborough Sounds, Natural Character Landscape and Visual Amenity Effects Final Report Prepared for King Salmon; Boffa Miskell, August 2011, pg. 24.

[23] The Social and Community Effects of Salmon Farming & Rearing: A Case Study of the Top of the South Island; Taylor Baines & Assocs & Quigley & Watts Ltd; Nov 2015, pgs. 37 - 40.
[24] Ibid; pg 43.

Assessment of Effects

For detailed assessment of effects refer to the table below.

Conclusion: Proposed Site 125 – Effects on Natural Character

There will be adverse effects on the perceptual/sensory aspect of natural character from this proposal, including a loss of naturalness and some loss of night sky darkness. However, the distance across the reach at the proposed site measures 2kms and more, and it is considered that, with the design proposed, and the surrounding character, that the expansive context will be able to visually absorb the proposal to an acceptable level, especially given the predominant viewing audience of work boats. Adverse effects on the perceptual/sensory aspect of natural character are not considered to be at a significant level.

With regards to natural science values, the site has a low baseline rating. Recent modelling of potential benthic effects[25] has shown that at a feed rate (of 7000 tonnes/year), enrichment beneath the site would be at an acceptable level - not exceeding Enrichment Stage 5. There are no ecological features of special significance which are predicted to be affected as a result of the proposed farm. Natural science effects are therefore assessed as not being at a significant level.

Overall it is considered that effects on Natural Character will result in a Natural Character ranking of Low-Moderate. Overall adverse effects on natural character at the site scale (level 4/5) are not assessed as being significant. It is considered that adverse effects will be adequately mitigated by the proposed design of the farm, with the expansive context with its mixed uses being an additional mitigating factor.

It is not considered that natural character effects at the Level 3 scale[26] will be significant. Values at this scale are broad, and the site is only a very small part of the context at this scale. The site is not in an area proposed as Outstanding Natural Character at the Level 3 scale.

Effects on the Marlborough Sounds natural character values at a national scale are considered to be insignificant.

Conclusion: Proposed Site 125 – Effects on Seascape Character

The proposal will result in the introduction of structures into a setting currently free of structures. There will be resultant adverse effects on visual amenity and loss of perceived naturalness at the site. However, due to the expansiveness of the context, (2km wide at the site), and the mixed-use character of the wider terrestrial surrounds, effects are not considered to be at a significant level. The site is not in or near any area proposed as ONF. It is considered that adverse effects will be adequately mitigated by the proposed design of the farm (dark circular forms), with the mixed use character and expansiveness of the context being further mitigating factors. It is considered that the seascape will remain visually dominant for residences, for views from land, and for those in boats further than 0.5-1km from the site.

There will be adverse effects on seascape character resulting from the proposal, mainly in terms of a reduction in perceived naturalness. However, it is considered that the proposal will fit with the mixed-use character of the site's wider context. Effects from lighting are likely to be not significant for residences, and reduced in significance for boats travelling through the reach, when considered alongside existing lights on mussel farms within this productive context. It is considered that, with the mitigation measures proposed, the context is expansive enough to accommodate the proposal with resultant adverse effects on seascape character being at an acceptable level.

With those mitigation measures proposed, overall the adverse seascape and visual effects will not be significant at the site scale (Level 4/5), and are assessed as resulting in a High-Moderate seascape rating.

Effects from the proposal on district scale landscape values are not assessed as being significant. This is considered to be a visual amenity landscape rather than an ONF/L at the district scale, and it is considered that visual amenity at the site, and the visual amenity offered by the site when viewed from surrounding land, will remain high. The context is large enough to absorb the proposal – with the Reach being about 2km wide at the site. Close views will be temporary/transitory; and views from surrounding land will be distant (about 1km from the closest points on land either side).

Regional-scale values have not been separately identified by MDC[27]. It is considered that as district scale values will not be significantly affected, any larger-scale regional landscape values will also not be significantly affected by this proposal. At that large scale values will be broader again in nature, and the site forms only a very small part of the context.

Landscape and visual effects on the Marlborough Sounds Outstanding landscape values at a national scale are considered to be insignificant, with those Outstanding values remaining intact.

Cumulative effects are discussed in a separate part of this report.

[25] Ecological Benthic Assessment for Proposed Salmon Farm Sites – Part 2: Assessment of Potential Effects; Niwa, June 2016.
[26] Natural Character of the Marlborough Coast, MDC, 2014

[27] MDC proposed ONFLs have been assessed at a district scale; Marlborough Landscape Study 2015, pg. 104; MDC proposed ONFLs have not been assessed separately at regional and district levels; an ONFL in Marlborough is considered to be an ONFL at both levels; Marlborough Landscape Study 2015, MDC, Pg. 20.

Site 125 Assessment of Effects				
Character Component (NZCPS)	*Existing Character*	*Assessment of Effects*		
	Key Values	*Baseline Rating*[28]	*Effects*	***Mitigation*** *(Including site characteristics and proposal design features).*
Natural Science [29]	• Mid-channel position; deep with strong currents; • No benthic features of ecological significance.	Low	• No change to landform or landcover. • Recent modelling of potential benthic effects have shown that at a feed rate of 7000 tonnes/year, enrichment beneath the site would be at an acceptable level. There are no ecological features of special significance which are predicted to be affected as a result of the proposed farm. Natural science effects are therefore assessed as being low.	
Perceptual /Sensory[30] Values	• Highly coherent and simple water context; • Changing surface character depending on weather; • Expansive; with the scale being set by the horizontal plane of the water and the distance between adjacent enclosing landforms; • Exposed; • High perceived naturalness; within a largely regenerating but mixed character terrestrial backdrop; • Visual context includes aspects of modified land use on surrounding areas including forestry, pastoral use and marine farms, indicative of working landscape; • Very High transient qualities	Very High	• The proposal will result in the introduction of structures into a setting where there are currently no structures present. The new structures will be seen on the surface of a highly simple and coherent context. The nature of the expansive flat surface means that visual absorption of the proposal can be more difficult, however visual effects will be reduced by the use of a receding black colour for the structures and netting, along with the circular form proposed which have a lower profile than the standard square form. Overall the proposal will be a softer intrusion into the environment when seen from an elevated viewpoint. • Perceived naturalness will drop, but due to the expansiveness of the site's context, it is considered that the seascape will remain visually dominant. In this expansive context the horizontal distance between the landforms on the west and east sides of the channel becomes the equivalent to the vertical scale of a landform backdrop. With the distance across the reach at the proposed sites being a distance of 2kms and more, it is considered that the context is large-scale enough to visually absorb the proposed structures to an acceptable level, especially with the design proposed. • Views from boat traffic will likely be close, but will be transitory only. Views from surrounding landform will be distant, at about 1km from the closest landforms either side of the reach, although there are no tracks or dwellings at these distances. Closest dwellings are in Waihinau Bay ay 3.5km. It is apparent from viewing similar structures existing at Crail Bay that the use of a black colour for the structures successfully blends the structures into the water when viewed from such distances. It is considered that the visual amenity offered by the site to viewers on surrounding landform will not be significantly affected. • There will be loss of darkness of the night sky at the site due to lighting on the structures. Lights may be visible from up to 2 nautical miles (about 3.7kms). Residences in Waihinau Bay are approximately 3.5kms from the site. Lights may be faintly discernible on clear nights. The significance of this is considered reduced by the existing lights in the Bay – both from a number of residences and from mussel farms. Tui Nature Reserve to the south is at a distance of more than 4.5kms – a greater distance than the 2 nautical miles visibility for lights. Given the scale of the Reach and its existing mixed use character (with existing lighting on mussel farms through the Reach) effects from lights are considered to be an acceptable level. • The mixed-use character of Waitata Reach means the proposal will not be out of character with existing uses in the wider setting. • Surveys of social perceptions carried out in 2001 and 2012 for the Marlborough District Council[31].suggest that the growth in marine farming activities (including salmon farming) was not seen by national and regional visitors as having had a deleterious effect on the valued qualities of the Marlborough Sounds over this period.[32]	• Mixed use character of the surrounding context - proposal is a fit with existing productive uses; • Expansive context provides for visual absorption; • Use of a visually recessive black colour for structures and netting will reduce visual effects; • Use of a circular form will provide a softer intrusion into the environment; • semi-submerged circular, or similar in appearance, barge reduces visual impact of the proposal.
Associative Values[33]	• Physical and spiritual values associated with mana whenua, mana moana, and tangata whenua taonga, mauri, customary practices and the exercise of kaitiakitanga; • Traditional and contemporary waka routes through Waitata Reach; • Wide mix of uses and activities through the Waitata reach, including productive uses and recreation.	Moderate	• A Tourism and Recreation Assessment (TARA) has concluded that this site will, for some, have a perceived negative impact on the recreational qualities of the area, although adverse effects are not assessed as being significant. • The site is mid-channel, and not along the eastern side of the Reach identified as the route of traditional waka; • There may be adverse effects on mana whenua, mana moana and tangata whenua spiritual values, although these may be mitigated by the strong currents present at the site.	• Pelorus Sound is known as a Sound with a complex mix of uses, including recreation, tourism, production (pasture farming, forestry, marine farming), and regeneration of indigenous vegetation.
Overall Baseline Natural Character[34]		Moderate		
Overall Baseline Seascape[35]		High		
Resultant Natural Character			Low-Moderate	
Resultant Seascape			High-Moderate	

[28] In all scoring a 7-point scale is used: Very Low/Low/Low-Moderate/Moderate/Moderate-High/High/Very High.
[29] Includes geomorphological (landforms) and ecological (flora, fauna, habitat, biodiversity and natural systems and processes).
[30] Includes visual and aesthetic values such as coherence, vividness, memorability, perceived naturalness, expressiveness, and transient values.
[31]. Corydon Consultants Ltd, 2001 and Corydon Consultants Ltd, 2012.
[32] The Social and Community Effects of Salmon Farming & Rearing: A Case Study of the Top of the South Island; Taylor Baines & Assocs & Quigley & Watts Ltd; Nov 2015, pg. 69
[33] Includes cultural (Tangata Whenua), historic, and shared and recognised values.
[34] The Overall Baseline rating is reflective of the site's sensitivity to change. In the Marlborough Sounds environment a highly natural site will have higher perceptual ratings as well as high natural science ratings, and will be more sensitive to change. The more modified a site is, the lower the ratings tend to be for both natural science and perceptual/sensory ratings, and the less sensitive a site will be to change.
[35] Ibid

Site: 106 - Richmond Bay South

Figure 10: Site 106 - Photo from Aircraft

Figure 11: Site 106 - Location Map of Proposed Site

Figure 12: Site 106 - Photo from Boat

PROPOSED SITE 106: RICHMOND BAY SOUTH

Natural Character & Natural Features and Landscapes: Site Specific Assessment

Location: Adjacent (north of) the headland between Richmond Bay and Horseshoe Bay; between Te Kaiangapipi and the northern tip of The Reef. South-east end of Waitata Reach, Outer Pelorus Sound.

Wider Context: Recent Natural Character/ONC Study[1]

Site is not in any area proposed as ONC.

Terrestrial Area 3 – Bulwer. Site is adjacent to Terrestrial Sub-Area "Eastern Waitata Reach" identified as having High natural character values at Level 4/5.

Marine Area C – Pelorus Sound. Site is not in any Marine Sub-Area identified as having High or Very High abiotic/biotic values at Level 4/5.

Wider Context: Recent Landscape/ONFL Study[2]

Site is part of the Outer Sounds Landscape.

Site is not adjacent to any terrestrial area or in any marine area proposed as ONF at the district scale; site is inside area proposed as high amenity.

Area 6: Maud Island, Mt Shewell, Fitzroy Bay and Eastern Tawhitinui Reach.

Wider Context: Operative Resource Management Plan

Proposed site is not adjacent to or in any Area of Outstanding Landscape Value.

Site Natural Science Baseline

Geomorphology (Landform)[3]

The proposed site is backed by the north-west-facing slopes of a small headland formed by a ridge coming down in a north-westerly direction into Waitata Reach from Kauauroa (555masl), at the south end of the Outer Pelorus Sound. The headland has an elevation of around 200masl, and sits between Richmond and Horseshoe Bays. The north-west slopes adjacent to the proposed site are characterised by steep slopes rising abruptly from a rocky coastal edge, with low rocky bluffs and exposed substrate in places across the slopes, particularly at the tips of the headland (north and south), and closer to the water's edge.

Terrestrial Ecology

Land adjacent to the proposed site has been previously identified as having High abiotic/biotic values at the 4/5 level[4]. Key values listed are:

- relatively low levels of modification and extensive areas of regenerating Bush.

Sub-Area additional comments are:

- also contains low intensity grazed pastoral land

Viewed at the site scale, the headland here is fairly extensively covered with coastal scrubland regeneration. There are small areas of pasture remaining on the top of the headland to the south, and vegetation is bare in parts, with areas of exposed rocky substrate, particularly close to the water's edge, and on slopes closest to the northern and southern tips of the headland. Slopes here are generally north-facing, and this drier aspect and the mid-channel exposure are reflected in these occasional bare patches, but on the whole regeneration is advancing. There are only a few wilding pines on the southern-most slopes. '

Rating: High - Moderate

Marine Ecology

Pelorus Sound is typified by narrow near-shore reef; sand/shell and then mud offshore, with a typical array of coastal species. Reefs and sediments can often appear relatively barren; there are biogenic communities in places including rhodoliths, hydroids, tube worms, horse mussels and bryozoans.[5]

The coastal margin adjacent to the proposed site is modified by the presence of a mussel farm.

Recent ecological benthic assessment[6] has determined that the habitat on the seabed directly beneath the site is homogeneous mud inhabited by a sparsely distributed epibiota. No particularly notable communities or taxa were recorded on the muddy seabed in the immediate vicinity of the site during the assessment, although scallops were relatively abundant, and there are no significant ecological features. Reef habitat supporting a diverse community was present inshore of the site. No information on currents was recorded.

Rating: High-Moderate

Summary of Natural Science Characteristics:

- Proposed site is on the edge of the main channel;
- North-facing slopes of a small, relatively low headland;
- Steep slopes above an abrupt rocky coastal edge; low rocky bluffs in places;
- Fairly extensively covered with coastal scrubland; some areas of exposed substrate, particularly at the headland tips (south and north) and close to the water's edge;
- Unmodified landform;
- Some modification to the coastal margin by existing mussel farms;
- No notable marine communities or taxa at the site.

Natural Science Baseline Rating:

- High-Moderate

Key Natural Science Values:

- Extensive areas of regenerating coastal scrub; good coverage for the most part; exposed substrate in places;
- Unmodified landform;
- Some modification of the coastal margin by existing mussel farms;
- No notable marine communities or taxa at the site.

Site Perceptual/Sensory Baseline

Coherence

The headland does form a visually coherent backdrop to the site, due to the simplicity of the regenerating vegetation, which lacks great diversity, and with the regeneration occurring consistently and in natural patterns for the most part right across the slopes. There are areas of exposed substrate, but these are part of a natural pattern of revegetation, and do not detract substantially from presentation of the backdrop as a coherent whole. Wilding pines are present, but are very few in number and are too few to effect coherence.

Rating: Very High

[1] Natural Character of the Marlborough Coast, MDC, 2014.
[2] Marlborough Landscape Study, MDC, 2015.
[3] Broader geomorphological aspects have been covered previously; Refer to Natural Character of the Marlborough Coast, MDC, 2014.
[4] Natural Character of the Marlborough Coast, MDC, 2014; pgs.124-5.
[5] Natural Character of the Marlborough Coast, MDC, 2014; pg.70.
[6] Ecological Benthic Assessments for Proposed Salmon Farm Sites, Part 1; Niwa, April 2016.

Vividness and Memorability
The headland does not stand out vividly in the context of the Reach. This headland is one of a repetitive series of headlands seen in travelling through this Reach, and does not stand out particularly from the others. It has a fairly low elevation and indistinct form, and the vegetative cover does not stand out as being of high quality/diversity. Attention in the main channel of the Reach here tends to be focused on the impressive landforms to the south and west, including Maud Island and Mt Shewell. When travelling north, attention tends to be focused down the Reach towards the open sea. The site is effectively an edge to the travel route through the Reach, rather than a stopping point in its own right.

There is an impression of expansiveness at the site, due to its edge-of-channel position and the surrounding context. There are long views out from the site down the reach south and north, with views south taking in a number of impressive large-scale landforms.
Rating: Low.

Perceived Naturalness
Perceived naturalness at the site is relatively high – with no structures on the headland. It is reduced by the presence of mussel farming, but the expansiveness of the wider context provides for absorption of the existing mussel farm structures, and means that the natural elements of landform, vegetation and seascape still dominate visually. There is an existing salmon farm roughly 2.5 to the north (Richmond) but this is only a minor part of the view and does not impact significantly on the perceived naturalness at the site due to the expansive context. Visual amenity is high - moderate – reduced by the vegetation being "only scrubland", but helped by the wider context.
Rating: High

Expressiveness
The landform here, with its rocky bluffs and exposed substrate is expressive of the strong maritime influence and the site's exposed position on the edge of the main channel of the Reach.
Rating: High - Moderate

Transient Values
Exposure and sense of openness. Wildlife. Boat traffic[7]. Changing character of the water depending on weather.
Rating: High

Summary of Perceptual/Sensory Characteristics:

- North-west facing slopes on the end of a relatively low headland;
- On the edge of the main channel;
- Rugged slopes, expressive of their position in the main channel;
- Headland is one of a series through the Reach; a repetitive element;
- Open, expansive views up and down the Reach;
- Vegetated backdrop has simple, consistent and natural patterns;
- Backdrop indigenous vegetative cover is fairly extensively covered with coastal scrub;
- A mussel farm is the only structure present;
- Forms the edge of a travel route through the Reach, rather than a stopping point.

Perceptual/Sensory Baseline Rating:

- High-Moderate

Key Perceptual/Sensory Values:

- Backdrop slopes have simplicity and very high visual coherence;
- Backdrop indigenous vegetative cover is perceived as moderate "quality"
- Visually dominant seascape and landform;
- Expressive coastal edge; Sense of exposure
- Sense of expansiveness, openness.

Site Associative Baseline

While there has been no direct input into this assessment from local community, information has been incorporated from social impact reporting on salmon farms in the Sounds, and from recently completed Cultural Impact and Tourism and Recreation assessments.

Tangata Whenua
Research undertaken shows the historical and widespread activity of each of Te Tau Ihu tribes (Ngāti Koata, Ngāti Kuia, Ngāti Apa ki te Rā Tō, Ngāti Toa Rangatira, Te Ātiawa o Te Waka-a-Māui, Ngāti Rangitāne o Wairau, Ngāti Tama ki Te Tau Ihu and Ngāti Rarua) in Kura Te Au (Tory Channel), Tōtaranui (Queen Charlotte Sound) and Te Hoiere (Pelorus Channel). Every tribe has at some point fished, had kāinga or pā (whether temporary or permanent), or is able to relate kōrero tūpuna in and around these waterways[8].

it is recognised that some iwi may have an interest in an area that is historical (e.g. as a result of historical occupation of an area with accompanying wāhi tapu and other sites of significance), while current mana whenua, mana moana, tāngata whenua is held by another iwi. Additionally, there are instances where mana whenua, mana moana, tāngata whenua interests are overlapping and shared by two, or more iwi. (The term 'mana whenua, mana moana, tāngata whenua' seeks to encompass all the various 'Māori' interests that exist in the areas under investigation).[9]

For mana whenua, mana moana and tangata whenua there will be physical and spiritual values relating to the protection of taonga, mauri, customary uses and practices and the exercise of kaitiakitanga in Te Hoiere.[10], as well as values relating to mahinga kai, manaaki tangata, traditional and contemporary waka routes[11]. Values which have been previously identified[12] in Te Hoiere include:

- Mauri of the waterway/moana;
- Taonga species (including King Shags and dolphins, which are considered taonga and taniwha by Ngati Kuia);
- Traditional waka routes along the eastern side of Waitata Reach;
- Customary scallop fisheries in Waitata Reach
- Reef fishing spots

At this stage there have been no Maori Heritage Sites or additional values publically identiified[13] which relate to this site in particular. More information may become available as consultation continues. In general values relating to the context as a whole will apply. In 1991 work to record coastal (terrestrial) sites of significance to iwi in the Pelorus Sound was undertaken, although the findings are confidential.[14]

Historic
No historic features have been identified at the proposed site.[15]

Shared and Recognised
Waitata Reach is classified by DOC under the ROS system as 'accessible waters' for recreation, which implies a degree of modification to the natural environment and the likelihood of encountering other users and uses of the area. The main recreation and tourism activities in Waitata Reach, as elsewhere in the Marlborough Sounds, are recreational fishing and boating. Other key activities include sightseeing cruises, walking/hiking, fishing and sailing, and diving. (Kayaking is largely focused in inner Pelorus Sound – around the Kenepuru Sound and Tennyson Inlet areas.) Pelorus Sound is less popular for sailing due to the gusty nature of the winds and the shallow upper reaches.

The Waitata Reach is described as experiencing a moderate level of fishing activity. There is a shift by the guided fishing operators to go out past the Pelorus entrance to fish the D'Urville, Stephen and Chetwode Islands surrounds[16]. The Pelorus Mail Boat's Outer Sounds route takes in the bays (Waitata, Richmond, Bulwer and Port Ligar) of Waitata Reach once a week on Fridays[17]. In general the Pelorus Sound does not have the same popularity and high use for recreation and tourism as does the Queen Charlotte Sound.[18] Boats through Pelorus Sound tend for the main part to be for servicing marine farms. This particular bay is the site of mussel farming.

[7] Refer to Navigational Risk Review for Proposed Pelorus Sound Salmon Farms, Appendix B; Navigatus Consulting Limited; December 2015
[8] Draft Cultural Impact Assessment; Maximise, 2016, pg 7.
[9] Ibid; pg. 4
[10] Board of Inquiry, NZKS Decision, 23 Feb 2013; pg 248.
[11] Draft Cultural Impact Assessment; Maximise, 2016, pg 15 and Attachment 2.
[12] Board of Inquiry, NZKS Decision, 23 Feb 2013; pg 253.
[13] Marlborough District Council Smart Maps: Heritage Sites.
[14] Board of Inquiry, NZKS Decision, 23 Feb 2013; pg 254.
[15] Marlborough District Council Smart Maps: Heritage Sites.
[16] Personal communications – Del Carrodus, Havelock and Sounds Water Taxis, 7 June 2016
[17] www.mail-boat.co.nz/mailruns.html
[18] NZ King Salmon Potential Salmon Farm Relocation in Marlborough Tourism and Recreation Assessment (TARA); TRC Tourism Ltd. August 2016, pgs, 18 - 28

Summary of Associative Characteristics:

- Physical and spiritual values associated with mana whenua, mana moana, and tangata whenua taonga, mauri, customary practices and the exercise of kaitiakitanga
- Traditional and contemporary waka routes through Waitata Reach;
- Recreational use of the wider Pelorus Sound –holidays, boating, fishing.

Associative Baseline Rating:

- Moderate

Key Associative Values:

- Physical and spiritual values associated with mana whenua, mana moana, and tangata whenua taonga, mauri, customary practices and the exercise of kaitiakitanga;
- Traditional and contemporary waka routes through Waitata Reach
- Recreational uses of the wider Pelorus Sound.

Summary: Key Values

	Key Values	*Baseline Rating*
Natural Science	• Extensive areas of regenerating coastal scrub; good coverage for the most part; exposed substrate in places; • Unmodified landform; • Some modification of the coastal margin by existing mussel farms • No notable marine communities or taxa at the site.	High-Moderate
Perceptual/Sensory	• Backdrop slopes have simplicity and very high visual coherence; • Backdrop indigenous vegetative cover is perceived as moderate "quality"; • Visually dominant seascape and landform; • Expressive coastal edge; Sense of exposure • Sense of expansiveness, openness	High-Moderate
Associative	• Physical and spiritual values associated with mana whenua, mana moana, and tangata whenua taonga, mauri, customary practices and the exercise of kaitiakitanga • Traditional and contemporary waka routes through Waitata Reach • Recreational uses of the wider Pelorus Sound.	Moderate

Conclusion: Proposed Site 106 Natural Character Assessment

Landform is unmodified. There is regenerating indigenous scrub over much of the headland slopes. Although coverage is for the most part extensive, it is still in the fairly early stages. There is some modification of the coastal margin by mussel farming and there are no notable marine communities at the site. Perceptual/sensory values are high-moderate.

Natural Character Baseline Rating: High-Moderate

Outstanding Natural Character:

This assessment concludes that the site (Level 4/5) the site does not meet the threshold to qualify as Outstanding Natural Character, due mainly to the reduced natural science values, but also due to reduced perceptual/sensory values. This conclusion is in agreement with proposals for areas of ONC in the 2014 Natural Character Study.

Conclusion: Proposed Site 106 Landscape Assessment

The site is at the edge of the main channel – experienced as a part of the journey through the Reach rather than as a stopping point in its own right (unless for servicing the existing mussel farm). Regenerating indigenous scrub covers much of the headland, with good natural science value and potential, but benthic natural science value is lowered. Visual amenity is moderately high, with adjacent slopes having high coherence. Vividness and memorability is not high. Associative values relate to the wider reach rather than particularly to this site.

Landscape Baseline Rating: High-Moderate

Outstanding Natural Feature/Landscape

The site is part of the wider Sounds, which is an Outstanding Natural Landscape at the National Scale. The proposed site is not in or adjacent to any area proposed as ONFL at the district scale[19].

This assessment concludes that the site does not meet the threshold to qualify as an Outstanding Natural Feature at the site/local scale (Level 4/5) due to reduced natural science and perceptual/sensory values.

[19] MDC proposed ONFLs have been assessed at a district scale; Marlborough Landscape Study 2015, pg. 104; MDC proposed ONFLs have not been assessed separately at regional and district levels; an ONFL in Marlborough is considered to be an ONFL at both levels; Marlborough Landscape Study 2015, MDC, Pg. 20.

PROPOSED SITE 106: RICHMOND BAY SOUTH

Assessment of Effects from the Proposal

Proposed Change:

- A rectangular above-water steel structure with netting (8 pens); it is assumed that the structure will be dark in colour, with dark netting. The findings of the site swap assessment are that circular pens would be preferred in terms of landscape effects, and these are commented on in regard to mitigation options below.
- Underwater mooring structures – anchoring the farm in place. (Not visible above water);
- Lighting and Navigation Structures: at each corner of the farm (above the underwater mooring corners), and possibly in the middle of the long sides. Lighting will be visible from a minimum distance of one navigational mile, and possibly up to two navigational miles.[20] Lighting is likely to be in synchronised flashing, to show the form of the farm at night.
- A barge for servicing the farm. This assessment makes the assumptions that:
  - the barge will be located at the southern end or on the shoreline side of the farm, as close as possible to the adjacent landform, enabling the landform to backdrop that structure;
  - the barge will be the more recent architecturally-designed model, or specifically designed, in a dark recessive colour.

Potential Viewing Audience/Visual Appraisal:

The proposal will be visible from the air, but will be mostly viewed by boat traffic. Boat traffic may include water taxis, tour operators, workboats servicing marine farms, cargo boats, logging boats and recreational vessels (fishing/diving/transport to holiday homes) - travelling between Tawhitinui and Waitata Reaches.

The navigational surveying of vessel routes made available for this assessment has shown that the majority of boats passing the proposal will be work boats, typically travelling close by the proposed site while visiting mussel farms in Horseshoe Bay[21]. Very few pleasure boats are shown in the maps passing the site. The vessel tracking shows routes 200-300m away from the site as they round the point of Te Kaiangapipi. Views will mostly be transitory, as boats pass the site. Views from small boats will be more side on, with viewers more likely to perceive the structure's height out of the water. Views from larger boats will be from a greater elevation, with viewers more likely to see the form of the structure, and more of its total area.

Boats will receive varying views of the site from across the Reach. If at up to 0.5km distance a white-coloured salmon farm can be expected to be "dominant[22]", visual dominance will be reduced here by the proposed farm design (dark recessive colours) and with the site attributes and context providing further mitigating factors. At distances of 0.5 – 1km visual "prominence" will be reduced for the same reasons. At 1-2kms views of structures may become faint.

Perceptions of salmon farms by recreational boaties were surveyed in 2015. Results showed that just over half the boatie respondents reported no effect of salmon farms on their experience of the Sounds, while almost one-third reported a negative effect. The most common negative effect reported by boaties was visual blight (12 percent), a feeling of displacement from the bay (10 percent), and course change or navigational risk (6 percent). However salmon farms also commonly attract boaties and visitors on charter vessels. People's responses to the presence of salmon farms varies a great deal, depending on the nature of occupancy, and the experiences, personalities and attitudes of the individuals concerned. [23]. Neighbours have not reported noticeable adverse effects from salmon-farm lighting, whether it be from the accommodation block, navigational aids or under-water lighting.[24]

Pelorus Sound has been determined to have significantly less vessel activity than other areas of the Marlborough Sounds.[25]

Maud Island Gun Emplacement Track is the only public walking track in the Waitata Reach – views may be possible from some points on the track, although the track is largely in bush and approximately 3km from the proposed farm.

Tui Nature Reserve is situated opposite the site on the other side of Waitata Reach with the primary views obtained at a distance of approximately 3.5km. The proposed farm will be visible, but at this distance it is likely to appear faint, especially given that structures will be dark and recessive in colour. It is likely that visual effects will be reduced here by the farm design, site characteristics and viewing distance.

Visual effects could be further reduced with the use of the lower-profile circular form.

Site Sensitivity:

This location has a baseline value of High-Moderate for both Natural Character and Landscape. There are no unique factors that warrant adjustment to the baseline Landscape Sensitivity for this location.

Assessment of Landscape Effects

For detailed assessment of effects refer to the table below.

Conclusion: Proposed Site 106 – Effects on Natural Character

There will be adverse effects on the perceptual/sensory aspect of natural character from this proposal, including loss of perceived naturalness, and some reduction in night sky darkness. While it is considered that the site's expansive context will provide for some absorption for the proposal, the open nature of the site on the edge of the Reach means the proposed structures will be clearly visible. The typical travel route past the site brings vessels relatively close, but with the volume of traffic being relatively low and mostly work-boats, and with the near-by context of Richmond Bay having a working-landscape character, adverse effects on the perceptual/sensory aspect of natural character are assessed as being not significant.

Recent modelling of potential benthic effects[26] has shown that at a feed rate of 5000 tonnes/year, enrichment levels beneath the cages would be at an acceptable level (not exceeding ES5). Although taxa sensitive to deposition would be displaced beneath the cages, these are already sparsely distributed at the site. There are no notable ecological features present which are predicted to be adversely affected. Overall adverse effects on natural character at the site scale (level 4/5) are assessed as reducing the natural character value to moderate.

It is not considered that natural character effects at the Level 3 scale[27] will be significant. Values at this scale are broad, and the site is only a very small part of the context this scale. The site is not in an area proposed as Outstanding Natural Character at the Level 3 scale. Effects on the Marlborough Sounds natural character values at a regional and national scale are considered to be insignificant.

[20] Navigational Risk Review for Proposed Pelorus Sound Salmon Farms, Navigatus Consulting Limited; December 2015; pg 24. Visibility range of 1 nautical mile is recommended as a minimum for lighting, with range being able to be increased to 2 nautical miles economically.
[21] Navigational Risk Review for Proposed Pelorus Sound Salmon Farms, Appendix B; Navigatus Consulting Limited; December 2015
[22] Proposed Salmon Farms Marlborough Sounds, Natural Character Landscape and Visual Amenity Effects Final Report Prepared for King Salmon; Boffa Miskell, August 2011, pg. 24.
[23] The Social and Community Effects of Salmon Farming & Rearing: A Case Study of the Top of the South Island; Taylor Baines & Assocs & Quigley & Watts Ltd; Nov 2015, pgs. 37 - 40.
[24] Ibid; pg 43.
[25] Navigational Risk Review for Proposed Pelorus Sound Salmon Farms, Pg 18; Navigatus Consulting Limited; December 2015
[26] Ecological Benthic Assessment for Proposed Salmon Farm Sites – Part 2: Assessment of Potential Effects; Niwa, June 2016.
[27] Natural Character of the Marlborough Coast, MDC, 2014

Conclusion: Proposed Site 106 – Effects on Landscape Character

The proposal will result in a higher number of structures at the site than currently exist. The open nature of the site means that structures will be more openly visible, rather than being tucked away. The simple and coherent backdrop also makes visual absorption of the structures more difficult at the site. The expansive context and scale of the adjacent landform will, however, provide for some visual absorption of the proposed structures, with the prominence of the proposed structures diminished in comparison to the scale of the wider surroundings. Most traffic viewing the proposal will be work boats; any possible views from Tui Reserve will be from a distance of about 3.5kms, with the farm likely to be only faintly discernible if visible at all. For those reasons adverse visual effects are not considered to be significant. Adverse visual effects could be further reduced by the use of the alternative circular farm design in a recessive dark colour.

There will be adverse effects on landscape character resulting from the proposal, with a reduction in perceived naturalness at the site. It is considered that the expansiveness of the context and the scale of the adjacent landform backdrop will provide for some absorption of the proposed structures. The existing character of the wider context of Pelorus Sound, with its mix of productive uses, also means that the proposal will not be out of character with the wider area. However, although there are existing mussel farm structures at this site, perceived naturalness remains relatively high here, although the "quality" of the vegetative cover is generally perceived as being high-moderate. On balance, and taking into account the lower volumes of traffic past the site, with those being mostly work boats, adverse landscape effects are not considered significant at the site scale (level 4/5), with the context providing mitigating attributes. The proposal is considered to reduce the landscape rating to Moderate. Adverse landscape effects would be reduced further with the use of the alternative circular farm design in a recessive colour.

Overall it is not considered that adverse landscape and effects on visual amenity will be significant at the local/site scale (Level 4/5), due mainly to the expansive setting being able to absorb the proposal, and due to the existing working-landscape context.

In terms of district-scale values, the site is not part of any proposed ONFL. It does lie within an area proposed as "High Amenity". It is not considered that landscape and visual effects at the district scale will be significant. The proposal will be a fit with the existing character of the wider context, and visual amenity effects and reduction in perceived naturalness at that scale will be very small. The Reach is already characterised by fairly extensive marine farming, including salmon farms. Cumulative effects are discussed in a separate section of this report.

Regional-scale values have not been separately identified by MDC[28]. It is considered that as district scale landscape values will not be significantly affected, any larger-scale regional landscape values will also not be significantly affected by this proposal. At that large scale values will be broader again in nature, and the site forms only a very small part of the context.

Landscape and visual effects on the Marlborough Sounds Outstanding landscape values at a national scale are considered to be insignificant, with those Outstanding values remaining intact.

[28] MDC proposed ONFLs have been assessed at a district scale; Marlborough Landscape Study 2015, pg. 104; MDC proposed ONFLs have not been assessed separately at regional and district levels; an ONFL in Marlborough is considered to be an ONFL at both levels; Marlborough Landscape Study 2015, MDC, Pg. 20.

Site 106 Assessment of Effects				
Character Component (NZCPS)	*Existing Character*		*Assessment of Effects*	
	Key Values	*Baseline Rating*[29]	*Effects*	***Mitigation*** *(Including site characteristics and proposal design features).*
Natural Science [30]	• Extensive areas of regenerating coastal scrub; good coverage for the most part; exposed substrate in places; • Unmodified landform; • Some modification of the coastal margin by existing mussel farms. • No notable marine communities or taxa at the site.	High-Moderate	• No change to landform or landcover; • Further modification to the coastal margin. Recent modelling of potential benthic effects has shown that at a feed rate of 5000 tonnes/year, enrichment levels beneath the cages would be at an acceptable level. Although taxa sensitive to deposition would be displaced beneath the cages, these are already sparsely distributed at the site. There are no notable ecological features at the site which are predicted to be adversely affected.	
Perceptual/Sensory[31] Values	• Backdrop slopes have simplicity and very high visual coherence; • Backdrop indigenous vegetative cover is perceived as moderate "quality"; • Visually dominant seascape and landform; • Expressive coastal edge; Sense of exposure • Sense of expansiveness, openness	High-Moderate	• The proposed structures will be seen against a simple and coherent backdrop. The nature of the backdrop here means this site will be less able to receive and visually absorb the proposed new structures than some other sites. • The open character of the site also means that the structures will be clearly open to view, rather than tucked away; • The "quality" of the vegetative backdrop here is perceived as moderate only, reducing the significance of the adverse visual effects of the proposal. • The expansiveness of the context will provide for some absorption, with the prominence of the proposal diminished in comparison to the large scale of the immediately adjacent landform backdrop and the wider surroundings; • Structures are already present at the site, which has adversely affected perceived naturalness, and perceived naturalness will drop further with the introduction of the proposed new structures. However, due to the expansiveness of the site's context it is considered that the natural elements of vegetated landform and seascape will continue to be visually dominant. • There will be a reduction in darkness of night sky from navigational lighting at a range of 1-2 nautical miles. However, lighting is already in place on the existing mussel farm at the site, reducing the significance of this effect. • Surveys of social perceptions carried out in 2001 and 2012 for the Marlborough District Council[32].suggest that the growth in marine farming activities (including salmon farming) was not seen by national and regional visitors as having had a deleterious effect on the valued qualities of the Marlborough Sounds over this period.[33] • Visual effects would be reduced with the use of the circular design, which would have the benefit of a lower profile, more organic shape, and matching the round forms of the central channel farms if they are implemented.	• Expansive context provides for greater absorption; • Locating the barge in a position which allows the adjacent landform to act as a backdrop. • Visual effects would be reduced with use of the circular design option, with its lower profile and softer overall shape. The round design is recommended at this location, at an appropriate size for the site. This design would also synchronise with round mid-channel farms if they are implemented.
Associative Values[34]	• Physical and spiritual values associated with mana whenua, mana moana, and tangata whenua taonga, mauri, customary practices and the exercise of kaitiakitanga • Traditional and contemporary waka routes through Waitata Reach • Recreational uses of the wider Outer Pelorus Sound.	Moderate	• A Tourism and Recreation Assessment (TARA) has concluded that this site will have minimal, if any, impact on tourists or recreationalists; • There may be effects on waka routes on this side of the Reach. This will need to be assessed by a CIA. As mussel farming is already present some Tangata whenua values may not be considered to be intact at the site, and it may be that adverse effects are considered reduced for that reason.	• Pelorus Sound is known as a Sound with a complex mix of uses, including recreation, tourism, production (pasture farming, forestry, marine farming), and regeneration of indigenous vegetation.
Overall Baseline Natural Character[35]		High-Moderate		
Overall Baseline Landscape[36]		High-Moderate		
Resultant Natural Character			Moderate	
Resultant Landscape			Moderate	

[29] In all scoring a 7-point scale is used: Very Low/Low/Low-Moderate/Moderate/Moderate-High/High/Very High.
[30] Includes geomorphological (landforms) and ecological (flora, fauna, habitat, biodiversity and natural systems and processes).
[31] Includes visual and aesthetic values such as coherence, vividness, memorability, perceived naturalness, expressiveness, and transient values.
[32.] Corydon Consultants Ltd, 2001 and Corydon Consultants Ltd, 2012.
[33] The Social and Community Effects of Salmon Farming & Rearing: A Case Study of the Top of the South Island; Taylor Baines & Assocs & Quigley & Watts Ltd; Nov 2015, pg. 69
[34] Includes cultural (Tangata Whenua), historic, and shared and recognised values.
[35] The Overall Baseline rating is reflective of the site's sensitivity to change. In the Marlborough Sounds environment a highly natural site will have higher perceptual ratings as well as high natural science ratings, and will be more sensitive to change. The more modified a site is, the lower the ratings tend to be for both natural science and perceptual/sensory ratings, and the less sensitive a site will be to change.
[36] Ibid

Site: 124 - Horseshoe Bay

Figure 13: Site 124 - Photo from Aircraft

Figure 14: Site 124 - Location Map of Proposed Site

Figure 15: Site 124 - Photo from Boat

PROPOSED SITE: 124 HORSESHOE BAY

Natural Character & Natural Features and Landscapes: Site Specific Assessment

Location: South side of the headland between Richmond Bay and Horseshoe Bay (south-west of Te Kaiangapipi), south-east end of Waitata Reach, Outer Pelorus Sound.

Wider Context: Recent Natural Character/ONC Study[1]

Site is not in any area proposed as ONC.

Terrestrial Area 3 – Bulwer. Proposed site is adjacent to Terrestrial Sub-Area "Eastern Waitata Reach" identified as having High natural character values at Level 4/5.

Marine Area C – Pelorus Sound. Site is not in any Marine Sub-Area identified as having High or Very High abiotic/biotic values at Level 4/5.

Wider Context: Recent Landscape/ONFL Study[2]

Site is part of the Outer Sounds Landscape.

Proposed site is not adjacent to any terrestrial area or in any marine area proposed as ONF at the district scale. (It is opposite terrestrial area proposed as ONF at the district scale at Tapapa Point).

Area 6: Maud Island, Mt Shewell, Fitzroy Bay and Eastern Tawhitinui Reach.

Wider Context: Operative Resource Management Plan

Proposed site is not adjacent to or in any Area of Outstanding Landscape Value.

Site Natural Science Baseline

Geomorpology (Landform)[3]

The proposed site sits against the south-facing side of the small headland formed by a ridge coming down in a north-westerly direction into Waitata Reach from Kauauroa (555masl), at the south end of the Outer Pelorus Sound. The headland has a relatively low elevation of around 200masl, and sits on the north side of Horseshoe Bay.

The south-facing side of the headland has moderately steep slopes above a coastal edge which is rocky and abrupt in some places, but also has stretches of narrow beach. The coastal edge here is heavily indented, with a couple of main bays, one of which sits behind the proposed site (ie to the north of the proposed site), with the slopes of the headland folded into numerous gullies as the land falls to the bay.

Adjacent to the proposed site landform is unmodified. There is some modification to landform and the shoreline further into Horseshoe Bay, where there is a dwelling and jetty.

Terrestrial Ecology

The headland slopes are fairly consistently covered in regenerating indigenous coastal vegetation, with natural vegetative patterns over ridgetops and in the moister gullies expressive of species adaptations. Regeneration appears to be advancing into the secondary stages, with a good density of secondary species apparent in the gullies. (This is in contrast to the other side of the headland, where slopes are north-facing and drier, and coverage lacks the broadleaf diversity).

There is a patch visible where vegetation appears to be more degraded.

Natural Science values previously identified for adjacent Terrestrial Sub-Area "Eastern Waitata Reach" at level 4/5[4] are:

- relatively low levels of modification and extensive areas of regenerating Bush, especially on Forsyth Island
- largely intact podocarp broadleaved forest at Kauauroa Bay. (This is not at this site).

Rating: High-Moderate

Marine Ecology

Pelorus Sound is typified by narrow near-shore reef; sand/shell and then mud offshore, with a typical array of coastal species. Reefs and sediments can often appear relatively barren; there are biogenic communities in places including rhodoliths, hydroids, tube worms, horse mussels and bryozoans.[5]

The coastal margin in Horseshoe Bay is modified by mussel farming right along the length of the shoreline.

Recent ecological benthic assessment at the site has determined that the proposed salmon farm cage area and most of the proposed farm site is situated over sandy mud seabed. Within the proposed farm site boundaries the substratum is mostly sandy mud and there were no habitats or communities of particular ecological or conservation value. Benthic biota was sparsely distributed within the site except for the northeast corner – where more diverse and abundant biota was attributed to the influence of hard substratum in the form of shell-drop from the near-by mussel farm, and also the proximity to the steeply shallowing shoreline and adjacent reef and cobble habitat located approximately 40 m from the site boundary that supports a diverse assemblage of biota. A zone of shell rubble habitat considered to be an uncommon ecological feature in the context of the Pelorus Sound was located approximately 90m north of the northwest corner of the site. Scallops were relatively abundant beneath the cage area and wider site. There was extensive bedrock reef habitat in the vicinity, but not within the proposed farm boundaries. The reef and biogenic habitat in the vicinity of the farm are considered to be significant ecological features. Current speeds were characterised as moderate to high.

Rating: High-Moderate

Summary of Natural Science Characteristics:

- Steep south-facing slopes of a headland (200masl)
- Numerous spurs and gullies falling to a bay;
- Rocky coastal edge with stretches of narrow beach;
- Unmodified landform adjacent to proposed site; some slight landform modifications in adjacent bay;
- Extensive regenerating broadleaf coastal vegetation, moving into secondary stages;
- Coastal margin modified by mussel farms adjacent to proposed site, and the length of the wider bay;
- No habitats or communities of particular ecological or conservation value inside the site boundaries;
- Shell rubble habitat approximately 90m to the north of the site is considered uncommon for Pelorus Sound.

Natural Science Baseline Rating:

- High-Moderate

Key Natural Science Values:

- Extensive regenerating broadleaf coastal vegetation, moving into secondary stages;
- Largely unmodified landform;
- Modification to the coastal margin adjacent to the site, as well as right along the length of the wider Bay;
- No benthic habitats or communities of particular ecological or conservation value inside the site boundaries;
- Shell rubble habitat approximately 90m to the north of the site is considered uncommon for Pelorus Sound

[1] Natural Character of the Marlborough Coast, MDC, 2014; pg.73.
[2] Marlborough Landscape Study, MDC, 2015
[3] Broader geomorphological aspects have been covered previously - refer to Natural Character of the Marlborough Coast, MDC, 2014.
[4] Natural Character of the Marlborough Coast, MDC, 2014; pg.125.
[5] Natural Character of the Marlborough Coast, MDC, 2014; pg.70.

Site Perceptual/Sensory Baseline

Coherence
The vegetated headland slopes form a coherent backdrop to the proposed site. Vegetative patterns are more visually complex, but are the natural patterns of successional regeneration, which create a backdrop of one coherent whole. Coherence is slightly reduced by the appearance of an area where vegetation appears more degraded.
Rating: High

Vividness and Memorability
This headland does not have particularly high memorability, as it does not stand out especially vividly within the context of this part of the Waitata Reach. The headland here is one of a series of repetitive headlands along the edges of the Waitata reach. At this end of the Reach attention tends to be drawn to other large-scale or interestingly-shaped landforms such as Maud Island or Mt Shewell, or the rounded landform on the south side of Horseshoe Bay – Tapapa Point.

At the site there is a sense of enclosure and shelter from channel exposure and business, due to the relatively closely surrounding landforms and the depth (horizontally) of the bay relative to its width, and due to the steepness of the slopes enclosing it. The sense of enclosure and shelter adds to amenity and memorability for users of the Bay.
Rating: Moderate-High

Perceived Naturalness
Perceived naturalness at the site is moderately high. There are no visible structures on the adjacent headland, but the feeling of naturalness is reduced by the presence of mussel farms right the way around the coastal edge of Horseshoe Bay. Due to the unobtrusive nature of the mussel farms and the relatively tightly enclosing steep hills, landform and vegetation are still dominant visually at the site. Visual amenity here is relatively high due to coherence, and the quality and coverage of the vegetation on adjacent slopes.

A dwelling and jetty are also present further into the Bay, although well-concealed by landform.
Rating: Moderate-High

Expressiveness
Landform here is legible as a drowned valley, as is the whole of the Marlborough Sounds. There are no features present immediately adjacent to the proposed site which show particular expressiveness of formative or maritime coastal processes, although on the south side of Horseshoe Bay the landform is highly expressive of the level of submersion of the land type here (Bulwer), which is the most submerged of the Marlborough land ecosystems. [6] With the small size of Horseshoe Bay the landform opposite becomes more closely associated with the proposed site.
Rating: Moderate-High

Transient Values
The site provides a sense of enclosure. There is wildlife, and boat traffic passes the site[7]. The character of the sea is changing, depending on the weather. The site is sheltered and nearing the Inner Sounds Landscape, where the surface of the water is often smoother and calm.
Rating: High

Summary of Perceptual/Sensory Characteristics:

- Small sheltered bay off the main channel;
- Relatively deep (horizontally) bay in comparison to its width;
- Relatively tightly enclosed by steep slopes;
- Distinctive Isthmus and rounded hilltop headland opposite the site to the south;
- Vegetated backdrop has quite complex but consistent and natural patterns;
- Backdrop indigenous vegetative cover is extensive regenerating broadleaf coastal vegetation, moving into secondary stages;
- Structures (mussel farms) are present adjacent to the proposed site and along the length of the bay's edge;
- Surface of the water is often smooth and calm;
- High visual amenity.

Perceptual/Sensory Baseline Rating:

- High-Moderate

Key Perceptual/Sensory Values:

- Backdrop slopes have high visual coherence;
- Backdrop indigenous vegetative cover is perceived as good "quality"
- Visually dominant landform and vegetation;
- Close to highly expressive landforms;
- Close to headland and isthmus which are memorable within the wider context;
- Strong sense of enclosure/shelter;
- Sense of tranquillity.

Site Associative Baseline

While there has been no direct input into this assessment from local community, information has been incorporated from social impact reporting on salmon farms in the Sounds, and from recently completed Cultural Impact and Tourism and Recreation assessments.

Tangata Whenua
Research undertaken shows the historical and widespread activity of each of Te Tau Ihu tribes (Ngāti Koata, Ngāti Kuia, Ngāti Apa ki te Rā Tō, Ngāti Toa Rangatira, Te Ātiawa o Te Waka-a-Māui, Ngāti Rangitāne o Wairau, Ngāti Tama ki Te Tau Ihu and Ngāti Rarua) in Kura Te Au (Tory Channel), Tōtaranui (Queen Charlotte Sound) and Te Hoiere (Pelorus Channel). Every tribe has at some point fished, had kāinga or pā (whether temporary or permanent), or is able to relate kōrero tūpuna in and around these waterways[8].

it is recognised that some iwi may have an interest in an area that is historical (e.g. as a result of historical occupation of an area with accompanying wāhi tapu and other sites of significance), while current mana whenua, mana moana, tāngata whenua is held by another iwi. Additionally, there are instances where mana whenua, mana moana, tāngata whenua interests are overlapping and shared by two, or more iwi. (The term 'mana whenua, mana moana, tāngata whenua' seeks to encompass all the various 'Māori' interests that exist in the areas under investigation).[9]

For mana whenua, mana moana and tangata whenua there will be physical and spiritual values relating to the protection of taonga, mauri, customary uses and practices and the exercise of kaitiakitanga in Te Hoiere.[10], as well as values relating to mahinga kai, manaaki tangata, traditional and contemporary waka routes[11]. Values which have been previously identified[12] in Te Hoiere include:

[6] Natural Character of the Marlborough Coast, MDC, 2014, pg. 118.
[7] Refer to Navigational Risk Review for Proposed Pelorus Sound Salmon Farms, Appendix B; Navigatus Consulting Limited; December 2015
[8] Draft Cultural Impact Assessment; Maximise, 2016, pg 7.
[9] Ibid; pg. 4
[10] Board of Inquiry, NZKS Decision, 23 Feb 2013; pg 248.
[11] Draft Cultural Impact Assessment; Maximise, 2016, pg 15 and Attachment 2.
[12] Board of Inquiry, NZKS Decision, 23 Feb 2013; pg 253.

- Mauri of the waterway/moana;
- Taonga species (including King Shags and dolphins, which are considered taonga and taniwha by Ngati Kuia);
- Traditional waka routes along the eastern side of Waitata Reach;
- Customary scallop fisheries in Waitata Reach
- Reef fishing spots

At this stage there have been no Maori Heritage Sites or additional values publically identiified[13] which relate to this site in particular. More information may become available as consultation continues. In general values relating to the context as a whole will apply

In 1991 work to record coastal (terrestrial) sites of significance to iwi in the Pelorus Sound was undertaken, although the findings are confidential.[14]

Historic
No historic features have been identified at the proposed site.[15]

Shared and Recognised
Waitata Reach is classified by DOC under the ROS system as 'accessible waters' for recreation, which implies a degree of modification to the natural environment and the likelihood of encountering other users and uses of the area. The main recreation and tourism activities in Waitata Reach, as elsewhere in the Marlborough Sounds, are recreational fishing and boating. Other key activities include sightseeing cruises, walking/hiking, fishing and sailing, and diving. (Kayaking is largely focused in inner Pelorus Sound – around the Kenepuru Sound and Tennyson Inlet areas.) Pelorus Sound is less popular for sailing due to the gusty nature of the winds and the shallow upper reaches.

The Waitata Reach is described as experiencing a moderate level of fishing activity. There is a shift by the guided fishing operators to go out past the Pelorus entrance to fish the D'Urville, Stephen and Chetwode Islands surrounds[16]. The Pelorus Mail Boat's Outer Sounds route takes in the bays (Waitata, Richmond, Bulwer and Port Ligar) of Waitata Reach once a week on Fridays[17]. In general the Pelorus Sound does not have the same popularity and high use for recreation and tourism as does the Queen Charlotte Sound.[18] Boats through Pelorus Sound tend for the main part to be for servicing marine farms. Due to the large number of mussel farms in this bay it seems likely that this bay is known for marine farming.

Summary of Associative Characteristics:

- Physical and spiritual values associated with mana whenua, mana moana, and tangata whenua taonga, mauri, customary practices and the exercise of kaitiakitanga
- Traditional and contemporary waka routes through Waitata Reach
- Bay with intensive mussel farming.

Associative Baseline Rating:

- Moderate

Key Associative Values:

- Physical and spiritual values associated with mana whenua, mana moana, and tangata whenua taonga, mauri, customary practices and the exercise of kaitiakitanga
- Traditional and contemporary waka routes through Waitata Reach
- Recreational uses of the wider Pelorus Sound;
- Bay with intensive mussel farming.

Summary: Key Values

	Key Values	*Baseline Rating*
Natural Science	• Extensive regenerating broadleaf coastal vegetation, moving into secondary stages; • Largely unmodified landform; • Modification to the coastal margin adjacent to the site, as well as right along the length of the wider Bay; • No benthic habitats or communities of particular ecological or conservation value inside the site boundaries; • Shell rubble habitat approximately 90m to the north of the site is considered uncommon for Pelorus Sound.	High-Moderate
Perceptual/ Sensory	• Backdrop slopes have high visual coherence; • Backdrop indigenous vegetative cover is perceived as good "quality" • Visually dominant landform and vegetation; • Close to highly expressive landforms; • Close to headland and isthmus which are memorable within the wider context; • Strong sense of enclosure/shelter; • Sense of tranquillity	High-Moderate
Associative	• Physical and spiritual values associated with mana whenua, mana moana, and tangata whenua taonga, mauri, customary practices and the exercise of kaitiakitanga; • Traditional and contemporary waka routes through Waitata Reach • Bay with intensive mussel farming.	Moderate

Conclusion: Proposed Site 124 Natural Character Assessment

Landform is unmodified adjacent to the site. There is extensive regenerating indigenous coastal broadleaf forest over much of the headland slopes adjacent to the proposed site. The regeneration is well into the secondary stages, particularly in gullies. Natural character is reduced here by the presence of a high number of mussel farms adjacent to the site and in the wider bay. No benthic habitats or communities of particular ecological or conservation value have been found inside the site boundaries; although the nearby reef and biogenic habitat are considered to be significant ecological features.

Natural Character Baseline Rating: High-Moderate

Outstanding Natural Character:
This assessment concludes that the site (Level 4/5) does not meet the threshold to qualify as Outstanding Natural Character due to reduced natural science values, and reduced perceptual/sensory values. This conclusion is in agreement with proposed areas of ONC in the 2014 Marlborough Natural Character Study.

[13] Marlborough District Council Smart Maps: Heritage Sites.
[14] Board of Inquiry, NZKS Decision, 23 Feb 2013; pg 254.
[15] Marlborough District Council Smart Maps: Heritage Sites.

[16] Personal communications – Del Carrodus, Havelock and Sounds Water Taxis, 7 June 2016
[17] www.mail-boat.co.nz/mailruns.html
[18] NZ King Salmon Potential Salmon Farm Relocation in Marlborough Tourism and Recreation Assessment (TARA); TRC Tourism Ltd, August 2016, pgs, 18 - 28

Conclusion: Proposed Site 124 Landscape Assessment

The site has moderately high natural science values, and a reasonably high level of visual amenity due to the level of perceived naturalness and high coherence. It also provides a strong sense of enclosure and shelter, which adds to amenity value. Slopes adjacent to the site are not especially distinctive or memorable.

Landscape Baseline Rating: High-Moderate

Outstanding Natural Feature/Landscape

The site is part of the wider Sounds, which is an Outstanding Natural Landscape at the National scale. The proposed site has not been proposed as ONL and is not adjacent to any proposed ONF, at the district scale (Level 3)[19].

This assessment concludes that the site, when assessed at the local site- scale (Level 4/5), does not meet the threshold to qualify as an Outstanding Natural Feature. This is due to reduced natural science values and reduced perceptual/sensory values.

[19] MDC proposed ONFLs have been assessed at a district scale; Marlborough Landscape Study 2015, pg. 104; MDC proposed ONFLs have not been assessed separately at regional and district levels; an ONFL in Marlborough is considered to be an ONFL at both levels; Marlborough Landscape Study 2015, MDC, Pg. 20.

PROPOSED SITE: 124 HORSESHOE BAY

Assessment of Effects from the Proposal

Proposed Change:

- A rectangular above-water steel structure with netting (4 Pens); it is assumed that the structure will be dark in colour, with dark netting. The findings of this assessment are that circular pens would be preferred in terms of landscape effects, and these are commented on in regard to mitigation options below.
- Underwater mooring structures – anchoring the farm in place. (Not visible above water);
- Lighting and Navigation Structures: at each corner of the farm (above the underwater mooring corners), and possibly in the middle of the long sides. Lighting will be visible from a minimum distance of one navigational mile, and possibly up to two navigational miles.[20] Lighting is likely to be in synchronised flashing, to show the form of the farm at night.
- A barge for servicing the farm. This assessment makes the assumptions that:
  - the barge will be located on the northern end or shoreline side of the farm, as close as possible to the adjacent landform, enabling the landform to backdrop that structure;
  - the barge will be the more recent architecturally-designed model, in a dark recessive colour.

Potential Viewing Audience/Visual Appraisal:

The proposal will be visible from the air, but will be mostly viewed by boat traffic. Boat traffic may include water taxis, tour operators, workboats servicing marine farms, cargo boats, logging boats and recreational vessels (fishing/diving/transport to holiday homes) - travelling between Tawhitinui and Waitata Reaches. The navigational surveying of vessel routes provided has shown that the majority of boats passing the proposal will be work boats[21], with routes being close (within 0.5km) to the site as boats travel around Tapapa Point toward inner Pelorus Sound. Views will mostly be transitory, as boats pass the site. Views from small boats will be more side on, with viewers more likely to perceive the structure's height out of the water. Views from larger boats will be from a greater elevation, with viewers more likely to see the rectangular form of the structure, and more of its total area.

If at up to 0.5km distance a white-coloured salmon farm can be expected to be "dominant[22]", visual dominance will be reduced here by the proposed farm design (dark recessive colours) and the site attributes present. At distances of 0.5 – 1km visual "prominence" will be reduced for the same reasons. At 1-2kms views of structures may become faint.

Perceptions of salmon farms by recreational boaties were surveyed in 2015. Results showed that just over half the boatie respondents reported no effect of salmon farms on their experience of the Sounds, while almost one-third reported a negative effect. The most common negative effect reported by boaties was visual blight (12 percent), a feeling of displacement from the bay (10 percent), and course change or navigational risk (6 percent). However salmon farms also commonly attract boaties and visitors on charter vessels. People's responses to the presence of salmon farms varies a great deal, depending on the nature of occupancy, and the experiences, personalities and attitudes of the individuals concerned. [23]. Neighbours have not reported noticeable adverse effects from salmon-farm lighting, whether it be from the accommodation block, navigational aids or under-water lighting.[24]

Pelorus Sound has been determined to have significantly less vessel activity than other areas of the Marlborough Sounds[25].

There is a residence inside Horseshoe Bay. The resident will gain up-close views in traveling past the farm to the dwelling, however visual effects are considered educed overall because views from the dwelling of the farm will be blocked by landform.

Tui Nature Reserve is situated opposite the site on the other side of Waitata Reach with the primary views obtained at a distance of over 4kms. The proposed farm will be visible, but at this distance it is likely to appear faint, especially given that structures will be dark and recessive in colour. A white-coloured farm has been assessed as being "visible" at distances of 2.5-5kms from elevated land-based views. It is likely that visual effects will be reduced here by the farm design and site characteristics, possibly to "partially visible" on a clear day, given the distances.

Maud Island Gun Emplacement Track is the only public walking track in the Waitata Reach – views may be possible from some points on the track, although the track is largely in bush and approximately 2.5km from the proposed farm.

Site Sensitivity:

This location has a baseline value of High-Moderate for both Natural Character and Landscape. The moderate-high flow rate does reduce the sensitivity of the benthic environment to a degree. There are no unique factors that warrant adjustment to the baseline Landscape Sensitivity for this location.

Assessment of Landscape Effects

For detailed assessment of effects refer to the table below.

Conclusion: Proposed Site 124 – Effects on Natural Character

There will be adverse effects on the perceptual/sensory aspect of natural character from this proposal, including loss of perceived naturalness, and some reduction in night sky darkness (although there is already lighting from mussel farms). While it is considered that the enclosure provided by the site will shield some of the wider context from adverse effects, effects on natural character will be amplified at the site by the smaller scale of the setting. Adverse effects could be reduced with the use of the alternative circular farm design in a recessive dark colour.

The natural science aspect of natural character has an existing baseline of high-moderate. The presence of the adjacent mussel farms and those through Horseshoe Bay already affect the natural science values. Recent modelling of potential benthic effects[26] has shown that at a feed rate of 1500 tonnes/year, enrichment beneath the cages would be at an acceptable level, and the wider deposition footprint would not be expected to extend to the reef area (shell rubble habitat) to the north of the site. (adjacent to Te Kaingapipi). Benthic taxa sensitive to the effects of deposition would be displaced on the seabed below the cages, but overall ecological effects would be moderate at a feed rate which meets the Enrichment Stage requirement.

Overall adverse effects on natural character are not assessed as likely to be significant at the site scale (Level 4/5). Given the High-Moderate natural science baseline and predicted benthic effects, the presence of existing mussel farms, and the character of the proposal and context, the proposal results in a Moderate Natural Character rating.

It is not considered that natural character effects at the Level 3 scale[27] will be significant. Values at this scale are broad, and the site is only a very small part of the context this scale. The site is not in area proposed as Outstanding Natural Character at the Level 3 scale.

Effects on the Marlborough Sounds natural character values at a national scale are considered to be insignificant.

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[20] Navigational Risk Review for Proposed Pelorus Sound Salmon Farms, Navigatus Consulting Limited; December 2015; pg 24. Visibility range of 1 nautical mile is recommended as a minimum for lighting, with range being able to be increased to 2 nautical miles economically.
[21] Navigational Risk Review for Proposed Pelorus Sound Salmon Farms, Appendix B; Navigatus Consulting Limited; December 2015
[22] Proposed Salmon Farms Marlborough Sounds, Natural Character Landscape and Visual Amenity Effects Final Report Prepared for King Salmon; Boffa Miskell, August 2011, pg. 24.
[23] The Social and Community Effects of Salmon Farming & Rearing: A Case Study of the Top of the South Island; Taylor Baines & Assocs & Quigley & Watts Ltd; Nov 2015, pgs. 37 - 40.
[24] Ibid; pg 43.
[25] Ibid; Pg 18.
[26] Ecological Benthic Assessment for Proposed Salmon Farm Sites – Part 2: Assessment of Potential Effects; Niwa, June 2016.
[27] Natural Character of the Marlborough Coast, MDC, 2014

Conclusion: Proposed Site 124 – Effects on Landscape Character

The proposal will result in a higher number of structures at the site than currently exist. Views from passing boats will typically be in quite close range, but viewers will for the most part be work boats, and passing traffic volumes are relatively low. While the wider context is shielded from effects to some degree by landform, the enclosed nature of the site, and its highly coherent backdrop will amplify visual effects of the proposal at the site. On balance it is considered that the size of the bay will be able to visually absorb the proposal.

There will be adverse effects on landscape character resulting from the proposal, with a reduction in perceived naturalness at the site. On balance it is considered that the size of the bay will be able to absorb the proposal and the resultant landscape rating will be Moderate. Adverse effects could be reduced with the use of the alternative circular farm design in a recessive dark colour.

Overall landscape and visual effects from the proposal are not considered to be significant at the site scale (Level 4/5), with the context providing a number of mitigating factors, including the scale of the bay and the working character.

In terms of district-scale values, the site is not part of or adjacent to any proposed ONFL. It does lie within an area proposed as "High Amenity". It is not considered that landscape and visual effects at the district scale will be significant. The proposal will be a fit with the existing character of the wider context, and visual amenity effects and reduction in perceived naturalness at that scale will be very small. The Reach is already characterised by fairly extensive marine farming, including salmon farms. Cumulative effects are discussed in a separate section at the start of this report.

Regional-scale values have not been separately identified by MDC[28]. It is considered that as district scale landscape values will not be significantly affected, any larger-scale regional landscape values will also not be significantly affected by this proposal. At that large scale values will be broader again in nature, and the site forms only a very small part of the context.

Landscape and visual effects on the Marlborough Sounds Outstanding landscape values at a national scale are considered to be insignificant, with those Outstanding values remaining intact.

[28] MDC proposed ONFLs have been assessed at a district scale; Marlborough Landscape Study 2015, pg. 104; MDC proposed ONFLs have not been assessed separately at regional and district levels; an ONFL in Marlborough is considered to be an ONFL at both levels; Marlborough Landscape Study 2015, MDC, Pg. 20.

Site 124 Horseshoe Bay Assessment of Effects				
Character Component (NZCPS)	***Existing Character***	***Assessment of Effects***		
	Key Values	***Baseline Rating[29]***	***Effects***	***Mitigation*** *(Including site characteristics and proposal design features).*
Natural Science [30]	• Extensive regenerating broadleaf coastal vegetation, moving into secondary stages; • Largely unmodified landform; • Modification to the coastal margin adjacent to the site, as well as right along the length of the wider Bay; • No benthic habitats or communities of particular ecological or conservation value inside the site boundaries; • Shell rubble habitat approximately 90m to the north of the site is considered uncommon for Pelorus Sound.	High-Moderate	• No change to landform or landcover; • Further modification to the coastal margin. Recent modelling of potential benthic effects has shown that at a feed rate of 1500 tonnes/year, enrichment beneath the cages would be at an acceptable level, and the wider deposition footprint would not be expected to extend to the reef area (shell rubble habitat) to the north of the site (i.e. adjacent to Te Kaingapipi). Benthic taxa sensitive to the effects of deposition would be displaced on the seabed below the cages, but overall ecological effects would be unlikely to be significant at the specified feed rate.	
Perceptual/ Sensory[31] Values	• Backdrop slopes have high visual coherence; • Backdrop indigenous vegetative cover is perceived as good "quality" • Visually dominant landform and vegetation; • Close to highly expressive landforms; • Close to headland and isthmus which are memorable within the wider context; • Strong sense of enclosure/shelter; • Sense of tranquillity	High-Moderate	• The proposed structures will be seen against a highly coherent backdrop. The nature of the backdrop here means this site will be less able to receive and absorb the proposed new structures than some other more visually complex and less coherent sites. • The structures will be placed against slopes where the quality of the vegetation is perceived as fairly good, meaning an increase in adverse effects on visual amenity and perceived naturalness. • Numerous mussel farm structures are present near the site in Horseshoe Bay, and perceived naturalness will drop further with the introduction of the proposed new structures. The proposal would be a "fit" with the productive character, 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. • The sense of enclosure in the bay will amplify the visual impact of the proposal, with the new structures appearing more prominent in this setting. • There will be a reduction in darkness of night sky from navigational lighting, but effects will be somewhat contained by the enclosing landform. The significance of these effects is also considered reduced by the presence of existing lighting on mussel farms in the Bay. Tui Nature Reserve is beyond the 2 nautical mile likely maximum visibility distance for lighting. • The enclosure provided by the bay does shield the wider context from effects at the bay, which is a mitigating factor. • The bay does not have a high volume of Pelorus Sound's boat traffic passing by, but the fact that most boats viewing the proposal are work boats will be a mitigating factor. • Surveys of social perceptions carried out in 2001 and 2012 for the Marlborough District Council**32**.suggest that the growth in marine farming activities (including salmon farming) was not seen by national and regional visitors as having had a deleterious effect on the valued qualities of the Marlborough Sounds over this period.**33** • Visual effects would be reduced to low with use of the less obtrusive circular design option, with its lower profile and softer overall shape. • There will be visual effects for the resident of the dwelling in Horseshoe Bay, as they will need to pass closely by the farm to reach the dwelling. Visual effects are considered reduced because there is extensive marine farming in the Bay already. However there will also be amenity effects in that the resident may well have to actively avoid the farm in travelling through the bay to reach the dwelling, especially if travelling from the north.	• Enclosed setting provides some shielding from effects for the wider context; • Locating the barge in a position against the landform will allow the adjacent landform to act as a backdrop, reducing its visual effects. • Passing boat traffic is mostly work-boats, not high volume pleasure vessels. • Visual effects would be reduced with use of the circular design option, with its lower profile, and softer overall shape. The round design is recommended at this location. This design would also synchronise with round mid-channel farms if they are implemented.
Associative Values[34]	• Physical and spiritual values associated with mana whenua, mana moana, and tangata whenua taonga, mauri, customary practices and the exercise of kaitiakitanga • Traditional and contemporary waka routes through Waitata Reach;; • Recreational uses of the wider Pelorus Sound; • Bay with intensive mussel farming.	Moderate	• A Tourism and Recreation Assessment (TARA) has concluded that this site will have minimal, if any, impact on tourists or recreationalists. • There may be effects on traditional waka routes on this side of the Reach. This will need to be assessed by a CIA. Given the existing modification of the coastal margin at the site some values may not be considered to be intact at the site,and it may be that adverse effects are considered reduced for that reason. • The proposal would be a "fit" with existing uses associated with this bay.	• Pelorus Sound is known as a Sound with a complex mix of uses, including recreation, production (pasture farming, forestry, marine farming), and regeneration of indigenous vegetation. • The proposal would be a "fit" with existing uses associated with this bay.
Overall Baseline Natural Character[35]		High-Moderate		
Overall Baseline Landscape[36]		High-Moderate		
Resultant Natural Character			Moderate	
Resultant Landscape			Moderate	

[29] In all scoring a 7-point scale is used: Very Low/Low/Low-Moderate/Moderate/Moderate-High/High/Very High.
[30] Includes geomorphological (landforms) and ecological (flora, fauna, habitat, biodiversity and natural systems and processes).
[31] Includes visual and aesthetic values such as coherence, vividness, memorability, perceived naturalness, expressiveness, and transient values.
[32]. Corydon Consultants Ltd, 2001 and Corydon Consultants Ltd, 2012.
[33] The Social and Community Effects of Salmon Farming & Rearing: A Case Study of the Top of the South Island; Taylor Baines & Assocs & Quigley & Watts Ltd; Nov 2015, pg. 69
[34] Includes cultural (Tangata Whenua), historic, and shared and recognised values.
[35] The Overall Baseline rating is reflective of the site's sensitivity to change. In the Marlborough Sounds environment a highly natural site will have higher perceptual ratings as well as high natural science ratings, and will be more sensitive to change. The more modified a site is, the lower the ratings tend to be for both natural science and perceptual/sensory ratings, and the less sensitive a site will be to change.
[36] Ibid

Site: 42 - Tipi Bay

Figure 16: Site 42 - Photo from Aircraft

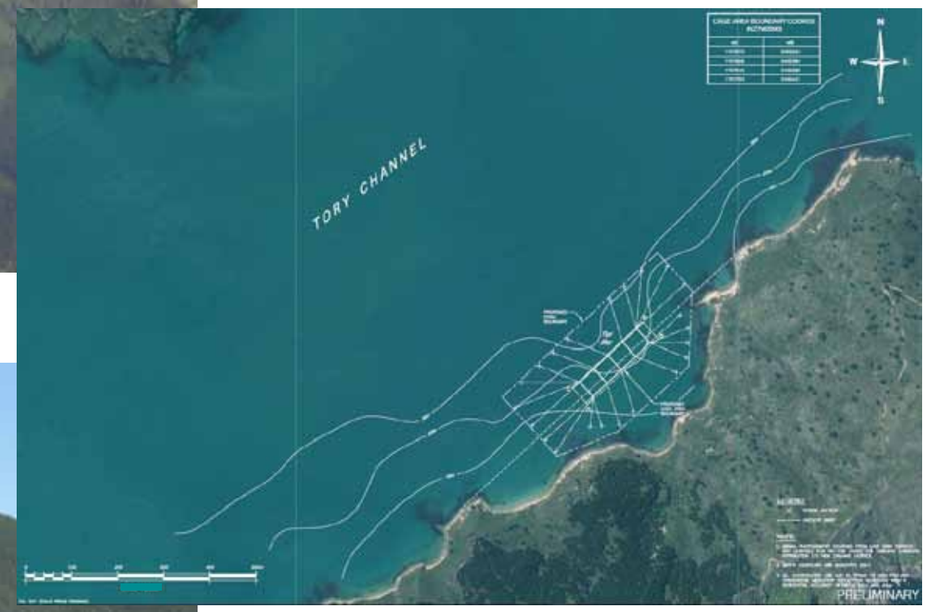

Figure 17: Site 42 - Location Map of Proposed Site

Figure 18: Site 42 - Photo from Boat

PROPOSED SITE: 42 TIPI BAY

Natural Character & Natural Features and Landscapes: Site Specific Assessment

Location: Tipi Bay, south side of Tory Channel, approximately 3.5kms from the mouth of the Channel.
Wider Context: Recent Natural Character Study[1]
Site is not in any area proposed as ONC. (Nearest ONC area is at the mouth of Tory Channel, at a distance of 3.5km).
Terrestrial Area 4 – Arapawa. Proposed site is not adjacent to Terrestrial Sub-Area identified as having High or Very High natural character values at Level 4/5.
Marine Area E – Tory Channel. Proposed site is part of Marine Sub-Area Tory Channel identified as having High abiotic/biotic values at Level 4/5.
Wider Context: Recent Landscape Study[2]
Site is part of the Outer Sounds Landscape.
Site is adjacent to a terrestrial area proposed as ONF at the district scale (West Head, at the gateway to Tory Channel).
Area 14: Arapawa Islands and East and West Heads.
Wider Context: Operative Resource Management Plan
Site is back-dropped by an Area of Outstanding Landscape Value.
Site is back-dropped by Tipi Recreation Reserve.

Site Natural Science Baseline

Geomorphology (Landform)[3]
The proposed site is backed (to the south-east) by the north-west-facing slopes of a ridge which drops to the north-east to form the entry into Tory Channel from Cook Strait (West Head). The coastal edge behind the site (i.e. south-east of the site) is heavily indented, with a number of small bays and coves being formed by spurs dropping from the main ridge into Tory Channel. The proposed site sits in a small but wide bay (Tipi Bay), which is open to the main channel.

The bay is only shallowly enclosed, with spurs and gullies rising steeply behind it to the ridgetop, reaching an elevation of around 200masl directly east of the site, before the ridge then drops to the gateway to Cook Strait/Tory Channel. It is the spurs dropping from this peak which shallowly encloses the proposed site from the gateway between Tory Chanel and Cook Strait. South-west of the proposed site the ridge continues to rise, reaching a peak of 260masl directly south of the bay, before it continues to travel south-west towards Port Underwood.

Slopes behind Tipi Bay are relatively steep, and landform appears unmodified. Modification is evident further east, in the form of roads and a small number of buildings. A road does traverse the slopes behind the proposed site, but this follows the ridgetop and is not discernible from the proposed site. The coastal edge is rocky with exposed bluffs and small cliffs.

Terrestrial Ecology
Most of the area directly behind the site and to the south-east has vegetative cover of a mix of regenerating native scrub with patches of gorse and wilding pines. To the south-west is a block of forestry on the upper slopes, with an edge of regenerating native scrub and wilding pines on slopes immediately above the coastal edge, and in the main gully behind the site.

There will be some existing natural science value in the areas of regenerating scrub here; but the area of forestry is likely to be causing some disruption to natural patterns such as water and nutrient cycling, chemical properties of the soil and the succession of indigenous vegetation. Value of native vegetation may increase with time as the land is a Reserve, although wilding pines may also increase.
Rating: Moderate

Marine Ecology
The whole of Tory Channel (excluding marine farm areas) has been previously identified as having High abiotic/biotic values at the 4/5 level[4]. Key Values previously identified are:

- narrow deep channel dominated by strong tidal flows, sheltered wave climate and proximity to Cook Strait;
- shallow side bays;
- numerous ecologically significant marine sites distinguished by high current communities;
- unique natural character area as a whole;
- adjoins Coastal Marine Area G.

The coastal margin at this site is unmodified.

Recent ecological benthic assessment[5] has determined that a wide range of habitat types and communities are present at this site. Throughout most of the site, the substratum is whole shell, shell hash and muddy sands, with zones of low-relief broken rock and bedrock patches supporting diverse encrusting biota and biogenic aggregations comprising bryozoans (including *Celleporaria agglutinans*), various sponges, ascidians, hydroids, macroalgae and associated invertebrates including polychaetes. Areas of this habitat type are located between the cage area boundary and the outer site boundary at both ends of the Tipi Bay site. Associated with this habitat is a diverse range of fish including butterfly perch, terakihi and blue cod. Ecologically important stands of bladder kelp (*Macrocystis pyrifera*) are present within the inshore portion of the site. Kina and paua are present within the greater site boundary area. Small areas of seagrass habitat occur in places inshore of the site boundary. The reef and biogenic habitat areas within the farm boundary are considered to be notable ecological features with ecologically significant habitats. No data on currents at the site was reported.

Rating: High

Summary of Site Natural Science Characteristics:

- Wide, shallow side bay on the edge of and open to the main channel;
- Close to but shallowly enclosed from the gateway between Tory Channel and Cook Strait;
- Steep slopes; a mix of regenerating native scrub, exotic plantation forestry (pine), and wilding pines;
- Rocky coastal edge with exposed bluffs and small cliffs;
- Largely unmodified landform;
- Unmodified coastal margin;
- To the immediate side of narrow deep channel with strong tidal flows;
- A wide range of benthic habitat types and communities are present at the site;
- Ecologically important stands of bladder kelp (*Macrocystis pyrifera*) are present within the inshore portion of the site.

Natural Science Baseline Rating:

- High-Moderate

Key Natural Science Values:

- Largely unmodified landform;
- Areas of regenerating indigenous vegetation – early stage ;
- Presence of plantation forestry and wilding pines;
- Unmodified coastal margin;
- A wide range of benthic habitat types and communities are present at the site with the reef being particularly special;
- Ecologically important stands of bladder kelp (*Macrocystis pyrifera*) are present within the inshore portion of the site.
- Significant marine high current communities.

[1] Natural Character of the Marlborough Coast, MDC, 2014; pg.73.
[2] Marlborough Landscape Study, MDC, 2015.
[3] Broader geomorphological aspects have been covered previously - refer to Natural Character of the Marlborough Coast, MDC, 2014.
[4] Natural Character of the Marlborough Coast, MDC, 2014; pg.85
[5] Ecological Benthic Assessments for Proposed Salmon Farm Sites, Part 1; Niwa, April 2016.

Site Perceptual/Sensory Baseline

Coherence
The visual coherence of the backdrop adjacent to the site (slopes rising from Tipi Bay) is low due to fragmented vegetation patterns and a mix of vegetation types. Vegetation comprises a mix of exotic (pine) forestry, regenerating coastal scrub, gorse and wilding pines. There is a visual contrast between the forestry blocks and the areas of regenerating vegetation, which reduces the appearance of the adjacent slopes as one coherent whole.
Rating: Low

Vividness and Memorability
The proposed site is not particularly distinctive either in terms of its individual attributes or in terms of its position within the context of the entrance to Tory Channel. The site is well past the drama of the "gateway" to the Channel, and is inside the Sound proper, enclosed – although only shallowly, by landform from the "gateway". The site melds into the wider context and "working landscape" character of Tory Channel and due to that will not have high memorability.
Rating: Low.

Perceived Naturalness
The proposed site has some degree of perceived naturalness due to the lack of structures on immediately adjacent slopes, but this is reduced by the appearance of the slopes as part of a managed, productive landscape. Parts are in plantation forestry, and although there are no structures present at the site, structures are visible in the wider area, including dwellings, farm buildings, tracks and roads. Further into the Sound a salmon farm (Ngamahau) is also visible. The vegetative cover does include areas of early-stage regenerating indigenous vegetation, but these are not perceived as advanced or high quality, with a predominance of Gorse covering the adjacent hill.

At the larger scale, the site affords some reasonably long views down Tory Channel to the south-west, but Tory Channel is relatively narrow and confined, and despite the site's open edge-character, it is fairly enclosed by surrounding landforms. For that reason it is also highly impacted by the character of its wider surroundings. Although landform, vegetation and seascape are still the dominant visual elements in this setting, the managed character of the land is the defining characteristic.

There is a feeling of remoteness at the site, due to its location approaching the gateway to Cook Strait. But remoteness is reduced by the working character of the wider context.
Rating: Moderate

Expressiveness
The landform here is legible as part of a drowned valley system (as is the landform throughout the Sounds). The rocky coastal edge at this proposed site - with its exposed bluffs and low cliffs, is also expressive of the extreme maritime conditions and on-going coastal processes in action at this location, although less dramatically so than some other parts of the wider context here such as the outer cliffs facing Cook Strait that are still within the same Area 14 District landscape unit of the MEP.
Rating: Moderate

Transient Values
The site is just to the side of the main channel. With Tory Channel being the main sea transport route between the North and South Islands, there is a regular boat traffic passing the site daily[6]. Seals, dolphins and even whales are seen at times in Tory Channel.
Rating: Moderate

Summary of Site Perceptual/Sensory Characteristics:

- Approaching the gateway between Tory Channel and Cook Strait;
- Shallowly-enclosed side-bay, on the edge of the main channel;
- Backed by steep slopes – low elevation;
- Some quite long views south-west down Tory Channel, but restricted in general by enclosing the Channel's landforms;
- Adjacent slopes are a mix of gorse and regenerating vegetation and productive forestry;
- Part of a wider productive landscape with a high level of human modification evident;
- No structures present at the site;
- To the side of the busy transport route;
- To the edge of a busy transportation route;

Perceptual/Sensory Baseline Rating:

- Low-Moderate

Key Perceptual/Sensory Values:

- Approaching the gateway between Tory Channel and Cook Strait;
- Open character, but within an enclosed wider setting;
- Working, productive character, within a wider working landscape;
- Some remoteness, but that is reduced by the character of the context;
- Fits uniformly into the wider context; low vividness and memorability within that context;
- Landform and vegetation visually dominant;
- Complex vegetative patterns with low coherence and low perceived naturalness.

Site Associative Baseline

While there has been no direct input into this assessment from local community, information has been incorporated from social impact reporting on salmon farms in the Sounds, and from recently completed Cultural Impact and Tourism and Recreation assessments.

Tangata Whenua[7]
Research undertaken shows the historical and widespread activity of each of Te Tau Ihu tribes (Ngāti Koata, Ngāti Kuia, Ngāti Apa ki te Rā Tō, Ngāti Toa Rangatira, Te Ātiawa o Te Waka-a-Māui, Ngāti Rangitāne o Wairau, Ngāti Tama ki Te Tau Ihu and Ngāti Rarua) in Kura Te Au (Tory Channel), Tōtaranui (Queen Charlotte Sound) and Te Hoiere (Pelorus Channel). Every tribe has at some point fished, had kāinga or pā (whether temporary or permanent), or is able to relate kōrero tūpuna in and around these waterways.[8].

It is recognised that some iwi may have an interest in an area that is historical (e.g. as a result of historical occupation of an area with accompanying wāhi tapu and other sites of significance), while current mana whenua, mana moana, tāngata whenua is held by another iwi. Additionally, there are instances where mana whenua, mana moana, tāngata whenua interests are overlapping and shared by two, or more iwi. (The term 'mana whenua, mana moana, tāngata whenua' seeks to encompass all the various 'Māori' interests that exist in the areas under investigation).[9] For mana whenua, mana moana and tangata whenua there will be physical and spiritual values relating to the protection of taonga, mauri, customary uses and practices and the exercise of kaitiakitanga in Te Kura Te Au.[10], as well as values relating to mahinga kai, manaaki tangata, and traditional and contemporary waka routes[11].

[6] Refer to Navigational Risk Review for Proposed Tory Channel Salmon Farms, Navigatus Consulting Limited; December 2015
[7] Maps of Maori Reserve Lands were provided to the Board of Inquiry, NZKS Decision Feb 2013 by David Alexander, but no evidence was heard that these lands were adversely affected. BOI, NZKS Decision pg 262.
[8] Draft Cultural Impact Assessment; Maximise, 2016, pg 7.
[9] Ibid; pg. 4
[10] Board of Inquiry, NZKS Decision, 23 Feb 2013; pg 248.
[11] Draft Cultural Impact Assessment; Maximise, 2016, pgs 15.

There is evidence of early Maori settlement/activity throughout Te Kura Te Au and the Arapawa Island areas, and there is ongoing cultural association with Te Kura Te Au, which has been identified as having a role as a "food basket" and "engine room" for the whole of Totaranui (Queen Charlotte Sound).[12]

There have been no specific Maori Heritage Sites or additional values publicly identified[13] which relate to this site in particular. Values relating to the context as a whole will apply. (There are two Maori Heritage sites to the north-east of the proposed site, on the opposite side of the Channel at Te Awaiti Bay) [14].

A recent Cultural Impact Assessment (CIA) has identified historical involvement of local iwi in commercial enterprise near this site, and a need to discuss options for developing Tipi Bay with Te Ātiawa, Te Tau Ihu commercial fisheries collective, and other mana whenua, mana moana, tāngata whenua, as appropriate.[15]

Historic

The first whaling station in New Zealand was established in Tory Channel, at Te Awaiti, and is reputed to be the first European settlement on the South Island. Remnants of the original jetty remain visible on the beach southwest of the proposed farm site. No historic features have been identified at the site.[16]

Shared and Recognised

Tory Channel is well known as the main route between the North and South Islands, and leads to the actual gateway which provides a transition between the wildness of Cook Strait and shelter of the Marlborough Sounds. It also has a number of jetties and wharfs in the bays along its edge. It is an area of low active recreation and tourism use in comparison to Queen Charlotte Sound and parts of Pelorus Sound, with no known daily tour routes and only moderate recreational fishing levels. The main recreation and tourism activities in the vicinity are daily Interislander and Blue Bridge ferries, recreational boating (predominantly vessels over 5 metres) and fishing. Regular boat traffic through the channel is an existing use and as a result the Tory Channel could be considered more of a thoroughfare than a destination for tourism and recreation.

This area is not a major Picton scenic cruise and/or charter location; however, Beachcomber Cruises and the Cougar Line do operate Tory Channel routes each week[17]. While fishing occurs throughout the Queen Charlotte Sound, the area from the Tory Channel entrance through to Cape Jackson (over 28km away) is frequently used by recreational fishers and fishing tourism operators.

The Tory Channel is classified by DOC under the ROS system as an 'accessible' recreation area. Characteristics of 'accessible waters' include: "the waterways and/or adjacent land are readily accessible. Water is commonly plied by runabouts, trailer sailors, and other small vessels. Modification is apparent but not dominant."

Discussions with some tourism operators indicate an acceptance of salmon farms in Tory Channel [18]

Roughly a third of the length of the proposed out-of-water structures will sit in front of Tipi Recreation Reserve.

Summary of Site Associative Characteristics:

- East of the site is the headland gateway between Tory Channel and Cook Strait;
- Tory Channel is known as the main transportation route between North and South Islands;
- History of settlement in the wider Tory Channel/Arapawa Island area; important physical and spiritual values relating to mana whenua, mana moana and tangata whenua protection of taonga, mauri, customary practices and the exercise of kaitiakitanga;
- Historical involvement of local iwi in commercial enterprise near this site;
- The wider Channel is used for boating, crayfish diving and spear-fishing;
- Part of the proposal sits in front of Tipi Recreation Reserve.

Associative Baseline Rating:

- High-Moderate

Key Associative Values:

- East of the site is the headland gateway between Tory Channel and Cook Strait;
- Tory Channel known as the link between North and South Island
- Cultural heritage and historical sites within the wider Tory Channel/Arapawa Island area;
- Physical and spiritual values associated with mana whenua, mana moana and tangata whenua taonga, mauri, tangata whenua customary practices and the exercise of kaitiakitanga;
- Historical involvement of local iwi in commercial enterprise near this site
- Recreational use of the wider Tory Channel area
- Part of the proposal sits in front of Tipi Recreation Reserve.

[12] Board of Inquiry, NZKS Decision, 23 Feb 2013; pg 262
[13] Marlborough District Council Smart Maps: Heritage Sites.
[14] Marlborough District Council Smart Maps: Heritage Sites.
[15] Draft Cultural Impact Assessment; Maximise, 2016, pgs 19, 21.
[16] Marlborough District Council Smart Maps: Heritage Sites.

[17] www.mailboat.co.nz/pgs/cruises/mail_run/mail_run.php and www.cougarline.co.nz
[18] NZ King Salmon Potential Salmon Farm Relocation in Marlborough Tourism and Recreation Assessment (TARA); TRC Tourism Ltd. August 2016, pgs, 30 - 33

Summary: Key Values

	Key Values	*Baseline Rating*
Natural Science	• Largely unmodified landform; • Areas of regenerating indigenous vegetation; • Presence of plantation forestry and wilding pines; • Unmodified coastal margin; • A wide range of benthic habitat types and communities are present at the site with the reef being particularly special; • Ecologically important stands of bladder kelp (*Macrocystis pyrifera*) are present within the inshore portion of the site; • Significant marine high current communities. .	High-Moderate
Perceptual/Sensory	• Approaching the gateway between Tory Channel and Cook Strait; • Open character, but within an enclosed wider setting; • Working, productive character, within a wider working landscape; • Some remoteness, but that is reduced by the character of the context; • Fits uniformly into the wider context; low vividness and memorability within that context; • Landform and vegetation visually dominant; • Complex vegetative patterns with low coherence and low perceived naturalness.	Low-Moderate
Associative	• East of the site is the headland gateway between Tory Channel and Cook Strait; • Tory Channel known as the link between North and South Island • Cultural heritage and historical sites within the wider Tory Channel/Arapawa Island area; • Physical and spiritual values associated with mana whenua, mana moana and tangata whenua taonga, mauri, customary practices and the exercise of kaitiakitanga; • Historical involvement of local iwi in commercial enterprise near this site; • Recreational use of the wider Tory Channel area; • Part of the proposal sits in front of Tipi Recreation Reserve.	High-Moderate

Conclusion: Proposed Site 42 Natural Character Assessment

(Note: This study considers marine and terrestrial environments together for the assessment of natural character baseline).
The terrestrial area adjacent to the site is mixed early-stage native regeneration, gorse, and wilding pines, with an area of pine forestry. There is some natural science value in the areas of indigenous scrub. There is a wide range of benthic habitat types and communities at the site; ecologically important stands of bladder kelp (Macrocystis pyrifera) are present within the inshore portion of the site. The coastal margin here is unmodified. Perceptual/sensory values for the site are considered to be low-moderate.
Natural Character Baseline Rating: High-Moderate

Outstanding Natural Character:
This assessment considers that the site (Level 4/5) does not meet the threshold for Outstanding Natural Character. Natural science values at the site appear to be fairly typical of Tory Channel, with modified terrestrial environment and benthic values aligning with the proposed rating of marine values for Tory Channel in the 2014 Marlborough Natural Character Study as High rather than Outstanding.

Conclusion: Proposed Site 42 Landscape Assessment

The site is part of a working landscape just to the side of a busy transportation route. Visual amenity is not particularly high for this site, and neither are perceptual/sensory values. Benthic natural science values are high, but at the moment these are also reduced due to the adjacent exotic forestry. The site does have some association with the gateway to Cook Strait, but it is well into the main channel and past the "drama" of the gateway. It is considered more a part of the channel than the headland gateway to the channel.
Landscape Baseline Rating: Moderate

Outstanding Natural Feature:
The site is part of the wider Sounds, which is an Outstanding Natural Landscape at the National Scale. Slopes adjacent to the proposed site have also been proposed as ONF at the district scale[19]. This status relates to a wide area, including the seaward facing slopes on the southern side of Tory Channel and much of Arapawa Island. The associative values of the Gateway relate to the ferry route and the narrow entrance to Tory Channel past East and West heads.

This assessment concludes that the proposed site, when assessed at the localised site scale (Level 4/5), does not meet the threshold for Outstanding Natural Feature classification, due to reduced natural science and perceptual/sensory values. The site does have some association with the gateway between Tory Channel and Cook Strait, and the adjacent recreation reserve, but the site is well into the main channel and past the "drama" of the headland gateway.

[19] MDC proposed ONFLs have been assessed at a district scale; Marlborough Landscape Study 2015, pg. 104; MDC proposed ONFLs have not been assessed separately at regional and district levels; an ONFL in Marlborough is considered to be an ONFL at both levels; Marlborough Landscape Study 2015, MDC, Pg. 20.

PROPOSED SITE: 42 TIPI BAY

Assessment of Effects from the Proposal

Proposed Change:

- A rectangular above-water steel structure with netting (4 pens); the structure is assumed to be dark in colour, with black netting and a barge.
- Underwater mooring structures – anchoring the farm in place. (Not visible above water);
- Lighting and Navigation Structures: at each corner of the farm (above the underwater mooring corners), and possibly in the middle of the long sides. Lighting will be visible from a minimum distance of one nautical mile, and possibly up to two nautical miles. [20] Lighting is likely to be in synchronised flashing, to show the form of the farm at night.
- A barge for servicing the farm. This assessment makes the assumptions that:
  - the barge will be located on one end or shoreline side of the farm, as close as possible to the adjacent landform, enabling the landform to backdrop that structure;
  - the barge will be the more recent architecturally-designed model, in a dark recessive colour.

Potential Viewing Audience/Visual Appraisal:

The proposal will be visible from the air, but will be mostly viewed by boat traffic. A good proportion of the boat traffic is likely to be pleasure vessels, as Tory Channel is used for recreation, although it is not considered a high-recreational-use part of the Sounds. It is the route of the inter-island ferries. There will also be work-boats, fishing boats and cargo vessels passing the site. Views will mostly be transitory. Views from small boats will be more side on, with viewers more likely to perceive the structure's height out of the water. Views from larger boats will be from a greater elevation, with viewers more likely to see the rectangular form of the structure, and more of its total area. Given the narrow width of Tory Channel views from boats will be relatively close. The navigational surveying of vessel routes provided for this assessment has shown that the ferry route is approximately 410m from the proposed structures[21].

If at up to 0.5km distance a white-coloured salmon farm can be expected to be visually "dominant[22]" from the water, that visual dominance will be reduced here by the proposed farm design (dark recessive colours), with the site attributes and context providing further mitigating factors. At distances from 0.5 - 1km visual prominence will be reduced for the same reasons. At 1-2kms views of structures may become faint.

From more elevated views (such as from dwellings or from the ferries), if at up to 1km views of a white-coloured salmon farm can be expected to be "dominant", visual dominance can be expected to be reduced here by the proposed farm design (dark recessive colours), with the site attributes and context providing further mitigating factors. At distances greater than 1-2.5kms visual prominence will be reduced for the same reasons. Beyond that views of structures may become difficult to see. Views of the proposal may be possible from a dwelling at the entrance to Deep Bay, from a distance of just over 2kms. Views may be reduced to "visible" rather than "prominent".

Perceptions of salmon farms by recreational boaties were surveyed in 2015. Results showed that just over half the boatie respondents reported no effect of salmon farms on their experience of the Sounds, while almost one-third reported a negative effect. The most common negative effect reported by boaties was visual blight (12 percent), a feeling of displacement from the bay (10 percent), and course change or navigational risk (6 percent). However salmon farms also commonly attract boaties and visitors on charter vessels. People's responses to the presence of salmon farms varies a great deal, depending on the nature of occupancy, and the experiences, personalities and attitudes of the individuals concerned. [23]. Neighbours have not reported noticeable adverse effects from salmon-farm lighting, whether it be from the accommodation block, navigational aids or under-water lighting.[24]

Site Sensitivity:

This location has a baseline value of High- Moderate for Natural Character and Moderate for Landscape. The location is near an Outstanding Natural Feature (district scale) and associated with a key entry point into the Sounds, however, the physical characteristics which backdrop the proposed site are not considered particularly sensitive to change. There are no unique factors that warrant adjustment to the baseline Landscape Sensitivity for this location. Notable benthic communities and reef features identified at the site do raise the sensitivity of the site with regard to natural character.

Assessment of Landscape Effects

For detailed assessment of effects refer to the table below.

Conclusion: Proposed Site 42 – Effects on Natural Character

There will be adverse effects on the perceptual/sensory aspect of natural character from this proposal, including a reduction in perceived naturalness. However, the site currently does not appear as highly natural, and structures will not appear a bad "fit" with the site's existing character. Perceptual factors influence Natural Character to some degree, with the other determinant of natural character being the influence from natural science factors. There will be no change to terrestrial natural science, which has a low ecological rating, nor any change to geomorphology.

The existing marine environment is assessed as having high biotic values. Recent modelling of potential benthic effects[25] has shown that at a feed rate of 1000 tonnes/year, enrichment beneath the cages would be at an acceptable level, but moderate levels of deposition would extend over ecologically significant reef and biogenic features. Giant kelp (Macrocystis) stands and seagrass beds could also be potentially affected. For these reasons effects on natural science factors are considered to be elevated and significant at this site (Level 5) by benthic experts[26] due to the predicted benthic effects on notable communities. The resultant natural character is assessed as Low.

Effects on natural character at the larger scales (Levels 4 and 3) are not known, as the significance of the benthic features identified at this site have not been assessed at these larger scales. It is noted that the site is not in an area proposed as Outstanding Natural Character at the Level 3 scale.

Conclusion: Proposed Site 42 – Effects on Landscape Character

The proposal will result in new clearly visible structures in an area of water where currently there are none. This means there will be adverse effects on landscape and visual values resulting from the proposal, with a reduction in perceived naturalness at the site and a reduction in the levels of visual amenity. However, effects on landscape character and visual amenity are reduced by the low coherence of the backdrop, which will allow structures to be more readily absorbed visually. The structures will also not appear out of place with the existing working character of the wider area. For these reasons effects on visual values at the site are not considered to be significant.

Adverse effects on associative values relating to Tory Channel's role as the link between the North and South Islands are not considered significant, again because the proposal will be a fit with the existing character of Tory Channel – which is known as a mixed-use Sound, with a predominantly working character.

Part of the slopes behind the proposal are a Recreation Reserve, but as the Reserve does not appear to be promoted (it does not appear on MDC Smart Maps of Reserves), or easily accessed, effects on associative values are considered reduced.

Overall, the landscape effect at a site scale (Level 4/5) is considered to result in a Low-Moderate Landscape rating.

[20] Navigational Risk Review for Proposed Pelorus Sound Salmon Farms, Navigatus Consulting Limited; December 2015; pg 24. Visibility range of 1 nautical mile is recommended as a minimum for lighting, with range being able to be increased to 2 nautical miles economically.
[21] Navigational Risk Review for Proposed Tory Channel Salmon Farms; Navigatus Consulting Limited; December 2015; Pg. 12
[22] Proposed Salmon Farms Marlborough Sounds, Natural Character Landscape and Visual Amenity Effects Final Report Prepared for King Salmon; Boffa Miskell, August 2011, pg. 24.
[23] The Social and Community Effects of Salmon Farming & Rearing: A Case Study of the Top of the South Island; Taylor Baines & Assocs & Quigley & Watts Ltd; Nov 2015, pgs. 37 - 40.
[24] Ibid; pg 43.
[25] Ecological Benthic Assessment for Proposed Salmon Farm Sites – Part 2: Assessment of Potential Effects; Niwa, June 2016.
[26] Phone Conference: Niwa, MPI & Hudson Associates; 13 July 2016

A number of district-scale values have been identified relating to the "gateway" between Tory Channel and Cook Strait[27], to the north-east of the site, with the gateway and surrounding landform and water classified as "Outstanding" at a district scale under the operative Marlborough Sounds Resource Management Plan and MEP. It is not considered that these values will be compromised by the proposal at this site. Identified values relating to the "gateway" [28], are linked to the landforms forming the entrance, and to the experience of entering the narrow entrance to the Channel, and the change from wild Cook Strait and dramatic ocean-edge landforms, to a tamer and more sheltered pastoral/productive landscape. The identified values are not considered to be consequential at the site scale in the location of this proposal, as the site is well inside the landform of the "gateway", and does not form part of the dramatic "gateway" experience.

Regional-scale values have not been separately identified by MDC[29]. It is considered that as district scale values will not be significantly affected, any larger-scale regional landscape values will also not be significantly affected by this proposal. At that large scale values will be broader again in nature, and the site forms only a very small part of the context.

Cumulative effects are discussed in a separate section at the start of this report.

It is considered that effects from the proposal will not impact national-scale values informing the classification of the Sounds as an ONL at that national scale.

[27] Marlborough Landscape Study, MDC, 2015; pg 134
[28] Marlborough Landscape Study, MDC, 2015; pg 134

[29] MDC proposed ONFLs have been assessed at a district scale; Marlborough Landscape Study 2015, pg. 104; MDC proposed ONFLs have not been assessed separately at regional and district levels; an ONFL in Marlborough is considered to be an ONFL at both levels; Marlborough Landscape Study 2015, MDC, Pg. 20.

Site 42 Tipi Bay Assessment of Effects				
Character Component (NZCPS)	*Existing Character*	*Assessment of Effects*		
	Key Values	*Baseline Rating*[30]	*Effects*	*Mitigation (Including site characteristics and proposal design features).*
Natural Science [31]	• Largely unmodified landform; • Areas of regenerating indigenous vegetation – early stage; • Presence of plantation forestry and wilding pines; • Unmodified coastal margin; • A wide range of benthic habitat types and communities are present at the site; • Ecologically important stands of bladder kelp (*Macrocystis pyrifera*) are present within the inshore portion of the site; • Significant marine high current communities.	High-Moderate	• No change to landform or landcover; • New modification to the coastal margin. Recent modelling of potential benthic effects has shown that at a feed rate of 1000 tonnes/year, enrichment beneath the cages would be at an acceptable level, but moderate levels of deposition would extend over ecologically significant reef and biogenic features. Giant kelp (Macrocystis) stands and seagrass beds could also be potentially affected. Effects on natural science factors are considered to be elevated and significant at this site by benthic experts[32] due to the predicted benthic effects on notable communities and reef features at this site. The resultant natural character baseline is assessed as low	
Perceptual/ Sensory[33] Values	• Approaching the gateway between Tory Channel and Cook Strait; • Open character, but within an enclosed wider setting; • Working, productive character, within a wider working landscape; • Some remoteness, but that is reduced by the character of the context; • Fits uniformly into the wider context; low vividness and memorability within that context; • Landform and vegetation visually dominant; • Complex vegetative patterns with low coherence and low perceived naturalness.	Low-Moderate	• The will be a drop in visual amenity provided by the site as a result of the proposal. However, the proposed structures will be seen against a fairly complex backdrop with low visual coherence. The nature of the backdrop here means this site will be more readily able to receive and visually absorb the proposed new structures than some other sites. • There will also be a lowering of the perceived naturalness of the site, with the introduction of new structures in the water, where there are none currently. However, existing structures are clearly visible near-by on slopes in the wider context. Given that the site appears only moderately natural at the moment, this lowering effect is not considered significant. • The existing working character of the wider context, and the apparent past productive uses of the slopes adjacent to the site, mean that the structures will not appear out of place overall. • The channel-edge location means that the structures will be easily visible, especially given the channel width. But landforms surrounding the site (headlands either side) provide some enclosure for the site, • Roughly a third of the length of the proposed out-of-water structures will sit in front of Reserve, but adverse visual effects are reduced by the low quality of the reserve vegetative cover, which is primarily gorse; • There will be a loss of night sky darkness at the site, with the introduction of lighting where this is currently none. .If lights are designed to be visible for up to 2 nautical miles (3.7kms) they will be seen by the dwelling at Deep Bay (although this is a very limited audience with adverse effects from stationary viewing of lights) . • Surveys of social perceptions carried out in 2001 and 2012 for the Marlborough District Council[34].suggest that the growth in marine farming activities (including salmon farming) was not seen by national and regional visitors as having had a deleterious effect on the valued qualities of the Marlborough Sounds over this period.[35]	• Slight enclosure within the shallow bay allows the structures to be seen as reasonably tucked away, despite the location on the edge of the main channel; • Locating the barge in a position which allows the adjacent landform to act as a backdrop. • Use of dark recessive colours on structures and netting will reduce visual impact; • Structures will be a "fit" with existing character. • Low coherence backdrop is more readily able to receive and absorb change.
Associative Values[36]	• East of the site is the headland gateway between Tory Channel and Cook Strait; • Tory Channel known as the link between North and South Island • Cultural heritage and historical sites within the wider Tory Channel/Arapawa Island area; • Physical and spiritual values associated with mana whenua, mana moana and tangata whenua taonga, mauri, customary practices and the exercise of kaitiakitanga; • Historical involvement of local iwi in commercial enterprise near this site; • Recreational use of the wider Tory Channel area; • Part of the proposal sits in front of Tipi Recreation Reserve.	High-Moderate	• Values have been identified relating to the "gateway" between Tory Channel and Cook Strait[37], to the north-east of the site, with the gateway and surrounding landform and water classified as "Outstanding" under the operative Marlborough Sounds Resource Management Plan and MEP. It is not considered that these values will be compromised by the proposal at this site. Identified values relating to the "gateway" [38], are linked to the landforms forming the entrance, and to the experience of entering the narrow entrance to the Channel, and the change from wild Cook Strait and dramatic ocean-edge landforms, to a tamer and more sheltered pastoral/productive landscape. The identified values are not considered to be consequential at the site scale in the location of this proposal, as the site is well inside the landform of the "gateway", and does not form part of the dramatic "gateway" experience. • Effects on associative values relating to Tory Channel's role as the link between the North and South Islands are not considered significant, as the proposal will be a fit with the existing character of Tory Channel – which is known as a mixed-use Sound, with a predominantly working character. • Effects of new lighting on associative values relating to the "gateway" are not considered consequential, as the proposal is situated well into the Channel and past the "gateway" experience; • Effects on the Reserve are considered reduced as the Reserve does not seem to be well-used or easily accessible; • A Tourism and Recreation Assessment (TARA) has concluded that there will be minimal impact on tourists or recreationalists. • As the coastal margin here is currently unmodified effects on mana whenua, mana moana and tangata whenua values at the site may be amplified.	• Tory Channel is recognised as a Sound with a complex mix of uses, including recreation, production (pasture farming, forestry, marine farming), and regeneration of indigenous vegetation. • Although the land adjacent to the site is ranked as an ONF in the District Plan, it has low ecological values and moderate-high geomorphic values based on its steep and enclosing form. Neither of these will be affected by the proposed salmon farm, but will actually assist in mitigating perceptual effects due to the hill's scale and the modified land cover.
Overall Baseline Natural Character[39]		High-Moderate		
Overall Baseline Landscape[40]		Moderate		
Resultant Natural Character			Low	
Resultant Landscape			Low-Moderate	

[30] In all scoring a 7-point scale is used: Very Low/Low/Low-Moderate/Moderate/Moderate-High/High/Very High.
[31] Includes geomorphological (landforms) and ecological (flora, fauna, habitat, biodiversity and natural systems and processes).
[32] Phone Conference: Niwa, MPI & Hudson Associates; 13 July 2016
[33] Includes visual and aesthetic values such as coherence, vividness, memorability, perceived naturalness, expressiveness, and transient values.
[34]. Corydon Consultants Ltd, 2001 and Corydon Consultants Ltd, 2012.
[35] The Social and Community Effects of Salmon Farming & Rearing: A Case Study of the Top of the South Island; Taylor Baines & Assocs & Quigley & Watts Ltd; Nov 2015, pg. 69
[36] Includes cultural (Tangata Whenua), historic, and shared and recognised values.
[37] Marlborough Landscape Study, MDC, 2015; pg 134
[38] Marlborough Landscape Study, MDC, 2015; pg 134
[39] The Overall Baseline rating is reflective of the site's sensitivity to change. In the Marlborough Sounds environment a highly natural site will have higher perceptual ratings as well as high natural science ratings, and will be more sensitive to change. The more modified a site is, the lower the ratings tend to be for both natural science and perceptual/sensory ratings, and the less sensitive a site will be to change.
[40]Ibid.

Site: 82 - Motukina Point

Figure 19: Site 82 - Photo from Aircraft

Figure 20: Site 82 - Location Map of Proposed Site

Figure 21: Site 82 - Photo from Boat

PROPOSED SITE: 82 MOTUKINA POINT

Natural Character & Natural Features and Landscapes: Site Specific Assessment

Location: Large indent east of Motukina Point, on the south side of Tory Channel between Oyster Bay and Te Rua Bay; Outer Sounds.

Wider Context: Recent Natural Character Study[1]

Site is not in any area proposed as ONC.

Terrestrial Area 4 – Arapawa. Site is not adjacent to Terrestrial Sub-Area identified as having High or Very High natural character values at Level 4/5.

Marine Area E – Tory Channel. Site is part of Marine Sub-Area Tory Channel identified as having High abiotic/biotic values at Level 4/5.

Wider Context: Recent Landscape Study[2]

Site is part of the Outer Sounds Landscape.

Site is not adjacent to or in any area proposed as ONF at the district scale.

Area 14: Arapawa Islands and East and West Heads.

Wider Context: Operative Resource Management Plan

Proposed site is not adjacent to or in any Area of Outstanding Landscape Value.

Site Natural Science Baseline

Geomorphology (Landform)[3]

The proposed site is set against a large indent on a headland, on the south side of Tory Channel. The site is open to the main channel, and is backed (to the south) by the north-west facing slopes of the low headland (approximately 180masl), which separates two main bays on the south-side of Tory Channel (Te Rua Bay and Oyster Bay). The indent is formed at the end of the headland, between two spurs coming down from the summit.

A wide, shallow valley is also formed between the spurs, at the centre of the indent. Slopes on the headland behind the proposed site (i.e. to the south) rise steeply from the edge of the main channel, where the coastal edge is rocky and abrupt - typical of the Outer Sounds. There are low, exposed cliff-faces towards the southern end of the headland, where the southern-most spur stretches out into the channel in a narrow finger-like form, at the entrance to Oyster Bay (Motukina Point).

The landform behind the proposed site is largely unmodified – although a faintly discernible track has been cut up one side of the headland, and power poles are visible, and at the middle of the indent on the coastal edge there is a dwelling and jetty with quite extensive breastwork.

Terrestrial Ecology

Slopes on the headland adjacent to the proposed site are a mix of pine forestry and regenerating coastal scrub with wilding pines. The forestry is predominant, planted on the spurs either side of the headland, and on upper slopes behind the headland. Regenerating vegetation (along with wilding pines) is mainly in the quite wide valley between the spurs. There are some smaller areas of regeneration mixed amongst pines on the southernmost spur.

The valley here provides quite a good sized area of coastal regeneration where there will be some existing natural science value as well as potential for improvement. However, the large amount of forestry is likely to be causing some disruption to natural patterns such as water and nutrient cycling, chemical properties of the soil and the succession of indigenous vegetation.

Rating: Low

Marine Ecology

The whole of Tory Channel (excluding marine farm areas) has been previously identified as having High abiotic/biotic values at the 4/5 level[4]. Key Values previously identified are:

- narrow deep channel dominated by strong tidal flows, sheltered wave climate and proximity to Cook straight;
- shallow side bays;
- numerous ecologically significant Marine sites distinguished by high current communities;
- unique natural character area as a whole;
- adjoins Coastal Marine Area G.

The coastal margin is modified by a jetty.

Recent ecological benthic[5] assessment has determined that much of the proposed farm site lies over sand/shell hash habitat inhabited by a sparse to moderately dense epibenthic community. There are also areas supporting communities of high biological diversity adjacent to, and extending within the site boundaries. In the vicinity of the eastern site boundary in particular, and also the southwestern corner of the cage boundary, there are areas of broken rock/cobble supporting large biogenic aggregations and associated fish populations that are ecologically significant. Hydroid trees (*Solandaria* sp – described as a "notable organism") were noted within the site boundary. Inshore of the site and extending into the site in places there are patches of kelp, including the ecologically important bladder kelp (*Macrocystis pyrifera*), and relatively dense algal beds comprising a diverse range of red and green algae. Patches of kina were noted. Overall the features, biogenic aggregations and algal beds make this a notable benthic location.

Site Rating: High

Summary of Site Natural Science Characteristics:

- Large indent on the edge of the main channel;
- Abrupt rocky coastal edge with small cliffs;
- Steep slopes in exotic forestry;
- Areas of regenerating native scrub- early stage, mainly in the central valley;
- Largely unmodified landform;
- Coastal margin is modified by a jetty;
- To the immediate side of narrow deep channel with strong tidal flows;
- Sparse to moderately dense epibenthic community over much of the site;
- Areas of ecologically significant biogenic aggregations and associated fish populations adjacent to and extending into the eastern site boundary, and the southwestern corner of the cage boundary.

Natural Science Rating:

- Moderate

Key Natural Science Values:

- Largely unmodified landform;
- Forestry planting (Pine) and wilding pines;
- Areas of regeneration of indigenous vegetation – early stage;
- Unmodified coastal margin;
- Sparse to moderately dense epibenthic community over much of the site;
- Areas of ecologically significant biogenic aggregations and associated fish populations adjacent to and extending into the eastern site boundary, and the southwestern corner of the cage boundary.

[1] Natural Character of the Marlborough Coast, MDC, 2014; pg.73.
[2] Marlborough Landscape Study, MDC, 2015.
[3] Broader geomorphological aspects have been covered previously - refer to Natural Character of the Marlborough Coast, MDC, 2014.
[4] Natural Character of the Marlborough Coast, MDC, 2014; pg.85
[5] Ecological Benthic Assessments for Proposed Salmon Farm Sites, Part 1; Niwa, April 2016.

Site Perceptual/Sensory Baseline

Coherence
Vegetation here is a mix of regenerating scrub, geometrically planted forestry blocks of pine, and wilding pines. Visual coherence of the backdrop is not high, due to the complex planting patterns over the headland slopes and the spurs to either end, and the geometric boundaries of some of the forestry present, which appear at odds with the underlying landform. Patterns are fragmented, reducing the appearance of the backdrop as one coherent whole.
Rating: Low-Moderate

Vividness and Memorability
The main headland form adjacent to the proposed site is not likely to be highly memorable within its context – its scale is somewhat dwarfed by the surrounding landforms, and its physical characteristics generally fit unobtrusively into the wider landscape of Tory Channel. But the elongated spur on the southern end of the headland has a more unusual form, and stands out within its context at the entrance to Oyster Bay, with memorability increased by both its location and form.
Rating: High-Moderate

Perceived Naturalness
Slopes adjacent to this proposed site do not have high perceived naturalness, mainly due to the highly managed, productive character of the land; and due to the structures present (a dwelling, a jetty, and power-poles and lines traversing the slopes behind the proposed site). Adding to the working character, a salmon farm is visible in a near-by bay to the south, on the opposite side of the channel.

Landform and vegetation are still the dominant elements visually at this proposed site, but the managed character of the land is the defining characteristic, rather than naturalness. The site is part of the wider productive landscape of Tory Channel, with a high level of human modification evident. Visual amenity is moderate.
Rating: Low-Moderate

Expressiveness
The landform here is legible as part of a drowned valley system (as is the landform throughout the Sounds). The rocky coastal edge at this proposed site is also expressive of the extreme maritime conditions and coastal processes in action here, as is the finger-like form of the narrow spur at the entrance to Oyster Bay, with its low, exposed coastal cliffs.
Rating: High

Transient Values
The site is just to the side of the main channel. With Tory Channel being the main sea transport route between the North and South Islands, there is a regular boat traffic passing the site daily[6]..

Seals, dolphins and even whales are seen at times in Tory Channel.
Rating: Moderate

Summary of Site Perceptual/Sensory Characteristics:

- Large indent at the base of a headland;
- On the edge of the main channel – a busy transport route;
- Backed by steep slopes;
- Views are fairly shortened/restricted by enclosing landforms of the wider context (Tory Channel);
- Adjacent slopes are mostly productive working landscape with visually dominant forestry;
- Part of a wider productive landscape with a high level of human modification evident;
- A few structures present;
- Includes a distinctive narrow peninsula landform;

Perceptual/Sensory Baseline Rating:

- Low-Moderate

Key Perceptual/Sensory Values:

- Open character, but within an enclosed wider setting;
- Working, productive character, within a wider working landscape;
- Landform and vegetation visually dominant;
- Complex vegetative patterns with low coherence and low perceived naturalness;
- Includes expressive landform and coastal edge.
- Fairly busy wider context; low levels of remoteness.

Site Associative Baseline

While there has been no direct input into this assessment from local community, information has been incorporated from social impact reporting on salmon farms in the Sounds, and from recently completed Cultural Impact and Tourism and Recreation assessments.

Tangata Whenua

Research undertaken shows the historical and widespread activity of each of Te Tau Ihu tribes (Ngāti Koata, Ngāti Kuia, Ngāti Apa ki te Rā Tō, Ngāti Toa Rangatira, Te Ātiawa o Te Waka-a-Māui, Ngāti Rangitāne o Wairau, Ngāti Tama ki Te Tau Ihu and Ngāti Rarua) in Kura Te Au (Tory Channel), Tōtaranui (Queen Charlotte Sound) and Te Hoiere (Pelorus Channel). Every tribe has at some point fished, had kāinga or pā (whether temporary or permanent), or is able to relate kōrero tūpuna in and around these waterways.[7].

it is recognised that some iwi may have an interest in an area that is historical (e.g. as a result of historical occupation of an area with accompanying wāhi tapu and other sites of significance), while current mana whenua, mana moana, tāngata whenua is held by another iwi. Additionally, there are instances where mana whenua, mana moana, tāngata whenua interests are overlapping and shared by two, or more iwi. (The term 'mana whenua, mana moana, tāngata whenua' seeks to encompass all the various 'Māori' interests that exist in the areas under investigation).[8] For mana whenua, mana moana and tangata whenua there will be physical and spiritual values relating to the protection of taonga, mauri, customary uses and practices and the exercise of kaitiakitanga in Te Kura Te Au.[9], as well as values relating to mahinga kai, manaaki tangata, and traditional and contemporary waka routes[10].

There is evidence of early Maori settlement/activity throughout Te Kura Te Au and the Arapawa Island areas, and there is ongoing cultural association with Kura Te Au, which has been identified as having a role as a "food basket" and "engine room" for the whole of Totaranui (Queen Charlotte Sound).[11]

There have been no specific Maori Heritage Sites or additional values publicly identified[12] which relate to this site in particular. Values relating to the context as a whole will apply.

[6] Refer to Navigational Risk Review for Proposed Tory Channel Salmon Farms, Navigatus Consulting Limited; December 2015
[7] Draft Cultural Impact Assessment; Maximise, 2016, pg 7.
[8] Ibid; pg. 4
[9] Board of Inquiry, NZKS Decision, 23 Feb 2013; pg 248.
[10] Draft Cultural Impact Assessment; Maximise, 2016, pgs 15.
[11] Board of Inquiry, NZKS Decision, 23 Feb 2013; pg 262
[12] Marlborough District Council Smart Maps: Heritage Sites.

Historic
In terms of the wider context, the first whaling station in New Zealand was established in Tory Channel, at Te Awaiti, and is reputed to be the first European settlement on the South Island.

No historic sites have been identified at the site.[13]

Shared and Recognised
Tory Channel is well known as the main route between the North and South Islands, and leads to the actual gateway which provides a transition between the wildness of Cook Strait and shelter of the Marlborough Sounds. It also has a number of jetties and wharfs in the bays along its edge. It is an area of low active recreation and tourism use in comparison to Queen Charlotte Sound and parts of Pelorus Sound, with no known daily tour routes and only moderate recreational fishing levels. The main recreation and tourism activities in the vicinity are daily Interislander and Blue Bridge ferries, recreational boating (predominantly vessels over 5 metres) and fishing. Regular boat traffic through the channel is an existing use and as a result the Tory Channel could be considered more of a thoroughfare than a destination for tourism and recreation.

This area is not a major Picton scenic cruise and/or charter location; however, Beachcomber Cruises and the Cougar Line do operate Tory Channel routes each week[14]. While fishing occurs throughout the Queen Charlotte Sound, the area from the Tory Channel entrance through to Cape Jackson (over 28km away) is frequently used by recreational fishers and fishing tourism operators.

The Tory Channel is classified by DOC under the ROS system as an 'accessible' recreation area. Characteristics of 'accessible waters' include: "the waterways and/or adjacent land are readily accessible. Water is commonly plied by runabouts, trailer sailors, and other small vessels. Modification is apparent but not dominant."

Discussions with some tourism operators indicate an acceptance of salmon farms in Tory Channel [15]

There is a dwelling/holiday home present behind this proposed site.

Summary of Associative Characteristics:

- Tory Channel is known as the main transportation route between North and South Islands;
- History of settlement in the wider Tory Channel/Arapawa Island area;
- Physical and spiritual values for mana whenua, mana moana and tangata whenua relating to the protection of taonga, mauri, customary practices and the exercise of kaitiakitanga;
- The wider Channel is used for boating, crayfish diving and spear-fishing;
- There is a dwelling/holiday home present behind this proposed site.

Associative Baseline Rating:

- High-Moderate

Key Associative Values:

- Tory Channel known as the link between North and South Island
- Cultural heritage and historical sites within the wider Tory Channel/Arapawa Island area;
- Physical and spiritual values associated with mana whenua, mana moana and tangata whenua taonga, mauri, tangata whenua customary practices and the exercise of kaitiakitanga;
- Recreational use of the wider Tory Channel area, and a dwelling/holiday home present behind this proposed site.

Summary: Key Values

	Key Values	*Baseline Rating*
Natural Science	• Largely unmodified landform; • Forestry planting (Pine); Wilding pines; • Areas of regeneration of indigenous vegetation – early stage; • Coastal margin modified by a jetty; • Sparse to moderately dense epibenthic community over much of the site; • Areas of ecologically significant biogenic aggregations and associated fish populations adjacent to and extending into the eastern site boundary, and the southwestern corner of the cage boundary.	Moderate
Perceptual/Sensory	• Open character, but within an enclosed wide setting; • Working, productive character, within a wider working landscape; • Landform and vegetation visually dominant; • Complex vegetative patterns with low coherence and low perceived naturalness; • Includes expressive landform and coastal edge; • Fairly busy wider context; low levels of remoteness.	Low-Moderate
Associative	• Tory Channel known as the link between North and South Island • Cultural heritage and historical sites within the wider Tory Channel/Arapawa Island area; • Physical and spiritual values associated with mana whenua, mana moana and tangata whenua taonga, mauri, customary practices and the exercise of kaitiakitanga; • Recreational use of the wider Tory Channel area, and a dwelling/holiday home present behind this proposed site.	High-Moderate

[13] Marlborough District Council Smart Maps: Heritage Sites.
[14] www.mailboat.co.nz/pgs/cruises/mail_run/mail_run.php and www.cougarline.co.nz

[15] NZ King Salmon Potential Salmon Farm Relocation in Marlborough Tourism and Recreation Assessment (TARA); TRC Tourism Ltd. August 2016, pgs, 30 - 33

Conclusion: Proposed Site 82 Natural Character Assessment

The slopes adjacent to the site have large areas of forestry, which have low natural science value and cause some disruption to natural processes in adjacent areas. There will be some existing natural science value in the areas of indigenous scrub in the valley behind the proposed site, but this is still early stage regeneration. There is sparse to moderately dense epibenthic community over much of the site. Areas of ecologically significant biogenic aggregations and associated fish populations have been found adjacent to and extending into the eastern site boundary, and the southwestern corner of the cage boundary. Perceptual/sensory values are only low-moderate at this site.

Natural Character Baseline Rating: Moderate

Outstanding Natural Character:

This assessment concludes that the site does not meet the threshold to qualify as Outstanding Natural Character due to reduced natural science values, and reduced perceptual/sensory values. That assessment is in agreement with the rating of natural science values in Tory Channel as High rather than Outstanding at the level 4/5, in the 2014 Marlborough Natural Character Study.

Conclusion: Proposed Site 82 Landscape Assessment

The site is part of a working landscape just to the side of a busy transportation route. Visual amenity is not especially high for this site, which is reflected in the low-moderate perceptual/sensory values. There are high-moderate associative values in terms of the wider context, and the natural science values are high-moderate, which combine with the perceptual/sensory ranking and result in an overall score of Moderate for Landscape.

Landscape Baseline Rating: Moderate

Outstanding Natural Feature/Landscape

The site is part of the wider Sounds, which is an Outstanding Natural Landscape at the National Scale. The proposed site is not adjacent to or in any area proposed as ONF at the district scale[16].

This assessment concludes that the site, when assessed at the local site-scale (Level 4/5), does not meet the threshold to qualify as an Outstanding Natural Feature due to reduced natural science values and reduced perceptual/sensory values.

[16] MDC proposed ONFLs have been assessed at a district scale; Marlborough Landscape Study 2015, pg. 104; MDC proposed ONFLs have not been assessed separately at regional and district levels; an ONFL in Marlborough is considered to be an ONFL at both levels; Marlborough Landscape Study 2015, MDC, Pg. 20.

PROPOSED SITE: 82 MOTUKINA POINT

Assessment of Effects from the Proposal

Proposed Change:

- A rectangular above-water steel structure with netting (5 pens); the structure is assumed to be dark in colour, with dark netting and a barge.
- Underwater mooring structures – anchoring the farm in place. (Not visible above water);
- Lighting and Navigation Structures: at each corner of the farm (above the underwater mooring corners), and possibly in the middle of the long sides. Lighting will be visible from a minimum distance of one navigational mile, and possibly up to two navigational miles. [17] Lighting is likely to be in synchronised flashing, to show the form of the farm at night.
- A barge for servicing the farm. This assessment makes the assumptions that:
  - the barge will be located on the western end or shoreline side of the farm, as close as possible to the adjacent landform, enabling the landform to backdrop that structure and away from the dwelling;
  - the barge will be the more recent architecturally-designed model, or specifically designed, in a dark recessive colour.

Potential Viewing Audience/Visual Appraisal:

The proposal will be visible from the air, but will be mostly viewed by boat traffic. A large proportion of the boat traffic is likely to be pleasure vessels, as Tory Channel is well-used for recreation. It is also the route of the inter-island ferries. There will also be work-boats, fishing boats and cargo vessels passing the site. Views will mostly be transitory. Views from small boats will be more side on, with viewers more likely to perceive the structure's height out of the water. Views from larger boats will be from a greater elevation, with viewers more likely to see the rectangular form of the structure, and more of its total area.

Given the narrow width of Tory Channel views from boats will be relatively close. The navigational surveying of vessel routes provided has shown that the ferry route is approximately 410m from the proposed structures[18].

If at up to 0.5km distance a white-coloured salmon farm can be expected to be visually "dominant[19]" from the water, that visual dominance will be reduced here by the proposed farm design (dark recessive colours), with the site attributes and context providing further mitigating factors. At distances from 0.5 - 1km visual prominence will be reduced for the same reasons. Views of the structures from greater 1-2km may become faint.

From more elevated views (such as from dwellings or from the ferries), if at up to 1km views of a white-coloured salmon farm can be expected to be "dominant", visual dominance can be expected to be reduced here by the proposed farm design (dark recessive colours), with the site attributes and context providing further mitigating factors. At distances greater than 1-2.5kms visual prominence will be reduced for the same reasons. Beyond that views of structures may become a minor part of the view.

There is a dwelling located within the bay which will look out toward the proposed Salmon Farm Site. The impact on views will be at least prominent due to the static nature of the views obtained and the proximity to the proposal site. There is also a dwelling on the other side of Te Rua Bay (about 1km distance), and one at the entrance to Deep Bay (about 1.4kms distance), which are both likely to have views of the proposed farm, although probably less than "prominent" in both cases, given the use of dark recessive colours on structures and the busy, productive context.

Perceptions of salmon farms by recreational boaties were surveyed in 2015. Results showed that just over half the boatie respondents reported no effect of salmon farms on their experience of the Sounds, while almost one-third reported a negative effect. The most common negative effect reported by boaties was visual blight (12 percent), a feeling of displacement from the bay (10 percent), and course change or navigational risk (6 percent). However salmon farms also commonly attract boaties and visitors on charter vessels. People's responses to the presence of salmon farms varies a great deal, depending on the nature of occupancy, and the experiences, personalities and attitudes of the individuals concerned.[20] Neighbours have not reported noticeable adverse effects from salmon-farm lighting, whether it be from the accommodation block, navigational aids or under-water lighting.[21]

Site Sensitivity:

This location has a baseline value of High- Moderate for Natural Character and Moderate for Landscape. This site is considered to be sensitive in terms of its marine ecological features. The physical characteristics which backdrop the proposal site are considered appropriate for the absorption of a Salmon Farm in terms of Landscape values, however the presence of a dwelling within the bay has an influence on the sensitivity of this site. This site is therefore considered to be sensitive to the addition of a Salmon Farm.

Assessment of Landscape Effects

For detailed assessment of effects refer to the table below.

Conclusion: Proposed Site 82 – Effects on Natural Character

There will be adverse effects on the perceptual/sensory aspect of natural character from this proposal, including a reduction in perceived naturalness and reduced visual amenity. Adverse effects on the perceptual/sensory aspect of natural character are assessed as being not at a significant level, due mainly to the visual attributes and character of the wider context of the receiving environment.

There will be no effects on terrestrial natural science values. Recent modelling of potential benthic effects[22] has shown that at a feed rate of 1000 tonnes/year, enrichment beneath the cages would be at an acceptable level but moderate levels of deposition would be expected to affect notable benthic habitats and communities at the eastern and western ends of the site. Macroalgal beds inshore of the farm could also potentially be affected.

Effects on natural character at the site scale (Level 5) are considered elevated and significant at this site by benthic experts[23] due to the predicted benthic effects on notable communities. The resultant natural character rating for the site has been assessed as Low.

Effects on natural character at the larger scales (Levels 4 and 3) are not known, as the significance of the benthic features identified at this site have not been assessed at these larger scales. It is noted that the site is not in an area proposed as Outstanding Natural Character at the Level 3 scale.

Conclusion: Proposed Site 82 – Effects on Landscape Character

The proposal will result in new clearly visible structures, although effects are reduced as there are already structures visible at the site (dwelling, jetty). The low-moderate coherence of the backdrop will mean that structures will be more readily absorbed, and the structures will not appear out of place with the existing character. However, there will likely be significant adverse visual effects for the dwelling/holiday home located directly behind the proposed site. Access will be past the new structures, and the structures are likely to be clearly visible from the property. There will be loss of night sky darkness at the site, which will affect this residence in looking out to water. There will be similar but reduced effects for the two dwellings at Te Rua Bay and Deep Bay. Effects from lighting for other viewers are not considered significant due to distance, and existing lighting in the wider context.

[17] Navigational Risk Review for Proposed Pelorus Sound Salmon Farms, Navigatus Consulting Limited; December 2015; pg 24. Visibility range of 1 nautical mile is recommended as a minimum for lighting, with range being able to be increased to 2 nautical miles economically.
[18] Navigational Risk Review for Proposed Tory Channel Salmon Farms; Navigatus Consulting Limited; December 2015; Pg. 12
[19] Proposed Salmon Farms Marlborough Sounds, Natural Character Landscape and Visual Amenity Effects Final Report Prepared for King Salmon; Boffa Miskell, August 2011, pg. 24.

[20] The Social and Community Effects of Salmon Farming & Rearing: A Case Study of the Top of the South Island; Taylor Baines & Assocs & Quigley & Watts Ltd; Nov 2015, pgs. 37 - 40.
[21] Ibid; pg 43.
[22] Ecological Benthic Assessment for Proposed Salmon Farm Sites – Part 2: Assessment of Potential Effects; Niwa, June 2016.
[23] Phone Conference: Niwa, MPI & Hudson Associates; 13 July 2016

Effects on tangata whenua values at the site may also be amplified due to the lack of existing marine farming at the site, although the coastal margin has been modified with a jetty.

There will be adverse effects on landscape character resulting from the proposal at the site scale (Level 4/5), with some reduction in perceived naturalness at the site and a reduction in the levels of visual amenity. However the proposal would be a fit with the existing character of the site and its context.

There are a number of salmon farms already in Tory Channel - cumulative effects are discussed in a separate section at the start of this report.

It is considered that the proposal will result in a Low-Moderate Landscape rating.

In terms of district-scale values, the site is not part of any proposed ONF. It does lie within area proposed as "High Amenity". It is not considered that landscape and visual effects at the district scale will be significant. The proposal will be a fit with the existing character of Tory Channel, and visual amenity effects at that scale from this proposal will be only small. Again, cumulative effects are discussed in a separate section of this report.

Regional-scale values have not been separately identified by MDC[24]. It is considered that as district scale values will not be significantly affected, any larger-scale regional landscape values will also not be significantly affected by this proposal. At that large scale values will be broader again in nature, and the site forms only a very small part of the context.

It is considered that effects from the proposal will not impact national-scale values informing the classification of the Sounds as an ONL at that national scale.

[24] MDC proposed ONFLs have been assessed at a district scale; Marlborough Landscape Study 2015, pg. 104; MDC proposed ONFLs have not been assessed separately at regional and district levels; an ONFL in Marlborough is considered to be an ONFL at both levels; Marlborough Landscape Study 2015, MDC, Pg. 20.

Site 82 Motukina Point Assessment of Effects				
Character Component (NZCPS)	*Existing Character*	*Assessment of Effects*		
	Key Values	*Baseline Rating*[25]	*Effects*	***Mitigation*** *(Including site characteristics and proposal design features).*
Natural Science [26]	• Largely unmodified landform; • Forestry planting (Pine); Wilding pines; • Areas of regeneration of indigenous vegetation – early stage; • Coastal margin modified by a jetty; • Sparse to moderately dense epibenthic community over much of the site; • Areas of ecologically significant biogenic aggregations and associated fish populations adjacent to and extending into the eastern site boundary, and the southwestern corner of the cage boundary.	Moderate	• No change to landform or landcover; • Further modification to the coastal margin. Recent modelling of potential benthic effects has shown that at a feed rate of 1000 tonnes/year, enrichment beneath the cages would be at an acceptable level but moderate levels of deposition would be expected to affect notable benthic habitats and communities at the eastern and western ends of the site. Macroalgal beds inshore of the farm could also potentially be affected. Effects on natural science values are considered elevated and significant at this site by benthic experts[27] due to the predicted benthic effects on notable communities.	
Perceptual/ Sensory[28] Values	• Open character, but within an enclosed wide setting; • Working, productive character, within a wider working landscape; • Landform and vegetation visually dominant; • Complex vegetative patterns with low coherence and low perceived naturalness; • Includes expressive landform and coastal edge; • Fairly busy wider context; low levels of remoteness.	Low-Moderate	• The will be a drop in visual amenity provided by the site as a result of the proposal. However, the proposed structures will be seen against a complex backdrop (including structures) with low visual coherence. The nature of the backdrop here means this site will be more readily able to receive and visually absorb the proposed new structures than some other sites. • There will also be a lowering of the perceived naturalness of the site, with the introduction of new structures in the water, where there are none currently. However, given that the site has low perceived naturalness, and is defined instead by its working character, this lowering effect is not considered significant. Structures will not appear out of place overall. • The channel-edge location means that the structures will be easily visible, especially given the proposed design, although the slight enclosure provided by the shallow bay will allow the structures to be seen as slightly tucked away from the main channel, despite their edge location. The visible elements of the structures lie within a line between the two headlands either end. • The structure will be adjacent to expressive landform in the form of the elongated peninsula at Motukina Point, and will be a distracting element from that. • Surveys of social perceptions carried out in 2001 and 2012 for the Marlborough District Council[29].suggest that the growth in marine farming activities (including salmon farming) was not seen by national and regional visitors as having had a deleterious effect on the valued qualities of the Marlborough Sounds over this period.[30] • There will be significant adverse visual effects for the dwelling/holiday home located directly behind the proposed site. Access will be past the new structures, and the structures are likely to be clearly visible from the property. There will also be adverse effects on visual amenity for the two dwellings at Te Rua Bay and Deep Bay, although views will be more distant (1-1.5kms). The use of dark recessive colours on structures will reduce the visual impact. There will be loss of night sky darkness at the site, which will affect all these residences in looking out to water. Effects from lighting will be most significant for the dwelling behind the proposal. For other viewers are not considered significantly affected due to distance, and existing lighting in the wider context.	• Slight enclosure within the shallow bay allows the structures to be seen as slightly tucked away, despite the location on the edge of the main channel; • Locating the barge in a position which allows the adjacent landform to act as a backdrop; • Use of dark recessive colours on structures and netting will reduce visual impact; • Structures will be a "fit" with existing character. • Low coherence backdrop is more readily able to receive and absorb change.
Associative Values[31]	• Tory Channel known as the link between North and South Island • Cultural heritage and historical sites within the wider Tory Channel/Arapawa Island area; • Physical and spiritual values associated with mana whenua, mana moana and tangata whenua taonga, mauri, customary practices and the exercise of kaitiakitanga; • Recreational use of the wider Tory Channel area, and a dwelling/holiday home present behind this proposed site.	High - Moderate	• A Tourism and Recreation Assessment (TARA) has concluded that there will be minimal impact on tourists or recreationalists. • Effects on associative values relating to Tory Channel's role as the link between the North and South Islands are not considered significant, as the proposal will be a fit with the existing character of Tory Channel – which is known as a mixed-use Sound, with a predominantly working character. • As there is no marine farming existing at this site effects on tangata whenua values at the site may be amplified, although the coastal margin is modified by a jetty.	• Tory Channel is recognised as a Sound with a complex mix of uses, including recreation, production (pasture farming, forestry, marine farming), and regeneration of indigenous vegetation.
Overall Baseline Natural Character[32]		Moderate		
Overall Baseline Landscape[33]		Moderate		
Resultant Natural Character			Low	
Resultant Landscape			Low-Moderate	

[25] In all scoring a 7-point scale is used: Very Low/Low/Low-Moderate/Moderate/Moderate-High/High/Very High.
[26] Includes geomorphological (landforms) and ecological (flora, fauna, habitat, biodiversity and natural systems and processes).
[27] Phone Conference: Niwa, MPI & Hudson Associates; 13 July 2016
[28] Includes visual and aesthetic values such as coherence, vividness, memorability, perceived naturalness, expressiveness, and transient values.
[29]. Corydon Consultants Ltd, 2001 and Corydon Consultants Ltd, 2012.
[30] The Social and Community Effects of Salmon Farming & Rearing: A Case Study of the Top of the South Island; Taylor Baines & Assocs & Quigley & Watts Ltd; Nov 2015, pg. 69
[31] Includes cultural (Tangata Whenua), historic, and shared and recognised values.
[32] The Overall Baseline rating is reflective of the site's sensitivity to change. In the Marlborough Sounds environment a highly natural site will have higher perceptual ratings as well as high natural science ratings, and will be more sensitive to change. The more modified a site is, the lower the ratings tend to be for both natural science and perceptual/sensory ratings, and the less sensitive a site will be to change.
[33] Ibid

Site: 156 - Tio Point

Figure 22: Site 156 - Photo from Aircraft

Figure 23: Site 156 - Location Map of Proposed Site

Figure 24: Site 156 - Photo from Boat

PROPOSED SITE: 156 TIO POINT

Natural Character & Natural Features and Landscapes: Site Specific Assessment

Location: North-east side of Tio Point, on the south side of Tory Channel between Oyster Bay and Te Pangu Bay; Outer Sounds.

Wider Context: Recent Natural Character Study[1]

Site is not in any area proposed as ONC.

Terrestrial Area 4 – Arapawa. Site is not adjacent to Terrestrial Sub-Area identified as having High or Very High natural character values at Level 4/5.

Marine Area E – Tory Channel. Site is part of Marine Sub-Area Tory Channel identified as having High abiotic/biotic values at Level 4/5.

Wider Context: Recent Landscape Study[2]

Site is part of the Outer Sounds Landscape.

Site is not adjacent to or in any area proposed as ONF at the district scale.

Area 14: Arapawa Islands and East and West Heads.

Wider Context: Operative Resource Management Plan

Proposed site is not adjacent to or in any Area of Outstanding Landscape Value.

Site Natural Science Baseline

Geomorphology (Landform)[3]

The proposed site sits at the entrance to a fairly large Bay off the south side of Tory Channel – Oyster Bay, and is back-dropped to the south-west by Tio Point headland. The site sits fairly well-out into the Oyster Bay entrance, between the headlands of Tio Point and Motukina Point, and is open to the main Tory Channel.

The slopes on the headland immediately behind the proposed site (i.e. to the south-west) rise steeply from the coastal edge to an elevation of 180masl. The coastal edge here is typical of the Outer Sounds, being indented, rocky and abrupt. Rocky coastal cliffs and bluffs run the length of the coastal edge behind the site.

Opposite the site at Motukina Point there is a low spur (20masl) which stretches out into the channel in a narrow finger-like shape, forming part of the entrance to Oyster Bay.

Terrestrial Ecology

Slopes on the headland adjacent to the proposed site (to the south-west) are predominantly in pine forestry. Forestry is likely to be an ongoing land (the land is Crown Forest). There is some early-stage regenerating coastal scrub along the lower-most coastal edges.

The extensive area of forestry is likely to be causing disruption to natural patterns such as water and nutrient cycling, chemical properties of the soil and the succession of indigenous vegetation.

Rating: Low

Marine Ecology

The whole of Tory Channel (excluding marine farm areas) has been previously identified as having High abiotic/biotic values at the 4/5 level[4]. Key Values previously identified are:

- narrow deep channel dominated by strong tidal flows, sheltered wave climate and proximity to Cook straight;
- shallow side bays;
- numerous ecologically significant Marine sites distinguished by high current communities;
- unique natural character area as a whole;
- adjoins Coastal Marine Area G.

The site is subject to an active marine farming consent issued in 2001 (3.5 hectares; mussels and scallops), although no marine farming is currently present. Recent benthic assessment[5] has shown that that the existing and proposed marine farm sites are situated in slightly deeper water than previously reported, particularly over the proposed net pen location. The eastern corner of the proposed site is situated beside a hole that has the potential to accumulate deposition from a finfish farm.

The assessment determined that the benthic habitats in the vicinity of the existing and proposed marine farm sites were predominantly sand/mud and shall hash with relatively sparse epibiota. These habitats are widespread in the Marlborough Sounds. The benthic habitats in the vicinity of the proposed site contained eleven taxa or habitats which have been identified as having particular ecological or scientific importance in the Marlborough Sounds (Department of Conservation 1995, Davidson et al. 2011; pg 21). Most of these species were present at densities less than the trigger level for more detailed investigation (blue cod, horse mussels, scallops, burrowing anemones, sponge communities, macroalgal beds) or at a sufficient distance (~60-130 m) from the proposed marine farm site (reef, bladder kelp). The *Bispira bispira A* sabellid tubeworm beds, however, reached the trigger level (bed > 10% cover in a distinct zone) for a more detailed study. *Solanderia* hydroid trees also reached the trigger level (> 3 individuals seen) for a more detailed study. It was determined that *Bispira bispira A* sabellid tubeworm beds appeared to be restricted to shell hash habitat in vicinity of the proposed farm; and that *Solanderia* hydroid trees were occasionally observed in the vicinity of the proposed site, however, they appeared to be low in number and more limited in extent than the communities found on the eastern north coast of Tory Channel.[6]

Reef and cobble habitat communities observed inshore of the proposed site were typical of those observed elsewhere in Tory Channel

Site Rating: Moderate

Summary of Site Natural Science Characteristics:

- Open to the main channel;
- Indented coastal edge – rocky and abrupt with coastal cliffs;
- Steep slopes above cliffs in early-stage regenerating native scrub; pine forestry on upper slopes;
- Largely unmodified landform;
- Wider Tory Channel identified as having High abiotic/biotic values at the 4/5 level, with this site excluded from that assessment (along with all other marine farming areas);
- Subject to an active marine farming consent (issued 2001), although no marine farming currently present.

Natural Science Rating:

- Moderate

Key Natural Science Values:

- Open to the main channel;
- Indented coastal edge – rocky and abrupt with coastal cliffs;
- Steep slopes above cliffs in early-stage regenerating native scrub; pine forestry on upper slopes;
- Largely unmodified landform;
- Wider Tory Channel identified as having High abiotic/biotic values at the 4/5 level, with this site excluded from that assessment (along with all other marine farming areas);
- Subject to an active marine farming consent, although no marine farming currently present.

[1] Natural Character of the Marlborough Coast, MDC, 2014; pg.73.
[2] Marlborough Landscape Study, MDC, 2015.
[3] Broader geomorphological aspects have been covered previously - refer to Natural Character of the Marlborough Coast, MDC, 2014.
[4] Natural Character of the Marlborough Coast, MDC, 2014; pg.85
[5] Report No. 2882 Additional Information for a Finfish Farm Effects Assessment at Tio Point, Oyster Bay, Tory Channel; Cawthron Institute; June 2016.
[6] Ibid; pgs 21-23.

Site Perceptual/Sensory Baseline

Coherence

Vegetation here is a mix of pine forestry, and native regeneration on slopes above the coastal edge. There is strong visual contrast between the forestry and the revegetating areas, with the backdrop being quite clearly divided into blocks of plantation and revegetation. This reduces the appearance of the backdrop as one coherent whole. Planting patterns here are simple, but visual complexity is increased by the strong visual contrast between the blocks of different vegetation types, and also by the textured backdrop provided by the rocky cliffs.
Rating: Moderate

Vividness and Memorability

When approached from the north-east (from the Cook Strait end of Tory Channel) the vividness and memorability of this site is increased by the site's position on the main turning point in Tory Channel. From this approach the site has a highly visible position on this turning point. Vividness and memorability of the site is further increased when viewed from a distance on this approach by the scale of the landform back-dropping the site. From a distance on this approach the headland slopes immediately behind the site merge with more elevated slopes rising to the south, meaning that from a distance (when viewed from the north) the site sits against one of the most prominent landforms in the Channel. Closer to the site, however, the more elevated slopes to the south are less visible, and the slopes immediately adjacent to the site are less memorable in terms of scale within the immediate context of Tory Channel.

The site is much less memorable when approached from the south (from Queen Charlotte Sound). The landform adjacent to the site appears much smaller-scale from this angle, with the site largely hidden from this approach until alongside the site. From a near-by perspective the site does not stand out particularly vividly within its immediate context of Tory Channel. This site has an open character, despite its position inside the entrance to Oyster Bay, as it sits fairly well out from the coastal edge, and the edge of the Tio Point headland behind the site is only very shallowly enclosing.
Rating: High-Moderate

Perceived Naturalness

In spite of the highly managed character of large areas of slopes above the site, the site does appear relatively "natural", due mainly to the lack of structures and the appearance of the landform as unmodified. Perceived naturalness is reduced by the pine forestry clearly being a managed, productive use. The site is part of the wider productive landscape of Tory Channel, with a high level of human modification evident. A salmon farm is visible on the opposite side of the channel. Visual amenity is moderate.
Rating: Moderate

Expressiveness

The landform here is legible as part of a drowned valley system (as is the landform throughout the Sounds). The quite large-scale and prominent rocky coastal cliffs behind this proposed site are expressive of the extreme maritime conditions and coastal processes in action here.
Rating: High-Moderate

Transient Values

The site is just to the side of the main channel. With Tory Channel being the main sea transport route between the North and South Islands, there is a regular boat traffic passing the site daily[7]. Seals, dolphins and even whales are seen at times in Tory Channel.
Rating: Moderate

Summary of Site Perceptual/Sensory Characteristics:

- Open character site at the entrance to a Bay;
- On the edge of the main channel – a busy transport route;
- Backed by steep slopes with prominent rocky cliffs;
- Adjacent slopes are regenerating native vegetation below blocks of pine forestry; visually dominant forestry;
- Part of a similar, wider productive landscape with a high level of human modification evident;
- Views are fairly shortened/restricted by enclosing landforms of the wider context (Tory Channel);
- No structures present;

Perceptual/Sensory Baseline Rating:

- Moderate

Key Perceptual/Sensory Values:

- Moderate "naturalness" – no structures, with landform and vegetation visually dominant; but predominant pine forestry and productive character;
- Low vividness within its immediate context (when viewed from a close proximity); increased vividness and memorability on approach from the north;
- Moderate coherence with simple but fragmented vegetative patterns;
- Expressive coastal edge;
- Open character, but within an enclosed wider setting;
- Low levels of remoteness - busy wider context.

Site Associative Baseline

While there has been no direct input into this assessment from local community, information has been incorporated from social impact reporting on salmon farms in the Sounds, and from recently completed Cultural Impact and Tourism and Recreation assessments.

Tangata Whenua[8]

Research undertaken shows the historical and widespread activity of each of Te Tau Ihu tribes (Ngāti Koata, Ngāti Kuia, Ngāti Apa ki te Rā Tō, Ngāti Toa Rangatira, Te Ātiawa o Te Waka-a-Māui, Ngāti Rangitāne o Wairau, Ngāti Tama ki Te Tau Ihu and Ngāti Rarua) in Kura Te Au (Tory Channel), Tōtaranui (Queen Charlotte Sound) and Te Hoiere (Pelorus Channel). Every tribe has at some point fished, had kāinga or pā (whether temporary or permanent), or is able to relate kōrero tūpuna in and around these waterways.[9].

it is recognised that some iwi may have an interest in an area that is historical (e.g. as a result of historical occupation of an area with accompanying wāhi tapu and other sites of significance), while current mana whenua, mana moana, tāngata whenua is held by another iwi. Additionally, there are instances where mana whenua, mana moana, tāngata whenua interests are overlapping and shared by two, or more iwi. (The term 'mana whenua, mana moana, tāngata whenua' seeks to encompass all the various 'Māori' interests that exist in the areas under investigation).[10] For mana whenua, mana moana and tangata whenua there will be physical and spiritual values relating to the protection of taonga, mauri, customary uses and practices and the exercise of kaitiakitanga in Te Kura Te Au.[11], as well as values relating to mahinga kai, manaaki tangata, and traditional and contemporary waka routes[12].

There is evidence of early Maori settlement/activity throughout Te Kura Te Au and the Arapawa Island areas, and there is ongoing cultural association with Te Kura Te Au, which has been identified as having a role as a "food basket" and "engine room" for the whole of Totaranui (Queen Charlotte Sound).[13]

There have been no specific Maori Heritage Sites or additional values publically identified[14] which relate to this site in particular. Values relating to the context as a whole will apply.

[7] Refer to Navigational Risk Review for Proposed Tory Channel Salmon Farms, Navigatus Consulting Limited; December 2015
[8] Maps of Maori Reserve Lands were provided to the Board of Inquiry, NZKS Decision Feb 2013 by David Alexander, but no evidence was heard that these lands were adversely affected. BOI, NZKS Decision pg 262.
[9] Draft Cultural Impact Assessment; Maximise, 2016, pg 7.
[10] Ibid; pg. 4
[11] Board of Inquiry, NZKS Decision, 23 Feb 2013; pg 248.
[12] Draft Cultural Impact Assessment; Maximise, 2016, pgs 15.
[13] Board of Inquiry, NZKS Decision, 23 Feb 2013; pg 262
[14] Marlborough District Council Smart Maps: Heritage Sites.

Historic

In terms of the wider context, the first whaling station in New Zealand was established in Tory Channel, at Te Awaiti, and is reputed to be the first European settlement on the South Island. No historic sites have been identified at the site.[15]

Shared and Recognised

Tory Channel is well known as the main route between the North and South Islands, and leads to the actual gateway which provides a transition between the wildness of Cook Strait and shelter of the Marlborough Sounds. It also has a number of jetties and wharfs in the bays along its edge. It is an area of low active recreation and tourism use in comparison to Queen Charlotte Sound and parts of Pelorus Sound, with no known daily tour routes and only moderate recreational fishing levels. The main recreation and tourism activities in the vicinity are daily Interislander and Blue Bridge ferries, recreational boating (predominantly vessels over 5 metres) and fishing. Regular boat traffic through the channel is an existing use and as a result the Tory Channel could be considered more of a thoroughfare than a destination for tourism and recreation.

This area is not a major Picton scenic cruise and/or charter location; however, Beachcomber Cruises and the Cougar Line do operate Tory Channel routes each week[16]. While fishing occurs throughout the Queen Charlotte Sound, the area from the Tory Channel entrance through to Cape Jackson (over 28km away) is frequently used by recreational fishers and fishing tourism operators.

The Tory Channel is classified by DOC under the ROS system as an 'accessible' recreation area. Characteristics of 'accessible waters' include: "the waterways and/or adjacent land are readily accessible. Water is commonly plied by runabouts, trailer sailors, and other small vessels. Modification is apparent but not dominant."

Discussions with some tourism operators indicate an acceptance of salmon farms in Tory Channel [17]

There is marine farming (shellfish) and a small number of residential dwellings further into Oyster Bay. The site must be passed to reach these.

Summary of Associative Characteristics:

- Tory Channel is known as the main transportation route between North and South Islands;
- History of settlement in the wider Tory Channel/Arapawa Island area;
- Physical and spiritual values for mana whenua, mana moana and tangata whenua relating to the protection of taonga, mauri, customary practices and the exercise of kaitiakitanga;
- The wider Channel is used for boating, crayfish diving and spear-fishing. Marine farming and a small number of dwellings past the site further into Oyster Bay.

Associative Baseline Rating:

- High-Moderate

Key Associative Values:

- Tory Channel known as the link between North and South Island;
- Cultural heritage and historical sites within the wider Tory Channel/Arapawa Island area;
- Physical and spiritual values associated with mana whenua, mana moana and tangata whenua taonga, mauri, customary practices and the exercise of kaitiakitanga;
- Recreational use of the wider Tory Channel area. Marine farming and a small number of dwellings past the site further into Oyster Bay.

Summary: Key Values

	Key Values	*Baseline Rating*
Natural Science	• Open to the main channel; • Indented coastal edge – rocky and abrupt with coastal cliffs; • Steep slopes above cliffs in early-stage regenerating native scrub; pine forestry on upper slopes; • Largely unmodified landform; • Wider Tory Channel identified as having High abiotic/biotic values at the 4/5 level, with this site excluded from that assessment (along with all other marine farming areas); • Subject to an active marine farming consent, although no marine farming currently present. No benthic information on existing site conditions is currently available.	Moderate
Perceptual/Sensory	• Moderate "naturalness" – no structures, with landform and vegetation visually dominant; but predominant pine forestry and productive character; • Low vividness within its immediate context (when viewed from a close proximity); increased vividness and memorability on approach from the north; • Moderate coherence with simple but fragmented vegetative patterns; • Expressive coastal edge; • Open character, but within an enclosed wider setting; • Low levels of remoteness - busy wider context.	Moderate
Associative	• Tory Channel known as the link between North and South Island; • Cultural heritage and historical sites within the wider Tory Channel/Arapawa Island area; • Physical and spiritual values associated with mana whenua, mana moana and tangata whenua taonga, mauri, customary practices and the exercise of kaitiakitanga; • Recreational use of the wider Tory Channel area. Marine farming and a small number of dwellings past the site further into Oyster Bay.	High-Moderate

[15] Marlborough District Council Smart Maps: Heritage Sites.

[16] www.mailboat.co.nz/pgs/cruises/mail_run/mail_run.php and www.cougarline.co.nz

[17] NZ King Salmon Potential Salmon Farm Relocation in Marlborough Tourism and Recreation Assessment (TARA); TRC Tourism Ltd. August 2016, pgs, 30 - 33

Conclusion: Proposed Site 156 Natural Character Assessment

The slopes adjacent to the site have large areas of forestry, which have low natural science value and cause disruption to natural processes in adjacent areas. There are also areas of regenerating indigenous scrub, although these are still in the fairly early stages of regeneration. The site has an active consent for marine farming, and has been excluded from areas identified in Tory Channel as having high biotic/abiotic values at the level 4/5. Perceptual/sensory values are moderate.
Natural Character Baseline Rating: Moderate

Outstanding Natural Character:
This assessment concludes that at a site scale (Level 4/5), it does not meet the threshold to qualify as Outstanding Natural Character due to reduced natural science values, and reduced perceptual/sensory values. That assessment is in agreement with the 2014 Marlborough Natural Character Study.

Conclusion: Proposed Site 156 Landscape Assessment

The site is part of a working landscape just to the side of a busy transportation route. Visual amenity is not especially high for this site, which is reflected in the moderate perceptual/sensory values. There are high-moderate associative values in terms of the wider context; natural science values are moderate.
Landscape Baseline Rating: Moderate

Outstanding Natural Feature/Landscape
The site is part of the wider Sounds, which is an Outstanding Natural Landscape at the National Scale. The proposed site is not adjacent to or in any area proposed as ONF at the district scale[18].

This assessment concludes that the site, when assessed at the local site-scale (Level 4/5), does not meet the threshold to qualify as an Outstanding Natural Feature due to reduced natural science values and reduced perceptual/sensory values.

[18] MDC proposed ONFLs have been assessed at a district scale; Marlborough Landscape Study 2015, pg. 104; MDC proposed ONFLs have not been assessed separately at regional and district levels; an ONFL in Marlborough is considered to be an ONFL at both levels; Marlborough Landscape Study 2015, MDC, Pg. 20

PROPOSED SITE: 156 TIO POINT

Assessment of Effects from the Proposal

Proposed Change:

- A rectangular above-water steel structure with netting; the structure is assumed to be dark in colour, with dark netting and a barge.
- Underwater mooring structures – anchoring the farm in place (not visible above water);
- Lighting and Navigation Structures: at each corner of the farm (above the underwater mooring corners), and possibly in the middle of the long sides. Lighting will be visible from a minimum distance of one navigational mile, and possibly up to two navigational miles. [19] Lighting is likely to be in synchronised flashing, to show the form of the farm at night.
- A barge for servicing the farm. This assessment makes the assumptions that:
  - for all sites where a barge is included, the barge will be located on the shoreline side of the farm, as close as possible to the adjacent landform, enabling the landform to backdrop that structure;
  - the barge will be the more recent architecturally-designed model, or specifically designed, in a dark recessive colour.

Potential Viewing Audience/Visual Appraisal:

The proposal will be visible from the air, but will be mostly viewed by boat traffic. A large proportion of the boat traffic is likely to be pleasure vessels, as Tory Channel is well-used for recreation. It is also the route of the inter-island ferries. There will also be work-boats, fishing boats and cargo vessels passing the site. Views will mostly be transitory. Views from small boats will be more side on, with viewers more likely to perceive the structure's height out of the water. Views from larger boats will be from a greater elevation, with viewers more likely to see the rectangular form of the structure, and more of its total area.

Given the narrow width of Tory Channel views from boats will be relatively close. The navigational surveying of vessel routes provided for this assessment has shown that the ferry route is approximately 250m from the proposed structures[20].

If at up to 0.5km distance a white-coloured salmon farm can be expected to be visually "dominant[21]" from the water, that visual dominance will be reduced here by the proposed farm design (dark recessive colours), with the site attributes and context providing further mitigating factors. At distances from 0.5 - 1km visual prominence will be reduced for the same reasons. Views of structures from greater than 1-2km may become faint.

From more elevated views (such as from dwellings or from the ferries), if at up to 1km views of a white-coloured salmon farm can be expected to be "dominant", visual dominance can be expected to be reduced here by the proposed farm design (dark recessive colours), with the site attributes and context providing further mitigating factors. At distances greater than 1-2.5kms visual prominence will be reduced for the same reasons. Beyond that views of structures may a minor part of the view.

Perceptions of salmon farms by recreational boaties were surveyed in 2015. Results showed that just over half the boatie respondents reported no effect of salmon farms on their experience of the Sounds, while almost one-third reported a negative effect. The most common negative effect reported by boaties was visual blight (12 percent), a feeling of displacement from the bay (10 percent), and course change or navigational risk (6 percent). However salmon farms also commonly attract boaties and visitors on charter vessels. People's responses to the presence of salmon farms varies a great deal, depending on the nature of occupancy, and the experiences, personalities and attitudes of the individuals concerned. [22]. Neighbours have not reported noticeable adverse effects from salmon-farm lighting, whether it be from the accommodation block, navigational aids or under-water lighting.[23]

The site will need to be passed at a very close proximity by boats travelling to the marine farm sites and dwellings further into Oyster Bay. There are 3-4 dwellings further into the Bay (views from dwellings will be blocked by landform). Views or partial views of the proposal may be possible from a dwelling on the north side of Te Rua Bay. This dwelling Is at about 2kms distance, and so views are not likely to be "prominent" given the use of recessive colours on structures and the use of dark recessive colours on structures and the busy, productive context.

Site Sensitivity:

This location has a baseline value of Moderate for Natural Character and Moderate for Landscape. The site is considered to have some sensitivity to a Salmon Farm in terms of natural character, due to the notable communities identified in the vicinity – although these were noted a being restricted in extent. The physical characteristics which backdrop the proposal site are considered appropriate for the absorption of a Salmon Farm in terms of Landscape values. The site is therefore not considered to be sensitive to the addition of a Salmon Farm from a landscape perspective.

Assessment of Landscape Effects

For detailed assessment of effects refer to the table below.

Conclusion: Proposed Site 156 – Effects on Natural Character

There will be adverse effects on the perceptual/sensory aspect of natural character from this proposal, including a reduction in perceived naturalness and reduced visual amenity. Adverse effects on the perceptual/sensory aspect of natural character is assessed as being not at a significant level, due mainly to the visual attributes and character of the site and the wider context of the receiving environment.

There will be no effects on terrestrial natural science values. There will be some adverse effects on marine natural science values, but recent modelling of potential benthic effects has shown that at feed inputs of 1600 t yr-1, deposition is not expected to result in enrichment beyond the level of acceptable seabed effects beneath salmon farms in the Marlborough Sounds (ES 5). The level of enrichment will improve rapidly with distance for the first 50 to 100 m, and then grade progressively to near-background conditions within *ca.* 500 m.

While the depositional footprint is likely to overlay the occasional notable ecological feature, the majority of the depositional footprint extends to north of the proposed net pens, and away from much of the potentially sensitive inshore reef area and the large tubeworm mound identified by O'Callaghan et al. (2014). Although a number of novel habitats and taxa were recorded in the benthic survey, most were present at low densities or at sufficient distances from the proposed site. Habitats inshore of the proposed farm (which were found to be typical of Tory Channel) included reef communities that may be also affected by farm deposition. (While reefs in proximity to nearby salmon farms at Te Pangu and Clay Point have not shown farm-related impacts, some indications of enrichment have recently been observed. Due to the proximity of the proposed farm, the reef communities at Tio Point should be closely monitored.) [24]

Given the above, it is assessed that effects on the natural science aspect of natural character will be adverse but not likely to be at a significant level.

Overall effects on natural character are assessed as being not significant. The resultant natural character rating is assessed as Low-Moderate.

Following on from that, it is not considered that natural character effects at the Level 3 scale[25] will be significant. Values at this scale are broad, and the site is only a very small part of the context this scale. The site is not in area proposed as Outstanding Natural Character at the Level 3 scale. Effects on the Marlborough Sounds natural character values at a regional and national scale are considered to be insignificant.

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[19] Navigational Risk Review for Proposed Pelorus Sound Salmon Farms, Navigatus Consulting Limited; December 2015; pg 24. Visibility range of 1 nautical mile is recommended as a minimum for lighting, with range being able to be increased to 2 nautical miles economically.
[20] Navigational Risk Review for Proposed Tory Channel Salmon Farms; Navigatus Consulting Limited; December 2015; Pg. 12
[21] Proposed Salmon Farms Marlborough Sounds, Natural Character Landscape and Visual Amenity Effects Final Report Prepared for King Salmon; Boffa Miskell, August 2011, pg. 24.
[22] The Social and Community Effects of Salmon Farming & Rearing: A Case Study of the Top of the South Island; Taylor Baines & Assocs & Quigley & Watts Ltd; Nov 2015, pgs. 37 - 40.
[23] Ibid; pg 43.
[24] Report No. 2882 Additional Information for a Finfish Farm Effects Assessment at Tio Point, Oyster Bay, Tory Channel; Cawthron Institute; June 2016.
[25] Natural Character of the Marlborough Coast, MDC, 2014

Conclusion: Proposed Site 156 – Effects on Landscape Character

The proposal will result in new clearly visible structures at a site where currently no structures are present, although this is not considered significant mainly due to the existing working- landscape/productive character of the backdrop and the wider context (Tory Channel). The proposed structures will not appear out of place in the existing setting. Further, it is considered there is enough visual complexity in the backdrop to allow for good visual absorption of the proposal.

It is considered that the adverse effect on amenity will be heightened for the dwellings/holiday homes located further into Oyster Bay. Boats to these dwellings will need to actively avoid the proposal and travel through a much narrower entrance into Oyster Bay, while viewing the proposal in close proximity. However, adverse effects for the owners/users of the dwellings are considered reduced because views of the proposal will not be possible from most of the dwellings, and if possible will be from a distance of greater than 1km, and not dominant. More distant views may also be possible from a dwelling on the north side of Te Rua Bay, about 2kms away. The use of dark recessive colours on structures will reduce the visual impact, and views from this residence are not likely to be prominent. There will be loss of dark night sky at the site, which will affect residences with views of the proposal, but stationary views of lighting from any dwellings will be at a distance of greater than 1km, and will apply to a limited audience of one to two dwellings.

On balance it is considered that the proposal will result in a Low-Moderate landscape rating.

Cumulative effects are discussed in a separate section at the start of this report.

In terms of district-scale values, the site is not part of any proposed ONF. It does lie within area proposed as "High Amenity". It is not considered that landscape and visual effects at the district scale will be significant. The proposal will be a fit with the existing character of Tory Channel, and visual amenity effects at that scale from this proposal will be only small.

Regional-scale values have not been separately identified by MDC[26]. It is considered that as district scale values will not be significantly affected, any larger-scale regional landscape values will also not be significantly affected by this proposal. At that large scale values will be broader again in nature, and the site forms only a very small part of the context.

It is considered that effects from the proposal will not impact national-scale values informing the classification of the Sounds as an ONL at that national scale.

[26] MDC proposed ONFLs have been assessed at a district scale; Marlborough Landscape Study 2015, pg. 104; MDC proposed ONFLs have not been assessed separately at regional and district levels; an ONFL in Marlborough is considered to be an ONFL at both levels; Marlborough Landscape Study 2015, MDC, Pg. 20.

Site 156 Tio Point Assessment of Effects				
Character Component (NZCPS)	*Existing Character*		*Assessment of Effects*	
	Key Values	*Baseline Rating*[27]	*Effects*	***Mitigation*** *(Including site characteristics and proposal design features).*
Natural Science [28]	• Open to the main channel; • Indented coastal edge – rocky and abrupt with coastal cliffs; • Steep slopes above cliffs in early-stage regenerating native scrub; pine forestry on upper slopes; • Largely unmodified landform; • Wider Tory Channel identified as having High abiotic/biotic values at the 4/5 level, with this site excluded from that assessment (along with all other marine farming areas); • Subject to an active marine farming consent, although no marine farming currently present. No benthic information on existing site conditions is currently available.	Moderate	• No change to landform or landcover but new modification to the coastal margin, with resultant benthic effects. Although the site has been the subject of an active marine farming consent for many years, there are no structures present at the moment. • Recent modelling of potential benthic effects has shown that at feed inputs of 1600 t yr-1, deposition is not expected to result in enrichment beyond the level of acceptable seabed effects beneath salmon farms in the Marlborough Sounds (ES 5). The level of enrichment will improve rapidly with distance for the first 50 to 100 m, and then grade progressively to near-background conditions within *ca.* 500 m[29]. • While the depositional footprint is likely to overly the occasional notable ecological feature, the majority of the depositional footprint extends to north of the proposed net pens, and away from much of the potentially sensitive inshore reef area and the large tubeworm mound identified by O'Callaghan et al. (2014); [30]. • Habitats inshore of the proposed farm were typical of Tory Channel and included reef communities that may be affected by farm deposition and due to the proximity of the proposed farm monitoring is recommended. [31]	
Perceptual/ Sensory[32] Values	• Moderate "naturalness" – no structures, with landform and vegetation visually dominant; but predominant pine forestry and productive character; • Low vividness within its immediate context (when viewed from a close proximity); increased vividness and memorability on approach from the north; • Moderate coherence with simple but fragmented vegetative patterns; • Expressive coastal edge; • Open character, but within an enclosed wider setting; • Low levels of remoteness - busy wider context.	Moderate	• The will be a drop in visual amenity provided by the site as a result of the proposal, and the channel-edge location does mean that the structures will be easily seen by boat traffic in Tory Channel. However, the proposed structures will be seen against a backdrop which is only moderately coherent. It is considered that there is enough visual complexity to the backdrop to enable good visual absorption of the proposed new structures; • Further, it is considered that adverse visual effects of the proposal will be reduced by the nature of the existing landscape character of the backdrop and wider context – which is largely mixed use/productive. The proposal will be a visual "fit" with the existing working landscape character, and this will reduce the significance of the adverse visual effects; • Although on approach from the north-east (Cook Strait) the site sits against one of the more prominent landforms in Tory Channel, from this distance the proposal is likely to be only faintly visible. From a closer range the site is less distinctive, and effects are therefore less significant; • There will be a lowering of the perceived naturalness of the site, with the introduction of new structures in the water, where there are none currently. Again, given the mixed character of the site's backdrop and the wider context, this lowering effect is not considered significant. Structures will not appear out of place overall; • It is considered that visual and amenity effects arising from the new structures will be greater for those travelling to the dwellings/marine farms further into Oyster Bay. As the site sits well out from the edge of Tio Point headland, nearing the centre of the entrance to Oyster Bay, these boats will need to travel on a route which purposefully avoids the proposal, particularly if travelling from the south (from the direction of Queen Charlotte Sound). In its current position, assuming that boats will not be able to travel over the currently consented marine farm site (which lies immediately landward of this proposed site), this proposal would considerably narrow the entrance to Oyster Bay. The significance of the adverse effects for owners of the dwellings is reduced by the fact that views of the proposal are unlikely to be possible from most of the dwellings, with the proposal hidden by intervening landform. Views may be possible from one dwelling, but these would be from a distance of greater than 1km. More distant views may also be possible from a dwelling on the north side of Te Rua Bay, about 2kms away. The use of dark recessive colours on structures will reduce the visual impact. • There will be loss of dark night sky at the site, but stationary views of lighting from any dwellings will be at a distance of greater than 1km. • Surveys of social perceptions carried out in 2001 and 2012 for the Marlborough District Council[33].suggest that the growth in marine farming activities (including salmon farming) was not seen by national and regional visitors as having had a deleterious effect on the valued qualities of the Marlborough Sounds over this period.[34]	• Locating the barge in a position which allows the adjacent landform to act as a backdrop; • Use of dark recessive colours on structures and netting will reduce the visual impact; • Structures will be a "fit" with existing landscape character; • Backdrop has enough complexity to receive and absorb the proposed level of change.
Associative Values[35]	• Tory Channel known as the link between North and South Island; • Cultural heritage and historical sites within the wider Tory Channel/Arapawa Island area; • Physical and spiritual values associated with taonga, mauri, customary practices and the exercise of kaitiakitanga; • Recreational use of the wider Tory Channel area; marine farming and a small number of dwellings past the site further into Oyster Bay.	High - Moderate	• A Tourism and Recreation Assessment (TARA) has concluded that there will be minimal impact on tourists or recreationalists. • Effects on associative values relating to Tory Channel's role as the link between the North and South Islands are not considered significant, as the proposal will be a fit with the existing character of Tory Channel – which is known as a mixed-use Sound, with a predominantly working character. • The site's current marine consent is owned by Te Atiawa Limited, who have indicated approval for this proposal.	• Tory Channel is recognised as a Sound with a complex mix of uses, including recreation, production (pasture farming, forestry, marine farming), and regeneration of indigenous vegetation.
Overall Baseline Natural Character[36]		Moderate	Resultant Natural Character	Low-Moderate
Overall Baseline Landscape[37]		Moderate	Resultant Landscape	Low-Moderate

[27] In all scoring a 7-point scale is used: Very Low/Low/Low-Moderate/Moderate/Moderate-High/High/Very High.
[28] Includes geomorphological (landforms) and ecological (flora, fauna, habitat, biodiversity and natural systems and processes).
[29] Report No. 2882 Additional Information for a Finfish Farm Effects Assessment at Tio Point, Oyster Bay, Tory Channel; Cawthron Institute; June 2016; pg 23.
[30] Ibid pg 23.
[31] Ibid pg 23.
[32] Includes visual and aesthetic values such as coherence, vividness, memorability, perceived naturalness, expressiveness, and transient values.
[33]. Corydon Consultants Ltd, 2001 and Corydon Consultants Ltd, 2012.
[34] The Social and Community Effects of Salmon Farming & Rearing: A Case Study of the Top of the South Island; Taylor Baines & Assocs & Quigley & Watts Ltd; Nov 2015, pg. 69
[35] Includes cultural (Tangata Whenua), historic, and shared and recognised values.
[36] The Overall Baseline rating is reflective of the site's sensitivity to change. In the Marlborough Sounds environment a highly natural site will have higher perceptual ratings as well as high natural science ratings, and will be more sensitive to change. The more modified a site is, the lower the ratings tend to be for both natural science and perceptual/sensory ratings, and the less sensitive a site will be to change.
[37] Ibid

Site: 47 - Te Weka Bay

Figure 25: Site 47 - Photo from Aircraft

Figure 26: Site 47 - Location Map of Proposed Site

Figure 27: Site 47 - Photo from Boat

PROPOSED SITE 47: TE WEKA BAY

Natural Character & Natural Features and Landscapes: Site Specific Assessment

Location: Te Weka Bay; West end of Tory Channel on the south side, Outer Sounds.

Wider Context: Recent Natural Character Study[1]

Site is not in any area proposed as ONC.

Terrestrial Area 4 – Arapawa. Site is not adjacent to Terrestrial Sub-Area identified as having High or Very High natural character values at Level 4/5.

Marine Area E – Tory Channel. Site is part of Marine Sub-Area Tory Channel identified as having High abiotic/biotic values at Level 4/5.

Wider Context: Recent Landscape Study[2]

Site is part of Outer Sounds Landscape.

Site is not adjacent to or in any area proposed as ONFL at the district scale. (It is opposite (on the other side of the Channel) an area of Arapawa Island which has been proposed as ONF at the district level), Area 14: Arapawa Islands and East and West Heads.

Wider Context: Operative Resource Management Plan

Proposed site is not adjacent to or in any Area of Outstanding Landscape Value.

Proposed site is back-dropped by Katoa Point Scenic Reserve.

Site Natural Science Baseline

Geomorphology (Landform)[3]

The proposed site sits against the north-west-facing slopes of a wide bay (Te Weka) on the south side of Tory Channel, facing directly and openly into the main channel. Slopes rise steeply from the water here to an elevation of around 380masl, forming a large headland between two more major bays off Tory Channel (Erie and Onapua). Two main spurs descend from the headland into Tory Channel to enclose Te Weka Bay to the west and east. A small area of more gently sloping land sits between the spurs at the coastal edge, being the very top portions of a valley, elevated enough to avoid being submerged. The coastal edge adjacent to the site is for the most part abrupt and rocky, with slopes rising steeply and directly from the water's edge. There is a very thin strip of coastal beach adjacent to the head of the drowned valley.

Landform is largely unmodified here, although a track is cut on the slopes of the headland towards a cleared area with visibly exposed substrate on the ridgeline to the north-east (for telecommuncations). There is also a dwelling and jetty at the coastal edge, towards the middle of the bay.

Terrestrial Ecology

Vegetation adjacent to the proposed site is a mix of pine plantings, wilding pines, and early-stage regenerating coastal scrubland. Native scrubland regeneration is quite extensive across much of the headland, from the coastal edges to the top of the headland, but wilding pines are prolific throughout the regeneration over much of the headland. There appears to be more advanced regeneration on some parts of the main valley of the headland, as well as in small gullies behind the coastal edge. But pines are also dense in the valley behind the middle of the bay.

There will be some natural science value in the native regeneration here, although the value is reduced by the pines, which are known to disrupt natural patterns such as water and nutrient cycling, chemical properties of the soil and the succession of the indigenous vegetation. The wilding pines are problematic.

Rating: Low-Moderate

Marine Ecology

The whole of Tory Channel (excluding marine farm areas) has been previously identified as having High abiotic/biotic values at the 4/5 level[4]. Key Values previously identified are:

- narrow deep channel dominated by strong tidal flows, sheltered wave climate and proximity to Cook straight;
- shallow side bays;
- numerous ecologically significant Marine sites distinguished by high current communities;
- unique natural character area as a whole;
- adjoins Coastal Marine Area G.

The coastal margin here modified by a jetty and (presumably) underground power cables.

Recent ecological benthic assessment at the site[5] has determined that beneath most of the proposed cage area and farm site, biota was relatively sparse. In the vicinity of the offshore site boundary there are wave-like biogenic mounds comprising semi-consolidated aggregations of whole shell rubble and shell hash bound together by a diverse assemblage of sponges, hydroids, ascidians and bryozoans. This biogenic habitat has not been widely described within the greater Marlborough Sounds bioregion and is of value ecologically, and of interest scientifically[6]. Stands of bladder kelp (*Macrocystis pyrifera*) grow on broken rock, cobble and low relief bedrock habitat along the shoreline adjacent. An extensive bedrock reef lies approximately 100m to the west of the western site boundary (250 m from the cage area boundary), and a smaller reef area lies approximately 60 m to the east of the eastern site boundary (180 m from the cage area boundary). These reefs support diverse reef communities. Kina are present, and scallops (in low abundance) were found within the site. No data on currents at the site was available. Overall this site has a number of significant ecological features in the vicinity.

Rating: High

Summary of Natural Science Characteristics:

- Wide bay on the edge of main channel;
- Steep slopes rising from an abrupt, rocky coastal edge;
- Largely unmodified landform;
- Coastal margin modified by jetty and underground power cables;
- Large areas of regenerating indigenous coastal vegetation, appearing more advanced in the main valley and gullies;
- Plantation forestry present; also prolific wilding pines;
- To the side of narrow deep channel with strong tidal flows and sheltered wave climate;
- Relatively sparse benthic biota beneath most of the proposed cage area and farm site;
- An area of biogenic habitat (wave-like biogenic mounds) of ecological value and scientific interest in the vicinity of the off-shore site boundary.

Natural Science Rating:

- High-Moderate

Key Natural Science Values:

- Large areas of regenerating indigenous vegetation – mainly early stage;
- Plantation forestry present; also prolific wilding pines;
- Largely unmodified landform;
- Coastal margin modified by jetty and underground cables;
- Relatively sparse benthic biota beneath most of the proposed cage area and farm site;
- An area of biogenic habitat (wave-like biogenic mounds) of ecological value and scientific interest in the vicinity of the off-shore site boundary.

[1] Natural Character of the Marlborough Coast, MDC, 2014; pg.73.
[2] Marlborough Landscape Study, MDC, 2015.
[3] Broader geomorphological aspects have been covered previously - refer to Natural Character of the Marlborough Coast, MDC, 2014.
[4] Natural Character of the Marlborough Coast, MDC, 2014; pg.85
[5] Ecological Benthic Assessments for Proposed Salmon Farm Sites, Part 1; Niwa, April 2016.
[6] Ibid; pg 111.

Perceptual/Sensory Baseline

Coherence

Visual coherence of slopes behind this proposed site is on the low side, with fragmented and complex vegetative patterns and wilding pines scattered across the headland. With the pines randomly scattered the high visual contrast between the exotic pines and the regenerating native vegetation is subdued, but on the whole the site has a "peppered" look, rather than a coherent one.
Rating: Moderate-Low

Vividness and Memorability

This site is not highly memorable within its wider context of Tory Channel. Although the headland here is a main one within the Channel, in terms of its scale, elevation and location it does not stand out any more vividly than other headlands through the Channel. It forms part of a series of repetitive headlands through the Tory Channel, with its landscape character sitting uniformly within its wider context.

The bay itself, at the base of the headland, is open in character in that it is only shallowly enclosed to the west and east, and faces directly and openly into the Channel. Tory Channel is relatively confined, however, and so views from the site are fairly contained, with the site enclosed by the landforms of that wider context.
Rating: Low.

Perceived Naturalness

While the slopes here are unlikely to be perceived as highly natural, due mainly to the evident past modifications to vegetation, as well as the clearly visible track and structures (power poles, jetty, dwelling) the slopes themselves appear more "natural" than some other parts of Tory Channel. This is because there are no geometrical blocks of forestry, and the land has less of a managed look. The landform and vegetation are the dominant visual elements, with nature visibly beginning to reassert itself. Visual amenity is somewhat reduced by the appearance of prolific wilding pines, which appear out of control.

The vegetative cover, which includes quite large areas of early-stage regenerating indigenous vegetation, will be perceived as moderate-low "quality', with perceptions influenced by the prolific wilding pines.
Rating: Moderate

Expressiveness

The landform here is not particularly expressive, when considered within the context of the wider Sounds area. It is legible as part of a drowned valley system, as is the whole Sounds area. The rocky coastline is also expressive of the more extreme maritime conditions in the Outer Sounds, but this site has no particular features which are any more expressive of formative and coastal processes than much of the Sounds.
Rating: Low-Moderate

Transient Values

The site is just to the side of the main channel. With Tory Channel being a busy transport route between the North and South Islands, as well as an area with a number of marine farms, there is a fair amount of boat traffic passing the site daily[7]..

Seals, dolphins and even whales are seen at times in Tory Channel.
Rating: Moderate - High

Summary of Perceptual Characteristics:

- Wide, shallowly-enclosed bay on the edge of the main channel;
- Backed by steep, elevated slopes;
- Views are fairly shortened/restricted by enclosing landforms of the wider context (Tory Channel);
- Headland form fits uniformly into the wider context; a repetitive element through the Tory Channel;
- Fragmented and complex vegetation patterns;
- Slopes have a less "managed" look with slopes reverting to a more "natural" state;
- Backdrop vegetative cover includes large areas of early-stage regenerating indigenous vegetation;
- Visible structures and tracking on slopes.

Perceptual/Sensory Baseline Rating:

- Low - Moderate

Key Perceptual/Sensory Values:

- Open character bay, within an enclosed wider context;
- A working character, but with an unmanaged appearance;
- Backdrop vegetative cover perceived as moderate-low "quality";
- Moderate perceived naturalness;
- Low visual coherence; a complex "peppered" look;
- Visually dominant landform/vegetation;
- Fairly busy wider context; low levels of remoteness.

Site Associative Baseline

While there has been no direct input into this assessment from local community, information has been incorporated from social impact reporting on salmon farms in the Sounds, and from recently completed Cultural Impact and Tourism and Recreation assessments.

Tangata Whenua

Research undertaken shows the historical and widespread activity of each of Te Tau Ihu tribes (Ngāti Koata, Ngāti Kuia, Ngāti Apa ki te Rā Tō, Ngāti Toa Rangatira, Te Ātiawa o Te Waka-a-Māui, Ngāti Rangitāne o Wairau, Ngāti Tama ki Te Tau Ihu and Ngāti Rarua) in Kura Te Au (Tory Channel), Tōtaranui (Queen Charlotte Sound) and Te Hoiere (Pelorus Channel). Every tribe has at some point fished, had kāinga or pā (whether temporary or permanent), or is able to relate kōrero tūpuna in and around these waterways.[8].

it is recognised that some iwi may have an interest in an area that is historical (e.g. as a result of historical occupation of an area with accompanying wāhi tapu and other sites of significance), while current mana whenua, mana moana, tāngata whenua is held by another iwi. Additionally, there are instances where mana whenua, mana moana, tāngata whenua interests are overlapping and shared by two, or more iwi. (The term 'mana whenua, mana moana, tāngata whenua' seeks to encompass all the various 'Māori' interests that exist in the areas under investigation).[9] For mana whenua, mana moana and tangata whenua there will be physical and spiritual values relating to the protection of taonga, mauri, customary uses and practices and the exercise of kaitiakitanga in Kura Te Au.[10], as well as values relating to mahinga kai, manaaki tangata, and traditional and contemporary waka routes[11].

There is evidence of early Maori settlement/activity throughout Te Kura Te Au and the Arapawa Island areas, and there is ongoing cultural association with Kura Te Au, which has been identified as having a role as a "food basket" and "engine room" for the whole of Totaranui (Queen Charlotte Sound).[12]

There have been no specific Maori Heritage Sites or additional values publicly identified[13] which relate to this site in particular. Values relating to the context as a whole will apply. A recent Cultural Impact Assessment has, however, identified suggestions that this area is near an urupā and there are some concerns on the impact of discharge from the farms flowing past the urupā[14].

[7] Refer to Navigational Risk Review for Proposed Tory Channel Salmon Farms, Navigatus Consulting Limited; December 2015
[8] Draft Cultural Impact Assessment; Maximise, 2016, pg 7.
[9] Ibid; pg. 4
[10] Board of Inquiry, NZKS Decision, 23 Feb 2013; pg 248.
[11] Draft Cultural Impact Assessment; Maximise, 2016, pgs 15 and Appendix 2.
[12] Board of Inquiry, NZKS Decision, 23 Feb 2013; pg 262
[13] Marlborough District Council Smart Maps: Heritage Sites.
[14] Draft Cultural Impact Assessment; Maximise, 2016, pg 19.

Historic

In terms of the wider context, the first whaling station in New Zealand was established in Tory Channel, at Te Awaiti, and is reputed to be the first European settlement on the South Island. No historic sites have been identified at the site. [15]

Shared and Recognised

Tory Channel is well known as the main route between the North and South Islands, and leads to the actual gateway which provides a transition between the wildness of Cook Strait and shelter of the Marlborough Sounds. It also has a number of jetties and wharfs in the bays along its edge. It is an area of low active recreation and tourism use in comparison to Queen Charlotte Sound and parts of Pelorus Sound, with no known daily tour routes and only moderate recreational fishing levels. The main recreation and tourism activities in the vicinity are daily Interislander and Blue Bridge ferries, recreational boating (predominantly vessels over 5 metres) and fishing. Regular boat traffic through the channel is an existing use and as a result the Tory Channel could be considered more of a thoroughfare than a destination for tourism and recreation.

This area is not a major Picton scenic cruise and/or charter location; however, Beachcomber Cruises and the Cougar Line do operate Tory Channel routes each week[16]. While fishing occurs throughout the Queen Charlotte Sound, the area from the Tory Channel entrance through to Cape Jackson (over 28km away) is frequently used by recreational fishers and fishing tourism operators.

The Tory Channel is classified by DOC under the ROS system as an 'accessible' recreation area. Characteristics of 'accessible waters' include: "the waterways and/or adjacent land are readily accessible. Water is commonly plied by runabouts, trailer sailors, and other small vessels. Modification is apparent but not dominant."

Discussions with some tourism operators indicate an acceptance of salmon farms in Tory Channel [17]

The slopes back-dropping the site are a Scenic Reserve (Katoa Point Scenic Reserve). The Reserve is very rarely visited.[18]

The south-western edge of Arapawa Island (opposite the site) is particularly popular for pleasure craft.[19]

There is a dwelling/holiday home present behind this proposed site.

Summary of Site Associative Characteristics:

- Tory Channel is known as the main transportation route between North and South Islands;
- History of early Maori settlement/activity in the wider Tory Channel/Arapawa Island area; Physical and spiritual values for mana whenua, mana moana and tangata whenua relating to the protection of taonga, mauri, customary practices and the exercise of kaitiakitanga;
- Site may be near an urupa;
- Some history of early European settlement;
- The site is adjacent to Katoa Point Scenic Reserve
- The wider Channel is used for boating, crayfish diving and spear-fishing;
- The south-western edge of Arapawa Island opposite the site is popular boating spot;
- There is a dwelling/holiday home present behind this proposed site.

Associative Baseline Rating:

- High

Key Associative Values:

- Tory Channel known as the link between North and South Island
- Site is adjacent to Katoa Point Scenic Reserve
- Cultural heritage and historical sites within the wider Tory Channel/Arapawa Island area;
- Physical and spiritual values associated with mana whenua, mana moana and tangata whenua taonga, mauri, customary practices and the exercise of kaitiakitanga;
- Site may be near an urupa;
- Recreational use of the wider Tory Channel area, with a popular boating spot opposite the site, and a dwelling/holiday home present behind this proposed site.

[15] Marlborough District Council Smart Maps: Heritage Sites.

[16] www.mailboat.co.nz/pgs/cruises/mail_run/mail_run.php and www.cougarline.co.nz

[17] NZ King Salmon Potential Salmon Farm Relocation in Marlborough Tourism and Recreation Assessment (TARA); TRC Tourism Ltd. August 2016, pgs, 30 - 33

[18] Ibid; pg 31

[19] Appendix A – AIS Data of Vessel Routes, Navigational Risk Review for Proposed Tory Channel Salmon Farms; Navigatus Consulting Limited; July 2015

Summary: Key Values

	Key Values	*Baseline Rating*
Natural Science	• Extensive regeneration of indigenous vegetation; • Plantation forestry present; • Largely unmodified landform; • Coastal margin modified by jetty and underground cables; • Relatively sparse benthic biota beneath most of the proposed cage area and farm site; • An area of biogenic habitat (wave-like biogenic mounds) of ecological value and scientific interest in the vicinity of the off-shore site boundary.	High-Moderate
Perceptual/Sensory	• Open character bay, within an enclosed wider context; • A working character, but with an unmanaged appearance; • Backdrop vegetative cover perceived as moderate-low "quality"; • Moderate perceived naturalness; • Low visual coherence; a complex "peppered" look; • Visually dominant landform/vegetation; • Fairly busy wider context; low levels of remoteness.	Low-Moderate
Associative	• Tory Channel known as the link between North and South Island • Site is adjacent to Katoa Point Scenic Reserve • Cultural heritage and historical sites within the wider Tory Channel/Arapawa Island area • Physical and spiritual values associated with mana whenua, mana moana and tangata whenua taonga, mauri, customary practices and the exercise of kaitiakitanga; • Site may be near an urupa; • Recreational use of the wider Tory Channel area, with a popular boating spot opposite the site, and a dwelling/holiday home present behind this proposed site.	High

Conclusion: Proposed Site 47 Natural Character Assessment

Landform is for the most part unmodified; there is obvious tracking, and placement of structures in the form of a dwelling, jetty and telecommunications structure. Slopes adjacent to the site have extensive areas of regenerating native vegetation, potentially with good natural character values, although there is also pine forestry, with prolific wilding pines, and there will be disruption to values and natural processes caused by the pines. The coastal margin here modified here by the jetty and presumably by underground cable; there is relatively sparse benthic biota beneath most of the proposed cage area. An area of biogenic habitat (wave-like biogenic mounds) of ecological value and scientific interest has been identified in the vicinity of the off-shore site boundary; overall this site has a number of significant ecological features in the vicinity. Perceptual/sensory values for the site are low-moderate.

Natural Character Baseline Rating: High-Moderate

Outstanding Natural Character:

This assessment concludes that the site does not meet the threshold to qualify as Outstanding Natural Character due to reduced natural science values, and reduced perceptual/sensory values. That assessment is in agreement with the rating of natural science values in Tory Channel as High rather than Outstanding at the level 4/5, in the 2014 Marlborough Natural Character Study.

Conclusion: Proposed Site 47 Landscape Assessment

Landscape here is characterised by less management and the start of a return to a more natural state, with extensive areas of regenerating native vegetation. The slopes are unlikely to be seen as highly natural, due mainly to the evident past modifications to vegetation, as well as highly visible tracking and the presence of structures, but landform and vegetation are the dominant visual elements, with a moderate level of a visual amenity. Vividness and memorability is not high, but associative values are relatively high, with a possible urupa near-by, fairly intensive public use of the wider Tory Channel, and a popular pleasure-boating spot opposite the site.

Landscape Baseline Rating: Moderate

Outstanding Natural Feature/Landscape

The site is part of the wider Sounds, which is an Outstanding Natural Landscape at the National Scale. The site is not adjacent to or in any area proposed as ONF at the district scale[20].

This assessment concludes that the site, when assessed at the local site-scale (Level 4/5), does not meet the threshold to qualify as an Outstanding Natural Feature due to reduced natural science values and reduced perceptual/sensory values.

[20] MDC proposed ONFLs have been assessed at a district scale; Marlborough Landscape Study 2015, pg. 104; MDC proposed ONFLs have not been assessed separately at regional and district levels; an ONFL in Marlborough is considered to be an ONFL at both levels; Marlborough Landscape Study 2015, MDC, Pg. 20

PROPOSED SITE 47: TE WEKA BAY

Assessment of Effects from the Proposal

Proposed Change:

- A rectangular above-water steel structure with netting (5 pens); the structure is assumed to be dark in colour, with black netting and a barge.
- Underwater mooring structures – anchoring the farm in place. (Not visible above water);
- Lighting and Navigation Structures: at each corner of the farm (above the underwater mooring corners), and possibly in the middle of the long sides. Lighting will be visible from a minimum distance of one navigational mile, and possibly up to two navigational miles. [21] Lighting is likely to be in synchronised flashing, to show the form of the farm at night.
- A barge for servicing the farm. This assessment makes the assumptions that:
  - the barge will be located an end or on the shoreline side of the farm, as close as possible to the adjacent landform, enabling the landform to backdrop that structure;
  - the barge will be the more recent architecturally-designed model, or specifically designed, in a dark recessive colour.

Potential Viewing Audience/Visual Appraisal:

The proposal will be visible from the air, but will be mostly viewed by boat traffic. A large proportion of the boat traffic is likely to be pleasure vessels, as Tory Channel is well-used for recreation. It is also the route of the inter-island ferries. There will also be work-boats, fishing boats and cargo vessels passing the site. Views will mostly be transitory. Views from small boats will be more side on, with viewers more likely to perceive the structure's height out of the water. Views from larger boats will be from a greater elevation, with viewers more likely to see the rectangular form of the structure, and more of its total area. Given the narrow width of Tory Channel views from boats will be relatively close. The navigational surveying of vessel routes provided for this assessment has shown that the ferry route is approximately 380m from the proposed structures[22].

If at up to 0.5km distance a white-coloured salmon farm can be expected to be visually "dominant[23]" from the water, that visual dominance will be reduced here by the proposed farm design (dark recessive colours), with the site attributes and context providing further mitigating factors. At distances from 0.5 - 1km visual prominence will be reduced for the same reasons. Views of the structures from greater 1-2km may become faint.

From more elevated views (such as from dwellings or from the ferries), if at up to 1km views of a white-coloured salmon farm can be expected to be "dominant", visual dominance can be expected to be reduced here by the proposed farm design (dark recessive colours), with the site attributes and context providing further mitigating factors. At distances greater than 1-2.5kms visual prominence will be reduced for the same reasons. Beyond that views of structures may a minor part of the view.

Perceptions of salmon farms by recreational boaties were surveyed in 2015. Results showed that just over half the boatie respondents reported no effect of salmon farms on their experience of the Sounds, while almost one-third reported a negative effect. The most common negative effect reported by boaties was visual blight (12 percent), a feeling of displacement from the bay (10 percent), and course change or navigational risk (6 percent). However salmon farms also commonly attract boaties and visitors on charter vessels. People's responses to the presence of salmon farms varies a great deal, depending on the nature of occupancy, and the experiences, personalities and attitudes of the individuals concerned. [24]. Neighbours have not reported noticeable adverse effects from salmon-farm lighting, whether it be from the accommodation block, navigational aids or under-water lighting.[25]

There is a dwelling located within the bay which will look out toward the proposed Salmon Farm Site. While this is a limited viewing audience, the impact on views will be at least prominent due to the static nature of the views obtained and the proximity to the proposal site.

There are also a small number of dwellings across the Channel at Te Iro Bay, at distances ranging from approximately 3.5-4.5kms. At this distance views of the proposal are unlikely, especially given the use of recessive colours, however it may be possible to see night lighting from 3.7kms if lights with that range are used on the proposed structures.

Site Sensitivity:

This location has a baseline value of High- Moderate for Natural Character and Moderate for Landscape. The physical characteristics which backdrop the proposed site are considered appropriate for the absorption of a Salmon Farm in terms of Landscape values, however the associational values of the boat traffic and presence of a dwelling within the bay have an influence on the sensitivity of this site. This site is therefore considered to have some sensitivity to a Salmon Farm in terms of landscape values. The site has a number of significant ecological features in the vicinity which have been identified in the benthic assessment and increase the sensitivity to a Salmon Farm in terms of Natural Character.

Assessment of Landscape Effects

For detailed assessment of effects refer to the table below.

Conclusion: Proposed Site 47 – Effects on Natural Character

There will be adverse effects on the perceptual/sensory aspect of natural character from this proposal, including a reduction in perceived naturalness and reduced visual amenity. Adverse effects on the perceptual/sensory aspect of natural character is assessed as being not at a significant level, due mainly to the visual attributes and character of the site and the wider context of the receiving environment, which is not highly natural.

The Natural science baseline rating for the site is High-Moderate. There will be no effects on terrestrial natural science values. Recent modelling of potential benthic effects[26] has shown that with a feed rate of 1800 tonnes/year enrichment on the seabed beneath the cages would be at an acceptable level; but some of the ecologically significant habitat northeast of the cages would still be subject to moderate levels of deposition.

Effects on natural character at the site scale (Level 4/5) are assessed as being unlikely to be significant, with a resulting Natural character rating for the site of Moderate.

It is not considered that natural character effects at the Level 3 scale[27] will be significant. Values at this scale are broad, and the site is only a very small part of the context this scale. The site is not in an area proposed as Outstanding Natural Character at the Level 3 (District) scale. Effects on the Marlborough Sounds natural character values at a regional and national scale are considered to be insignificant.

Conclusion: Proposed Site 47 – Effects on Landscape Character

There will be adverse effects on landscape character resulting from the proposal, with a reduction in perceived naturalness at the site and a reduction in the levels of visual amenity. The proposal will result in new clearly visible structures, however structures are already visible in the vicinity (jetty, dwelling, power poles), which reduces the significance of adverse effects on visual amenity and perceived naturalness. The significance of adverse effects on perceived naturalness are also considered reduced by the proliferation of wilding pines throughout the Reserve at this point in time. The moderate-low coherence of the existing backdrop will mean that structures will be more readily absorbed visually, and the structures will also not appear out of place with the existing character of the site and context.

[21] Navigational Risk Review for Proposed Pelorus Sound Salmon Farms, Navigatus Consulting Limited; December 2015; pg 24. Visibility range of 1 nautical mile is recommended as a minimum for lighting, with range being able to be increased to 2 nautical miles economically.
[22] Navigational Risk Review for Proposed Tory Channel Salmon Farms; Navigatus Consulting Limited; December 2015; Pg. 12
[23] Proposed Salmon Farms Marlborough Sounds, Natural Character Landscape and Visual Amenity Effects Final Report Prepared for King Salmon; Boffa Miskell, August 2011, pg. 24.
[24] The Social and Community Effects of Salmon Farming & Rearing: A Case Study of the Top of the South Island; Taylor Baines & Assocs & Quigley & Watts Ltd; Nov 2015, pgs. 37 - 40.
[25] Ibid; pg 43.
[26] Ecological Benthic Assessment for Proposed Salmon Farm Sites – Part 2: Assessment of Potential Effects; Niwa, June 2016.
[27] Natural Character of the Marlborough Coast, MDC, 2014

There may be significant adverse visual effects for the dwelling/holiday home located directly behind the proposed site. Access will be past the new structures, and the structures are likely to be clearly visible from the property. There will be loss of night sky darkness at the site, which will affect this residence in looking out to water. Effects for other viewers are not considered significant due to distance, and existing lighting in the wider context.

There will also be adverse effects on the associative values relating to the popular boating spot opposite the site, although these are reduced by the distance from the site. There will be adverse effects on the associative values of the adjacent Scenic Reserve, although again, these will be reduced if the Reserve is not well-recognised by the general public (as noted in the Toursim and Recreation Assessment for the proposal) and does not appear on the MDC Smart Map of Parks and Reserves.

Effects on the urupa are not known at this stage. Further information may come to light with on-going consultation.

At this stage overall landscape and visual effects at the site scale (Level 4/5) are considered to reduce the landscape rating from Moderate to Low-Moderate. The proposal would be a fit with the existing working-landscape character of the site.

There are a number of salmon farms already in Tory Channel - cumulative effects are discussed in a separate section at the start of this report.

In terms of district-scale values, the site is not part of any proposed ONF. It does lie within an area proposed as "High Amenity". It is not considered that landscape and visual effects at the district scale will be significant. The proposal will be a fit with the existing character of Tory Channel, and visual amenity effects at that scale from this proposal will be only small.

Regional-scale values have not been separately identified by MDC[28]. It is considered that as district scale values will not be significantly affected, any larger-scale regional landscape values will also not be significantly affected by this proposal. At that large scale values will be broader again in nature, and the site forms only a very small part of the context.

It is considered that effects from the proposal will not impact national-scale values informing the classification of the Sounds as an ONL at that national scale.

[28] MDC proposed ONFLs have been assessed at a district scale; Marlborough Landscape Study 2015, pg. 104; MDC proposed ONFLs have not been assessed separately at regional and district levels; an ONFL in Marlborough is considered to be an ONFL at both levels; Marlborough Landscape Study 2015, MDC, Pg. 20.

Site 47 Te Weka Bay Assessment of Effects				
Character Component (NZCPS)	*Existing Character*	*Assessment of Effects*		
	Key Values	*Baseline Rating*[29]	*Effects*	***Mitigation*** *(Including site characteristics and proposal design features).*
Natural Science [30]	• Extensive regeneration of indigenous vegetation; • Plantation forestry present; • Largely unmodified landform; • Coastal margin modified by jetty and underground cables; • Relatively sparse benthic biota beneath most of the proposed cage area and farm site; • An area of biogenic habitat (wave-like biogenic mounds) of ecological value and scientific interest in the vicinity of the off-shore site boundary.	High-Moderate	• No change to landform or landcover; • New modification to the coastal margin. Recent modelling of potential benthic effects has shown that with a feed rate of 1800 tonnes/year enrichment on the seabed beneath the cages would be at an acceptable level; but some of the ecologically significant habitat northeast of the cages would still be subject to moderate levels of deposition.	
Perceptual/ Sensory[31] Values	• Open character bay, within an enclosed wider context; • A working character, but with an unmanaged appearance; • Backdrop vegetative cover perceived as moderate-low "quality"; • Moderate perceived naturalness; • Low visual coherence; a complex "peppered" look; • Visually dominant landform/vegetation; • Fairly busy wider context; low levels of remoteness.	Low-Moderate	• The will be a drop in visual amenity provided by the site as a result of the proposal. However, the proposed structures will be seen against a fairly complex backdrop with low visual coherence. The nature of the backdrop here means this site will be more readily able to receive and visually absorb the proposed new structures than some other sites. • There will be significant adverse visual effects for the dwelling/holiday home located directly behind the proposed site. Access will be past the new structures, and the structures are likely to be clearly visible from the property. There will be loss of night sky darkness at the site, which will affect this residence in looking out to water. Effects from lighting for other viewers are not considered significant due to distance, and existing lighting in the wider context. • As the popular boating spot opposite the site on the other side of the channel is at a distance approaching 1km, visual effects for pleasure boats stopping at that point are not considered high. • The quality of the vegetation here is only perceived as moderate-low, which decreases the significance of adverse visual effects from the proposal. However, slopes behind the proposed site are a Scenic Reserve, which increases the associative significance of adverse visual effects. • There will also be a lowering of the perceived naturalness of the site, with the introduction of new structures in the water. However, power poles are clearly visible on adjacent slopes and a jetty is present. Given that the site appears only moderately natural at the moment, with its past working character readily apparent, this lowering effect is not considered significant. • The existing working character of the wider context, and the apparent past productive uses of the slopes adjacent to the site, mean that the structures will not appear out of place overall. • There will be loss of night sky darkness • The channel-edge location means that the structures will be easily visible, although the slight enclosure provided by the shallow bay will allow the structures to be seen as slightly tucked away from the main channel, despite their edge location. • Surveys of social perceptions carried out in 2001 and 2012 for the Marlborough District Council[32].suggest that the growth in marine farming activities (including salmon farming) was not seen by national and regional visitors as having had a deleterious effect on the valued qualities of the Marlborough Sounds over this period.[33]	• Slight enclosure within the shallow bay allows the structures to be seen as slightly tucked away, despite the location on the edge of the main channel; • Locating the barge in a position which allows the adjacent landform to act as a backdrop; • Use of dark recessive colours on structures and netting will reduce visual impact; • Structures will be a "fit" with existing character. • Low coherence backdrop is more readily able to receive and absorb change.
Associative Values[34]	• Tory Channel known as the link between North and South Island • Site is adjacent to Katoa Point Scenic Reserve; • Cultural heritage and historical sites within the wider Tory Channel/Arapawa Island area; • Physical and spiritual values associated with mana whenua, mana moana and tangata whenua taonga, mauri, customary practices and the exercise of kaitiakitanga; • Site may be near an urupa; • Recreational use of the wider Tory Channel area, with a popular boating spot opposite the site, and a dwelling/holiday home present behind this proposed site.	High	• A Tourism and Recreation Assessment (TARA) has concluded that there will be minimal impact on tourists or recreationalists. • Effects on mana whenua, mana moana and tangata whenua values may also be amplified due to the lack of existing marine farming at the site, although the coastal margin has been modified by a jetty and (presumably) underground cables. Possible effects on the urupa are not known at this stage. • There will be adverse effects on the associative values relating to the popular boating spot opposite the site, although these are reduced by the distance from the site; effects on associative values relating to the recognition of the Channel • Effects on associative values relating to Tory Channel's role as the link between the North and South Islands are not considered significant, as the proposal will be a fit with the existing character of Tory Channel – which is known as a mixed-use Sound, with a predominantly working character. • There will also be adverse effects on the associative values of the adjacent Scenic Reserve, although the Reserve does not appear to be one of the more recognised or promoted Reserves in the Sound. It does not appear on the MDC Parks and Reserves Smart Map and the TARA notes that the adjacent Reserve is rarely visited. .	• Tory Channel is recognised as a Sound with a complex mix of uses, including recreation, production (pasture farming, forestry, marine farming), and regeneration of indigenous vegetation.
Overall Baseline Natural Character[35]		High-Moderate		
Overall Baseline Landscape[36]		Moderate		
Resultant Natural Character			Moderate	
Resultant Landscape			Low-Moderate	

[29] In all scoring a 7-point scale is used: Very Low/Low/Low-Moderate/Moderate/Moderate-High/High/Very High.
[30] Includes geomorphological (landforms) and ecological (flora, fauna, habitat, biodiversity and natural systems and processes).
[31] Includes visual and aesthetic values such as coherence, vividness, memorability, perceived naturalness, expressiveness, and transient values.
[32] Corydon Consultants Ltd, 2001 and Corydon Consultants Ltd, 2012.
[33] The Social and Community Effects of Salmon Farming & Rearing: A Case Study of the Top of the South Island; Taylor Baines & Assocs & Quigley & Watts Ltd; Nov 2015, pg. 69
[34] Includes cultural (Tangata Whenua), historic, and shared and recognised values.
[35] The Overall Baseline rating is reflective of the site's sensitivity to change. In the Marlborough Sounds environment a highly natural site will have higher perceptual ratings as well as high natural science ratings, and will be more sensitive to change. The more modified a site is, the lower the ratings tend to be for both natural science and perceptual/sensory ratings, and the less sensitive a site will be to change.
[36] Ibid

Site: Waihinau Bay

Figure 28: Site Waihinau Bay - Photo from Aircraft

Figure 29: Waihinau Bay - Location Map

Figure 30: Waihinau Bay - Photo from Boat

EXISTING SITE: WAIHINAU

Natural Character & Natural Features and Landscapes: Site Specific Assessment

Location: West side of Waihinau Bay, Outer Pelorus Sound.
Wider Context: Recent Natural Character Study[1]
Site is not in any area identified as having Outstanding Natural Character.
Terrestrial Area 3 – Bulwer. Site is not adjacent to (but is close to) Terrestrial Sub-Area identified as having High or Very High abiotic/biotic values at Level 4/5.
Marine Area C – Pelorus Sound. Site is not in any Marine Sub-Area identified as having High or Very High abiotic/biotic values at Level 4/5.
Wider Context: Recent Landscape Study[2]
Site is part of the Outer Sounds Landscape.
Site is not in or adjacent to any proposed as ONF at the district scale. (It is opposite terrestrial area identified as ONF at the district scale – on the opposite north/north-eastern side of Waihinau Bay).
Area 5: Port Ligar, Forsyth Island and Kaitira Headland.
Wider Context: Operative Resource Management Plan
The site is not back-dropped by an Area of Outstanding Landscape Value.
Slopes to the north of the site and the foreshore area in front of residential development (north/north-eastern side of the Bay) is Bulwer Scenic Reserve.

Site Natural Science Baseline

Geomorphology (Landform)[3]
Waihinau Bay is formed by the encircling arms of two main ridges coming down into the Waitata Reach from Turner Peak (693masl), the second highest peak in the Waitata Reach (the highest being Mt Shewell at 775masl, at the south-west end of the Reach). The massive form of Turner Peak sits to the north-west of the existing salmon farm. The existing salmon farm is back-dropped to the immediate north-west/west by a ridge which drops quickly from Turner Peak to an elevation of around 300masl directly behind the farm (west), and remains fairly constant at that elevation to the end of Camp Bay (south side of the farm), before dropping again to the headland between Waihinau Bay and Waitata Bay (240masl).

Waihinau Bay is the middle and smallest of the three main bays on the western side of this mid-section of Waitata Reach. Much of the coastal edge in the Bay has the abrupt character typical to the Outer Pelorus Sound, with slopes rising steeply and immediately from a rocky sea-edge, but there are also some strips of narrow beach, including behind the salmon farm (to the west) . There are also two areas of more gently sloping land in the Bay – being the upper-most portions of valley-floors, elevated enough to escape the sea. One of these is to the north of the existing salmon farm, at a distance of about 750m; the other – which is smaller, is just to the north-west of the farm (about 350m distance). .

Slopes adjacent to the salmon farm (to the west) are largely unmodified, but modifications have occurred for placement of dwellings and jetties (both south and north-west of the salmon farm). Some tracks are also visible on the slopes behind (west of) the farm as lines through the vegetation; a few power-poles are also visible. To the north of the salmon farm the Port Ligar Road traverses the lower slopes, and is visible across a grassed area behind development, and as a line through the vegetation on the hillslopes. Modifications have also been made here to accommodate dwellings and jetties.

Terrestrial Ecology
The slopes behind the existing salmon farm are for the most part densely covered in regenerating indigenous scrub, being manuka/kanuka dominated, with a scattering of wilding pines. There are a few thinner, more exposed rocky patches towards the end of the headland between Waihinau Bay and Waitata Bay.

The headland and slopes behind it have been previously identified as having High natural character values.[4] There is a large grouping of pines on the coastal edge immediately west of the existing salmon farm, and small areas of grass on parts of the lower slopes, associated with dwellings. There is a larger area of grass behind development to the north of the salmon farm, and pines are also scattered through vegetation along the coastal edge and development to the north of the salmon farm.

On the slopes to the north and east of the salmon farm (on the opposite side of the Bay) native regeneration appears well-advanced. Turner Peak and these more north-eastern slopes of the Bay have been previously identified as an Outstanding Natural Feature.
Rating: High-Moderate

Marine Ecology
Pelorus Sound is typified by narrow near-shore reef; sand/shell and then mud offshore, with a typical array of coastal species. Reefs and sediments can often appear relatively barren; there are biogenic communities in places including rhodoliths, hydroids, tube worms, horse mussels and bryozoans.[5]

The coastal margin has been modified on the western side by the salmon farm, and by mussel farms to the east.

The Waihinau Bay salmon farm is a low-flow site that has no significant reef habitats within the primary depositional footprint[6]. Most recent annual monitoring (2015) has shown that biological communities at the site are indicative of enriched conditions. Some areas beneath the farm are characterised by very low taxa richness and very high abundances of opportunistic taxa; other areas still have a healthy level of richness and diversity, albeit with a numeric dominance by opportunistic taxa. The indicated bio-available concentrations of zinc in some areas continue to exceed the threshold for possible biological effects, suggesting some effect to the biota may result. Assessment of seabed enrichment indicated the conditions are moderately to highly enriched. No seabed enrichment effect related to farming was evident in the water-column profile[7].
Rating: Low-Moderate

Summary of Natural Science Characteristics:

- Relatively small bay at the base of Turner Peak (693masl), the second highest peak in Waitata Reach;
- Extensive areas of regenerating scrubland on slopes behind the salmon farm; presence of wilding pines;
- Advanced regenerating indigenous forest on slopes to the north and north-east (identified as ONF);
- High natural character values also previously identified for the headland slopes to the south of the salmon farm (between Waihinau and Waitata Bays);
- Slopes and coastal edge relatively highly developed for the Outer Pelorus Sound, with dwellings, a couple of jetties, roads, tracks, power poles and power lines
- Coastal margin modified by a salmon farm to the west, and mussel farms to the east.
- Enriched benthic conditions beneath the site; low flow currents.

Natural Science Baseline Rating:

- Moderate

Key Natural Science Values:

- Extensive areas of regenerating indigenous vegetation; fairly early stages but with good coverage for the most part;
- Presence of wilding pines;
- Some modification to landform for dwellings, jetties, roads, tracks and power-lines;
- Some modification to the coastal margin by marine farming, including large rectangular salmon farm;
- Enriched benthic conditions beneath the site; low flow currents.

[1] Natural Character of the Marlborough Coast, MDC, 2014.
[2] Marlborough Landscape Study, MDC, 2105.
[3] Broader geomorphological aspects have been covered previously; Refer to Natural Character of the Marlborough Coast, MDC, 2014.

[4] Natural Character of the Marlborough Coast, MDC, 2014; pg.125
[5] Natural Character of the Marlborough Coast, MDC, 2014; pg.70.
[6] Report 2782 Environmental Impacts of the Waihinau Bay Salmon Farm: Annual Monitoring 2015; Cawthron Institute; pg 8.
[7] Ibid.

Site Perceptual/Sensory Baseline

Coherence
The hillslopes behind the salmon farm are highly coherent, due to the extensive coverage of regenerating vegetation and its visual simplicity – being dominated by a small number of species. There are a small number of wilding pines across the face of the headland between Waihinau Bay and Waitata Bay, as well as a large grouping of pines close to the salmon farm. The pines here do not appear visually discordant, as they are naturalistically grouped or dotted randomly though other tall vegetation, rather than being in highly contrasting, geometric mono-species forestry blocks.
Rating: High

Vividness and Memorability
This area has high memorability due to the awesome scale of the steep slopes of Turner Peak, which visually tower over the small Bay and dwarf the development at the base – in fact development here gives a visual clue as to the large scale of the hillside backdrop. The setting is picturesque, with small groups of dwellings set into grassy banks and extensive areas of tall vegetation; groups of visually contrasting trees (pines); and small scattered boats. Visual amenity is high, although reduced by the presence of the salmon farm.
Rating: High

Perceived Naturalness
Perceived naturalness is reduced by the presence of the commercial salmon farm, and the presence of mussel farms in the Bay, as well as by the residential development with associated roads, tracks and power poles. These factors also reduce the sense of remoteness. However, the enormous scale and steep elevation of the hillslopes rising behind the Bay to Turner Peak, and the extensive coverage of tall vegetation, mean that the natural elements of landform, vegetation and seascape still visually dominate. Development is dwarfed at the toes of the landform, inside a relatively small bay.

The vegetative cover on slopes adjacent to the site, being Manuka/Kanuka dominated "scrub", while being seen as more "natural" than modified cover such as pasture or plantation forestry, is generally perceived as being of lower "quality" than for example more advanced native regeneration, and this has implications for visual amenity, lowering that value slightly.
Rating: Moderate

Expressiveness
The landform here is expressive of its formative processes, being clearly legible as part of a drowned valley system, as is the whole of the Marlborough Sounds. The flatter areas here – top portions of valley which are elevated enough to have avoided being submerged, provide interesting features; and the patches of exposed rocky slopes behind the farm are expressive of the more extreme maritime exposure of the Outer Sounds.
Rating: Moderate

Transient Values
Changing character of the water; generally a calmer more sheltered part of the Sound, where mist can form over the water. Wildlife; boat traffic[8]. Tranquillity is somewhat reduced by the presence of the commercial salmon farm.
Rating: Moderate - High

Summary of Perceptual/Sensory Characteristics:

- Relatively small bay at the base of steep, towering slopes;
- Sheltered calm waters enclosed from the main channel;
- Vegetated slopes with consistent, simple and natural patterns;
- Backdrop indigenous vegetative cover is extensive areas of regenerating scrub;
- Relatively well-developed; picturesque – with dwellings set into native vegetation, pine plantings with an amenity character, a couple of jetties and scattered boats;
- Highly memorable due to picturesque qualities and dominating scale of Turner Peak;
- Marine farming structures also present in the form of a salmon farm in the west; and mussel farms in the east;
- Development visually dominated by Turner Peak.

Perceptual/Sensory Baseline Rating:

- High-Moderate

Key Perceptual/Sensory Values:

- Visually dominant landform, vegetation and seascape, with landform dwarfing development;
- Backdrop slopes have simplicity and high visual coherence;
- Backdrop indigenous vegetative cover is perceived as moderate "quality";
- Scenic/picturesque qualities;
- High memorability;
- Sense of enclosure and shelter;
- Sense of tranquillity;
- Modification apparent through prominent salmon farm structure in southern bay.

Site Associative Baseline

While there has been no direct input into this assessment from local community, information has been incorporated from social impact reporting on salmon farms in the Sounds, and from recently completed Cultural Impact and Tourism and Recreation assessments.

Tangata Whenua
Research undertaken shows the historical and widespread activity of each of Te Tau Ihu tribes (Ngāti Koata, Ngāti Kuia, Ngāti Apa ki te Rā Tō, Ngāti Toa Rangatira, Te Ātiawa o Te Waka-a-Māui, Ngāti Rangitāne o Wairau, Ngāti Tama ki Te Tau Ihu and Ngāti Rarua) in Kura Te Au (Tory Channel), Tōtaranui (Queen Charlotte Sound) and Te Hoiere (Pelorus Channel). Every tribe has at some point fished, had kāinga or pā (whether temporary or permanent), or is able to relate kōrero tūpuna in and around these waterways[9].

it is recognised that some iwi may have an interest in an area that is historical (e.g. as a result of historical occupation of an area with accompanying wāhi tapu and other sites of significance), while current mana whenua, mana moana, tāngata whenua is held by another iwi. Additionally, there are instances where mana whenua, mana moana, tāngata whenua interests are overlapping and shared by two, or more iwi. (The term 'mana whenua, mana moana, tāngata whenua' seeks to encompass all the various 'Māori' interests that exist in the areas under investigation).[10]

For mana whenua, mana moana and tangata whenua there will be physical and spiritual values relating to the protection of taonga, mauri, customary uses and practices and the exercise of kaitiakitanga in Te Hoiere.[11], as well as values relating to mahinga kai, manaaki tangata, traditional and contemporary waka routes[12]. Values which have been previously identified[13] in Te Hoiere include:

[8] Refer to Navigational Risk Review for Proposed Pelorus Sound Salmon Farms, Navigatus Consulting Limited; December 2015
[9] Draft Cultural Impact Assessment; Maximise, 2016, pg 7.
[10] Ibid; pg. 4
[11] Board of Inquiry, NZKS Decision, 23 Feb 2013; pg 248.
[12] Draft Cultural Impact Assessment; Maximise, 2016, pg 15 and Attachment 2.
[13] Board of Inquiry, NZKS Decision, 23 Feb 2013; pg 253.

- Mauri of the waterway/moana;
- Taonga species (including King Shags and dolphins, which are considered taonga and taniwha by Ngati Kuia);
- Traditional waka routes along the eastern side of Waitata Reach;
- Customary scallop fisheries in Waitata Reach
- Reef fishing spots

At this stage there have been no Maori Heritage Sites or additional values publically identiified[14] which relate to this site in particular. More information may become available as consultation continues. In general values relating to the context as a whole will apply. .It is likely that values at the site will be considered lowered by the presence of the existing salmon farm. In 1991 work to record coastal (terrestrial) sites of significance to iwi in the Pelorus Sound was undertaken, although the findings are confidential.[15]

Historic
No historic features have been identified at the proposed site.[16]

Shared and Recognised
Waihinau Bay is the site of a small settlement of dwellings, with associated jetties for boating. It is likely to have some recognition as a holiday/recreation spot. The bay is also the site of a number of mussel farms and a salmon farm

In terms of the wider context, Waitata Reach is classified by DOC under the ROS system as 'accessible waters' for recreation, which implies a degree of modification to the natural environment and the likelihood of encountering other users and uses of the area. The main recreation and tourism activities in Waitata Reach, as elsewhere in the Marlborough Sounds, are recreational fishing and boating. Other key activities include sightseeing cruises, walking/hiking, fishing and sailing, and diving. (Kayaking is largely focused in inner Pelorus Sound – around the Kenepuru Sound and Tennyson Inlet areas.) Pelorus Sound is less popular for sailing due to the gusty nature of the winds and the shallow upper reaches.

The Waitata Reach is described as experiencing a moderate level of fishing activity. There is a shift by the guided fishing operators to go out past the Pelorus entrance to fish the D'Urville, Stephen and Chetwode Islands surrounds[17]. The Pelorus Mail Boat's Outer Sounds route takes in the bays (Waitata, Richmond, Bulwer and Port Ligar) of Waitata Reach once a week on Fridays[18]. In general the Pelorus Sound does not have the same popularity and high use for recreation and tourism as does the Queen Charlotte Sound.[19] Boats through Pelorus Sound tend for the main part to be for servicing mussel farms.

Summary of Associative Characteristics:
- Physical and spiritual values associated with mana whenua, mana moana, and tangata whenua taonga, mauri, customary practices and the exercise of kaitiakitanga
- Traditional and contemporary waka routes through Waitata Reach;;
- Recreational use of the wider Pelorus Sound –holidays, boating, fishing;
- The bay has dwellings/is a holiday spot;
- Marine farming area.

Associative Baseline Rating:
- High

Key Associative Values:
- Physical and spiritual values associated with mana whenua, mana moana, and tangata whenua taonga, mauri, customary practices and the exercise of kaitiakitanga
- Traditional and contemporary waka routes through Waitata Reach;;
- Recreational uses of the wider Pelorus Sound;
- Waihinau Bay has dwellings/is a holiday spot.

Summary: Key Values

	Key Values	*Baseline Rating*
Natural Science	• Extensive areas of regenerating indigenous vegetation; fairly early stages but with good coverage for the most part; • Presence of wilding pines; • Some modification to landform for dwellings, jetties, roads, tracks and power-lines; • Some modification to the coastal margin by marine farming, including large rectangular salmon farm; • Enriched benthic conditions beneath the site; low flow currents.	Moderate
Perceptual/Sensory	• Visually dominant landform, vegetation and seascape, with landform in particular dwarfing development; • Backdrop slopes have simplicity and high visual coherence; • Backdrop vegetation is perceived as moderate "quality"; • Scenic/picturesque qualities; • High memorability; • Sense of enclosure and shelter; • Sense of tranquillity; • Modification apparent through prominent salmon farm structure in southern bay.	High-Moderate
Associative	• Physical and spiritual values associated with mana whenua, mana moana, and tangata whenua taonga, mauri, customary practices and the exercise of kaitiakitanga • Traditional and contemporary waka routes through Waitata Reach;; • Recreational uses of the wider Pelorus Sound; • Waihinau Bay has dwellings/is a holiday spot.	High

[14] Marlborough District Council Smart Maps: Heritage Sites.
[15] Board of Inquiry, NZKS Decision, 23 Feb 2013; pg 254.
[16] Marlborough District Council Smart Maps: Heritage Sites.

[17] Personal communications – Del Carrodus, Havelock and Sounds Water Taxis, 7 June 2016
[18] www.mail-boat.co.nz/mailruns.html
[19] NZ King Salmon Potential Salmon Farm Relocation in Marlborough Tourism and Recreation Assessment (TARA); TRC Tourism Ltd, August 2016, pgs, 18 - 28

Conclusion: Existing Site Waihinau Natural Character Assessment

The extensive areas of regenerating indigenous vegetation on slopes adjacent (to the west) of the salmon farm will hold good natural science value with the potential values increased by proximity to areas already identified as having high natural character values. However, the biological (benthic) environment in the vicinity of the site is indicative of enriched conditions and reduces the natural science value of this location. Natural science and Perceptual/Sensory values are reduced by the presence of the salmon farm, although Perceptual/Sensory values remain high-moderate.

Natural Character Baseline Rating: Moderate

Outstanding Natural Character

The site is assessed as not meeting the threshold for ONC due to reduced natural science and reduced Perceptual/Sensory values. This is in agreement with natural character rating of the area at the level 4/5 in the 2014 Marlborough Natural Character Study.

Conclusion: Existing Site Waihinau Landscape Assessment

The site has high perceptual values in terms of coherence, memorability and overall visual amenity. Perceived naturalness is reduced by the presence of marine farm structures and other development, but remains at a good level due to the visual dominance of the natural elements of landform, vegetation and seascape, with landform being particularly dominant here. The site also has increased associative values as a holiday/recreation spot, and the terrestrial backdrop has high-moderate levels of natural science value in the extensively regenerating indigenous vegetation.

Landscape Baseline Rating: High-Moderate

Outstanding Natural Landscape/Feature

The site is part of the wider Sounds, which is an Outstanding Natural Landscape at the National Scale. The site has not been previously proposed as ONF at the district scale, although slopes to the north and north-east have been identified as ONF at the district scale.

This assessment concludes that at a site scale (Level 4/5), although scoring relatively highly across all attributes, the slopes behind the salmon farm do not currently meet the threshold for ONF. This is due to reduced natural science values, and reduced Perceptual/Sensory values.

EXISTING SITE: WAIHINAU

Assessment of Effects from the Proposal

Proposed Change:

Surrender of Site

Removal of existing salmon farm structures comprising

- Permission for up to 2ha of structures within a 5ha area, with no constraints on pens, nets or barges;
- Rectangular above-water steel cage structure measuring approximately 175m x 40m; light in colour with white netting covering;
- Underwater mooring structures – anchoring the farm in place. (Not visible above water);
- Lighting and navigation structures associated with the rectangular above-water steel cage;
- Barge (approximately 20m x 9m).

Once the salmon farm is removed the marine farming consent for the site will be surrendered. It is proposed that zoning for the site revert to CMZ1, where marine farming is a prohibited activity.

Potential Viewing Audience/Visual Appraisal:

The existing salmon farm is mainly viewed by dwellings and moored boats in Waihinau Bay. Views of the salmon farm from dwellings and moored boats are close, and are constant rather than transitory. There are approximately 15-20 dwellings in the bay. Views from boats are more side on, with viewers more likely to perceive the structure's height out of the water than its whole size. Views from dwellings are more elevated, and will see more of the farm's total area.

Navigational surveying of vessel routes has shown the salmon farm is not passed by a large volume of Pelorus Sound's boat traffic. Boat traffic passing the mouth of the bay is at some distance from the existing salmon farm (likely to be greater than 1km[20])

Perceptions of salmon farms by recreational boaties were surveyed in 2015. Results showed that just over half the boatie respondents reported no effect of salmon farms on their experience of the Sounds, while almost one-third reported a negative effect. The most common negative effect reported by boaties was visual blight (12 percent), a feeling of displacement from the bay (10 percent), and course change or navigational risk (6 percent). However salmon farms also commonly attract boaties and visitors on charter vessels. People's responses to the presence of salmon farms varies a great deal, depending on the nature of occupancy, and the experiences, personalities and attitudes of the individuals concerned. [21]. Neighbours have not reported noticeable adverse effects from salmon-farm lighting, whether it be from the accommodation block, navigational aids or under-water lighting.[22]

Site Sensitivity:

This location has a baseline value of Moderate for Natural Character and High-Moderate for Landscape. The site surrounds are considered to be suited to the absorption of a Salmon Farm in terms of Landscape values, however there is a nearby Outstanding Natural Feature/Landscape and settlement which increases the site sensitivity.

Assessment of Landscape Effects

For detailed assessment of effects refer to the table below.

[20] Navigational Risk Review for Proposed Pelorus Sound Salmon Farms, Appendix B; Navigatus Consulting Limited; December 2015

[21] The Social and Community Effects of Salmon Farming & Rearing: A Case Study of the Top of the South Island; Taylor Baines & Assocs & Quigley & Watts Ltd; Nov 2015, pgs. 37 - 40.

[22] Ibid; pg 43.

Conclusion: Existing Site Waihinau - Effects on Natural Character

There will be beneficial effects on the perceptual/sensory aspect of natural character from the removal of the existing salmon farm, including considerably increased perceived naturalness and visual amenity. Taking into account the enclosure of the Bay which amplifies the effects of the existing salmon farm; the visually prominent design of the existing salmon farm; and the close and constant views of the existing structures from dwellings and moored boats, it is assessed that effects from the removal of the farm on the perceptual/sensory aspect of natural character would be significant. There will also be beneficial effects on the natural science aspects of natural character, given the low flow rates and the reduced quality of the benthic environment. Removal of the salmon farm will reduce the adverse effects on the natural science aspects.

It is considered that removal of the salmon farm would result in a natural character ranking of High at this site (Level 4/5).

Effects on ONC Status

While there will be added benefits due to the proximity of other areas of High natural science rating[23], it is not considered that the benefits would result in the site becoming eligible for consideration as ONC. Benthic conditions will take time to improve, and adjacent vegetation is still in fairly early stages of regeneration, with wilding pines present.

For the same reasons the increase in natural character values resulting from the removal of the salmon farm would not at this stage mean the site should be considered for eligibility for ONC status at the district scale. It is not considered that removal of this farm would affect natural character values and ratings at the larger regional and national scales, for which are much broader in nature, with the site forming only a very small part of the context at those scales.

Conclusion: Existing Site Waihinau – Effects on Landscape Character

There will be beneficial effects on landscape character resulting from the proposed removal of the existing salmon farm, including considerably increased perceived naturalness and visual amenity. At this site, the enclosure of the Bay amplifies the effects of the existing salmon farm, and the design of the existing salmon farm is visually prominent. There are close and constant views of the existing structures from dwellings and moored boats, and higher associative values at the site arising from its having a number of dwellings/holiday homes. Given all these factors, and the presence of areas identified as proposed ONF around the wider Bay, it is assessed that the beneficial effects from the removal of the salmon farm would be significant enough to result in a landscape rating of High at the site scale (level 4/5).

Effects on ONL/F Status

It is considered that removal of the salmon farm would result in the site approaching eligibility for consideration as ONF. Landform is considered significant in terms of the slopes being part of Turner's Peak, and although existing vegetative cover behind the farm is still in the relatively early stages of regeneration, and the perceived "quality" of vegetation is moderate only, the slopes are close to areas of vegetation which have been identified as having either High or Outstanding value. Removal of the salmon farm and a return to CMZ1 zoning would also result in this section of the coastal margin being free of marine farming. On balance it is considered that removal of the salmon farm structures would result in a 'high' landscape ranking, rather than 'very high' due to the early stage of regeneration behind the site and presence of wilding pines and baches.

The resultant "High" ranking for the site means that this assessment also considers that the increase in values resulting from the removal of the salmon farm would not at this stage mean the site should be considered for eligibility for ONF status at the district scale.

Any broader-scale regional values will not be affected by the proposal. [24] The status of the Sounds as an ONL at the national scale will also not be affected by this proposal.

[23] Natural Character of the Marlborough Coast, MDC, 2014

[24] MDC proposed ONFLs have been assessed at a district scale; Marlborough Landscape Study 2015, pg. 104; MDC proposed ONFLs have not been assessed separately at regional and district levels; an ONFL in Marlborough is considered to be an ONFL at both levels; Marlborough Landscape Study 2015, MDC, Pg. 20.

Existing Site: Waihinau - Assessment of Effects				
Character Component (NZCPS)	*Existing Character*		*Assessment of Effects*	
	Key Values	*Baseline Rating*[25]	*Effects*	***Existing Mitigation*** *(Including site characteristics and proposal design features).*
Natural Science [26]	• Extensive areas of regenerating indigenous vegetation; fairly early stages but with good coverage for the most part; • Presence of wilding pines; • Some modification to landform for dwellings, jetties, roads, tracks and power-lines; • Some modification to the coastal margin by marine farming, including large rectangular salmon farm; • Enriched benthic conditions beneath the site; low flow currents.	Moderate	• No change to landform or landcover. • Removal of modifying structures from the coastal margin will have beneficial effects on benthic and in-water values, and resultant beneficial effects on ecology.	
Perceptual/Sensory[27] Values	• Visually dominant landform, vegetation and seascape, with landform in particular dwarfing development; • Backdrop slopes have simplicity and high visual coherence; • Backdrop indigenous vegetative cover is perceived as moderate "quality"; • Scenic/picturesque qualities; • High memorability; • Sense of enclosure and shelter; • Sense of tranquillity; • Modification apparent through prominent salmon farm structure in southern bay.	High – Moderate	• Removal of the salmon farm would have significantly beneficial visual amenity effects. This is because the existing salmon farm has a considerable reducing effect at this site on perceived naturalness and on visual amenity and sense of tranquillity. Although landform is still visually dominant at the site, the visual impact of the farm structures is amplified here by the enclosure of the bay, and by the simple and coherent backdrop, which is less readily able to receive and absorb the structures, with the result that the farm is a prominent visual element in the bay. • The visual impact of the farm is further amplified by the farm's design, which is large, rectangular, with a higher profile out of the water than some other available designs, and uses highly visible white and green netting. The significance of its adverse visual effects is raised too by the close and constant view of them by local residents/holiday makers. Night-time lighting from the salmon farms will be highly visible for residences in this Bay, and removal of these will mean an increase in night sky darkness for residents looking out to the water (although it is noted that lights from existing mussel farms on the other side of the Bay will remain, and there will also be lighting from residences on hillslopes around the Bay). • Surveys of social perceptions carried out in 2001 and 2012 for the Marlborough District Council[28].suggest that the growth in marine farming activities (including salmon farming) was not seen by national and regional visitors as having had a deleterious effect on the valued qualities of the Marlborough Sounds over this period.[29] • Beneficial effects on perceived naturalness and visual amenity would have flow-on effects here for nearby areas which have been previously identified as ONF. (Slopes adjacent to the north-eastern side of Waihinau Bay, and leading from there up to and including Turner's Peak.)	• The enclosure provided by the bay shields the wider context from effects of the farm; • The existing farm is a fit with the mixed-use character of the surrounding context; • Scale of adjacent landform diminishes effects of the farm;
Associative Values[30]	• Physical and spiritual values associated with mana whenua, mana moana, and tangata whenua taonga, mauri, customary practices and the exercise of kaitiakitanga • Traditional and contemporary waka routes through Waitata Reach; • Recreational uses of the wider Pelorus Sound; • Waihinau Bay has dwellings/is a holiday spot.	High	• A Tourism and Recreation Assessment (TARA) has concluded that this site will have a moderate (2.5) impact on tourists or recreationalists • Overall removal of the prominent salmon farm structures is assessed as having beneficial effects for associative values of the bay. • Removal of the salmon farm structures will have beneficial effects for mana whenua, mana moana and tangata whenua values.	• Pelorus Sound is known as a Sound with a complex mix of uses, including recreation, production (pasture farming, forestry, marine farming), and regeneration of indigenous vegetation.
Overall Baseline Natural Character[31]		Moderate		
Overall Baseline Landscape[32]		High-Moderate		
Resultant Natural Character			High	
Resultant Landscape			High	

[25] In all scoring a 7-point scale is used: Very Low/Low/Low-Moderate/Moderate/Moderate-High/High/Very High.
[26] Includes geomorphological (landforms) and ecological (flora, fauna, habitat, biodiversity and natural systems and processes).
[27] Includes visual and aesthetic values such as coherence, vividness, memorability, perceived naturalness, expressiveness, and transient values.
[28]. Corydon Consultants Ltd, 2001 and Corydon Consultants Ltd, 2012.
[29] The Social and Community Effects of Salmon Farming & Rearing: A Case Study of the Top of the South Island; Taylor Baines & Assocs & Quigley & Watts Ltd; Nov 2015, pg. 69
[30] Includes cultural (Tangata Whenua), historic, and shared and recognised values.
[31] The Overall Baseline rating is reflective of the site's sensitivity to change. In the Marlborough Sounds environment a highly natural site will have higher perceptual ratings as well as high natural science ratings, and will be more sensitive to change. The more modified a site is, the lower the ratings tend to be for both natural science and perceptual/sensory ratings, and the less sensitive a site will be to change.
[32] Ibid

Site: Forsyth Bay

Figure 31: Forsyth Bay - Photo from Aircraft

Figure 32: Forsyth Bay - Location Map

Figure 33: Forsyth Bay - Photo from Boat

EXISTING SITE: FORSYTH BAY

Natural Character & Natural Features and Landscapes: Site Specific Assessment

Location: North-west side of Forsyth Bay; Outer Pelorus Sound.
Wider Context: Recent Natural Character Study[1]
Site is not in any area identified as ONC.
Terrestrial Area 3 – Bulwer. Site is adjacent to Terrestrial Sub-Area "Eastern Waitata Reach" identified as having High natural character values at Level 4/5.
Marine Area C – Pelorus Sound. Site is not in any Marine Sub-Area identified as having High or Very High abiotic/biotic values at Level 4/5. (It is close to Marine Sub-Area Pelorus Heads, identified as having High abiotic/biotic values at level 4/5).
Wider Context: Recent Landscape Study[2]
Site is part of the Outer Sounds Landscape.
Site is not in any area proposed as ONFL at the district scale. (It is opposite areas identified as ONF at the district scale – Forsyth Island, and Bird Island, and is at the back of district-scale ONF Kaitira Headland.)
Area 5: Port Ligar, Forsyth Island and Kaitira Headland.
Wider Context: Operative Resource Management Plan
Slopes back-dropping the site are adjacent to an Area of Outstanding Landscape Value (Kaitira Headland).

Site Natural Science Baseline

Geomorphology (Landform)[3]
The proposed site sits against the south-east facing slopes of Pelorus Sound's Kaitira headland (400masl), at the back of the headland, out of the main channel. Spurs fall from the top of the headland to form a small, open bay, on the north-west side of the larger Forsyth Bay. The site's small bay is somewhat enclosed by the ridges to the north and south, although the site is fairly wide mouthed, and open to the wider expansiveness of Forsyth Bay. The south-east-facing slopes adjacent to the site (to the west) rise very steeply from the coastal edge, which is rocky and rugged, and there are exposed bluffs in places above the shoreline. There is a narrow strip of beach adjacent to the existing site.

The slopes adjacent to the existing site are largely unmodified, with the only modification being a road/track following the ridgeline at the top of the headland (not visible from the bay).

Terrestrial Ecology
The slopes adjacent to the existing site are extensively covered by regenerating indigenous vegetation. The regeneration is mostly still in the fairly early successional stages, but broadleaf species are apparent. Coverage is most dense on lower slopes and in gullies. A small number of wilding pines are dotted across the slopes.

The slopes here are in contrast to slopes further south into Forsyth Bay, which still retain some large areas of pasture.

Natural Science values previously identified for Terrestrial Sub-Area "Eastern Waitata Reach" (adjacent to the site) at level 4/5[4] are:

- relatively low levels of modification and extensive areas of regenerating Bush, especially on Forsyth Island
- largely intact podocarp broadleaved forest at Kauauroa Bay (this is not near the site).

Areas within Forsyth Bay have been identified as being of National Significance for king shag feeding and breeding habitat. Bird Island (in the middle of Forsyth Bay) is nationally significant for reef heron breeding.
Rating: High

Marine Ecology
Pelorus Sound is typified by narrow near-shore reef; sand/shell and then mud offshore, with a typical array of coastal species. Reefs and sediments can often appear relatively barren; there are biogenic communities in places including rhodoliths, hydroids, tube worms, horse mussels and bryozoans.[5]

The coastal margin here is modified by the existing salmon farm (with barge), and by the mussel farms to the north and south of the salmon farm. Mussel farms are also present in the wider context to the east, against the edge of Forsyth Island, and around the wider Forsyth Bay to the south.

The Forsyth Bay salmon farm is a low-flow site that has no significant reef habitats within the primary depositional footprint. The site has been managed on a rotational/fallowing basis. It was operational during the most recent annual monitoring (2015), which indicated that infauna communities beneath the farm were being very highly impacted[6] and were indicative of highly enriched conditions. Sample communities were characterised by an extremely low taxa count (< 5 per core), low to moderate abundances of opportunistic infauna species, low species richness, evenness, diversity and EQR scores. Some assessment samples indicated near azoic conditions. One sample station warranted an 'alert' management response under the BMP (MPI2015)[7] No seabed enrichment effect related to farming was evident in the water-column profile.
Rating: Low

Summary of Natural Science Characteristics:

- Small bay behind a headland; on the edge of a much larger bay;
- Fairly close to the open sea;
- A rocky coastal edge which includes a narrow strip of beach;
- Very steep slopes with some exposed rocky bluffs;
- Moister, south-east-facing slopes;
- Regenerating indigenous vegetation in the early successional stages, with broadleaf species mostly in gullies; coverage is most dense on lower slopes and in gullies;
- Largely unmodified landform;
- Areas within Forsyth Bay have been identified as being of National Significance for king shag feeding and breeding habitat;
- The nearby Bird Island (in the middle of Forsyth Bay) is nationally significant for reef heron breeding;
- Coastal margin is modified by a salmon farm and a number of mussel farms; mussel farms are also present in the wider Forsyth Bay;
- Low flow site with at times highly enriched conditions and highly impacted benthic communities.

Natural Science Baseline Rating:

- Moderate

Key Natural Science Values:

- Regenerating coastal scrubland, early secondary stages in parts, with broadleaf species present;
- Largely unmodified landform
- Coastal margin modified by a salmon farm and mussel farming;
- Low flow site with at times highly enriched conditions and highly impacted benthic communities;
- Bird feeding and breeding habitat nearby (wider Forsyth Bay and Bird Island).

[1] Natural Character of the Marlborough Coast, MDC, 2014; pg.73.
[2] Marlborough Landscape Study, MDC, 2105.
[3] Broader geomorphological aspects have been covered previously - refer to Natural Character of the Marlborough Coast, MDC, 2014.
[4] Natural Character of the Marlborough Coast, MDC, 2014; pg.125.
[5] Natural Character of the Marlborough Coast, MDC, 2014; pg.70.
[6] Report 2783 Environmental Impacts of the Forsyth Bay Salmon Farm: Annual Monitoring 2015;Cawthron Institute; pg 11.
[7] Ibid; pg 20.

Site Perceptual/Sensory Baseline

Coherence

The vegetated headland slopes adjacent to the existing salmon farm form a highly coherent backdrop, with fairly consistent cover over the slopes, and simple and natural successional vegetation patterns.
Rating: Very High

Vividness and Memorability

The existing site does not have particularly high memorability on its own, being a small bay at the back of a main headland, and a component of a much larger bay. Within the context of that larger bay (Forsyth Bay), the slopes adjacent to the site do stand out somewhat for the regenerating vegetative cover, which is a visual contrast to slopes further south into the bay, where there are large areas of pasture. But there are also other slopes around Forsyth Bay (to the south, and to the north-east, on Forsyth Island) which are similarly covered in regenerating native vegetation, which reduces the vividness of the slopes adjacent to the existing salmon farm.

Landform around the wider Forsyth Bay has high memorability, due to be very low elevation of some of the almost submerged rocky ridge crests. In the wider context the north-facing slopes of Kaitira headland (in the main Pelorus channel) are also highly memorable as part of the entrance into Pelorus Sound from the open sea.
Rating: Moderate

Perceived Naturalness

Perceived naturalness at the site is relatively high, and there is a sense of remoteness – there are no structures on the adjacent slopes; no visible physical modifications to landform; and vegetation patterns are coherent and natural. And relating to those factors, visual amenity offered by the site is also high. Perceived naturalness and visual amenity is reduced by the presence of the salmon farm, and the mussel farms visible to the north and south, but the natural elements of landform, vegetation and seascape dominate visually. The open nature of the site and the expansiveness of the wider context (wider Forsyth Bay) provide for some absorption of the salmon farm.

Apart from structures associated with mussel farms there are very few structures visible around the wider Forsyth Bay area, which adds to the perceived naturalness at this site, although naturalness is also somewhat reduced by the areas of pasture to the south.

The vegetative cover on slopes adjacent to the site, being fairly early-stage native regeneration, while being seen as more "natural" than modified cover such as pasture or plantation forestry, is generally perceived as being of lower "quality" than for example more advanced native regeneration.
Rating: Moderate-High

Expressiveness

As in the whole Sounds area, landform here is legible as part of a drowned valley system. At this site the rocky coastal edge and areas of exposed rocky bluffs on adjacent slopes are also expressive of the maritime exposure and ongoing natural coastal erosion processes.

In the wider context of Forsyth Bay the low elevation of some of the submerged rocky ridge crests (particularly at Bird Island and to the south) are particularly expressive of this land type (Bulwer) being the most submerged of the Marlborough land systems.[8]
Rating: Moderate

Transient Values

Wind and exposure, although the site is given a degree of shelter from the near-by open sea by the slopes of Kaitira Headland enclosing it to the north. Birdlife. Boat traffic[9]..
Rating: High

[8] Natural Character of the Marlborough Coast, MDC, 2014, pg. 118.
[9] Refer to Navigational Risk Review for Proposed Pelorus Sound Salmon Farms, Navigatus Consulting Limited; December 2015
[10] Draft Cultural Impact Assessment; Maximise, 2016, pg 7.
[11] Ibid; pg. 4

Summary of Perceptual/Sensory Characteristics:

- Bay with a degree of shelter, but close to the open sea; on the edge of a much larger bay;
- Backed by very steep, rugged slopes, rocky with exposed bluffs in places;
- Adjacent slopes are well-vegetated in fairly-early stage indigenous regeneration, with simple and natural vegetative patterns;
- Structures present in the form of salmon and mussel farms, including at times a barge;
- Landform is expressive of formative and coastal processes.

Perceptual/Sensory Baseline Rating:

- High-Moderate

Key Perceptual/Sensory Values:

- Vegetated backdrop is highly visually coherent, with simple vegetative patterns;
- Backdrop indigenous vegetative cover is perceived as moderate "quality";
- Enclosure, but on the edge of a more expansive context;
- Visually dominant landform, vegetation and seascape; high perceived naturalness;
- Sense of remoteness;
- Rugged, expressive landform, particularly in the wider Forsyth Bay;
- Distinctive landforms close-by, in the wider Forsyth Bay; higher memorability associated with those;
- Transient wildlife values.
- Modification due to existing marine farms

Site Associative Baseline

While there has been no direct input into this assessment from local community, information has been incorporated from social impact reporting on salmon farms in the Sounds, and from recently completed Cultural Impact and Tourism and Recreation assessments.

Tangata Whenua

Research undertaken shows the historical and widespread activity of each of Te Tau Ihu tribes (Ngāti Koata, Ngāti Kuia, Ngāti Apa ki te Rā Tō, Ngāti Toa Rangatira, Te Ātiawa o Te Waka-a-Māui, Ngāti Rangitāne o Wairau, Ngāti Tama ki Te Tau Ihu and Ngāti Rarua) in Kura Te Au (Tory Channel), Tōtaranui (Queen Charlotte Sound) and Te Hoiere (Pelorus Channel). Every tribe has at some point fished, had kāinga or pā (whether temporary or permanent), or is able to relate kōrero tūpuna in and around these waterways[10].

it is recognised that some iwi may have an interest in an area that is historical (e.g. as a result of historical occupation of an area with accompanying wāhi tapu and other sites of significance), while current mana whenua, mana moana, tāngata whenua is held by another iwi. Additionally, there are instances where mana whenua, mana moana, tāngata whenua interests are overlapping and shared by two, or more iwi. (The term 'mana whenua, mana moana, tāngata whenua' seeks to encompass all the various 'Māori' interests that exist in the areas under investigation).[11]

For mana whenua, mana moana and tangata whenua there will be physical and spiritual values relating to the protection of taonga, mauri, customary uses and practices and the exercise of kaitiakitanga in Te Hoiere.[12], as well as values relating to mahinga kai, manaaki tangata, traditional and contemporary waka routes[13]. Values which have been previously identified[14] in Te Hoiere include:

- Mauri of the waterway/moana;
- Taonga species (including King Shags and dolphins, which are considered taonga and taniwha by Ngati Kuia);
- Traditional waka routes along the eastern side of Waitata Reach;
- Customary scallop fisheries in Waitata Reach
- Reef fishing spots

[12] Board of Inquiry, NZKS Decision, 23 Feb 2013; pg 248.
[13] Draft Cultural Impact Assessment; Maximise, 2016, pg 15 and Attachment 2.
[14] Board of Inquiry, NZKS Decision, 23 Feb 2013; pg 253.

At this stage there have been no Maori Heritage Sites or additional values publically identiified[15] which relate to this site in particular. More information may become available as consultation continues. In general values relating to the context as a whole will apply. .It is likely that values at the site will be considered lowered by the presence of the existing salmon farm. In 1991 work to record coastal (terrestrial) sites of significance to iwi in the Pelorus Sound was undertaken, although the findings are confidential.[16]

Historic

No historic features have been identified at the proposed site.[17]

Shared and Recognised

Waitata Reach is classified by DOC under the ROS system as 'accessible waters' for recreation, which implies a degree of modification to the natural environment and the likelihood of encountering other users and uses of the area. The main recreation and tourism activities in Waitata Reach, as elsewhere in the Marlborough Sounds, are recreational fishing and boating. Other key activities include sightseeing cruises, walking/hiking, fishing and sailing, and diving. The entrance to Pelorus Sound and around the Chetwode and Forsyth Islands is one of three sites listed nationally as either spectacular or popular for diving opportunities. (Kayaking is largely focused in inner Pelorus Sound – around the Kenepuru Sound and Tennyson Inlet areas.) Pelorus Sound is less popular for sailing due to the gusty nature of the winds and the shallow upper reaches.

The Waitata Reach is described as experiencing a moderate level of fishing activity. There is a shift by the guided fishing operators to go out past the Pelorus entrance to fish the D'Urville, Stephen and Chetwode Islands surrounds[18]. The Pelorus Mail Boat's Outer Sounds route takes in the bays (Waitata, Richmond, Bulwer and Port Ligar) of Waitata Reach once a week on Fridays[19]. In general the Pelorus Sound does not have the same popularity and high use for recreation and tourism as does the Queen Charlotte Sound.[20] Boats through Pelorus Sound tend for the main part to be for servicing mussel farms.

This particular bay is the site of a number of marine farms and a salmon farm; and other mussel farms are arrayed along the edges of the wider Forsyth Bay. The bay may be recognised/known as a marine farming area.

Summary of Associative Characteristics:

- Physical and spiritual values associated with mana whenua, mana moana, and tangata whenua taonga, mauri, customary practices and the exercise of kaitiakitanga
- Traditional and contemporary waka routes through Waitata Reach
- Recreational fishing and boating through wider Pelorus Sound/Waitata reach;
- Extensive marine farming at Forsyth Bay.

Associative Baseline Rating:

- Moderate

Key Associative Values:

- Physical and spiritual values associated with mana whenua, mana moana, and tangata whenua taonga, mauri, customary practices and the exercise of kaitiakitanga
- Traditional and contemporary waka routes through Waitata Reach;
- Recreational fishing and boating in the wider Pelorus Sound;
- Marine farming area.

Summary: Key Values

	Key Values	*Baseline Rating*
Natural Science	• Regenerating coastal scrubland, early secondary stages in parts, with broadleaf species present; • Largely unmodified landform • Coastal margin modified by salmon and mussel farms; • Low flow site with at times highly enriched conditions and highly impacted benthic communities; • Bird feeding and breeding habitat nearby (wider Forsyth Bay and Bird Island).	Moderate
Perceptual/Sensory	• Vegetated backdrop is highly visually coherent, with simple vegetative patterns; • Backdrop indigenous vegetative cover is perceived as moderate "quality" • Enclosure, but on the edge of a more expansive context; • Visually dominant landform, vegetation and seascape; high perceived naturalness; • Sense of remoteness; • Rugged, expressive landform, particularly in the wider Forsyth Bay; • Distinctive landforms close-by, in the wider Forsyth Bay; high memorability associated with those; • Transient wildlife values.	High-Moderate
Associative	• Physical and spiritual values associated with mana whenua, mana moana, and tangata whenua taonga, mauri, customary practices and the exercise of kaitiakitanga • Traditional and contemporary waka routes through Waitata Reach;; • Recreational fishing and boating in the wider Pelorus Sound; • Marine farming area.	Moderate

[15] Marlborough District Council Smart Maps: Heritage Sites.
[16] Board of Inquiry, NZKS Decision, 23 Feb 2013; pg 254.
[17] Marlborough District Council Smart Maps: Heritage Sites.
[18] Personal communications – Del Carrodus, Havelock and Sounds Water Taxis, 7 June 2016
[19] www.mail-boat.co.nz/mailruns.html
[20] NZ King Salmon Potential Salmon Farm Relocation in Marlborough Tourism and Recreation Assessment (TARA); TRC Tourism Ltd. August 2016, pgs, 18 - 28

Conclusion: Existing Site Forsyth Bay Natural Character Assessment

The site backdrop has high natural science value by way of its headland slopes of regenerating indigenous vegetation, in the early successional stages, and by way of its proximity to known areas of bird feeding and breeding habitat in the wider Forsyth Bay. Marine natural character at the site is reduced by the presence of marine farms. The farms also have reducing effects on perceptual/sensory values such as perceived naturalness and visual amenity. Considering marine and terrestrial together the natural character rating is considered to be moderate.

Natural Character Baseline Rating: Moderate

Outstanding Natural Character:

It is not considered that the site (Level 4/5) meets the threshold for Outstanding Natural Character due to reducing effect of the marine farms on both natural science and perceptual/sensory values. Vegetation on adjacent slopes is also probably not yet of a quality to be called Outstanding in terms of natural science value, although potential will certainly be there for values to increase.

Conclusion: Existing Site Forsyth Bay Landscape Assessment

The site has high coherence and relatively high perceived naturalness despite the presence of marine farms, due to the expansiveness of its context, its remote location and rugged setting. Aesthetic and natural science values are reduced by the marine farms, but natural elements still dominate visually due to the scale of the surroundings. Visual amenity offered by the site is high. Memorability of the site is also increased by way of its association (through proximity) with expressive and distinctive landforms in the wider Forsyth Bay.

Landscape Baseline Rating: High-Moderate

Outstanding Natural Landscape/Feature:

The site is part of the wider Sounds, which is an Outstanding Natural Landscape at the National Scale. It also lies inside an area proposed as ONL at the district scale (part of the Outer Sounds Landscape)[21]. The proposed site has not been proposed as ONF at the district scale. The northern slopes of Kaitira Headland, Forsyth Island and Bird Island are identified as ONF at the district scale.

This assessment concludes that the site does not meet the threshold for Outstanding classification at a site scale (Level 4/5), due to reduced natural science values, reduced perceptual/sensory values, and reduced associative values. Although landform is part of the Kaitira headland, it is back slopes only, and not perceived as part of the "gateway" between Kaitira and Te Akaroa headlands. Existing vegetative cover is also still in the relatively early stages of regeneration, and the perceived "quality" of vegetation is moderate only. Further, this assessment considers that marine and terrestrial components of a site need to be considered as one for the assessment of Outstanding status, and the presence of the mussel farms prevents Outstanding status being appropriate at this site.

[21] MDC proposed ONFLs have been assessed at a district scale; Marlborough Landscape Study 2015, pg. 104; MDC proposed ONFLs have not been assessed separately at regional and district levels; an ONFL in Marlborough is considered to be an ONFL at both levels; Marlborough Landscape Study 2015, MDC, Pg. 20.

EXISTING SITE: FORSYTH BAY

Assessment of Effects from the Proposal

Proposed Change:

Surrender of current consents ensuring that the following structures will no longer be permitted at the sites:

- Structures permitted over 2ha,
- Rectangular above-water steel cage structure measuring approximately 260m x 40m; with netting;
- Underwater mooring structures – anchoring the farm in place. (Not visible above water);
- Lighting and navigation structures associated with the rectangular above-water steel cage;
- Barge (consent is for older design).

Potential Viewing Audience/Visual Appraisal:

It likely that the existing salmon farm is mainly viewed by work-boats servicing existing marine farms in Forsyth Bay, and by some pleasure boats over the summer months. Some views are likely to be from close range, as boats pass the farm; will are likely to be both constant and transitory. Views from boats are more side on, with viewers more likely to perceive the structure's height out of the water than whole size. Views from the consented dwelling on Forsyth Island (Approximately 2.5km away) will be more elevated, and will see more of the farm's total area. However, the existing dwelling on Forsyth Island at Sundy Bay is low on the coastal edge is not considered to be 'elevated' in terms of the visibility tables outlined in the beginning of this report.

Navigational surveying of vessel routes has shown the salmon farm is not passed by a large volume of Pelorus Sound's boat traffic, with the farm tucked away out of sight from most of the summer pleasure-boat routes around the entrance to Pelorus Sound[22].

Perceptions of salmon farms by recreational boaties were surveyed in 2015. Results showed that just over half the boatie respondents reported no effect of salmon farms on their experience of the Sounds, while almost one-third reported a negative effect. The most common negative effect reported by boaties was visual blight (12 percent), a feeling of displacement from the bay (10 percent), and course change or navigational risk (6 percent). However salmon farms also commonly attract boaties and visitors on charter vessels. People's responses to the presence of salmon farms varies a great deal, depending on the nature of occupancy, and the experiences, personalities and attitudes of the individuals concerned. [23]. Neighbours have not reported noticeable adverse effects from salmon-farm lighting, whether it be from the accommodation block, navigational aids or under-water lighting.[24]

Site Sensitivity:

This location has a baseline value of High-Moderate for both Natural Character and Landscape. The site surrounds are considered to be sensitive to the absorption of this Salmon Farm in terms of Landscape values due to the simple and coherent backdrop and nearby Outstanding Natural Features Bird Island, Forsyth Island, Kaitira Headland). However this is balanced by the presence of other numerous other aquaculture activities which help absorb the activity. The Landscape Sensitivity is therefore considered to have been reflected in the Landscape Baseline value.

Assessment of Landscape Effects

For detailed assessment of effects refer to the table below.

[22] Navigational Risk Review for Proposed Pelorus Sound Salmon Farms, Appendix B; Navigatus Consulting Limited; December 2015

[23] The Social and Community Effects of Salmon Farming & Rearing: A Case Study of the Top of the South Island; Taylor Baines & Assocs & Quigley & Watts Ltd; Nov 2015, pgs. 37 - 40.

[24] Ibid; pg 43.

Conclusion: Existing Site Forsyth Bay - Effects on Natural Character

There will be beneficial effects on the perceptual/sensory aspect of natural character from the removal of the existing salmon farm, including increased naturalness, increased darkness of the night sky, and increased sense of remoteness. Given the proximity of Areas of Outstanding Landscape Value, there will be highly beneficial effects on the perceptual/Sensory aspects of Natural Character.

The effects on the natural science values at the site are also assessed as being highly beneficial, given the low-flows at the site and the high impacts the farm has at times on benthic conditions. Beneficial effects are reduced by the number of mussel farms which will continue to operate in the vicinity. The resultant level of natural character at the site scale (Level 5) is considered to be of a High-Moderate rating.

Effects on ONC Status

It is considered that removal of the salmon farm would result in a natural character ranking of Moderate-High at the site scale. The site is not considered eligible for ONC status due to the existing marine farming which will continue even if the salmon farm is removed, and due to the early stage of terrestrial indigenous vegetation regeneration. This assessment also considers that the increase in natural character values resulting from the removal of the salmon farm would not at this stage mean the site should be considered for eligibility for ONC status at the district scale – again due to the continued presence of marine farming, and the fairly early stage of terrestrial regeneration.

It is not considered that removal of this farm would affect natural character values and ratings at the larger regional and national scales. Values at these scales are much broader in nature, with the site forming only a very small part of the context at those scales.

Conclusion: Existing Site Forsyth Bay – Effects on Landscape Character

The proposed removal of an existing visually prominent salmon farm will result in this setting being seen as more natural, with increased sense of remoteness, and improved visual amenity. Removal will allow adjacent rugged and expressive landform to stand alone without the visual distraction of prominent salmon-farm structures. There will be beneficial effects on landscape character at a site scale (Level 4/5) resulting from the proposed removal of the existing salmon farm that result in a landscape rating of High. This takes account of the proximity that the site has to areas of ONF and the wider beneficial effects on landscape character.

Effects on ONL/F Status

It is not considered that removal of the salmon farm would result in the site becoming eligible for consideration as ONF. Although the adjacent landform is part of the Kaitira headland, it is the back slopes only, and the site itself is not perceived as part of the "gateway" between Kaitira and Te Akaroa headlands. The existing vegetative cover is still in the relatively early stages of regeneration, and the perceived "quality" of vegetation is moderate only. There are also a high number of existing mussel farms in the coastal margin immediately adjacent to the site. For these reasons it is considered that removal of the salmon farm structures here would not result in the site being at a level where consideration for Outstanding status at the local site scale would be appropriate.

The resultant "High" landscape rating for the site means that this assessment also considers that the increase in values resulting from the removal of the salmon farm would not at this stage mean the site should be considered for eligibility for ONF status at the district scale. This is due to the relatively early stages of regeneration and the high number of mussel farms in the coastal margin immediately adjacent to the site.

Any broader-scale regional values will not be affected by the proposal. [25] The status of the Sounds as an ONL at the national scale will also not be affected by this proposal.

[25] MDC proposed ONFLs have been assessed at a district scale; Marlborough Landscape Study 2015, pg. 104; MDC proposed ONFLs have not been assessed separately at regional and district levels; an ONFL in Marlborough is considered to be an ONFL at both levels; Marlborough Landscape Study 2015, MDC, Pg. 20.

Existing Site: Forsyth Bay - Assessment of Effects				
Character Component (NZCPS)	*Existing Character*	*Assessment of Effects*		
	Key Values	*Baseline Rating*[26]	*Effects*	***Existing Mitigation*** *(Including site characteristics and proposal design features).*
Natural Science [27]	• Regenerating coastal scrubland, early secondary stages in parts, with broadleaf species present; • Largely unmodified landform • Coastal margin modified by salmon and mussel farms; • Low flow site with at times highly enriched conditions and highly impacted benthic communities; • Bird feeding and breeding habitat nearby (wider Forsyth Bay and Bird Island).	Moderate	• No change to landform or landcover. • Removal of modifying structures from the coastal margin, with beneficial benthic effects and in-water effects, and resultant beneficial effects on ecology. Given the low-flows at the site, and that at times benthic conditions at the site are highly enriched and communities highly impacted by the presence of this salmon farm, removal of the farm is assessed as being highly beneficial.	
Perceptual/ Sensory[28] Values	• Vegetated backdrop is highly visually coherent, with simple vegetative patterns; • Backdrop indigenous vegetative cover is perceived as moderate "quality" • Enclosure, but on the edge of a more expansive context; • Visually dominant landform, vegetation and seascape; high perceived naturalness; • Sense of remoteness; • Rugged, expressive landform, particularly in the wider Forsyth Bay; • Distinctive landforms close-by, in the wider Forsyth Bay; high memorability associated with those; • Transient wildlife values.	High-Moderate	• The existing salmon farm has a reducing effect at this site on perceived naturalness and on visual amenity and sense of remoteness at this site. Although landform is still visually dominant at the site, the visual impact of the farm structures is amplified here by the simple and coherent backdrop, which is less readily able to receive and absorb the structures, making the structures appearance more prominent. The visual impact of the farm here is also reduced by the farm's design, which is rectangular, with a low profile out of the water and incorporates recessive black netting and the new architecturally designed barge. Removal of the existing farm structures will increase the visual amenity offered by the site's backdrop. • The farm is in addition to a number of existing mussel farms near its site and around the wider bay. Removal of the existing farm will increase perceived naturalness at the site, although the significance of the beneficial effects is reduced due to the existing other productive uses in the area (a number of mussel farms), and the continuance of those uses. • Removal of the existing structures will increase the sense of remoteness at the site, and allow adjacent rugged and expressive landform to stand alone without the visual distraction of prominent man-made structures. • Increased naturalness and remoteness at the site will have beneficial flow-on effects to those nearby areas (Forsyth Island and Bird Island) which are classified as ONF in the operative Marlborough Resource Management Plan. The proximity of the Areas increases the significance of the beneficial effects of removal. • There will be an increase to the darkness of the night sky from removal of lighting associated with the farm (although lighting from existing mussel farms will remain). • Surveys of social perceptions carried out in 2001 and 2012 for the Marlborough District Council[29].suggest that the growth in marine farming activities (including salmon farming) was not seen by national and regional visitors as having had a deleterious effect on the valued qualities of the Marlborough Sounds over this period.[30]	• The enclosure provided by the bay shields the wider context from effects of the existing farm; • The existing farm is a fit with the mixed-use character of the wider surrounding context; • Continued presence of mussel farms reduces effect on naturalness of removal of the salmon farm • Scale of adjacent landform diminishes effects of the existing farm.
Associative Values[31]	• Physical and spiritual values associated with mana whenua, mana moana, and tangata whenua taonga, mauri, customary practices and the exercise of kaitiakitanga • Traditional and contemporary waka routes through Waitata Reach; • Recreational fishing and boating in the wider Pelorus Sound; • Marine farming area.	Moderate	• A Tourism and Recreation Assessment (TARA) has concluded that this site will have a minimal impact on tourists or recreationalists • Overall removal of the salmon farm structures is assessed as having low beneficial effects for associative values of the bay. The significance of the beneficial effects is reduced due to the existing fit of the farm with other productive uses at the site (a number of mussel farms), and the continuance of those uses.	• Pelorus Sound is known as a Sound with a complex mix of uses, including recreation, production (pasture farming, forestry, marine farming), and regeneration of indigenous vegetation.
Overall Baseline Natural Character[32]		Moderate		
Overall Baseline Landscape[33]		High-Moderate		
Resultant Natural Character			High-Moderate	
Resultant Landscape			High	

[26] In all scoring a 7-point scale is used: Very Low/Low/Low-Moderate/Moderate/Moderate-High/High/Very High.
[27] Includes geomorphological (landforms) and ecological (flora, fauna, habitat, biodiversity and natural systems and processes).
[28] Includes visual and aesthetic values such as coherence, vividness, memorability, perceived naturalness, expressiveness, and transient values.
[29]. Corydon Consultants Ltd, 2001 and Corydon Consultants Ltd, 2012.
[30] The Social and Community Effects of Salmon Farming & Rearing: A Case Study of the Top of the South Island; Taylor Baines & Assocs & Quigley & Watts Ltd; Nov 2015, pg. 69
[31] Includes cultural (Tangata Whenua), historic, and shared and recognised values.
[32] The Overall Baseline rating is reflective of the site's sensitivity to change. In the Marlborough Sounds environment a highly natural site will have higher perceptual ratings as well as high natural science ratings, and will be more sensitive to change. The more modified a site is, the lower the ratings tend to be for both natural science and perceptual/sensory ratings, and the less sensitive a site will be to change.
[33] Ibid

Site: Crail Bay (Two Sites)

Figure 34: Crail Bay Sites - Photo from Aircraft

Figure 35: Crail Bay Sites - Location Map

Figure 36: Crail Bay Sites - Photo from Boat

EXISTING SITES: CRAIL BAY (Two Sites).

Natural Character & Natural Features and Landscapes: Site Specific Assessment

Location: At the entrance to Crail Bay; north- west side; Inner Pelorus Sound.
Wider Context: Recent Natural Character/ONC Study[1]
The sites are not in any area identified as ONC.
Terrestrial Area 6 – Nydia. Sites are adjacent to Terrestrial Sub-Area "Southern and Eastern Parts" identified as having High natural character values at Level 4/5.
Marine Area C – Pelorus Sound. Sites are not in any Marine Sub-Area identified as having High or Very High abiotic/biotic values at Level 4/5.
Wider Context: Recent Landscape/ONFL Study[2]
The sites are inside the Inner Sounds Landscape.
The sites are not in or immediately adjacent to any area proposed as ONF at the district scale. They are opposite and below two separate areas proposed as ONFs at the district scale.
Area 11: Forested Ridges around Crail Bay.
Wider Context: Operative Resource Management Plan
The sites are back-dropped by an Area of Outstanding Landscape Value.

Site Natural Science Baseline

Geomorphology (Landform)[3]
The two salmon farm sites in Crail Bay sit fairly close to each other (roughly 430m apart), against the east-facing slopes of a large headland enclosing Crail Bay to the west from the main Pelorus Sound channel. The slopes of the headland rise steeply behind the sites to an elevation of 546masl. The coastal edge behind the sites is indented, but without enclosed bays. The sites are open in character, facing east onto the entrance to Crail Bay, which is quite a large-scale bay. Opposite the sites (to the south-east) is the snake-like form of a narrow peninsula - the nearly-submerged crest of a ridge, at times sitting only 20masl. It stretches out into the entrance to Crail Bay, enclosing a large embayment to the east (Hopai Bay). The submerged crest emerges again further into Crail Bay as Ouokaha Island, also only 20masl.

The landform adjacent to the sites is modified in the form of a few tracks and a small number of dwellings/buildings (around 6 buildings) near the coastal edge. At the south end of Crail Bay there are extensive earthworks on higher slopes, with highly visible forestry haul-outs and roads criss-crossing over large areas of cleared land. There is also modification on the east side of Crail Bay, with roads and a number of dwellings, although landform here is less extensively modified them to the south.

Terrestrial Ecology
The slopes of the headland behind the sites are extensively covered with regenerating indigenous vegetation, which appears well-advanced in places, and extends from the water's edge to the summit of the headland, as well as extending south to cover much of the east-facing slopes around Crail Bay.

Just to the north of the sites are extensive areas of exotic forestry. The forestry starts at the top point of the gully just north-west of the northern-most salmon farm, and extends along the ridgeline, (as well as below the ridgeline on the east-facing slopes), to where the headland drops into the sea at Opani-aputa Point. A few wilding pines extend out from the forestry across the slopes behind the sites. The south end of Crail Bay has large parts of the upper slopes cleared of vegetation, with the substrate visible. Again there are also areas of exotic forestry, as well as large areas of regenerating native vegetation. On the eastern side of Crail Bay vegetation is also modified, with large areas of pasture and exotic forestry. Much of the forested ridges above the sites contain very high levels of natural science value due mainly to their indigenous, unmodified vegetation.[4] High natural science values previously identified for the Nydia Terrestrial Sub-Area "Southern and Eastern Parts" at level 4/5[5] are:

- Extensive upland forest, although some regenerating slopes around Hikapu Reach.

Rating: High

Marine Ecology
Pelorus Sound is typified by narrow near-shore reef; sand/shell and then mud offshore, with a typical array of coastal species. Reefs and sediments can often appear relatively barren; there are biogenic communities in places including rhodoliths, hydroids, tube worms, horse mussels and bryozoans.[6]

The coastal margin here is modified by the presence of marine farming, including both salmon and mussel farming. A large number of mussel farms are also arrayed along much of the coastal edge of Crail Bay. Being Inner Sounds, this area is relatively sheltered with a moderate maritime influence[7] and is known to be a low flow site.

The sites are currently not in use. Most recent benthic reporting was in 2012.[8] In that reporting seabed conditions at both sites were assessed as being less impacted than the equivalent ES limits for the relevant EQS specified in the consent conditions. There was no evidence of farm-related effects on near-bottom DO levels. The results were consistent with the farms undergoing recovery since being destocked. The benthic environments still showed slight signs of enrichment, but some of this could be attributed to the presence of near-by mussel farming.
Rating: Low

Summary of Natural Science Characteristics:

- Large Bay (Crail) enclosed from the main Pelorus Channel to the west by an elevated headland;
- Sites sit against the east-facing slopes of the headland, out from an indented coastal edge;
- Open character sites, facing east onto the quite wide entrance of Crail Bay;
- Steep slopes rising abruptly from the coastal edge, then more steeply to the summit;
- Extensive native vegetation regeneration, appearing well-advanced in places; to the coastal edge and up to the highest ridge; also extending south over much of the east-facing slopes on the west side of Crail Bay;
- Regenerating slopes are connected to known areas of very high natural science value (ridgetop);
- Large areas of exotic forestry just north-west of the sites; some wilding pines spreading across the slopes adjacent to the sites;
- Landform modifications adjacent to sites for a small number of dwellings and tracks/roads;
- Coastal edge modified by both salmon and mussel farms; extensive mussel farming in the wider Crail Bay;
- Recovering benthic environment at the sites since the salmon farms became non-operational; some slight benthic enrichment which could be attributable to remaining mussel farming; a low-flow site;
- Pasture and forestry present in the wider context of Crail Bay, extensive areas of regenerating native vegetation also present in this wider context.

Natural Science Baseline Rating:

- Moderate

Key Natural Science Values:

- Extensive regenerating coastal forest, appearing well-advanced in places, and connected to known areas of high and very high natural science value;
- Largely unmodified landform adjacent to the sites;
- Coastal margin modified by marine farming (salmon and mussel); recovering benthic environment; low-flow site.

[1] Natural Character of the Marlborough Coast, MDC, 2014; pg.73.
[2] Marlborough Landscape Study, MDC, 2015.
[3] Broader geomorphological aspects have been covered previously - refer to Natural Character of the Marlborough Coast, MDC, 2014.
[4] Marlborough Landscape Study, MDC, 2105; pg. 128.
[5] Natural Character of the Marlborough Coast, MDC, 2014; pg.145.
[6] Natural Character of the Marlborough Coast, MDC, 2014; pg.70.
[7] Marlborough Landscape Study, MDC, 2105; pg 140.
[8] Report No. 2280 Environmental Impacts of the MFL-48 Salmon Farm: Annual Monitoring 2012; Report No. 2281 Environmental Impacts of the MFL-32 Salmon Farm; Annual Monitoring 2012; Cawthron Institute

Site Perceptual/Sensory Baseline

Coherence
The vegetated headland slopes behind the sites form a highly coherent backdrop, with simple, natural, and consistent vegetation patterns across the slopes. (To the north of the sites coherence is reduced by the geometric boundaries of the exotic forestry, visually inconsistent with the underlying landform).
Rating: Very High

Vividness and Memorability
The sites have high memorability due mainly to their context – with the distinctive landforms of Ouoaha Island and the peninsula enclosing Hopai Bay being near-by, opposite the sites in the entrance to Crail Bay. The slopes immediately adjacent to the sites, and indeed right around the wider Crail Bay, also have vividness for their enormous scale, elevation and steepness, made more vivid by the visual contrast with the extremely low elevation of the near-by peninsula and Ouokaha Island.
Rating: Very High

Perceived Naturalness
Perceived naturalness at the sites is high – due mainly to the large scale of the adjacent vegetated slopes being strongly visually dominant over the structures present; visual amenity at the sites is high too, and the reasonably well-advanced native regeneration on adjacent slopes will be perceived as good "quality".

With the sites being open to the wider context, the expansiveness of Crail Bay provides for some absorption of the marine farms, although they do reduce perceived naturalness at the site scale (i.e. when at the site), as do the mussel farms. The reducing effect of the salmon farms here is tempered though by their design - being dark circles, and more unobtrusive than the white squares often used.
The wider context of the site has a working landscape character, although large areas of slopes and upper ridges are also in regenerating native forest. The forestry present to the north of the sites reduces perceived naturalness with its geometric boundaries, but the natural landform/seascape is still visually dominant.
Rating: Moderate-High

Expressiveness
The slopes adjacent to the sites are legible as part of a drowned valley system – as is the whole of the Marlborough Sounds.

The landforms in the wider context here are more particularly expressive – in the form of the almost fully submerged ridge crests of the peninsula around Hopai Bay, and Ouokaha Island.
Rating: Moderate.

Transient Values
Changing character of the water, depending on the weather. In the Inner Pelorus Sound the surface of the water is often smooth and conditions often feel tranquil, due to the increased shelter here.
Rating: High

Summary of Perceptual/Sensory Characteristics:

- Open-character sites, on the edge of the entrance to a Bay;
- Large-scale context: large Bay with steep, highly elevated surrounding slopes;
- Structures present: dwellings, marine farms;
- Immediately adjacent slopes are steep and tower over the sites;
- Well-vegetated immediate backdrop has extensive, reasonably well-advanced indigenous regeneration, with simple, consistent and natural vegetation patterns;
- Wider context has pasture, marine farming and forestry, with large harvested areas currently visible with exposed substrate, haul-outs, and extensive forestry roads; plantation forestry on slopes just to the north;
- Distinctive landforms near-by.

Perceptual/Sensory Baseline Rating:

- High-Moderate

Key Perceptual/Sensory Values:

- Open-character sites, within an expansive enclosing context;
- Visually dominant landform and seascape;
- Well-vegetated immediate backdrop is simple and highly visually coherent;
- Backdrop indigenous vegetative cover is perceived as good "quality";
- Highly memorable context, with distinctive, highly expressive landforms near-by.
- Wider context has working landscape values, with existing marine farms bringing similar values to the local marine scale

Site Associative Baseline

While there has been no direct input into this assessment from local community, information has been incorporated from social impact reporting on salmon farms in the Sounds, and from recently completed Cultural Impact and Tourism and Recreation assessments.

Tangata Whenua
Research undertaken shows the historical and widespread activity of each of Te Tau Ihu tribes (Ngāti Koata, Ngāti Kuia, Ngāti Apa ki te Rā Tō, Ngāti Toa Rangatira, Te Ātiawa o Te Waka-a-Māui, Ngāti Rangitāne o Wairau, Ngāti Tama ki Te Tau Ihu and Ngāti Rarua) in Kura Te Au (Tory Channel), Tōtaranui (Queen Charlotte Sound) and Te Hoiere (Pelorus Channel). Every tribe has at some point fished, had kāinga or pā (whether temporary or permanent), or is able to relate kōrero tūpuna in and around these waterways[9].

it is recognised that some iwi may have an interest in an area that is historical (e.g. as a result of historical occupation of an area with accompanying wāhi tapu and other sites of significance), while current mana whenua, mana moana, tāngata whenua is held by another iwi. Additionally, there are instances where mana whenua, mana moana, tāngata whenua interests are overlapping and shared by two, or more iwi. (The term 'mana whenua, mana moana, tāngata whenua' seeks to encompass all the various 'Māori' interests that exist in the areas under investigation).[10]

For mana whenua, mana moana and tangata whenua there will be physical and spiritual values relating to the protection of taonga, mauri, customary uses and practices and the exercise of kaitiakitanga in Te Hoiere.[11], as well as values relating to mahinga kai, manaaki tangata, traditional and contemporary waka routes[12]. Values which have been previously identified[13] in Te Hoiere include:

- Mauri of the waterway/moana;
- Taonga species (including King Shags and dolphins, which are considered taonga and taniwha by Ngati Kuia);
- Traditional waka routes along the eastern side of Waitata Reach;
- Customary scallop fisheries in Waitata Reach
- Reef fishing spots

[9] Draft Cultural Impact Assessment; Maximise, 2016, pg 7.
[10] Ibid; pg. 4
[11] Board of Inquiry, NZKS Decision, 23 Feb 2013; pg 248.
[12] Draft Cultural Impact Assessment; Maximise, 2016, pg 15 and Attachment 2.
[13] Board of Inquiry, NZKS Decision, 23 Feb 2013; pg 253.

At this stage there have been no Maori Heritage Sites or additional values publically identiified[14] which relate to this site in particular. More information may become available as consultation continues. In general values relating to the context as a whole will apply. In 1991 work to record coastal (terrestrial) sites of significance to iwi in the Pelorus Sound was undertaken, although the findings are confidential.[15]

Historic

No historic features have been identified at the proposed site.[16]

Shared and Recognised

The main recreation and tourism activities in Pelorus Sound, as elsewhere in the Marlborough Sounds, are recreational fishing and boating. Other key activities include sightseeing cruises, walking/hiking, fishing and sailing, and diving. Older information from a Marlborough Sounds recreational fishing survey in 1998 (J.D. Bell) suggests that Crail Bay had high levels of fishing from shore[17]. Kayaking is largely focused in inner Pelorus Sound – around the Kenepuru Sound and Tennyson Inlet areas.

Pelorus Sound is less popular for sailing due to the gusty nature of the winds and the shallow upper reaches. In general the Pelorus Sound does not have the same popularity and high use for recreation and tourism as does the Queen Charlotte Sound.[18] Commercial scallop dredging occurs in nearby Tawhitinui Reach.

This particular bay is the site of numerous marine farms, as well as forestry and pastureland.

Much of the upper forested ridges in this area are reserves under DOC management.

Summary of Associative Characteristics:

- Te Hoiere (wider Pelorus Sound) has important physical and spiritual values for mana whenua, mana moana and tangata whenua relating to the protection of taonga, mauri, customary practices and the exercise of kaitiakitanga in Te Hoiere;
- Traditional and contemporary waka routes;
- Recreational use of the wider Inner Pelorus Sound –holidays, boating, fishing;
- Extensive marine farming and forestry in the wider Crail Bay; commercial scallop dredging in nearby Tawhitinui Reach.

Associative Baseline Rating:

- Moderate

Key Associative Values:

- Physical and spiritual values associated with mana whenua, mana moana and tangata whenua taonga, mauri, tangata whenua customary practices and the exercise of kaitiakitanga;
- Traditional and contemporary waka routes;
- Wider context of Crail Bay is a farming/forestry area;
- Recreational uses of the wider Inner Pelorus Sound.

Summary: Key Values

	Key Values	*Baseline Rating*
Natural Science	• Extensive regenerating coastal forest, appearing well-advanced in places, and connected to known areas of high and very high natural science value; • Largely unmodified landform adjacent to the sites; • Coastal margin modified by marine farming (salmon and mussel; recovering benthic environment; low-flow site.	Moderate
Perceptual/Sensory	• Open-character sites, within an expansive enclosing context; • Visually dominant landform and seascape; • Well-vegetated immediate backdrop is simple and highly visually coherent; • Backdrop indigenous vegetative cover is perceived as good "quality" • Highly memorable context, with distinctive, highly expressive landforms near-by • Wider context has working landscape values, with existing marine farms bringing similar values to the local marine scale	High-Moderate
Associative	• Physical and spiritual values associated with mana whenua, mana moana and tangata whenua taonga, mauri, customary practices and the exercise of kaitiakitanga; • Traditional and contemporary waka routes; • Wider context of Crail Bay is a farming/forestry area; Recreational uses of the wider Inner Pelorus Sound.	Moderate

[14] Marlborough District Council Smart Maps: Heritage Sites.
[15] Board of Inquiry, NZKS Decision, 23 Feb 2013; pg 254.
[16] Marlborough District Council Smart Maps: Heritage Sites.

[17] Marlborough Sounds Recreational Fishing Survey 1998. J. D. Bell and Associates, final research report for the Ministry of Fisheries Project REC9807
[18] NZ King Salmon Potential Salmon Farm Relocation in Marlborough Tourism and Recreation Assessment (TARA); TRC Tourism Ltd. August 2016, pgs, 18 - 28

Conclusion: Existing Sites Crail Bay Natural Character Assessment

The extensive areas of advancing regenerating indigenous vegetation on slopes adjacent to the site would appear to have good potential in terms of natural science value, added to by the connection to known areas of very high natural science value. Natural science value here is reduced by the presence of the salmon farms and mussel farms, but due to the large scale of the regeneration, and the high perceptual values, natural character for the site is moderate.

Natural Character Baseline Rating: Moderate

Outstanding Natural Character

The site is not deemed to meet the threshold for Outstanding Natural Character at the site scale (Level 4/5), as natural science values are reduced by the modified coastal margin, and perceptual/sensory values are reduced by the marine farm structures.

Conclusion: Existing Sites Crail Bay Landscape Assessment

The site has a high level of perceived naturalness due to the scale of the immediately adjacent vegetated slopes, and their high coherence. This also means that the visual amenity provided by the site is high. Perceived naturalness at the site is reduced by the presence of structures, and by the near-by forestry, but landform, vegetation and seascape are the dominant visual elements. The reducing effects of the salmon farm structures here is tempered by their design, which is more unobtrusive black circles, rather than the white squares often used. The expansiveness of the wider context also provides for some absorption of the salmon farm structures.

The site has very high memorability due to its context, and the distinctive landforms nearby. Natural science values are moderate at the site scale (Level 4/5), and although these values are reduced by the modified coastal margin, they are increased by the proximity of the slopes to areas of known high natural science value.

Landscape Baseline Rating: High-Moderate

Outstanding Natural Landscape/Feature:

The site is part of the wider Sounds, which is an Outstanding Natural Landscape at the National Scale. The top ridges of slopes adjacent to the sites are proposed as ONF at the district scale, as are the peninsula landform and island opposite the sites[19].

This assessment concludes that given the Moderate natural science values, and the High-Moderate perceptual/sensory values, on balance the slopes adjacent to these sites do not meet the threshold for Outstanding status. It is considered that marine and terrestrial components of a site need to considered as one for the assessment of Outstanding status, and the presence of the aquaculture activities along this portion of Crail Bay, combined with the reduced perceptual/sensory values, prevents Outstanding status being appropriate. This aligns with the rating of this marine area and adjacent slopes in the proposed MEP.

[19] MDC proposed ONFLs have been assessed at a district scale; Marlborough Landscape Study 2015, pg. 104; MDC proposed ONFLs have not been assessed separately at regional and district levels; an ONFL in Marlborough is considered to be an ONFL at both levels; Marlborough Landscape Study 2015, MDC, Pg. 20.

EXISTING SITES: CRAIL BAY (Two Sites)

Assessment of the Proposal

Proposed Change:

Surrender of Site

Surrender of current consents ensuring that the following structures will no longer be permitted at the sites:

- Up to nine circular above-water cage structures at each site (with a maximum of 6 at each site measuring 509m², and the others slightly smaller); black in colour;
- Underwater mooring structures – anchoring the farm in place. (Not visible above water);
- Associated lighting and navigation structures;
- A barge.

Potential Viewing Audience/Visual Appraisal:

It likely that the existing salmon farm is mainly viewed by the small number of near-by dwellings, and work-boats servicing existing marine farms in Crail Bay. Views for dwellings are closer range, and constant; views from work-boats will be both constant and transitory. Views from boats are more side on, with viewers more likely to perceive the structure's height out of the water than whole size. Views from dwellings are more elevated, and will see more of the farm's total area.

Navigational surveying of vessel routes has shown the salmon farm is not passed by a large volume of Pelorus Sound's boat traffic, with the farm distant from most of the summer pleasure-boat routes around the entrance to Pelorus Sound (Kaitira and Te Akaroa headlands)[20].

Perceptions of salmon farms by recreational boaties were surveyed in 2015. Results showed that just over half the boatie respondents reported no effect of salmon farms on their experience of the Sounds, while almost one-third reported a negative effect. The most common negative effect reported by boaties was visual blight (12 percent), a feeling of displacement from the bay (10 percent), and course change or navigational risk (6 percent). However salmon farms also commonly attract boaties and visitors on charter vessels. People's responses to the presence of salmon farms varies a great deal, depending on the nature of occupancy, and the experiences, personalities and attitudes of the individuals concerned. [21]. Neighbours have not reported noticeable adverse effects from salmon-farm lighting, whether it be from the accommodation block, navigational aids or under-water lighting.[22]

Site Sensitivity:

This location has a baseline value of High-Moderate for both Natural Character and Landscape. The low flow rate here does increase the sensitivity of the benthic environment. However, the site surrounds are considered to be suited to the absorption of these Salmon Farms in terms of Landscape values and this reduces sensitivity from a landscape perspective. This is because of the scale of the adjacent landform, the expanse of the bay and the consistent string of other aquaculture activities which help integrate the farms, despite presence of an identified Outstanding Natural Feature/Landscape on the adjacent ridgeline.

Assessment of Landscape Effects

For detailed assessment of effects refer to the table below.

[20] Navigational Risk Review for Proposed Pelorus Sound Salmon Farms, Appendix B; Navigatus Consulting Limited; December 2015

[21] The Social and Community Effects of Salmon Farming & Rearing: A Case Study of the Top of the South Island; Taylor Baines & Assocs & Quigley & Watts Ltd; Nov 2015, pgs. 37 - 40.

[22] Ibid; pg 43.

Conclusion: Existing Site Crail Bay - Effects on Natural Character

There will be beneficial effects on the perceptual/sensory aspect of natural character from the removal of the existing salmon farm, including increased naturalness, and increased darkness of the night sky (although existing mussel farms with lighting will remain). Given the number of structures permitted at these two close-together sites, and given the existing Outstanding rating for slopes immediately adjacent to the existing site under the operative Marlborough Sounds Resource Management Plan, (with other nearby landforms also proposed as Outstanding), effects on the perceptual/sensory aspect of Natural Character of removing the existing farms from these sites will be beneficial. Effects on the natural science aspects of natural character will be beneficial, but those beneficial effects will be reduced by the number of mussel farms along the coastal margin, which will remain – along with the low flow of this environment. Overall it is considered that the proposed removal of this site will have a positive benefit that increases the natural character ranking at the site scale (Level 4/5) to High-Moderate.

Effects on ONC Status

It is considered that removal of the salmon farms would result in a natural character ranking of High-Moderate at the site scale. The site is not considered eligible for ONC status due to the existing marine farming which will continue even if the salmon farms are removed.

It is not considered that natural character effects at the district scale will be significant. Values at this scale are broad, and the site is only a very small part of the context this scale. Effects on the Marlborough Sounds natural character values at a regional and national scale are considered to be insignificant, for the same reasons.

Conclusion: Existing Site Crail Bay – Effects on Landscape Character

The proposed removal of existing salmon farm structures will result in this setting having an increase in perceived naturalness and increased visual amenity. Although the design of the pen structures is relatively unobtrusive, the number of pens consented increases their visual prominence. The adjacent ridgeline is likely to remain identified as an Outstanding Natural Feature and the removal of the existing salmon farm consents would have a positive influence on the surrounding environment. At a site scale (level 4/5), the resulting landscape rating is assessed as High.

Effects on ONL/F Status

Recent work has recommended removal of the slopes adjacent to this site from Outstanding classification[23]. This assessment considers that even with the existing salmon farm structures removed, the sites would not be eligible for consideration for Outstanding status given the high number of mussel farms in the coastal margin immediately around them. Vegetation on adjacent slopes is of a perceived "quality" and likely ecological diversity which would warrant their consideration for Outstanding status, especially given their connection to Outstanding Areas on the ridgeline above. However, this assessment considers that marine and terrestrial components of a site need to considered as one, and the presence of the mussel farms mitigates against Outstanding status being appropriate. If slopes were to be removed from operative Outstanding classification, there would still be beneficial effects on natural character, landscape character and visual amenity.

This assessment considers that the increase in values resulting from the removal of the salmon farm consents would not at this stage mean the sites should be considered for eligibility for ONF status at the district scale. This is due to the remaining mussel farms in the coastal margin in the vicinity of the sites.

Any broader-scale regional values will not be affected by the proposal. [24] The status of the Sounds as an ONL at the national scale will also not be affected by this proposal.

[23] Marlborough Landscape Study, MDC, 2015

[24] MDC proposed ONFLs have been assessed at a district scale; Marlborough Landscape Study 2015, pg. 104; MDC proposed ONFLs have not been assessed separately at regional and district levels; an ONFL in Marlborough is considered to be an ONFL at both levels; Marlborough Landscape Study 2015, MDC, Pg. 20.

Existing Site: Crail Bay - Assessment of Effects				
Character Component (NZCPS)	*Existing Character*	*Assessment of Effects*		
	Key Values	*Baseline Rating*[25]	*Effects*	*Existing Mitigation* *(Including site characteristics and proposal design features).*
Natural Science [26]	• Extensive regenerating coastal forest, appearing well-advanced in places, and connected to known areas of high and very high natural science value; • Largely unmodified landform adjacent to the sites; • Coastal margin modified by marine farming (salmon and mussel); recovering benthic environment; low-flow site.	Moderate	• No change to landform or landcover. • Removal of modifying structures from the coastal margin, with beneficial benthic effects and in-water effects, and resultant beneficial effects on ecology.	
Perceptual/Sensory[27] Values	• Open-character sites, within an expansive enclosing context; • Visually dominant landform and seascape; • Well-vegetated immediate backdrop is simple and highly visually coherent; • Backdrop indigenous vegetative cover is perceived as good "quality"; • Highly memorable context, with distinctive, highly expressive landforms near-by.	High-Moderate	• The existing consented salmon farm structures have a reducing effect on perceived naturalness and on visual amenity at this site. The site has a simple and coherent backdrop, which is less able to receive and visually absorb structures. The quality of the vegetation on adjacent slopes is also perceived as good, increasing the benefit of removal. • The visual effects of the existing structures are mitigated here by the use of circular forms and a black recessive colour. Adverse effects are also mitigated by the scale of adjacent landform and the expansive wider context, which provides for increased visual absorption of the structures. However, there is a large number of circular structures consented for the two sites, and the two sites are located very near to each other. • Removal of the consented farm structures will increase perceived naturalness and visual amenity, however it is noted that there are a number of nearby aquaculture activities in this location. There will be less (permitted) lighting at the site with the removal of the farms, although lighting from existing mussel farms will remain. • Surveys of social perceptions carried out in 2001 and 2012 for the Marlborough District Council[28].suggest that the growth in marine farming activities (including salmon farming) was not seen by national and regional visitors as having had a deleterious effect on the valued qualities of the Marlborough Sounds over this period.[29] • The existing farms are located below a ridgeline proposed as an Outstanding Natural Feature/Landscape, which would potentially increase the level of sensitivity.	• The expansive context provides for visual absorption of the existing salmon farm structures. • The existing farm is a fit with the mixed-use character of the wider surrounding context; • Scale of adjacent landform diminishes effects of the existing farm; Effects of the existing structures are mitigated by the use of circular forms and a black recessive colour.
Associative Values[30]	• Physical and spiritual values associated with mana whenua, mana moana and tangata whenua taonga, mauri, customary practices and the exercise of kaitiakitanga; • Traditional and contemporary waka routes • Wider context of Crail Bay is a farming/forestry area; • Recreational uses of the wider Outer Pelorus Sound.	Moderate	• A Tourism and Recreation Assessment (TARA) has concluded that this site will have a minimal impact on tourists or recreationalists • Overall removal of the existing farm structures is assessed as having a low effect for associative values relating to the bay.	• Pelorus Sound is known as a Sound with a complex mix of uses, including recreation, production (pasture farming, forestry, marine farming), and regeneration of indigenous vegetation.
Overall Baseline Natural Character[31]		Moderate		
Overall Baseline Landscape[32]		High-Moderate		
Resultant Natural Character			High-Moderate	
Resultant Landscape			High	

[25] In all scoring a 7-point scale is used: Very Low/Low/Low-Moderate/Moderate/Moderate-High/High/Very High.
[26] Includes geomorphological (landforms) and ecological (flora, fauna, habitat, biodiversity and natural systems and processes).
[27] Includes visual and aesthetic values such as coherence, vividness, memorability, perceived naturalness, expressiveness, and transient values.
[28]. Corydon Consultants Ltd, 2001 and Corydon Consultants Ltd, 2012.
[29] The Social and Community Effects of Salmon Farming & Rearing: A Case Study of the Top of the South Island; Taylor Baines & Assocs & Quigley & Watts Ltd; Nov 2015, pg. 69
[30] Includes cultural (Tangata Whenua), historic, and shared and recognised values.
[31] The Overall Baseline rating is reflective of the site's sensitivity to change. In the Marlborough Sounds environment a highly natural site will have higher perceptual ratings as well as high natural science ratings, and will be more sensitive to change. The more modified a site is, the lower the ratings tend to be for both natural science and perceptual/sensory ratings, and the less sensitive a site will be to change.
[32] Ibid

Site: Ruakaka Bay

Figure 37: Ruakaka Bay - Photo from Aircraft

Figure 38: Ruakaka Bay - Location Map

Figure 39: Ruakaka Bay - Photo from Boat

EXISTING SITE: RUAKAKA

Natural Character & Natural Features and Landscapes: Site Specific Assessment

Location: South-east side of Ruakaka Bay, Inner Queen Charlotte Sound.
Wider Context: Recent Natural Character Study[1]
The site is not in any area proposed as ONC.
Terrestrial Area 5 – Portage. The site is adjacent to Terrestrial Sub-Area identified as having High natural character values at Level 4/5.
Marine Area D – Queen Charlotte Sound. The site is not in a Marine Sub-Area identified as having High or Very High abiotic or biotic values at level 4/5. (The site is between two Marine Sub-Areas identified as Very High abiotic/biotic value; as well as close to (opposite side of the channel) a Sub-Area identified as having High abiotic/biotic value.
Wider Context: Recent Landscape Study[2]
The site is part of the Inner Sounds Landscape.
The site is adjacent to an area proposed as ONF at the district scale.
Area 17: Northern Lands of Inner Queen Charlotte Sound.
Wider Context: Operative Resource Management Plan
The site is not back-dropped by any Area of Outstanding Landscape Value.
The site is partially back-dropped by Ruakaka Scenic Reserve (Headland slopes).

Site Natural Science Baseline

Geomorphology (Landform)[3]
The site sits in a small sub-bay at the south-east end of the larger Ruakaka Bay, well enclosed by slopes to the north and east. To the east are the slopes of the small headland (160masl) between the Bay of Many Coves, and Ruakaka Bay, with the tapering form of West Head (coming off the headland) enclosing the sub-bay from the main Sound channel. To the north the small bay is enclosed by a spur descending from the main south-going ridge which ends at West Head. The small sub-bay is inside Ruakaka Bay, but is fairly wide-mouthed, opening south-west onto the main channel of Queen Charlotte Sound.

The south and west facing slopes adjacent to the existing salmon farm rise abruptly from the water, forming low rocky cliffs, above which the slopes continue to rise steeply, to rolling ridgetops. The landform is largely unmodified; there is a small amount of modification north of the salmon farm for placement of a couple of small buildings and a jetty; there is also a track running along the top ridge of this landform (not visible from the site).

Terrestrial Ecology
The slopes adjacent to the salmon farm are extensively covered by regenerating indigenous forest, from the ridgetop to the tops of the low cliffs, and close to the coastal edge in places. The regeneration appears reasonably well-advanced, particularly on those slopes with a moister, southerly aspect, with broadleaf species appearing dominant over much of those. Manuka/kanuka scrub remains along ridgetops and those slopes with a more northerly aspect.

Previously identified High abiotic/biotic values[4] adjacent to this existing site are:

- Regenerating native forests
- South-facing biotic communities generally more intact (greater cover, less vulnerable to past and ongoing disturbance then North facing communities).

Rating: High

Marine Ecology
Sheltered; waters relatively clear and cool; narrow near-shore reef grading into sand/shell and extensive mud habitats offshore; typical array of species, though reefs and sediments can often appear relatively barren; biogenic communities in places including tubeworms, horse mussels, brachiopods and red algae beds.[5]

Marine areas to the north of this site (northwards of the start of Blumine Island) and to the south (south of the headland between Ruakaka Bay and Blackwood Bay) have been identified as having Very High abiotic/biotic values.[6]

The coastal margin is modified by the presence of the existing salmon farm. The site has low flows and no significant reef habitats within the primary depositional footprint. Most recent monitoring of the site (2015) has shown that biological communities at the pen stations were indicative of highly enriched conditions, with high abundances of opportunistic taxa. Water column measurements did not indicate impacts of farming activities due to benthic enrichment-related processes. Seabed enrichment levels were within the allowable EQS. However, both pen stations appear to have undergone an overall deterioration across sediment chemistry and macrofaunal indicators[7].

Rating: Low-Moderate

Summary of Natural Science Characteristics:

- Small sub-bay on the edge of a larger bay;
- Enclosed by landform to the north and east; open to the south and west; just off main channel behind a headland;
- Abrupt coastal edge with low rocky cliffs; steep slopes above rising to rolling ridgetops;
- Surrounding landform fairly low elevation;
- Surrounding slopes extensively covered with well-advanced native coastal forest regeneration, particularly on south-facing slopes;
- Largely unmodified landform;
- Modification to the coastal margin by presence of a salmon farm;
- Between two areas previously identified as having Very High marine abiotic/biotic value;
- Adjacent to terrestrial area previously identified as having High natural character values;
- An existing salmon farm present; low-flow site with highly enriched benthic conditions.

Natural Science Baseline Rating:

- Moderate

Key Natural Science Values:

- Extensive advancing regenerating coastal forest; secondary stages on south facing slopes and in gullies;
- Largely unmodified landform
- Modification to the coastal margin by presence of a salmon farm;
- A low-flow site with highly enriched benthic conditions.

[1] Natural Character of the Marlborough Coast, MDC, 2014.
[2] Marlborough Landscape Study, MDC, 2015.
[3] Broader geomorphological aspects have been covered previously - refer to Natural Character of the Marlborough Coast, MDC, 2014.
[4] Natural Character of the Marlborough Coast, MDC, 2014; pg.137-8.
[5] Natural Character of the Marlborough Coast, MDC, 2014; pg.76.
[6] Natural Character of the Marlborough Coast, MDC, 2014; pg.81.
[7] Report 2786 Environmental Impacts of the Ruakaka Bay Salmon Farm: Annual Monitoring 2015;Cawthron Institute.

Site Perceptual/Sensory Baseline

Coherence
The well- vegetated slopes adjacent to the existing salmon farm form a highly coherent visual backdrop, with consistent cover and simple, natural vegetative patterns.
Rating: High

Vividness and Memorability
This small sub-bay is one of many such sub-bays positioned to the side of a headland – a repeated element along the convoluted coastal edge of Queen Charlotte Sound. The sub- bay will hold increased vividness and memorability due to its location opposite the entrance into Tory Channel. It will also stand out more due to the presence of the existing salmon farm.
Rating: High

Perceived Naturalness
Although perceived naturalness is reduced here by the presence of a salmon farm, it remains fairly high, due to the small number of structures on immediately adjacent slopes, and due to the reasonably expansive context. With the site's location just to the side of the main channel, where open and long views to and from the site are possible, that expansive context provides for some absorption of the farm. This, however, is reduced by the use of extensive white and green netting, which increases visibility of the farm both within the bay and from distant views. From within the site, however, the salmon farm's reducing effect on perceived naturalness, and on visual amenity, is magnified by the small size of the bay and the enclosing hills, with the farm becoming a dominant visual element. Visual amenity provided by the Bay to the main channel is higher, due to the simple and coherent adjacent vegetated slopes, and the context being able to absorb the salmon farm structures to some extent due to scale.

The vegetation of the backdrop here is reasonably well-advanced native regeneration, particularly on those slopes with a moister, southerly aspect, with broadleaf species appearing dominant over much of those. This is generally perceived as being of a higher "quality", (than for example, areas of earlier-stage "scrub").
Rating: Moderate-High

Expressiveness
As in the whole Sounds area, landform here is legible as part of a drowned valley system, and the rocky coastal edge with eroded landform illustrates the maritime influence and coastal erosion processes. On the whole this small bay is not as expressive as some other parts of the Sounds. The location here in the Inner Sounds affords more shelter to the site.
Rating: Moderate

Transient Values
Enclosure/shelter, while still being able to "see out"; Wildlife; changing character of the water depending on weather. Regular boat traffic passes the site.
Rating: Moderate

[8] Draft Cultural Impact Assessment; Maximise, 2016, pg 7.
[9] Ibid; pg. 4
[10] Board of Inquiry, NZKS Decision, 23 Feb 2013; pg 248.

Summary of Perceptual/Sensory Characteristics:

- Sub-bay on the edge of the main channel;
- Opposite the juncture between Queen Charlotte Sound and Tory Channel;
- Landform to the north and north-east;
- Long views out to south-west, down Queen Charlotte Sound;
- Small number of structures present: two small buildings, a jetty, and a salmon farm;
- Well-vegetated adjacent slopes in reasonably well-advanced native regeneration, with consistent, simple and natural vegetation patterns;
- At the site scale existing salmon farm is quite dominant visually, with effects magnified by the small size of the bay and its enclosing hills;
- Visual amenity provided by the site to the main channel remains moderate-high, with the expansive context able to partially absorb the farm structures;
- Changing character of the sea; Wildlife; Regular boat traffic.

Perceptual/Sensory Baseline Rating:

- Moderate

Key Perceptual/Sensory Values:

- Vegetated backdrop is simple and highly visually coherent;
- Much of the backdrop indigenous vegetative cover is perceived as high "quality";
- Salmon farm is a visually dominant element at the site scale;
- Sense of enclosure/shelter/retreat, on the edge of an expansive context;
- High memorability due to location;
- Reasonably busy with passing boat traffic;
- Transient wildlife values.

Site Associative Baseline (ONFL only)

While there has been no direct input into this assessment from local community, information has been incorporated from social impact reporting on salmon farms in the Sounds, and from recently completed Cultural Impact and Tourism and Recreation assessments.

Tangata Whenua
Research undertaken shows the historical and widespread activity of each of Te Tau Ihu tribes (Ngāti Koata, Ngāti Kuia, Ngāti Apa ki te Rā Tō, Ngāti Toa Rangatira, Te Ātiawa o Te Waka-a-Māui, Ngāti Rangitāne o Wairau, Ngāti Tama ki Te Tau Ihu and Ngāti Rarua) in Kura Te Au (Tory Channel), Tōtaranui (Queen Charlotte Sound) and Te Hoiere (Pelorus Channel). Every tribe has at some point fished, had kāinga or pā (whether temporary or permanent), or is able to relate kōrero tūpuna in and around these waterways.[8].

it is recognised that some iwi may have an interest in an area that is historical (e.g. as a result of historical occupation of an area with accompanying wāhi tapu and other sites of significance), while current mana whenua, mana moana, tāngata whenua is held by another iwi. Additionally, there are instances where mana whenua, mana moana, tāngata whenua interests are overlapping and shared by two, or more iwi. (The term 'mana whenua, mana moana, tāngata whenua' seeks to encompass all the various 'Māori' interests that exist in the areas under investigation).[9]

For mana whenua, mana moana and tangata whenua there will be physical and spiritual values relating to the protection of taonga, mauri, customary uses and practices and the exercise of kaitiakitanga in Totaranui.[10], as well as values relating to mahinga kai, manaaki tangata, and traditional and contemporary waka routes[11].

There is evidence of early Maori settlement/activity throughout Totaranui (Queen Charlotte Sound), with Totaranui being an important area for shelter and plentiful food; and the cultural association with Totaranui is ongoing. There have been no specific Maori Heritage Sites or additional values publicly identified[12] which relate to this site in particular. Values relating to the context as a whole will apply.

[11] Draft Cultural Impact Assessment; Maximise, 2016, pgs 15 and Appendix 2.
[12] Marlborough District Council Smart Maps: Heritage Sites.

Historic
No historic features have been identified at the proposed site.[13]

Shared and Recognised
Queen Charlotte Sound is recognised for its recreational attributes, being the most popular part for the Sounds for baches/dwellings, and for recreational activities such as boating, scallop diving and fishing. It is considered the recreational and tourism hub of the Marlborough Sounds, with recreational and tourism opportunities of both regional and national recreational importance.[14] A visit to the Marlborough Sounds (Queen Charlotte Sound) is considered one of AA Travel's 101 'Must Do's' for Kiwis[15].

Sightseeing cruises, mailboat runs and boat trips around the Queen Charlotte Sound are key activities, along with walking/hiking, kayaking, fishing and sailing. Queen Charlotte Sounds provides easy access; there are walking tracks, including the well-known Queen Charlotte Track; and baches and jetties are plentiful, mainly located within the many small embayments on the western side of the Sound. Development dissipates northwards.

The Queen Charlotte Sound at the entrance to Tory Channel is classified by DOC using the ROS system as 'accessible' recreation area. Characteristics of 'accessible waters' include: "the waterways and/or adjacent land are readily accessible. Water is commonly plied by runabouts, trailer sailors, and other small vessels. Modification is apparent but not dominant".[16]

There is limited marine farming in Queen Charlotte Sound. An additional salmon farm is located in East Bay, with a number of mussel farms in East Bay also. The south part of the Sound is part of the ferry route between the North and South islands, connecting Wellington to Picton. The ferry route passes this site.

Summary of Associative Characteristics:

- Totaranui (Queen Charlotte Sound) was an important area for early Maori, providing shelter and plentiful food; There continue to be physical and spiritual values for mana whenua, mana moana and tangata whenua relating to the protection of taonga, mauri, customary practices and the exercise of kaitiakitanga;
- Traditional and contemporary waka routes;
- Recognised as the most popular of the Sounds for recreation, many baches/through the Sound, mainly to the south and west; boating, fishing, scallop diving; spear-fishing;
- Part of the ferry-route connecting the North and South Islands;

Associative Baseline Rating:

- High-Moderate

Key Associative Values:

- Physical and spiritual values associated with mana whenua, mana moana and tangata whenua taonga, mauri, customary practices and the exercise of kaitiakitanga;
- Traditional and contemporary waka routes;
- Recognised as the most popular of the Sounds for recreation; boating, fishing, scallop diving; spear-diving;
- Part of the ferry route connecting the North and South Islands.

Summary: Key Values

	Key Values	*Baseline Rating*
Natural Science	• Extensive advancing regenerating coastal forest; secondary stages on south facing slopes and in gullies; • Largely unmodified landform • Modified coastal margin by the presence of a salmon farm; • A low-flow site with highly enriched benthic conditions.	Moderate
Perceptual/Sensory	• Vegetated backdrop is simple and highly visually coherent; • Much of the backdrop indigenous vegetative cover is perceived as high "quality"; • Salmon farm is a visually dominant element at the site scale; • Sense of enclosure/shelter/retreat, on the edge of an expansive context; • High memorability due to location; • Reasonably busy with passing boat traffic.	Moderate
Associative	• Physical and spiritual values associated with mana whenua, mana moana and tangata whenua taonga, mauri, customary practices and the exercise of kaitiakitanga; • Traditional and contemporary waka routes; • Recognised as the most popular of the Sounds for recreation: Boating, fishing, scallop diving; spear-diving; • Part of the ferry-route connecting the North and South Islands.	High-Moderate

[13] Marlborough District Council Smart Maps: Heritage Sites.
[14] NZ King Salmon Potential Salmon Farm Relocation in Marlborough Tourism and Recreation Assessment (TARA); TRC Tourism Ltd. August 2016, pg 18
[15] AA Travel, www.aatravel.co.nz
[16] NZ King Salmon Potential Salmon Farm Relocation in Marlborough Tourism and Recreation Assessment (TARA); TRC Tourism Ltd. August 2016, pg 30

Conclusion: Existing Site Ruakaka Natural Character Assessment

The site has terrestrial natural science value in the extensive areas of quite well advanced regenerating forest on surrounding slopes. There is also potential for added marine value in the site's location, which is surrounded by marine areas previously identified as having either high or very high natural science values. Natural science values at the site are reduced by the presence of the existing salmon farm, which also has a reducing effect on perceptual/sensory attributes. At the site scale (Level 5) the natural character rating is considered to be Moderate.

Natural Character Baseline Rating: Moderate

Outstanding Natural Character:

The site is assessed as not meeting the threshold for Outstanding classification, due to reduced natural science values, and reduced perceived naturalness and visual amenity brought about by the presence of the existing salmon farm.

Conclusion: Existing Site Ruakaka Landscape Assessment

The site has high coherence and reasonably high perceived naturalness. However the existing salmon farm is a visually dominant element at the site, reducing perceived naturalness and visual amenity. That reducing effect is magnified by the small size of the bay and its enclosing hills. The site has increased vividness and memorability due to its location at the entry/exit Tory Channel and the associative values are high-moderate. Natural science values on the adjacent slopes are high; Natural science values in the benthic environment are reduced by the presence of the salmon farm. At the site scale (Level 4/5), the Landscape Baseline Ranking is considered to be High-Moderate.

Landscape Baseline Rating: High-Moderate

Outstanding Natural Feature:

The site is part of the wider Sounds, which is an Outstanding Natural Landscape at the National Scale. This site is also adjacent to a terrestrial area which has been proposed as an Outstanding Natural Feature at the district scale[17].

This assessment concludes that at the site level, the site does not meet the threshold for Outstanding, due to reduced perceived naturalness, reduced visual amenity and reduced natural science values.

[17] MDC proposed ONFLs have been assessed at a district scale; Marlborough Landscape Study 2015, pg. 104; MDC proposed ONFLs have not been assessed separately at regional and district levels; an ONFL in Marlborough is considered to be an ONFL at both levels; Marlborough Landscape Study 2015, MDC, Pg. 20.

EXISTING SITE: RUAKAKA

Assessment of Effects from the Proposal

Proposed Change:

Surrender of the Site

Removal of existing salmon farm structures comprising

- Structures permitted over 2ha, including:
- Rectangular above-water steel cage structures with netting;
- Underwater mooring structures – anchoring the farm in place. (Not visible above water);
- Lighting and navigation structures associated with the rectangular above-water steel cage;
- Barge.

With the removal of the salmon farm and the surrender of the consent, the site would revert to its underlying CMZ1 status, and any new farming would become prohibited.

Potential Viewing Audience/Visual Appraisal:

The existing salmon farm is viewed by high volumes of boat traffic, with a large percentage of those being pleasure boats, as well as the inter-island ferries. Views of the salmon farm will mostly be transitory, from moving vessels. Views from smaller boats will be more side on, with viewers more likely to perceive the structure's height out of the water than its whole size. Views from larger boats will be more elevated, and will see more of the farm's total area. Views from the main Queen Charlotte Sound (e.g. from ferries) are more distant (being 1.5kms or greater); views will be closer for boats entering Ruakaka Bay to holiday homes (approx. 900m from the middle of the bay's entrance).

Perceptions of salmon farms by recreational boaties were surveyed in 2015. Results showed that just over half the boatie respondents reported no effect of salmon farms on their experience of the Sounds, while almost one-third reported a negative effect. The most common negative effect reported by boaties was visual blight (12 percent), a feeling of displacement from the bay (10 percent), and course change or navigational risk (6 percent). However salmon farms also commonly attract boaties and visitors on charter vessels. People's responses to the presence of salmon farms varies a great deal, depending on the nature of occupancy, and the experiences, personalities and attitudes of the individuals concerned. [18]. Neighbours have not reported noticeable adverse effects from salmon-farm lighting, whether it be from the accommodation block, navigational aids or under-water lighting.[19]

Site Sensitivity:

This location has a baseline value of High-Moderate for both Natural Character and Landscape. The low flow rate here increases the sensitivity of the benthic environment. Ruakaka Bay is considered to be very sensitive to the presence of a Salmon Farm due to the enclosure and quality of this location, and its high visibility to large amounts of boat traffic.

Assessment of Landscape Effects

For detailed assessment of effects refer to the table below.

[18] The Social and Community Effects of Salmon Farming & Rearing: A Case Study of the Top of the South Island; Taylor Baines & Assocs & Quigley & Watts Ltd; Nov 2015, pgs. 37 - 40.

[19] Ibid; pg 43.

[20] Under the MEP an ONFL in Marlborough is considered to be an ONFL at both district and regional levels; Marlborough Landscape Study 2015, MDC, Pg. 20.

Conclusion: Existing Site Ruakaka Bay - Effects on Natural Character

There will be beneficial effects on the perceptual/sensory aspect of natural character from the removal of the visually dominant existing salmon farm, including considerably increased naturalness and visual amenity. Taking into account the small size of the Bay, and its enclosure, which amplify the effects of the existing salmon farm; and given the visually prominent design of the existing salmon farm, it is assessed that effects from the removal of the farm on the perceptual/sensory aspect of natural character would be significantly beneficial. There will also be beneficial effects on the natural science aspects of natural character, given the low flow rates and resultant highly enriched benthic conditions present at the site in the 2015 monitoring. It is assessed that beneficial effects from removal of the salmon farm will result in a natural character rating of High at the site scale (Level 4/5).

Effects on ONC Status

It is not considered that removal of the salmon farm would bring natural character values up to a level where the site would become eligible for consideration of ONC status at the site scale.

There will be added benefits at the Level 3/4 scales, as the site is between two Marine Level 4 Sub-Areas identified as Very High abiotic/biotic value; as well as close to (opposite side of the channel) a Level 4 Sub-Area identified as having High abiotic/biotic value. However at this stage natural science values have not been assessed as being sufficiently high to warrant consideration for ONC status at the larger scales.

It is not considered that removal of this farm would affect natural character values and ratings at the larger regional and national scales. Values at these scales are much broader in nature, with the site forming only a very small part of the context at those scales.

Conclusion: Existing Site Ruakaka Bay – Effects on Landscape Character

There will be significant beneficial effects on landscape character resulting from the proposed removal of the existing salmon farm, including considerably increased perceived naturalness and visual amenity. There are few structures in the Bay and vegetation is perceived as high "quality". Without the salmon farm here the bay would be seen as highly natural. Taking into account the enclosure of the Bay which amplifies the effects of the existing salmon farm; the visually prominent design of the existing salmon farm; the higher associative values at the site; and the vegetative quality and high perceived naturalness of the surrounding slopes, it is assessed that effects from the removal of the farm on landscape character would be significantly beneficial. The resulting landscape rating is assessed as Very High at the site scale (Level 4/5). It is considered that with removal of the farm, the entire bay (terrestrial and marine) should become eligible for consideration as an ONF.

Effects on ONF Status

It is considered that removal of the salmon farm would result in the site becoming eligible for consideration as ONF at the site and district scales. The site is in a highly visible position (for boat traffic – including the inter-island ferries); existing vegetative cover is well advanced in many areas in terms of regeneration; and removal of the salmon farm would also result in this section of the coastal margin being free of marine farming. The adjacent terrestrial slopes have already been identified as proposed ONF at the district scale in the MEP. On balance it is considered that removal of the salmon farm structures here would result in the whole bay being at a level where consideration for Outstanding status at the local and district levels would be appropriate.[20].

Any broader-scale regional values will not be affected by the proposal. [21] The status of the Sounds as an ONL at the national scale will also not be affected by this proposal.

[21] MDC proposed ONFLs have been assessed at a district scale; Marlborough Landscape Study 2015, pg. 104; MDC proposed ONFLs have not been assessed separately at regional and district levels; an ONFL in Marlborough is considered to be an ONFL at both levels; Marlborough Landscape Study 2015, MDC, Pg. 20.

Existing Site: Ruakaka Bay - Assessment of Effects					
Character Component (NZCPS)	*Existing Character*	*Assessment of Effects*			
	Key Values	*Baseline Rating*[22]	*Effects*	***Existing Mitigation*** *(Including site characteristics and proposal design features).*	
Natural Science [23]	• Extensive advancing regenerating coastal forest; secondary stages on south facing slopes and in gullies; • Largely unmodified landform • Modified coastal margin by the presence of a salmon farm; • A low-flow site with highly enriched benthic conditions.	Moderate	• No change to landform or landcover. • Removal of modifying structures from the coastal margin, with beneficial benthic effects and in-water effects, and resultant beneficial effects on ecology. It is noted that the site is surrounded by marine areas previously identified as having high biotic/abiotic values. Given that factor, and the low-flow and highly enriched benthic conditions, which appear to be deteriorating, beneficial effects of removal are considered to be significant.		
Perceptual/ Sensory[24] Values	• Vegetated backdrop is simple and highly visually coherent; • Much of the backdrop indigenous vegetative cover is perceived as high "quality"; • Salmon farm is a visually dominant element at the site scale; • Sense of enclosure/shelter/retreat, on the edge of an expansive context; • High memorability due to location; • Reasonably busy with passing boat traffic.	Moderate	• The existing salmon farm has a significant reducing effect at this site on perceived naturalness and on visual amenity. • The visual impact of the farm structures is amplified here by the enclosure of the bay, the small size of the bay, and by the simple and coherent backdrop, which is less readily able to receive and absorb the structures. These are factors which increase the site's sensitivity in terms of its ability to absorb structures visually. The visual impact of the farm is further amplified by the farm's design, which is rectangular, with a higher profile out of the water than some other available designs, and incorporates highly visible light coloured netting. The existing salmon farm is considered a dominant visual element in this bay. Removal of the structures will significantly increase visual amenity at this site. • There are few structures in the Bay and vegetation is perceived as high quality. Without the salmon farm here the bay would be seen as highly natural. Removal of the farm will significantly increase perceived naturalness and the sense of the bay being a high quality setting; • Night sky darkness will improve inside the Bay – there is no existing mussel farm lighting; • Surveys of social perceptions carried out in 2001 and 2012 for the Marlborough District Council[25].suggest that the growth in marine farming activities (including salmon farming) was not seen by national and regional visitors as having had a deleterious effect on the valued qualities of the Marlborough Sounds over this period.[26] • Beneficial effects of removal of the structures at this bay are increased in significance by the identification of adjacent slopes as ONF (although this is not operative).		
Associative Values[27]	• Physical and spiritual values associated with mana whenua, mana moana and tangata whenua taonga, mauri, customary practices and the exercise of kaitiakitanga; • Traditional and contemporary waka routes; • Recognised as the most popular of the Sounds for recreation: Boating, fishing, scallop diving; spear-diving; • Part of the ferry route connecting the North and South Islands.	High - Moderate	• A Tourism and Recreation Assessment (TARA) has concluded that removal of this farm will result in a moderate (2.5) impact on tourists and recreationalists • Removal of the prominent salmon farm structures will have significant beneficial effects for associative values of the wider context, given the bay's location on the ferry route, and the high recreational use of Queen Charlotte Sound.	• Queen Charlotte Sound is known as a Sound with a complex mix of uses, including recreation, production (pasture farming, forestry, marine farming), and regeneration of indigenous vegetation.	
Overall Baseline Natural Character[28]		Moderate			
Overall Baseline Landscape[29]		High-Moderate			
Resultant Natural Character			High		
Resultant Landscape			Very High		

[22] In all scoring a 7-point scale is used: Very Low/Low/Low-Moderate/Moderate/Moderate-High/High/Very High.
[23] Includes geomorphological (landforms) and ecological (flora, fauna, habitat, biodiversity and natural systems and processes).
[24] Includes visual and aesthetic values such as coherence, vividness, memorability, perceived naturalness, expressiveness, and transient values.
[25.] Corydon Consultants Ltd, 2001 and Corydon Consultants Ltd, 2012.
[26] The Social and Community Effects of Salmon Farming & Rearing: A Case Study of the Top of the South Island; Taylor Baines & Assocs & Quigley & Watts Ltd; Nov 2015, pg. 69
[27] Includes cultural (Tangata Whenua), historic, and shared and recognised values.
[28] The Overall Baseline rating is reflective of the site's sensitivity to change. In the Marlborough Sounds environment a highly natural site will have higher perceptual ratings as well as high natural science ratings, and will be more sensitive to change. The more modified a site is, the lower the ratings tend to be for both natural science and perceptual/sensory ratings, and the less sensitive a site will be to change.
[29] Ibid

Site: Otanerau Bay

Figure 40: Otanerau Bay - Photo from Aircraft

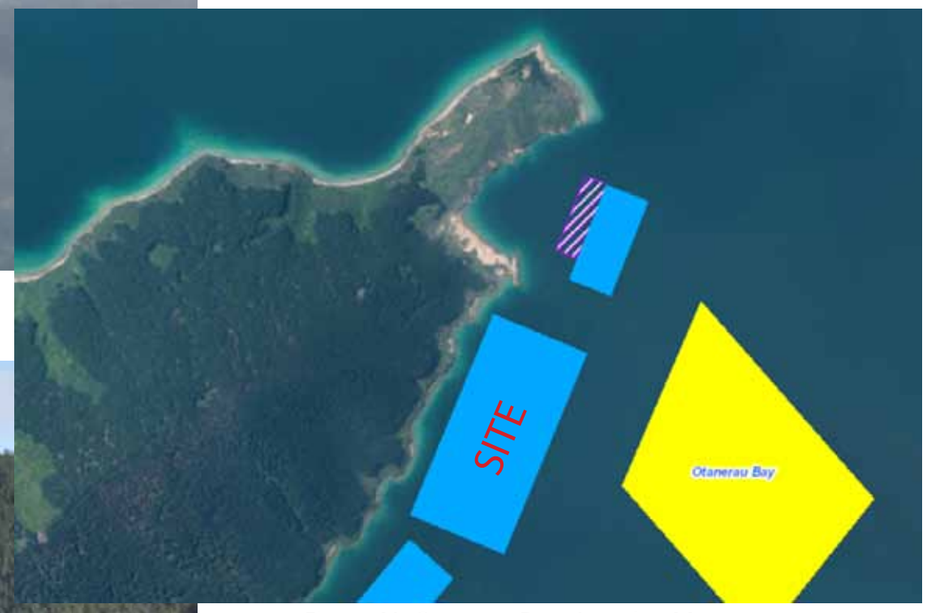


Figure 41: Otanerau Bay - Location Map

Figure 42: Otanerau Bay - Photo from Boat

EXISTING SITE: OTANERAU, EAST BAY

Natural Character & Natural Features and Landscapes: Site Specific Assessment

Location: West side of Otanerau Bay; sub-bay off East Bay, Arapawa Island; Outer Queen Charlotte Sound.
Wider Context: Recent Natural Character Study[1]
The site is not in any area proposed as ONC.
Terrestrial Area 4 – Arapawa. The site is not adjacent to any Terrestrial Sub-Area identified as having High natural character values at Level 4/5.
Marine Area D – Queen Charlotte Sound. The site is not in a Marine Sub-Area identified as having High or Very High abiotic or biotic values at level 4/5. (The site is close to Marine Sub-Area "Outer Queen Charlotte Sound" identified as Very High abiotic/biotic value at level 4/5).
Wider Context: Recent Landscape Study[2]
Site is part of the Outer Sounds Landscape.
Site is adjacent to an area proposed as ONF at the district scale.
Area 14: Arapawa Island and East and West Heads.
Wider Context: Operative Resource Management Plan
Proposed site is back-dropped by an Area of Outstanding Landscape Value.

Site Natural Science Baseline

Geomorphology (Landform)[3]
The proposed site sits in a sheltered small bay, close to the open sea, but sheltered by landforms enclosing it from Cook Strait to the north. It is one of three inter-connected bays at the end of Arapawa Island (East Bay being the main bay, with Otanerau Bay coming off that to the south, and Onauku Bay also off East Bay to the north-east).

The existing salmon farm sits against the south-east-facing slopes of a main spur descending from the central ridge of Arapawa Island. At the site the slopes rise very steeply from a rocky coastal edge, forming low, exposed rocky bluffs in places. Slopes reach an elevation of 218masl directly west of the site, before the spur rises around the back of Otanerau Bay to the south, to the even higher elevations on the central ridge of Arapawa Island, reaching 559masl directly behind Otanerau Bay, tothe south-east. Adjacent to the site the coastal edge is indented, with small embayments being formed in between lesser spurs falling into the sea.

Landform is unmodified immediately adjacent to the site. Further into Otanerau Bay forestry roads are visible on slopes.

Terrestrial Ecology
The slopes adjacent to the salmon farm are extensively covered by exotic forestry. The forestry (pine) starts a short distance above the rocky bluffs of the coastal edge, and extends right to the top of the spur, and over to the other side. Initial slopes above the coastal edge are starting to regenerate with some natïve coastal scrub and gorse.

In the wider context, the slopes around East Bay to the east and north are in regenerating indigenous vegetation. Forestry extends from behind the site to the south-west corner of the Bay.

There are a number of ecological island sanctuaries in the wider vicinity (Blumine, Motuara, Long and Pickersgill Islands).

Rating: Low

Marine Ecology
The waters around East Bay have been identified as having nationally significant ecological values, particularly for Hectors Dolphin.[4]

The coastal margin of Otanerau Bay is modified by the presence of the salmon farm (with barge); mussel farms are also present either side of the salmon farm. Other mussel farms are also present around the edge of the wider Otanerau Bay.

The Otanerau Bay salmon farm is a low to moderate-flow site that has no significant reef habitats within the primary depositional footprint. In most recent benthic monitoring seabed enrichment levels were consistent with the stated EQS requirements, although biological communities at some pen stations were indicative of highly enriched conditions, with low species richness, diversity scores and biotic indices indicating low ecological quality status. Some areas showed high abundances of opportunistic taxa and low evenness. Water column measurements did not indicate impacts of farming activities due to benthic enrichment-related processes.[5]

Rating: Low

Summary of Natural Science Characteristics:

- A small sheltered bay, close to the open sea but enclosed by landforms from Cook Strait to the north;
- One of three inter-connected bays at the northern end of Arapawa Island;
- Surrounding landform of Arapawa Island fairly highly elevated (up to 559masl directly to the south-east);
- Site is adjacent to east-facing slopes, rising very steeply from a rocky coastal edge;
- Adjacent slopes extensively covered in exotic forestry (pines), extending beyond the site to the south-west;
- Some regeneration of native coastal scrub occurring on slopes below forestry (and immediately above coastal edge), but limited at this stage;
- Adjacent landform unmodified;
- Landform of the wider bay modified with forestry roads
- Slopes in the wider area are extensively covered with regenerating native coastal scrubland;
- Coastal edge modified by marine farming – a salmon farm and several mussel farms. Other mussel farms in the wider bay too;
- Highly enriched benthic conditions within parts of the farm site; low-moderate flows.

Natural Science Baseline Rating:

- Low

Key Natural Science Values:

- Limited regenerating indigenous vegetation on adjacent slopes;
- Adjacent unmodified landform;
- Presence of pine plantation;
- Coastal margin modified by a salmon farm and mussel farms;
- Highly enriched benthic conditions within parts of the farm site; low-moderate flows;
- Regenerating indigenous vegetation across the wider context.

[1] Natural Character of the Marlborough Coast, MDC, 2014.
[2] Marlborough Landscape Study, MDC, 2105.
[3] Broader geomorphological aspects have been covered previously - refer to Natural Character of the Marlborough Coast, MDC, 2014.
[4] Marlborough Landscape Study 2009, MDC; pg 70.
[5] [5] Report 2785 Environmental Impacts of the Otanerau Bay Salmon Farm: Annual Monitoring 2015; Cawthron Institute

Site Perceptual/Sensory Baseline

Coherence

The forested slopes adjacent to the site provide a reasonably coherent backdrop due to the simplicity of the forestry planting in one species (pine). Coherence is reduced by the un-natural edge of the forestry above the coast, and the band of scrub between the forestry and the coastal edge, which does not look natural, and reduces the appearance of the backdrop as a coherent whole.
Rating: Moderate

Vividness and Memorability

Slopes adjacent to the salmon farm are not particularly distinctive in terms of scale, form or aesthetics. They do stand out from their wider surroundings because they are covered in forestry, which contrasts strongly with the indigenous vegetation on surrounding landform. But that cover of forestry is likely to change over time.

There is a feeling of remoteness at the site, but that is characteristics of this whole Outer Sound area, and not something particular or "stand-out" about this site. Overall the wider setting here has more memorability, including a series of distinctive long narrow islands at the mouth of Queen Charlotte Sound (ridge crests of submerged landform), on the edge of the open sea.
Rating: Low

Perceived Naturalness

Perceived naturalness at the site is low. Adjacent slopes are clearly part of a highly controlled and managed landscape; and the productive character of the slopes are reinforced by the presence of the commercial salmon and mussel farms. The low perceived naturalness here also reduces visual amenity, with the forestry boundaries appearing unnatural, and discordant with landform and the surrounding context of coherent and natural vegetative patterns. The salmon farm structures also reduce perceived naturalness and visual amenity, with those effects somewhat magnified by the relatively small size of Otanerau Bay and its enclosing hills. At this site the farm structures become more dominant within the bay than they would in a less enclosed setting.

The wider context of East Bay/Onauku Bay, with extensive slopes of regenerating indigenous vegetation, has more perceived naturalness, and higher visual amenity, with that larger scale providing for a greater degree of absorption of the salmon farm structures.
Rating: Low.

Expressiveness

As in the whole Sounds area, landform adjacent to the sites is legible as part of a drowned valley system. The abrupt rocky coastal edge here is also expressive of the extreme maritime conditions and ongoing coastal processes at this location. However the adjacent slopes are no more expressive of formative and ongoing processes than many other parts of the wider Sounds.

Landforms in the adjacent areas are more expressive, including the near-by islands at the mouth of Queen Charlotte Sound, and exposed and eroded rocks standing alone out to sea.
Rating: Moderate

Transient Values

Enclosure/shelter; changing character of the water; wildlife; boat traffic.
Rating: Moderate

Summary of Perceptual/Sensory Characteristics:

- Small bay strongly enclosed by steep and elevated landforms;
- Sheltered from open sea conditions, despite its proximity to the open sea;
- Adjacent slopes are rocky and steep, with low exposed bluffs in places;
- Predominant forestry, with a strip of scrub on steepest slopes immediately above coastal edge;
- Within Otanerau Bay the salmon farm is quite a prominent visual element, with effects magnified by the relatively small size of the bay and the enclosing hills;
- Immediately adjacent slopes are unmodified, with no structures;
- Wider context has extensive areas of regenerating indigenous vegetation.

Perceptual/Sensory Baseline Rating:

- Low-Moderate

Key Perceptual/Sensory Values:

- Working/productive character;
- Rugged landform;
- Vegetated backdrop has simplicity and moderate coherence;
- Low perceived naturalness;
- Salmon farm structures a reasonably prominent visual element within Otanerau Bay;
- Sense of enclosure/shelter;
- Sense of remoteness.

Site Associative Baseline

While there has been no direct input into this assessment from local community, information has been incorporated from social impact reporting on salmon farms in the Sounds, and from recently completed Cultural Impact and Tourism and Recreation assessments.

Tangata Whenua

Research undertaken shows the historical and widespread activity of each of Te Tau Ihu tribes (Ngāti Koata, Ngāti Kuia, Ngāti Apa ki te Rā Tō, Ngāti Toa Rangatira, Te Ātiawa o Te Waka-a-Māui, Ngāti Rangitāne o Wairau, Ngāti Tama ki Te Tau Ihu and Ngāti Rarua) in Kura Te Au (Tory Channel), Tōtaranui (Queen Charlotte Sound) and Te Hoiere (Pelorus Channel). Every tribe has at some point fished, had kāinga or pā (whether temporary or permanent), or is able to relate kōrero tūpuna in and around these waterways.[6].

it is recognised that some iwi may have an interest in an area that is historical (e.g. as a result of historical occupation of an area with accompanying wāhi tapu and other sites of significance), while current mana whenua, mana moana, tāngata whenua is held by another iwi. Additionally, there are instances where mana whenua, mana moana, tāngata whenua interests are overlapping and shared by two, or more iwi. (The term 'mana whenua, mana moana, tāngata whenua' seeks to encompass all the various 'Māori' interests that exist in the areas under investigation).[7]

For mana whenua, mana moana and tangata whenua there will be physical and spiritual values relating to the protection of taonga, mauri, customary uses and practices and the exercise of kaitiakitanga in Totaranui.[8], as well as values relating to mahinga kai, manaaki tangata, and traditional and contemporary waka routes[9].

There is evidence of early Maori settlement/activity throughout Totaranui (Queen Charlotte Sound), with Totaranui being an important area for shelter and plentiful food; and the cultural association with Totaranui is ongoing. There have been no specific Maori Heritage Sites or additional values publicly identified[10] which relate to this site in particular. Values relating to the context as a whole will apply.

[6] Draft Cultural Impact Assessment; Maximise, 2016, pg 7.
[7] Ibid; pg. 4
[8] Board of Inquiry, NZKS Decision, 23 Feb 2013; pg 248.
[9] Draft Cultural Impact Assessment; Maximise, 2016, pgs 15 and Appendix 2.
[10] Marlborough District Council Smart Maps: Heritage Sites.

Shared and Recognised

Queen Charlotte Sound is recognised for its recreational attributes, being the most popular part for the Sounds for baches/dwellings, and for recreational activities such as boating, scallop diving and fishing. It is considered the recreational and tourism hub of the Marlborough Sounds, with recreational and tourism opportunities of both regional and national recreational importance.[11] However, development and recreational/tourism use has dissipated in the outer parts of the Sound – where this site is located. [12]

Associative values here relate more to the much wider context than this particular site.

Summary of Associative Characteristics:

- Wider Queen Charlotte Sound recognised as the most popular of the Sounds for recreation; walkway ends in the Outer Sound; Boating, fishing, spear-diving ;
- Historic features in the wider Outer Sound context;
- Early Maori activity/settlement at the wider East Bay - Totaranui (Queen Charlotte Sound) was an important area for early Maori, providing shelter and plentiful food; There continue to be physical and spiritual values for mana whenua, mana moana and tangata whenua relating to the protection of taonga, mauri, customary practices and the exercise of kaitiakitanga;
- Limited marine farming.

Associative Baseline Rating:

- Moderate

Key Associative Values:

- Historical settlement of East Bay by early Maori;
- Physical and spiritual values associated with mana whenua, mana moana and tangata whenua taonga, mauri, customary practices and the exercise of kaitiakitanga;
- Historical features in the wider Outer Sound;
- Recreational uses in the wider Queen Charlotte Sound; boating, fishing, diving.

Summary: Key Values

	Key Values	*Baseline Rating*
Natural Science	• Limited regenerating indigenous vegetation on adjacent slopes; • Presence of pine plantation; • Adjacent unmodified landform; • Coastal margin modified by a salmon farm and mussel farms; • Highly enriched benthic conditions within parts of the salmon farm site; low-moderate flows; • Regenerating indigenous vegetation across the wider context.	Low
Perceptual /Sensory	• Working/productive character; • Rugged landform; • Vegetated backdrop has simplicity and moderate coherence; • Low perceived naturalness; • Salmon farm structures a reasonably prominent visual element within Otanerau Bay; • Sense of enclosure/shelter; • Sense of remoteness.	Low-Moderate
Associative	• Historical settlement of East Bay by early Maori; • Physical and spiritual values associated with mana whenua, mana moana and tangata whenua taonga, mauri, customary practices and the exercise of kaitiakitanga; • Recreational uses in the wider Queen Charlotte Sound; boating, fishing, diving; • Historical features in the wider Outer Sound.	Moderate

[11] NZ King Salmon Potential Salmon Farm Relocation in Marlborough Tourism and Recreation Assessment (TARA); TRC Tourism Ltd. August 2016, pg 18

[12] NZ King Salmon Potential Salmon Farm Relocation in Marlborough Tourism and Recreation Assessment (TARA); TRC Tourism Ltd. August 2016, Map 3, pg 24.

Conclusion: Existing Site Otanerau Natural Character Assessment

The site has low natural science value due to the predominant coverage of adjacent slopes in exotic forestry; the limited amount of native vegetation regeneration present (which is in the very early stages); and due to the modification of the coastal edge by marine farming. The presence of the salmon farm also reduces perceptual/sensory values at the site scale (Level 4/5), especially as the smallish size of the Otanerau Bay and its enclosing hills mean the salmon farm becomes more dominant visually than it would be in a more expansive context.

Natural Character Baseline Rating: Low

Outstanding Natural Character:

The site is assessed as not meeting the threshold for Outstanding classification, due to reduced natural science values and reduced perceived naturalness and visual amenity brought about by the presence of the forestry and existing marine farms.

Conclusion: Existing Site Otanerau Landscape Assessment

Adjacent slopes have a reasonable level of visual coherence due to the simplicity of the planting, but perceived naturalness is low due to the vegetation being clearly managed rather than natural, with unnatural boundary lines inconsistent with landform. The productive character of the site is reinforced by the presence of marine farming. Visual amenity offered by the site is relatively low, due to the low perceived naturalness, and the prominence of the salmon farm structures in this relatively small bay with enclosing hills. Neither inherent memorability nor expressiveness are particularly high at the site, and associative values relate more to the wider context than this particular site. The Landscape Baseline Rating is considered to be Low-Moderate when assessed at a site scale (Level 4/5).

Landscape Baseline Rating: Low-Moderate

Outstanding Natural Landscape/Feature:

The site is part of the wider Sounds, which is an Outstanding Natural Landscape at the National Scale. Slopes adjacent to the site have also been proposed as an Outstanding Natural Feature at a district scale[13].

This assessment concludes that, when assessed at the local scale this site does not meet the threshold for Outstanding classification, due to reduced natural science values, reduced scoring across the range of perceptual/sensory attributes, and reduced visual amenity.

[13] MDC proposed ONFLs have been assessed at a district scale; Marlborough Landscape Study 2015, pg. 104; MDC proposed ONFLs have not been assessed separately at regional and district levels; an ONFL in Marlborough is considered to be an ONFL at both levels; Marlborough Landscape Study 2015, MDC, Pg. 20.

EXISTING SITE: OTANERAU, EAST BAY

Assessment of Effects from the Proposal

Proposed Change:

Surrender of Site

Removal of existing salmon farm structures with structures permitted over 2ha, and currently comprising:

- Rectangular above water steel structure; Light in colour and incorporating white netting;
- Underwater mooring structures – anchoring the farm in place (not visible above water);
- Associated navigation structures;
- A barge.

Once the salmon farm is removed the marine farming consent for the site will be surrendered. It is proposed that zoning for the site revert to CMZ1, where marine farming is a prohibited activity.

Potential Viewing Audience/Visual Appraisal:

Navigational surveying of vessel routes[14] in January indicted that Otanerau Bay is not visited or passed by many pleasure vessels or passenger vessels. It is likely the farm is viewed mostly by work-boats Views from smaller boats will be more side on, with viewers more likely to perceive the structure's height out of the water than whole size. Views from larger boats will be more elevated, and will see more of the farm's total area. Views will be both transitory and constant.

Perceptions of salmon farms by recreational boaties were surveyed in 2015. Results showed that just over half the boatie respondents reported no effect of salmon farms on their experience of the Sounds, while almost one-third reported a negative effect. The most common negative effect reported by boaties was visual blight (12 percent), a feeling of displacement from the bay (10 percent), and course change or navigational risk (6 percent). However salmon farms also commonly attract boaties and visitors on charter vessels. People's responses to the presence of salmon farms varies a great deal, depending on the nature of occupancy, and the experiences, personalities and attitudes of the individuals concerned. [15]. Neighbours have not reported noticeable adverse effects from salmon-farm lighting, whether it be from the accommodation block, navigational aids or under-water lighting.[16]

Site Sensitivity:

This location has a baseline value of Low for Natural Character and Low-Moderate for Landscape. This location is considered to have a reduced sensitivity for the majority of Natural Science values, however the low-moderate flow rate does slightly increase the sensitivity of the benthic environment. While there is an area identified as an Outstanding Natural Feature/Landscape on the adjacent slopes, the presence of productive forestry and aquaculture activities is the dominant characteristic in this location and the site is considered to have a reduced level of landscape sensitivity to the presence of a Salmon Farm.

Assessment of Landscape Effects

For detailed assessment of effects refer to the table on the following page.

[14] Navigational Risk Review for Proposed Tory Channel Salmon Farms, Appendix B; Navigatus Consulting Limited July 2015.

[15] The Social and Community Effects of Salmon Farming & Rearing: A Case Study of the Top of the South Island; Taylor Baines & Assocs & Quigley & Watts Ltd; Nov 2015, pgs. 37 - 40.

Conclusion: Existing Site Otanerau Bay - Effects on Natural Character

There will be beneficial effects on the perceptual/sensory aspect of natural character from the removal of the existing salmon farm, including a small increase in perceived naturalness, and increased darkness of the night sky (although it is noted that lighting from existing salmon farms will remain). The continued presence of the predominant forestry and logging work, and the presence of adjacent mussel farms in the coastal margin, will however prevent the beneficial effect (of removing the salmon farm) from being of greater significance. Removal of the salmon farm will reduce the adverse effects on the natural science values, but the low-moderate flow and adjacent mussel farms will remain. The overall beneficial effect on natural character considering both the natural science and to some extent the perceptual will, at a site scale (level 4/5), result in a Low-Moderate natural character rating.

Effects on ONC Status

Removal of the salmon farm at this site would not result in the site becoming eligible for ONC status, due to low value of vegetation on adjacent slopes and the continued marine farming (mussel farms) at the site.

The increase in natural character values resulting from the removal of the salmon farm would not result in the site becoming suitable for consideration for ONC status at the district scale, for the same reasons.

Removal of this farm would not affect natural character values and ratings at the larger regional and national scales, which are much broader in nature, with the site forming only a very small part of the context at those scales.

Conclusion: Existing Site Otanerau Bay – Effects on Landscape Character

The proposed removal of existing salmon farm structures will result in this setting having a small increase in perceived naturalness and also some improvement to visual amenity. The continued presence of the predominant forestry and logging work, and the presence of adjacent mussel farms in the coastal margin will, however, prevent any beneficial effects on landscape character from being of greater significance. The resultant landscape ranking will be Moderate at a site scale (Level 4/5).

Effects on ONL/F Status

It is considered that removal of the salmon farm at this site would result in a landscape ranking of Moderate. It is not considered that removal of the salmon farm would result in the site approaching eligibility for consideration as ONF at the site scale, due to the continued presence of the predominant forestry and logging work, and the presence of adjacent mussel farms in the coastal margin.

Given the predominance of forestry and marine farming within the wider Otanerau Bay, the same is considered true for the district scale. At the district scale Otanerau Bay will exhibit reduced natural science and perceptual/sensory values even if the salmon farm is removed.

Any broader-scale regional values will not be affected by the proposal. [17] The status of the Sounds as an ONL at the national scale will also not be affected by this proposal.

[16] Ibid; pg 43.

[17] MDC proposed ONFLs have been assessed at a district scale; Marlborough Landscape Study 2015, pg. 104; MDC proposed ONFLs have not been assessed separately at regional and district levels; an ONFL in Marlborough is considered to be an ONFL at both levels; Marlborough Landscape Study 2015, MDC, Pg. 20.

Existing Site: Otanerau Bay - Assessment of Effects				
Character Component (NZCPS)	*Existing Character*	*Assessment of Effects*		
	Key Values	*Baseline Rating*[18]	*Effects*	*Existing Mitigation (Including site characteristics and proposal design features).*
Natural Science [19]	• Limited regenerating indigenous vegetation on adjacent slopes; • Presence of pine plantation; • Adjacent unmodified landform; • Coastal margin modified by a salmon farm and mussel farms; • Highly enriched benthic conditions within parts of the salmon farm site; low-moderate flows; • Regenerating character in the wider context.	Low	• No change to landform or landcover. • Removal of modifying structures from the coastal margin, with beneficial benthic effects and in-water effects, and resultant beneficial effects on ecology.	
Perceptual/ Sensory[20] Values	• Working/productive character; • Rugged landform; • Vegetated backdrop has simplicity and moderate coherence; • Low perceived naturalness; • Salmon farm structures a reasonably prominent visual element within Otanerau Bay; • Sense of enclosure/shelter; • Sense of remoteness.	Low - Moderate	• The existing salmon farm structures have a reducing effect on perceived naturalness at this site. However, perceived naturalness at this site is low for additional reasons to the presence of the salmon farm (predominant plantation forestry/working character), and even with removal of the farm perceived naturalness will remain low. • Removal of the structures will increase visual amenity at the site. However, visual amenity here is low for additional reasons to the presence of the salmon farm, and will remain low even with the salmon farm gone. Even though the salmon farm is quite a prominent visual element at the site, the dominant visual element is the forestry, which is not high in visual amenity at this site. • Removal of the salmon farm structures would result in an increase in the sense of remoteness. The presence of other structures (mussel farms), and intermittent logging work, will prevent that increase from being significant. • Removal would result in increased darkness of the night sky, with removal of lighting associated with the farm. • Surveys of social perceptions carried out in 2001 and 2012 for the Marlborough District Council[21].suggest that the growth in marine farming activities (including salmon farming) was not seen by national and regional visitors as having had a deleterious effect on the valued qualities of the Marlborough Sounds over this period.[22] • The classification of the slopes adjacent to the site as an Area of Outstanding Landscape Value in the operative Marlborough Sounds Resource Management Plan increases the significance of the beneficial effects of removing the salmon farm structures. However, the continued presence of the predominant forestry will prevent that increase from being significant overall.	• The existing farm is a fit with the working/productive character of the wider surrounding context.
Associative Values[23]	• Historical settlement of East Bay by early Maori; • Physical and spiritual values associated with mana whenua, mana moana and tangata whenua taonga, mauri, customary practices and the exercise of kaitiakitanga; • Recreational uses in the wider Queen Charlotte Sound; boating, fishing, diving; • Historical features in the wider Outer Sound	Moderate	• A Tourism and Recreation Assessment (TARA) has concluded that removal of this farm will have a minimal impact on tourists and recreationalists • Removal of the existing farm structures is assessed as having low-moderate beneficial effects for associative values relating to of the history of the bay. The continued presence of other productive uses will prevent that increase from being greater.	• Queen Charlotte Sound is known as a Sound with a complex mix of uses, including recreation, production (pasture farming, forestry, marine farming), and regeneration of indigenous vegetation.
Overall Baseline Natural Character[24]		Low		
Overall Baseline Landscape[25]		Low-Moderate		
Resultant Natural Character			Low-Moderate	
Resultant Landscape			Moderate	

[18] In all scoring a 7-point scale is used: Very Low/Low/Low-Moderate/Moderate/Moderate-High/High/Very High.
[19] Includes geomorphological (landforms) and ecological (flora, fauna, habitat, biodiversity and natural systems and processes).
[20] Includes visual and aesthetic values such as coherence, vividness, memorability, perceived naturalness, expressiveness, and transient values.
[21]. Corydon Consultants Ltd, 2001 and Corydon Consultants Ltd, 2012.
[22] The Social and Community Effects of Salmon Farming & Rearing: A Case Study of the Top of the South Island; Taylor Baines & Assocs & Quigley & Watts Ltd; Nov 2015, pg. 69
[23] Includes cultural (Tangata Whenua), historic, and shared and recognised values.
[24] The Overall Baseline rating is reflective of the site's sensitivity to change. In the Marlborough Sounds environment a highly natural site will have higher perceptual ratings as well as high natural science ratings, and will be more sensitive to change. The more modified a site is, the lower the ratings tend to be for both natural science and perceptual/sensory ratings, and the less sensitive a site will be to change.
[25] Ibid

Appendix 1

Site Context: Marlborough Sounds

Recent work completed for Marlborough District Council has identified landscape and natural character values across the Marlborough Sounds, as well as proposing areas of Outstanding Natural Character and Outstanding Landscapes and Features. This work has been completed for the most part at a district scale. Sites being assessed as part of this report sit within the following context of identified higher-level values:

Marlborough Landscape Study; MDC,within 2015

National Scale

The Marlborough Landscape Study 2015 identifies eight Landscape Character Areas of Marlborough, one of which is the Marlborough Sounds (described as including Picton, Havelock and islands, spurs and peninsulas that form the north-eastern-most part of the South Island). At a National scale the Marlborough Sounds is perceived as one landscape[1], and is considered an Outstanding Natural Landscape at that scale.

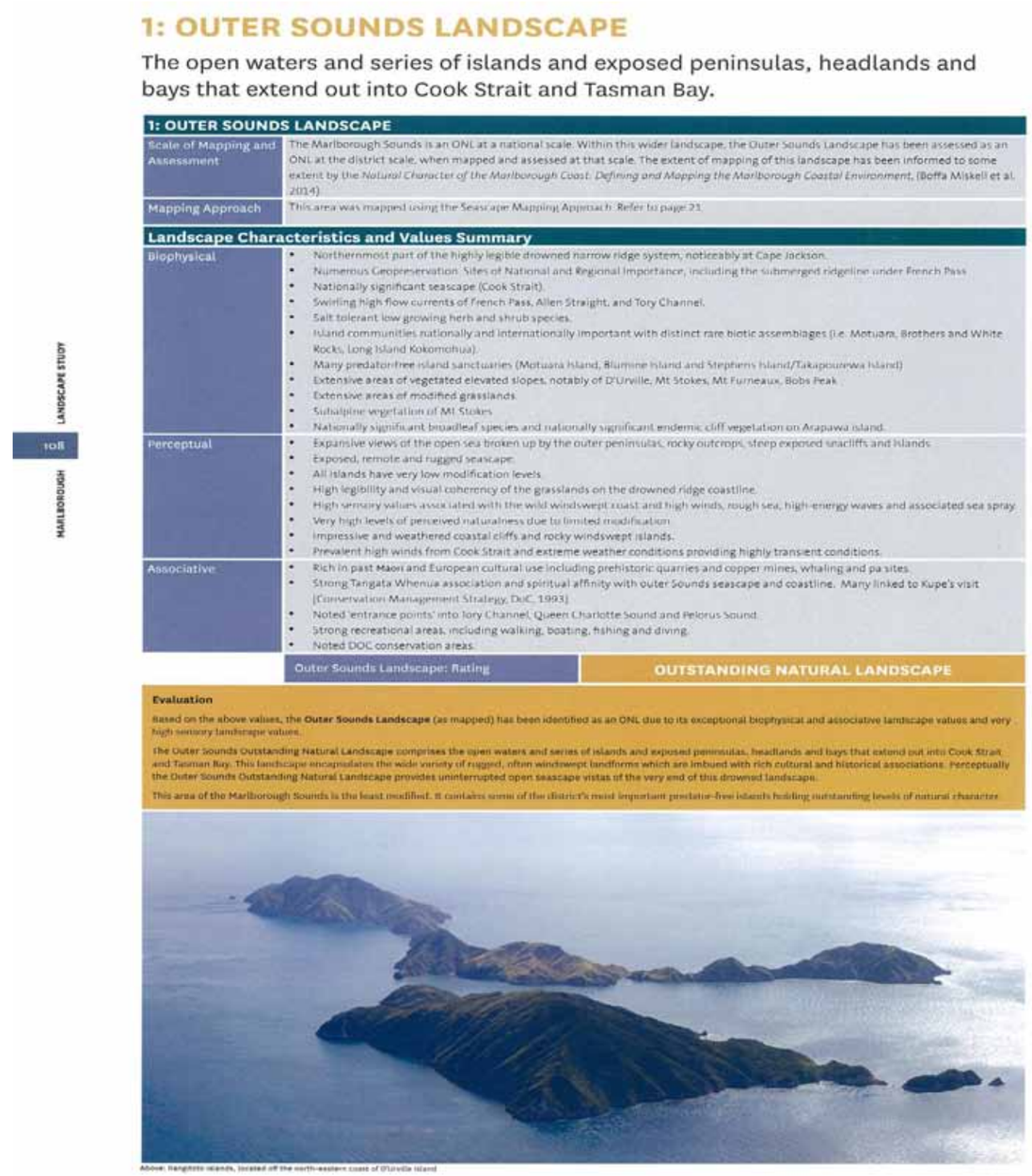
District Scale

At the district scale the Marlborough Landscape Study 2015 identifies two distinct character units within the Marlborough Sounds – the Outer Sounds Landscape and the Inner Sounds Landscape.[2] Proposed ONFLs within these two character units have been assessed at a district scale[3]. (Proposed ONFLs have not been assessed separately at regional and district scales; an ONFL in Marlborough is considered to be an ONFL at both regional and district scales[4].)

The Inner and Outer Sounds Landscapes are divided into 17 geographical areas, which contain ONFs. The characteristics and values of the ONFs are listed under the relevant geographical area.

The following excerpts from the 2015 Landscape Study identify the district-scale values relevant to the sites being considered in this report.

Values of the Outer Sounds Landscape
(Excerpt from the Marlborough Landscape Study 2015)



1: OUTER SOUNDS LANDSCAPE

The open waters and series of islands and exposed peninsulas, headlands and bays that extend out into Cook Strait and Tasman Bay.

1: OUTER SOUNDS LANDSCAPE	
Scale of Mapping and Assessment	The Marlborough Sounds is an ONL at a national scale. Within this wider landscape, the Outer Sounds Landscape has been assessed as an ONL at the district scale, when mapped and assessed at that scale. The extent of mapping of this landscape has been informed to some extent by the *Natural Character of the Marlborough Coast: Defining and Mapping the Marlborough Coastal Environment*, (Boffa Miskell et al. 2014).
Mapping Approach	This area was mapped using the Seascape Mapping Approach. Refer to page 23.
Landscape Characteristics and Values Summary	
Biophysical	• Northernmost part of the highly legible drowned narrow ridge system, noticeably at Cape Jackson. • Numerous Geopreservation Sites of National and Regional Importance, including the submerged ridgeline under French Pass. • Nationally significant seascape (Cook Strait). • Swirling high flow currents of French Pass, Allen Straight, and Tory Channel. • Salt tolerant low growing herb and shrub species. • Island communities nationally and internationally important with distinct rare biotic assemblages (i.e. Motuara, Brothers and White Rocks, Long Island Kokomohua). • Many predator-free island sanctuaries (Motuara Island, Blumine Island and Stephens Island/Takapourewa Island) • Extensive areas of vegetated elevated slopes, notably of D'Urville, Mt Stokes, Mt Furneaux, Bobs Peak. • Extensive areas of modified grasslands. • Subalpine vegetation of Mt Stokes. • Nationally significant broadleaf species and nationally significant endemic cliff vegetation on Arapawa Island.
Perceptual	• Expansive views of the open sea broken up by the outer peninsulas, rocky outcrops, steep exposed seacliffs and islands. • Exposed, remote and rugged seascape. • All islands have very low modification levels. • High legibility and visual coherency of the grasslands on the drowned ridge coastline. • High sensory values associated with the wild windswept coast and high winds, rough sea, high-energy waves and associated sea spray. • Very high levels of perceived naturalness due to limited modification. • Impressive and weathered coastal cliffs and rocky windswept islands. • Prevalent high winds from Cook Strait and extreme weather conditions providing highly transient conditions.
Associative	• Rich in past Maori and European cultural use including prehistoric quarries and copper mines, whaling and pa sites. • Strong Tangata Whenua association and spiritual affinity with outer Sounds seascape and coastline. Many linked to Kupe's visit (Conservation Management Strategy, DoC, 1993). • Noted 'entrance points' into Tory Channel, Queen Charlotte Sound and Pelorus Sound. • Strong recreational areas, including walking, boating, fishing and diving. • Noted DOC conservation areas.
Outer Sounds Landscape: Rating	OUTSTANDING NATURAL LANDSCAPE

Evaluation

Based on the above values, the **Outer Sounds Landscape** (as mapped) has been identified as an ONL due to its exceptional biophysical and associative landscape values and very high sensory landscape values.

The Outer Sounds Outstanding Natural Landscape comprises the open waters and series of islands and exposed peninsulas, headlands and bays that extend out into Cook Strait and Tasman Bay. This landscape encapsulates the wide variety of rugged, often windswept landforms which are imbued with rich cultural and historical associations. Perceptually the Outer Sounds Outstanding Natural Landscape provides uninterrupted open seascape vistas of the very end of this drowned landscape.

This area of the Marlborough Sounds is the least modified. It contains some of the district's most important predator-free islands holding outstanding levels of natural character.

Above: Rangitoto Islands, located off the north-eastern coast of D'Urville Island

LANDSCAPE STUDY 108 MARLBOROUGH

[1] Marlborough Landscape Study, August 2015; MDC, pg.106
[2] Ibid; pg. 106
[3] Ibid; pg. 104
[4] Ibid; pg 20.

Area 5: Port Ligar, Forsyth Island and Kaitira Headland

Falling into this Area are:

- Proposed site 34 North Blowhole Point (adjacent to a proposed ONF within this Area);
- Proposed Site 122 Blowhole Point (adjacent to a proposed ONF within this Area);
- Proposed Site 125 Mid-channel Waitata;
- Existing Site Waihinau;
- Existing Site Forsyth Bay.

District Scale Characteristics and Values of Area 5
(excerpt from Marlborough Landscape Study 2015)

5: PORT LIGAR, FORSYTH ISLAND AND KAITIRA HEADLAND

Scale of Mapping and Assessment	The Marlborough Sounds is an ONL at a national scale. Within this wider landscape, Port Ligar, Forsyth Island and Kaitria headland have been assessed aas ONFs at the district scale, when mapped and assessed at that scale.
Mapping Approach	This area was mapped using the Contained Landscape Feature Approach as well as the Seascape Mapping Approach. Refer to page 21.

Landscape Characteristics and Values Summary

Biophysical	• Where the waters of exposed Cook Strait and more sheltered Pelorus Sound meet. • Areas within Forsyth Bay and Waitata Reach, including Port Ligar have been identified as being of national significance for king shag feeding and breeding habitat, including Duffers Reef. • Bird Island is nationally significant for reef heron breeding. • Both Forsyth Island and the Kaitira headland hold high levels of natural character. The open waters between Port Ligar, the Kaitira headland and northern Forsyth Island also hold high levels of natural character, principally due to low levels of modification.
Perceptual	• Rugged, exposed outer coastal slopes and narrow isthmus landform at Port Ligar. • Interesting landform of Duffers Reef and the neck at the head of Forsyth Bay. • Dramatic pinch point at Allen Strait in to Forsyth Bay. • Visually dramatic headland of Clay Point.
Associative	• Recognised entry/ exit point of Pelorus Sound between Kaitira (East Entry Point) and Te Akaroa (West Entry Point). • Evidence of early Māori settlement clustered around Port Ligar and Orchard Bay including a Pa. • Evidence of early European settlement at Port Ligar. • Te Kopi and Sir Bernard Fergusson Scenic Reserves in Waterfall Bay, Port Ligar, Bulwer Scenic Reserve in Waitata Bay. • Historic gun emplacement at Post Office Point on the Kaitira headland. • Private Forsyth Island is a destination for travellers.
Rating:	OUTSTANDING NATURAL FEATURES

Evaluation

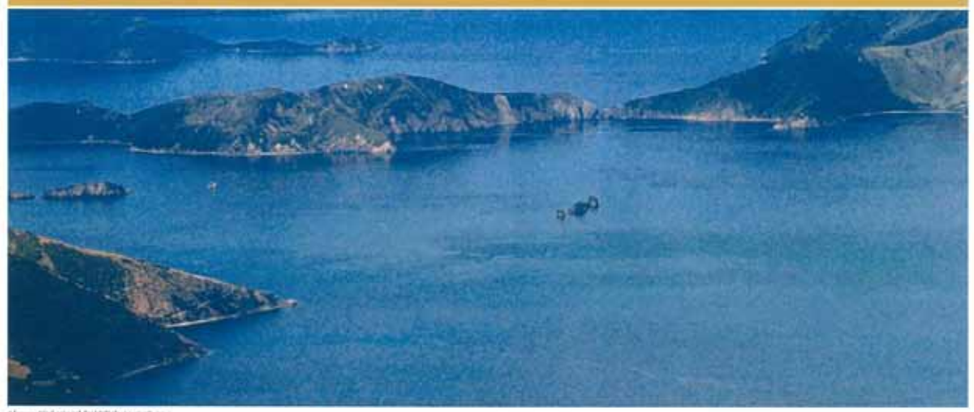
Based on the above values, **Port Ligar, Forsyth Island, the waters between Te Akaroa and the Kaitira headland and Bird Island** have been identified as ONF's due to their exceptional biophysical and associative and very high sensory landscape values.

The rugged, exposed outer coastal slopes and peninsulas give way to the more sheltered embayments of Port Ligar and Forsyth Bay at the entry to Pelorus Sound. Identifiable features include the rugged, narrow isthmus landform at Port Ligar, the interesting landform of Duffers Reef, a chain of small islands and stacks off the north-western tip of Forsyth Island and the neck at the head of Forsyth Bay. The narrow pinch point of Allen Strait, between southern Forsyth Island and the mainland, forms a visually enclosing entrance into Forsyth Bay.

Whilst some land has been cleared for pasture, there are limited structures on the land, especially around northern Port Ligar. Waterfall Bay features native vegetation of local value, fragmented bird habitat and some uncommon plant species.

Duffers Reef is a nationally significant nesting area for king shags. Areas within Forsyth Bay and Waitata Reach, including Port Ligar have also been identified as being of national significance for king shag feeding and breeding habitat. Bird Island is nationally significant for reef heron breeding.

Modifications include moorings; marine farms adjacent to the Port Ligar headland, extending to Makata Rock; vegetation clearance; forestry; roads and tracks; jetties; buildings; and powerlines.



Above: Bird Island (middle), Forsyth Bay.

Area 6: Maud Island, Mt Shewell, Fitzroy Bay and Eastern Tawhitinui Reach

- Proposed Site 106 Richmond Bay South
- Proposed Site 124 Horseshoe Bay

District Scale Characteristics and Values of Area 6:
(excerpt from the Marlborough Landscape Study 2015)

6: MAUD ISLAND, MT. SHEWELL, FITZROY BAY AND EASTERN TAWHITINUI REACH

Scale of Mapping and Assessment	The Marlborough Sounds is an ONL at a national scale. Within this wider landscape, Maud Island, Mt Shewell, Fitzroy Bay and Eastern Tawhitinui Reach have been assessed as ONFs at the district scale, when mapped and assessed at that scale.
Mapping Approach	This area was mapped using the Contained Landscape Feature Approach as well as the Landuse Mapping Approach. Refer to page 21.

Landscape Characteristics and Values Summary

Biophysical	• Mt. Shewell is nationally significant for *Powelliphanta hochstetteri obscura* (New Zealand giant snail) and diverse plant species. • Maud Island is internationally significant, as a predator-free island sanctuary, harbouring nationally threatened species of invertebrates, birdlife and the entire population of the Maud Island frog. • Fitzroy Bay - nationally significant beech forest/lowland/coastal broad leaf and internationally significant waters. • Largely intact podocarp-broadleaf forest in Kauauroa Bay (eastern Tawhitinui Reach). • Maud Island largely cloaked in regenerating shrubland and forest. • Remnant indigenous forest on the elevated slopes of Mt Drew. • Maud Island is a visually striking, unique landform and holds outstanding natural character. • Fitzroy Bay, Mt. Shewell and parts of Kauauroa Bay hold very high levels of natural character due to the indigneous bush cover. The remaining areas hold high levels of natural character.
Perceptual	• Impressive peak of Mt Shewell at the head of Admiralty Bay. • Interesting distinct pyramidal form of Maud Island. • Low levels of modification. • Road to Admiralty Bay/French Pass passes through the bush above Fitzroy Bay – contributing to the scenic journey. • Frequent, intimate bays with sheltered waters, notably Fitzroy Bay/ Savill Bay/ Carne Bay/ Waiona Bay and Kauauroa Bay. • Area typified by slender peninsulas (notably Tawero and Whakamawahi Points) and broad bays. • Visually impressive Yellow Cliffs at the southern head of Waitata Bay.
Associative	• Historic gun emplacement on Maud Island. • Peninsulas of Tawero Point and Whakamawahi Point act as gateway features to central Pelorus Sound.
Rating:	OUTSTANDING NATURAL FEATURES

Evaluation

Based on the above values, **Maud Island, Mt Shewell, Fitzroy Bay and Eastern Tawhitinui Reach**, have been identified as ONF's due to their exceptional biophysical and associative landscape values and very high sensory landscape values.

Maud Island is an important island sanctuary containing nationally threatened species. The island landform provides a distinctive pyramidal skyline linking to the slender neck of Harter Point. Most of the island is cloaked in regenerating shrubland and forest. Māori settlement and use of the resources in this part of the outer Sounds is evident in the intense clusters of archaeological remains.

The impressive peak of Mt Shewell, the sheltered waters of Apuau Channel and intimate bays of this coastline are highly legible. Of the remaining indigenous forests within the area, much appears on more elevated slopes (Mt Shewell) and the western slopes of Waiona Bay and around the elevated slopes of Fitzroy Bay. The continuous undeveloped coastline in this area is highly natural. Mt Shewell Scenic Reserve features nationally significant, diverse plant species.

Modifications include: vegetation clearance; forestry and tracks on Maud Island; buildings; jetties; tracks and limited moorings adjacent to marine farms around Tawhitinui Reach.

Above: Maud Island.

Area 11: Forested Ridges Around Crail Bay

- Existing Sites Crail Bay 1 & 2

District Scale Characteristics and Values of Area 11:
(excerpt from the Marlborough Landscape Study 2015)

11: FORESTED RIDGES AROUND CRAIL BAY

Scale of Mapping and Assessment	The Marlborough Sounds is an ONL at a national scale. Within this wider landscape, the Forested Ridges around Crail Bay have been assessed as ONFs at the district scale, when mapped and assessed at that scale.
Mapping approach	This area was mapped using the Contained Landscape Feature Approach as well as Contour Line and Landuse Mapping Approaches. Refer to page 21.

Landscape Characteristics and Values Summary

Biophysical	• Bobs Knob Scenic Reserve – nationally significant for plant and animal diversity (near Crail Bay) • Nationally threatened *Powelliphanta hochstetteri obscura* (NZ native giant snail) on western ridge of Pelorus Sound • Extensive upland forest, notably at the ridges and peaks. • Much of the forested ridges contain very high levels of natural character due principally to the indigenous, unmodified vegetation. • Very High terrestrial natural character at Yncyca Bay.
Perceptual	• Ridge dividing Kenepuru and Pelorus Sounds provides a vegetated backdrop to both waterbodies providing high levels of naturalness. • Several interesting peninsula landforms, including Hopai Bay, Kaiaho Point and the indented peninsula around St. Omer, Gold Bay Reef and Weka Point. Unmodified and slender Duokaha Island extends off Hopai Bay peninsula and acts as a feature of this part of the bay.
Associative	• DOC reserve extends along the ridges of much of this area.
Rating:	OUTSTANDING NATURAL FEATURES

Evaluation

Based on the above values, the **Forested Ridges around Crail Bay** have been identified as ONF's due to their exceptional biophysical and associative landscape values and very high sensory landscape values.

Situated on the landform separating Pelorus Sound from Kenepuru Sound, the upland forested ridges of this area are largely under DOC management. Upland vegetation communities, including those of the Bobs Knob Scenic Reserve at the southeastern head of Crail Bay, are nationally significant for plant and animal diversity. A large area of indigenous vegetation extends in places from Bobs Knob to the water's edge and, at the northern side of Kenepuru Sound, at St Omer Bay, Gold Reef Bay, Weka Point and Mills Bay. Distinctive peninsula landforms at Hopai Bay and Kaiaho Point are interesting and highly memorable.

Modifications include: road (Kenepuru) and tracks, vegetation clearance, forestry, powerlines, buildings, jetties, moorings and the partial inclusion of a limited number of marine farms.

Above: Waters of Crail Bay. Duokaha Island and the peninsula enclosing Hopai Bay can be seen in the mid-ground.

Area 17: Northern Lands of the Inner Queen Charlotte Sound

- Existing Site Ruakaka

District Scale Characteristics and Values of Area 17:
(excerpt from the Marlborough Landscape Study 2015)

17: NORTHERN LANDS OF INNER QUEEN CHARLOTTE SOUND

Scale of Mapping and Assessment	The Marlborough Sounds is an ONL at a national scale. Within this wider landscape, the Northern Lands of Inner Queen Charlotte Sound have been assessed as ONFs at the district scale, when mapped and assessed at that scale.
Mapping Approach	This area was mapped using the Contained Landscape Feature, Landuse and Ridges and Spurs Mapping Approaches. Refer to page 21.

Landscape Characteristics and Values Summary

Biophysical	• Allports Island, Kaipakirikiri Bay and southern flanks of Onahau Bay are of localised ecological value. • Predator-free island of Allports Island • Forested headland of Kaipupu Point managed as a "mainland island" with high natural character values. • Regionally important tracts of primary forest in Kumutoto Bay and impressive forest sequences on southern flanks of Onahau Bay. • Allports Island, Kaipakirikiri Bay and southern flanks of Onahau Bay retain very high levels of natural character and the remaining areas hold high natural character values.
Perceptual	• Impressive views into Kenepuru Sound and wider Queen Charlotte Sound from Queen Charlotte Track. • Intriguing regular indentation of bays between Houhou Point and Snake Point. • Land cover remains predominantly native bush and regenerating scrub, providing an attractive contrast to and setting for the towns and baches. • High experiential values in Queen Charlotte Sound, especially in relation to Kaipupu Point and Mabel Island where they are visible from Picton.
Associative	• Popular area for recreational activities and habitation. The popular Queen Charlotte Track extends through this area as a well-known walking/mountain biking track. • Travellers enjoy views from the Cook Strait ferries, which pass through Queen Charlotte Sound to, and from, Picton. • Evidence of early Māori settlement and activities around the coastline. • The bush-covered islands of Allports and Mabel assist boaties as navigational landmarks.
Rating:	OUTSTANDING NATURAL FEATURES

Evaluation

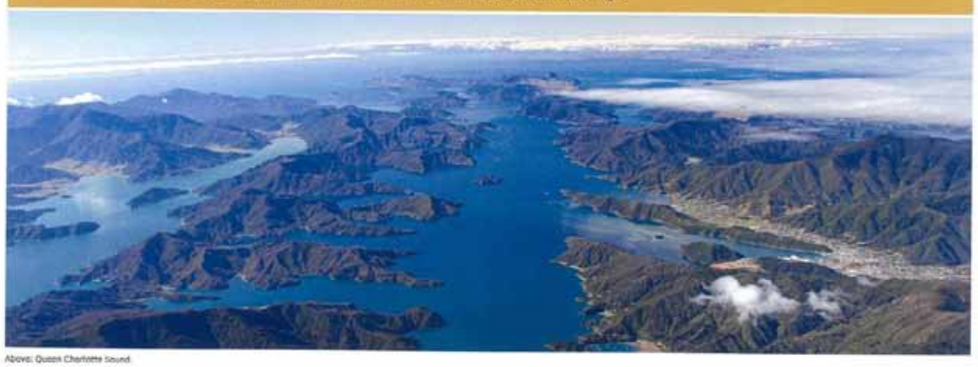
Based on the above values, **Northern Lands of Inner Queen Charlotte Sound** have been identified as ONF's due to the exceptional biophysical and associative landscape values and very high sensory landscape values.

Queen Charlotte Sound is the easternmost of the main Sounds and the part that New Zealanders are generally most familiar with (Corydon Consultants, Perception Survey, 2001). For many inter-island ferry travellers, Queen Charlotte Sound may be their only experience of the Marlborough Sounds. The most commonly visited part of the Sounds (Croydon Survey), Queen Charlotte Drive, is a well-known slow and winding route between Havelock and Picton with scenic views down to the bays.

The intriguing regular indentation of bays in the sound are highly memorable, providing an attractive contrast to and setting for the towns and baches of Queen Charlotte Sound. Large proportions of the bays, headlands and ridges on the northern side of Queen Charlotte Sound are in DOC ownership. Within these areas, the impressive forested peak of Mt. Bolton, the lower southern slopes of Mt Stokes, and the bays and headlands of the mainland between Onahau Bay and the Bay of Many Coves are of ecological value. Of particular value is the predator-free island of Allports Island, north east of Picton. Large areas of the waters in Queen Charlotte Sound are of international or national scientific ecological significance.

The Māori name for Queen Charlotte Sound is Totaranui, for the totara trees that grew there. Totaranui was an important trade route for early Māori, with evidence of their settlements and activities throughout the area. A large number of people also use the Queen Charlotte Track, which follows the ridge that divides Kenepuru Sound from Queen Charlotte Sound, providing panoramic viewing into both areas.

Modifications include: cleared vegetation, tracks, powerlines, forestry, buildings, jetties, and moorings.



Above: Queen Charlotte Sound.

Area 14: Arapawa Island and East and West Heads

- Proposed Site 42 Tipi Bay
- Proposed Site 82 Motukina Point
- Proposed Site 47 Te Weka Bay
- Proposed Site 156 Tio Point
- Existing Site Otanerau

District Scale Characteristics and Values of Area 14:
(excerpt from the Marlborough Landscape Study 2015)

14: ARAPAWA ISLAND AND EAST AND WEST HEADS

Scale of Mapping and Assessment	The Marlborough Sounds is an ONL at a national scale. Within this wider landscape, Arapawa Island and East and West Heads have been assessed as ONFs at the district scale, when mapped and assessed at that scale. They are ONF's within the eastern part of the Outer Sounds ONL.
Mapping Approach	This area was mapped using the Contained Landscape Feature, Seascape and Landuse Mapping Approaches. Refer to page 21.

Landscape Characteristics and Values Summary

Biophysical	• Geopreservation site: Tory Channel East Head. • Arapawa Island Reserves – nationally significant original cliff vegetation and rare species. Possum free. • The eastern flanks of Arapawa Island support some of the best remaining examples of Cook Strait mixed broadleaf forests and are nationally significant. • Highly natural coastal cliffs and large southerly swells are typical of this high-energy coastline, which is minimally modified. • Steep coastal cliffs and rocky reefs dominated by high-energy wave action provide a unique coastal habitat. • Easternmost parts of Arapawa Island hold outstanding natural character due to the unmodified cliffs. Remaining northern parts of Arapawa Island and Kaitapeha hold high levels of natural character.
Perceptual	• Gateway to South Island and Marlborough Sounds from Cook Strait ferry route. • Dramatic, narrow entrance to the Tory Channel between East Head and West Head. • Dramatic coastal processes are highly legible along the length of the Arapawa Island's steep coastal cliffs and rocky reefs. • Semi-exposed to very exposed coast. • Strong tidal currents on the outer edge of the Sounds. • Experiential and naturalness values high along Kaitapeha Peninsula and northern Arapawa Island including East Bay and parts of Tory Channel.
Associative	• Early whaling stations, including the first shore whaling station at Te Awaiti and Fisherman's Bay. • Pa sites and other archaeological evidence of early Māori settlement line the coast of Tory Channel.
Rating:	OUTSTANDING NATURAL FEATURES

Evaluation

Based on the above values, **Arapawa Island and East and West Heads** have been identified as ONF's due to the exceptional biophysical and associative landscape values and very high sensory landscape values.

Dramatic coastal processes are highly legible along the length of Arapawa Island's steep coastal cliffs and rocky reefs. The outer coast of Arapawa Island features nationally significant original cliff vegetation whilst the south-facing slopes of the island feature nationally significant regenerating coastal forest.

Tory Channel features as the marine gateway to the South Island and Marlborough Sounds via the dramatic, narrow entrance to Queen Charlotte Sound between East Head (a geopreservation site) and West Head. Kaitapeha Peninsula, at the entrance to Tory Channel, is a legible forested landmark. The waters around East Bay have nationally significant ecological values, particularly for Hector's dolphin.

There is considerable evidence of early Māori settlement/activity throughout the area, with sites particularly intense around East Bay, Arapawa Island. The first whaling station in New Zealand was established in Tory Channel, at Te Awaiti in 1827 by Londoner John Guard and is reputed to be the first European settlement in the South Island.

Modifications include: cleared vegetation and pasture, power lines, tracks, buildings, and moorings. Modifications also include the heritage sites at Okukari Bay. Aquaculture is present in East Bay and isolated parts of Tory Channel.

Above: Cliffs of eastern Arapawa Island.

Natural Character of the Marlborough Coast; Boffa Miskell 2014

Sub-Regional Scale (Level 2)

Natural character characteristics and values of the Marlborough Sounds as a whole (sub-regional level) are set out in discussion in Section C of the 2014 Natural Character Study, for marine and terrestrial environments, across a range of abiotic, biotic and experiential criteria. Overall the natural character rating for the Marlborough Sounds at this level is found to be Very High.

Coastal Marine and Terrestrial Areas of the Marlborough Sounds (Level 3)

10 Coastal Terrestrial Areas and 7 Coastal Marine Areas are identified within the Marlborough Sounds, with those areas mapped at approximately 1:50,000 – 1:10,000 scale (referred to as Level 3 scale). Level 3 characteristics and values for these Coastal and Terrestrial Areas are discussed in Section D of the Study, across a range of abiotic, biotic and experiential attributes. Values are not put into bullet points in Section D, and have not been extracted into bullet points as part of this report. The Level 3 characteristics and values discussed in Section D have been considered in terms of how they are likely to be affected by the proposed salmon farms, during the Assessment of Effects carried out for each site considered in this report.

Where sites being considered in this report are in proximity to each other, they often fall within the same Level 3-scale Area delineated in the 2014 Natural Character Study, and so have the same Level 3-scale characteristics and values. Sites fall into the following common Areas:

Coastal Marine Area C: Pelorus Sound
Collective Characteristics: Sheltered and warm; turbid and estuarine in the inner Sound; narrow near-shore reef; sand/shell and thenmud offshore; typical array of coastal species; reefs and sediments can often appear relatively barren; biogenic communities in places including rhodoliths, hydroids, tube worms, horse mussels and bryozoans.[12]
Level 3 Overall Natural Character Rating: Moderate-High

- Proposed Site 34 North Blowhole Point
- Proposed Site 122 Blowhole Point
- Proposed Site 125 Mid-channel Waitata
- Proposed Site 106 Richmond Bay South
- Proposed Site 124 Horseshoe Bay
- Existing Site Waihinau Bay
- Existing Site Forsyth Bay
- Existing Sites Crail Bay 1 & 2

Coastal Marine Area D: Queen Charlotte Sound
Collective Characteristics:Sheltered; waters relatively clear and cool; narrow near-shore reef grading into sand/shell and extensive mud habitats offshore; typical array of species, though reefs and sediments can often appear relatively barren; biogenic communities in places including tubeworms, horse mussels, brachiopods and red algae beds[13].
Level 3 Overall Natural Character Rating:Very High

- Existing Site Ruakaka
- Existing Site Otanerau

Coastal Marine Area E: Tory Channel
Collective Characteristics: Very sheltered; cold waters; strong currents; a narrow rock/cobble reef fringe bordered by well-sorted sands; silty sands and calcareous gravels in the bottom of the main channel; shallow muddy side bays; rich and abundant seaweed and invertebrate communities along channel margins[14].
Level 3 Overall Natural Character Rating: High

- Proposed Site 42 Tipi Bay
- Proposed Site 82 Motukina Point
- Proposed Site 47 Te Weka Bay
- Proposed Site 156 Tio Point

Coastal Terrestrial Area 2: Cook Strait
Collective Characteristics: Taupata, Ngaio, Rengarenga, Tuatara, Diving Petrel, Exposed, Dry, Maritime Ecosystem. This Coastal Terrestrial Area is highly exposed and maritime with a high coherence of cliff face landforms and a collection of jagged stacks and harsh rocky islands. Steep, exposed and imposing sea cliffs, peninsulas and headlands are dominant landforms creating a wild and scenic sea coast. Dry climate is coupled with small catchment areas and few streams. Elevation is low and rocks are predominantly a range of schists and sedimentary strata. Exposure and maritime influence is extreme. Brutal exposure to maritime elements has shaped a unique Cook Strait vegetation. The sheer nature of the topography and its inaccessibility has left some areas, especially islands, predominantly in a natural state. There is a high aesthetic coherence of pastoral landcover. Numerous island sanctuaries (Stephens, Chetwode, Titi & Brothers Islands) supporting many nationally threatened species including tuatara on Stephens and North Brother Islands, and king shags on rock stacks.[15]
Level 3 Overall Natural Character Rating:Very High

- Proposed Site 34 North Blowhole Point
- Proposed Site 122 Blowhole Point

Coastal Terrestrial Area 3: Bulwer
Collective Characteristics: Kohekohe, Whararikі, Blue Penguin, Western Sounds, Dry, Non To Weakly Schistose Ecosystem. This Coastal Terrestrial Area is characterised by steepish, dissected, climatically dry coastal hill slopes which stretch fingers at random into the sea, forming many bays and coves, the landmass itself being the most submerged of the Marlborough land ecosystems. Inside these splayed fingers the sea abuts the land abruptly, with few beaches. Rocks are sedimentary and weakly developed schist. Maritime influence and exposure is high and elevation generally low. Vegetation patterns are fragmented with much scrubland.[16]
Level 3 Overall Natural Character Rating: High

- Proposed Site 125 Mid-channel Waitata
- Proposed Site 106 Richmond Bay South
- Proposed Site 124 Horseshoe Bay
- Existing Site Waihinau Bay
- Existing Site Forsyth Bay

Coastal Terrestrial Area 4: Arapawa
Tauhinu, Black Beech, Fluttering Shearwater, Powelliphanta 'bicolor', Eastern Sounds, Dry, Weakly Schistose Ecosystem. Steep to moderately steep dry dissected coastal hill slopes are a feature of this coastal terrestrial area with several islands, a highly indented coast, with confined coastal inlets, beaches and undulating to rolling prograding inlet heads, and minor fans filling the valley floors. Base rock is weakly developed schist with minor sedimentary layers, with a valley overlay of alluvium in a few places. Exposure and maritime influence is generally high due to the landmass being surrounded by sea, while low relief is due to excessive drowning of the landmass. Vegetation patterns are fragmented, with much scrubland.[17]
Level 3 Overall Natural Character Rating:High

- Proposed Site 42 Tipi Bay
- Proposed Site 82 Motukina Point
- Proposed Site 47 Te Weka Bay

[12] Natural Character of the Marlborough Coast; MDC 2014; pg 70
[13] Ibid; pg 76
[14] Ibid; pg 82
[15] Ibid; pg 108
[16] Ibid; pg 118
[17] Ibid; pg 126

- Proposed Site 156 Tio Point
- Existing Site Otanerau

Coastal Terrestrial Area 5: Portage

Collective Characteristics: Kanuka, Rewarewa, Pipipi, Sounds, Dry, Strongly Schistose Ecosystem.
This Coastal Terrestrial Area is dominated by a strongly dissected long low ridge with many bays forming a gnarled finger, which separates two major water bodies - Pelorus and Queen Charlotte Sounds. Rocks are strongly schistose and slopes steep. Both maritime influence and rainfall are moderated. Due to the excessively drowned nature and low relief of the landmass, flats and gentle slopes are uncommon. Slopes generally trend into the sea without a change in slope, only sometimes terminating in truncated rocky shorelines, and then not usually with tall cliffs.[18]
Level 3 Overall Natural Character Rating: Very High

- Existing Site Ruakaka

Coastal Terrestrial Area 6: Nydia

Collective Characteristics: Red Beech, Supplejack, Filmy Ferns, Kakariki, Inner Sounds, Wet, Non to Weakly Schistose Area.
Steep to moderately steep terrain is typical of this Coastal Terrestrial Area with slopes plunging at similar angles into the sea. Small inlets and bays nestle within a range of fine fingers and broad headlands. Within the sheltered valleys lie fans and wetlands accumulating on the alluvium washed down from the non-schistose sedimentary strata and weakly developed schists. Elevation here is moderately high with high rainfall at the tops. Being Inner Sounds, it is relatively sheltered and enjoys a moderate maritime influence. Some frosts occur on flats behind sheltered bays. Original forest covers much of the northern part of the Coastal Terrestrial Area.
The coastal context includes Mt. Rutland and the Bull Range. Tributaries of the Pelorus River, namely the Opouri River, the Tunakino River and the Ronga River drain into the Rai River at Rai Valley. The valley floors of these river corridors are modified with agricultural grazing and forestry. The mid and upper slopes are typically clothed with indigenous forests.[19]
Level 3 Overall Natural Character Rating: Very High

- Existing Sites Crail Bay 1 & 2

Level 4/5: "Specific Parts"

Abiotic, biotic and experiential characteristics and values at Level 4/5 are also listed in Section D, where information to that level has been available, and characteristics and values have been identified as High or Very High. These have been included within in the individual site assessments in this report, as these are the values/characteristics closest in scale to the site-specific scale with which this report is concerned. However, it should be noted that for the most part the Level 4/5 characteristics and values in Section D of the 2014 Natural Character study are not Level 5 at the sites being considered. That is, the Level 4/5 characteristics/values from the 2014 study are still fairly general, and do not relate specifically to the sites being considered in this report.

Proposed Outstanding Natural Character

The Natural Character of the Marlborough Coast 2014 proposes areas of Outstanding Natural Character. None of the sites being considered in this report lie within those proposed areas.

[18] Ibid; pg 132

[19] Ibid; pg 140