

## **Appendix T    Natural character, landscape and visual assessment report**



Ngāi Tahu Seafood Resources Limited

# Hananui Aquaculture Project

Landscape, Visual and Natural Character

Evidence of Braddyn (Brad) Thomas Coombs regarding Landscape,  
Visual and Natural Character Assessment and Proposed Conditions.

Braddyn Thomas Coombs  
11-20-2025

## Introduction

My name is Braddyn (Brad) Thomas Coombs.

My role in relation to the Hananui Aquaculture Project (“**HAP**”) has been to provide expert evidence in relation to landscape, visual and natural character effects. I was the lead author of the Landscape, Visual and Natural Character Assessment which is provided within Appendix T of the application.

This evidence has been prepared to accompany the application by Ngāi Tahu Seafood Resources Limited (“**NTS**”) for approvals required for the HAP under the Fast-track Approvals Act 2024 (“**FTAA**”). It has been prepared on the understanding that the process for determining applications under the FTAA does not require a hearing to be held, and accordingly the purpose of this evidence is to confirm that, relative to my area of expertise, the Landscape, Visual and Natural Character Assessment Report provides an appropriate description of the relevant environment, the proposed activities comprising the effects of the HAP on that environment, and the way those effects are proposed to be managed.

My findings are set out in full in the Landscape, Visual and Natural Character Assessment Report included within Appendix T of the application.

While this application is not being considered by the Environment Court, I confirm that I have read the Code of Conduct for expert witnesses contained in the Environment Court of New Zealand Practice Note 2023 and that I have complied with it when preparing this evidence. Other than when I state I am relying on the advice of another person, this evidence is within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express.

## Qualifications and Experience

I am a Principal Landscape Architect at Isthmus Group Limited.

I graduated from Lincoln University with a Bachelor of Landscape Architecture (with honours)(1997) and Massey University with a Bachelor of Horticulture (1995).

I have worked at Isthmus Group (Isthmus) for almost 20 years, focussing on resource management and landscape planning work. Prior to working at Isthmus I worked at consultancy and local government offices in Aotearoa New Zealand and the United Kingdom. I have over 29 years of professional work experience as a landscape architect.

I have worked on the following projects which are relevant to my experience of assessing the landscape, visual and natural character effects of aquaculture, marine and coastal projects:

- a) 2006 – 2007 Waihi Beach seawall for Western Bay of Plenty District Council.
- b) 2013 Re-consenting of the Guards May Marine Farm, Marlborough.

- c) 2014 Applications to abandon the wreck of the MV Rena on Otaiti (Astrolabe Reef) (for the Department of Conservation).
- d) 2015 Review of the Admiralty Bay Marine Farm for Clearwater Mussels.
- e) 2015 Scoping of several marine farm sites in the Marlborough Sounds.
- f) 2015 – 2020 Orewa Beach Seawall application for Auckland Council.
- g) 2015 Bledisloe Park Seawall, Little Waihi.
- h) 2016 Western Firth of Thames Marine Farm (664 ha of new aquaculture space).
- i) 2017 Plan Change application for the Colville Marine Farm Zone, Coromandel.
- j) 2017-2018 Waikawa Marina extension for Port Marlborough Ltd.
- k) 2018 Scoping of a spat marine farm site, Mercury Bay, Coromandel.
- l) 2020/2021 Coromandel Fin Fish Farm application, for Pare Hauraki.
- m) 2020-2022 Te Kouma / Sugar Loaf Wharf, Coromandel commercial and public boat ramp and wharf expansion.
- n) 2021 Te Tumu Kuku Eastern Hauraki Gulf Marine Farm.
- o) 2021 Guards Bay Marine Farm assessment for the Marlborough Environment Plan.
- p) 2021 Cliffords Bay Marine Farm assessment for the Marlborough Environment Plan.
- q) 2021 – 2023 Peer Review of the applications by the Port of Tauranga to develop the wharves in the Stella Passage, for the Bay of Plenty Regional Council.
- r) 2023 - 2024 Novel aquaculture trails (submerged fin fish pens) at Rangitoto ki te tonga / D'Urville island.
- s) 2024 Landscape and natural character evidence to support the Aquaculture New Zealand and Coromandel Marine Farmers Association submissions on the Waikato Coastal Plan.
- t) 2024 – 2025 Waihi Beach Seawall, for private applicants.

I am a Registered member and Fellow of Tuia Pito Ora - New Zealand Institute of Landscape Architects (TPO NZILA) and a past President of the Institute (2018-2021). I am a member of the Resource Management Law Association (RMLA) and have presented papers at the RMLA annual conference, including on marine management in September 2025. I have the Ministry for the Environments Making Good Decisions Resource Management Decision makers certificate and I have acted as an Independent Commissioner on several occasions.

In proving this evidence in relation to Landscape, Visual and Natural Character effects, I have considered the following matters as relevant to that topic:

- The project description provided by NTS;
- The description of the existing environment, the effects of the HAP on that environment and their significance, and the proposed management and mitigation measures to manage those effects all as set out in the assessment of environmental effects accompanying the application;
- The technical effects assessments including:
  - i. The Hananui Aquaculture Project - Project Description. (27 May 2025).

- ii. The Shark Assessment Report. NIWA. June 2025.
- iii. The Shark Management Plan. NIWA. June 2025.
- iv. The Hananui Aquaculture Project Navigational Risk Assessment. Navigatus Consulting. November 2025.
- v. Ngā Hua o Āpiti Hono Tātai Hono. Proposed Hananui Aquaculture Area. Te Ao Mārama Inc. 2022 (updated 2025).
- vi. Cultural Impact Assessment for Hananui Aquaculture Project. Tipa & Associates. October 2020.
- vii. Hananui Aquaculture Project Recreation and Tourism Assessment. Thrive Places and Spaces. October 2025.
- viii. Hananui Aquaculture Site. Front-end Engineering Report. DSA Ocean. November 2025.
- ix. Effects Hananui Aquaculture Project on Marine Mammals. Cawthron Institute. November 2025.
- x. Wildfish Assessment Report. Statfishtics and University of Melbourne. August 2021.
- xi. Hananui Aquaculture Project. Coastal and Marine Avifauna Assessment. Blue Green Ecology. November 2025.
- xii. Water Column Assessment for the Hananui Aquaculture Project. SLR. November 2025.
- xiii. Assessment of Seabed Effects (Benthic Assessment) for the Hananui Aquaculture Project. Cawthron Institute. November 2025.

## Confirmation of Contents of Report and Proposed Conditions

I confirm that in my opinion the Landscape, Visual and Natural Character Assessment Report contains an accurate and appropriate description of the environment, the actual and potential effects of the HAP, and the recommended actions to manage those effects within my area of expertise.

I confirm that in my opinion the contents of the Landscape, Visual and Natural Character Assessment Report may be relied on in making a decision on the approvals sought for the HAP and confirm that provided effects within my area of expertise are managed as proposed in the application those effects will not be unacceptable and will be managed to a standard that I consider meets good practice.

I confirm that I have reviewed the conditions that NTS proposes for the approvals being sought as they relate to my area of expertise. I confirm that in my opinion, those proposed conditions are appropriate.



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Braddyn Coombs

20 November 2025

**Hananui Aquaculture Project**

**Te Ara a Kiwa, Rakiura**

**NATURAL CHARACTER, LANDSCAPE AND VISUAL ASSESSMENT REPORT**

**November 2025**

**Isthmus.**

Client Name: **Ngāi Tahu Seafood Limited**

Project Name: **Hananui Aquaculture Project**

Document Name: **Natural Character, Landscape and Visual Assessment Report**

Document Status: **FINAL**

Date: **20 November 2025**

IGL Reference: **5099 / C2**

Author: **Brad Coombs**

QA **RP/EA/TH/BC**

Isthmus Group Limited  
L6, 246 Queen Street  
PO Box 90366  
Auckland

Tel: 09 309 9442

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**Appendix A – Landscape Related Provisions**

**Appendix B – Graphic Attachments** *(refer separate A3 document)*

## EXECUTIVE SUMMARY

- i. The HAP site has been located, sized and shaped to avoid any elevated seafloor biogenic habitat in the area and is off-set from the Rakiura coastline to provide a meaningful buffer from the any outstanding terrestrial landscape values.
- ii. The HAP is located outside of the boundary lines of any outstanding natural landscape and natural character values that have been identified in recent technical reports.
- iii. The HAP is in a location that is part of a comparatively well used area of Te Ara a Kiwa on the Northwest coastline of Rakiura.
- iv. While the seascape of the HAP site is relatively featureless, the landscape setting of Te Ara a Kiwa is broad and accommodating of the various commercial and cargo vessel activities that are associated with Bluff port.
- v. The context and the HAP is described and assessed at three scales – Te Ara Kiwa, the Site catchment and the HAP site. The appropriate scale for the assessment of landscape, natural character and visual effects is at the **site catchment scale**.
- vi. The overall effects of the HAP on the natural character values of the site catchment are **low-moderate (adverse)**.
- vii. The overall effects of the HAP on the natural character values of Te Ara a Kiwa are **low (adverse)**.
- viii. The overall effects of the HAP on the natural character values of the HAP site are **low-moderate (adverse)**.
- ix. The overall effects of the HAP on the landscape character of the site catchment are of a **low-moderate (adverse)**.
- x. The overall effects of the HAP on the landscape character of Te Ara a Kiwa are **low (adverse)**.

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- xi. The overall effects of the HAP on the landscape character of the HAP site are of a **moderate (adverse)**.
- xii. The overall effects of the HAP on the visual amenity values of Te Ara a Kiwa, the site catchment and the HAP site are of a **low to very low** order.
- xiii. The HAP will not have adverse effects on any identified outstanding natural feature or landscape values or outstanding natural character values within or close to the coastal edge of Rakiura.
- xiv. The HAP can be accommodated into the site and the broader landscape and seascape of Te Ara a Kiwa and is an appropriate activity in this location for the reasons set out above.
- xv. The HAP will continue and reinforce the ongoing associations that Ngāi Tahu ki Murihiku have with Te Ara a Kiwa and will provide for the broader community of Murihiku and Rakiura.

## INTRODUCTION

- 1 Isthmus Group Ltd (IGL) has been engaged by Ngāi Tahu Seafood Limited (NTSL - the applicant) to undertake an assessment of the landscape, natural character, and visual effects of a proposed two-stage exposed coastal water salmon farm, known as the Hananui Aquaculture Project (HAP) within Te Ara a Kiwa, the Foveaux Strait, between Te Waipounamu (the South Island) and Rakiura (Stewart Island) ("**the Site**").
- 2 The purpose of this report is to undertake an evaluation of the existing seascape, landscape, natural character and visual amenity values of the area and to assess the effects of the proposed coastal water salmon farm on those values.
- 3 The proposal includes a two-stage salmon farming project, proposed to occupy approximately 1,285 ha of the coastal marine area located 2-6km off the northern coast of Rakiura in Te Ara a Kiwa.
- 4 The two-staged exposed coastal water salmon farming project includes the following:
  - Stage 1 - Feed discharge of 15,000 tonnes per annum and the establishment of a block of 10 sea pens (arranged in a 5x2 configuration) at each of the four marine farm sites.
  - Stage 2 - Overall feed discharge rise to 25,000 tonnes per annum with the introduction of a second block of 10 sea pens at each of the four marine farm sites
- 5 Within this project boundary area four marine farms are proposed – each with two blocks of ten 168m circumference (53m diameter) polar circle pens and associated feed barges, feed hoses, and navigational lights.
- 6 Ngāi Tahu have and maintain ongoing associations with Te Ara a Kiwa and have lived and practiced mahinga kai at Te Ara a Kiwa for over 600 hundred years. The HAP will continue these associations for Ngāi Tahu and will provide for the broader community of Murihiku and Rakiura.

## METHODOLOGY

7 The following method has been used to assess the site, the broad physical context, the proposal and its natural character, landscape and visual effects:

- A desktop review of the site, relevant documents, including relevant statutory provisions;
- A visit to the site was undertaken between 14 and 16 April 2025 to gain an appreciation of the site, the localised area and broader landscape. A visit to Te Rau Aroha Marae was undertaken to gain additional context and perspective of the importance of the area to Ngāi Tahu ki Murihiku. The wharekai and wharenui at Te Rau Aroha marae are adorned with modern sculptures and painting reflecting the landscapes and traditions of Ngāi Tahu ki Murihiku in relation to Te Ara Kiwa and kaimoana gathering practices. The visit included travelling across Te Ara a Kiwa from Bluff to Rakiura, tramping along the North West Circuit Track from Port William to Murray Beach (with an overnight stay in the Bungaree DoC hut), a helicopter flight from Murray Beach to Oban with views over the site and inland Rakiura, and the northern coastal area of Rakiura by boat. Photographs were taken during the site visit and are illustrated within the **Graphic Attachments**. The site visit from 14 to 16 April was during good and clear weather conditions, particularly on 16 April, when most of the photographs for the visual simulations were taken. While the weather conditions were good for visibility, they are not typical viewing conditions, particularly during this time of the year. The sea conditions were also unusually calm.
- A second visit to the site was undertaken on 1 October 2025, including a visit to the Sandford salmon farms in Big Glory Bay. The sea conditions within Foveaux Strait were reasonably rough with a strong westerly wind. While the Foveaux Strait crossing was rough, the site of the HAP was calm in the lee of the northern section of Rakiura, illustrating the benefit of the site for its sheltered location.
- A description of the existing landscape and seascape context of Te Ara a Kiwa, the northern edge of Rakiura, and the area proposed to be

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occupied by the Salmon Farm. This description includes reference to the land uses in the catchment, which have a downstream effect on the landscape, seascape and natural character of the waters of Rakiura and Te Ara a Kiwa.

- An analysis of the natural character attributes of the site and the surrounding area;
- An analysis of the landscape character and values of the site and of the surrounding area;
- An assessment of the visibility of the HAP from land and sea-based view points, including an elevated viewing location above the water<sup>1</sup>, representing views of passing aircraft;
- An assessment of the potential natural character effects of the HAP on the site and on the wider context;
- An assessment of the potential landscape effects of the HAP on the site and on the wider context;
- An assessment of the potential visual effects of the HAP on the site and on the wider context;

- 8 The natural character and landscape values are described below, with reference to a rating scale for the values
- 9 The level of landscape, natural character or visual effect is described using a rating scale.<sup>2</sup> Words are used in preference to numbers to reduce the likelihood of using 'scores' in a formulaic way.
- 10 A comparison of how adverse effect ratings as recorded in TTatM relate to the terminology used in the RMA of 'less than minor', 'minor' and 'more than minor' is provided below.

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<sup>1</sup> The image was captured by drone photography.

<sup>2</sup> The scale is symmetrical around 'moderate'. The scale is based on the recommended NZILA Best Practice Guide and is consistent with the Te Tangi a te Manu: Aotearoa New Zealand Landscape Assessment Guidelines'.

					SIGNIFICANT	
LESS THAN MINOR		MINOR	MORE THAN MINOR			
VERY LOW	LOW	LOW-MOD	MODERATE	MOD-HIGH	HIGH	VERY HIGH

- 11 A change in a landscape does not in itself mean that a proposal will result in an adverse effect on the values of that landscape:

*“Change itself is not an effect: landscapes change constantly. It is the implications of change for a landscape’s values that is the effect.”<sup>3</sup>*

- 12 An assessment of effects combines both value ratings (Very Low – Very High) and nature of effects (Adverse, Positive). The nature of effects can be Adverse (negative) or Beneficial (positive):

- a) An adverse effect relates to an activity which results in a reduction in landscape and / or visual amenity values; in this circumstance the RMA terminology of ‘less than minor’, ‘minor’ and ‘more than minor’ is applied.
- b) A positive effect relates to an activity which enhances landscape and / or visual amenity values through for example, restoration and / or provision of positive elements or features.

- 13 Where a proposal will result in a change, but that change will have no effect on the characteristics or values of a particular landscape or view, a nature of effect rating of ‘neutral’ is provided.

- 14 The method used is consistent with the methodology (principles and approaches) set out in **Te Tangi A Te Manu Aotearoa New Zealand Landscape Assessment Guidelines** Tuia Pito Ora New Zealand Institute of Landscape Architects, July 2022.

- 15 In preparing this landscape and natural character assessment the following technical assessments have been read and summarised:

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<sup>3</sup> Refer 6.03 of TTatM.



- i. The Hananui Aquaculture Project - Project Description. (27 May 2025).
- ii. The Shark Assessment Report. NIWA. June 2025.
- iii. The Shark Management Plan. NIWA. June 2025.
- iv. The Hananui Aquaculture Project Navigational Risk Assessment. Navigatus Consulting. November 2025.
- v. Ngā Hua o Āpiti Hono Tātai Hono. Proposed Hananui Aquaculture Area. Te Ao Mārama Inc. 2022 (updated 2025).
- vi. Cultural Impact Assessment for Hananui Aquaculture Project. Tipa & Associates. October 2020.
- vii. Hananui Aquaculture Project Recreation and Tourism Assessment. Thrive Places and Spaces. October 2025.
- viii. Hananui Aquaculture Site. Front-end Engineering Report. DSA Ocean. November 2025.
- ix. Effects Hananui Aquaculture Project on Marine Mammals. Cawthron Institute. November 2025.
- x. Wildfish Assessment Report. Statfishitics and University of Melbourne. August 2021.
- xi. Hananui Aquaculture Project. Coastal and Marine Avifauna Assessment. Blue Green Ecology. November 2025.
- xii. Water Column Assessment for the Hananui Aquaculture Project. SLR. November 2025.
- xiii. Assessment of Seabed Effects (Benthic Assessment) for the Hananui Aquaculture Project. Cawthron Institute. November 2025.

- 16 The detailed methodology for the preparation of the site photographs and the visual simulations within **Appendix A - Graphic Attachments** is described and

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illustrated at the end of the **Graphic Attachment** booklet and is consistent with **NZILA Tuia Pito Ora Best Practice Guide Visual Simulations 10.2.**

- 17 The methodology section above sets out a series of 'steps' and guidance that have been taken to assess the relevant natural character, landscape and visual effects of the proposal on the receiving environment. The methodology statement is provided for completeness to set out the key matters that have been taken into consideration. The detailed description of the work undertaken is contained under the relevant headings throughout the report.

### DESCRIPTION OF THE EXISTING ENVIRONMENT

- 18 Isthmus has undertaken site visits, with viewpoints on land and water-based locations visited. These are included from **Viewpoints 1 to 14** within the **Graphic Attachments** and provide a range of photographs that illustrate the setting and context of the site and the surrounding waters and coastal landscape of Te Ara a Kiwa.



**Figure 1: Broad Site Context.**

- 19 The site itself is a marine environment and is framed by Raikura to the south, Ruapuke and the Titi (Muttonbird) Islands to the east and the south end of Te Waipounamu to the north. Given the coastal landscape of Rakiura and Te Ara a

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Kiwa, it is impossible to separate the two. The land and the sea interact with each other, and they each confer character and energy on each other. While it can at times be helpful to delineate the two environs, particularly from a planning context, the two are interconnected. They are part of the same coastal environment that includes both sea and land and the interactions between them.

### Description of the site - context

- 20 The site is located within Te Ara a Kiwa, the Foveaux Strait off the northern coast of Rakiura, Stewart Island. Te Ara a Kiwa / Foveaux Strait is an open ocean stretch of coastal water covering approximately 2,460km<sup>2</sup> or 246,000 hectares.
- 21 Rakiura is the third-largest island in New Zealand and is located 30km south of Motupōhue, Bluff, at the southern end of Te Waipounamu. Rakiura and the South Island Te Waipounamu are separated by Te Ara a Kiwa.
- 22 Rakiura is visible from various locations along Southland's southern coastline. Rakiura's elevated landforms, particularly the ridgeline featuring Hananui and Little Mt Anglem create a distinctive skyline profile. These prominent elevated forms contribute to the spatial definition of Te Ara a Kiwa. The visibility and definition of Rakiura are dependent on weather conditions, which can be changeable and are strongly influenced by the exposed coastal location.
- 23 Rakiura has a land area of approximately 1,680 km<sup>2</sup>, including the main island and the numerous surrounding smaller islands. Approximately 85% of the island is National Park.
- 24 Rakiura has a rich historical and cultural heritage associated with places of exploration, settlement, natural resource use and protection. The widespread use of Rakiura by early Māori, and signs of permanent settlements at Port William, convey a rich cultural heritage from the late 1700's – early 1800's.
- 25 The original Māori name of Rakiura was Te Punga o Te Waka a Maui, which translates as the anchor stone of Maui's Canoe with reference to the legend of Maui and the creation of Aotearoa. Today the island is referred to as Rakiura, which is translated as the Island of Glowing Skies.

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- 26 Rakiura is significant to Ngāi Tahu as a place of settlement, mahinga kai, and associated with legends describing ancestral connections to place. Harvesting titi (mutton bird or sooty shearwater) from the 36 small Tītī (muttonbird) islands that surround Rakiura is a long-standing tradition. Many of the Tītī islands have several permanent houses, sheds and other buildings that are used during the harvesting season<sup>4</sup>.
- 27 Occupation of these islands for mutton birding has occurred for centuries and part of the traditional gathering process is slashing and cutting tracks throughout the islands every year. Access to these islands is only by Māori with ancestral rights which allow them to gather tītī. Customary fishing rights are managed under two sets of regulations - regulation 27 of the Fisheries (Kaimoana Customary Fishing) Regulations 1986 and the Fisheries (South Island Regulations 1999.<sup>75</sup> Under these regulations Tangata Kaitiaki / Tiaki authorise customary fishing of species that are taonga to Maori including oysters, paua, kina etc.
- 28 Historic colonial activities on Rakiura included iron prospecting and mining and gold mining, pastoral use, timber milling, whaling, sealing (1700's – 1800's), fishing and oyster dredging. The Codfish Island Sealing Camp was established in 1825 and the Kaipipi Whaling Base was established in 1923. Pastoral lease farming in Mason Bay was undertaken from 1966 until it was relinquished in 1985. Pastoral lease farming was undertaken in addition to deer and possum hunting at Mason Bay. The Neck at the entrance to Paterson Inlet was an important Māori and Pākehā settlement area that was farmed until recently and still has permanent houses. There are Macrocarpa trees and other non-native vegetation located around The Neck. Historically a number of sites around Rakiura were settled.
- 29 Of these Port Pegasus, which is located on the southern coast of the island is now uninhabited. Another former settlement was located at Port William but was abandoned within two years. Other areas of habitation include The Neck, Mason Bay, Port Adventure, and Bravo Island (Paterson Inlet). The cultural

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<sup>4</sup> NZ Department of Conservation. 2011. Rakiura National Park Management Plan, 2011-2021. 243 pp. Page 148.

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history of Rakiura identifies both Māori and European archaeological sites, combined archaeological sites and sites managed by the Historic Places Trust, as being mainly concentrated around the coastline.

- 30 The 20 km section of the northern coastline that forms the terrestrial edge of the receiving environment holds National Park status except for a currently undeveloped 4 ha block of Maori land at Murray Beach and seven blocks of Maori land at Port William ranging between 0.11 ha up to 34 ha
- 31 Modern colonial human modification and settlement on Rakiura is limited and largely occurs in discrete areas. Historic colonial human settlement patterns centred around the island's rich resources and included various temporary or short-lived settlements around the island's coast. Oban, which is in Halfmoon Bay, is the principal settlement, with a population of approximately 440 people and accommodates approximately 40,000 visitors per annum. Modification outside of this settlement is limited to walking tracks, huts and historic remnants.
- 32 Rakiura is roughly triangular in shape. The exposure to southern oceanic conditions has created rugged landscapes, including areas of rocky coast with bush cover down to the waterline. There is a sequence of large, indented inlets including Whaka a Te Wera/Paterson Inlet (on the northern), Pikihatiti/Port Pegasus (on the southern end), and Pukeweka/Port Adventure (on the south-east coast); broad sandy beaches, the largest of which is Te Oneroa/Mason Bay (on the west coast), the more sheltered northern edge contains smaller golden sand beaches between headlands.
- 33 Numerous offshore islands, ranging in size from small rocky outcrops to larger, substantially forested islands, dot the nearshore marine area. Whenua Hou/Codfish Island is located off the north-west coast and is the largest of these.
- 34 Inland Rakiura contains impressive granite and schist ridges including: the southern Tin Range and exposed granite peaks on the southern corner; the Ruggedy Range on the west coast; and the Anglem massif, which dominates the north-western corner. Hananui/Mt Anglem is the highest point on the island at 980m. The northwestern inland area contains a broad freshwater basin and bogs of Ruggedy Flat. See **Figures 1 to 6** in the **Graphic Attachments**.

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- 35 Much of the Rakiura's original vegetation has remained intact although some pest animal and predators are found on the island. The island contains "...a diverse number, of habitats ranging from indigenous forests and shrublands to wetlands, sand/dune communities and alpine ecosystems"<sup>5</sup>. Podocarp forest is the dominant forest cover on the island and comprises mainly rimu, kamahi and southern rata and extensive sub-canopy including tree-fern, lancewood and broadleaf.
- 36 While Rakiura has some introduced pest species such as deer, possums and rats; other pests such as mice, mustelids, rabbits, hares, pigs, goats, and magpies have either not established or have been eradicated from the island. Introduced exotic weed species are also largely confined to the settled areas around Halfmoon Bay and the previously farmed areas around Mason Bay. These absences are reflected in the more natural and ecologically intact composition of the island's flora and fauna<sup>6</sup>.
- 37 The Predator Free Rakiura Project aims to eradicate rats, possums, feral cats and hedgehogs from the island. Deer and domestic pets are not targets for the Predator Free Rakiura project. The vision for the Predator Free Rakiura Project is '*to grow Rakiura as a taonga by working collaboratively towards a predator-free Rakiura that allows ecosystems and community to thrive and benefit from each other*'<sup>7</sup>.
- 38 Some of the islands surrounding Rakiura, such as Whenua Hou/Codfish Island and Te Wharawhara/Ulva Island, are predator-free and host various indigenous species, including the critically endangered kakapo (on Whenua Hou).
- 39 Te Ara a Kiwa is located within the Southern Ocean, with a range of marine life living within both the sheltered and more exposed waters. There is only one marine reserve around Rakiura, which is in the immediacy of Te Wharawhara/Ulva Island. The remainder of Te Whaka-a-Te-Wera/Paterson Inlet, with the exception of Big Glory Bay, is a designated Mātaitai Reserve. There are various Mātaitai Reserves around the Tītī Islands.

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<sup>5</sup> Stewart Island Landscape and Natural Character Study - 2019

<sup>6</sup> Ibid

<sup>7</sup> [About Us](#)

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- 40 Southland's existing offshore aquaculture activities are focused at Big Glory Bay. Aquaculture activities in Big Glory Bay include salmon and mussel farms and have historically also included other farmed aquaculture such as oysters, scallops, and seaweeds<sup>8</sup>. Marine farms from Big Glory Bay currently account for 22% of New Zealand's salmon and 3% of mussel production. There are several smaller, non-active consented marine farm areas located within Bluff Harbour. Historically, there have also been some consented marine farms on Rakiura around the headland area northwest of Horseshoe Bay<sup>9</sup>. These consents were for research permits.
- 41 In November 2024, the Government set aside almost 9,000 hectares for five new Aquaculture Settlement Areas for Ngāi Tahu and the Crown to assess for offshore aquaculture potential. These areas included Rakiura's Port Pegasus and Port Adventure and Rarotoka South, Rarotoka North and Ruapuke (within Te Ara a Kiwa).
- 42 These areas were in addition to the previously declared 16.6 Ha of Aquaculture Settlement Area of the North-Eastern Coast of Rakiura, to the north of the Hananui site. These areas are not consented but have designation under the Māori Commercial Aquaculture Claims Settlement Act 2004.
- 43 Access to and from Rakiura is by boat or aircraft, with the primary public access route from Motupōhue/Bluff to Oban. Ferry and airline services are the modes of transport connecting Invercargill and Motupōhue/Bluff to Oban. Access to more remote parts of the island is by aircraft such as aeroplanes landing on Te Oneroa/Mason Bay, helicopters providing access to Rakiura and surrounding smaller islands, such as the Tītī Islands; and small boats that provide access to areas around the coastal edge. On Rakiura, road networks are restricted to limited areas around Oban and the immediate bays, with approximately 20kms of road. The further extents of the island are accessible through DoC walking tracks, including the Rakiura Track, the Northwest Circuit, and the Southern Circuit Track and numerous huts (see **Figure 04 in the Graphic Attachments – the Recreation Access Map**). Beach areas are also accessible by boat.

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<sup>8</sup> Great South – Key Facts about Aquaculture in Murihiku Southland

<sup>9</sup> Coastal Management Layers for Southland – Environment Southland

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- 44 The receiving coastal environment is characterised by the open and dynamic Te Ara a Kiwa. The Coastal Marine Area (CMA) extends out to the territorial sea boundary (12 nautical miles). In practice, there is a strong interaction between the land and sea, which has an impact on the extent of influence that goes beyond applying a hard boundary.
- 45 Rakiura is an International Dark Sky Sanctuary. Rakiura was designated in 2019 and includes the whole of the island incorporating the urban area of Oban<sup>10</sup>. The HAP site is not visible from Oban or other areas where night sky watching activity will be concentrated. Twinkle Dark Sky Tours is a night sky and star watching commercial tourism enterprise that hosts tours from Oban<sup>11</sup>.

### Cultural landscape values - context

- 46 Āpiti Hono Tātai Hono: Ngā Whenua o Ngāi Tahu ki Murihiku is the cultural landscape assessment method prepared and followed by Ngāi Tahu ki Murihiku.
- 47 The whole of the Murihiku<sup>12</sup> (Southland and parts of Otago) area has cultural significance to Ngāi Tahu ki Murihiku.
- 48 Āpiti Hono Tātai Hono describes the method of understanding Murihiku in relation to Ira Atua and Ira Tangata, or layers of Whakapapa.
- 49 Ira Atua and Ira Tangata stories that relate to the wider area of Murihiku and Te Ara a Kiwa include examples as set out below. These do not capture all stories or places that are relevant but give some indication of the commonly known stories in the area and their importance. More detailed records and histories are held by Ngāi Tahu ki Murihiku.
- 50 The Ira Atua or creation stories include:
- a) Maui, who is described as a Demigod and a navigator from across the Pacific. The South Island or Te Waipounamu is often referred to as Te

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<sup>10</sup> [Stewart Island / Rakiura | DarkSky International](#)

<sup>11</sup> [Twinkle Dark Sky Tours](#)

<sup>12</sup> Murihiku and Southland are often used interchangeably to describe Murihiku and/or the region, however they are not the same area.



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Waka a Maui, or Maui's canoe, which he stood on while fishing up the North Island, Te Ika a Maui (Maui's fish).

- b) Te Taurapa o te Waka – the sternpost of the waka – Southern Te Waipounamu.
- c) Te Puka a Maui – Rakiura (Stewart Island) is often referred to as the anchor stone of Maui's canoe.

51 Te Ara a Kiwa is the name for Foveaux Strait.

- a) Kiwa is a whale that traversed the Pacific Ocean (Te Moananui a Kiwa) connecting all peoples to this place.
- b) When Kiwa came down through these waters, he bit his way through the land, separating Rakiura from the mainland, creating Te Ara a Kiwa - Foveaux Strait.

52 Ira Tangata – the people stories include:

- a) Rakitauneke is the eponymous ancestor.
- b) Motupōhue – Bluff Hill where Rakitauneke was buried to look out over Te Ara a Kiwa – 'Kia pai ai tāku titiro ki Te Ara a Kiwa'.
- c) Murihiku Marae. The wharenui is named after Rakitauneke.
- d) Arowhenua. Bush clad area to the east of Invercargill (Waihōpai) named by Rakitauneke.
- e) Hokonui Hills. One of the resting places of Matamata, Rakitauneke taniwha.
- f) Taiari Plains. Carved out by Matamata when Rakitauneke ventured south.
- g) Saddle Hill / Matamata. Another resting place of Matamata.

53 The purpose of recording these important places and events under the headings offered in Āpiti Hono Tātai Hono is not to attempt to express the cultural values

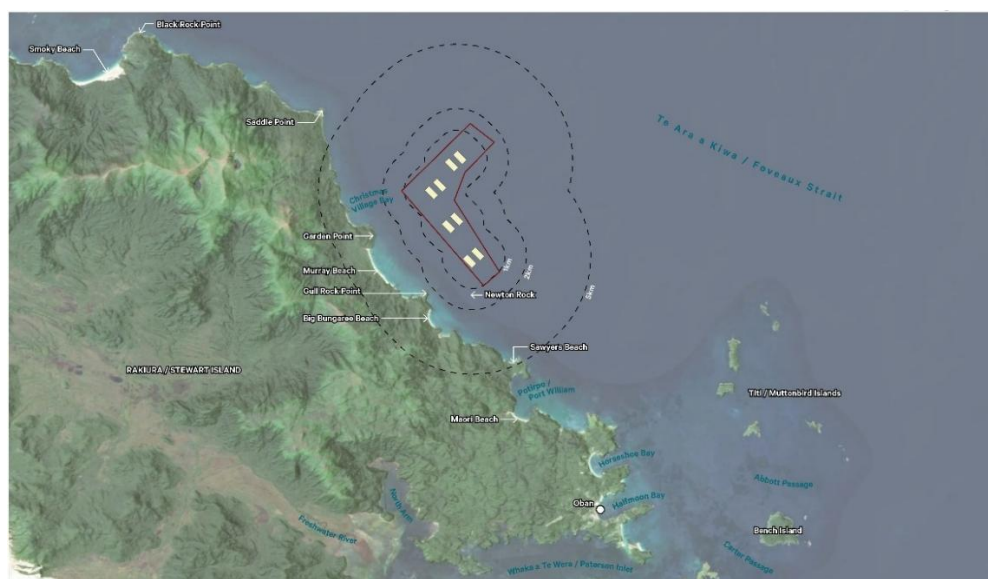
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and places of Murihiku as they relate to Ngāi Tahu ki Murihiku, but to understand the relationships between some of those commonly understood places, names and events. These places, events and descriptions are used to inform an understanding of the cultural importance of the wider Murihiku area.

- 54 As recorded above, it is understood that the entire area of Murihiku is an important cultural landscape to Ngāi Tahu.

### Description of the site - catchment

- 55 The site is located on the north coast of the Rakiura, a sheltered, relatively gentle coastline, in the context of the rest of Rakiura. The coastline includes regular sand and gravel beaches. The land behind the coastline is steep and undulating, with Hananui/Mt Anglem (980m), the highest point on Rakiura, and Little Mt Anglem (738m) are part of the Anglem massif, which includes the ridgeline from The Paps to Hananui. The Anglem Massif is the landscape backdrop to the HAP site. Dense mixed-coastal forest covers the land from the coast toward the ridgeline. The mix of forest becomes increasingly lower in stature as the altitude increases. Hananui and Little Mt Anglem are sub montane environments with low stature vegetation. See the photographs from Hananui in **Figure 44** in the **Graphic Attachments**. To the east and west of Hananui, are cirque tarns, which are regionally significant geological features. Small tarns occur at various locations along the Anglem massif.



**Figure 2: Local Site Context.**

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- 56 The catchment's coastline is gently concave in shape, including several beach and headland sections from Saddle Point to Potirepo/Port William (Pānui-o-Hau) headland. The focus, from the beaches and coastline, is out to Te Ara a Kiwa and Motupōhue/Bluff, when it is visible. The focus from Te Ara a Kiwa looking back towards Rakiura is on the Anglem massif ridgeline and the highpoints of Little Mt Anglem and Hananui.
- 57 Te Ara a Kiwa is dynamic and is characterised by its open coastal environment, which is subject to strong tidal, current, wave and weather influences. Te Ara a Kiwa is influenced by the Tasman Sea water masses, which moderate the climate and protect it from the cooler sub-Antarctic water<sup>13</sup>. Prevailing winds are westerly, and the strait can often be rough (particularly when the wind and weather tends from the southwest). This changeable and often severe weather creates a sense of wildness. While the strait can at times feel wild, its locality between Murihiku/Southland's southern coast and Bluff and Rakiura mean that it feels less remote than other exposed coastal areas, including the southern and eastern edges of Rakiura.
- 58 The strong currents and nutrient-rich cool water around the island and flowing through the strait support a wide range of marine habitats, including kelp forests and reefs, supporting a range of marine fauna. These habitats are also important nursery areas for fish species. Many species of marine mammals visit or inhabit the wider Rakiura marine area of Te Ara a Kiwa, including great white sharks, Hooker's sea lion, fur seals and southern right whales. Seabirds are abundant and include albatross, petrels, gulls, penguins, shearwater and shag.
- 59 The local oceanographic conditions in the HAP site are mainly influenced by the Southland Current, with a net water movement towards the east through Foveaux Strait. The volumes of water moving through the strait are large. The water column within the strait is generally well mixed. Variations in the temperature-salinity regimes of nearshore waters occur with incursions of high salinity and nutrient-rich waters from the west and east of Stewart Island through advection and / or upwelling.

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<sup>13</sup> Southland/Murihiku Regional Coastal Study

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- 60 While the north coast of Rakiura contains a mixture of headlands, rocky shorelines and sandy rocky beaches, it is generally open to Te Ara a Kiwa and across toward Motupōhue/Bluff and Murihiku/Southland's southern coast. The area is in the lee of the Anglem massif and, compared to other parts of the open coastal Rakiura, is relatively sheltered. The area is a relatively low wave environment when compared to other coastal sites around Stewart Island and is relatively accessible most of the time. The HAP site is sheltered by the landforms of Rakiura described above and is relatively calm in comparison with the more exposed areas of Te Ara a Kiwa, as observed during the second site visit on 1 October 2025.
- 61 Each of the beaches along the catchment coastline is typically separated from one another by vegetated rocky headlands. These are named, in sequence from north to south, Saddle Point, Christmas Village Bay, Rollers Beach, Garden Point, Otaku/Murray Beach, Golden Beach, Gull Rock Point/ Pōhatu-kōau/Pā-whakataka, Big Bungaree Beach, Little Bungaree Beach, Newton Beach, Sawyers Beach, Potirepo/Port William (Pānui-o-Hau) Headland. The beaches are predominantly golden sand, except for Christmas Village Bay and Rollers Beach, which are rock/stone beaches. Newton Rock is a small reef feature approximately 2km to the east of Gull Rock Point.
- 62 From the surrounding hills, several streams/creeks drain to the coast. The largest of these is Murray River. Some of these systems drain directly to the ocean, others have small estuaries, the largest of which is at the northern end of Murray Beach.
- 63 The vegetation of the area within the Anglem Ecological District, which notes the changes in vegetation from: predominantly podocarp forest (rimu/kamahi and southern rata while lacking beech), with areas of coastal tussockland and rock vegetation from sea level to approximately 400m; to extensive scrub dominated by *Olearia colensoi* and/or *Leptospermum scoparium*, from 400m to 800m; with open subalpine and alpine vegetation above 800m<sup>14</sup>.

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<sup>14</sup> DoC – Ecological Regions and Districts of New Zealand, 1987.

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- 64 Clearings in vegetation, mainly grassed, have been created around the huts, and campsites have been made. Other human modification is limited to walking trails, short sections of wooden boardwalk in boggy areas, track signs, long drop toilets and huts. Introduced species such as deer and possum also have an impact on the vegetation.
- 65 The forest supports a wide diversity of fauna, including kiwi, weka, robin and Fernbird that are endemic to Rakiura<sup>15</sup>. The small-eared skink (*Oligosoma stenotis*) is confined to the sub-alpine areas of Rakiura and is threatened – nationally vulnerable<sup>16</sup>.
- 66 Within the catchment, the Northwest Circuit track traverses the coastal edge, with a side trail up to Hananui. The track begins at Oban, and while comparatively less remote than other parts and tracks around Rakiura, it is experienced for this sense of remote/wildness. The section between Port William and Saddle Point is approximately 17.5km. Huts along this section include the Port William Hut (Potirepo/Port William), Bungaree Hut (Big Bungaree Beach), Murray Hunters Hut and Campsite (Murray Beach), Christmas Village Hunters Hut (Christmas Village Bay), and Christmas Village Hut (bay north of Christmas Village Bay).
- 67 Huts are used by trampers travelling on the Northwest Circuit, as well as hunters accessing inland and coastal areas of Rakiura. Hunting is a restricted activity in hunting block #1, with the hunting season closed between 1 November and 31 March (the Great Walk peak season). Permits for the hunting blocks on this area of the coast must be issued by DoC<sup>17</sup>. Hunting is typically for white-tailed deer, which are prevalent across Rakiura. Hunting blocks in this area are among the most accessible by charter boat/water taxi. Helicopters are also able to access these areas, without DoC concession, if landing below the mean high-tide mark. Trampers also access the area via watercraft.
- 68 Huts are used by ‘social hunters’. There is an established practice of hunters and fishers accessing the huts on the northern side of Rakiura and staying for

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<sup>15</sup> DoC – Ecological Regions and Districts of New Zealand, 1987.

<sup>16</sup> DoC – Conservation status of New Zealand reptiles, 2021.

<sup>17</sup> Doc - Stewart Island/Rakiura hunting information

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several days and nights, bringing much more than hunting or camping equipment. Such social users tend to stay closer to the huts and use them as a base for hunting and fishing in one part of the island<sup>18</sup>.

- 69 Like all areas on Rakiura, outside of the settled area of Oban, there is a sense of remoteness and high levels of naturalness<sup>19</sup>. The steep bush-clad foothills are wet and boggy, and while the intersection with the coast is less dramatic than other areas of Rakiura, the coastal and marine environment is sensorially ever-present, even if visually limited at times. The beaches offer a narrow strip between the bush-clad hills and the marine environment. This adds to the sense of scale experienced. There is a difference in experience between the openness of the beaches and marine environment, the closed bush environment, and the broad views experienced from the open ridgeline.
- 70 Ngāi Tahu's relationship with the coastal areas is expressed as 'extensive rather than intensive'. Hananui and Te Ara a Kiwa, are Statutory acknowledgement areas (see **Appendix A**). Archaeological sites are noted at various locations<sup>20</sup>, typically around the coastal edge. Within the catchment area, five archaeological sites are noted including Māori and European. Although there is not an extensive archaeological record in the area, this does not diminish or reflect the depth of Ngāi Tahu's connection to this area over centuries, which is expressed through occupation, whakapapa, narratives, and ongoing cultural associations.
- 71 The terrestrial areas within the site catchment are part of the Rakiura National Park, with the exception of a small blocks of land at the northern end of Murray Beach and Potirepo/Port William (Pānui-o-Hau) which is in privately owned and administered by the Rakiura Māori Lands Trust.
- 72 The catchment's orientation and focus on the marine environment, particularly from the scalloped shaped beaches results in offshore activities being visible, to varying degrees, from the land. In the near environment, three charted

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<sup>18</sup> During the site visit and the overnight stay at Bungaree hut on 14 April 2025 a group of social hunters was based at the hut. Personal conversations with Thomas Hilderbrand (NTSL) confirm the social hunting practice, particularly on the north side of Rakiura.

<sup>19</sup> Stewart Island Landscape and Natural Character Study, 2019.

<sup>20</sup> Southland Coastal Plan, Southland District Plan, and Te Tangi a Tauria – The Cry of the People.

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anchorages, annotated as M230 (Saddle Point), M231 (Murray Beach) and M232 (Garden Point) are used by cargo, tanker and fishing vessels awaiting berth at South Port, Bluff. See **Figure 17** in the **Graphic Attachments**.

- 73 Marine traffic movements are detailed within the Marine Navigation Report. Large vessel activity includes cruise ships, tankers, container ships and fuel carriers. These movements are typically through the strait, often stopping at Bluff Harbour. Movements across the strait, between Bluff Harbour and Rakiura are mainly fishing, cargo and passenger vessels. Recreational vessels also move around and across the strait. The marine passage data only partially reflects the quantum of these movements.
- 74 The abundant coastal waters around Rakiura and Te Ara a Kiwa, attract both commercial and recreational fishers. Commercial fishing for blue cod, crayfish, kina, paua and oyster dredging. The management of these fisheries, and the quota system/s, are managed by Fisheries New Zealand, which is part of the Ministry of Primary Industries. Commercial, recreational and customary fishing is of significant social, cultural and economic for Murihiku and as a result, fishing and small vessel movements are typical and expected in the coastal environment.
- 75 Fathom Consulting Ltd - Hananui aquaculture project: Characterisation and assessment of potential impacts on commercial fishing analyses the existing commercial fishing activity within the proposed Hananui Aquaculture Project site and surrounding areas includes dredging for Foveaux Strait (Bluff) oysters, blue cod potting, set netting for mixed finfish species, and rock lobster potting. Bottom trawling may have occurred occasionally at the site historically but no bottom trawling has been reported in the last six years. The site is also adjacent to coastal dive fisheries for pāua and kina.
- 76 More localised vessel movements are associated with the established aquaculture industry, located in Big Glory Bay. Previously, land-based paua and oyster hatcheries existed in Horseshoe Bay, with now-expired farm areas in the bay itself.

## Description of the site

- 77 The Site itself is an L shaped stretch of water centred midway along the gently concave coastline between Saddle Point and Potirepo/Port William as described above and illustrated in Figure 1 below. The 1,285ha site boundary includes offsets from the four salmon farms, which occupy much smaller areas of water surface and seafloor. In terms of the scale relationship between the site and the area of Te Ara a Kiwa / Foveaux Strait, the 1,285ha site boundary occupies approximately 0.5% or one two hundredth of the 2,640km<sup>2</sup> area of the strait. Within the 1,285ha site area, the salmon farm blocks of pens occupy approximately 96.8ha of water space, or 7.5% of the project site area. At its closest point of the site boundary is 2.2km from Garden Point and Gull Rock. From the centre of Murray Beach, the site is 3.3km offshore.
- 78 The section of coastal water and seafloor below within site boundary is not defined or marked from other parts of Te Ara a Kiwa by any physical features. The project boundary and the locations of the farms themselves are sufficient distance from the coastal edge and from Newton Rock to not be physically associated with them.
- 79 The L shaped project boundary and the farm locations within have been located and shaped to avoid areas of surveyed biogenic habitat on the seafloor and to provide a minimum distance from the coastal edge of Rakiura.
- 80 Water circulation in the Foveaux Strait is mainly determined by the Southland Current, a flow of water of mainly sub-tropical origin associated with the Southland Front, which moves eastwards through the Strait and determines local oceanographic conditions around the southern coasts of the South Island<sup>21</sup>. Given the dynamic nature of the southland current flowing through the site and the open coastal waters of Te Ara a Kiwa, the water within the HAP site itself is constantly moving and changing. The HAP site is in the lee of Rakiura, with the predominant wind and wave conditions from the west and south. Currents generally follow a northwest-southeast axis past the coastline of Rakiura. The maximum measured current was found to be 1.12m/s towards 315° at 15m

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<sup>21</sup> Heath 1985; Sutton 2003.



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depth. The secondary current was 1.05m/s from 140° at 5m depth<sup>22</sup>. The depth of water across the site is within a consistent range of 20 – 40 metres.

- 81 The Cawthron report notes mainly sand benthic habitats within the site area. These are described as:

*Sand Approximately 66% of the proposal area (and 39% of the area surveyed) is estimated to be sand-dominated habitat with sand ripples, waves and large sand banks frequently observed across this habitat type. Some shell hash is present, mainly in the troughs of sand ripples or waves. Sand habitats have relatively sparse epifaunal assemblages. Patches of biogenic structure were occasionally observed.*

*Sandy shell hash in approximately 16% of the proposal area (and 27% of the area surveyed) is estimated to be sand-dominated habitat with varying amounts of shell hash. Generally, when sandy shell hash was the dominate habitat there was relatively flat terrain (i.e. not strong rippling / wave sand forms). More epifauna were found than for sand habitat, and generally this was made up of brittle stars.*

- 82 The biota observed within each of these habitats is noted and detailed, including any significant communities, in the Cawthron report.

### Natural Character Attributes

- 83 Natural character has specific application in Aotearoa New Zealand because s6(a) of the RMA provides, as a matter of national importance, for decision-makers to recognise and provide for<sup>23</sup>;

*the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use and development.*

- 84 The coastal environment is recognised in an RMA context as including the Coastal Marine Area (CMA), including the foreshore, seabed and coastal water and the air above the water seawards to twelve nautical miles and a landward

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<sup>22</sup> Front end Engineering Report. DSA.

<sup>23</sup> TTaTM, page 205.

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area, generally defined by maps in the Southland Regional Policy Statement and the Southland District Plan.

- 85 The HAP is and functionally must be within the CMA and is, therefore, within the coastal environment.
- 86 As described above, the HAP site has been carefully selected to take advantage of a sheltered environment with cool water, high current flow, and a low wave climate—ideal conditions for sustainable salmon farming.
- 87 The HAP has been located over sandy habitat, with farm locations selected to avoid surveyed areas of significant biogenic habitat and ecologically important taxa and is generally away from major constraints such as commercial shipping, ferry, and cruising routes, recreational boating anchorages, and recreational fishing locations.
- 88 The HAP boundary ensures that the project components are more than 2km from the closest parts of the coastal edge of Rakiura. The distance from the closest area of land limits the visibility of the HAP from the beaches and the Northwest Circuit track. There is an existing commercial anchorage within the site, as identified in the Navigational Risk Assessment report<sup>24</sup>, however it is recommended that the anchorage is moved further away to create safe distances between the anchorages and the HAP.
- 89 The HAP has been located following investigations by Cawthron in relation to biogenic habitat on the seafloor. For these reasons, the HAP site is an appropriate location for marine farming activities.
- 90 Natural character is not defined in the RMA nor the NZCPS. NZCPS Policy 13 Guidance Note <sup>25</sup> (page 24) contains a definition of ‘natural character’:

*‘Natural character is the term used to describe the natural elements of all coastal environments. The degree or level of natural character within an environment depends on:*

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<sup>24</sup> Hananui Navigational Risk Assessment. Page 56.

<sup>25</sup> Produced by the Department of Conservation.

<http://www.doc.govt.nz/Documents/conservation/marine-and-coastal/coastal-management/guidance/policy-13.pdf>

1. *The extent to which the natural elements, patterns and processes<sup>26</sup> occur;*
2. *The nature and extent of modification to the ecosystems and landscape/seascape;*
3. *The degree of natural character is highest where there is least modification;*
4. *The effect of different types of modification upon natural character varies with context and may be perceived differently by different parts of the community'*

91 TTatM adopts the interpretation that:

*Natural character is an area's distinctive combination of natural characteristics and qualities, including degree of naturalness. Natural character and naturalness is not the same thing.*

92 In the context of the HAP site and the surrounding area, the consideration of natural character envisaged by s6(a) of the RMA is specific to the waters of Te Ara a Kiwa, the HAP site itself and the coastal edge and landscape backdrop of Rakiura. The HAP assessment considers the natural character values of the waters of Te Ara a Kiwa and the most adjacent landscape catchment of the northern coast of Rakiura.

93 The physical characteristics and attributes of the site and the surrounding area are described above. The detailed ecological and natural values of the HAP site and the surrounding areas of Te Ara a Kiwa are described in the Shark Assessment, Coastal and Marine Avifauna Assessment, Marine Mammal Assessment, Wildfish Assessment, Water Column Assessment and Benthic Assessment Reports. See the Natural Character effects section below.

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<sup>26</sup> For the purposes of interpreting the NZCPS 2010 Policy 13.2, 'elements, patterns and processes' means: biophysical, ecological, geological and geomorphological aspects; natural landforms such as headlands, peninsulas, cliffs, dunes, wetlands, reefs, freshwater springs and surf breaks; and the natural movement of water and sediment.

94 Policy 13 of the NZCPS determines that natural character includes the following factors:

- a) natural elements, processes and patterns;
- b) biophysical, ecological, geological and geomorphological aspects;
- c) natural landforms such as headlands, peninsulas, cliffs, dunes, wetlands, reefs, freshwater springs and surf breaks;
- d) the natural movement of water and sediment;
- e) the natural darkness of the night sky;
- f) places or areas that are wild or scenic;
- g) a range of natural character from pristine to modified; and
- h) experiential attributes, including the sounds and smell of the sea; and their context or setting.

95 The aspects or factors that contribute to natural character attributes are generally separated into three broad types:

- The biotic factors, such as the ecological aspects contained in Policy 13;
- The abiotic factors, such as the geological/natural landforms; and
- The experiential factors, or the human components.

96 As set out in the definition above, the highest level of natural character occurs where there has been the least amount of modification from the original natural state.

### **Te Ara a Kiwa**

97 Te Ara a Kiwa includes a wide range of activities and uses that have a bearing on the level of natural character.

98 The southern coast of Te Waipounamu, the South Island, including the township of Bluff and Awarua and series of headlands and beaches facing southwards to Rakiura.

## Biotic Attributes

- 99 The biotic attributes of Te Ara a Kiwa include the marine fish and animals that live in the coastal waters. A diverse range of pelagic and benthic fish species are known to live in Te Ara a Kiwa. Notable species include Baracouta, Mackerel, Trevally, Warehou, Mullet, Kingfish, Moki, Perch, Rockfish, Red and Blue Cod, Gurnard, Flounder, Hapuku, Sole, Snapper, Tarakihi and Sole<sup>27</sup>.
- 100 White and Seven gill sharks are known to frequent the area with a major White shark aggregation site 10km away at the Titī Islands. Fourteen captures of White sharks were reported by commercial fishers from 2010 and 2021. White sharks are present in Te Ara a Kiwa from late summer to early winter and Seven gill sharks are abundant other than during winter when their numbers substantially decline<sup>28</sup>. On the return voyage back to Bluff from the site visit to Rakiura on 16 April 2025 White Sharks were observed at a shark cage diving location at the Titī Islands. Oysters and Paua are key shellfish species that grow naturally in Te Ara a Kiwa.
- 101 Marine mammals that are known to use Te Ara a Kiwa as habitat, mating or migration sites include NZ Fur Seals, NZ Sea Lions, Bottlenose dolphins, Southern right whales, Humpback whales and Orca. The HAP site could potentially coincide with important winter mating habitats for Southern right whales and forms part of Humpback whales' northern migration corridor<sup>29</sup>.
- 102 A total of 97 marine and coastal avifauna species have been recorded utilising the waters surrounding northern Rakiura / Te Ara a Kiwa and the nearby coastlines. Fifty of those 97 species were recorded by multiple data sources, are range restricted in the area, and / or from groups that are considered vulnerable to aquaculture projects. Fourteen of the 50 species either recorded or potentially occurring close to the site have been identified as key species. These 14 key species include *Threatened* or *At Risk* penguins (hoiho, southern little penguin and Fiordland crested), sooty shearwater / Titī, Cook's petrel, diving

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<sup>27</sup> Wildfish Assessment Report. Table 1.

<sup>28</sup> Shark Assessment Report. NIWA. Executive Summary.

<sup>29</sup> Marine Mammal Assessment Report. Executive Summary.

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petrel (southern and Whenua Hou), white-fronted tern, shag (Foveaux, spotted, pied, little and black) and red-billed gull<sup>30</sup>.

- 103 Habitat types on the seafloor surrounding the site include bryozoan sponge reefs, Low profile bryozoans and sponges, bushy bryozoans and sand. The bryozoan habitats are assessed as having higher ecological and biogenic habitat values. Changes to the shape and location of the overall project site and boundary and the farms within have been made to avoid the higher value biogenic habitats. The seafloor conditions under the project site and farms are largely sand<sup>31</sup>. See **Figure 3** above. ***Update with new Benthic Assessment.***
- 104 The water column assessment found that current within the site show a strong bi-directional flow along the northwest – southeast axis<sup>32</sup>. Wind and waves in Te Ara a Kiwa are predominantly from the west and therefore the HAP site and the strait are relatively protected from large waves by Rakiura. The shallower waters of the strait also act to attenuate large, long period waves. Wave modelling found that 77% of waves are less than 1m and 97% of waves are less than 1.5m. There is potential for large (>3m) waves to occur infrequently at the site.
- 105 Data showed water temperature, salinity and turbidity varied little throughout the water column, indicating that the water column in the area is subject to strong vertical mixing and horizontal transport. High levels of dissolved oxygen were measured in the water column. Changes across the site in sampled nutrients and chlorophyll showed little variation, suggesting relatively homogenous nutrient conditions, thought to be due to the strong currents in the area.
- 106 Based in the description above, the biotic natural character attributes of Te Ara a Kiwa are assessed to be **High**.

### *Abiotic Attributes*

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<sup>30</sup> Coastal and Marine Avifauna Assessment. Executive Summary.

<sup>31</sup> Benthic Assessment Report. Cawthron Institute.

<sup>32</sup> Water Column Effects Assessment. SLR.

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- 107 Te Ara a Kiwa is a well-known oyster fishery, famous for its 'Bluff oysters' or Tio. The oyster fisheries are wild growing naturally in the strong currents of the clean cold waters. Wild oysters are caught by dredging the floor of the sea. Dredging disturbs the floor of the sea and can damage natural fish habitats.
- 108 As described above and illustrated in **Figure 3**, the HAP site and boundary and the marine farm locations have been located to avoid the biogenic habitat that has been surveyed on the seafloor. The seafloor conditions under the site are largely relatively featureless sand. Te Ara a Kiwa is within the Oyster quota management area, as illustrated on **Figure 7** in the **Graphic Attachments**. The oyster dredging process is likely to disturb any biogenic habitat in the areas that are dredged as they disturb the seafloor.
- 109 The presence of anchored or drifting cargo vessels in the charted anchorage areas within and close to the site adds a sense of commercial use and utility to the area. Cargo vessels can stay for a short period or up to several days while waiting to load or unload at Bluff Harbour. Recreational and other vessels moving through or past the area will also add a sense of recreational use to the Strait.
- 110 Based in the description above, the abiotic natural character attributes of Te Ara a Kiwa are assessed to be **High**.

### *Experiential Attributes*

- 111 The Recreational and Tourism Assessment finds that the site and the surrounding area are not a destination for recreational fishers. The site and the Strait are within the Oyster, Blue Cod, Crayfish, Paua and Kina quota management areas as illustrated on **Figure 7** in the **Graphic Attachments**. While kaimoana in Te Ara a Kiwa is generally abundant and in good healthy condition, the commercially harvested products are closely monitored to assess their health and abundance.
- 112 The presence of commercial fishing vessels either passing or working the site will further add to the sense of commercial use of the waters of the Strait. The Bluff – Oban passenger ferry passes through the eastern side of the Strait,

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approximately 10km from the HAP site. The HAP site is unlikely to be visible from this distance. See the navigation route maps in the **Graphic Attachments**.

- 113 The main use of the site and the area is the passage and presence of commercial fishing vessels, the Bluff – Oban ferry and cargo vessels heading to and from Bluff Harbour. Cargo, passenger and recreational vessels are a common sight within the Strait, particularly between Bluff, Oban and Big Glory Bay. The navigation maps for Cargo, Fishing, Passenger and Pleasure vessels from the Navigation Risk Report are contained in **Figure 17** in the **Graphic Attachments**. The maps show much higher concentrations of Cargo, Fishing and Passenger vessels movements in the area. While not all Pleasure vessels will have AIS trackers, the lower numbers of vessels accords with the observations from the Recreational and Tourism Assessment in relation to the users of the site and the Strait.
- 114 The Northwestern Circuit tramping track is on the northern coastal edge of Rakiura, with huts at Port William, Big Bungaree Beach, Murray Beach and Christmas Village, as illustrated on **Figure 4** in the **Graphic Attachments**. Views of the HAP will only be likely to be available from the coastal edge of Rakiura from Sawyers Beach to Saddle Point. There is a side track to Hananui/Mount Anglem from Christmas Village. Views over the site and back towards Bluff are available from parts of the track and from the summit of Hananui. Viewing distances from this part of the track are likely to be at 8km or greater. The visual effects of the HAP from these land-based areas are assessed in the Visual Assessment section below.
- 115 The ability to experience the natural character of the site and the surrounding area is restricted mainly to the Cargo, Fishing and Passenger vessels that are working in or pass through the Strait. Smaller number of Pleasure vessels may experience the area, again passing through or seeking shelter from the predominant wind and waves from the west. Users of the Northwest Circuit tramping track and huts may have views from a distance (minimum viewing distance of 3km) from beaches, open parts of the track and the elevated Hananui side track.



- 116 Based in the description above, the experiential natural character attributes of Te Ara a Kiwa are assessed to be **High**.

### **The site catchment**

- 117 The broad description of Te Ara a Kiwa above provides the surrounding context for the consideration of the natural character values of the site catchment which is the most appropriate scale for the consideration of the natural character values and effects of the proposal. This is because the catchment is 'tucked into' the northern bays of Rakiura and is protected from the open oceans to the south and the west.
- 118 The natural character values of the site catchment are a subset of the values of Te Ara a Kiwa and are more closely associated with the protected coastal waters close to the northern coastal edge of Rakiura, generally offset by 2km to 6km from the coastline. The description below highlights any differences between the natural character values of the broader Te Ara a Kiwa context and the site catchment scale at which the effects of the HAP are more appropriately assessed.

### *Biotic Attributes*

- 119 The biotic attributes of the site catchment include the marine fish and animals that live in the coastal waters as described above. The pelagic and benthic species described in the broader area of Te Ara a Kiwa above are likely to be present within the site catchment area. White and seven gill sharks may be present within or travel through the site catchment, however the main recognised gathering area is 10km away at the Titi Islands.
- 120 Marine mammals described above are likely to use the site catchment as habitat as there is no physical difference between the marine waters of the site catchment and the broader context of Te Ara a Kiwa.
- 121 Coastal avifauna species are also likely to have unrestricted access to the site catchment as habitat. The proximity to and shelter provided by the landscape backdrop of Rakiura will provide more sheltered conditions for avifauna than the open waters of the Strait.

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- 122 Seafloor habitats within the site catchment are not differentiated from the seafloor conditions of the broader Te Ara a Kiwa and are likely to be a subset of the surveyed bryozoan sponge reefs, low profile bryozoans and sponges, bushy bryozoans and sand, as described above.
- 123 The water column conditions of the site catchment are not differentiated from the broader Te Ara a Kiwa context, however are more sheltered than the open waters of the strait due to the protection afforded by the northern coastal landforms of Rakiura.
- 124 The terrestrial environment on the coastal edge of Rakiura includes intact vegetation sequences from: predominantly podocarp forest (rimu/kamahi and southern rata while lacking beech), with areas of coastal tussockland and rock vegetation from sea level to approximately 400m; to extensive scrub dominated by *Olearia colensoi* and/or *Leptospermum scoparium*, from 400m to 800m; with open subalpine and alpine vegetation above 800m<sup>33</sup>. An abundance of native wildlife is found on the northern coastal edge of Rakiura along with some introduced animal species, as described above.
- 125 The terrestrial environment on the northern coastal edge of Rakiura has heightened biotic values.
- 126 Based in the description above, the biotic natural character attributes of the catchment area are assessed to be **Very High** (including the higher inshore and terrestrial biotic values).

### *Abiotic Attributes*

- 127 The site catchment within Te Ara a Kiwa is not differentiated physically from other parts of the Strait in terms of abiotic attributes and includes a subset of the same attributes. Relatively feature-less sandy seafloor conditions exist across the site catchment area. The site catchment area includes some areas of higher biogenic habitat on the seafloor which have generally been avoided in the siting of the HAP.

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<sup>33</sup> DoC – Ecological Regions and Districts of New Zealand, 1987.

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- 128 The shallow waters of the coastal edge include areas of kelp forest on rock reef habitats.
- 129 The presence of anchored or drifting cargo vessels in the charted anchorage areas within the site catchment adds a sense of commercial use and utility to the area. Due to the sheltered nature of the site catchment and the charted anchorages, cargo vessels tend to be concentrated in this area of the Strait.
- 130 The northern coastal edge of Rakiura includes the sandy beaches, bays and headlands as described above.
- 131 Based in the description above, the abiotic natural character attributes of the catchment area are assessed to be **High**.

### *Experiential Attributes*

- 132 The Recreational and Tourism Assessment finds that the site catchment is not a specific destination for recreational fishers.
- 133 The site catchment is outside of and away from the Bluff – Oban passenger ferry route.
- 134 The main use of the site catchment area is the passage and presence of commercial fishing vessels, the Bluff – Oban ferry and cargo vessels heading to and from Bluff Harbour. Cargo, passenger and recreational vessels are a common site in the site catchment.
- 135 The Northwestern Circuit tramping track is a particular feature on the northern coastal edge of Rakiura, with huts at Port William, Big Bungaree Beach, Murray Beach and Christmas Village, as illustrated on **Figure 4** in the **Graphic Attachments**. Experience of the biotic and abiotic values described above on the northern coastal edge of Rakiura is mainly available to the users of the North Western Circuit and visitors to the huts on the northern coast.
- 136 Views of the HAP from the coastal edge of Rakiura from Sawyers Beach to Saddle Point as described above are in the context of less remote and busier commercial vessel traffic along the northern coastline.

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- 137 Based in the description above, the experiential natural character attributes of the catchment area are assessed to be **High**.

### The HAP Site

- 138 The site itself is a 1,285 ha area of open water and sea floor within the CMA between Rakiura and the Bluff coastline, as illustrated on **Figures 1 - 6** in the **Graphic Attachments** and **Figures 1 and 2**, above. The site itself is a subset of the open coastal waters of Te Ara a Kiwa and it is not differentiated from the rest of the coastal waters in any way, other than that it has been located, shaped and sized to avoid higher biogenic habitat values on the seafloor and to be a sufficient distance from the coast to avoid direct effects on the island. The same attributes described above in relation to Te Ara a Kiwa are also present at the HAP site, albeit that the seafloor biogenic habitat has been largely avoided and the area is favoured for cargo vessel anchorage and passage and various fishing activities. Any mobile natural character attributes described above, such as marine mammals, wild fish, avifauna or tidal waters will move through the site as part of the broader habitat area of Te Ara a Kiwa.

- 139 Based in the description above, the biotic natural character attributes of the HAP site are assessed to be **High**.

- 140 Based in the description above, the abiotic natural character attributes of the HAP site assessed to be **High**.

- 141 Based in the description above, the experiential natural character attributes of the HAP site are assessed to be **High**.

### *Natural Character Summary*

- 142 As described above Te Ara a Kiwa is abundant in marine fish, mammals and avifauna. These species are mobile and move through the area, rather than dwell in one location. The seafloor habitat types are limited and likely disturbed regularly by oyster dredging and other activities, hence the largely sandy seafloor conditions and limited biogenic habitat. The water column attributes are healthy and benefit from the strong currents through the Strait. The presence of cargo, fishing, passenger and recreational vessels, particularly around Bluff, Oban, Big

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Glory Bay and passing through the Strait offers a sense of commercial and recreational activity in contrast to the remoteness across most of Rakiura.

143 The natural environment of Te Ara a Kiwa is healthy and abundant with wildlife and kaimoana. The area is also used extensively for commercial fishing, cargo and passenger vessel passage. There is an interesting tension between the relative remoteness and apparent natural health of Te Ara a Kiwa and the use of the area for commercial fisheries, cargo and passenger passage.

144 The inshore and terrestrial natural character attributes of Rakiura and the coastal edge are elevated and are experienced as part of a natural landscape by visitors to the area.

145 Based on the description, analysis and synthesis of the biotic, abiotic and experiential attributes above, overall the natural character values of Te Ara a Kiwa are assessed to be **High**.

146 Based on the description, analysis and synthesis of the biotic, abiotic and experiential attributes above, overall the natural character values of the site catchment are assessed to be **High**.

147 Based on the description, analysis and synthesis of the biotic, abiotic and experiential attributes above, overall the natural character values of the HAP site are assessed to be **High**.

### **Landscape Attributes**

148 The character of the CMA within Te Ara a Kiwa is described above. The assessment of the effects of the HAP on the landscape attributes and values is undertaken in the effects assessment section below. Firstly, the methodology for the assessment of landscape effects is relevant.

149 The methodology for assessing the effects of an activity or development on landscape values requires a four-stage process:

- i. Definition of 'landscape';
- ii. Analysis of landscape characteristics that contribute to values;
- iii. Overall synthesis (or appraisal) of landscape values; and

- iv. Assessment of effects of an activity or change on landscape values and the characteristics.

*‘While landscape draws strands from diverse sources (natural sciences, humanities, cultural perspectives), it is perceived and experienced as a unified phenomenon. It is an integrated whole. It is more than a summary of data – the whole is greater than the sum of the parts.*

*The current professional practice of conceptualising ‘landscape’ as the overlap of its physical, associative, and perceptual dimensions<sup>34</sup>*

150 The three overlapping dimensions of landscape include:

- **Physical aspects** - the physical environment—its collective natural and built components and processes (e.g. its geomorphology, ecological communities and pattern of development);
- **Perceptual aspects** - how we perceive and experience places (e.g. the vividness and memorability of the landscape features, legibility, aesthetic qualities and coherence); and,
- **Associative aspects** - the meanings and values we associate with places (shared and recognised values), including such meanings as the historical and cultural connections of the site and the identity and customs of a place.

151 The description of the detailed natural character attributes is set out above. In a coastal landscape and seascape there is considerable crossover between natural character and landscape attributes, however they are not the same thing.

152 The appropriate scale of the landscapes for the assessment of the effects of the HAP are at the site catchment scale. The effects are assessed within the overall landscape context of Te Ara a Kiwa – The Foveaux Strait with the enclosing land edges of the southern coastline of Te Waipounamu, the northern coastal edge of Rakiura and the islands, including the Tītī Islands and Ruapuke Island. The HAP site is the L shaped 1,285ha areas of water, seafloor and water column that is defined by the project boundary.

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<sup>34</sup> TTatM. Paragraphs 4.21 – 4.22

**Te Ara a Kiwa****Physical aspects**

153 The physical aspects of Te Ara a Kiwa that contribute to the landscape attributes of the catchment include:

- i. The enclosing coastline and landforms of Rakiura, including the Anglem massif – Hananui Mt Anglem (980m asl), Little Anglem (738 asl) and the elevated ridgelines from the Paps to Hananui.
- ii. The gently concave coastline of Rakiura, including several beaches and headland sections from Saddle Point to Potirepo/Port William.
- iii. Dense mixed indigenous coastal forest on the northern edge of Rakiura supporting diverse habitats for flora and fauna.
- iv. The physical infrastructure of the Northwest Circuit walking track, including the tracks themselves and huts at Poteripo/Port William, Big Bungaree Beach, Murrays Beach, the Christmas Village hunters hut and the Christmas Village Hut.
- v. The Murihiku southern coastline including Motupōhue/Bluff, the Bluff Harbour, the Awarua and Murihiku Plains and the backdrop mountains of Fiordland, Takitimu, Hokonui and the Catlins.
- vi. The broad expanse of the waters of Te Ara a Kiwa, which while protected by Rakiura, have strong tidal currents influenced by the determined by the Southland Current.
- vii. The nutrient rich cool waters of the strong tidal currents.
- viii. The marine mammal, wild fish, avifauna, benthic and water column marine communities.
- ix. The three charted anchorages on the Northern coast of Rakiura, including the shipping activity that they generate.

- x. The localised marine activity and passage, including commercial fishing, passenger and recreational fishing vessels.

154 The physical landscape aspects above are summarised from the Site Description and Natural Character attributes described in more detail.

### **Perceptual Aspects**

155 The perceptual aspects of Te Ara a Kiwa that contribute to the landscape attributes of the catchment include:

- i. The remoteness of the open water strait and the means by which visitors access and visit the waters and the northern coast of Rakiura. Access to the waters and Rakiura is generally provided by commercial passenger or fishing vessels or by private aircraft – small airplane or helicopter to the Oban airfield or to the beaches on the coastal edges.
- ii. The perception of a lack of use or development on Rakiura, outside of the urban area at Oban.
- iii. The perceived increasing remoteness of the Northwest Circuit walking track and well-spaced huts along the northern coastline as part of a multi-day advanced tramping track before reaching the sections of the track on the more remote sections of the track on the northern and western coastlines of Rakiura.
- iv. The contrasting perceptions of the commercial shipping and fishing vessels and activities on the sheltered waters of Te Ara a Kiwa, including large shipping vessels at anchor or passage, commercial fishers and occasional recreational fishers working the waters.
- v. The distinctive landform profile of the Anglem massif skyline, particularly outline of the ridgeline and the highpoint of Hananui when viewed from vessels on the waters of Te Ara a Kiwa or from aircraft travelling south in the direction of Rakiura, including the legibility of the broad landscape patterns.



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- vi. The perception of the long-distance views from Rakiura and Te Ara a Kiwa back towards Motupōhue/Bluff, the southern coast of Murihiku, Ruapuke Island, Dog Island and its lighthouse and the Tītī Islands. Views at these distances (20-30km plus) are of broad landscapes and seascapes with little obvious interruption to those patterns. From some locations changes in landcover, lights at Motupōhue/Bluff and the turbines in the Flat Hill wind farm are visible.
- vii. Views to and from Rakiura and Te Ara a Kiwa are of broad landscape and seascape patterns that have a high level of legibility and coherence, other than when interrupted by the commercial shipping and fishing vessels and activity.

156 The perceptual landscape aspects above are summarised from the Site Description and Natural Character attributes described in more detail.

### **Associative Aspects**

157 The associative aspects of Te Ara a Kiwa that contribute to the landscape attributes of the catchment include:

- i. The whole of the Murihiku<sup>35</sup> (Southland and parts of Otago) area has cultural significance to Ngāi Tahu ki Murihiku.
- ii. Maui, who is described as a Demigod and a navigator from across the Pacific. The South Island or Te Waipounamu is often referred to as Te Waka a Maui, or Maui's canoe, which he stood on while fishing up the North Island, Te Ika a Maui (Maui's fish).
- iii. Te Taurapa o te Waka – the sternpost of the waka – Southern Te Waipounamu.
- iv. Te Puka a Maui – Rakiura (Stewart Island) is often referred to as the anchor stone of Maui's canoe.

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<sup>35</sup> Murihiku and Southland are often used interchangeably to describe Murihiku and/or the region, however they are not the same area.

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- v. Te Ara a Kiwa - Kiwa is a whale that traversed the Pacific Ocean (Te Moananui a Kiwa) connecting all peoples to this place. When Kiwa came down through these waters, he bit his way through the land, separating Rakiura from the mainland, creating Te Ara a Kiwa - Foveaux Strait.
- vi. Motupōhue – Bluff Hill where Rakitauneke was buried to look out over Te Ara a Kiwa – ‘Kia pai ai tāku titiro ki Te Ara a Kiwa’.
- vii. Murihiku Marae. The wharenui is named after Rakitauneke. Otaku was once occupied by wahine mareikura and their partners. Pikowhiowhio and Wharetutu are prominent figures as represented in the wharenui at Te Rau Aroha marae.
- viii. Ruapuke Island. Since 1840, the significance and claimed sovereign status of the Ruapuke Island Group has meant it sat outside most processes.
- ix. Otaku was once occupied by wahine mareikura and their partners.
- x. Pikowhiowhio and Wharetutu are prominent figures as represented in the wharenui at Te Rau Aroha marae.
- xi. Access to and activities (including harvesting of Tītī) on the Tītī Islands are strongly connected to whakapapa for Ngāi Tahu ki Murihiku. Access to the islands is restricted by cultural tikanga (practices).
- xii. Ngāi Tahu ki Murihiku have a strong historical and contemporary relationship with the kaitiakitanga, management and harvesting of kaimoana from Te Ara a Kiwa and from surrounding waters.
- xiii. Te Ara a Kiwa / Foveaux Strait is strongly associated with traditional and contemporary commercial fishing practices, particularly for Ngā Tahu, including oyster dredging, cray fishing, paua and blue cod fisheries. Fisheries in the strait are generally wild fisheries, with marine farming activities largely located within Big Glory Bay at Whaka a Te Wera / Paterson Inlet.

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- xiv. The Ngāi Tahu ki Murihiku world view is often expressed as being on and looking from the waters of Te Ara a Kiwa towards Rakiura and Te Waipounamu.
- xv. The economic and recreational activity and health of the settlement of Oban and the residents of Rakiura are strongly tied to the fisheries of Te Ara a Kiwa and Murihiku. Other economic activities on Rakiura are generally restricted to tourism, recreation and hospitality (visitors to the island).
- xvi. Bluff, Rakiura and Te Ara a Kiwa are well known for their abundant kaimoana including 'Bluff' oysters, cray fish, paua and blue cod.
- xvii. The Rakiura tourism experience is relatively remote in an Aotearoa sense, with limited access by passenger and commercial vessels and small aircraft, along with very limited tourism infrastructure outside of the small settlement of Oban. Rakiura is the southern most accessible area of Aotearoa for most visitors to Murihiku.
- xviii. The presence and passage of shipping vessels within Te Ara a Kiwa is strongly associated with the Bluff Harbour and the port.

158 The associative landscape aspects above are summarised from the Site Description and Cultural landscape values described in more detail above.

### **Site catchment**

159 The attributes of the site catchment are described below. As the site catchment is a subset of the broader landscape context of Te Ara a Kiwa, only those attributes that are pertinent to the site catchment scale are described.

### **Physical aspects**

160 The physical aspects of the site catchment that contribute to the landscape attributes of the catchment include:

- i. The enclosing coastline and landforms of Rakiura, including the Anglem massif – Hananui Mt Anglem (980m asl), Little Anglem (738 asl) and the elevated ridgelines from the Paps to Hananui.

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- ii. The gently concave coastline of Rakiura, including several beaches and headland sections from Saddle Point to Potirepo/Port William.
- iii. Dense mixed indigenous coastal forest on the northern edge of Rakiura supporting diverse habitats for flora and fauna.
- iv. The physical infrastructure of the Northwest Circuit walking track, including the tracks themselves and huts at Poteripo/Port William, Big Bungaree Beach, Murrays Beach, the Christmas Village hunters hut and the Christmas Village Hut.
- v. The local waters of Te Ara a Kiwa, which while protected by Rakiura, have strong tidal currents influenced by the determined by the Southland Current.
- vi. The nutrient rich cool waters of the strong tidal currents.
- vii. The marine mammal, wild fish, avifauna, benthic and water column marine communities.
- viii. The three charted anchorages on the Northern coast of Rakiura, including the shipping activity that they generate.
- ix. The localised marine activity and passage, including commercial fishing, passenger and recreational fishing vessels in the areas sheltered by Rakiura.

### **Perceptual Aspects**

161 The perceptual aspects of the site catchment that contribute to the landscape attributes of the area include:

- i. The remoteness of the open water strait and the means by which visitors access and visit the waters and the northern coast of Rakiura. Access to the waters and Rakiura is generally provided by commercial passenger or fishing vessels or by private aircraft – small airplane or helicopter to the Oban airfield or to the beaches on the coastal edges.

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- ii. The perceived increasing remoteness of the Northwest Circuit walking track and well-spaced huts along the northern coastline as part of a multi-day advanced tramping track before reaching the sections of the track on the more remote sections of the track on the northern and western coastlines of Rakiura.
- iii. The contrasting perceptions of the commercial shipping and fishing vessels and activities on the sheltered waters of Te Ara a Kiwa, including large shipping vessels at anchor or passage, commercial fishers and occasional recreational fishers working the waters.
- iv. The distinctive landform profile of the Anglem massif skyline, particularly outline of the ridgeline and the highpoint of Hananui when viewed from vessels on the waters of the site catchment or from aircraft travelling south in the direction of Rakiura, including the legibility of the broad landscape patterns.
- v. Views to and from Rakiura and Te Ara a Kiwa are of broad landscape and seascape patterns that have a high level of legibility and coherence, other than when interrupted by the commercial shipping and fishing vessels and activity.

### **Associative Aspects**

162 The associative aspects of the site catchment that contribute to the landscape attributes of the area include:

- i. The edge of Te Taurapa o te Waka – the sternpost of the waka – Southern Te Waipounamu.
- ii. Te Puka a Maui – Rakiura (Stewart Island) is often referred to as the anchor stone of Maui's canoe.
- iii. The site catchment as part of Te Ara a Kiwa - Kiwa is a whale that traversed the Pacific Ocean (Te Moananui a Kiwa) connecting all peoples to this place. When Kiwa came down through these waters, he bit his way through the land, separating Rakiura from the mainland, creating Te Ara a Kiwa - Foveaux Strait.

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- iv. Ngāi Tahu ki Murihiku have a strong historical and contemporary relationship with the kaitiakitanga, management and harvesting of kaimoana from the site catchment and from surrounding waters.
- v. The site catchment is strongly associated with traditional and contemporary commercial fishing practices, particularly for Ngā Tahu, including oyster dredging, cray fishing, paua and blue cod fisheries. Fisheries in the strait are generally wild fisheries.
- vi. The Ngāi Tahu ki Murihiku world view is often expressed as being on and looking from the waters of Te Ara a Kiwa towards Rakiura and Te Waipounamu.
- vii. The site catchment, as part of Rakiura and Te Ara a Kiwa is well known for their abundant kaimoana including 'Bluff' oysters, cray fish, paua and blue cod.
- viii. The Rakiura tourism experience is relatively remote in an Aotearoa sense, with limited access by passenger and commercial vessels and small aircraft, along with very limited tourism infrastructure outside of the small settlement of Oban. Rakiura is the southern most accessible area of Aotearoa for most visitors to Murihiku.
- ix. The presence and passage of shipping vessels within the catchment site is strongly associated with the Bluff Harbour and the port.

163 The associative landscape aspects above are summarised from the Site Description and Cultural landscape values described in more detail above.

164 The physical, perceptual and associative aspects of the site of the HAP are a small sub-set of the broader aspects of the landscape and seascape of Te Ara a Kiwa and the site catchment, as described above. Te Ara a Kiwa provides the landscape and seascape context for the site catchment and the HAP site. There is currently no differentiation between the landscape and seascape attributes of the site and the surrounding site catchment.

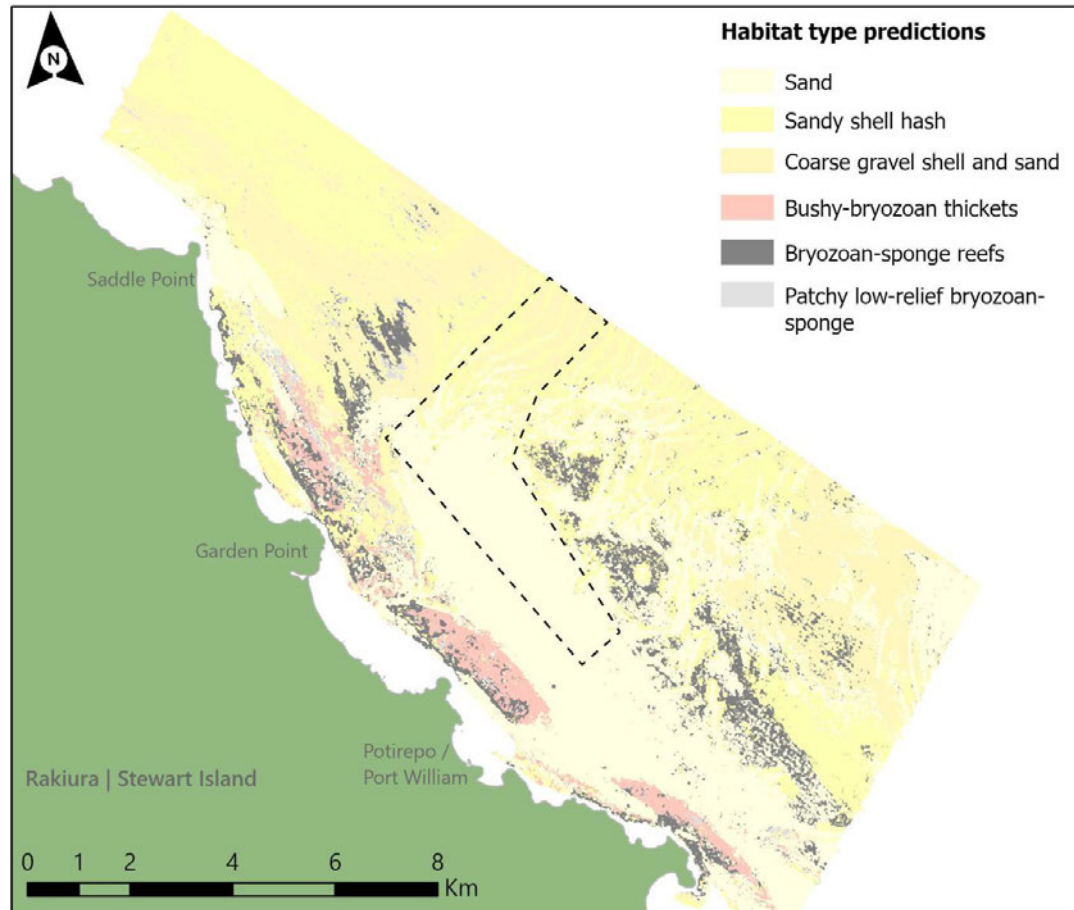
### **Landscape Values Summary**

- 165 Based on the description of the landscape values above the overall landscape values or significance of Te Ara a Kiwa are assessed as **High**.
- 166 Based on the description of the landscape values above the overall landscape values or significance of the site catchment are assessed as **Very High** (including the heightened inshore and terrestrial values).
- 167 Based on the description of the landscape values above the overall landscape values or significance of HAP site are assessed as **High**.

### **DESCRIPTION OF THE PROPOSAL**

- 168 Full details of the proposal are illustrated on the plans and diagrams in **Figures 1 to 6** in the **Graphic Attachments**. The proposal is for the staged construction and operation of a salmon farm known as the Hananui Aquaculture Project (HAP).
- 169 The HAP is a two-stage exposed coastal water salmon farming project, proposed to occupy an approximately 1,285ha area of the coastal marine area located 2-6km off the northern coast of Rakiura. Within this area four marine farms are proposed. A minimum off set of 2km from the coastal edge was applied to the location of marine farms.
- 170 Stage 1 of the project involves a feed discharge of 15,000 tonnes per annum and the establishment of a block of 10 sea pens (arranged in a 5x2 configuration) at each of the four marine farm sites.
- 171 Stage 2 of the project would see the overall feed discharge rise to 25,000 tonnes per annum with the introduction of a second set of 10 sea pens at each of the four marine farm sites.
- 172 Development of Stage 2 would be subject to environmental monitoring over two production cycles at the Stage 1 feed input.

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**Figure 3: Project site and marine farm locations. (Source: Benthic Assessment Report. Cawthron Institute)**

173 The project boundary and salmon farm locations have been selected based on multiple drivers – including separation distances between marine farms, distance to the coastal edge, distance to (and avoidance of) biogenic habitat (the dark grey and pink in the figure above).

174 Key features of the marine farms and pens are as follows:

- There will be one feed barge for each of the four marine farms. Four barges in total.
- The two blocks within each farm will be separated by approximately 300 m.
- Net pens will be 168m circumference (53m diameter) polar circle type pens.
- Within the overall 1,285ha project site boundary, the blocks of floating pens will occupy 96.8ha of water space, less than 8% of the project site



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area. The mooring lines and anchors on the sea floor will occupy an exclusive occupation area of approximately 500ha. The exclusive occupation area includes all of the floating structures, the mooring lines and anchors, the feed barges, plus a 50m buffer around all of the structures, leading to an area of exclusive occupation of 125ha per farm.

- Single net systems will be used, which are anticipated to be dark coloured, have an underwater mesh size less than 40mm and made of predator resistant materials.
- The maximum net depth will be 22 m. However, a minimum 5 m clearance will be kept between the bottom of the pen and the seabed. This means that in some instances the net depth will be less than 22 m. Bathymetry in the site ranges from 20m closest to the shore to up to 40m.
- Above water Bird Netting Mesh Size will be used. No more than 60 mm (knot to knot) mesh size.
- Birdnet poles – 65mm diameter pole size – 5.9m tall
- Sealnet fence ~ 90mm diameter pole size ~ 3 to 3.5m tall.
- There will be one feed barge to service each salmon farm. Four in total. The feed barges will be up to 40m in length with a beam of 12m.
- Navigational safety and lighting. The recommended navigational safety buoys and lighting<sup>36</sup> includes four lit cardinal marks, one on each of the outer corners of the HAP site boundary, 8 lit special marks and eight unlit special marks, on each of the outer corners of the four marine farms and 14 yellow compensation buoys within each block of pens. Compensation buoys do not have marks or lights. There will be 4 lit cardinal marks and two lit special marks for each farm, 12 lights in total. The four feed barges will also be lit. The lighting proposals are discussed and illustrated in the Navigational Risk Assessment Report and are illustrated in **Figure 13** below.

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<sup>36</sup> Navigational Risk Assessment Report. Navigatus.

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- The barges will be permanently occupied by HAP staff. Support vessels will travel to and from the HAP farms regularly (daily, if not more regularly) from a base at SouthPort at Bluff. Harvest and maintenance vessels will also regularly visit the farms.

175 The current application has seen changes made to the HAP compared to the previous COVID-19 Fast-Track application. In broad terms, these changes include:

- Adjustments to the Hananui farm boundary and farm positions, including movement away from the coastal edge.
- A full modelling overhaul.
- Increased separation between farm locations and biogenic habitats located outside the 1,285 ha area in the main current direction.
- Adjusted the southern boundary and farm position to reduce visual impact from Bungaree Hut.
- Exclusion of large biogenic habitat areas from the new 1,285 ha area.
- Relocation of the farm boundary to a minimum of 2 km from the nearest land.

176 Plans, diagrams and illustrations of the proposed layout of the farm and its' components are illustrated in **Figures 1 to 6 and 8 to 16** in the **Graphic Attachments** and in **Figures 4 to 13** below. The illustrations indicate the components and layout of the HAP as described above. Illustrations in **Figures 4 to 13** below have been extracted from the DSA Ocean Engineering report and the Navigational Safety Risk Assessment report.

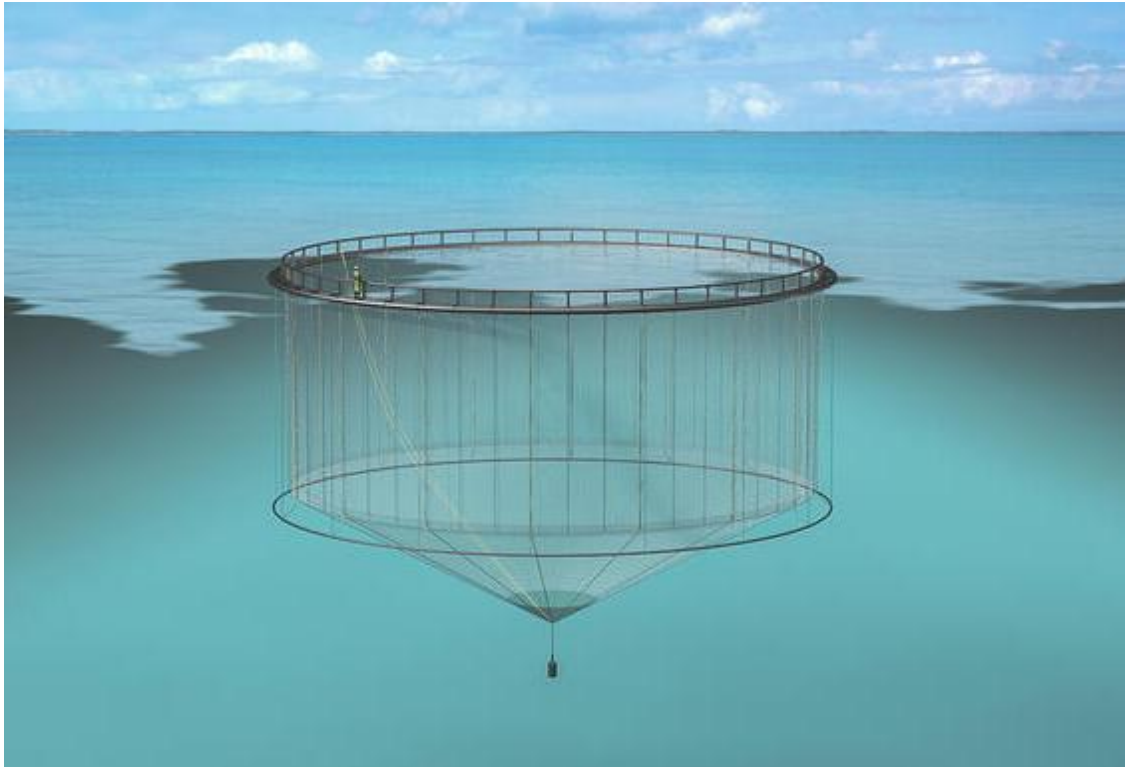


Figure 4: Net pen diagram.

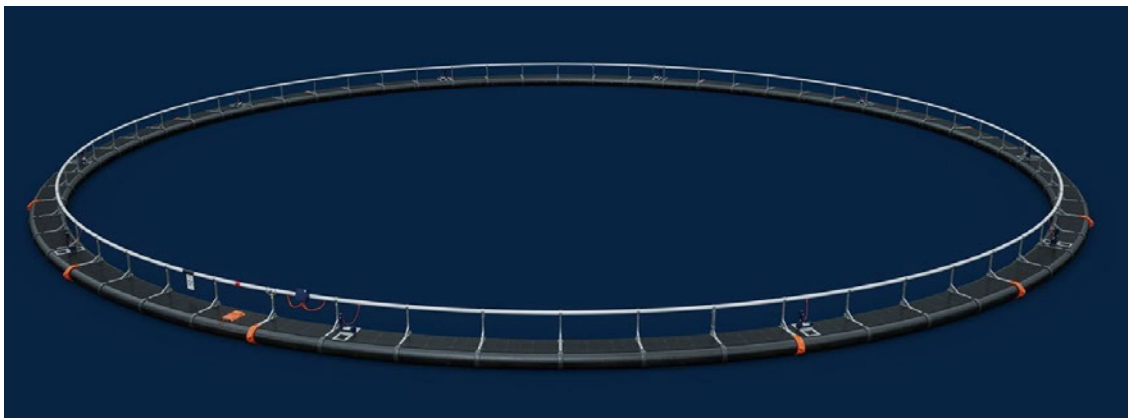


Figure 5: Pen scale model.

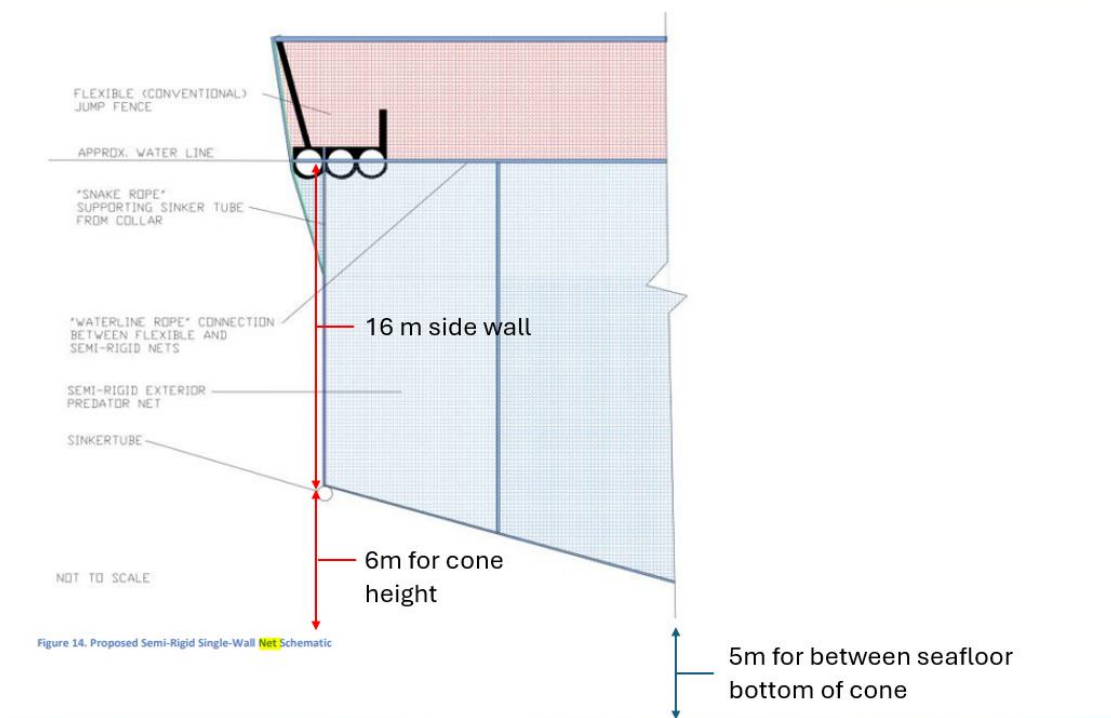


Figure 6: Pen cross section.

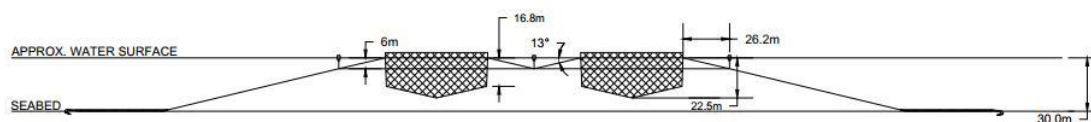


Figure 7: Farm cross section.

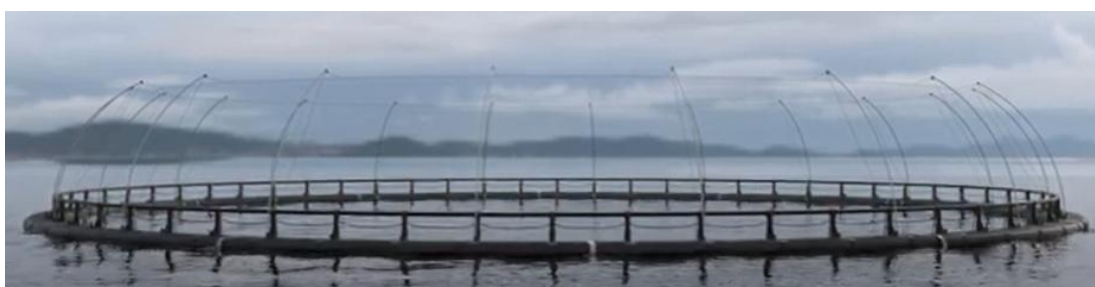


Figure 8: Polar Circle Pen photograph.

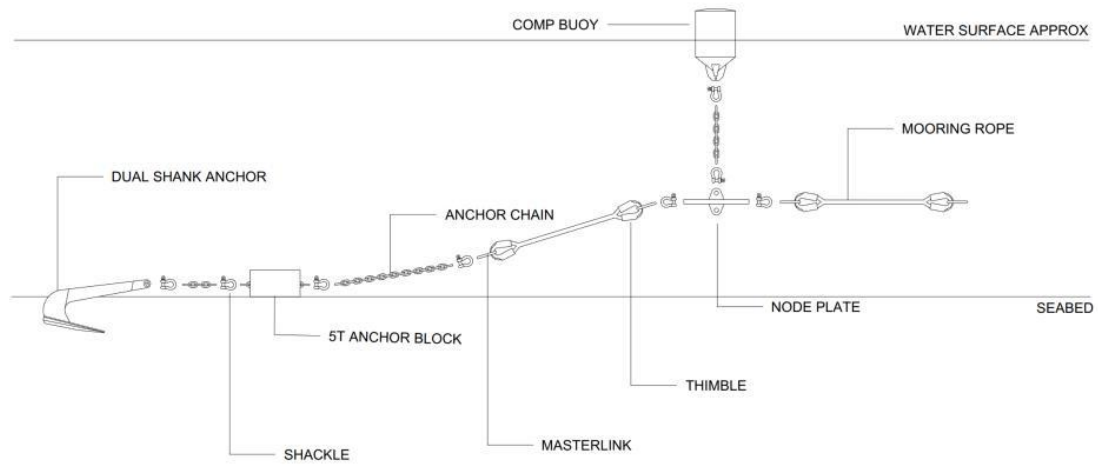


Figure 9: Mooring anchor scheme.

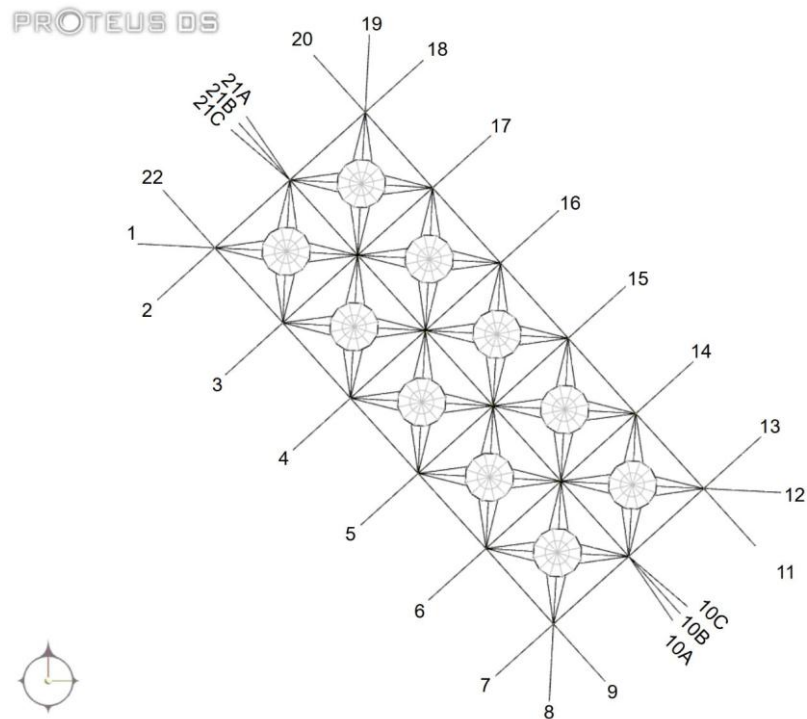


Figure 10: Net pen and mooring setout.

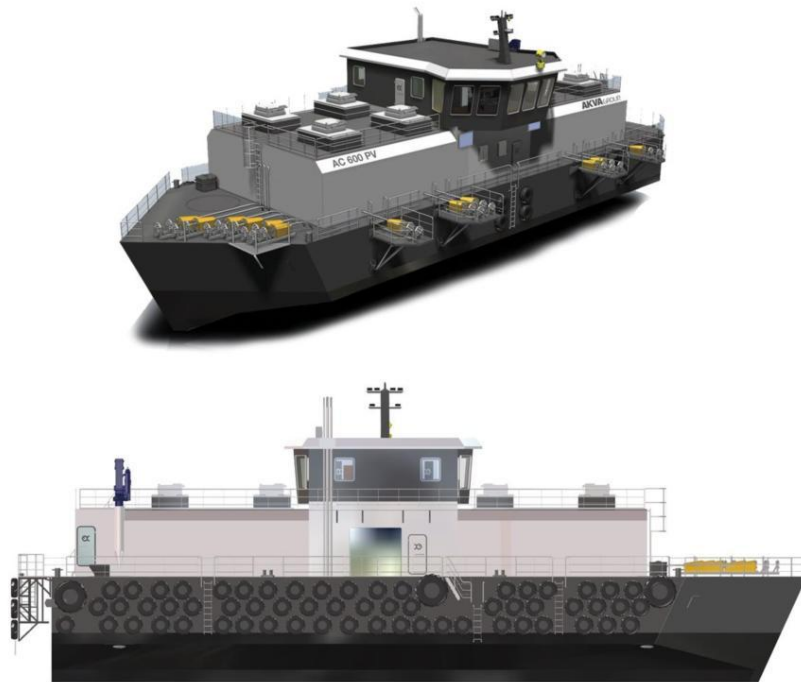


Figure 11: Feed barge.



Figure 12: Mooring layout for feed barge (not to scale).



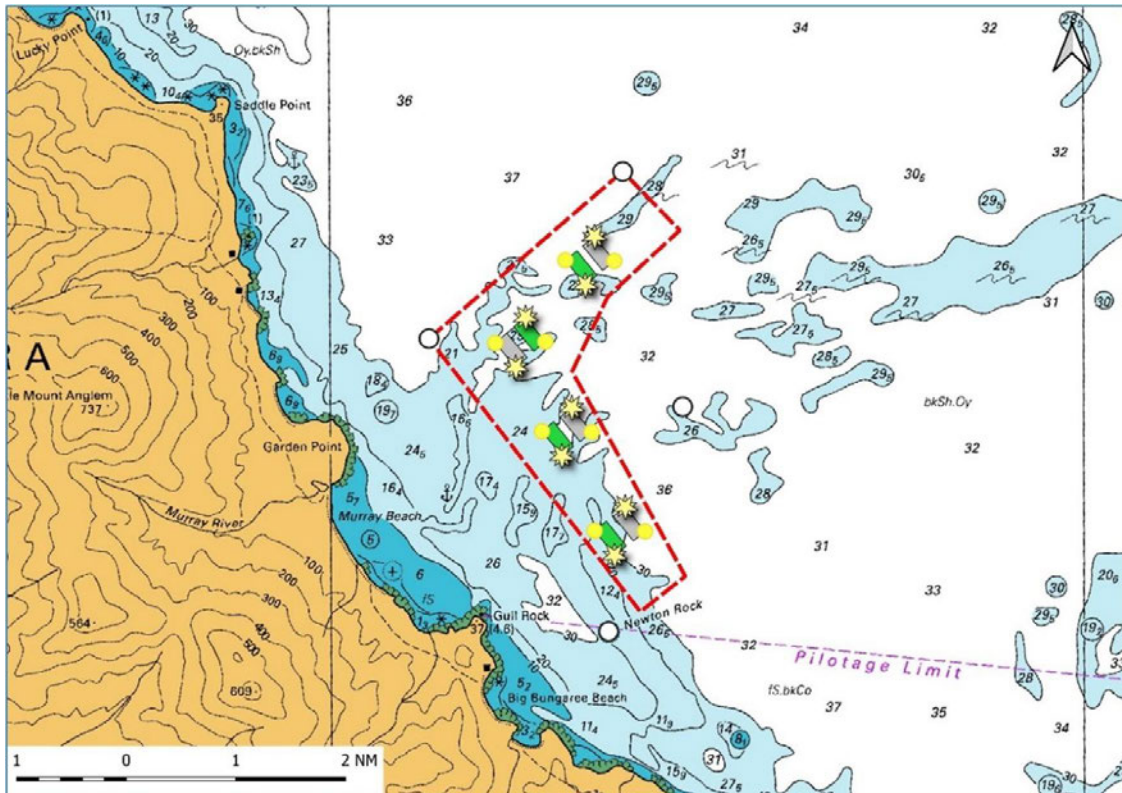


Figure 13: Navigational safety buoy and lighting setout (star denotes lit special marks, white circles are cardinal marks, yellow circles are unlit special marks).

## PLANNING CONTEXT

177 This section of the report is not intended to provide a planning assessment, but rather to highlight relevant provisions to help frame the assessment of landscape effects. A full planning assessment of the Project has not been undertaken here. The AEE has been prepared by Stantec.

178 The site is located within the Southland District and the Southland Regional Council boundaries.

179 The relevant statutory, planning and strategic documents applicable to the development include:

- The Resource Management Act 1991 (RMA)
- The New Zealand Coastal Policy Statement 2010 (NZCPS)
- The Southland Regional Policy Statement 2017 (RPS)

- The Regional Coastal Plan for Southland 2013 (RCP)
- Southland District Plan 2018 (SDP)
- The Ngāi Tahu Deed of Settlement
- Murihiku Southland Aquaculture Pathway. 2025
- Āpiti Hono Tātai Hono: Ngā Whenua o Ngāi Tahu ki Murihiku
- The Stewart Island/Rakiura Conservation Management Strategy 2011 (CMS) & The Rakiura National Park Management Plan 2011 (NPMP)
- Stewart Island/Rakiura Landscape and Coastal Natural Character Study 2019 (LCNCS)
- Southland/Murihiku Regional Coastal Environment Study – Coastal Natural Character Assessment 2019 (SMRCES)
- Māori Commercial Aquaculture Claims Settlement Act 2004 (MCACSA)
- Other - National and Regional Aquaculture Development Strategies (ADS)

180 A summary of the relevant planning context documents is outlined below, with greater detail provided in **Appendix A**.

### **Resource Management Act 1991**

181 Relevant landscape matters are found in Part II of the RMA, specifically Section 6: Matters of National Importance, and Section 7: Other Matters. Sections of direct relevance are outlined below and have been considered as part of the assessment.

#### ***Section 6***

*“In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall recognise and provide for the following matters of national importance:”*

- *s6(a) – the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and*



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*lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development:*

- *s6(b) – The protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development*
- *s6(d) – the maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers:*
- *s6(e) – the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other toanga*

182 With regard to Part II of the RMA, more relevant landscape provisions are contained in section 7: Other Matters.

### **Section 7**

*“In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall have particular regard to:”*

- *s7(c) - The maintenance and enhancement of amenity values.*
- *s7(f) - Maintenance and enhancement of the quality of the environment.*

### **New Zealand Coastal Policy Statement 2010**

183 The New Zealand Coastal Policy Statement (NZCPS) sets out objectives and policies to enable the management of the coastal environment under the RMA. All of the objectives and policies in the NZCPS have some relevance to aquaculture due to its functional requirement to be in the CMA. Policy 8 applies specifically to aquaculture, requiring regional policy statements and regional coastal plans to provide for aquaculture activities in appropriate places, subject to relevant considerations. Of most relevance to landscape matters are Policies 1, 6, 13 and 15.

184 Policy 1 relates to the extent and characteristics of the coastal environment. Policy 6 provides direction for activities and their functional needs concerning the coastal environment and coastal marine area. Policies 13 and 15 provide guidance on

determining natural character and landscape values and the level of protection or preservation required.

### **The Southland Regional Policy Statement 2017**

185 The Southland Regional Policy Statement (RPS) 2017 provides a framework for managing the region's coastal environment, including aquaculture and the preservation of natural character.

186 Chapter 7 Coast includes various related objectives, covering what is appropriate occupation and use of the coastal marine area; maintaining and enhancing public access while recognising that certain activities must be located within the coastal environment even though they can affect natural character and public access. This includes specific references to aquaculture (Objective 5) and Natural Features and Landscapes (Chapter 10). These chapters give effect to the NZCPS (Policies 8, 13 and 15), see above.

### **The Regional Coastal Plan for Southland 2013**

187 The Regional Coastal Plan (RCP) sets out how the Regional Council (Environment Southland) will carry out its resource management responsibilities in the CMA. The current plan was made fully operative in 2013. The RCP is currently under review. As part of the review process, Environment Southland commissioned Boffa Miskell to undertake an assessment of the Southland Coast, and separately an assessment of the Stewart Island/Rakiura's coast and landscape. These were completed in 2019.

188 The operative plan uses a Coastal Landscape Assessment completed in 1997 by Alan Petrie, the then Regional Landscape Architect for the Department of Conservation. For the purposes of assessing this project, both the Boffa Miskell and Alan Petrie studies have been reviewed as they are largely cumulative.

189 Chapter 5 – General Matters includes matters relating to Natural Character and Natural Features and Landscapes. Chapter 15 provides specific regulation around Marine Farming activities. The RCP currently prohibits marine farming in:

- Internal Waters of Fiordland (Awarua to Puysegur Point)
- Marine Reserves

- Awarua Bay (east of Tiwai causeway)
- Specific areas of Stewart Island: Lords River, Port Pegasus, Paterson Inlet (except Big Glory Bay and the Salmon Farming Refuge Zone) and Port William

190 Marine farming is a non-complying activity in the Bluff Port Zone and a discretionary activity in the other coastal areas of Southland.

### **The Southland District Plan 2018**

191 The Operative Southland District Plan became operative in 2018. Stewart Island is located within the Southland District Council boundary.

192 The Southland District Plan includes objectives and policies relating to Natural Features and Landscapes. The plan identifies Outstanding Natural Features and Landscapes. The plan references Boffa Miskell Southland Regional Landscape Assessment (1997) and Boffa Miskell Southland Coastal Landscape Study (2006). More recent studies have been undertaken including the Southland/Murihiku Regional Landscape Study (2019) the Southland/Murihiku Regional Coastal Environment Study (2019) – see below, and the Stewart Island/Rakiura: Landscape and Coastal Natural Character Study (2019) – see below. While these documents have not been tested through public consultation as part of a District Plan process – they have been considered as part of this assessment.

193 The Southland District Plan also has area specific matters – with Raikura National Park being zoned as a Natural Open Spaces Zone which is intended to ensure the natural and wilderness qualities are maintained. The zone forms part of the Districts' coastal environment and includes all the of Stewart Island's/Rakiura offshore islands which are subject to coastal process as being identified as being within the Coastal Environment.

### **The Stewart Island/Rakiura Conservation Management Strategy 2011 (CMS) & The Rakiura National Park Management Plan 2011 (NPMP)**

194 The Conservation Management Strategy (CMS) and National Park Management Plan (NPMP) are contained within the same document. While they are contained together (something that is not common) they are two legally distinct documents but are combined for ease of reference.

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- 195 The Stewart Island/Rakiura Conservation Management Strategy provides an overarching direction for the strategic and integrated management of all the public conservation lands within Stewart Island/Rakiura. Emphasis is placed on integrated conservation management, biodiversity protection, and sustainable recreation, aligning with the Conservation Act 1987.

### **Stewart Island/Rakiura Landscape and Coastal Natural Character Study 2019 (RLCNCS)**

- 196 The Stewart Island / Rakiura Landscape and Coastal Natural Character Study 2019 (RLCNS) was commissioned by Environment Southland to inform resource management decisions under the RMA, particularly sections 6(a) and 6(b), identifying the Outstanding Natural Character and Outstanding Natural Features and Landscapes (ONF/Ls) of Stewart Island.
- 197 In addition, the study assesses the natural character values of the Coastal Environment as it relates to the NZCPS, noted above.
- 198 While the RLCNCS is dated 2019 it has not been adopted by the Southland District Council as part of the District Plan (above). The study notes that it is a technical report and, in its preparation, consultation occurred with identified key stakeholders, however has not been tested by its communities or been the basis of any draft or proposed plan change.
- 199 The RLCNCS, identifies and notes suggested changes (from various other plans and studies) to the Rakiura ONL area. The suggested extent includes a 2km offset from the coast. Much of the island's coastal environment was assessed as having high or very high natural character.
- 200 As described above, the RLCNCS 2km off set from the coastal edge of Rakiura as part of the Rakiura ONL area is a buffer to the ONL itself and the values of the buffer are not the same as the values of the assessed ONL. The buffer provides the relevant off set from the terrestrial landscape and natural character values, allowing for the protection of those values from use and development outside of the buffer.

### **Southland/Murihiku Regional Coastal Environment Study – Coastal Natural Character Assessment 2019 (SMRCES)**

- 201 The SMRCES is a broader technical study that is complementary and has an overlap with the RLCNCS, above. The SMRCES covers the entirety of the Southland coastline, and along with the RLCNCS was commissioned by Environment Southland.
- 202 The SMERCES excludes the terrestrial components from the Stewart Island study areas as they are covered in the RLCNCS.
- 203 Chronologically, the RLCNCS appears to have been undertaken first, in 2017, and published in 2019, with the SMRCES published the same year. As a result, there are some variations in mapped areas.
- 204 The SMRCES assesses the Coastal Marine Area (CMA), with the northern coast of Stewart Island included in the Foveaux Strait area, with the Natural Character assessed as either Very High or High. The study identifies some areas around the Stewart Island coastal environment as having Outstanding Natural Character.
- 205 Like the RLCNCS maps indicate the locality of these areas but given the scale of the Southland and Stewart Island's coast, it contains limited granularity and detail.
- 206 The study notes that it is a technical report and, like the RCLCNS, has in its preparation, consultation occurred with identified key stakeholders, however has not been tested by its communities or been the basis of any draft or proposed plan change.

### **Māori Commercial Aquaculture Claims Settlement Act 2004 (MCACSA)**

- 207 The Act provides for the full and final settlement of Māori claims to commercial aquaculture space in New Zealand's coastal marine area, recognising Te Tiriti o Waitangi (the Treaty of Waitangi) and enabling iwi to participate in and benefit from aquaculture development.
- 208 While the Act itself does not directly address landscape matters, its relevance is in the context within which aquaculture development may occur. Any development must still be assessed under the RMA; however, the act provides particular acknowledgement to the statutory rights and expectations it creates for iwi

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involvement in aquaculture development. The location of the HAP site under the MCACSA has considered the landscape and natural character values of the area and the suitability of the site for aquaculture activities.

- 209 MCACSA reinforces the importance of recognising iwi values and aspirations in relation to both cultural identity and economic use of the coastal marine area.

### Other - National and Regional Aquaculture Development Strategies (ADS)

- 210 Both the Aquaculture Development Plan 2025 and the Southland Aquaculture Strategy (2012 – currently being updated) support and promote the growth of Aquaculture. Recognition is given to the importance of protecting natural character, landscape values, and cultural landscapes. Both strategies promote partnership with iwi.
- 211 Neither of these documents serves a planning or statutory role; however, both outline a range of values and constraints, including many relating to landscape

## ASSESSMENT OF EFFECTS

- 212 The following section assesses the HAP and its level of potential effects and appropriateness in this setting. The main assessment of effects conclusions for the HAP are assessed at the site catchment scale. This is the appropriate scale for the assessment of effects as the site catchment is the scale at which the overall project and its' attributes are experienced. The Te Ara a Kiwa scale is too large for the scale of the effects of the HAP and the HAP project site itself is too small and is isolated from the surrounding landscape context. Therefore throughout the assessment of effects section and in the summaries and conclusions, the site catchment scale is the most appropriate scale for the effects of the HAP to be assessed at. The Te Ara a Kiwa and HAP site scale are described and assessed for context.
- 213 The main Natural Character, Landscape Character and Visual Amenity issues considered are:

#### *a) Natural Character effects:*

##### *i. Biotic attributes;*

- ii. *Abiotic attributes; and,*
- iii. *Experiential attributes.*
- b) **Landscape Character** effects:
  - i. *Integration with the existing form and character of the 1,285 ha seascape site; and,*
  - ii. *Effects on character of the surrounding landscape and seascape setting of Te Ara a Kiwa.*
- c) **Visual Amenity** effects of the HAP in relation to:
  - i. *Marine visitors to and users of the HAP site;*
  - ii. *Viewpoints on the Northwestern tramping circuit, particularly at Big Bungaree Beach, Murray Beach and Christmas Village;*
  - iii. *Visibility from the track and summit of Hananui; and,*
  - iv. *Potential visibility to passing aircraft.*

#### **Natural Character Effects**

- 214 Natural character attributes of Te Ara a Kiwa, the site catchment and the HAP site are described above in the existing environment description above and are summarised below:
- 215 Based on the description, analysis and synthesis of the biotic, abiotic and experiential attributes above, overall the natural character values of Te Ara a Kiwa are assessed to be **High**.
- 216 Based on the description, analysis and synthesis of the biotic, abiotic and experiential attributes above, overall the natural character values of the site catchment are assessed to be **High** with heightened natural character values on the coastal edge of Rakiura.
- 217 The site itself is a subset of the open coastal waters of Te Ara a Kiwa and the site catchment and it is not differentiated from the rest of the coastal waters in any

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way, other than that it has been located, shaped and sized to avoid higher biogenic habitat values on the seafloor and to be a sufficient distance from the coast to avoid direct effects on the island. The same attributes described above in relation to Te Ara a Kiwa and the site catchment are also present at the HAP site, albeit that the seafloor biogenic habitat has been largely avoided and the area is favoured for cargo vessel anchorage and passage.

- 218 Based on the description, analysis and synthesis of the biotic, abiotic and experiential attributes above, overall the natural character values of the HAP site are assessed to be **High**.

### *Effects on Biotic Attributes*

- 219 The effects on the biotic attributes of Te Ara a Kiwa and the site catchment include the displacement of marine fish and animals that live in the coastal waters, from the areas of the marine farms and nets.
- 220 The notable wild fish species including Baracuda, Mackerel, Trevally, Warehou, Mullet, Kingfish, Moki, Perch, Red and Blue Cod, Gurnard, Flounder, Hapuku, Sole, Tarakihi and Sole<sup>37</sup> will be displaced from the net and anchoring locations. There is no shortage of open water habitat for such species to relocate to, which would happen should other habitat disbursement occur, such as the temporary anchorage of shipping vessels. Effects on wild fish populations are to be managed by monitoring the wild fish species and quantifying the levels of feed waste in the environment to manage future marine farm operations and expansions<sup>38</sup>. Overall, effects of marine farming on wild fish in Te Ara a Kiwa/Foveaux Strait are likely to be no more than minor
- 221 White and Seven gill sharks that frequent the area will also experience habitat displacement from the marine farm and anchoring areas. Potential adverse effects on sharks include habitat displacement and the attraction of sharks to the farms. Overseas evidence indicates that sharks will remain transient and won't become resident as the farms. Shark attraction and activity will be restricted to summer, autumn and early winter. Effects on sharks will be managed through net

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<sup>37</sup> Wildfish Assessment Report. Table 1.

<sup>38</sup> Wildfish Assessment Report. Executive Summary.



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design than minimises shark incidents, inspecting nets daily, ensure that animal husbandry within the farms is of the highest standard, monitoring sharking activity and developing an action plan and training staff for the removal of live or dead sharks<sup>39</sup>.

222 Marine mammals including NZ Fur Seals, NZ Sea Lions, Bottlenose dolphins, Southern right whales, Humpback whales and Orca could experience adverse effects through displacement, avoidance or entanglement. Effects on marine mammal will be managed through a Marine Mammal Management Plan (MMMP) which will include monitoring measures that are aimed at addressing any knowledge gaps and assessing the effectiveness of the mitigation measures<sup>40</sup>.

223 The potential level of effect on avifauna species was assessed for the following: Entanglement in structures, habitat exclusion, providing roost sites closer to foraging areas, changes to food supply, disturbance, marine litter, vessel / propeller strike, and artificial lighting. For most key species the potential adverse effects were assessed to be Low to Very Low, the exception of a potential Moderate level of effect on Foveaux shag and spotted shag from entanglement and on Whenua Hou diving petrel from attraction to the artificial lighting<sup>41</sup>.

224 Deposition of organic material (principally waste food and fish faeces) from finfish farming onto the seabed will be the ecological effect of most concern. In sites with low water flow, farm wastes fall to the seabed and remain largely near the farm, whereas in higher-flow environments, currents spread wastes further afield. Depositional modelling without resuspension (a conservative estimate of enrichment intensity for this site) predicts high seabed enrichment across 10 to 19 ha of the seabed (up to 1.5% of the proposal area) during periods of peak production at Stage 2. At these times, changes to sediment chemistry are expected, with opportunistic taxa such as nematodes and capitellid worms likely to dominate seabed sediment communities, although other taxa may persist. However, given the strong currents across the proposal area, significant resuspension of farm wastes is likely and actual accumulation of organic material within sediments beneath and near pens is likely to be lower than predicted by the

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<sup>39</sup> Shark Assessment Report. NIWA. Executive Summary.

<sup>40</sup> Marine Mammal Assessment Report. Cawthron Institute. Executive Summary.

<sup>41</sup> Coastal and Marine Avifauna Assessment. Blue Gren Ecology. Executive Summary.

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depositional model without resuspension, creating a more diffuse but weaker footprint. When resuspension is taken into account, moderate enrichment (where increased infauna abundance and reduced infaunal diversity is expected) is predicted to remain within the proposal area boundaries over predominantly sandy seabed.

225 Ngāi Tahu Seafood propose a staged approach to development that will allow for monitoring and understanding of the response of the proposal area to deposition before development is increased. Effects-based management involves monitoring of potential effects of concern and adapting farming practices to ensure unacceptable effects do not eventuate as the activity progresses. Cawthron recommends that an effects-based management strategy is adopted as a mechanism for reducing and mitigating potential effects of the proposal to ensure the farm is managed within a level of allowable effect. Adaptive management actions to limit the effect of seabed deposition, should they emerge during active farming operations, could include site fallowing and rotation (as is planned under the single year class farming regime proposed by Ngāi Tahu Seafood), and reduction of planned farming intensity. Given the scale of the proposed operation, and uncertainty around potential far-field effects, an adaptive approach will also need to be taken with respect to monitoring design and assessment of environmental impacts. Monitoring recommendations are under development<sup>42</sup>.

226 The water column assessment found that the main potential effects of the HAP would be associated with dissolved oxygen (DO), primarily associated with fish respiration, nutrient loading associated with the addition of feed and production of fish wastes, and related effects on phytoplankton species abundance and composition and submerged artificial lighting, particularly effects associated with plankton responses<sup>43</sup>.

227 The water column assessment finds that farm will be in deep and well-flushed waters and therefore oxygen depletion will be very localised. At full production, there is potential for measurable reductions in DO near the farm. Site surveys and

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<sup>42</sup> Benthic Assessment Report. Cawthron Institute.

<sup>43</sup> Water Column Assessment. SLR.

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modelling suggest DO effects would be limited to the farmed fish and unlikely to extend to the wider environment.

- 228 The water column assessment finds that the effect of fish wastes on nutrient concentrations will be greatest near the farm and decrease with distance as a result of mixing and dilution. Modelling indicates the potential for a 38% increase in mean TN concentrations covering an area of up to 10,000 ha at full production. A mean increase of 57% is possible for short periods of maximum feed input at full development.
- 229 Modelling indicates the potential for total nitrogen (TN) concentrations to increase above background levels by 1–25 mg/m<sup>3</sup>, covering an area of up to **[XX] ha** at full production, with the highest concentrations occurring close to the pens and decreasing with distance.
- 230 The attraction of organisms to artificial lighting is likely to occur; however, the effect will be limited by the small spatial footprint of the lighting and the inability of small organisms to maintain their position within high currents. There is likely to be an effect of artificial lights on wild fish over and beyond those associated with the structures and presence of feed. Visibility of prey (baitfish) during night-time will increase along with likelihood of predation by adult salmon as well as fish and marine mammals adjacent to the pens. These effects are likely to be small and highly localised due to the light being mainly confined within the pens, and because the salmon are fed development<sup>44</sup>.
- 231 The HAP will not have any direct effects on the biotic attributes of the coastal edge or terrestrial natural character of Rakiura, due to the physical separation of the HAP from the island (minimum of 2km off set) and the limited physical effects of the HAP within the coastal waters site and catchment.
- 232 While abiotic natural character effects are not purely the amalgamation of the ecological effects and responses to the HAP, the effects on biotic attributes are relatively limited and the adaptive monitoring and management of the effects of the HAP on the ecological communities of Te Ara a Kiwa and the site catchment

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Benthic Assessment Report. Cawthron Institute.

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provide options for the ongoing avoidance or mitigation of any potential adverse effects that might not yet be certain.

- 233 For these reasons, the potential adverse effects on the **high** biotic natural character values of Te Ara a Kiwa are assessed to be **low**.

### *Abiotic Attributes*

- 234 The presence of the moored and static marine farms, feed barges, buoys, feed hoses and associated mooring structures and lines will lead to the displacement of water and seafloor material. The initial effects of the displacements will be during the construction of the marine farms, with sea floor sediments, in particular re-establishing around the disturbed areas.
- 235 The presence of the nets, mooring structures and lines and the floating barges and feed lines will be unlikely to have ongoing effects on the abiotic attributes of natural character as they will be well maintained and kept in clean and tidy condition. Any marine waste generated by the HAP will be closely monitored with any stray buoys, lines, nets or other materials will be collected to ensure that there is no ongoing navigational safety hazards or wastes generated by the structures of the HAP.
- 236 The HAP pen and mooring system is designed to withstand the open ocean environment, thereby reducing the risk of any structural failures or marine waste in the environment.
- 237 The water column assessment finds that due to the well flushed waters of Te Ara a Kiwa any effects of the HAP on DO and the effects of fish wastes on nutrient concentration will be quickly dispersed with effects limited to within the marine farm site or within a small surrounding area. The benefit of an open ocean site is the strong tidal currents which will disperse concentrations of DO and nutrients quickly.
- 238 The presence of moored or drifting cargo vessels in the charted mooring areas within and close to the site adds a sense of commercial use and utility to the area. Cargo vessels can stay for a short period or up to several days while waiting to unload at Bluff Harbour. The relocation of one of the charted anchorages away

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from the HAP will be a relocation of an existing activity to a nearby location. The HAP will add to the commercial use of the waters in a relatively sheltered and therefore favoured location of the lee of the northwest coastal edge of Rakiura.

239 With the exceptions of Big Glory Bay, Half Moon Bay (Oban) and some parts of Whaka a Te Wera / Paterson Inlet, the location of the HAP on the Northwestern shoreline of Rakiura is one of the most intensively commercially used stretches of water around the island, despite its open ocean environment. The presence of the HAP will be consistent with the presence of other ongoing commercial activities and structures on the busier northern coastal waters of Rakiura.

240 The navigational safety lighting<sup>45</sup> will be visible from areas close to the HAP and from some areas on the coastal edge of Northwest Rakiura, however other than when visible as co-ordinated flashing lights, the lights would be difficult to distinguish from other safety lighting on commercial and recreational vessels.

241 For these reasons, the potential adverse effects on the **high** abiotic natural character values of Te Ara a Kiwa are assessed to be **low**.

### *Experiential Attributes*

242 As the Recreational and Tourism Assessment finds that the site and the surrounding area are not a destination for recreational fishers, the presence of the HAP and its floating vessels and structures are unlikely to disturb recreational fishing to any noticeable extent. It is possible that some recreational fishing vessels may be attracted to the HAP, particularly if wild fish are also attracted to the additional activity and potential food sources, however any increase in fishing activity in the area is likely to be minimal.

243 The HAP site and activity will be consistent with and will consolidate the wetfish species, Oyster, Blue Cod, Crayfish, Paua and Kina quota management area activities within Te Ara a Kiwa, including the presence and passage of commercial vessels through or past the site.

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<sup>45</sup> See the effects of the navigational safety lighting below.

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- 244 The HAP site is unlikely to be visible from the Bluff – Oban passenger ferry and will therefore will not affect the natural character experience of passengers. The presence of additional commercial vessels passing between the HAP site and Bluff port will add to the traffic in the area, however will be consistent with the existing vessels and use of Te Ara a Kiwa as a service and passage area for the port. The increase in the commercial vessels will also help to express the abundant and productive nature of the waters of Te Ara a Kiwa as a traditional and contemporary fishing ground for both wild and farmed kaimoana.
- 245 The Northwestern Circuit tramping track is on the northern coastal edge of Rakiura, with huts at Port William, Big Bungaree Beach, Murray Beach and Christmas Village, will see some increase in the structures and activity at the HAP site. It is currently a common site to see cargo vessels at the charted anchorages or drifting within or close to the HAP site, so the presence and passage of cargo vessels is part of the existing natural character experience for this part of the Northwest circuit. The cargo vessels are much larger and more visible than the marine farms and feed barges for the HAP<sup>46</sup>.
- 246 From the side track to Hananui/Mount Anglem from Christmas Village views down into the HAP site will be available, under clear viewing conditions. Views over the site and back towards Bluff are available from parts of the track and from the summit of Hananui. Currently views of cargo vessels at the charted anchorages are a common site from these locations. Viewing distances from this part of the track are likely to be at 8km or greater. The visual effects of the HAP from these land-based areas are assessed in the Visual Assessment section below.
- 247 The ability to experience the natural character of the site and the surrounding area is restricted mainly to the Cargo, Fishing and Passenger vessels that are working in or pass through the Strait. Smaller numbers of pleasure vessels may experience the area, again passing through or seeking shelter from the predominant wind and waves from the west. Users of the Northwest Circuit tramping track and huts may have views from a distance (minimum viewing distance of 3km) from beaches, open parts of the track and the elevated Hananui side track in the context of the three charted anchorages on the coastline.

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<sup>46</sup> See the Assessment of Visual Effects section below.

248 For these reasons, the potential adverse effects on the **high** experiential natural character values of Te Ara a Kiwa are assessed to be **low**.

### *Natural Character Effects Summary*

#### **The Site Catchment**

249 The site catchment is a subset of the overall landscape context of Te Ara a Kiwa and includes the waters and the closest coastal edge and landscape backdrop on the northern coastline of Rakiura. Elevated inshore and terrestrial natural character values are on the coastal edge.

250 Based on the description, analysis and synthesis of the biotic, abiotic and experiential attributes above, overall the natural character values of the site catchment are assessed to be **High**.

251 Based on the description and assessment of the HAP on the natural character values of the site catchment, the summary of effects is:

- i. The potential adverse effects on the **high** biotic natural character values of the site catchment are assessed to be **low-moderate**.
- ii. The potential adverse effects on the **high** abiotic natural character values of the site catchment are assessed to be **low-moderate**.
- iii. The potential adverse effects on the **high** experiential natural character values of the site catchment are assessed to be **low-moderate**.
- iv. Overall the effect of the HAP on the **high** natural character values of the site catchment are assessed to be **low-moderate**.

#### **Te Ara a Kiwa**

252 As described above Te Ara a Kiwa is abundant in marine fish, mammals and avifauna. These species are mobile and move through the area, rather than dwell in one location. The seafloor habitat types are limited and likely disturbed regularly by oyster dredging and other activities, hence the largely sandy seafloor conditions and limited biogenic habitat. The water column attributes are healthy and benefit from the strong currents through the Strait. The presence of cargo,

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fishing, passenger and recreational vessels, particularly around Bluff, Oban, Big Glory Bay and passing through the Strait offers a sense of commercial and recreational activity in contrast to the remoteness across most of Rakiura.

253 The natural environment of Te Ara a Kiwa is healthy and abundant with wildlife and kaimoana. The area is also used extensively for commercial fishing, cargo and passenger vessel passage. There is an interesting tension between the relative remoteness and apparent natural health of Te Ara a Kiwa and the use of the area for commercial fisheries, cargo and passenger passage.

254 Based on the description and assessment of the HAP on the natural character values of Te Ara a Kiwa, the summary of effects is:

- i. The potential adverse effects on the **high** biotic natural character values of Te Ara a Kiwa are assessed to be **low**.
- ii. The potential adverse effects on the **high** abiotic natural character values of Te Ara a Kiwa are assessed to be **low**.
- iii. The potential adverse effects on the **high** experiential natural character values of Te Ara a Kiwa are assessed to be **low**.
- iv. Overall the effect of the HAP on the **high** natural character values of Te Ara a Kiwa are assessed to be **low**.

### The HAP Site

255 The site itself is a 1,285 ha area of open water, water column and sea floor within the CMA between Rakiura and the Bluff coastline, as illustrated on **Figures 1 - 6** in the **Graphic Attachments** and **Figures 1 and 2**, above. The site itself is a subset of the open coastal waters of Te Ara a Kiwa and it is not differentiated from the rest of the coastal waters in any way, other than that it has been located, shaped and sized to avoid higher biogenic habitat values on the seafloor and to be a sufficient distance from the coast to avoid direct effects on the island. The same attributes described above in relation to Te Ara a Kiwa are also present at the HAP site, albeit that the seafloor biogenic habitat has been largely avoided and the area is favoured for cargo vessel anchorage and passage. Any mobile natural character attributes described above, such as marine mammals, wild fish, avifauna or tidal



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waters will move through the site as part of the broader habitat area of Te Ara a Kiwa.

256 Based on the description, analysis and synthesis of the biotic, abiotic and experiential attributes above, overall the natural character values of the HAP site are assessed to be **High**.

257 Based on the description and assessment of the HAP on the natural character values of the HAP site, the summary of effects is:

- i. The potential adverse effects on the **high** biotic natural character values of the HAP site are assessed to be **low-moderate**.
- ii. The potential adverse effects on the **high** abiotic natural character values of the HAP site are assessed to be **low-moderate**.
- iii. The potential adverse effects on the **high** experiential natural character values of the HAP site are assessed to be **low-moderate**.
- iv. Overall the effect of the HAP on the **high** natural character values of the HAP site are assessed to be **low-moderate**.

## Landscape Effects

### Te Ara a Kiwa

258 The physical aspects and values of the Te Ara a Kiwa and of the site are described above.

#### *Effects on Physical aspects*

259 The broad physical aspects that relate to Te Ara a Kiwa described above include the broad enclosing landforms of Rakiura and the Murihiku southern coastlines and the Ruapuke and Titī Islands, with associated geomorphic and land cover values. These broad physical aspects of the enclosing landscapes of Te Ara a Kiwa will not be impacted by the HAP. The experience of the physical landscape from the closest land-based locations on the Northwest coastline (and tramping track) on Rakiura will similarly not be physically affected by the HAP.

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- 260 The nature of the HAP being largely underwater, with some limited floating elements and structures within and on the surface of the water, is recessed into the landscape and seascape, with much of the physical aspects not immediately obvious. The main physical changes to the landscape and seascape are on the surface of the water, under the water and on the seafloor. The physical aspects of the proposal are described and illustrated above, in **Figures 3 to 13**.
- 261 The seafloor below the HAP site will be disturbed though the placement of the anchor blocks and moorings on the sea floor. As illustrated in **Figures 9 and 10** there will be a total of 26 anchor blocks for each block of nets (52 anchor blocks for each farm and up to 208 anchor blocks for the completed HAP). There will be 8 mooring points and structures for each of the feed barges (up to 32 anchor moorings for the 4 feed barges). The anchor blocks and barge moorings will disturb the seafloor and displace the sand and sediment surface. The locations of the farms have been surveyed, and the farms have been placed to avoid areas of significant biogenic habitat as much as possible.
- 262 The seafloor in the HAP location is routinely subject to oyster dredging and anchoring disturbance, hence the lower value sand and sediment substrate conditions under the site. The sand and sediment will re-establish around the anchor blocks and the mooring structures to a similar sand and sediment seafloor condition.
- 263 The physical presence of the structures and vessels within the HAP site will displace the water and will more generally occupy an area which is currently pen and without physical disruption. The network of mooring blocks and structures, lines, buoys, barges and nets are required to ensure that the marine farms are safely moored and do not pose a navigational threat in the area.
- 264 The physical effects on the habitat values, the water column and the seafloor environment are assessed in further detail in relation to natural character attributes above.
- 265 The physical effects of the HAP on the landscape character of Te Ara a Kiwa are limited to a small area within the project site area and within a small buffer as described in the natural character assessment above.

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- 266 For these reasons, the potential adverse effects on the **high** physical landscape aspects of Te Ara a Kiwa are assessed to be **low**

### *Effects on Perceptual aspects*

- 267 The HAP is located in an area of the waters of Te Ara a Kiwa that is balanced by being relatively natural and isolated but also part of a broader landscape and seascape that is close to and provides passage routes and anchorage location for the Bluff port.

- 268 The perceptual experience of the broad landscape patterns of Te Ara a Kiwa, including the long-distance views and experience from Rakiura and Te Ara a Kiwa back towards Motupōhue/Bluff, the southern coast of Murihiku, Ruapuke Island and the Tītī Islands will remain the dominant scale and experience of the strait. The HAP will be a small feature within that overall landscape composition and will only be experienced from localised parts of the strait, close to the Northwestern coastline of Rakiura/. The rest of the landscape pattern and experience will be largely unaffected. The relationship and scale of the HAP in relation to the surrounding landscape and seascape is illustrated in the visual simulation from the drone in **Figure 43** in the **Graphic Attachments**.

- 269 The presence of the HAP in an area where there are three charted anchorages will add to the commercial vessel traffic and use of the area. The protected waters will remain an attractive anchorage location for cargo vessels and commercial and recreational vessels when shelter from the western and southerly weather patterns are required. The charted HAP and navigational safety lighting will benefit mariners who are looking for reference features and lights to navigate the Northwestern Rakiura coastline.

- 270 For local commercial and recreation fishers the HAP will become a known feature and reference point along the coastline. Local residents at Oban will be aware of the presence of the HAP, however the majority of the maintenance and service vessel traffic will be to and from Bluff.

- 271 As the HAP will not generally be visible from the Bluff – Oban passenger ferry route the project itself will not have any effect on the perceptual aspects of the ferry journey. Passengers will be subject to more regular commercial vessels at

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the Bluff port and the entrance to the harbour where maintenance and service vessels will be based and will passage to and from the site.

- 272 Passing aircraft will have an oblique view over the HAP if passing close to the site. Marine farms create a mottled pattern on the surface of the water, which can be read more distinctly if viewed from a close distance or as a pattern at a distance. The regular pattern of the farms and the placement of the feed barges will be more regular than the relatively haphazard locations of the cargo vessels in the charted anchorages.
- 273 For visitors and trampers on the North West Circuit, the presence of the HAP in the context of the three charted anchorages and the regular cargo vessels in the area are distant features, but are close enough to be part of the experience on the track between Potirepo / Port William and Saddle Point. The HAP will only potentially be visible from the open beaches and elevated or open sections of the track. The feed barges will be the largest and most apparent features within the HAP, with the nets, buoys and floating feed tubes not generally visible beyond 2-3 km.
- 274 The visual effects of the HAP on the Northwestern circuit are assessed below.
- 275 For these reasons, the potential adverse effects on the **high** perceptual landscape aspects of Te Ara a Kiwa are assessed to be **low**

### *Effects on Associative aspects*

- 276 The Associative aspects described above include the creation and whakapapa stories described above. Ngāi Tahu ki Murihiku have strong and ongoing relationships with Te Ara a Kiwa and the extensive relationship with kaitiakitanga and use of the abundant kaimoana resource in the strait in an historic and contemporary sense. The development and operation of a salmon farm at the HAP site will continue that relationship and will provide for Ngāi Tahu fishers, as the currently quota management system does.
- 277 While the creation and whakapapa stories of Te Ara a Kiwa are well known in the area, those associations are with the broad landscape and seascape area – including the southern coastline of Te Waipounamu / Murihuku, Rakiura,

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Ruapuke and Tītī Islands and Te Ara a Kiwa itself. The HAP site is a relatively small and featureless area of landscape and seascape within that overall landscape composition. No known or named features are within the HAP site.

278 The abundant wild fish stocks of Te Ara a Kiwa and the surrounding waters are well known and understood at Bluff and Oban and throughout Aotearoa. Big Glory Bay is a recognised known marine farming area. The HAP will reinforce the commercial fishing and marine farming values that are associated with the area.

279 As the HAP site and area is not currently a known recreational fishing or tourism location, the presence of a marine farm is unlikely to change any contemporary associations with the area. Some visitors may be attracted to the salmon farm out of curiosity or for potential recreational fishing.

280 The associative landscape aspects above are summarised from the Site Description and Cultural landscape values described in more detail above.

281 For these reasons, the potential adverse effects on the **high** perceptual landscape aspects of Te Ara a Kiwa are assessed to be **low**.

### Landscape Effects – Within the HAP site

282 The physical, perceptual and associative aspects of the site of the HAP are a small sub-set of the broader aspects of the landscape and seascape of Te Ara a Kiwa, as described above. Te Ara a Kiwa provides the landscape and seascape context for the HAP site. There is currently no differentiation between the landscape and seascape attributes of the site and the surrounding site catchment and the waters of Te Ara a Kiwa.

### Summary of Landscape Effects

283 Based on the description and assessment of the HAP on the landscape character aspects and values of the **site catchment**, the summary of effects is:

- i. The potential adverse effects on the physical landscape aspects of site catchment are assessed to be **low-moderate**.
- ii. The potential adverse effects on the perceptual landscape aspects of the site catchment are assessed to be **low-moderate**.

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- iii. The potential adverse effects on the associative landscape aspects of the site catchment are assessed to be **low**.
- iv. The potential adverse effects on the overall landscape aspects of the site catchment are assessed to be **low-moderate**.

284 Based on the description and assessment of the HAP on the landscape character aspects and values of **Te Ara a Kiwa**, the summary of effects is:

- i. The potential adverse effects on the physical landscape aspects of Te Ara a Kiwa are assessed to be **very low**.
- ii. The potential adverse effects on the perceptual landscape aspects of Te Ara a Kiwa are assessed to be **low**.
- iii. The potential adverse effects on the associative landscape aspects of Te Ara a Kiwa site are assessed to be **very low**.
- iv. The potential adverse effects on the overall landscape aspects of Te Ara a Kiwa are assessed to be **low**.

285 Based on the description and assessment of the HAP on the landscape character aspects and values of the **HAP site**, the summary of effects is:

- i. The potential adverse effects on the physical landscape aspects of the HAP site are assessed to be **moderate**.
- ii. The potential adverse effects on the perceptual landscape aspects of the HAP site are assessed to be **moderate**.
- iii. The potential adverse effects on the associative landscape aspects of the HAP site are assessed to be **low-moderate**.
- iv. The potential adverse effects on the overall landscape aspects of the HAP site are assessed to be **moderate**.

## Visual Amenity

286 The visual amenity values of the site and the receiving environment are those values that the local viewing audience(s) appreciate as part of the view from or to

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the project site and it's surrounding landscape context. Based on the description of the landscape and context above and the potential users and visitors to the site and the surrounding context, the visual amenity values of the area are:

- i. The openness and composition of views to and from Rakiura, particularly the distinctive ridgeline of the Anglem massif and including the waters of Te Ara a Kiwa as a foreground or midground of those views;
- ii. The openness and composition of views to and from the south coast of Te Waipounamu, particularly the distinctive landform of Motupōhue (Bluff) and including the waters of Te Ara a Kiwa as a foreground or midground of those views; and
- iii. The natural seascape of the relevant catchment area of Te Ara a Kiwa.

287 The main visible elements of the HAP are the floating blocks of pens, the floating feed hoses, the feed barges, the navigational safety buoys and lights and the visiting boats for maintenance and harvesting, as described above.

288 There are many variables that can influence the visibility and potential visual effects of a marine farm, including;

- i. Weather and sea conditions – marine farms are generally more visible in calm, smooth conditions and in clear light, reflections on smooth water can appear to increase the size of the floating elements. In contrast, buoys and other floating elements can be temporarily lost from view in swell or choppy conditions. Sea spray and coastal haze, as generated by wind conditions also affects visibility, particularly over distance (see below). Cloudy conditions can also create lower light conditions, making floating components on the water surface more difficult to see.
- ii. The colour of the components of the marine farm - dark elements will generally be less prominent against a grey sea than orange or reflective equipment. Over time the accumulation of guano on buoys, nets and the barges, in particular, will give them a mottled visual appearance, when viewed from a distance, making them less visually obvious.

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Orange buoys may be required by Maritime NZ for safety and navigation reasons. Cardinal buoys, special marks and compensation buoys, as described above are required to mark the location of the HAP site and the four marine farms.

- iii. The size, density and buoyancy of surface structures - the density of the structures will influence the appearance of the farm, particularly when seen from distant viewpoints. When farms, pens and buoys visually overlap they are likely to be more visible than as discrete features.
- iv. The angle of view and elevation of viewpoint - visibility of the farms generally increases with elevation and is lowest when viewed from sea level.
- v. Backdrop - viewing marine farm structures against a land backdrop can reduce their level of visibility rather than viewing them silhouetted against the open sea. Close to the shoreline marine farms can visually integrate with the line between the land and the sea. The open water nature of this marine farm ensures that it will generally be viewed on the surface of the water from Rakiura and against the backdrop of Rakiura when viewed from Te Ara a Kiwa.
- vi. Distance of the viewer from the visible structures of the marine farm.

### *Visibility over distance*

289 Due to the curvature of the earth and the surface of the sea, the surface of the water is potentially visible for approximately 5 km when viewed from the same level as the sea, or at a normal standing height of approximately 155cm above the surface. From elevated locations, more of the surface of the water is visible, however over increasing distance, less of the sea and detail of what is on the surface can be seen due to increasing atmospheric coastal haze. The main public land-based locations where the surface of the HAP site would be visible, would include the northern coastline, and beaches of Rakiura from Big Bungaree Beach to Christmas Village and from Hananui and Litte Mt Anglem. Distant views from Motupōhue/Bluff are possible under ideal viewing conditions.



### *Users and visitors to the site*

- 290 The assessment of effects on visual amenity considers views from various locations and user groups and how and to what level these changes may affect visual amenity. Change itself is not an effect, but the implications on the landscape, including visual amenity values that is the effect. It is the implications of change for a landscape's values that is the effect.
- 291 The magnitude of any effects is dependent on several factors, including the sensitivity of the viewers, and their expectations of landscape values. Other influencing factors include the visibility, familiarity, scale, duration, and distance of view.
- 292 The users of the site can be characterised into two broad groups, those from the sea and those from the land. Each user group, as outlined below, will have different views and experiences and different expectations. These do not capture all users, as each group/individual movements are varied, however they are intended to indicate the majority of users. Each of the user groups' and their viewing catchments are outlined below and represented in the viewpoint photographs and visual simulations.

### *Trampers and hunters*

- 293 Trampers and hunters traverse the northern coast of Rakiura. The Northwest Circuit is the track providing access along the northern edge of Rakiura and, due to the topography and dense coastal forest, typically offers glimpsed views seaward through gaps in vegetation. The clearest views are offered when the track exits the bush and travels along beaches, including Sawyers Beach, Big Bungaree Beach and Murray Beach. Viewers are trampers and hunters who travel along the coast in a sequential manner and are transient.
- 294 Users tend to spend longer periods, trampers typically overnight and hunters multiple days, at the huts and campsites along the track. They are also situated in clearings along the coastal edge, which enables extended periods of views seaward. Huts in the site catchment area include Bungaree Hut, Murray Hunters Hut and Campsite, Christmas Village Hunters Hut and Christmas Village Hut. Views are not available from the Port William Hut, the Yankee River Hut or beyond.

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- 295 The open beach views experienced by trampers and hunters are represented in photographs from Viewpoints 1 and 2. These viewpoints are representative of the views available to trampers on the Northwest Circuit at the beach crossings.
- 296 Elevated views are available to trampers who take a side trip up to the summit of Hananui/Mt Anglem, at approximately 8km away. Hunters may also access the high points as they travel off track.

### *Public travelling to/from Rakiura*

- 297 The majority of public travelling to and from Rakiura travel between Waihōpai/Invercargill or Motupōhue/Bluff to Oban. Travel is typically either across Te Ara a Kiwa on the Stewart Island Ferry, or via air on Stewart Island Flights.
- 298 Both aerial and marine-based travel, typically takes the most direct route, between Bluff and Oban. Both pathways are to the east of the site and are at distance, both the ferry and aeroplane are approximately 10km at the closest point, with the plane having elevated views typically ranging between 500-1500ft.

### *Commercial and recreational marine users*

- 299 Marine traffic in the vicinity of the site includes commercial fishing, cargo and charter vessels and recreational vessels. Given the proximity to urban populations, this northern area of Rakiura and Te Ara a Kiwa activity is more common and frequent than other, more remote parts of the coast.
- 300 Commercial fishing activity is common along the northern coast and includes dredging for oysters. These activities are often transient and move through the environment, rather than being from static viewpoints.
- 301 Charter and private vessels may also be used to provide land access to groups such as hunter/tramper drop-offs/pick-ups. They may also include scenic boat trips. These groups may traverse in and around the site.
- 302 Given the open expanse of the marine environment and the broad navigational opportunities, viewpoints from the marine environment are more varied. This allows for views of the site that landward or seaward ie Rakiura forms the background and/or views are out to the expanse of Te Ara a Kiwa.

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303 Given the variability in viewing distances, other factors such as sea state, weather and time of day have a strong influence on potential visibility.

304 Large commercial vessels often frequent the marine area around the site. This includes cruise ships typically travelling through Te Ara a Kiwa to/from anchorages. Large commercial vessels also use the anchorages of the north coast while awaiting berth at South Port, Bluff.

### *Public from Te Waipounamu/South Island*

305 Views from the south coast of Te Waipounamu are distant (approximately a minimum of 25km), with weather conditions having a large role in the visibility across Te Ara a Kiwa. Elevated views from the coast are limited, with Motupōhue/Bluff Hill, at 265m, the closest elevated vantage point.

### *Titī/Muttonbird Island Users*

306 Access to the Titī Islands is restricted to those who can access islands and when harvest can occur (April 1 – May 31). There are numerous islands around Rakiura's coast that are collectively known as the Titī Islands. Those along the northern coast include Pikomamaku-iti (North Island), Pikomamaku-nui (Women's Island), Motunui (Edwards Island), Pukeokaoka (Jacky Lee Island) and Haumaiteraki (Bunker Islets). Accommodation on the islands tends to be in shelter areas of the forested islands.

307 At its closest point, the site is approximately 10km to the northwest of the closest of the Titī Islands. During the harvest season, travel to and from the Islands increases in volume with vessels and helicopters ferrying people, supplies and harvest to Rakiura or Te Waipounamu.

308 The location and the nature of the HAP site means that it would normally only be people that are seeking out the site to undertake maintenance or harvesting work or to visit the site to go fishing, would get within 1km to 2km of the site boundaries. Site photographs and visual simulations have been prepared from within 1km to 2km of the CMFZ boundary. These photographs are presented from **Viewpoints 5, 6, 7, 9 and 10** at a range of viewing angles and backdrops. See the Viewpoint Locations on **Figure 19** in the **Graphic Attachments**.

## *Viewpoints and Visual Amenity Effects*

### *Viewpoint 1 – Big Bungaree Bay looking northeast toward site*

- 309 The view from Big Bungaree Bay forms part of the Northwest Circuit Track, with Bungaree Hut located on the northern end of the bay. The hut is within a day's walk from the track start at Halfmoon Bay. The bay is enclosed by bush clad rocky headlands, 1.25km apart, with rocky outcrops features on each end of the bay. From the open golden sand beach views are open toward Te Ara a Kiwa and orientated to the east, with the Titi Islands visible in the distance on the eastern extent. Depending on weather conditions, views of Motupōhue/Bluff Hill, Flat Hill (and the wind farm), Three Sisters as well as other high points along the southern coast of Te Waipounamu are visible, albeit distant.
- 310 The orientation of the bay results in the site being partially obscured by the northern headland, with the southern end of the site visible. The closest point is 3.3km from the viewpoint location. At this distance, the low-profile pens appear as dark shapes in the distance. Given the pen's profile and their recessive colour, the visibility of these is very dependent on viewing conditions. The feed barges are larger visible features of the farms, and as result create a focal point that marks the farm. The viewpoint also shows a large vessel moored at an anchorage, to the east and further offshore than farm but given their scale are clear elements on the strait.
- 311 Given the proximity to the urban settlement of Oban and the pathways between the Te Waipounamu and Rakiura, views of marine vessels, albeit transient, are common and not unexpected. Like the farm, the vessel movements are typically distant. The immediate environment of the dense enveloping bush, form of the bay, and hut are the immediate focus of those in the area. The difference between land and broad strait creates a barrier to interaction between both which leads to the views and activities in the strait observed rather than being directly connected to the immediate land-based environment.
- 312 Given the distance between the viewpoint and the farm, the visibility of the elements of the farm is minimal, even in good viewing conditions. The seascape from the viewpoint is perceived as a broad contained composition, with changing

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elements and is experienced in an observational manner rather than immersive. The effects on the visual amenity values are assessed to be **low**.

### *Viewpoint 2 – Murray Beach looking northeast toward site*

- 313 Murray Beach is in the bay immediately north of Big Bungaree Beach and is long and more open offering more expansive views. The rocky bush clad headlands of Garden Point and Gull Rock Point provide the extents. Views are across Te Ara a Kiwa to Motupōhue/Bluff Hill and other high points. The Tītī Islands are distant but visible beyond Gull Rock Point.
- 314 The broad views of the strait allow the views to include the extents of the farm. The closest element is 3.8km from the viewpoint and as a result the smaller elements of the farms, including the pens are difficult to see. Feed barges are clearer but are also distant and become a layer of elements within the seascape.
- 315 The viewpoint image shows two large vessels that are moored at anchorages while waiting to enter South Port. The vessel in the immediate foreground has been removed to the photosimulation, as it is located within the farm site. It does however provide an indication of the existing marine environment and the scale, in comparison with the proposed development. The vessel anchored to the east (also seen from the Big Bungaree Beach viewpoint), is more distant than the southern end of the farm, and in the simulation is shown behind the farm elements.
- 316 The broad sandy beach, expansive views and distance from the viewpoint mean that elements of the farm are a layer within the broader views across Te Ara a Kiwa including the distant Tītī Islands and high points of the southern coast of Te Waipounamu. How distant or close these elements appear is a factor of environmental factors. The seascape, and the elements within it, are removed from the land-based environment of the viewpoint meaning views are viewed with a degree of detachment. The effects on the visual amenity values are assessed to be **low**.

### *Viewpoint 3 – Looking west to site from Te Ara a Kiwa*

- 317 Viewpoint 3 is located within Te Ara a Kiwa, approximately 1.9km to the east of the closest farm. The viewpoint captures Hananui/Mt Anglem and the northern

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corner of Rakiura, while looking west to the open strait. Views of the southwest coast of Te Waipounamu, including Fiordland, are very distant and only visible on very clear viewing days. While not visible in the viewpoint image, the south coast, including Motupōhue/Bluff Hill, are evident to the north of the viewpoint, albeit, given the distance, not as clear or dominant as Rakiura.

318 Given the viewing distance and low viewing elevation, the finer and more recessive elements are visible but are visually absorbed by the surrounding environment, either within the wider expansive views of the open strait or against the dark backdrop of Rakiura.

319 Like other viewpoints, the white colour barges are the most visible element and tend to attract the viewer's gaze. These are the most prominent components of the farm. Views from this location are offered to other marine-based users, whether commercial or recreational. Other marine vessels in this environment are not unexpected. The effects on the visual amenity values are assessed to be **low**.

### *Viewpoint 4 - Looking east to site from Te Ara a Kiwa*

320 Looking from the west of the farm, the viewpoint looks across the site along the coastline, with the Rakiura coast becoming more distant, and the Tītī Islands remain a visual anchor, even though they are distant.

321 At this distance and low viewing elevation, the more recessive elements of the farms are visible, but visually absorbed into the broader seascape, either blending into the strait or against the dark bush-clad Rakiura.

322 The barges form the largest and most obvious visible elements of the farm. Like viewpoint 3, the viewing location is offered to other marine-based users. The presence of other vessels is not unexpected. The effects on the visual amenity values are assessed to be **low**.

### *Viewpoints over distance – Viewpoint/s 5-10*

323 The site photographs and photosimulations from Viewpoints 5-10 illustrate the view over increasing distance of 500m, 1km, 2km, 3km, 4km and 6km respectively. Rakiura is a dominant backdrop with silhouetted ridge line which includes Hananui/Mt Anglem, Little Mt Anglem and The Paps are a focal feature. The dark

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bush-clad backdrop tends to absorb some of the foreground elements, making them more difficult to differentiate.

- 324 The dominance of the backdrop of Rakiura increases as viewpoints become more distant from the farm site, while the prominence of the farm and its components decreases. These viewpoints are accessible to marine-based users. The viewpoints are located off the northern end of the farm, increasingly moving out into Te Ara a Kiwa toward Motupōhue/Bluff.
- 325 **Viewpoint 5** is 500m from the closest farm infrastructure and is within the site boundary. The foreground structures are clear and prominent against the backdrop of Rakiura. The pen structures are evident, with the elements of the pen structures, such as netting, rails etc, apparent. Likewise, the Barges and feed infrastructure are prominent. The effects on the visual amenity values are assessed to be **Moderate**.
- 326 **Viewpoint 6** is located 1km from the nearest structure. As elements the pens and barges are clear and distinct. The smaller elements of the pens are not as distinct. The farm is prominent within the landscape. From this viewpoint it is clear that all elements form part of a salmon farm. The effects on the visual amenity values are assessed to be **Moderate - Low**.
- 327 **Viewpoint 7** is located 2km from the nearest farm infrastructure. At this distance, the pens are less distinct and become linear forms, rather than obvious pen structures. The barges are still evident and draw the viewer's eye. At this distance, Rakiura becomes dominant. The effects on the visual amenity values are assessed to be **Low**.
- 328 **Viewpoints 8 and 9** are 3km and 4km, respectively, from the closest infrastructure. At these distances, the pen structures become difficult to discern, with the more visible barges helping point to them. The barges are visible but are increasingly smaller elements in a wider panorama and backdrop of Rakiura. The effects on the visual amenity values are assessed to be **Low**.
- 329 **Viewpoint 10** is 6km from the farm. At this distance, and with Rakiura as a backdrop, the pens are difficult to see, with the barges barely visible. The visibility

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of the elements will be lost along the horizon and into the dark background of the island. The effects on the visual amenity values are assessed to be **Very Low**.

### *Viewpoints from the sea at Christmas Village Bay – Viewpoint – 11 and 12*

- 330 **Viewpoints 11 and 12** (with photosimulation) are taken from a vessel within or near Christmas Village Bay. They are reflective of a boat being moored, and while not 'on-land', they are generally representative of views from the Christmas Village Hut and Christmas Village Hunters Hut.
- 331 Viewpoint 11 is off the coast of the Christmas Village Hut, while Viewpoint 12 is located to the south within the named Christmas Village Bay, off the coast of the Christmas Village Hunters Hut. Both views are east toward the strait. Distant views of Motupōhue/Bluff Hill, Ruapuke Island and the Titi Islands are dependent on viewing conditions. The Rakiura coast extends to the southeast.
- 332 The closest point of the farm is 4.4km from Viewpoint 11 and 4.0km from Viewpoint 12. Both views are toward the open Te Ara a Kiwa, and given the viewing distance, all of the feed barges are visible from these viewpoints, although they are distant. Although not evident, due to the location of the viewpoint images, the on-land views from Christmas Village Bay are more enclosed than those from the Bay to the north, which houses the DoC tramping hut, Christmas Village Hut.
- 333 From both viewpoints, the pens and barges appear distant, with the elements appearing to be on the horizon. Viewing clarity is dependent on the environmental conditions. Like the Viewpoints 1 and 2, there is a separation between immersive viewing when at sea vs an observation of the marine environment from the land. Given this, the effects on the visual amenity values for both viewpoints are assessed to be **Very low**.

### *Viewpoint from the sea at Murray Beach Bay – Viewpoint – 13*

- 334 Views from within the bay of Murray Beach are representative of smaller vessels that may moor for periods. Given the proximity to the land-based viewpoint (**Viewpoint 2**) views are similar, with the headlands forming the extents of the seaward views. The closest element of the farm is 3.4km, which results in the pens being visible and difficult to discern with the barges visible, but a smaller component in the wider panorama of Te Ara a Kiwa. While the viewpoint is focused



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out into the strait, users will also experience and focus on the land. This viewpoint balances the dominance of land and water, giving effect to both. Given this, the effects on the visual amenity values for both viewpoints are assessed to be **Low**.

### *Viewpoint from the sea at Big Bungaree Beach Bay – Viewpoint – 14*

- 335 **Viewpoint 14** with within the bay of Big Bungaree Beach. The viewpoint is further to the east of the land-based Viewpoint 1 resulting in slightly broader views than the aforementioned. The headlands frame views, and limit views of the farm in its entirety, with the closest part of the farm 2.9km from the viewpoint. Like Viewpoint 14, the location is a balance between the dominance of the land and sea. Views out the strait, include the barges, which are evident but somewhat distant. The barges are seen within the context of the strait, with the pens difficult to see. Given this, the effects on the visual amenity values for both viewpoints are assessed to be **Low**.

### *Viewpoint – Drone*

- 336 This viewpoint shows the scale of the farm and its elements, within the context of Te Ara a Kiwa and Rakiura. The drone viewpoint is taken from 400ft in elevation and approximately 3.1km from the closest farm element. Rakiura forms a backdrop, with the Tītī Islands visible in the distance to the south. Pens in proximity are more distinct, with those further from the viewpoint becoming increasingly less defined. The circular pen structures form is more obvious at this elevation in comparison to sea/ground level views. At this height the pens become more obvious than the barges.
- 337 This viewpoint is an atypical view with the typical aviation corridor more direct between Waihōpai/Invercargill and Oban or the Tītī Islands. This pathway is approximately 10km to the south of the drone viewpoint. Some, although limited, aviation movements will occur in proximity to this viewpoint location, typically between Waihōpai/Invercargill and the south side of Rakiura, including to Te Oneroa/Mason Bay. The effects on the visual amenity values for both viewpoints are assessed to be **Moderate -Low**.

### *Viewpoint - Hananui*

- 338 The views from Hananui across the broader landscape of Te Ara a Kiwa include the northern coastline of Rakiura, Motupōhue / Bluff, Ruapuke and Tītī Islands. The

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site and the HAP are a small area of open water within a very broad landscape and seascape.

339 The viewing conditions from Hananui are often at least partially affected by cloud and other weather factors.

340 The effects on the visual amenity values from Hananui are assessed to be **Moderate -Low.**

### *Night-time Visibility*

341 The HAP requires navigation lights at night to indicate the location of the edges of the HAP project site and the corners of the four farms. As described and illustrated above there will be four lit cardinal marks, two lit special marks on each farm (eight in total) and the four feed barges will also be lit.

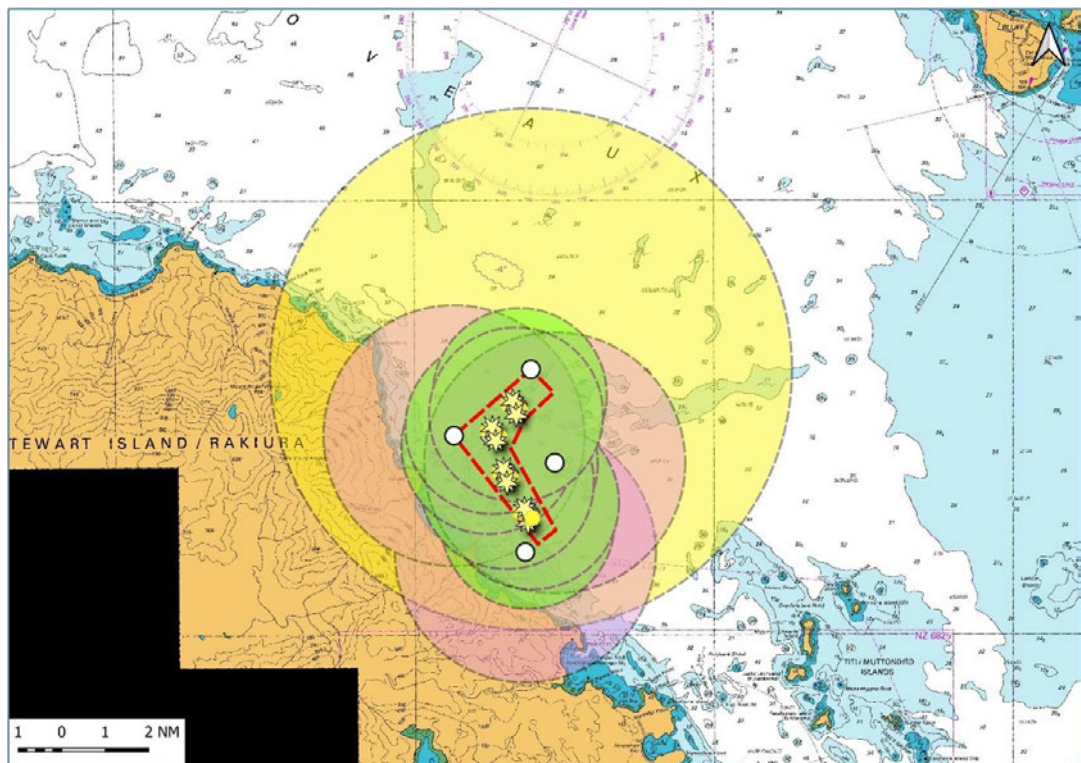
342 The nominal visibility of the recommended lights, as described and assessed below, is the maximum theoretical visibility of the lights under ideal viewing conditions on a dark clear night. Factors such as cloud, fog, coastal haze, intervening structures and features and the optical health of the viewer can all affect the potential visibility of the lights.

343 Specific recommendations are made in the Navigational Risk Assessment Report in relation to the lighting of the cardinal marks and the special marks. The Navigational Risk Assessment Report recommends that the northern cardinal mark is fitted with a white flashing light with a nominal viewing range of 6 nautical miles and the eastern, southern and western cardinal marks are fitted with a white light flashing light with a nominal viewing range of 3 nautical miles. The lit special marks are fitted with a yellow flashing light with a nominal viewing range of two nautical miles. The feed barges would also be lit at night. The twelve navigational safety cardinal and special mark lights would be synchronised to flash every five seconds to enable comprehension of the full form and extent of the HAP structures and layout.

344 **Figure 14** indicates the nominal visibility range of the cardinal mark and the special mark lighting, as recommended in the Navigational Risk Assessment Report. The yellow circle is the nominal visibility range of the northern cardinal mark, the pink

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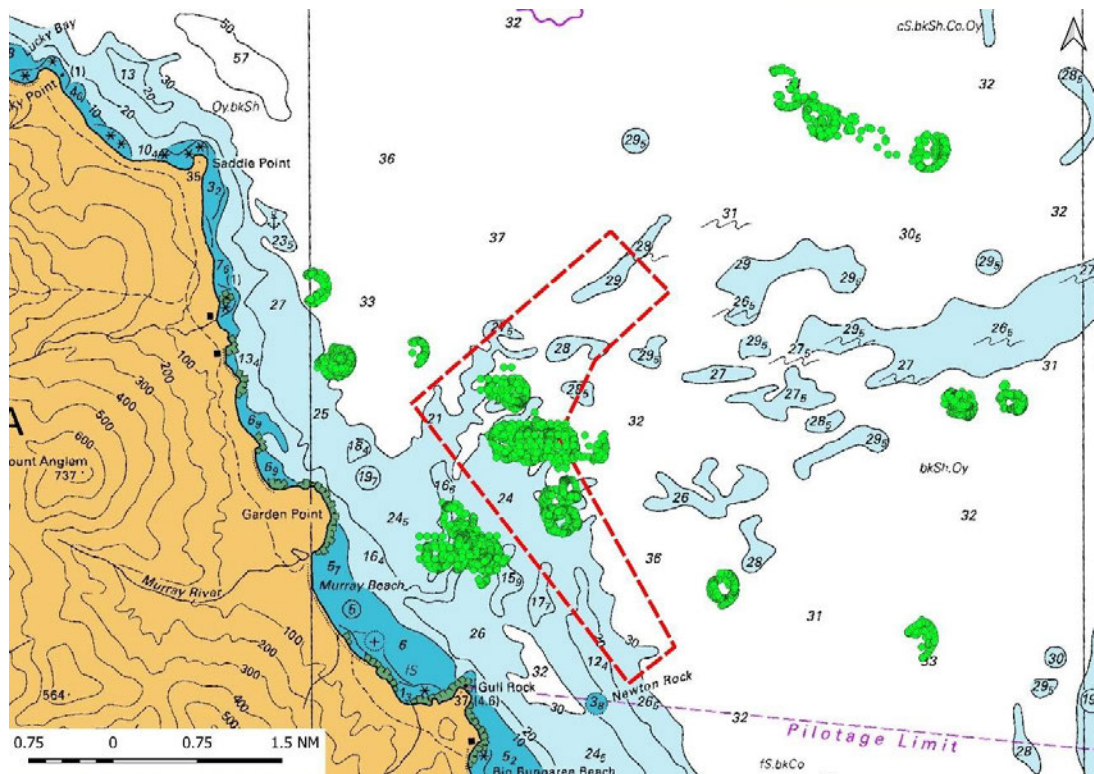
circles are the nominal visibility range of the other three cardinal marks and the green circles are the nominal visibility range of the eight lit special marks.



**Figure 14: Nominal visibility range of the Cardinal mark and special mark lighting, as recommended in the Navigational Risk Assessment Report (Figure 8.6 from that report).**

- 345 The recommended safety lighting would allow small to medium vessels to pass between the northern coastline of Rakiura and the HAP, with the coordinated lighting ensuring that the visible presence of the farm is maintained for passing vessels.
- 346 As described in the Navigational Safety Risk Assessment report and illustrated in Figures 6.2, 6.3 and 8.1 of that report, five charted anchorages surround the HAP site. One of the anchorages is close to the northern boundary. The Risk Assessment recommends moving the closest anchorage further to the east to avoid any conflict. The data on Figure 6.2 illustrates the Automatic Identification System (AIS) data points for vessels at anchor in 2024. The figure is reproduced below.

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**Figure 15: AIS datapoints for vessels "At anchor" in and near the proposed marine farming area (2024) (Figure 6.2 from the Navigational Risk Assessment Report).**

347 The AIS data points show that the sheltered coastal waters between Gull Rock and Saddle Point are popular anchorage location for commercial vessels entering or leaving Bluff Port. Each of these data points is an anchored vessel that would be visible during the day and lit at night to ensure safe visibility for passing vessels. During the site visit to Rakiura on 14 and 15 April 2025, two commercial vessels were anchored or drifting in these areas during the day and at night. Both were visible from the shore and are noted in the photographs in the **Graphic Attachments**.

348 **Figure 14** above illustrates that the nominal viewing distance of two nautical miles of the special mark lighting ensures that the lights are at the maximum viewing range from the coastal edge of Rakiura. Therefore, it is likely that even under ideal viewing conditions it is only the lighting on the cardinal marks that could potentially be visible from the land. The cardinal mark safety lighting could potentially be visible from the coastal edge from Potirepo/Port William to approximately Saddle Point.

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- 349 At the distance from the shore to the cardinal mark lights, the lights will generally be visible as long-distance features from the closest parts of the northern coastline of Rakiura between Bungaree Beach and Christmas Village.
- 350 The hut at Big Bungaree Beach faces to the east towards the Tītī Islands and there is a headland outcrop between the hut and the HAP to the north. The lighting at the HAP will not be visible from the Bungaree Hut. Further along Big Bungaree Beach (approximately mid bay), there are views to the north towards the site where navigational lighting will be visible. The southern cardinal mark on Newton Rock will be less than 2km from the beach and will be visible from Big Bungaree Beach and the hut. The eastern, northern and western cardinal marks will unlikely be visible from the hut, but they may be visible from the beach on the other side of and obscured by the HAP.
- 351 Three of the cardinal mark safety lights could potentially be visible from Murray Beach and the hut, however the special mark lighting would be on the limits of visibility.
- 352 The safety lighting on the HAP will not be visible from the Potirepo/Port William Hut, the ferry route between Bluff and Oban, from Oban, from the Tītī Islands or from the south coastline of Bluff. The summit of Hananui is on the limit of the potential visibility of the (strongest) northern cardinal mark safety light.
- 353 Importantly from the waters that are closer to the HAP site, the flashing lights of the cardinal and special marks will be visible. The purpose of the navigational safety lights is to ensure that vessels can pass or anchor within the sheltered waters of the Rakiura coastline without the risk of collision with the HAP. The safety lighting recommendations in the Navigational Risk Assessment Report ensure the navigational safety of vessels using the waters around the HAP, while minimising the effects of lighting on the closest areas of land.
- 354 All the visibility of the safety lighting described above is in the context of the five charted anchorages and the AIS data points for anchored vessels in **Figure 15** above. While many of the anchorages were for short periods, some were for several days. Whether anchoring for a short or long period, the five charted anchorages are well used by commercial vessels moving between the anchorages and South Port at Bluff.

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355 As described above, Rakiura is an International Dark Sky Sanctuary, designated in 2019 including the whole of the island incorporating the urban area of Oban<sup>47</sup>. The HAP site is not visible from Oban or other areas where night sky watching activity will be concentrated. Twinkle Dark Sky Tours is a night sky and star watching commercial tourism enterprise that hosts tours from Oban<sup>48</sup>. The focused nature of the navigational safety lighting will not adversely affect the night sky and star watching activities at Rakiura.

356 The nighttime visual effects of the HAP are assessed to be **Low**.

### Summary of Natural Character, Landscape and Visual Amenity Effects

357 The natural character, landscape and visual amenity effects of the proposal discussed above are summarised in the following table.

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<sup>47</sup> [Stewart Island / Rakiura | DarkSky International](#)  
<sup>48</sup> [Twinkle Dark Sky Tours](#)



**Table 1: Summary of Natural Character, Landscape and Visual Amenity Effects.**

			Effects
Natural Character Effects	Te Ara a Kiwa Values - High	Biotic Attributes	Low
		Abiotic Attributes	Low
		Experiential Attributes	Low
	Site Catchment Values - High	Biotic Attributes	Low-moderate
		Abiotic Attributes	Low-moderate
		Experiential Attributes	Low-moderate
	HAP site Values - High	Biotic Attributes	Low-moderate
		Abiotic Attributes	Low-moderate
		Experiential Attributes	Low-moderate
Landscape and Character Effects		Landscape Effects on Te Ara a Kiwa Values - <b>High</b>	Low
		Landscape effects on the site catchment Values – <b>Very high</b>	Low-moderate
		Landscape Effects on the HAP site Values – <b>Very high</b>	Moderate
Visual Amenity Effects		Users of the site - the immediate setting of the HAP site	Low
		Public viewpoints within the immediate setting – Northwestern circuit and huts	Very low
		Te Ara a Kiwa	Low
		Night-time visibility	Low

358 Based on the natural character, landscape and visual assessment work that has been completed, the HAP and associated structures and activities are appropriate to the location and can be accommodated within the receiving environment.

**STATUTORY ASSESSMENT**

- 359 The relevant statutory documents and provisions are described above and in Appendix A.
- 360 The Resource Management Act (1991) requires the preservation of the natural character of the coastal environment and the protection of outstanding natural features and landscapes from inappropriate subdivision, use and development as matters of national importance. The Policies that support these relevant matters of national importance are contained in the NZCPS (2010).
- 361 Policy 13 of the NZCPS (2010) requires the preservation of the natural character of the coastal environment and to protect it from inappropriate subdivision, use and development. Policy 13 requires the avoidance of adverse effects on areas of the coastal environment with outstanding natural character and the avoidance of significant adverse effects on natural character in all other areas of the coastal environment.
- 362 The HAP site, the site catchment and the broader context of Te Ara a Kiwa have been assessed for their natural character values and significance. The natural character of the area is generally assessed as being high at the site and throughout the broader context. High natural character is short of being outstanding and therefore does not reach the threshold of total protection from any adverse effects. Therefore the relevant test is the avoidance of significant adverse effects on the natural character values of the site and its' context. The assessment finds that the potential adverse effects of the HAP on natural character values ranges from low (at the broad scale) to moderate-low (at the HAP site scale). All natural character effects, whether considered under their separate headings or combined for total level of effect are assessed in the lower end of the effects scale and are therefore not significant.
- 363 The relevant matters set out in Policy 13 (2) have been taken into consideration in the assessment of the effects of the HAP on the natural character of the coastal environment.
- 364 Policy 14 of the NZCPS (2010) promotes the restoration and rehabilitation of the natural character of the coastal environment. While the natural character of the



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coastal environment within the site catchment and on the coastal edge of Rakiura is already assessed as being high, the HAP project includes the provision of funds to support local environmental and ecological enhancement projects on Rakiura which will have positive effects on natural character values.

365 Policy 15 of the NZCPS (2010) requires the protection of outstanding natural features and landscapes in the coastal environment and the avoidance of significant adverse effects on other natural features and landscapes in the coastal environment.

366 Rakiura is an outstanding natural landscape and requires protection from adverse effects. The landscape values of Rakiura and Te Ara a Kiwa have been described and analysed above and the effects of the HAP on those values have been assessed. The HAP site is not within an ONL. The effects of the HAP on landscape values, including the relevant parts of Rakiura have been assessed above.

367 The outstanding landscape values of Rakiura are described further below.

368 Chapter 7 Coast of the Southland Regional Policy Statement (RPS) 2017 includes various related objectives, covering what is appropriate occupation and use of the coastal marine area; maintaining and enhancing public access while recognising that certain activities must be located within the coastal environment even though they can affect natural character and public access. This includes specific references to aquaculture (Objective 5) and Natural Features and Landscapes (Chapter 10). These chapters give effect to the NZCPS (Policies 8, 13 and 15), see the assessment provided above.

369 The Regional Coastal Plan (RCP) sets out how the Regional Council (Environment Southland) will carry out its resource management responsibilities in the CMA in implementing the provisions of the RMA (1991) and the NZCPS (2010) (above).

370 The Southland District Plan (2018) includes objectives and policies relating to Natural Features and Landscapes. The plan identifies Outstanding Natural Features and Landscapes. The plan references Boffa Miskell Southland Regional Landscape Assessment (1997) and Boffa Miskell Southland Coastal Landscape Study (2006). More recent studies have been undertaken since. See further discussion below.

- 371 Whilst it is not a statutory document, the Stewart Island / Rakiura Landscape and Coastal Natural Character Study 2019 (RLCNS) was commissioned by Environment Southland to inform resource management decisions under the RMA, particularly in regard to sections 6(a) and 6(b), identifying the Outstanding Natural Features and Landscapes (ONF/Ls) of Stewart Island.
- 372 The study also assesses the natural character values of the Coastal Environment as it relates to the NZCPS, noted above.
- 373 The RLCNCS is dated 2019, however it has not been adopted by the Southland District Council as part of the District Plan (above). The study notes that it is a technical report and, in its preparation, consultation occurred with identified key stakeholders, however has not been tested by its communities or been the basis of any draft or proposed plan change.
- 374 The RLCNCS, identifies and notes suggested changes (from various other plans and studies) to the Rakiura ONL area. The suggested extent includes a 2km offset from the coast. Much of the island's coastal environment was assessed as having high or very high natural character.
- 375 It is accepted that Rakiura is an ONL in the context of the District and the Region and that a 2km offset or buffer from the coastal edge captures the relevant values of the ONL, even if the RLCNCS study has not been through a public process of adoption into the relevant District and Regional Plans. The effects of the HAP on the landscape and natural character values of Rakiura and Te Ara a Kiwa have been assessed above as if the Rakiura ONL is part of the Statutory Planning considerations (even though no policies or detailed provisions are available). The location of the HAP outside of the 2km (buffer) offset from the Rakiura shoreline is a direct response to this adjacent identified ONL.
- 376 As described above, the RLCNCS 2km off set from the coastal edge of Rakiura as part of the Rakiura ONL area is a buffer to the ONL itself and the values of the buffer are not the same as the values of the assessed ONL. The buffer provides the relevant off set from the terrestrial landscape and natural character values, allowing for the protection of those values from use and development outside of

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the buffer. The 2km buffer from the edge of Rakiura is an appropriate off set as it captures the highest landscape values of the marine environment, including the intertidal areas, the rocky shores and reefs that are associated with the geology of Rakiura and the highest landscapes values connected to Rakiura. The 2km offset is necessarily arbitrary, as nothing physically changes at the 2km ONL boundary line, however is captures an appropriate cross section of the highest value seafloor habitats and conditions. 2km is generally the distance at which aquaculture structures become less visually discernible or prominent. Beyond this distance aquaculture structures tend to become a small part of a larger landscape setting, which is the case for the HAP within the enclosing landscape of Rakiura at Murihku surrounding the broad seascape of Te Ara a Kiwa.

- 377 The HAP is assessed as not having adverse effects on the ONL values of Rakiura.
- 378 The Southland/Murihiku Regional Coastal Environment Study – Coastal Natural Character 2019 (SMRCES) is a broader technical study that is complementary and has an overlap with the RLCNCS, above. The SMRCES covers the Southland coastline, and along with the RLCNCS was commissioned by Environment Southland.
- 379 The SMRCES assesses the Coastal Marine Area (CMA), with the northern coast of Stewart Island included in the Foveaux Strait area, with the Natural Character assessed as either Very High or High. The study identifies some areas around the Stewart Island coastal environment as having Outstanding Natural Character including an area close to the shoreline on the northern coast (not including the site).
- 380 The ONC line varies, but appears to be offset approximately 800m-1km from the shoreline in the vicinity of the HAP and takes in much broader areas of the coastal waters around the more remote coastal parts of Rakiura to the east and south. The varied distance of the ONC boundary line is appropriate as the eastern, southern and western shorelines of Rakiura are much more isolated and exposed to the open oceanic conditions. The northern shoreline of Rakiura, including the area adjacent to the HAP site is much more enclosed and sheltered and for that reason is more easily accessed and utilised on Rakiura and in the marine

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environment. The tighter offset of the ONC boundary to the northern shoreline of Rakiura is appropriate for these reasons.

- 381 The SMRCES maps indicate the locality of these areas but given the scale of the Southland and Stewart Island's coast, it contains limited granularity and detail.
- 382 The study notes that it is a technical report and, like the RCLCNS, has in its preparation, consultation occurred with identified key stakeholders, however has not been tested by its communities or been the basis of any proposed plan change.
- 383 The relevant provisions in the national, district and regional planning documents above have provided the framework for the assessment of the effects of the HAP on the landscape and natural character values of the HAP site and the surrounding context. The HAP is outside of areas of identified outstanding landscape and natural character values and is assessed as not having adverse effects on those values in adjacent ONL and ONC areas.

## CONCLUSIONS

- 384 The HAP site has been located, sized and shaped to avoid any elevated seafloor biogenic habitat in the area and is off-set from the Rakiura Northern coastline to provide a meaningful buffer from the any outstanding terrestrial landscape values.
- 385 The HAP is located outside of the boundary lines of any outstanding natural landscape and natural character values that have been identified in recent technical reports.
- 386 The HAP is in a location that is part of a comparatively well used area of Te Ara a Kiwa on the Northwest coastline of Rakiura.
- 387 While the seascape of the HAP site is relatively featureless, the landscape setting of Te Ara a Kiwa is broad and accommodating of the various commercial and cargo vessel activities that are associated with Bluff port.
- 388 The context and the HAP is described and assessed at three scales – Te Ara Kiwa, the Site catchment and the HAP site. The appropriate scale for the assessment of landscape, natural character and visual effects is at the **site catchment scale**.
- 389 The overall effects of the HAP on the natural character values of the site catchment are **low-moderate (adverse)**.
- 390 The overall effects of the HAP on the natural character values of Te Ara a Kiwa are **low (adverse)**.
- 391 The overall effects of the HAP on the natural character values of the HAP site are **low-moderate (adverse)**.
- 392 The overall effects of the HAP on the landscape character of the site catchment are of a **low-moderate (adverse)**.
- 393 The overall effects of the HAP on the landscape character of Te Ara a Kiwa are **low (adverse)**.
- 394 The overall effects of the HAP on the landscape character of the HAP site are of a **moderate (adverse)**.

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- 395 The overall effects of the HAP on the visual amenity values of Te Ara a Kiwa, the site catchment and the HAP site are of a **low to very low** order.
- 396 The HAP will not have adverse effects on any identified outstanding natural feature or landscape values or outstanding natural character values within or close to the coastal edge of Rakiura.
- 397 The HAP can be accommodated into the site and the broader landscape and seascape of Te Ara a Kiwa and is an appropriate activity in this location for the reasons set out above.
- 398 The HAP will continue and reinforce the ongoing associations that Ngāi Tahu ki Murihiku have with Te Ara a Kiwa and will provide for the broader community of Murihiku and Rakiura.

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November 2025

## Appendix A – Landscape Related Provisions

New Zealand Coastal Policy Statement (2010). **(Emphasis added)**

### Policy 1 - Extent and characteristics of the coastal environment

- 1) *“Recognise that the extent and **characteristics** of the **coastal environment** vary from region to region and locality to locality; and the issues that arise may have different effects in different localities.*
- 2) *Recognise that the **coastal environment includes**:*
  - a. *the coastal marine area;*
  - b. *islands within the coastal marine area;*
  - c. *areas where coastal processes, influences or qualities are significant, including coastal lakes, lagoons, tidal estuaries, saltmarshes, coastal wetlands, and the margins of these;*
  - d. *areas at risk from coastal hazards;*
  - e. *coastal vegetation and the habitat of indigenous coastal species including migratory birds;*
  - f. ***elements and features that contribute to the natural character, landscape, visual qualities or amenity values;***
  - g. *items of cultural and historic heritage in the coastal marine area or on the coast;*
  - h. *inter-related coastal marine and terrestrial systems, including the intertidal zone; and*
  - i. *physical resources and built facilities, including infrastructure, that have modified the coastal environment.”<sup>49</sup>*

### Policy 13 Preservation of natural character

- 1) *“To **preserve the natural character** of the coastal environment and to protect it from inappropriate subdivision, use, and development:*
  - a. *avoid adverse effects of activities on **natural character** in areas of the **coastal** environment with outstanding natural character; and*

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<sup>49</sup> Policy 1 of the New Zealand Coastal Policy Statement (2010)

- b. avoid significant adverse effects and avoid, remedy or mitigate other adverse effects of activities on natural character in all other areas of the coastal environment;*

*including by:*

- c. assessing the natural character of the coastal environment of the region or district, by mapping or otherwise identifying at least areas of high natural character; and*
- d. ensuring that regional policy statements, and plans, identify areas where preserving natural character requires objectives, policies and rules, and include those provisions.*

2) Recognise that **natural character** is not the same as **natural features** and **landscapes** or **amenity values** and may include matters such as:

- a. natural elements, processes and patterns;*
- b. biophysical, ecological, geological and geomorphological aspects;*
- c. natural landforms such as headlands, peninsulas, cliffs, dunes, wetlands, reefs, freshwater springs and surf breaks;*
- d. the natural movement of water and sediment;*
- e. the natural darkness of the night sky;*
- f. places or areas that are wild or scenic;*
- g. a range of natural character from pristine to modified; and*
- h. experiential attributes, including the sounds and smell of the sea; and their context or setting.”<sup>50</sup>*

### **Policy 14** Restoration of natural character

*“Promote **restoration** or **rehabilitation** of the **natural character** of the **coastal environment**, including by:*

- a. identifying areas and opportunities for restoration or rehabilitation;*
- b. providing policies, rules and other methods directed at restoration or rehabilitation in regional policy statements, and plans;*

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<sup>50</sup> Policy 13 of the New Zealand Coastal Policy Statement (2010)



- c. *where practicable, imposing or reviewing restoration or rehabilitation conditions on resource consents and designations, including for the continuation of activities; and recognising that where degraded areas of the coastal environment require restoration or rehabilitation, possible approaches include:*
- i. ***restoring indigenous habitats and ecosystems, using local genetic stock where practicable; or***
  - ii. ***encouraging natural regeneration of indigenous species, recognising the need for effective weed and animal pest management; or***
  - iii. *creating or enhancing habitat for indigenous species; or*
  - iv. *rehabilitating dunes and other natural coastal features or processes, including saline wetlands and intertidal saltmarsh; or*
  - v. *restoring and protecting riparian and intertidal margins; or*
  - vi. *reducing or eliminating discharges of contaminants; or*
  - vii. *removing redundant structures and materials that have been assessed to have minimal heritage or amenity values and when the removal is authorised by required permits, including an archaeological authority under the Historic Places Act 1993; or*
  - viii. *restoring cultural landscape features; or*
  - ix. *redesign of structures that interfere with ecosystem processes; or*
  - x. *decommissioning or restoring historic landfill and other contaminated sites which are, or have the potential to, leach material into the coastal marine area.”<sup>51</sup>*

### Policy 15 Natural features and natural landscapes

*“To **protect the natural features and natural landscapes** (including seascapes) of the **coastal environment** from inappropriate subdivision, use, and development:*

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<sup>51</sup> Policy 14 of the New Zealand Coastal Policy Statement (2010)

- a. *avoid adverse effects of activities on **outstanding natural features** and **outstanding natural landscapes** in the **coastal environment**; and*
- b. *avoid significant adverse effects and avoid, remedy, or mitigate other adverse effects of activities on other natural features and natural landscapes in the coastal environment; including by:*
- c. *identifying and assessing the natural features and natural landscapes of the coastal environment of the region or district, at minimum by land typing, soil characterisation and landscape characterisation and having regard to:*
  - i. *natural science factors, including geological, topographical, ecological and dynamic components;*
  - ii. *the presence of water including in seas, lakes, rivers and streams;*
  - iii. *legibility or expressiveness—how obviously the feature or landscape demonstrates its formative processes;*
  - iv. *aesthetic values including memorability and naturalness;*
  - v. *vegetation (native and exotic);*
  - vi. *transient values, including presence of wildlife or other values at certain times of the day or year;*
  - vii. *whether the values are shared and recognised;*
  - viii. *cultural and spiritual values for tangata whenua, identified by working, as far as practicable, in accordance with tikanga Māori; including their expression as cultural landscapes and features;*
  - ix. *historical and heritage associations; and*
  - x. *wild or scenic values;*
- d. *ensuring that regional policy statements, and plans, map or otherwise identify areas where the protection of natural features and natural landscapes requires objectives, policies and rules; and*
- e. *including the objectives, policies and rules required by (d) in plans.”<sup>52</sup>*

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<sup>52</sup> Policy 15 of the New Zealand Coastal Policy Statement (2010)

*Appendix B*

**GRAPHIC ATTACHMENTS** (*refer separate A3 document*)