

Bea Gregory-5252

From: RCInbox
Sent: Tuesday, 18 September 2018 11:06 a.m.
To: RCInbox
Subject: An Application has been submitted

New resource consent application received

An application for a new resource consent has been received by Council on 18/09/2018

Applicant(s): GL Beal Family Trust, PE Beal Family Trust , Te Hoiere Asset Holding Company Limited
Consent(s) applied for: Coastal Permit - Activity

[Download](#) and review the application.

[View the application online.](#)

This e-mail message has been scanned by **SEG Cloud**

MARLBOROUGH DISTRICT COUNCIL
15 SEYMOUR STREET
PO BOX 443, BLENHEIM 7240
NEW ZEALAND

PH: +64 3 520 7400
FAX: +64 3 520 7496
EMAIL: mdc@marlborough.govt.nz
www.marlborough.govt.nz

Application for Resource Consent

Applicant details

Application for Resource Consent

Sections 88 and 145, Resource Management Act 1991

To

Marlborough District Council

Applicant

I,

GL Beal Family Trust

Private Bag 65001
Havelock 7150

Not applicable

Bernard Geoffrey Rowe

C/- Gascoigne Wicks
79 High Street
Blenheim 7201
New Zealand

03 578 4229

b.moriarty@xtra.co.nz

Peter Edward Beal

Private Bag 65001
Havelock 7150

03 5798263

b.moriarty@xtra.co.nz

Kathleen Mary Mead

Private Bag 65001
Havelock 7150

03 5798263

b.moriarty@xtra.co.nz

PE Beal Family Trust

Private Bag 65001
Havelock 7150

Not applicable

Bernard Geoffrey Rowe

C/- Gascoigne Wicks
79 High Street
Blenheim 7201
New Zealand

03 578 4229

b.moriarty@xtra.co.nz

Peter Edward Beal

Private Bag 65001
Havelock 7150

03 5798263

b.moriarty@xtra.co.nz

Te Hoiere Asset Holding Company Limited

c/- Te Runanga o Ngati Kuia
P O Box 968
Nelson 7040
New Zealand

2510929

C/- Te Runanga o Ngati Kuia C/- Te Runanga o Ngati Kuia

PO Box 968
Nelson 7040

03 546 7556

b.moriarty@xtra.co.nz

Apply for the following type(s) of resource consent

-

Agent

Aquaculture Direct Limited

PO Box 213
Blenheim 7240

Bruce Cardwell

021 451 284

bruce@aquaculturedirect.co.nz

Project reference

Marine Farm 8307

Property details

Site and location details

The site at which the proposed activity is to occur is as follows:

MARINE FARM SITE 8307 IN BRIGHTLANDS, PELORUS SOUND, MARLBOROUGH

Legal description

Marine Farm Site 8307

Is there locale information in regards to the site?

No - there is no locale information in regards to the site

Site description

Description of the site at which the activity is to occur

The site is along the inner south-eastern coastline of Brightlands Bay, Pelorus Sound.

"Brightlands Bay is a small north-facing bay on the southern shore of Tawhitinui Reach, Pelorus Sound. Brightlands Bay is approximately 43 km by sea from Havelock and 25 km from the Pelorus Harbour limit. Brightlands Bay has a coastline length of approximately 3 km and covers an area of sea of approximately 88.5 ha. The mouth of Brightlands Bay is approximately 1.5 km wide, and the bay is roughly 1 km long." (Davidson Environmental Report 895).

The farm sits alongside other farms on the eastern side of Brightlands Bay. The nearest marine farms to 8307 are the adjacent farms to the northwest 8306 and to the northeast 8308 and 8309.

The adjacent land to the south and east of the farm is Rural 1. There is one residence in the Bay, approximately 400 metres to the southwest of the farm. This residence is owned by one of the parties, being the Beal family.

The site lies within the boundary of Coastal Marine Zone 2 (CMZ2).

Owners and occupiers of the application site

Applicant is the only owner and occupier?

Yes - the applicant is the only owner and occupier

Proposed activity

Description of the activity

The activity to which the application relates (the proposed activity) is as follows:

GL & PE Beal Family Trusts and Te Hoiere Asset Holding Company Limited have applied to renew the existing Resource Consent U960533 (MPE379) marine farm site 8307 (total 3.58ha) for the purpose of farming Greenshell mussels (*Perna canaliculus*), blue mussels (*Mytilus galloprovincialis*), scallops (*Pecten novaezelandiae*) and dredge oysters (*Tiostrea chilensis*), using conventional long line methods. (Refer to attached layout diagrams illustrating the site.)

Resource Consent U960553 was initially declined by the Marlborough District Council. The Applicant appealed the decision and in July 1998 the Environment Court issued a Consent Order for the 3.58ha site. The associated marine farming permit MPE379 was issued in March 1999, under the Fisheries Act 1983.

U960533 (MPE379) expires 21 July 2033.

The Applicant seeks a 20-year term expiring in 2038.

U960533 (MPE379) is assessed as discretionary activity in the current Marlborough Sounds Resource Management Plan.

There is a Ministry of Fisheries (MoF) exclusion area inshore of the farm. One mussel line currently sits in part across this area and the line will be removed and the area surrendered. There are no mussels growing on the line and it will be removed as part of the farm upgrade, upon the granting of this consent.

The Application is seaward of the existing/original approved site as shown in the attached site plan. The Marlborough District Council is aware that due to errors in surveying systems 20 years ago, the farm structures of many marine farms were installed seaward of the licence boundaries.

The inshore area of the farm will be surrendered and substituted by the seaward area and there is no additional water space sought. Maps are attached to this Application outlining this change. The Applicant agrees to remove the inside line and the inshore boundary of the consent will commence at 70 metres from the low tide mark, as recommended in the Davidson report.

The Application is for a continuation of the activities currently consented at the site. No changes to the activities are proposed.

The site lies within the boundary of the CMZ2, an area in which marine farming activity is a discretionary activity.

As this is a 'like for like' Application by an existing permit holder, the Application should be processed under section 165ZH. The Applicant's adherence to the Codes of Practice mentioned above, and its commitment to environmental programmes and activities, along with its compliance with the conditions of the existing Consent, are conduct in the Applicant's favour, in terms of section 165ZJ(1).

The site dimensions are as per the attached layout plans. The Application includes 7 long lines, each being approximately between 220 and 230 metres long. The proposed site plan mirrors the lines currently installed on the site.

Resource consent U960553, Condition 5 states;

"5. That the structure be limited to anchors, ropes, droppers, cages, racks, floats and lights associated with the farming of the approved species within the boundaries of the consent area. The number of lines shall be at the discretion of the consent holder, but shall not exceed the number shown on the attached plan, the separation distances between lines shall be no less than as shown, and lines shall be oriented as shown."

The proposed structure plan complies with this condition; however the length of the backbones installed are longer than the existing Resource Consent. These lines were installed without the aid of the accurate mapping and installation technology available today. The crop rope installed and biomass grown onto the backbones does not necessarily increase as farmers space out crop rope droppers and farm to meet the growing conditions. The spreading of droppers allows greater waterflow.

There are currently 8 lines installed on the farm. Only 6 lines are operational at the site growing Greenshell mussels. The Applicant identified from the Marlborough District Council 'Smart Maps' website in 2012 that the inside line (line 1) is partly located over a MoF exclusion area and the outside line (line 8) is offsite. Immediate corrective action was undertaken. Since then, both of these lines have remained empty post-harvest. The inshore line will be removed and the Applicant will accept as a condition of the consent. The outside line will be included in this renewal (some adjustment is required on the southern anchor of this line). The Application seeks to renew the consent for 7 lines.

The site layout is attached to the Application.

The Applicants are the joint owners of farm 8307, being the GL & PE Family Trusts and Te Hoiere Asset Holding Company. Gus and Peter Beal have been mussel farmers since the industry commenced. Gus was a member of the Executive Committee of the Marine Farming Association for many years. They are also long-term residents of Brightlands Bay where the farm is located and have long association with this rohe being descents of Jacky Guard. Te Hoiere Asset Holding Company is the commercial arm of Te Rūnanga o Ngāti Kuia. Te Hoiere was the waka in which Ngāti Kuia landed at Te Tauihu (Top of the South Island).

The Applicant's farm is jointly managed by Sanford Limited and Kono, who adhere to the 'Greenshell Mussel Industry Environmental Code of Practice' and its successor, the 'Environment Management Framework' and are both active participants of the Marine Farming Association's Environmental Programme.

This programme covers the activities of marine farmers "on water" activities and includes being an active participant in beach clean ups and adhering to the following Codes of Practice:

- 'Marine Farming Operating Standards Marlborough Sounds, Tasman and Golden Bays'.
- 'Code of Practice to avoid, remedy or mitigate noise from marine farming activities in the Marlborough Sounds, Golden Bay and Tasman Bay, on other users and residents'.
- 'Reducing Pollution and Emissions from Marine Farming 'On Water' Activities'.
- 'Reducing Waste taken to Landfill from Marine Farming 'On water' Activities'.

Sanford Limited were one of the inaugural recipients of Environmental Certification status from the Marine Farming Association. This was achieved through complying with all requirements of the Marine Farming Association's Environmental Programme and having passed audits of the farms and vessels.

Kono NZ LP were also awarded Environment Certification status in 2017.

Kono, a Māori-owned food and beverage business based in Te Tau Ihu, the top of the South Island, was awarded Te Tupu-ā-Nuku Award for Business and Innovation at Ngā Whetū o Matariki Awards. The award recognises a Māori business for their contribution to Aotearoa New Zealand's economy and future.

Other activities that are part of the proposal to which the application relates

Are there permissions needed which do not relate to the Resource Management Act 1991?

Yes - there are permissions needed which do not relate to the Resource Management Act 1991

Permissions needed which do not relate to the Resource Management Act 1991

1. Fish farming licence 2. Aquaculture Decision

Are there permitted activities that are part of this application?

Yes - there are permitted activities that are part of this application

Permitted activities that are part of this application:

The Application is for a new consent to replace U960533 (MPE379) in Brightlands, Pelorus Sound to seed, cultivate and harvest species Greenshell mussels (*Perna canaliculus*), blue mussels (*Mytilus galloprovincialis*), scallops (*Pecten novaezelandiae*) and dredge oysters (*Tiostrea chilensis*) using conventional long line methods, including occupation of 3.58ha of the coastal marine area. Consent is also sought to allow the existing seabed anchoring devices to remain (and be replaced as required), to harvest marine farming product from the marine farm (including the discharging of coastal seawater and discharge of biodegradable and organic waste matter) and all other activities that are ancillary to the operation on site 8307.

The movement of vessels is a permitted activity: s27 Marine and Coastal Area (Takutai Moana) Act 2011. This right includes anything reasonably incidental to vessel movement (s27(2)).

The proposed activity has been assessed against the relevant provisions of the:

1. New Zealand Coastal Policy Statement 2010;
2. Marlborough Regional Policy Statement;
3. Marlborough Sounds Resource Management Plan; and
4. Proposed Marlborough Environment Plan

at Sections 23 and 24/Appendices A – C of this Assessment of Environmental Effects.

Other activities that relate to this Application include permissions that do not relate to the Resource Management Act, including;

1. Fish farming licence
2. Aquaculture Decision

Additional resource consents

Are any additional resource consents needed for the proposal to which this application relates?

No - no additional resource consents are needed for the proposal to which this application relates

Consent summary

I apply for the following resource consents.

Consent information

Marine Farm 8307

Consent type

Coastal

Subcategory type

Activity

Description of consent being applied for

GL & PE Beal Family Trusts and Te Hoiere Asset Holding Company Limited have applied to renew the existing Resource Consent U960533 (MPE379) marine farm site 8307 (total 3.58ha) for the purpose of farming Greenshell mussels (*Perna canaliculus*), blue mussels (*Mytilus galloprovincialis*), scallops (*Pecten novaezelandiae*) and dredge oysters (*Tiostrea chilensis*), using conventional long line methods. (Refer to attached layout diagrams illustrating the site.)

Resource Consent U960553 was initially declined by the Marlborough District Council. The Applicant appealed the decision and in July 1998 the Environment Court issued a Consent Order for the 3.58ha site. The associated marine farming permit MPE379 was issued in March 1999, under the Fisheries Act 1983.

U960533 (MPE379) expires 21 July 2033.

The Applicant seeks a 20-year term expiring in 2038.

U960533 (MPE379) is assessed as discretionary activity in the current Marlborough Sounds Resource Management Plan.

There is a Ministry of Fisheries (MoF) exclusion area inshore of the farm. One mussel line currently sits in part across this area and the line will be removed and the area surrendered. There are no mussels growing on the line and it will be removed as part of the farm upgrade, upon the granting of this consent.

The Application is seaward of the existing/original approved site as shown in the attached site plan. The Marlborough District Council is aware that due to errors in surveying systems 20 years ago, the farm structures of many marine farms were installed seaward of the licence boundaries.

The inshore area of the farm will be surrendered and substituted by the seaward area and there is no additional water space sought. Maps are attached to this Application outlining this change. The Applicant agrees to remove the inside line and the inshore boundary of the consent will commence at 70 metres from the low tide mark, as recommended in the Davidson report.

The Application is for a continuation of the activities currently consented at the site. No changes to the activities are proposed.

The site lies within the boundary of the CMZ2, an area in which marine farming activity is a discretionary activity.

As this is a 'like for like' Application by an existing permit holder, the Application should be processed under section 165ZH. The Applicant's adherence to the Codes of Practice mentioned above, and its commitment to environmental programmes and activities, along with its compliance with the conditions of the existing Consent, are conduct in the Applicant's favour, in terms of section 165ZJ(1).

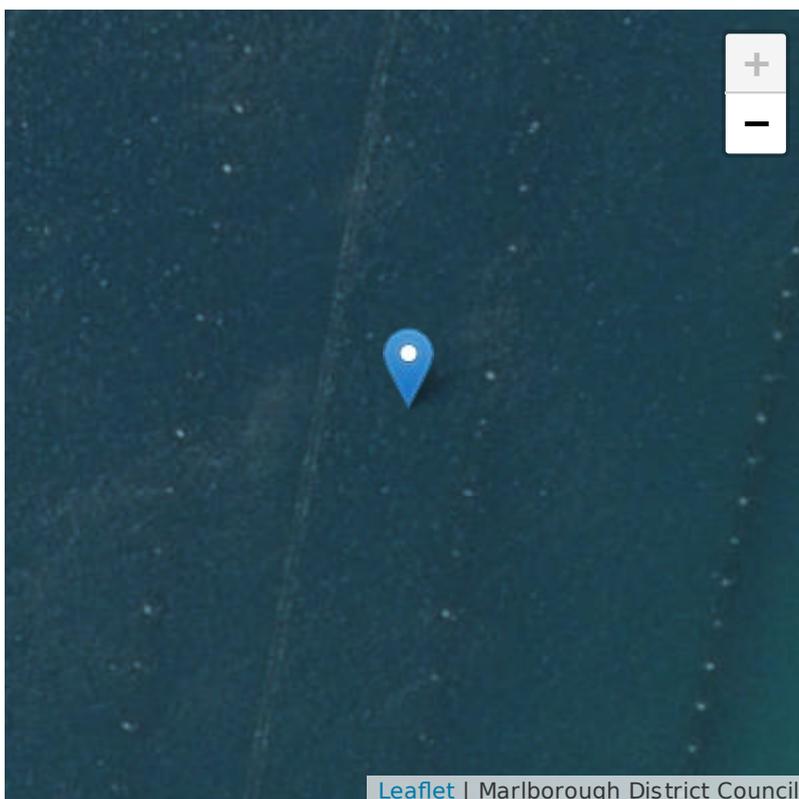
Location of the consent

Easting

1672107.313

Northing

5454110.287



Triggering rules

Rules which trigger the consent

I attach an assessment of the proposed activity against any relevant provisions of a document referred to in section 104(1)(b) of the Resource Management Act 1991, including the information required by clause 2(2) of Schedule 4 of that Act.

The assessment under this section must include an assessment of the activity against

- (a) Rules in a document; and
- (b) Any relevant requirements, conditions, or permission in any rules in a document; and
- (c) Any other relevant requirements in a document (for example, in a national environmental standard or other regulations))

Triggering rules assessment

The Application is for a new consent to replace U960533 (MPE379) in Brightlands, Pelorus Sound to seed, cultivate and harvest species Greenshell mussels (*Perna canaliculus*), blue mussels (*Mytilus galloprovincialis*), scallops (*Pecten novaezelandiae*) and dredge oysters (*Tiostrea chilensis*) using conventional long line methods, including occupation of 3.58ha of the coastal marine area. Consent is also sought to allow the existing seabed anchoring devices to remain (and be replaced as required), to harvest marine farming product from the marine farm (including the discharging of coastal seawater and discharge of biodegradable and organic waste matter) and all other activities that are ancillary to the operation on site 8307.

The movement of vessels is a permitted activity: s27 Marine and Coastal Area (Takutai Moana) Act 2011. This right includes anything reasonably incidental to vessel movement (s27(2)).

The proposed activity has been assessed against the relevant provisions of the:

1. New Zealand Coastal Policy Statement 2010;
2. Marlborough Regional Policy Statement;
3. Marlborough Sounds Resource Management Plan; and
4. Proposed Marlborough Environment Plan

at Sections 23 and 24/Appendices A – C of this Assessment of Environmental Effects.

Assessment of Effects on the Environment (AEE)

Clause 6 - Information required in assessment of environmental effects

6.1 An assessment of the activity's effect on the environment must include the following information:

6.1(a) if it is likely that the activity will result in any significant adverse effect on the environment, a description of any possible alternative locations or methods for undertaking the activity

Refer to attached Assessment of Environmental Effects

6.1(b) an assessment of the actual and potential effect on the environment of the activity

The actual and potential effects of the proposed activity on the environment are detailed in the attached Assessment of Environmental Effects

6.1(c) if the activity includes the use of hazardous installations, an assessment of any risks to the environment that are likely to arise from such use

Provision not relevant

6.1(d)(i) if the activity includes the discharge of any contaminant, a description of the nature of the discharge and the sensitivity of the receiving environment to adverse effects

As part of this Application, the Applicant seeks to continue harvesting mussel crops. The right to navigate to and from the farm, and to anchor, moor and load crop is preserved by section 27 of the Marine and Coastal Area (Takutai Moana) Act 2011. However, consent is required for the amount of organic waste matter which is discharged during the harvesting process and for the take and use of coastal water. No significant historical adverse effects have been recorded or are anticipated and any visual evidence of harvesting quickly dissipates in the coastal environment.

Vessels will be required to service the farm on an irregular basis (refer 8.5).

6.1(d)(ii) if the activity includes the discharge of any contaminant, a description of any possible alternative methods of discharge, including discharge into any other receiving environment

See assessment in question 6.1 (d) (i)

6.1(e) a description of the mitigation measures (including safeguards and contingency plans where relevant) to be undertaken to help prevent or reduce the actual or potential effect.

The Applicant's farm is jointly managed by Sanford Limited and Kono, who adhere to the 'Greenshell Mussel Industry Environmental Code of Practice' and its successor, the 'Environment Management Framework' and are both active participants of the Marine Farming Association's Environmental Programme.

This programme covers the activities of marine farmers "on water" activities and includes being an active participant in beach clean ups and adhering to the following Codes of Practice:

- 'Marine Farming Operating Standards Marlborough Sounds, Tasman and Golden Bays'.
- 'Code of Practice to avoid, remedy or mitigate noise from marine farming activities in the Marlborough Sounds, Golden Bay and Tasman Bay, on other users and residents'.
- 'Reducing Pollution and Emissions from Marine Farming 'On Water' Activities'.
- 'Reducing Waste taken to Landfill from Marine Farming 'On water' Activities'.

Sanford Limited were one of the inaugural recipients of Environmental Certification status from the Marine Farming Association. This was achieved through complying with all requirements of the Marine Farming Association's Environmental Programme and having passed audits of the farms and vessels.

Kono NZ LP were also awarded Environment Certification status in 2017.

Kono, a Māori-owned food and beverage business based in Te Tau Ihu, the top of the South Island, was awarded Te Tupu-ā-Nuku Award for Business and Innovation at Ngā Whetū o Matariki Awards. The award recognises a Māori business for their contribution to Aotearoa New Zealand's economy and future.

6.1(f) identification of the persons affected by the activity,

An e-mail has been sent to all Iwi listed below identifying the site prior to the application being submitted. Initial meetings have taken place with Ngati Kuia and Ngati Koata.

Ngati Koata Trust

PO Box 1659, Nelson 7040

(03) 548 1639

Te Runanga a Rangitane o Wairau

PO Box 883, Blenheim 7240

(03) 578 6180

Te Runanga O Ngati Kuia

PO Box 1046, Blenheim 7240

(03) 579 4328

Ngāti Apa ki te Rā Tō

PO Box 708, Blenheim 7240

(03) 578 9695

Te Atiawa Manawhenua Ki Te Tau Ihu Trust

PO Box 340, Picton 7250

(03) 573 5170

Ngati Toarangatira Manawhenua Ki Te Tau Ihu Trust

PO Box 5061, Blenheim 7240

(03) 577 8801

Ngati Rarua Trust

PO Box 1026, Blenheim 7240

(03) 577 8468

A statement from Ngai Kuia has been included in sections 12 and 23.1 of the attached AEE

The adjacent landowner is the applicant.

6.1(f cont.) any consultation undertaken,

See assessment in 6.1(f)

6.1(f cont.) and any response to the views of any person consulted

See assessment in 6.1(f)

6.1(f cont.) and any iwi consultation undertaken

See assessment in 6.1(f)

6.1(g) if the scale and significance of the activity's effects are such that monitoring is required, a description of how and by whom the effects will be monitored if the activity is approved.

5.4 Boundary adjustments, line adjustments and monitoring

At least one mussel backbone line was located offshore of the consent. The offshore out of consent backbone/s were positioned over flat silt and fine sand substrata with components of natural shell.

Surface structures were slightly inside the Ministry of Fisheries exclusion area along the inshore part of the consent and mussel shell debris ranged from none to high value in this area.

Davidson (1996) suggested the inshore boundary of the farm be relocated to a minimum distance of 70 m offshore. The reasons were related to cobble habitat towards the northern end, and the fine sand, broken shell community (relatively dense bed of bivalves) located towards the southern inshore end of the proposed farm area.

The present survey confirmed the presence of cobble substrata extending into the consent area towards the northern end, and immediately adjacent to the consent. It is recommended that either (A) the structure exclusion zone be increased by 10 m width or (B) the farm be adjusted further from shore to avoid hard substrata. During the present survey, substratum located immediately offshore of the consent were investigated and proved more suitable for consideration for marine farming activities compared to inshore areas.

For the remaining consent area, no benthic habitats or biological communities of particular interest were found during the present survey.

Based on the soft substratum located under structures and the impact levels of the existing activity, no monitoring is suggested. Habitats and species associated with the site are typical of sheltered central Pelorus Bays and as such no monitoring is suggested." (Davidson Environmental Report 895)

The Applicant commits to recommendation B to adjust the farm further seaward to avoid the hard substrata.

6.1(h) if the activity will, or is likely to, have adverse effects that are more than minor on the exercise of a protected customary right, a description of possible alternative locations or methods for the exercise of the activity (unless written approval for the activity is given by the protected customary rights group).

Policy 2 sets out a number of matters which are relevant to the taking into account of the principles of the Treaty of Waitangi and kaitiakitanga, in relation to the coastal environment.

The applicant recognises that Ngāti Apa ki te Rā Tō, Ngāti Kuia, Rangitāne o Wairau, Ngāti Kōata, Ngāti Rārua, Ngāti Tama ki Te Tau Ihu, Te Ātiawa o Te Waka-a-Māui and Ngati Toa Rangitira have statutory acknowledgments in the area of the application site. Those acknowledgements have been considered during the preparation of this application, as outlined above.

The iwi management plans of Ngāti Kōata and Te Ātiawa o Te Waka-a-Māui have been reviewed.

There are also no established areas of protected customary rights or customary marine title within the meaning of the Marine and Coastal Area (Takutai Moana) Act 2011.

The applicant recognises that Ngati Kuia have a special, long, intergenerational association to Te Taulhu o te waka a Maui/Top of the South Island and consider the Te Hoiere/Pelorus to be at the centre of their spheres of occupation and influence, spanning 1,000 years.

Over many centuries Ngati Kuia and their descendants have built paa, kainga, purakau, mapped mahinga kai and built spiritual connections where their people lived and been laid to rest.

"Te Hoiere awa/moana is Taonga tuku iho ki Tangata Whenua/Ngati Kuia therefore this requires the Crown and its agencies to give recognition to and make provision for the exercise of Kaitiakitanga by whanau, hapu and lwi who are operating within the Maori Customary and commercial Deeds of Settlement.[i]"

The Applicant will discuss the proposal further with relevant lwi representatives.

[i] Raymond Smith – Ngai Kuia

Clause 7 - Matters that must be addressed by assessment of environmental effects

7.1 An assessment of the activity's effects on the environment must address the following matters:

7.1(a) any effect on those in the neighbourhood and, where relevant, the wider community, including any social, economic, or cultural effects

8.1 The Shoreline

The distance from the shoreline holds with the conventions established in the Marlborough Sounds Resource Management Plan; that is the inshore boundary of the farm is beyond 50 metres from the mean low water mark. The farm will be moved to 70 metres from the low tide mark.

8.2 Headlands

There are no headlands immediately adjacent to the site.

8.3 Navigational Routes (Formal/Informal)

The shoreline in which the farm sits is not on a normal navigation route; however, vessels that wish to navigate within the area can go through the farm, either inside or outside of the site.

The farm does not impede vessel movements along the coastline or access to the adjacent land.

8.4 Anchorages or Mooring Areas (Formal/Informal)

There are 5 registered moorings in Brightlands Bay to the south and southwest of the site. Moorings 2101, 2102, 2103, 2104 and 2105 are all owned by the Beal Family.

The site does not impede access to these moorings.

8.5 Indirect Effects - Servicing vessels at site

The Applicant estimates farming and harvesting vessels will visit the site on an average of 25 - 30 days a year, for periods of 0.5 to 8 hrs, to undertake farm maintenance, seeding and harvesting.

The total number of hours spent on these activities is estimated to be 80 - 90 hrs annually.

8.6 Water Ski Lanes

There are no formal water ski lanes in the vicinity.

8.7 Submarine Cables

There are no submarine cables in the immediate vicinity of the farm.

The visual impact of the marine farm will not change.

Access to the coast for recreationalists is maintained.

7.1(b) any physical effect on the locality, including any landscape and visual effects

9.1 Land Zoned for Residential Use or Proximity to Residences

The adjacent land to the south and east of the farm is Rural 1.

There is one residence in the Bay, approximately 400 metres to the southwest of the farm. This residence is owned by the Beal Family.

9.2 Scenic Value

The area has not been identified within the Marlborough Sounds Resource Management Plan as being an area of outstanding natural landscape value.

The area has not been described as an area of outstanding landscape, outstanding very high or high coastal natural character in the proposed Plan.

The effect of the marine farm on the adjacent area will not have any effect on the flora and fauna of this area.

7.1(c) any effect on ecosystems, including effects on plants or animals and any physical disturbances of habitats in the vicinity

The actual and potential effects of the proposed activity on the environment are detailed in the attached Assessment of Environmental Effects

7.1(d) any effect on natural and physical resources having aesthetic, recreational, scientific, historical, spiritual, or cultural value, or other special value, for present or future generations

The actual and potential effects of the proposed activity on the environment are detailed in the attached Assessment of Environmental Effects

7.1(e) any discharge of contaminants into the environment, including any unreasonable emission of noise, and options for the treatment and disposal of contaminants

As part of this Application, the Applicant seeks to continue harvesting mussel crops. The right to navigate to and from the farm, and to anchor, moor and load crop is preserved by section 27 of the Marine and Coastal Area (Takutai Moana) Act 2011. However, consent is required for the amount of organic waste matter which is discharged during the harvesting process and for the take and use of coastal water. No significant historical adverse effects have been recorded or are anticipated and any visual evidence of harvesting quickly dissipates in the coastal environment.

Vessels will be required to service the farm on an irregular basis (refer 8.5).

The Applicant's farm is jointly managed by Sanford Limited and Kono, who adhere to the 'Greenshell Mussel Industry Environmental Code of Practice' and its successor, the 'Environment Management Framework' and are both active participants of the Marine Farming Association's Environmental Programme.

This programme covers the activities of marine farmers "on water" activities and includes being an active participant in beach clean ups and adhering to the following Codes of Practice:

- 'Marine Farming Operating Standards Marlborough Sounds, Tasman and Golden Bays'.
- 'Code of Practice to avoid, remedy or mitigate noise from marine farming activities in the Marlborough Sounds, Golden Bay and Tasman Bay, on other users and residents'.
- 'Reducing Pollution and Emissions from Marine Farming 'On Water' Activities'.
- 'Reducing Waste taken to Landfill from Marine Farming 'On water' Activities'.

Sanford Limited were one of the inaugural recipients of Environmental Certification status from the Marine Farming Association. This was achieved through complying with all requirements of the Marine Farming Association's Environmental Programme and having passed audits of the farms and vessels.

Kono NZ LP were also awarded Environment Certification status in 2017. Kono, a Māori-owned food and beverage business based in Te Tau Ihu, the top of the South Island, was awarded Te Tupu-ā-Nuku Award for Business and Innovation at Ngā Whetū o Matariki Awards. The award recognises a Māori business for their contribution to Aotearoa New Zealand's economy and future.

7.1(f) any risk to the neighbourhood, the wider community, or the environment through natural hazards or hazardous installations

8.1 The Shoreline

The distance from the shoreline holds with the conventions established in the Marlborough Sounds Resource Management Plan; that is the inshore boundary of the farm is beyond 50 metres from the mean low water mark. The farm will be moved to 70 metres from the low tide mark.

8.2 Headlands

There are no headlands immediately adjacent to the site.

8.3 Navigational Routes (Formal/Informal)

The shoreline in which the farm sits is not on a normal navigation route; however, vessels that wish to navigate within the area can go through the farm, either inside or outside of the site.

The farm does not impede vessel movements along the coastline or access to the adjacent land.

8.4 Anchorages or Mooring Areas (Formal/Informal)

There are 5 registered moorings in Brightlands Bay to the south and southwest of the site. Moorings 2101, 2102, 2103, 2104 and 2105 are all owned by the Beal Family.

The site does not impede access to these moorings.

Applicant's proposed conditions for this activity

GL & PE Beal Family Trusts and Te Hoiere Asset Holding Company Limited have applied to renew the existing Resource Consent U960533 (MPE379) marine farm site 8307 (total 3.58ha) for the purpose of farming Greenshell mussels (*Perna canaliculus*), blue mussels (*Mytilus galloprovincialis*), scallops (*Pecten novaezelandiae*) and dredge oysters (*Tiostrea chilensis*), using conventional long line methods. (Refer to attached layout diagrams illustrating the site.)

Part 2 RMA

Matters of national importance (Section 6 Resource Management Act 1991)

1. Assess your application against the following matters of national importance:

6.1 (a) 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:

Section 6(a) is given effect through Policy 13 of the New Zealand Coastal Policy Statement and is considered further below.

6.1 (b) the protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development:

The area has not been identified within the Marlborough Sounds Resource Management Plan as being an area of outstanding natural landscape value.

The area has not been described as an area of outstanding landscape, outstanding very high or high coastal natural character in the proposed Plan.

The effects of the Application on the landscape will be the same as the present Consent and any effects will not impact on the values which contribute to the landscape.

6.1 (c) the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna:

The adjacent vegetation next to the farm is regenerating bush.

6.1 (d) the maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers:

Public access is maintained with good separation from the coast and main navigational routes.

6.1 (e) the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga:

The Applicant is unaware of any new historical sites on land nearby identified since the last Application. This will be confirmed through consultation with Iwi.

6.1 (f) the protection of historic heritage from inappropriate subdivision, use, and development:

The Applicant is unaware of any new historical sites on land nearby identified since the last Application. This will be confirmed through consultation with Iwi.

6.1 (g) the protection of protected customary rights.

Policy 2 sets out a number of matters which are relevant to the taking into account of the principles of the Treaty of Waitangi and kaitiakitanga, in relation to the coastal environment.

The applicant recognises that Ngāti Apa ki te Rā Tō, Ngāti Kuia, Rangitāne o Wairau, Ngāti Kōata, Ngāti Rārua, Ngāti Tama ki Te Tau Ihu, Te Ātiawa o Te Waka-a-Māui and Ngati Toa Rangatira have statutory acknowledgments in the area of the application site. Those acknowledgements have been considered during the preparation of this application, as outlined above.

The iwi management plans of Ngāti Kōata and Te Ātiawa o Te Waka-a-Māui have been reviewed.

There are also no established areas of protected customary rights or customary marine title within the meaning of the Marine and Coastal Area (Takutai Moana) Act 2011.

The applicant recognises that Ngati Kuia have a special, long, intergenerational association to Te Taulhu o te waka a Maui/Top of the South Island and consider the Te Hoiere/Pelorus to be at the centre of their spheres of occupation and influence, spanning 1,000 years.

Over many centuries Ngati Kuia and their descendants have built paa, kainga, purakau, mapped mahinga kai and built spiritual connections where their people lived and been laid to rest.

"Te Hoiere awa/moana is Taonga tuku iho ki Tangata Whenua/Ngati Kuia therefore this requires the Crown and its agencies to give recognition to and make provision for the exercise of Kaitiakitanga by whanau, hapu and Iwi who are operating within the Maori Customary and commercial Deeds of Settlement.[i]"

The Applicant will discuss the proposal further with relevant Iwi representatives.

[i] Raymond Smith – Ngai Kuia

6.1 (h) the management of significant risks from natural hazards.

The industry has developed a Tsunami Management Plan

Other matters (Section 7 Resource Management Act 1991)

1. Assess your application against the following matters:

7.1 (a) kaitiakitanga:

This matter has been considered earlier in the original proposal. This application is not anticipated to have any additional effects over and above what already exists.

7.1 (aa) the ethic of stewardship:

The Applicant's farm is jointly managed by Sanford Limited and Kono, who adhere to the 'Greenshell Mussel Industry Environmental Code of Practice' and its successor, the 'Environment Management Framework' and are both active participants of the Marine Farming Association's Environmental Programme.

This programme covers the activities of marine farmers "on water" activities and includes being an active participant in beach clean ups and adhering to the following Codes of Practice:

- 'Marine Farming Operating Standards Marlborough Sounds, Tasman and Golden Bays'.
- 'Code of Practice to avoid, remedy or mitigate noise from marine farming activities in the Marlborough Sounds, Golden Bay and Tasman Bay, on other users and residents'.
- 'Reducing Pollution and Emissions from Marine Farming 'On Water' Activities'.
- 'Reducing Waste taken to Landfill from Marine Farming 'On water' Activities'.

Sanford Limited were one of the inaugural recipients of Environmental Certification status from the Marine Farming Association. This was achieved through complying with all requirements of the Marine Farming Association's Environmental Programme and having passed audits of the farms and vessels.

Kono NZ LP were also awarded Environment Certification status in 2017.

Kono, a Māori-owned food and beverage business based in Te Tau Ihu, the top of the South Island, was awarded Te Tupu-ā-Nuku Award for Business and Innovation at Ngā Whetū ō Matariki Awards. The award recognises a Māori business for their contribution to Aotearoa New Zealand's economy and future.

7.1 (b) the efficient use and development of natural and physical resources:

This matter has been considered earlier in the original proposal. This application is not anticipated to have any additional effects over and above what already exists.

7.1 (ba) the efficiency of the end use of energy:

Provision not relevant

7.1 (c) the maintenance and enhancement of amenity values:

This matter has been considered earlier in the original proposal. This application is not anticipated to have any additional effects over and above what already exists.

7.1 (d) intrinsic values of ecosystems:

This matter has been considered earlier in the original proposal. This application is not anticipated to have any additional effects over and above what already exists.

7.1 (f) maintenance and enhancement of the quality of the environment:

This matter has been considered earlier in the original proposal. This application is not anticipated to have any additional effects over and above what already exists.

7.1 (g) any finite characteristics of natural and physical resources:

This matter has been considered earlier in the original proposal. This application is not anticipated to have any additional effects over and above what already exists.

7.1 (h) the protection of the habitat of trout and salmon:

Provision not relevant

7.1 (i) the effects of climate change:

The effects of climate change on mussel farms is unknown, however, mussels can withstand a large change in temperatures and growing environment. They are currently grown throughout New Zealand from Southland to Coromandel.

7.1 (j) the benefits to be derived from the use and development of renewable energy

Provision not relevant

Treaty of Waitangi (Section 8 Resource Management Act 1991)

Assess your application against the principles of the Treaty of Waitangi (Te Tiriti o Waitangi)

Policy 2 sets out a number of matters which are relevant to the taking into account of the principles of the Treaty of Waitangi and kaitiakitanga, in relation to the coastal environment.

The applicant recognises that Ngāti Apa ki te Rā Tō, Ngāti Kuia, Rangitāne o Wairau, Ngāti Kōata, Ngāti Rārua, Ngāti Tama ki Te Tau Ihu, Te Ātiawa o Te Waka-a-Māui and Ngati Toa Rangatira have statutory acknowledgments in the area of the application site. Those acknowledgements have been considered during the preparation of this application, as outlined above.

The iwi management plans of Ngāti Kōata and Te Ātiawa o Te Waka-a-Māui have been reviewed.

There are also no established areas of protected customary rights or customary marine title within the meaning of the Marine and Coastal Area (Takutai Moana) Act 2011.

The applicant recognises that Ngati Kuia have a special, long, intergenerational association to Te Taulhu o te waka a Maui/Top of the South Island and consider the Te Hoiere/Pelorus to be at the centre of their spheres of occupation and influence, spanning 1,000 years.

Over many centuries Ngati Kuia and their descendants have built paa, kainga, purakau, mapped mahinga kai and built spiritual connections where their people lived and been laid to rest.

"Te Hoiere awa/moana is Taonga tuku iho ki Tangata Whenua/Ngati Kuia therefore this requires the Crown and its agencies to give recognition to and make provision for the exercise of Kaitiakitanga by whanau, hapu and Iwi who are operating within the Maori Customary and commercial Deeds of Settlement.[i]"

The Applicant will discuss the proposal further with relevant Iwi representatives.

[i] Raymond Smith – Ngai Kuia

Statutory instruments

I attach an assessment of the proposed activity against any relevant provisions of a document referred to in section 104(1) (b) of the Resource Management Act 1991, including the information required by clause 2(2) of Schedule 4 of that Act.

The assessment under this section must include an assessment of the activity against –

- (a) Any relevant objectives, or policies in a document; and
- (b) Any relevant requirements, conditions, or permission in any rules in a document; and
- (c) Any other relevant requirements in a document (for example, in a national environmental standard or other regulations)

Statutes that are relevant to your proposed activity

Assessment under the Resource Management Act 1991

Refer to attached Assessment of Environmental Effects and appendices

Assessment under the New Zealand Coastal Policy Statement

Refer to attached Assessment of Environmental Effects and appendices

Assessment under the Marlborough Regional Policy Statement

Refer to attached Assessment of Environmental Effects and appendices

Assessment under the Marlborough Sounds Resource Management Plan

Refer to attached Assessment of Environmental Effects and appendices

Assessment under the Proposed Marlborough Environment Plan

Refer to attached Assessment of Environmental Effects and appendices

Additional information

Applications affected by Section 124 or 165ZH(1)(c) of the Resource Management Act 1991

Does this application relate to an existing consent held by the applicant which is due to expire, and the applicant is to continue the activity?

Yes - this application relates to the following existing consent

Consent number

The application is to renew the existing Resource Consent U960533 (MPE379) marine farm site 8307 (total 3.58ha)

The value of investment of the existing consent holder is

As part of this Application to renew site 8307, the Applicant is seeking to re-consent the site as a single unit and surrender the existing Consents, when the Application is granted for a period of 20 years. As a result, this is an Application to which section 165ZH(1)(c) applies and the Council must, when considering the application, have regard to the value of the investment of the existing consent holder under section 104(2A). The original existing site has been held by the applicant since 1998. From that time the applicant has expended significantly on the establishment and maintenance of the farm. The farm produces approximately 82 tonnes per annum (\$1200/ Green Weight Tonne (GWT)) and after processing the final ½ shell product would be sold on the export market at approximately \$186,550. Approximately 95% of mussel products are exported. All lines are restocked after harvest to achieve 82 GWT/per annum harvests. The mussels are processed in Havelock (Sanford) and Blenheim (Kono) where they provide a critical part of the production to maintain processing to the factory.

Section 85 of the Marine and Coastal Area (Takutai Moana) Act 2011

Is the proposed activity to occur in an area within the scope of a planning document prepared by a customary marine title group under section 85 of the Marine and Coastal Area (Takutai Moana) Act 2011?

No - the proposed activity does not occur in such an area

Additional information required for subdivision consent

Does your application include one or more consents for subdivision?

No

Additional information required for application for reclamation

Does your application include one or more consents for reclamation?

No

Plans and technical reports

Report type	Report title	Author	External reference	Keywords	Document
Benthic report	Biological Report	Davidson Environmental Limited	895	-	8307 Brightlands (Beale Rowe).pdf (4 MB)
Site Plan	Location, site, Aerial and site plans 8307	Draughting Plus	-	-	8307 Renewal Aerial Overlay.pdf (2 MB)
Site Plan	-	-	-	-	8307 Renewal Layout Plan Final.pdf (499 kB)
Site Plan	-	-	-	-	8307 Renewal Locality Map.pdf (3 MB)
Site Plan	-	-	-	-	8307 Renewal Site Plan.pdf (728 kB)
Miscellaneous	AEE Renewal	ADL	-	-	8307 AEE Renewal Sept 2018 Final.pdf (506 kB)

Affected person approvals

Have you obtained affected person(s) approvals?

No - I have not obtained affected person(s) approvals

Iwi

Have you obtained approvals from iwi?

No - I have not obtained approvals from iwi

Public notification (Section 95A(2)(b)) of the Resource Management Act 1991

Is public notification of the application requested by the applicant?

No - public notification of application is not requested

Lodgement fee

Please see [Marlborough District Council's fees page](#) for more information.

Payment ID Code

0007B9

Do you require a GST receipt for a bank payment?

Yes - I do require a GST receipt for a bank payment

If further charges are incurred, please invoice

Applicant

Fee comments

-

Declaration

I confirm that the information provided in this application and the attachments are accurate.

Yes

Authorised by (your full name)

Bruce Cardwell

Authorising person is:

Person authorised to sign on behalf of the applicant

Note to applicant

You must include all information required by this form. The information must be specified in sufficient detail to satisfy the purpose for which it is required.

You may apply for 2 or more resource consents that are needed for the same activity on the same form. If you lodge the application with the Environment Protection Agency, you must also lodge a notice in form 16A at the same time.

You must pay the charge payable to the consent authority for a resource consent application under the Resource Management Act 1991 (if any)

If your application is to the Environment Protection Agency, you may be required to pay actual and reasonable costs incurred in dealing with this matter (see section 149ZD of the Resource Management Act

1991).

Privacy information

The information you have provided on this form is required so that your application can be processed and so that statistics can be collected by Council. The information will be stored on a public register and held by Council. Details may be made available to the public about consents that have been applied for and issued by Council. If you would like access to or made corrections to your details, please contact Council.

**ASSESSMENT OF ENVIRONMENTAL EFFECTS
FOR A COASTAL PERMIT
OCCUPANCY AND DISTURBANCE OF THE SEABED**

**APPLICATION BY GL & PE BEAL FAMILY TRUSTS AND
TE HOIERE ASSET HOLDING COMPANY LIMITED
TO RENEW EXISTING CONSENT FOR MARINE FARM SITE 8307
IN BRIGHTLANDS, PELORUS SOUND, MARLBOROUGH**

1.0 INTRODUCTION - THE APPLICANT

GL & PE Beal Family Trusts and Te Hoiere Asset Holding Company Limited have applied to renew the existing Resource Consent U960533 (MPE379) marine farm site 8307 (total 3.58ha) for the purpose of farming Greenshell mussels (*Perna canaliculus*), blue mussels (*Mytilus galloprovincialis*), scallops (*Pecten novaezelandiae*) and dredge oysters (*Tiostrea chilensis*), using conventional long line methods. (Refer to attached layout diagrams illustrating the site.)

Resource Consent U960553 was initially declined by the Marlborough District Council. The Applicant appealed the decision and in July 1998 the Environment Court issued a Consent Order for the 3.58ha site. The associated marine farming permit MPE379 was issued in March 1999, under the Fisheries Act 1983.

U960533 (MPE379) expires 21 July 2033.

The Applicant seeks a 20-year term expiring in 2038.

U960533 (MPE379) is assessed as discretionary activity in the current Marlborough Sounds Resource Management Plan.

There is a Ministry of Fisheries (MoF) exclusion area inshore of the farm. One mussel line currently sits in part across this area and the line will be removed and the area surrendered. There are no mussels growing on the line and it will be removed as part of the farm upgrade, upon the granting of this consent.

The Application is seaward of the existing/original approved site as shown in the attached site plan. The Marlborough District Council is aware that due to errors in surveying systems 20 years ago, the farm structures of many marine farms were installed seaward of the licence boundaries.

The inshore area of the farm will be surrendered and substituted by the seaward area and there is no additional water space sought. Maps are attached to this Application outlining this change. The Applicant agrees to remove the inside line and the inshore boundary of the consent will commence at 70 metres from the low tide mark, as recommended in the Davidson report.

The Application is for a continuation of the activities currently consented at the site. No changes to the activities are proposed.

The site lies within the boundary of the CMZ2, an area in which marine farming activity is a discretionary activity.

As this is a 'like for like' Application by an existing permit holder, the Application should be processed under section 165ZH. The Applicant's adherence to the Codes of Practice mentioned above, and its commitment to environmental programmes and activities, along with its compliance with the conditions of the existing Consent, are conduct in the Applicant's favour, in terms of section 165ZJ(1).

The site dimensions are as per the attached layout plans. The Application includes 7 long lines, each being approximately between 220 and 230 metres long. The proposed site plan mirrors the lines currently installed on the site.

Resource consent U960553, Condition 5 states;

"5. That the structure be limited to anchors, ropes, droppers, cages, racks, floats and lights associated with the farming of the approved species within the boundaries of the consent area. The number of lines shall be at the discretion of the consent holder, but shall not exceed the number shown on the attached plan, the separation distances between lines shall be no less than as shown, and lines shall be oriented as shown."

The proposed structure plan complies with this condition; however the length of the backbones installed are longer than the existing Resource Consent. These lines were installed without the aid of the accurate mapping and installation technology available today. The crop rope installed and biomass grown onto the backbones does not necessarily increase as farmers space out crop rope droppers and farm to meet the growing conditions. The spreading of droppers allows greater waterflow.

There are currently 8 lines installed on the farm. Only 6 lines are operational at the site growing Greenshell mussels. The Applicant identified from the Marlborough District Council 'Smart Maps' website in 2012 that the inside line (line 1) is partly located over a MoF exclusion area and the outside line (line 8) is offsite. Immediate corrective action was undertaken. Since then, both of these lines have remained empty post-harvest. The inshore line will be removed and the Applicant will accept as a condition of the consent. The outside line will included in this renewal (some adjustment is required on the southern anchor of this line). The Application seeks to renew the consent for 7 lines.

The site layout is attached to the Application.

The Applicants are the joint owners of farm 8307, being the GL & PE Family Trusts and Te Hoiere Asset Holding Company. Gus and Peter Beal have been mussel farmers since the industry commenced. Gus was a member of the Executive Committee of the Marine Farming Association for many years. They are also long-term residents of Brightlands Bay where the farm is located and have long association with this rohe being descents of Jacky Guard. Te Hoiere Asset Holding Company is the commercial arm of Te Rūnanga o Ngāti Kuia. Te Hoiere was the waka in which Ngāti Kuia landed at Te Taihu (Top of the South Island).

The Applicant's farm is jointly managed by Sanford Limited and Kono, who adhere to the 'Greenshell Mussel Industry Environmental Code of Practice' and its successor, the 'Environment Management Framework' and are both active participants of the Marine Farming Association's Environmental Programme.

This programme covers the activities of marine farmers "on water" activities and includes being an active participant in beach clean ups and adhering to the following Codes of Practice:

- 'Marine Farming Operating Standards Marlborough Sounds, Tasman and Golden Bays'.
- 'Code of Practice to avoid, remedy or mitigate noise from marine farming activities in the Marlborough Sounds, Golden Bay and Tasman Bay, on other users and residents'.
- 'Reducing Pollution and Emissions from Marine Farming 'On Water' Activities'.
- 'Reducing Waste taken to Landfill from Marine Farming 'On water' Activities'.

Sanford Limited were one of the inaugural recipients of Environmental Certification status from the Marine Farming Association. This was achieved through complying with all requirements of the Marine Farming Association's Environmental Programme and having passed audits of the farms and vessels.

Kono NZ LP were also awarded Environment Certification status in 2017.

Kono, a Māori-owned food and beverage business based in Te Tau Ihu, the top of the South Island, was awarded Te Tupu-ā-Nuku Award for Business and Innovation at Ngā Whetū ō Matariki Awards. The award recognises a Māori business for their contribution to Aotearoa New Zealand's economy and future.

2.0 INTRODUCTION - THE APPLICATION

2.1 Size: The site is 3.58ha, as originally applied for in 1998.

2.2 Structures: The site dimensions will be: inshore boundary 275 metres long, outer boundary 275 metres, northern boundary 132.50 metres long and southern boundary 132.50 metres long (refer attached site plan).

There will be a total of 7 longlines (refer attached layout diagram).

2.3 Species: It is proposed to farm and harvest Greenshell mussels (*Perna canaliculus*), blue mussels (*Mytilus galloprovincialis*), scallops (*Pecten novaezelandiae*) and dredge oysters (*Tiostrea chilensis*) using conventional long line methods.

The Application is for a continuation of the activities currently consented at the site. No changes to the activities are proposed. The existing consent is for 7 lines at 197 metres and this Application reflects the actual backbone length installed on the farm.

3.0 PERMITTED ACTIVITIES

The Application is for a new consent to replace U960533 (MPE379) in Brightlands, Pelorus Sound to seed, cultivate and harvest species Greenshell mussels (*Perna canaliculus*), blue mussels (*Mytilus galloprovincialis*), scallops (*Pecten novaezelandiae*) and dredge oysters (*Tiostrea chilensis*) using conventional long line methods, including occupation of 3.58ha of the coastal marine area. Consent is also sought to allow the existing seabed anchoring devices to remain (and be replaced as required), to harvest marine farming product from the marine farm (including the discharging of coastal seawater and discharge of biodegradable and organic waste matter) and all other activities that are ancillary to the operation on site 8307.

The movement of vessels is a permitted activity: s27 Marine and Coastal Area (Takutai Moana) Act 2011. This right includes anything reasonably incidental to vessel movement (s27(2)).

The proposed activity has been assessed against the relevant provisions of the:

1. New Zealand Coastal Policy Statement 2010;
2. Marlborough Regional Policy Statement;
3. Marlborough Sounds Resource Management Plan; and
4. Proposed Marlborough Environment Plan

at Sections 23 and 24/Appendices A – C of this Assessment of Environmental Effects.

Other activities that relate to this Application include permissions that do not relate to the Resource Management Act, including;

1. Fish farming licence
2. Aquaculture Decision

4.0 TERMS OF CONSENT

MPE379 (U960553) expires 21 July 2033.

The Applicant seeks a 20-year term, expiring in 2038.

5.0 THE SITE - LOCATION

The site is along the inner south-eastern coastline of Brightlands Bay, Pelorus Sound.

“Brightlands Bay is a small north-facing bay on the southern shore of Tawhitinui Reach, Pelorus Sound. Brightlands Bay is approximately 43 km by sea from Havelock and 25 km from the Pelorus Harbour limit. Brightlands Bay has a coastline length of approximately 3 km and covers an area of sea of approximately 88.5 ha. The mouth of Brightlands Bay is approximately 1.5 km wide, and the bay is roughly 1 km long.” (Davidson Environmental Report 895).

The farm sits alongside other farms on the eastern side of Brightlands Bay. The nearest marine farms to 8307 are the adjacent farms to the northwest 8306 and to the northeast 8308 and 8309.

The adjacent land to the south and east of the farm is Rural 1. There is one residence in the Bay, approximately 400 metres to the southwest of the farm. This residence is owned by one of the parties, being the Beal family.

The site lies within the boundary of Coastal Marine Zone 2 (CMZ2).

6.0 THE SITE - DIMENSIONS

The site dimensions have been described above and are as per the layout plans attached. The depth of the water at each of the site corners is 22 metres (NW), 12 metres (NE), 4 metres (SE), and 10 metres (SW).

The Application includes 7 long lines, each being approximately between 220 - 230 metres long.

There are currently 8 lines installed but only 6 lines operating at the site that grow Greenshell mussels. Line 1, the inshore line is not being used and will be removed. The outside line is not being used but is incorporated within the renewal application area (although the southern anchor requires adjustment). The site layout is attached to the Application.

The warp lengths are approximately 17 - 38 metres from each end of the backbone (see line layout diagram for individual longline lengths). The warp ratio is 2:1.

The farm is identified as being onsite as shown on the Marlborough District Council website ('Smart Maps'), except for the outside line which sits outside the consent and the inside line sits partly within a Ministry of Fisheries exclusion area. The new plan rectifies both of these issues.

7.0 THE PRESENT ENVIRONMENT

7.1 The Marine Environment

In July 2018 Mr RJ Davidson, of Davidson Environmental Ltd undertook a biological study of the ecology of the marine area of site 8307 (Report 895 attached).

The Report indicates that the impact of the existing activity is similar to other mussel farming activities in the Pelorus Sound. In particular, the report states the following;

“5.0 Conclusions

5.1 Benthic habitats and substratum

Substratum and habitat distribution relative to the re-consent area was based on drop camera stations and sonar imaging of the benthos.

Most of the consent area was located over silt and fine sand substratum with or without a component of natural shell. Hard substrata extended into the north-eastern inshore area of the consent, characterised by silt, fine sand, natural and mussel shell and cobbles.

Mud (i.e. silt and clay) is the most common subtidal habitat in the sheltered Marlborough Sounds (McKnight and Grange, 1991) and has been traditionally targeted for marine farming activities. This substratum type is considered suitable for consideration for marine farming activities in the Marlborough Sounds.

Unlike mud and silt, rocky substratum is not traditionally considered suitable for marine farming activities as it usually is smothered by shell debris and likely no longer functions as a hard substratum habitat. Rocky substrata were observed extending into the consent area.

5.2 Species and communities

Species abundance and diversity from most of the consent was low compared to high current locations in the Sounds. Benthic observations within silt dominated areas of the consent confirmed the area supported species typical of silt substratum (e.g. cushion seastars, sea cucumbers). Horse mussels were observed during the present survey in several photos in low abundance. Davidson (1996) previously documented horse mussel presence, noting densities were below those recognized as a horse mussel bed.

Spotty observed associated with hard substrata in this present survey are widespread in the Marlborough Sounds.

No further species or communities of scientific, conservation or ecological importance were observed during the present study (see Davidson et al., 2011 for criteria and biological features).

5.3 Mussel farming impacts

5.3.1 Benthic impacts

Mussel shell debris was recorded from 15 of the 21 consent area photos. Mussel debris was most abundant under backbones, ranging from none to high cover. Only one photo observed low mussel shell cover under warps. Mussel shell debris ranged from none to high in photos taken in the inshore exclusion area of the consent (i.e. no structure zone), including low cover on hard substrata recorded here. This may be a result of structures positioned slightly inside the exclusion zone, or movement of structures due to environmental variables (e.g. wind and tide).

Benthic observations of the offshore area bordering surface structures outside of the consent recorded no mussel shell debris, however, it is probable mussel shell will exist under the backbone. Shell debris impact levels were within the range known for mussel farms in the Marlborough Sounds. This farm impact at this site is at the low to moderate end of the impact range compared to other farms in the Sounds.

It is probable that the impact of continued shellfish farming at this site will result in the deposition of more shell and fine sediment under and near droppers. Based on the literature and assuming the present level of farming activity remains consistent, it is very unlikely that the surface sediments would become anoxic, however, the redox layer is likely shallower compared to sites away from the farm (Hartstein and Rowden, 2004; Keeley et al., 2009;).

5.4 Boundary adjustments, line adjustments and monitoring

At least one mussel backbone line was located offshore of the consent. The offshore out of consent backbone/s were positioned over flat silt and fine sand substrata with components of natural shell. Surface structures were slightly inside the Ministry of Fisheries exclusion area along the inshore part of the consent and mussel shell debris ranged from none to high value in this area.

Davidson (1996) suggested the inshore boundary of the farm be relocated to a minimum distance of 70 m offshore. The reasons were related to cobble habitat towards the northern end, and the fine sand, broken shell community (relatively dense bed of bivalves) located towards the southern inshore end of the proposed farm area.

The present survey confirmed the presence of cobble substrata extending into the consent area towards the northern end, and immediately adjacent to the consent. It is recommended that either (A) the structure exclusion zone be increased by 10 m width or (B) the farm be adjusted further from shore to avoid hard substrata. During the present survey, substratum located immediately offshore of the consent were investigated and proved more suitable for consideration for marine farming activities compared to inshore areas.

For the remaining consent area, no benthic habitats or biological communities of particular interest were found during the present survey.

Based on the soft substratum located under structures and the impact levels of the existing activity, no monitoring is suggested. Habitats and species associated with the site are typical of sheltered central Pelorus Bays and as such no monitoring is suggested." (Davidson Environmental Report 895)

The Applicant commits to recommendation B to adjust the farm further seaward to avoid the hard substrata.

The Report also indicates that the impact of the current activities is in line with expectations of the environmental impacts of mussel farming. In addition, the current study supports the Ministry of Fisheries assessment which was used to assess the sustainability of the farm and its impact on fishing and fishery resources.

7.2 The Land Environment

The site lies in Brightlands Bay, within Tawhitinui Reach, Pelorus Sound. (Refer attached locality map.)

The adjacent land is regenerating bush.

The coastline adjacent consists of steep hill slopes with short to moderately high coastal cliffs.

The beach is dominated by hard rock and boulders, although small beaches have formed along the coastline in this area.

8.0 NAVIGATION MATTERS

8.1 The Shoreline

The distance from the shoreline holds with the conventions established in the Marlborough Sounds Resource Management Plan; that is the inshore boundary of the farm is beyond 50 metres from the mean low water mark. The farm will be moved to 70 metres from the low tide mark.

8.2 Headlands

There are no headlands immediately adjacent to the site.

8.3 Navigational Routes (Formal/Informal)

The shoreline in which the farm sits is not on a normal navigation route; however, vessels that wish to navigate within the area can go through the farm, either inside or outside of the site.

The farm does not impede vessel movements along the coastline or access to the adjacent land.

8.4 Anchorages or Mooring Areas (Formal/Informal)

There are 5 registered moorings in Brightlands Bay to the south and southwest of the site. Moorings 2101, 2102, 2103, 2104 and 2105 are all owned by the Beal Family.

The site does not impede access to these moorings.

8.5 Indirect Effects - Servicing vessels at site

The Applicant estimates farming and harvesting vessels will visit the site on an average of 25 - 30 days a year, for periods of 0.5 to 8 hrs, to undertake farm maintenance, seeding and harvesting.

The total number of hours spent on these activities is estimated to be 80 - 90 hrs annually.

8.6 Water Ski Lanes

There are no formal water ski lanes in the vicinity.

8.7 Submarine Cables

There are no submarine cables in the immediate vicinity of the farm.

9.0 AESTHETIC

9.1 Land Zoned for Residential Use or Proximity to Residences

The adjacent land to the south and east of the farm is Rural 1.

There is one residence in the Bay, approximately 400 metres to the southwest of the farm. This residence is owned by the Beal Family.

9.2 Scenic Value

The area has not been identified within the Marlborough Sounds Resource Management Plan as being an area of outstanding natural landscape value.

The area has not been described as an area of outstanding landscape, outstanding very high or high coastal natural character in the proposed Plan.

The effect of the marine farm on the adjacent area will not have any effect on the flora and fauna of this area.

10.0 ECOLOGICAL VALUE

There are no areas of ecological value identified in the Marlborough Sounds Resource Management Plan for the site.

There are no areas of ecological significance in the proposed Plan.

The effect of the marine farm on the adjacent area will not have an effect on the flora and fauna of this area.

11.0 RECREATIONAL VALUE

The visual impact of the marine farm will not change.

Access to the coast for recreationalists is maintained.

12.0 HISTORICAL, TRADITIONAL AND CULTURAL VALUES

No sites of archaeological, historical or traditional value are known by the Applicant to be present in the area.

In preparing this Application, the Applicant has had regard to the Te Tau Ihu Statutory Acknowledgments and has reviewed the Statements of Association for each iwi. The Applicant understands that this Application will be notified to Iwi with statutory acknowledgements in the area and will discuss the Application further with Iwi representatives.

The applicant recognises that Ngati Kuia have a special, long, intergenerational association to Te Taulhu o te waka a Maui/Top of the South Island and consider the Te Hoiere/Pelorus to be at the centre of their spheres of occupation and influence, spanning 1,000 years.

Over many centuries, Ngati Kuia and their descendants have built paa, kainga, purakau, mapped mahinga kai and built spiritual connections where their people lived and have been laid to rest.

"Te Hoiere awa/moana is Taonga tuku iho ki Tangata Whenua/Ngati Kuia therefore this requires the Crown and its agencies to give recognition to and make provision for the exercise of Kaitiakitanga by whanau, hapu and Iwi who are operating within the Maori Customary and commercial Deeds of Settlement.¹"

13.0 COMMERCIAL AND RECREATIONAL FISHING

Matters impacting on commercial and recreational fishing are controlled by the Ministry of Primary Industry's (MPI) Undue Adverse Effects test (UAE).

13.1 Commercial Fishing

Commercial fishing is not known to occur in Brightlands Bay but may occur offshore. The farm will not interfere with commercial fishing operations. No artificial feed or attractants are added.

13.2 Recreational Fishing

It is the Applicant's view that the marine farm at the site enhances opportunities for recreational fishing, as marine farms generally tend to create an ecosystem which is conducive to the presence of reef fish and other fish species.

14.0 VISUAL EFFECTS OF THE FARM

Visual effects will remain the same as they exist at the present. in length containing black mussel buoys ranging between approximately 4 and 60 per line. (Albeit there is one extra line to be removed).

At the end of each longline an orange buoy will be displayed and an orange buoy will be displayed in the middle of each of the seaward most and landward most longlines.

A yellow light, radar reflector and a band of reflective tape will be displayed on the seaward corners and radar reflectors and a band of reflective tape will be displayed on the landward corners or as requested on the lighting plan provided by the Harbour Master.

15.0 EFFECTS ON WATER QUALITY AND ECOLOGY

Water quality of the area is suitable for mussel farming. The site relies on water quality to enable the process of mussel farming to flourish. The site 8307 has a good capacity for mixing of water with regular tidal currents, wind and wave action.

The effect on the ecology of the site from the existing activity is attached in the Davidson Environmental Limited Report 895.

No specific sites of marine ecological significance have been identified in Brightlands Bay in the 'Ecological Significant Marine Sites in Marlborough New Zealand' published by Rob Davidson and others in 2011.

16.0 EFFECTS ON PRODUCTIVITY

Water quality is unlikely to be a problem for mussel farming in Brightlands Bay. The continuing activity itself is unlikely to create any significant detrimental effects on water quality. Exert from Davidson Report (Benthic Report 895, refer attached).

"5.3.2 Productivity

Mussel farms can influence adjacent farms by slowing water flow to farms located in downstream positions. This is particularly pronounced in quiescent areas of the Sounds. However, published work by Zeldis et al. (2008, 2013) suggests that the major factors influencing productivity in the Marlborough Sounds relate to cyclical weather patterns in the summer (El Nino and La Nina) and river-derived nutrient inputs in winter. Slow crop cycles in some years are therefore a reflection of a weather cycle and much less about the number of farms.

There has been no data presented to show the ecological carrying capacity of the Sounds has been reached, however, this topic is not well researched. There is considerable evidence showing the major drivers of the Pelorus system, for example, naturally leads to large within and between year

variability. Relative to this, the impact of mussel farms appears to be material but relatively small compared to major environmental drivers (Broekhuizen et al., 2015).

Tidal flows in Brightlands Bay are expected to be low; however, winds may be a significant driver of water movement in this area, especially during the predominant north-westerly winds. The proximity of the farm to the main reach means water turnover times are likely to be relatively short compared to bays well distant to main reach (e.g. Hallam Cove).

Based on these considerations and the existing literature, it is probable the site is unlikely to cause significant phytoplankton depletion outside the boundaries of the consent.”

17.0 THE BENTHIC ENVIRONMENT

In terms of the benthic environment, the ecology of this area has been documented in Davidson Environmental Ltd Report 895 (refer to 7.1 above).

There are changes to the site boundaries to mitigate any adverse impacts on the seabed.

The applicant is mindful of the need to consider the cumulative effects of this farm over time and in combination with other effects, as required by s 3(d) of the Act. The effects of a farm at this specific location are assessed elsewhere in this assessment of environmental effects.

The aquaculture industry has contributed and is contributing to a better understanding of cumulative effects on a number of fronts, including:

- (a) The Marine Farming Association co-funded the 2017 NIWA history of seabed change in Pelorus Sound project;²
- (b) A king shag working group has been formed to draft and implement an *Action Plan and Research Strategy for the NZ King Shag*, which involves several stakeholders, including government departments and industry;
- (c) King shag population counts are undertaken by aerial survey as part of New Zealand King Salmon’s consent conditions;
- (d) Many benthic surveys have been conducted throughout the Sounds as part of marine farm consent applications. This has contributed to our overall understanding of Marlborough’s marine environment;
- (e) Water quality monitoring is undertaken as part of the Marlborough Shellfish Quality Programme; and
- (f) Fisheries Resource Impact Assessments (FRIA) were collective industry-led bay by bay assessments on the impacts of aquaculture on fisheries resources.

The applicant continues to support the industry’s collective response to these issues.

Aquaculture is part of the Marlborough Sounds environment. We cannot look at this application in isolation from its wider environment. We know that the marine environment in the Sounds has

been modified by human activities, including physical disturbance from historical dredging and trawling, as well as from catchment effects such as historic land clearance.³ In a relative sense, we know that aquaculture is having less of an impact on the marine environment than many anthropogenic stressors, including climate change, ocean acidification, sedimentation from land-based activities, dredging and trawling, and coastal engineering.⁴

We also know that mussel farms provide benefits or “ecosystem services.” Farmed mussels have replaced the natural mussel beds that were present throughout the Pelorus Sound in the 1960s prior to extensive commercial dredging.⁵ Mussels remove nutrients derived from land-use practices.

The applicant agrees with other stakeholders who are calling for a strategic assessment of cumulative effects.⁶ That exercise is required by policy 7(2) of the New Zealand Coastal Policy Statement 2010. It is more than can be expected of one applicant. It is best undertaken via the proposed Marlborough Environment Plan process, or in partnership with local and central government.

18.0 ALIENATION OF PUBLIC SPACE

The general area of this part of the Pelorus Sound has been utilised by marine farmers in excess of 35 years. Recreation and commercial boat owners are aware of marine farms in this area and all vessels have the opportunity to use the site and transit through it. The spacing between the long lines provides opportunity for access by vessels wanting to transit the site.

19.0 HARVESTING

As part of this Application, the Applicant seeks to continue harvesting mussel crops. The right to navigate to and from the farm, and to anchor, moor and load crop is preserved by section 27 of the Marine and Coastal Area (Takutai Moana) Act 2011. However, consent is required for the amount of organic waste matter which is discharged during the harvesting process and for the take and use of coastal water. No significant historical adverse effects have been recorded or are anticipated and any visual evidence of harvesting quickly dissipates in the coastal environment.

Vessels will be required to service the farm on an irregular basis (refer 8.5).

20.0 ON SHORE FACILITIES

The applicant’s farm work and harvesting are completed by Sanford Limited and Kono NZ LP who already has onshore marine farm facilities based in Havelock.

21.0 VALUE OF INVESTMENT

As part of this Application to renew site 8307, the Applicant is seeking to re-consent the site as a single unit and surrender the existing Consents, when the Application is granted for a period of 20 years. As a result, this is an Application to which section 165ZH(1)(c) applies and the Council must, when considering the application, have regard to the value of the investment of the existing consent holder under section 104(2A).

The original existing site has been held by the applicant since 1998. From that time the applicant has expended significantly on the establishment and maintenance of the farm.

The farm produces approximately 82 tonnes per annum (\$1200/ Green Weight Tonne (GWT)) and after processing the final ½ shell product would be sold on the export market at approximately \$186,550. Approximately 95% of mussel products are exported. All lines are restocked after harvest to achieve 82 GWT/per annum harvests.

The mussels are processed in Havelock (Sanford) and Blenheim (Kono) where they provide a critical part of the production to maintain processing to the factory.

22.0 PART II RESOURCE MANAGEMENT ACT ISSUES

22.1 Section 5

Section 5 of the Resource Management Act 1991 is given effect through the New Zealand Coastal Policy Statement, Marlborough Regional Policy Statement and Marlborough Sounds Resource Management Plan.

In terms of the enabling provisions in Section 5 of the Resource Management Act, the marine farm industry has been, and will continue to be, a source of substantial revenue generation and job creation in the Marlborough Sounds and, in the Nelson/Marlborough region.

The majority of mussels produced from the site will be exported, thereby generating foreign exchange earnings for the country. Applications such as this enable the sustainable use of the marine environment.

22.2 Section 6

Matters of national importance have been assessed under the requirements of the Marlborough Sounds Resource Management Plan.

The Proposal recognises:

- a. 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:*

Section 6(a) is given effect through Policy 13 of the New Zealand Coastal Policy Statement and is considered further below.

b. The protection of outstanding natural features and landscapes from inappropriate Subdivision, use, and development:

The area has not been identified within the Marlborough Sounds Resource Management Plan as being an area of outstanding natural landscape value.

The area has not been described as an area of outstanding landscape, outstanding very high or high coastal natural character in the proposed Plan.

The effects of the Application on the landscape will be the same as the present Consent and any effects will not impact on the values which contribute to the landscape.

c. The protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna:

The adjacent vegetation next to the farm is regenerating bush.

d. The maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers:

Public access is maintained with good separation from the coast and main navigational routes.

e. The relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga.

The Applicant is unaware of any new historical sites on land nearby identified since the last Application. This will be confirmed through consultation with Iwi.

22.3 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:

- (a) Kaitiakitanga:*
- (b) The efficient use and development of natural and physical resources:*
- (c) The maintenance and enhancement of amenity values:*
- (d) Intrinsic values of ecosystems:*
- (e) Recognition and protection of the heritage values of the sites, buildings, place, or areas:*

- (f) *Maintenance and enhancement of quality of the environment:*
- (g) *Any finite characteristics of natural and physical resources:*
- (h) *The protection of the habitat of trout and salmon.*

Matters under Section 7 (a - g) have been considered earlier in the original proposal. This Application is not anticipated to have any additional effects over and above what already exists. Section (h) is not relevant to this Application.

23.0 NEW ZEALAND COASTAL POLICY STATEMENT 2010 (NZCPS)

The New Zealand Coastal Policy Statement 2010 is of general relevance to this Application and all policies have been considered in the development of the proposal.

Policies of specific relevance are considered below.

23.1 Policy 2

Policy 2 sets out a number of matters which are relevant to the taking into account of the principles of the Treaty of Waitangi and kaitiakitanga, in relation to the coastal environment.

The applicant recognises that Ngāti Apa ki te Rā Tō, Ngāti Kuia, Rangitāne o Wairau, Ngāti Kōata, Ngāti Rārua, Ngāti Tama ki Te Tau Ihu, Te Ātiawa o Te Waka-a-Māui and Ngati Toa Rangatira have statutory acknowledgments in the area of the application site. Those acknowledgements have been considered during the preparation of this application, as outlined above.

The iwi management plans of Ngāti Kōata and Te Ātiawa o Te Waka-a-Māui have been reviewed.

There are also no established areas of protected customary rights or customary marine title within the meaning of the Marine and Coastal Area (Takutai Moana) Act 2011.

The applicant recognises that Ngati Kuia have a special, long, intergenerational association to Te Taulhu o te waka a Maui/Top of the South Island and consider the Te Hoiere/Pelorus to be at the centre of their spheres of occupation and influence, spanning 1,000 years.

Over many centuries Ngati Kuia and their descendants have built paa, kainga, purakau, mapped mahinga kai and built spiritual connections where their people lived and been laid to rest.

"Te Hoiere awa/moana is Taonga tuku iho ki Tangata Whenua/Ngati Kuia therefore this requires the Crown and its agencies to give recognition to and make provision for the exercise of Kaitiakitanga by whanau, hapu and Iwi who are operating within the Maori Customary and commercial Deeds of Settlement.⁷"

The Applicant will discuss the proposal further with relevant Iwi representatives.

23.2 Policy 6

Policy 6 of the NZCPS is in two parts; the first dealing with activities in the coastal environment more broadly, and the second with those in the coastal marine area more specifically.

The farm is part of the existing built environment, so is in accordance with subpart 1(f), as continuation of the farm would not result in a change in the present character of Brightlands Bay.

No areas of indigenous biodiversity or historic heritage value have been identified in relation to the site, so the farm complies with subpart 1(j).

Subpart 2 of Policy 6 is particularly relevant. Mussel farming clearly has a functional need to be located in the coastal marine area. The farm directly contributes to the social and economic wellbeing of people and communities, in accordance with subpart 2(a). This is discussed in relation to Policy 8 below.

23.3 Policy 8

Policy 8 of the NZCPS provides for the recognition of the significant existing and potential contribution of aquaculture to the social, economic and cultural wellbeing of people and communities by:

- (a) including in regional policy statements and regional coastal plans provision for aquaculture activities in appropriate places in the coastal environment, recognising that relevant considerations may include:
 - i. The need for high quality water for aquaculture activities; and*
 - ii. The need for land-based facilities associated with marine farming.**
- (b) Taking account of the social and economic benefits of aquaculture, including any available assessments of national and regional economic benefits; and*
- (c) Ensuring that development in the coastal environment does not make water quality unfit for aquaculture activities in areas approved for that purpose.*

The Application will enable the continuation of production from the site, contributing to the social and economic benefits of aquaculture to the community. No changes to the impact on water quality are anticipated. This Application satisfies the requirement of Policy 8.

23.4 Policy 11

Policy 11 relates to protecting the indigenous biological diversity of the coastal environment.

The longlines are located over mud habitat and avoids any reef areas or any other areas of significant biodiversity. There will be no adverse modified effects on indigenous biodiversity.

The proposed structure plan avoids the exclusion zone and the removal of the inside line will avoid any cobble area.

23.5 Policy 13

Policy 13 provides for the avoidance of significant adverse effects on areas of the coastal environment with outstanding natural character and the avoidance, remediation and mitigation of other adverse effects on natural character.

The area has not been identified within the Marlborough Sounds Resource Management Plan as being an area of outstanding natural landscape value.

The area has not been described as an area of outstanding landscape, outstanding very high or high coastal natural character in the proposed Plan.

23.6 Policy 15

Policy 15(a) provides for the avoidance of adverse effects of activities on outstanding natural features and outstanding natural landscapes in the coastal environment.

Policy 15(b) provides for the avoidance of significant adverse effects and the avoidance, remediation, and mitigation of other adverse effects of activities on other natural features and natural landscapes in the coastal environment.

There will be no further impact on the landscape than those already occurring under the current consent. The effects of the Application on the landscape will be minor and the effects are not likely to impact on the values which contribute to the landscape.

23.7 Policy 18

Policy 18 recognises the need for public open space within and adjacent to the coastal marine area, for public use and appreciation including active and passive recreation.

The visual impact of the marine farm will not change. Access to the coast for recreationalists is maintained.

There are 5 registered moorings in the vicinity of the site owned by the applicant. The site does not impede access to these moorings. There are no formal water ski lanes. Opportunities for recreational fishing may be enhanced by the presence of the marine farm.

23.8 Policy 22

Policy 22 requires an assessment of sedimentation levels, and that use will not result in a significant increase in those levels. Davidson's biological report, discussed above, stated that while shell and fine sediment would be deposited under and in proximity to droppers, the farm structures are located over habitat considered suitable for this type of activity. No monitoring appeared to be necessary.

23.9 Policy 23

Subpart 1 of Policy 23, which relates to managing discharges to water in the coastal environment, is relevant to this Application. Silts and organic matter released at harvest are readily assimilated into the water column and seabed. The effects of harvesting mussels are only transitory, and quickly become indistinguishable from background sedimentation.

Conclusion

The effects of the Application on the landscape will be no more than minor and will result in no change to the existing status. The effects are not likely to impact on the values which contribute to the landscape.

24.0 REGIONAL POLICY STATEMENT/MARLBOROUGH SOUNDS RESOURCE MANAGEMENT PLAN

Certain provisions of the Marlborough Regional Policy Statement have relevance to this application and are considered in Appendix A.

The Marlborough Sounds Resource Management Plan contains a number of provisions that are relevant this application. An assessment of the application against the requirements of the plan is contained in Appendix B.

Conclusion

Taken overall, the application is consistent with the relevant objectives and policies of the Regional Policy Statement and Marlborough Sounds Resource Management Plan.

25.0 CONSULTATION

An e-mail has been sent to all Iwi listed below identifying the site prior to the application being submitted. Initial meetings have taken place with Ngati Kuia and Ngati Koata.

Name	Address	Phone
Ngati Koata Trust	PO Box 1659, Nelson 7040	(03) 548 1639
Te Runanga a Rangitane o Wairau	PO Box 883, Blenheim 7240	(03) 578 6180
Te Runanga O Ngati Kuia	PO Box 1046, Blenheim 7240	(03) 579 4328
Ngāti Apa ki te Rā Tō	PO Box 708, Blenheim 7240	(03) 578 9695
Te Atiawa Manawhenua Ki Te Tau Ihu Trust	PO Box 340, Picton 7250	(03) 573 5170
Ngati Toarangatira Manawhenua Ki Te Tau Ihu Trust	PO Box 5061, Blenheim 7240	(03) 577 8801

A statement from Ngai Kuia has been included in sections 12 and 23.1 of this report.
The adjacent landowner is the applicant.

26.0 CONCLUSION

The Applicant considers that the renewal of site 8307 is appropriate, thereby allowing the continued farming of Greenshell mussels at the site.

The site is in that part of the Pelorus Sound where aquaculture has long been present and has no more than a minor impact on other values in the area.

Appendix A: Marlborough Regional Policy Statement – Policy Analysis

Objective	Policy	Assessment
<p>5.3.2: That water quality in the coastal marine area be maintained at a level which provides for the sustainable management of the marine ecosystem</p>	<p>5.3.5: Avoid, remedy or mitigate the reduction of coastal water quality by contaminants arising from activities occurring within the coastal marine area.</p>	<p>No artificial feed or attractants are added. No Chemicals, antibiotics or other therapeutants added Any discharges of organic matter associated with harvesting will be transitory.</p>
<p>5.3.10: The natural species diversity and integrity of marine habitats be maintained or enhanced</p>	<p>5.3.11: Avoid, remedy or mitigate habitat disruption arising from activities occurring within the coastal marine area.</p>	<p>Any disruption associated with the existing mooring of the farm is minor in scale and transitory. The seabed is already in a modified state due to terrestrial run off.</p>
<p>7.1.9: To enable present and future generations to provide for their wellbeing by allowing use, development and protection of resources provided any adverse effects of activities are avoided, remedied or mitigated.</p>	<p>7.1.10: To enable appropriate type, scale and location of activities by:</p> <ul style="list-style-type: none"> • clustering activities with similar effects; • ensuring activities reflect the character and facilities available in the communities in which they are located; • promoting the creation and maintenance of buffer zones (such as stream banks or 'greenbelts'); • locating activities with noxious elements in areas where adverse environmental effects can be avoided, remedied or mitigated. 	<p>The marine farm is consistent with the current Policy and the designated consented area is within a bay with other marine farms.</p>
	<p>7.1.12: To ensure that no undue barriers are placed on the establishment of new activities (including new primary production species) provided the life supporting capacity of air, water, soil and ecosystems is safeguarded and any adverse environmental effects are avoided, remedied or mitigated.</p>	<p>The marine farm will be relocated within the consented area which marine farming is a permitted activity. There will be no change in permitted activity or permitted structures when the consent is renewed.</p>

7.2.7 The subdivision use and development, of the coastal environment, in a sustainable way.	7.2.8: Ensure the appropriate subdivision, use and development of the coastal environment.	The marine farm is within a bay with other marine farms. The marine farm's activity is biologically sustainable.
	7.2.10(a) - (d)	The marine farm will be relocated within the consented area which is permitted for marine farming.
7.3.2: Buildings, sites, trees and locations identified as having significant cultural or heritage value are retained for the continued benefit of the community.	7.3.3: Protect identified significant cultural and heritage features	No sites of cultural or heritage significance have been identified on the area of the application site
8.1.2: The maintenance and enhancement of the visual character of indigenous, working and built landscapes.	8.1.3: Avoid, remedy or mitigate the damage of identified outstanding landscape features arising from the effects of excavation, disturbance of vegetation, or erection of structures.	There will be no further impact on the landscape than those already permitted under the current consent. The effects of the application on the landscape will be minor and the effects are not likely to impact on the values which contribute to the landscape. The farm is well managed and complies with the Greenshell Mussel Environmental Code of Practice.
	8.1.5: Promote enhancement of the nature and character of indigenous, working, and built landscapes by all activities which use land and water.	The marine farm will have no additional impact on landscape values.
	8.1.6: Preserve the natural character of the coastal environment.	The site will have no additional impact on the natural character of the coastal environment.

Appendix B: Marlborough Sounds Resource Management Plan – Policy Analysis

Objective	Policy	Assessment
<p>Ch 2, 2.2, Obj 1: The preservation of the natural character of the coastal environment, wetlands, lakes, and rivers and their margins and the protection of them from inappropriate subdivision, use and development.</p>	<p>Policy 1.1: Avoid the adverse effects of subdivision, use or development within those areas of the coastal environment and freshwater bodies which are predominantly in their natural state and have natural character which has not been compromised.</p>	<p>This application is set in an area which is regenerating bush. The marine farm is within a bay with other marine farms.</p>
	<p>Policy 1.2: Appropriate use and development will be encouraged in areas where the natural character of the coastal environment has already been compromised, and where the adverse effects of such activities can be avoided, remedied or mitigated.</p>	<p>Refer above.</p>
	<p>Policy 1.3: To consider the effects on those qualities, elements and features which contribute to natural character, including:</p> <ul style="list-style-type: none"> a) Coastal and freshwater landforms; b) Indigenous flora and fauna, and their habitats; c) Water and water quality; d) Scenic or landscape values; e) Cultural heritage values, including historic places, sites of early settlement and sites of significance to iwi; and f) Habitat of trout. 	<p>These matters have been considered in the assessment of environmental effects.</p>
	<p>Policy 1.4: In assessing the actual or potential effects of subdivision, use or development on natural character of the coastal and freshwater environments, particular regard shall be had to the policies in Chapters, 3, 4, 5, 6, 12, 13 and Sections</p>	<p>The application will not have any additional impact on the components of these policies which impact natural character values.</p>

	9.2.1, 9.3.2 and 9.4.1 in recognition of the components of natural character.	
	Policy 1.6: In assessing the appropriateness of subdivision, use or development in coastal and freshwater environments regard shall be had to the ability to restore or rehabilitate natural character in the area subject to the proposal.	Any residual impact on natural character will naturally rehabilitate on removal of the farm.
	Policy 1.7: To adopt a precautionary approach in making decisions where the effects on the natural character of the coastal environment, wetlands, lakes and rivers (and their margins) are unknown.	The effects of this application are not unknown and are discussed elsewhere in the assessment of environmental effects. A precautionary approach is not justified.
Ch 4, 4.3, Obj 1: The protection of significant indigenous flora and fauna (including trout and salmon) and their habitats from the adverse effects of use and development	Policy 1.2: Avoid, remedy or mitigate the adverse effects of land and water use on areas of significant ecological value.	The effect of the marine farm on the adjacent area will not have any effect on the flora and fauna of this area.
Ch 5, 5.3, Obj 1: Management of the visual quality of the Sounds and protection of outstanding natural features and landscapes from inappropriate subdivision, use and development	Policy 1.1: Avoid, remedy and mitigate adverse effects of subdivision, use and development, including activities and structures, on the visual quality of outstanding natural features and landscapes, identified according to criteria in Appendix One.	The effects of the application on the landscape will be the same as the current permitted activity and the effects are not likely to impact on the values which contribute to the landscape.
Ch 6, 6.1.2, Obj 1: Recognition and provision for the relationship of Marlborough's Maori to their culture and traditions with their ancestral lands, waters, sites, waahi tapu and other taonga.	Policies 1.1-1.5	In preparing this application, the applicant has had regard to the Statutory Acknowledgments and has reviewed the statements of association for each iwi. No areas of conflict have been identified by the applicant. An initial letter has been sent to all Iwi identifying the site prior to the application being submitted

Ch 8, 8.3, Obj 1: That public access <i>to and along</i> the coastal marine area, lakes and rivers be maintained and enhanced.	Policy 1.2: Adverse effects on public access caused by the erection of structures, marine farms, works or activities in or along the coastal marine area should as far as practicable be avoided. Where complete avoidance is not practicable, the adverse effects should be mitigated and provision made for remedying those effects, to the extent practicable.	There are no additional adverse effects on public access caused by the marine farm.
	Policy 1.3: To prevent the erection of structures and marine farms that restrict public access in the coastal marine area where it is subjected to high public usage.	There are no additional adverse effects on public access caused by the marine farm.
	Policy 1.8: Public access to and along the coastal marine area should be maintained and enhanced except where it is necessary to [circumstances do not apply].	There are no additional adverse effects on public access caused by the marine farm.
Ch 9, 9.2.1, Obj 1: The accommodation of appropriate activities in the coastal marine area whilst avoiding, remedying or mitigating the adverse effects of those activities.	<p>Policy 1.1: Avoid, remedy and mitigate the adverse effects of use and development of resources in the coastal marine area on any of the following:</p> <ul style="list-style-type: none"> a) Conservation and ecological values; b) Cultural and iwi values; c) Heritage and amenity values; d) Landscape, seascape and aesthetic values; e) Marine habitats and sustainability; f) Natural character of the coastal environment; g) Navigational safety; h) Other activities, including those on land; i) Public access to and along the coast; j) Public health and safety; k) Recreation values; and l) Water quality. 	The way in which adverse effects on the stated values will be avoided, remedied and mitigated is addressed elsewhere in the assessment of environmental effects. Overall, the proposal is consistent with this policy.

	Policy 1.2: Adverse effects of subdivision, use or development in the coastal environment should as far as practicable be avoided. Where complete avoidance is not practicable, the adverse effects should be mitigated and provision made for remedying those effects to the extent practicable.	The marine farm is within a bay with other marine farms. There are no additional adverse effects on the coastal environment from this farm. The navigational lighting requirements will not change from the existing consent.
	Policy 1.3: Exclusive occupation of the coastal marine area or occupation which effectively excludes the public will only be allowed to the extent reasonably necessary to carry out the activity.	Consistent with other marine farms in the Marlborough Sounds, exclusive occupation of the consent area is not sought, other than for the area physically occupied by the lines and anchoring devices.
	Policy 1.6: Ensure recreational interests retain a dominant status over commercial activities that require occupation of coastal space and which preclude recreational use in Queen Charlotte Sound, including Tory Channel, but excluding Port and Marina Zones.	Not applicable
	Policy 1.7: Avoid adverse effects from the occupation of coastal space in or around recognised casual mooring areas.	Exclusive occupation of the consent area is not sought. There are 5 moorings located in the Bay owned by the applicant. The farm does not impede the navigation to this mooring.
	Policy 1.12: To enable a range of activities in appropriate places in the waters of the Sounds including marine farming, tourism and recreation.	Policy 1.12 enables marine farming in appropriate places. Site 8307 is consented for marine farming, there are other marine farms consented in the bay.
	Policy 1.13: Enable the renewal as controlled activities of marine farms authorised by applications made prior to 1 August 1996 as controlled activities, apart from exceptions in Appendix D2 in the Plan.	NA
Ch 9, 9.3.2, Obj 1: Management of the effects of activities so that	Policies 1.1 to 1.11	This application is not anticipated to have any impact on shellfish quality.

water quality in the coastal marine area is at a level which enables the gathering or cultivating of shellfish for human consumption (Class SG).		
Ch 9, 9.4.1, Obj 1:	Policy 1.1: Avoid, remedy or mitigate the adverse effects of activities that disturb or alter the foreshore and/or seabed on any of the following: [criteria specified in Plan].	There will be no additional disturbances of the seabed.
Ch 9, 9.4A.1, Obj 1:	n/a	These policies are no longer relevant due to abolition of AMAs through legislation.
Ch 19, 19.3, Obj 1: Safe, efficient and sustainably managed water transport systems in a manner that avoids, remedies and mitigates adverse effects.	Policy 1.1: Avoid, remedy or mitigate the adverse effects of activities and structures on navigation and safety, within the coastal marine area.	There have been no reported navigational incidences in the bay. There will no changes to the existing consent conditions regarding the navigational aids placed on the farm.
Ch 22, 22.3, Obj 1: To avoid, remedy and mitigate the adverse effects of unreasonable noise, while allowing for reasonable noise associated with port activities.	Policy 1.1: Avoid, remedy and mitigate community disturbance, disruption or interference by noise within coastal, rural, and urban areas.	There is one resident in the Bay being the applicant. A servicing vessel is estimated to spend approximately 80-90 hours per annum maintaining and harvesting the lines per year. The applicant complies with the 'Code of Practice to avoid, remedy or mitigate noise from marine farming activities in the Marlborough Sounds, Golden Bay and Tasman Bay on other users and residents'

Appendix C: Analysis of Consistency with the Proposed Marlborough Environment Plan (Volume 1)

MEP Provision	Evaluation
<p>Objective 3.2 – Natural and physical resources are managed in a manner that takes into account the spiritual and cultural values of Marlborough’s tangata whenua iwi and respects and accommodates tikanga Māori. [RPS]</p>	<p>The applicant has prepared the application in a manner that takes into account the spiritual and cultural values of Marlborough’s tangata whenua iwi.</p> <p>Recognition is given to Māori culture and traditions and confirmation from Iwi is sought to ensure the proposal does not affect these values.</p>
<p>Objective 3.3 – The cultural and traditional relationship of Marlborough’s tangata whenua iwi with their ancestral lands, water, air, coastal environment, waahi tapu and other sites and taonga are recognised and provided for. [RPS]</p>	<p>See sections 12 and 22 AEE.</p>
<p>Objective 3.5 – Resource management decision making processes that give particular consideration to the cultural and spiritual values of Marlborough’s tangata whenua iwi. [RPS]</p>	<p>The applicant has given particular consideration to the matters in objective 3.5, as discussed the AEE at sections 12 and 22, in order to assist decision makers.</p>
<p>Policy 3.1.1 – Management of natural and physical resources in Marlborough will be carried out in a manner that:</p> <p>(a) takes into account the principles of the Treaty of Waitangi/Te Tiriti o Waitangi, including kāwanatanga, rangatiratanga, partnership, active protection of natural resources and spiritual recognition.</p> <p>(b) recognises that the way in which the principles of the Treaty of Waitangi/Te Tiriti o Waitangi will be applied will continue to evolve;</p> <p>(c) promotes awareness and understanding of the Marlborough District Council’s obligations under the Resource Management Act 1991 regarding the principles of the Treaty of Waitangi/Te Tiriti o Waitangi among Council decision makers, staff and the community;</p> <p>(d) recognises that tangata whenua have rights protected by the Treaty of Waitangi/Te Tiriti o Waitangi and that consequently the Resource Management Act 1991 accords iwi a status distinct from that of interest groups and members of the public; and</p> <p>(e) recognises the right of each iwi to define their own preferences for the sustainable management of natural and physical resources, where this is not inconsistent with the Resource Management Act 1991.</p>	<p>See above.</p>

MEP Provision	Evaluation
[RPS]	
<p>Policy 3.1.2 – An applicant will be expected to consult early in the development of a proposal (for resource consent or plan change) so that cultural values of Marlborough’s tangata whenua iwi can be taken into account.</p> <p>[RPS]</p>	See above.
<p>Policy 3.1.3 – Where an application for resource consent or plan change is likely to affect the relationship of Marlborough’s tangata whenua iwi and their culture and traditions, decision makers shall ensure:</p> <p>(a) the ability for tangata whenua to exercise kaitiakitanga is maintained;</p> <p>(b) mauri is maintained or improved where degraded, particularly in relation to fresh and coastal waters, land and air;</p> <p>(c) mahinga kai and natural resources used for customary purposes are maintained or enhanced and that these resources are healthy and accessible to tangata whenua;</p> <p>(d) for waterbodies, the elements of physical health to be assessed are:</p> <p>i. aesthetic and sensory qualities, e.g. clarity, colour, natural character, smell and sustenance for indigenous flora and fauna;</p> <p>ii. life-supporting capacity, ecosystem robustness and habitat richness;</p> <p>iii. depth and velocity of flow (reflecting the life force of the river through its changing character, flows and fluctuations);</p> <p>iv. continuity of flow from the sources of a river to its mouth at the sea;</p> <p>v. wilderness and natural character;</p> <p>vi. productive capacity; and</p> <p>vii. fitness to support human use, including cultural uses.</p> <p>(e) how traditional Māori uses and practices relating to natural and physical resources such as mahinga maataitai, waahi tapu, papakāinga and taonga raranga are to be recognised and provided for.</p> <p>[RPS]</p>	The applicant has had regard to the matters in Policy 3.1.3, as set out above, and in the AEE. Ecological effects have been assessed by Davidson Environmental in the report annexed to this application.

MEP Provision	Evaluation
<p>Policy 3.1.5 – Ensure iwi management plans are taken into account in resource management decision making processes. [RPS]</p>	<p>The applicant has reviewed the Iwi management plans of Ngāti Kōata and Te Ātiawa o Te Waka-a-Māui.</p>
<p>Objective 4.1 – Marlborough’s primary production sector and tourism sector continue to be successful and thrive whilst ensuring the sustainability of natural resources. [RPS]</p>	<p>The application will support the mussel farming industry in Marlborough and provide an opportunity for that industry to grow. The proposal ensures the sustainability of natural resources, as the adverse effects of mussel farming at the site are likely to be limited, as per the Davidson Environmental report. Within months of removing the farms, any trace of their presence will dissipate. Therefore, the proposal does not restrict the ability of future generations to decide how they wish to use these resources.</p>
<p>Policy 4.1.2 – Enable sustainable use of natural resources in the Marlborough environment. [RPS]</p>	<p>As above at Objective 4.1.</p>
<p>Policy 4.1.3 – Maintain and enhance the quality of natural resources. [RPS]</p>	<p>The proposal will have no more than minor effects on the quality of the natural resources at the site, and those effects are reversible upon removal of the farms.</p>
<p>Objective 4.3 – The maintenance and enhancement of the visual, ecological and physical qualities that contribute to the character of the Marlborough Sounds. [RPS]</p>	<p>The ecological character of the site will be maintained (see Davidson Environmental report). The application site is located over a habitat of sandy mud, typical of similar areas in the Sounds. The effects of low intensity farming are not likely to be significant. The relatively strong currents at the site are sufficient to prevent the accumulation of organic deposition.</p> <p>The existing character of the area is a working landscape. It is well-suited to the proposed activity due to the existing level of modification from farming and aquaculture. The proposed renewal is unlikely to adversely affect the existing values of the area.</p>

MEP Provision	Evaluation
<p>Policy 4.3.2 – Identify the qualities and values that contribute to the unique and iconic character of the Marlborough Sounds and protect these from inappropriate subdivision, use and development. [RPS]</p>	<p>The applicant has had regard to the qualities and values identified by the Council in the MEP, as indicated elsewhere in this policy assessment and in the application. Overall, the proposal is appropriate.</p>
<p>Policy 4.3.3 – Provide direction on the appropriateness of resource use activities in the Marlborough Sounds environment. [RPS]</p>	<p>The aquaculture provisions of the MEP have yet to be notified. The proposed site is zoned CMZ2 under the operative MSRMP, which suggests that aquaculture is appropriate in the area.</p>
<p>Policy 4.3.4 – Enhance the qualities and values that contribute to the unique and iconic character of the Marlborough Sounds. [RPS]</p>	<p>The proposal will not have significant effects on the qualities and values of the Sounds, and any effects are reversible upon removal of the farms.</p>
<p>Policy 4.3.5 – Recognise that the Marlborough Sounds is a dynamic environment [RPS]</p>	<p>The applicant recognises that the Sounds is a dynamic environment. The appropriateness of the farm can be re-assessed by future generations in the context of the future environment of the area through the resource consenting process.</p>
<p>Objective 5.10 – Equitable and sustainable allocation of public space within Marlborough’s coastal marine area. [RPS, C]</p>	<p>The applicant acknowledges that it is a privilege to occupy public space in the coastal marine area. The public will still have access around and through the site, and the proposal will not affect the ability of future generations to enjoy that public space.</p>
<p>Policy 5.10.1 – Recognition that there are no inherent rights to be able to use, develop or occupy the coastal marine area. [RPS, C]</p>	<p>The applicant recognises that it has no inherent right to occupy and use the coastal marine area and requires resource consent for the proposed activity.</p>
<p>Policy 5.10.2 – The ‘first in, first served’ method is the default mechanism to be used in the allocation of resources in the coastal marine area. Where competing demand for coastal space becomes apparent, the Marlborough District Council may consider the option of introducing an alternative regime. [RPS, C]</p>	<p>The applicant considers that the first in first served method of allocation is appropriate for applications that meet the statutory requirements.</p>

MEP Provision	Evaluation
<p>Policy 5.10.3 – Where a right to occupy the coastal marine area is sought, the area of exclusive occupation should be minimised to that necessary and reasonable to undertake the activity, having regard to the public interest. [RPS, C]</p>	<p>The design of the site layout ensures the public will have access inshore of and through the farm.</p>
<p>Policy 5.10.4 – Coastal occupancy charges will be imposed on coastal permits where there is greater private than public benefit arising from occupation of the coastal marine area. [C]</p>	<p>The applicant has insufficient information on coastal occupancy charges to understand the implications.</p>
<p>Policy 5.10.5 – The Marlborough District Council will waive the need for coastal occupancy charges for the following: ... (b) monitoring equipment; [C]</p>	<p>Davidson Environmental has not indicated that ongoing monitoring is necessary at this site.</p>
<p>Policy 5.10.6 – Where there is an application by a resource consent holder to request a waiver (in whole or in part) of a coastal occupation charge, the following circumstances will be considered: [(a) – (d)] [C]</p>	<p>Refer Policy 5.10.4</p>
<p>Objective 6.2 – Preserve the natural character of the coastal environment, and lakes and rivers and their margins, and protect them from inappropriate subdivision, use and development. [RPS, R, C, D]</p>	<p>The farm will not adversely compromise the existing values of the area and is appropriate development</p>
<p>Policy 6.2.1 – Avoid the adverse effects of subdivision, use or development on areas of the coastal environment with outstanding natural character values... [RPS, R, C, D]</p>	<p>N/A –site is not identified in the MEP has having outstanding natural character values.</p>
<p>Policy 6.2.2 – Avoid significant adverse effects of subdivision, use or development on coastal natural character, having regard to the significance criteria in Appendix 4. [RPS, R, C, D]</p>	<p>The proposal avoids significant adverse effects. There will be no damage, loss or destruction. The effects are reversible upon removal of the farm.</p>

MEP Provision	Evaluation
<p>Policy 6.2.3 – Where natural character is classified as high or very high, avoid any reduction in the degree of natural character of the coastal environment or freshwater bodies. [RPS, R, C, D]</p>	<p>The area is not classified as having high natural character in the MEP. There will be no change in the degree of the biological components of natural character.</p>
<p>Policy 6.2.4 – Where resource consent is required to undertake an activity within coastal or freshwater environments with high, very high or outstanding natural character, regard will be had to the potential adverse effects of the proposal on the elements, patterns, processes and experiential qualities that contribute to natural character. [RPS, R, C, D]</p>	<p>See above and AEE sections 9 and 22.3.</p>
<p>Policy 6.2.5 – Recognise that development in parts of the coastal environment and in those rivers and lakes and their margins that have already been modified by past and present resource use activities is less likely to result in adverse effects on natural character. [RPS, R, C, D]</p>	<p>The proposal is less likely to have an adverse effect on natural character, given existing development in the area.</p>
<p>Policy 6.2.6 – In assessing the appropriateness of subdivision, use or development in coastal or freshwater environments, regard shall be given to the potential to enhance natural character in the area subject to the proposal. [RPS, R, C, D]</p>	<p>The effects are not of a scale to justify an enhancement programme.</p>
<p>Policy 6.2.7 – In assessing the cumulative effects of activities on the natural character of the coastal environment, or in or near lakes or rivers, consideration shall be given to: (a) the effect of allowing more of the same or similar activity; (b) the result of allowing more of a particular effect, whether from the same activity or from other activities causing the same or similar effect; and (c) the combined effects from all activities in the coastal or freshwater environment in the locality. [RPS, R, C, D]</p>	<p>There are existing aquaculture activities in the area and the farm has been operating for a number of years. There are unlikely to be cumulative effects issues.</p>
<p>Objective 7.2 – Protect outstanding natural features and landscapes from inappropriate subdivision, use and development and maintain and enhance landscapes with high amenity value.</p>	<p>The area is not mapped as ONFL (although these maps are subject to challenge through the consultation process on the MEP).</p>

MEP Provision	Evaluation
<p>Policy 7.2.1 – Control activities that have the potential to degrade those values contributing to outstanding natural features and landscapes by requiring activities and structures to be subject to a comprehensive assessment of effects on landscape values through the resource consent process. [R, C, D]</p>	<p>See above and sections 9</p>
<p>Policy 7.2.3 – Control activities that have the potential to degrade the amenity values that contribute to those areas of the Marlborough Sounds Coastal Landscape not identified as being an outstanding natural feature and landscape by:</p> <ul style="list-style-type: none"> (a) using a non-regulatory approach as the means of maintaining and enhancing landscape values in areas of this landscape zoned as Coastal Living; (b) setting standards/conditions that are consistent with the existing landscape values and that will require greater assessment where proposed activities and structures exceed those standards; and... <p>[C, D]</p>	<p>Policy 7.2.3(b) does not apply to the proposed site, because aquaculture rules have yet to be included in the MEP. As a result, the application must be assessed against the rules applying under the operative MSRMP. This has been done in a separate policy analysis table, at Appendix B.</p>
<p>Policy 7.2.4 – Where resource consent is required to undertake an activity within an outstanding natural feature and landscape or a landscape with high amenity value, regard will be had to the potential adverse effects of the proposal on the values that contribute to the landscape. [R, C, D]</p>	<p>See above.</p>
<p>Policy 7.2.5 – Avoid adverse effects on the values that contribute to outstanding natural features and landscapes in the first instance. Where adverse effects cannot be avoided and the activity is not proposed to take place in the coastal environment, ensure that the adverse effects are remedied. [R, C, D]</p>	<p>See above.</p>
<p>Policy 7.2.7 – Protect the values of outstanding natural features and landscapes and the high amenity values of the Wairau Dry Hills and the Marlborough Sounds Coastal Landscapes by:</p> <ul style="list-style-type: none"> (a) In respect of structures: <ul style="list-style-type: none"> (i) avoiding visual intrusion on skylines, particularly when viewed from public places; (ii) avoiding new dwellings in close proximity to the foreshore; (iii) using reflectivity levels and building materials that complement the colours in the surrounding landscape; (iv) limiting the scale, height and placement of structures to minimise intrusion of built form into the landscape; 	<p>The applicant will minimise the scale, height and placement of structures to minimise intrusion of built form into the landscape. Buoys are low profile and predominantly black, save for orange navigation buoys required for navigational safety. The remainder of policy 7.2.7 does not apply to marine farming structures.</p>

MEP Provision	Evaluation
<p>(v) recognising that existing structures may contribute to the landscape character of an area and additional structures may complement this contribution;</p> <p>(vi) making use of existing vegetation as a background and utilising new vegetation as a screen to reduce the visual impact of built form on the surrounding landscape, providing that the vegetation used is also in keeping with the surrounding landscape character; and</p> <p>(vii) encouraging utilities to be co-located wherever possible...</p> <p>[R, C, D]</p>	
<p>Policy 7.2.8 – Recognise that some outstanding natural features and landscapes and landscapes with high amenity value will fall within areas in which primary production activities currently occur.</p> <p>[C, D]</p>	<p>Existing farming and aquaculture already occurs within the embayment and general area. The proposal is consistent with this primary production character.</p>
<p>Policy 7.2.9 – When considering resource consent applications for activities in close proximity to outstanding natural features and landscapes, regard may be had to the matters in Policy 7.2.7.</p> <p>[R, C, D]</p>	<p>See above.</p>
<p>Policy 8.3.1 – Manage the effects of subdivision, use or development in the coastal environment by:</p> <p>(a) avoiding adverse effects where the areas, habitats or ecosystems are those set out in Policy 11(a) of the New Zealand Coastal Policy Statement 2010;</p> <p>(b) avoiding adverse effects where the areas, habitats or ecosystems are mapped as significant wetlands or ecologically significant marine sites in the Marlborough Environment Plan; or</p> <p>(c) avoiding significant adverse effects and avoiding, remedying or mitigating other adverse effects where the areas, habitats or ecosystems are those set out in Policy 11(b) of the New Zealand Coastal Policy Statement 2010 or are not identified as significant in terms of Policy 8.1.1 of the Marlborough Environment Plan.</p>	<p>There are no areas of ecological significance in the MEP.</p> <p>The effect of the marine farm on the adjacent area will not have an effect on the flora and fauna of this area.</p>
<p>Policy 8.3.2 – Where subdivision, use or development requires resource consent, the adverse effects on areas, habitats or ecosystems with indigenous biodiversity value shall be:</p> <p>(a) avoided where it is a significant site in the context of Policy 8.1.1; and</p> <p>(b) avoided, remedied or mitigated where indigenous biodiversity values have not been assessed as being significant in terms of Policy 8.1.1</p>	<p>According to the Davidson Environmental report, the proposed farm is consistent with policy 8.3.2(b).</p>

MEP Provision	Evaluation
<p>Policy 8.3.5 – In the context of Policy 8.3.1 and Policy 8.3.2, adverse effects to be avoided or otherwise remedied or mitigated may include: [(a) – (t)]</p>	<p>See AEE and Davidson Environmental report.</p>
<p>Policy 8.3.8 – With the exception of areas with significant indigenous biodiversity value, where indigenous biodiversity values will be adversely affected through land use or other activities, a biodiversity offset can be considered to mitigate residual adverse effects. Where a biodiversity offset is proposed, the following criteria will apply: (a) the offset will only compensate for residual adverse effects that cannot otherwise be avoided, remedied or mitigated; (b) the residual adverse effects on biodiversity are capable of being offset and will be fully compensated by the offset to ensure no net loss of biodiversity; (c) where the area to be offset is identified as a national priority for protection under Objective 8.1, the offset must deliver a net gain for biodiversity; (d) there is a strong likelihood that the offsets will be achieved in perpetuity; (e) where the offset involves the ongoing protection of a separate site, it will deliver no net loss and preferably a net gain for indigenous biodiversity protection; and (f) offsets should re-establish or protect the same type of ecosystem or habitat that is adversely affected, unless an alternative ecosystem or habitat will provide a net gain for indigenous biodiversity.</p>	<p>Biodiversity offsetting is not justified in this case.</p>
<p>Objective 9.1 – The public are able to enjoy the amenity and recreational opportunities of Marlborough’s coastal environment, rivers, lakes, high country and areas of historic interest. [RPS, R, C, D]</p>	<p>See sections 8, 9, 11, 13, 14 and 18 of the AEE.</p>
<p>Policy 9.1.1 – The following areas are identified as having a high degree of importance for public access and the Marlborough District Council will as a priority focus on enhancing access to and within these areas: (a) high priority waterbodies for public access on the Wairau Plain and in close proximity to Picton, Waikawa, Havelock, Renwick, Seddon, Ward and Okiwi Bay; (b) coastal marine area, particularly in and near Picton, Waikawa and Havelock, Kaiuma Bay, Queen Charlotte Sound (including Tory Channel), Port Underwood, Pelorus Sound, Mahau Sound, Mahikipawa Arm and Croiselles Harbour, Rarangi to the Wairau River mouth, Wairau Lagoons, Marfells Beach and Ward Beach...</p>	<p>N/A</p>

MEP Provision	Evaluation
[RPS]	
<p>Policy 9.1.2 – In addition to the specified areas in Policy 9.1.1, the need for public access to be enhanced to and along the coastal marine area, lakes and rivers will be considered at the time of subdivision or development, in accordance with the following criteria:</p> <ul style="list-style-type: none"> (a) there is existing public recreational use of the area in question, or improving access would promote outdoor recreation; (b) connections between existing public areas would be provided; (c) physical access for people with disabilities would be desirable; and (d) providing access to areas or sites of cultural or historic significance is important. <p>[RPS, C, D]</p>	<p>See above. The farm will not prevent access to areas or sites of cultural and historic significance in the area.</p>
<p>Policy 9.1.5 – Acknowledge the importance New Zealander’s place on the ability to have free and generally unrestricted access to the coast.</p> <p>[RPS, C, D]</p>	<p>The applicant acknowledges the importance to New Zealanders of having unrestricted access to the coast. The site design ensures that the public will continue to have access through the site and along the shore.</p>
<p>Policy 9.1.7 – Recognise there is an existing network of marinas at Picton, Waikawa and Havelock, publicly owned community jetties, landing areas and launching ramps that make a significant contribution in providing access for the public to Marlborough’s coastal areas.</p> <p>[RPS, C]</p>	<p>The proposed farm will be able to be accessed from the existing facilities of a contractor or lessee.</p>
<p>Policy 9.1.8 – Enable public use of jetties for the purposes of access to the Sounds Foreshore Reserve and legal road along the coast.</p> <p>[RPS, C]</p>	<p>There is a jetty to the south west of the farm owned by the applicant, the farm does not impede access to this jetty.</p>
<p>Policy 9.1.13 – When considering resource consent applications for activities, subdivision or structures in or adjacent to the coastal marine area, lakes or rivers, the impact on public access shall be assessed against the following:</p> <ul style="list-style-type: none"> (a) whether the application is in an area identified as having a high degree of importance for public access, as set out in Policy 9.1.1; 	<p>The structures have a functional need to be located in the coastal marine area. The public will have access through and around the site. Access to the site is by boat. Any impact on public access would be temporary, being reversible upon removal of the farm. Any restrictions on public access will be consistent with the purpose of a resource consent to farm</p>

MEP Provision	Evaluation
<p>(b) the need for the activity/structure to be located in the coastal marine area and why it cannot be located elsewhere; ...</p> <p>(d) the extent to which the activity/subdivision/structure would benefit or adversely affect public access, customary access and recreational use, irrespective of its intended purpose;</p> <p>(e) in the coastal marine area, whether exclusive rights of occupation are being sought as part of the application;</p> <p>(f) for the Marlborough Sounds, whether there is practical road access to the site of the application;</p> <p>(g) how public access around or over any structure sought as part of an application is to be provided for;</p> <p>(h) whether the impact on public access is temporary or permanent and whether there is any alternative public access available; and</p> <p>(i) whether public access is able to be restricted in accordance with Policies 9.2.1 and 9.2.2.</p> <p>[C, D]</p>	<p>mussels, in line with policy 9.2.1. The effects on public access will be no more than minor, in accordance with policy 9.2.2.</p>
<p>Policy 9.3.2 – Seek diversity in the type and size of open spaces and recreational facilities to meet local, district, regional and nationwide needs, by: ... (d) recognising and protecting the value of open space in the coastal marine area, high country environments and river beds.</p> <p>[RPS, C, D]</p>	<p>The applicant recognises the value of open space and has designed the site layout with this in mind.</p>
<p>Objective 10.1 – Retain and protect heritage resources that contribute to the character of Marlborough.</p> <p>[RPS]</p>	<p>See section 12 AEE.</p>
<p>Policy 10.1.3 – Identify and provide appropriate protection to Marlborough’s heritage resources, including:</p> <p>(a) historic buildings (or parts of buildings), places and sites;</p> <p>(b) heritage trees;</p> <p>(c) places of significance to Marlborough’s tangata whenua iwi;</p> <p>(d) archaeological sites; and</p> <p>(e) monuments and plaques.</p> <p>[RPS, C, D]</p>	<p>See above</p>

MEP Provision	Evaluation
Chapter 13 objectives and policies.	N/A – Chapter 13 expressly states that it “does not contain provisions managing marine farming.”
<p>Objective 15.1a – Maintain and where necessary enhance water quality in Marlborough’s rivers, lakes, wetlands, aquifers and coastal waters, so that:</p> <ul style="list-style-type: none"> (a) the mauri of wai is protected; (b) water quality at beaches is suitable for contact recreation; (c) people can use the coast, rivers, lakes and wetlands for food gathering, cultural, commercial and other purposes; ... (f) coastal waters support healthy ecosystems. <p>[RPS, R, C]</p>	Mussel farming will not have an adverse effect on water quality and may even enhance water quality.
<p>Policy 15.1.1 – As a minimum, the quality of freshwater and coastal waters will be managed so that they are suitable for the following purposes:</p> <ul style="list-style-type: none"> (a) Coastal waters: protection of marine ecosystems; potential for contact recreation and food gathering/marine farming; and for cultural and aesthetic purposes; ... <p>[RPS, R, C]</p>	Aquaculture requires excellent water quality. The proposed farm will not have an adverse effect on water quality.
<p>Policy 15.1.9 – Enable point source discharge of contaminants or water to water where the discharge will not result:</p> <ul style="list-style-type: none"> (a) in any of the following adverse effects beyond the zone of reasonable mixing: <ul style="list-style-type: none"> (i) the production of conspicuous oil or grease films, scums, foams or floatable or suspended materials; (ii) any conspicuous change in the colour or significant decrease in the clarity of the receiving waters; (iii) the rendering of freshwater unsuitable for consumption by farm animals; (iv) any significant adverse effect on the growth, reproduction or movement of aquatic life; or (c) in the flooding of or damage to another person’s property. <p>[R, C]</p>	Discharge from harvesting will not result in any of the specified adverse effects.

MEP Provision	Evaluation
<p>15.1.10 – Require any applicant applying for a discharge permit that proposes the discharge of contaminants to water to consider all potential receiving environments and adopt the best practicable option, having regard to:</p> <ul style="list-style-type: none"> (a) the nature of the contaminants; (b) the relative sensitivity of the receiving environment; (c) the financial implications and effects on the environment of each option when compared with the other options; and (d) the current state of technical knowledge and the likelihood that each option can be successfully applied. <p>[RPS, R, C]</p>	<p>See Davidson Environmental report. Discharge occurs during harvesting, and the effects are momentary and insignificant. Contaminants are materials that are already in the water column, such as sediments and organic materials trapped by lines and structures.</p>
<p>15.1.11 – When considering any discharge permit application for the discharge of contaminants to water, regard will be had to:</p> <ul style="list-style-type: none"> (a) the potential adverse effects of the discharge on spiritual and cultural values of Marlborough’s tangata whenua iwi; (b) the extent to which contaminants present in the discharge have been removed or reduced through treatment; and (c) whether the discharge is of a temporary or short term nature and/or whether the discharge is associated with necessary maintenance work for any regionally significant infrastructure. <p>[RPS, R, C]</p>	<p>See above</p> <p>Discharge during harvest is temporary in nature and sedimentation soon reverts to background levels, consistent with policy 15.1.11(c).</p>
<p>15.1.12 – After considering Policies 15.1.10 and 15.1.11, approve discharge permit applications to discharge contaminants into water where:</p> <ul style="list-style-type: none"> (a) the discharge complies with the water quality classification standards set for the waterbody, after reasonable mixing; or (b) in the case of non-compliance with the water quality classification standards set for the waterbody: <ul style="list-style-type: none"> (i) the consent holder for an existing discharge can demonstrate a reduction in the concentration of contaminants and a commitment to a staged approach for achieving the water quality classification standards within a period of no longer than five years from the date the consent is granted; and (ii) the degree of non-compliance will not give rise to significant adverse effects. <p>[RPS, R, C]</p>	<p>Water discharged during harvesting will comply with SG standards in Appendix 5.</p>

MEP Provision	Evaluation
<p>Policy 15.1.16 – The duration of any new discharge permit will be either:</p> <p>(a) Up to a maximum of 15 years for discharges into waterbodies or coastal waters where the discharge will comply with water quality classification standards for the waterbody or coastal waters;</p> <p>... (c) no more than five years where the existing discharge will not comply with water quality classification standards for the waterbody or coastal waters.</p> <p>With the exception of regionally significant infrastructure, no discharge permit will be granted subsequent to the one granted under (c), if the discharge still does not meet the water quality classification standards for the waterbody or coastal waters.</p> <p>[R, C]</p>	<p>This policy is inconsistent with s 123A of the Resource Management Act, which provides for a minimum 20 year term for coastal permits authorising aquaculture activities, unless a shorter period is required to ensure that adverse effects on the environment are adequately managed. This high threshold is not met in these circumstances.</p> <p>It is illogical to allow for a marine farming permit for 20 years, and restrict a discharge permit for harvesting to 15 years.</p> <p>The applicant is seeking 20 year resource consent. The AEE suggests that this term is appropriate in these circumstances.</p>

Footnotes

¹ Raymond Smith – Ngai Kuia

² Handley, S. et al. 2017. A 1,000-year history of seabed change in Pelorus Sound/Te Hoiere, Marlborough. Prepared for Marlborough District Council, Ministry of Primary Industries and the Marine Farming Association. 136 p. NIWA Client Report No: 2016119NE.A copy is available here:

https://www.marlborough.govt.nz/repository/libraries/id:1w1mps0ir17q9sgxanf9/hierarchy/Documents/Environment/Coastal/Scientific%20Investigations%20List/A_1000_year_history_of_seabed_change_in_Pelorus_Sound_Te_Hoiere.pdf

³ Handley, S. 2016. History of benthic change in Queen Charlotte Sound/Totaranui, Marlborough. Prepared for Marlborough District Council. NIWA client report No: NEL2015-018:

https://www.marlborough.govt.nz/repository/libraries/id:1w1mps0ir17q9sgxanf9/hierarchy/Documents/Environment/Coastal/Scientific%20Investigations%20List/History_of_Benthic_Change_in_Queen_Charlotte_Sound_Totaranui_Marlborough.pdf; and Handley, S. 2015. The history of benthic change in Pelorus Sound (Te Hoiere), Marlborough. Prepared by NIWA for Marlborough District Council. NIWA client report NEL2015-001, NIWA project ELF15202: <https://www.marlborough.govt.nz/repository/libraries/id:1w1mps0ir17q9sgxanf9/hierarchy/Documents/Environment/Coastal/Scientific%20Investigations%20List/HistorySeabedChangePelorusSound.pdf>.

⁴ MacDiarmid, A.; McKenzie, A.; Sturman, J.; Beaumont, J.; Mikaloff-Fletcher, S.; Dunne, J. (2012). Assessment of Anthropogenic Threats to New Zealand Marine Habitats, New Zealand Aquatic Environment and Biodiversity Report No. 93, 2012; and Ministry for the Environment & Statistics New Zealand (2016) *New Zealand's Environmental Reporting Series: Our marine environment 2016* at 24. A copy is available here: <http://www.mfe.govt.nz/sites/default/files/media/Environmental%20reporting/our-marine-environment.pdf>

⁵ Handley et al 2017 *History of seabed change* at p 25.

⁶ For example Ministry for Primary Industries *Literature Review of Ecological Effects of Aquaculture – Cumulative Effects* (August 2013, Cawthron Institute/NIWA), at pp 12-3 to 12-4; Stewart, B. *Mussel Farming in Central Pelorus Sound* (Ryder Consulting, 3 December 2015, prepared for the Kenepuru and Central Sounds Residents Association) at [50]; and Further Submissions of the Marine Farming Association and Aquaculture New Zealand Limited on the proposed Marlborough Environment Plan (23 June 2017), at points 66, 73 and 78.

⁷ Raymond Smith – Ngai Kuia



Davidson Environmental Limited

Biological report for the
reconsenting of marine farm
8307 in Brightlands Bay,
Pelorus Sound

Research, survey and monitoring report number 895

*A report prepared for:
G. & P Beal and B. Rowe
c/- Bruce Cardwell,
Aquaculture Direct
Blenheim*

July 2018

Bibliographic reference:

Davidson, R.J.; Rayes, C.; Scott-Simmonds, T. 2018. Biological report for the re consenting of marine farm 8307 in Brightlands Bay, Pelorus Sound. Prepared by Davidson Environmental Ltd. for G. & P Beal and B. Rowe. Survey and monitoring report no. 895.

© Copyright

The contents of this report are copyright and may not be reproduced in any form without the permission of the client.

Prepared by:

Davidson Environmental Limited
6 Ngapua Place, Nelson 7010
Phone 03 545 2600
Mobile 027 445 3352
e-mail davidson@xtra.co.nz

July 2018



Specialists in research, survey and monitoring

Contents

1.0	Introduction	4
2.0	Background information	6
2.1	Study area.....	6
2.2	Historical reports.....	6
3.0	Methods (present survey).....	7
3.1	Sonar imaging.....	7
3.2	Drop camera stations, mussel debris and low tide.....	8
4.0	Results.....	8
4.1	Consent corners and surface structures	9
4.2	Sonar imaging.....	9
4.3	Drop camera images	14
5.0	Conclusions	23
5.1	Benthic habitats and substratum	23
5.2	Species and communities.....	23
5.3	Mussel farming impacts	24
5.3.1	Benthic impacts.....	24
5.3.2	Productivity.....	24
5.4	Boundary adjustments, line adjustments and monitoring	25
	References	27
	Appendix 1. Drop camera photographs.....	28

Specialists in research, survey and monitoring

1.0 Introduction

The aim of the present study was to provide biological information for the proposed re-consenting of marine farm 8307 in Brightlands Bay, Pelorus Sound. The 3.751 ha consent area is in Brightlands Bay, Tawhitinui Reach, central Pelorus Sound (Figure 1, Plate 1). A narrow Ministry of Fisheries exclusion area exists along the inshore area of the consent (Figure 2). This study describes the benthic substrata and habitats associated with the existing mussel farm consent.

This report was commissioned by the Aquaculture Direct on behalf of the farm owners, G. & P Beal and B. Rowe.

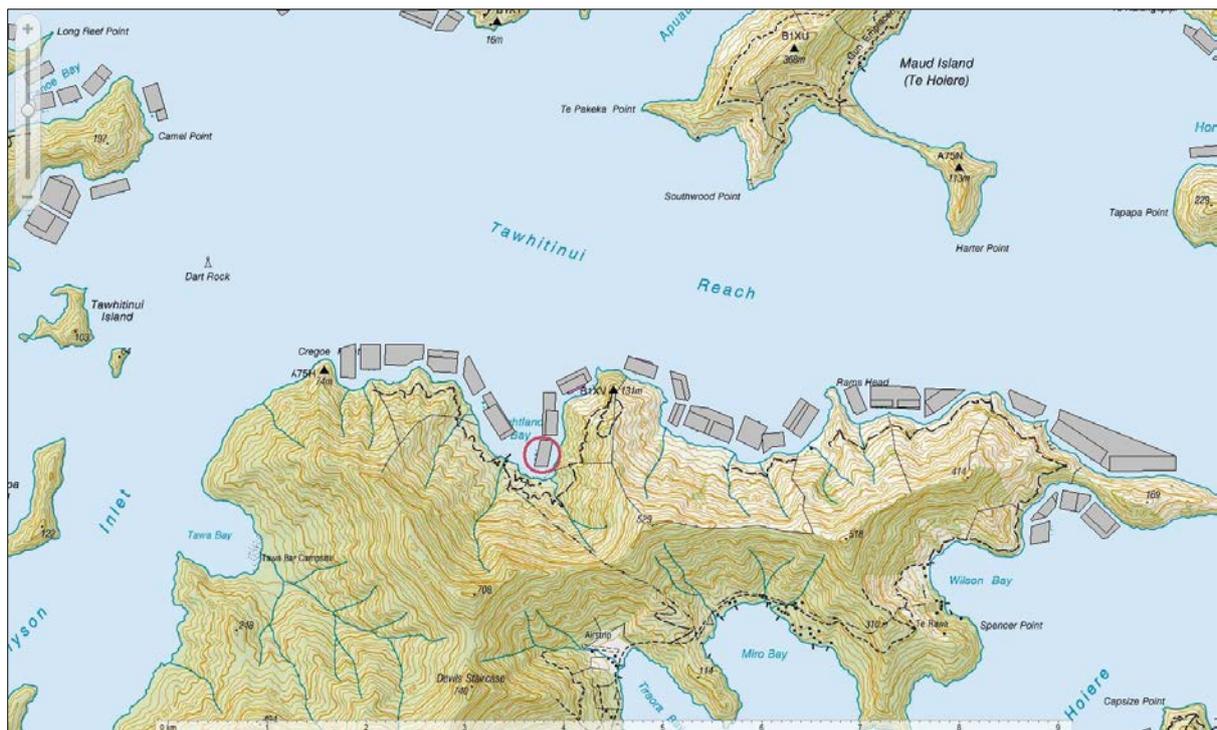


Figure 1. Location of marine farm 8307 (red circle) and other farms in Tawhitinui Reach.



Plate 1. Looking south-westwards through the existing backbone lines of farm 8307 in Brightlands Bay. Photo taken near the inshore, north eastern consent corner.

2.0 Background information

2.1 Study area

The marine farm site is along the inner south-eastern coastline of Brightlands Bay, Pelorus Sound. (Figure 1, Plate 1).

Brightlands Bay is a small north-facing bay on the southern shore of Tawhitinui Reach, Pelorus Sound. Brightlands Bay is approximately 43 km by sea from Havelock and 25 km from the Pelorus Harbour limit. Brightlands Bay has a coastline length of approximately 3 km and covers an area of sea of approximately 88.5 ha. The mouth of Brightlands Bay is approximately 1.5 km wide, and the bay is roughly 1 km long.

2.2 Historical reports

One existing biological report was found in relation to marine farm 8307. The report provides a biological description of the benthos for the proposed marine farm site (Davidson, 1996).

The authors concluded:

“The soft and hard shore communities recorded from the present study were dominated by species that occur on subtidal shores in the sheltered central Marlborough Sounds (Dell 1951; Estcourt 1967; McKnight 1969, 1974; Roberts and Asher 1993; McKnight and Grange 1991; Davidson and Duffy, 1992; Davidson, 1995; Davidson and Brown 1994; Duffy et al. in prep; Chadderton et al., in prep, Chadderton and Davidson in prep). Horse mussels, scallops and lampshells were observed from the study area, but were recorded in low densities. Applying the worst-case scenario, these animals would be smothered by shell debris and sediment originating from a mussel marine farm.

Most soft bottom substrata and communities located within the proposed marine farm area were dominated by dead and broken shell overlying silt and clay sediments or further from shore, silts and clays. A low variety of species in low abundances were observed from these soft bottom habitats: silt and clay areas represent the habitat least impacted by mussel shell deposition and is the most common subtidal substratum in the Marlborough Sounds. In



Specialists in research, survey and monitoring

contrast, the inshore soft shores supported beds of an unidentified bivalve and a cobble community. These inshore soft shores were observed extending to 60 m distance from shore. The shell/sand community and the cobble community would probably be impacted by deposition of shell and sediment if a marine farm was situated directly above.”

The author recommended:

“Considering ecological data collected during the present study at Brightlands Bay, it is suggested that the inshore boundary be relocated to a minimum distance of 70 offshore. This adjustment would avoid the cobble habitat towards the northern end of the proposed area and the fine sand/broken shell community located towards the southern inshore end of the proposed area. No other modifications to the proposed boundaries are suggested.”

3.0 Methods (present survey)

The area was investigated on 12th July 2018. Prior to fieldwork, the consent corners were plotted onto mapping software (TUMONZ Professional). The laptop running the mapping software was linked to a Lowrance HDS-12 Gen2 with an external Lowrance Point 1 high sensitivity GPS, allowing real-time plotting of the corners of marine farm surface structures and to pinpoint drop camera stations in the field. This GPS system has a maximum error of +/- 5 m.

The corners of the existing marine farm surface structures were surveyed by positioning the survey vessel immediately adjacent to the corner floats and the position plotted. It is noted that surface structures can move due to environmental variables such as tidal current and wind. The plot of surface structures is variable from day to day and over the duration of tidal cycles. These data should not therefore be regarded as a precise measurement of the position of surface structures, but rather an approximate position.

3.1 Sonar imaging

Sonar investigations of the area were conducted using a Lowrance HDS-12 Gen 2 and HDS-8 Gen2 linked with a Lowrance StructureScan™ Sonar Imaging LSS-1 Module. These units provide right and left side imaging as well as DownScan Imaging™. The unit also allows real time plotting of StructureMap™ overlays onto the installed Platinum underwater chart. A

Specialists in research, survey and monitoring

Lowrance HDS 10 Gen 1 unit fitted with a high definition 1kw Airmar transducer was used to collect traditional sonar data from the site.

Prior to the collection of underwater photographs, the boundaries of both the consent area and the marine farm surface structure area were investigated using the sonar. Any bottom abnormalities such as reefs, hard substrata or abrupt changes in depth were noted for inspection using the drop camera (see section 3.2).

3.2 Drop camera stations, mussel debris and low tide

A total of 34 drop camera photographs were collected from the farm (including alongside droppers and warps) and adjacent areas inside and offshore of the consent. At each drop camera station, a Sea Viewer underwater splash camera fixed to an aluminium frame was lowered to the benthos and an oblique still photograph was collected where the frame landed.

The cover of benthic mussel shell from drop camera photographs were ranked as: None = no mussel shell, Low = 1-30%, Moderate = 31-50%, Moderate to High = 51-75%, and High = 76-100% cover.

The location of photograph stations was selected to obtain a representative range of habitats and depths within the consent. Additional photographs were taken when any features of interest (e.g. mussel shell, reef structures, cobbles) were observed on the remote monitor on-board the survey vessel. All photographs collected during the survey have been included in Appendix 1.

Low tide was determined at three locations inshore of the consent. The survey vessel was positioned over the low water mark and the position plotted using the mapping software. Low tide was visually determined using the transition between intertidal and subtidal species.

4.0 Results

On the day of the survey, the tide was high at 8.00 am (2.6 m) and low at 2.11 pm (0.5 m). During fieldwork, the tide was outgoing. In general, water currents in this part of Brightlands Bay are low (Davidson, 1996; Broekhuizen *et al.*, 2015).

4.1 Consent corners and surface structures

The inshore corner depths of the consent area ranged from 2.1 m to 11.8 m. Offshore boundaries of the consent area ranged from 8.7 m to 22.7 m (Table 1, Figure 2). Existing surface structures consisted of one block of backbones covering a total area of approximately 3.508 ha. At least one line was located offshore and outside of the consent.

The distance between low tide and the consent boundary was measured at three positions along the adjacent shoreline. The distance to the inshore boundary at the position of low tide 1 was 54.8 m, at low tide 2 was 50.8 m, at low tide 3 was 86.5m (Plate 2, Figure 2).

4.2 Sonar imaging

Sonar runs collected along the inshore boundary of the consent revealed rocky substrata located at several locations inshore of the consent (Figure 3). Boulders and cobble substrata extended inside the inshore edge of the consent (Figure 3).

Specialists in research, survey and monitoring

Table 1. Depths at the consent corners and existing surface structures. Depths adjusted to datum. Coordinates = NZTM (Northing/Easting).

Type	No. & Depth (m)	Coordinates
Consent corner	1, 2.1m	1672148.0,5453974.2
Consent corner	2, 8.7m	1672015.8,5453977.8
Consent corner	3, 22.7m	1672073.4,5454246.6
Consent corner	5, 11.8m	1672200.4,5454243.3
Structure corner	A, 10.5m	1672195.8,5454219.9
Structure corner	B, 22.2m	1672047.4,5454224.7
Structure corner	C, 10.3m	1671993.0,5453993.1
Structure corner	D, 3m	1672148.5,5453991.1
Low tide	Low tide 1	1672243.2,5454155.7
Low tide	Low tide 2	1672205.0,5453998.6
Low tide	Low tide 3	1672074.1,5453889.3



Plate 2. Aerial view of three low tide GPS locations relative to the inshore farm boundary (red polygon).



Figure 2. Depths of the proposed reconsent area (grey), existing marine farm surface structures (pink) and Ministry of Fisheries exclusion area (red outline). Three low tide locations are also plotted (circles).

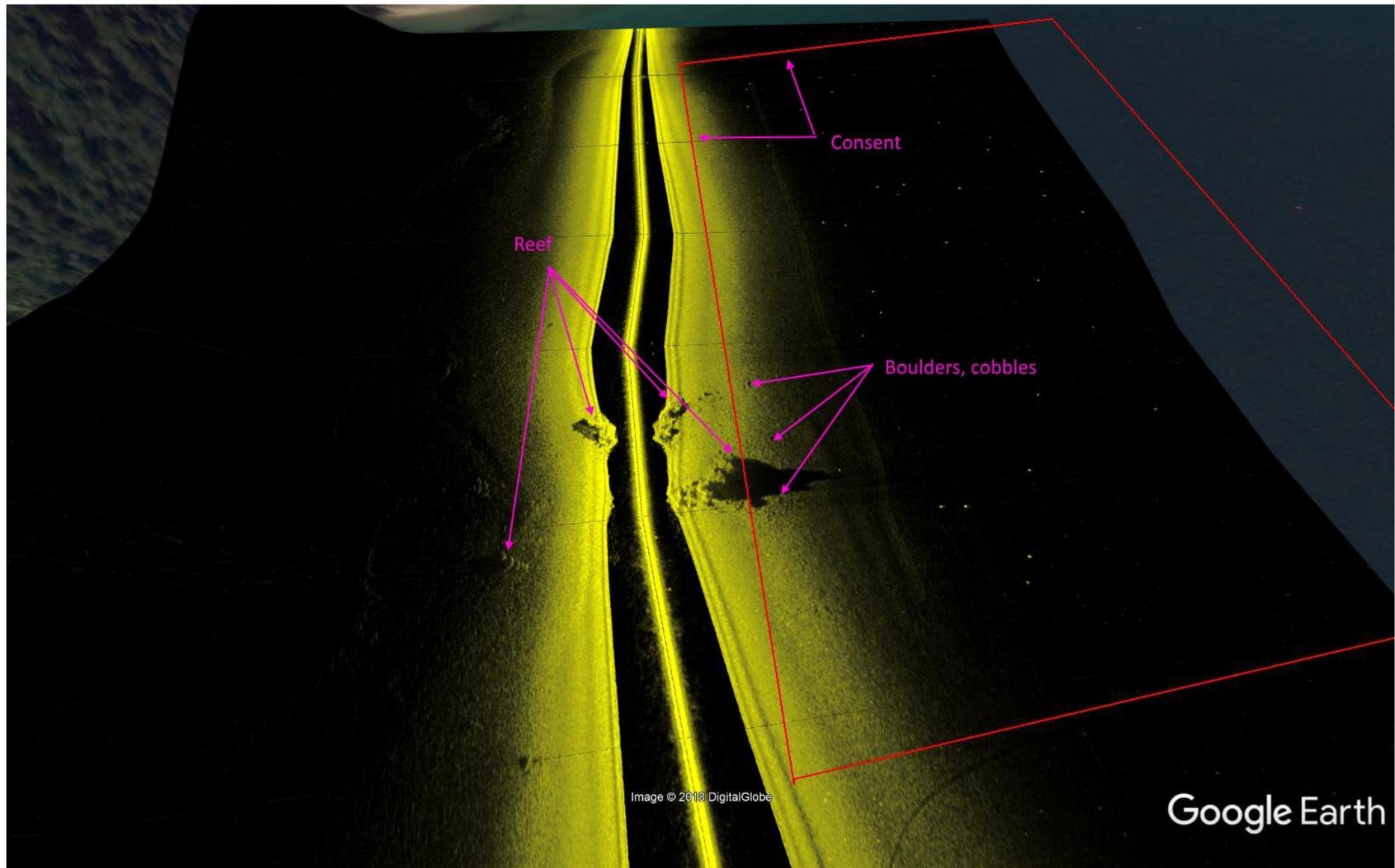


Figure 3. Inshore sonar run at farm site 8307. Red polygon = consent boundary, yellow line = sonar track.

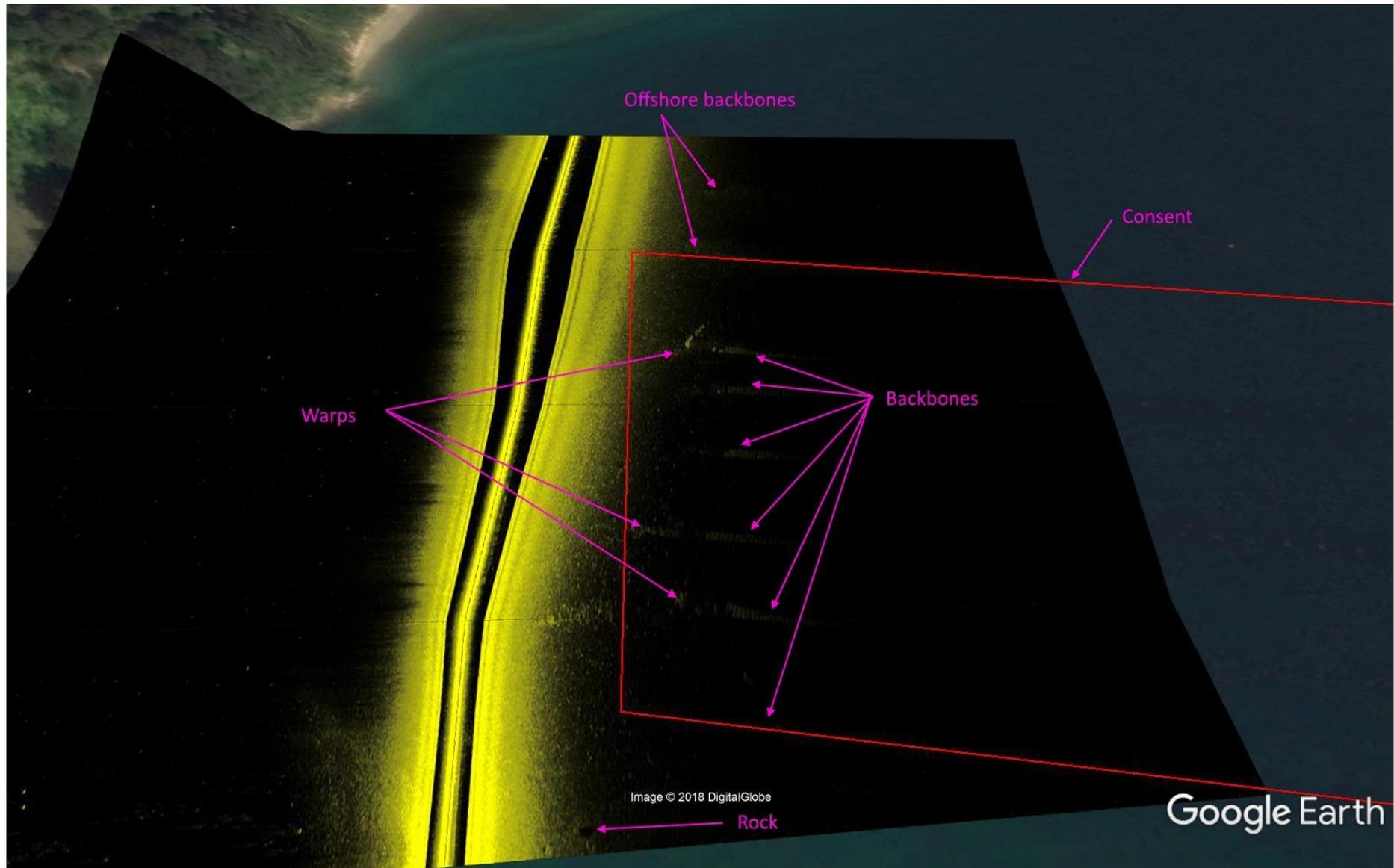


Figure 4. Sonar run at southern end of farm site 8307. Red polygon = consent boundary, yellow line = sonar track.

Specialists in research, survey and monitoring

4.3 Drop camera images

Drop camera photographs were taken throughout the existing consent and adjacent areas (Table 2, Figures 5 & 6, Appendix 1). Photographs were used to describe the benthic substratum, mussel shell debris cover and presence of biological characteristics.

Inshore of the consent

Benthic photographs taken inshore of the consent confirmed the presence of hard substrata (Figures 5 & 6, Table 2). Two inshore photos showed bedrock reef (Plate 3), while two showed cobbles and/or boulders (Plate 4). Mussel shell debris was absent from hard substrata inshore of the consent.



Plate 3. Bedrock reef, inshore of consent (photo 9, 4.3 m depth)



Plate 4. Silt, fine sand, natural shell, boulders and cobble. Inshore of consent (photo 17, 7.9 m depth).

Specialists in research, survey and monitoring

The remaining substratum inshore of the consent was characterised by combinations of silt, fine sand and natural shell (Table 2, Plate 5). Mussel shell debris was recorded on the benthos at one of the nine photos taken inshore of the consent, with moderate to high cover (Table 2, Plate 6).



Plate 5. Silt, fine sand and natural shell, inshore of the consent (photo 5, 8.5 m depth).



Plate 6. Silt, fine sand, natural shell and moderate to high mussel shell cover, inshore of the consent (photo 18, 8.9 m depth).

Specialists in research, survey and monitoring

Within the consent

The benthos within the consent was characterised by silt and fine sand with components of natural shell and mussel shell (Table 2, Plate 7). Cobbles were recorded in two photographs along the inshore northern edge of the consent (Plate 8). One of the photographs was right on the border of surface structures, and both photos were taken within the Ministry of Fisheries exclusion area (Figure 5b). A relatively low cover of mussel shell debris was recorded on the hard substrata (Plate 8).



Plate 7. Silt, fine sand, natural and mussel shell (photo 28, 14.1 m depth).



Plate 8. Silt, fine sand, natural and mussel shell, cobbles along the inshore edge of the consent, low mussel shell debris (photo 20, 10.3 m depth).

Specialists in research, survey and monitoring

Mussel shell

Mussel shell debris was observed from 15 of the 21 consent photos. In the consent, mussel shell debris ranged from none to high cover under the backbones, but the majority showed low cover (Plates 9 and 10).



Plate 9. Silt with high mussel shell debris under backbones (photo 29, 17.1 m depth).



Plate 10. Silt, fine sand and natural shell with low mussel shell debris under backbones located in the consent (photo 12, 5.6 m depth).

Specialists in research, survey and monitoring

One out of the five photos recorded low mussel shell debris inside under warp structures (Plate 11). Four out of five photos taken in the consent area with no structures recorded mussel shell, ranging from low to high values (Plate 12). All of these photos were taken along the inshore part of the consent within the Ministry of Fisheries structure exclusion zone.



Plate 11. Silt, fine sand, natural shell and low mussel shell debris, in consent under warps (photo 11, 3.7 m depth).



Plate 12. Silt, fine sand, natural shell and high mussel shell cover, inside consent with no structures (photo 3, 8 m depth).

Specialists in research, survey and monitoring

Offshore of the consent

The benthos offshore of the consent area was characterised by silt, fine sand and natural shell, and alongshore, silt and clay (Plates 13 and 14). No mussel shell debris was recorded offshore of this offshore backbone (Plates 13 and 14, Table 2).



Plate 13. Silt and natural shell, offshore of the consent (photo 33, 17.7 m depth).



Plate 14. Silt and clay, alongshore of the consent (photo 31, 22 m depth).

Table 2. Coordinates of drop camera stations showing location relative to the marine farm consent area (NZTM). Colours are: grey = within consent, pink = under backbones, blue = outside consent. Depth, substratum, level of mussel shell debris are listed. Mussel shell cover: None = no mussel shell, Low = 1-30%, Moderate = 31-50%, Moderate to High = 51-75%, and High = 76-100% cover.

No. & Depth (m)	Coordinates	Location	Substratum	Mussel shell debris
1, 2.3m	1672152.0,5453998.2	In consent, no structures	Silt, fine sand, natural shell	None
2, 5.2m	1672160.8,5454040.4	In consent, no structures	Silt, fine sand, natural & mussel shell	Moderate
3, 8m	1672180.4,5454131.5	In consent, no structures	Silt, fine sand, natural & mussel shell	High
4, 7m	1672195.4,5454185.1	Inshore of consent, no structures	Bedrock reef	None
5, 8.5m	1672203.5,5454223.2	Inshore of consent, no structures	Silt, fine sand, natural shell	None
6, 2.8m	1672164.6,5453980.4	Inshore of consent, no structures	Fine sand, silt	None
7, 4.5m	1672177.1,5454031.1	Inshore of consent, no structures	Silt, fine sand, natural shell	None
8, 6.3m	1672194.3,5454101.8	Inshore of consent, no structures	Silt, fine sand, natural shell, occ cobble	None
9, 4.3m	1672211.0,5454166.8	Inshore of consent, no structures	Bedrock reef	None
10, 7.1m	1672215.2,5454213.8	Inshore of consent, no structures	Silt, fine sand, natural shell	None
11, 3.7m	1672142.2,5453989.8	In consent, under warps	Silt, fine sand, natural & mussel shell	Low
12, 5.6m	1672152.0,5454039.6	In consent, under backbones	Silt, fine sand, natural & mussel shell	Low
13, 8.6m	1672165.5,5454096.4	In consent, under backbones	Silt, fine sand, natural & mussel shell	Low
14, 11.2m	1672178.8,5454152.5	In consent, under backbones	Silt, fine sand, natural & mussel shell	Low
15, 13.2m	1672184.7,5454192.7	In consent, under backbones	Silt, fine sand, natural & mussel shell	Low
16, 11.5m	1672197.7,5454240.6	In consent, under warps	Silt, fine sand, natural shell	None
17, 7.9m	1672192.8,5454171.5	Inshore of consent, no structures	Silt, fine sand, natural shell, boulders, cobble	None
18, 8.9m	1672203.0,5454211.8	Inshore of consent, no structures	Silt, fine sand, natural & mussel shell	Moderate to High
19, 9.1m	1672186.8,5454172.0	In consent, no structures	Silt, fine sand, natural & mussel shell, cobbles	Low
20, 10.3m	1672192.6,5454189.0	In consent, no structures	Silt, fine sand, natural & mussel shell, cobbles	Low
21, 10.1m	1672180.7,5454171.9	In consent, under backbones	Silt, fine sand, natural & mussel shell	Low
22, 4.1m	1672106.6,5453985.8	In consent, under warps	Silt, fine sand, natural shell	None
23, 10.2m	1672121.0,5454043.0	In consent, under backbones	Silt, fine sand, natural shell	None
24, 13.1m	1672133.5,5454101.4	In consent, under backbones	Silt, fine sand, natural & mussel shell	Low
25, 15.8	1672146.0,5454174.8	In consent, under backbones	Silt, natural & mussel shell	Moderate to High
26, 17.5m	1672155.2,5454243.4	In consent, under warps	Silt, natural shell	None
27, 8.8m	1672042.7,5453989.8	In consent, under warps	Silt, fine sand, natural shell	None
28, 14.1m	1672064.5,5454050.3	In consent, under backbones	Silt, fine sand, natural & mussel shell	Low
29, 17.1m	1672076.8,5454113.2	In consent, under backbones	Silt, mussel shell	High
30, 20.8m	1672090.2,5454180.5	In consent, under backbones	Silt, mussel shell	Moderate to High
31, 22m	1672100.8,5454245.9	Alongshore of consent, under warps	Silt and clay	None
32, 10.2m	1671987.3,5453997.6	Offshore of consent, no structures	Silt, fine sand, natural shell	None
33, 17.7m	1672015.4,5454097.9	Offshore of consent, no structures	Silt, natural shell	None
34, 20.4m	1672035.7,5454182.0	Offshore of consent, no structures	Silt, natural shell	None

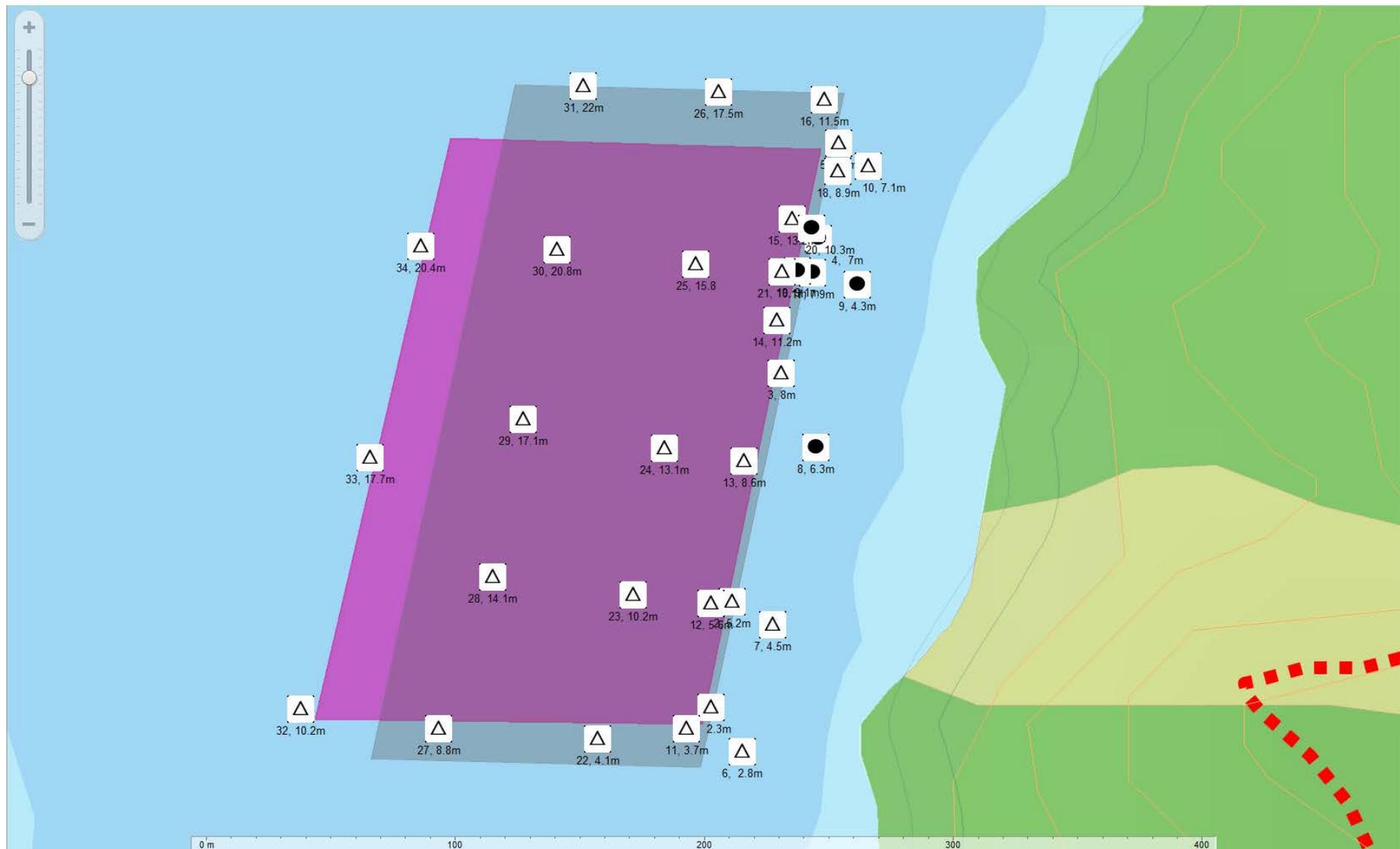


Figure 5a. Drop camera stations of the reconstent area (open triangles = soft substrata, dark circles = rocky), consent renewal area (grey) and surface structures (pink). Numbers are the photo number and water depth (m).



Figure 5b. Drop camera stations in northeastern corner (open triangles = soft substrata, dark circles = rocky), consent renewal area (grey), surface structures (pink) and Ministry of Fisheries exclusion area (red outline). Numbers are the photo number and water depth (m).

5.0 Conclusions

5.1 Benthic habitats and substratum

Substratum and habitat distribution relative to the consent area was based on drop camera stations and sonar imaging of the benthos.

Most of the consent area was located over silt and fine sand substratum with or without a component of natural shell. Hard substrata extended into the north-eastern inshore area of the consent, characterised by silt, fine sand, natural and mussel shell and cobbles.

Mud (i.e. silt and clay) is the most common subtidal habitat in the sheltered Marlborough Sounds (McKnight and Grange, 1991) and has been traditionally targeted for marine farming activities. This substratum type is considered suitable for consideration for marine farming activities in the Marlborough Sounds.

Unlike mud and silt, rocky substratum is not traditionally considered suitable for marine farming activities as it usually is smothered by shell debris and likely no longer functions as a hard substratum habitat. Rocky substrata were observed extending into the consent area.

5.2 Species and communities

Species abundance and diversity from most of the consent was low compared to high current locations in the Sounds. Benthic observations within silt dominated areas of the consent confirmed the area supported species typical of silt substratum (e.g. cushion seastars, sea cucumbers). Horse mussels were observed during the present survey in several photos in low abundance. Davidson (1996) previously documented horse mussel presence, noting densities were below those recognized as a horse mussel bed.

Spotty observed associated with hard substrata in this present survey are widespread in the Marlborough Sounds.

No further species or communities of scientific, conservation or ecological importance were observed during the present study (see Davidson *et al.*, 2011 for criteria and biological features).

5.3 Mussel farming impacts

5.3.1 Benthic impacts

Mussel shell debris was recorded from 15 of the 21 consent area photos. Mussel debris was most abundant under backbones, ranging from none to high cover. Only one photo observed low mussel shell cover under warps. Mussel shell debris ranged from none to high in photos taken in the inshore exclusion area of the consent (i.e. no structure zone), including low cover on hard substrata recorded here. This may be a result of structures positioned slightly inside the exclusion zone, or movement of structures due to environmental variables (e.g. wind and tide).

Benthic observations of the offshore area bordering surface structures outside of the consent recorded no mussel shell debris, however, it is probable mussel shell will exist under the backbone.

Shell debris impact levels were within the range known for mussel farms in the Marlborough Sounds. This farm impact at this site is at the low to moderate end of the impact range compared to other farms in the Sounds.

It is probable that the impact of continued shellfish farming at this site will result in the deposition of more shell and fine sediment under and near droppers. Based on the literature and assuming the present level of farming activity remains consistent, it is very unlikely that the surface sediments would become anoxic, however, the redox layer is likely shallower compared to sites away from the farm (Hartstein and Rowden, 2004; Keeley *et al.*, 2009;).

5.3.2 Productivity

Mussel farms can influence adjacent farms by slowing water flow to farms located in downstream positions. This is particularly pronounced in quiescent areas of the Sounds. However, published work by Zeldis *et al.* (2008, 2013) suggests that the major factors influencing productivity in the Marlborough Sounds relate to cyclical weather patterns in the summer (El Nino and La Nina) and river-derived nutrient inputs in winter. Slow crop cycles in some years are therefore a reflection of a weather cycle and much less about the number of farms.

Specialists in research, survey and monitoring

There has been no data presented to show the ecological carrying capacity of the Sounds has been reached, however, this topic is not well researched. There is considerable evidence showing the major drivers of the Pelorus system, for example, naturally leads to large within and between year variability. Relative to this, the impact of mussel farms appears to be material but relatively small compared to major environmental drivers (Broekhuizen *et al.*, 2015).

Tidal flows in Brightlands Bay are expected to be low; however, winds may be a significant driver of water movement in this area, especially during the predominant north-westerly winds. The proximity of the farm to the main reach means water turnover times are likely to be relatively short compared to bays well distant to main reach (e.g. Hallam Cove).

Based on these considerations and the existing literature, it is probable the site is unlikely to cause significant phytoplankton depletion outside the boundaries of the consent.

5.4 Boundary adjustments, line adjustments and monitoring

At least one mussel backbone line was located offshore of the consent. The offshore out of consent backbone/s were positioned over flat silt and fine sand substrata with components of natural shell.

Surface structures were slightly inside the Ministry of Fisheries exclusion area along the inshore part of the consent and mussel shell debris ranged from none to high value in this area.

Davidson (1996) suggested the inshore boundary of the farm be relocated to a minimum distance of 70 m offshore. The reasons were related to cobble habitat towards the northern end, and the fine sand, broken shell community (relatively dense bed of bivalves) located towards the southern inshore end of the proposed farm area.

The present survey confirmed the presence of cobble substrata extending into the consent area towards the northern end, and immediately adjacent to the consent. It is recommended that either (A) the structure exclusion zone be increased by 10 m width or (B) the farm be adjusted further from shore to avoid hard substrata. During the present survey, substratum located immediately offshore of the consent were investigated and proved more suitable for consideration for marine farming activities compared to inshore areas.



Specialists in research, survey and monitoring

For the remaining consent area, no benthic habitats or biological communities of particular interest were found during the present survey.

Based on the soft substratum located under structures and the impact levels of the existing activity, no monitoring is suggested. Habitats and species associated with the site are typical of sheltered central Pelorus Bays and as such no monitoring is suggested.



Specialists in research, survey and monitoring

References

- Broekhuizen, N., Hadfield, M., Plew, D. 2015. A biophysical model for the Marlborough Sounds Part 2: Pelorus Sound: 163. Prepared by NIWA for Marlborough District Council. Client report number CHC2014-130, NIWA project MDC13301.
- Davidson, R.J. 1996. Description of the subtidal substrata and associated macrobenthic communities from a proposed marine farm in Brightlands Bay, Pelorus Sound. Prepared by Davidson Environmental Limited for G. Beale. Research, survey and monitoring report number 123.
- Davidson R.J.; Duffy C.A.J.; Gaze P.; Baxter A.; Du Fresne S.; Courtney S. 2011. Ecologically significant marine sites in Marlborough, New Zealand. Co-ordinated by Davidson Environmental Limited for Marlborough District Council and Department of Conservation.
- Hartstein, N.D.; Rowden, A.A. 2004. Effect of biodeposits from mussel culture on macroinvertebrate assemblages at sites of different hydrodynamic regime. *Mar Environ Res.* 57(5): 339-57.
- Keeley, N.; Forrest, B.; Hopkins, G.; Gillespie, P.; Clement, D.; Webb, S.; Knight, B.; Gardner, J. 2009. Sustainable aquaculture in New Zealand: Review of the ecological effects of farming shellfish and other non-fish species. Cawthron Report No. 1476. 150p.
- McKnight, D.G.; Grange, K.R. 1991: Macrobenthos sediment-depth relationships in Marlborough Sounds. Report prepared for Department of Conservation by Oceanographic Institute, DSIR. No. P692. 19 p.
- Zeldis, J.R.; Howard-Williams, C.; Carter, C.M.; Schiel, D.R. 2008. ENSO and riverine control of nutrient loading, phytoplankton biomass and mussel aquaculture yield in Pelorus Sound, New Zealand. *Marine Ecology Progress Series*, Vol. 371, 131-142.
- Zeldis, J.R.; Hadfield, M.G.; Booker, D.J. 2013. Influence of climate on Pelorus Sound mussel aquaculture yields: predictive models and underlying mechanisms. *Aquaculture Environmental Interactions*, Vol. 4, 1-15

Appendix 1. Drop camera photographs

Photo 1 Silt, fine sand, natural shell



Photo site 2 Silt, fine sand, natural and mussel shell



Photo 3 Silt, fine sand, natural and mussel shell



Photo site 4 Bedrock reef



Photo site 5 Silt, fine sand, natural shell



Photo site 6 Fine sand, silt



Photo 7 Silt , fine sand, natural shell



Photo 8 Silt , fine sand, natural shell, occ cobble



Photo site 9 Bedrock reef



Photo site 10 Silt, fine sand, natural shell



Photo site 11 Silt, fine sand, natural and mussel shell



Photo 12 Silt, fine sand, natural and mussel shell

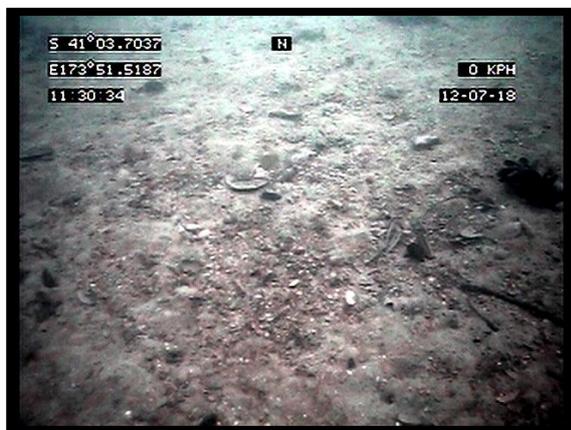


Photo site 13 Silt, fine sand, natural and mussel shell

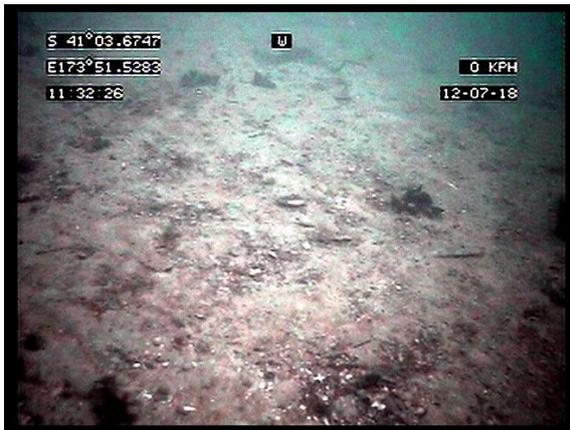


Photo site 14 Silt, fine sand, natural and mussel shell

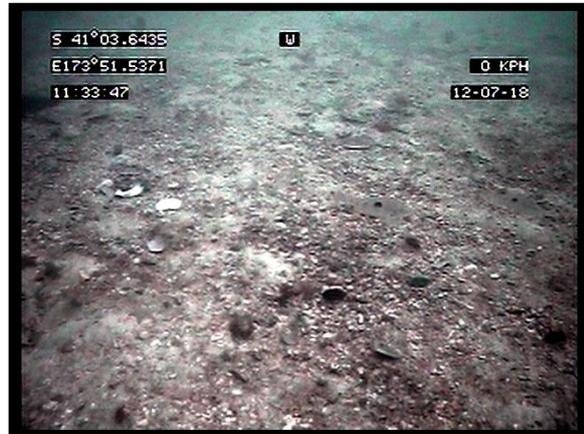


Photo site 15 Silt, fine sand, natural and mussel shell



Photo site 16 Silt, fine sand, natural shell



Photo site 17 Silt, fine sand, natural shell, boulders, cobble



Photo site 18 Silt, fine sand, natural and mussel shell



Photo 19 Silt, fine sand, natural and mussel shell, cobbles



Photo 20 Silt, fine sand, natural and mussel shell, cobbles



Photo 21 Silt, fine sand, natural and mussel shell, cobbles



Photo site 22 Silt, fine sand natural shell



Photo 23 Silt, fine sand natural shell



Photo 24 Silt, fine sand, natural and mussel shell



Photo 25 Silt, natural and mussel shell



Photo 26 Silt and natural shell



Photo 27 Silt, fine sand, natural shell



Photo site 28 Silt, fine sand, natural and mussel shell



Photo 29 Silt, mussel shell



Photo 30 Silt, mussel shell



Photo 31 Silt and clay



Photo site 32 Silt, fine sand, natural shell



Photo 33 Silt, natural shell



Photo 34 Silt, natural shell





Brightlands Bay

8308

8307



Prepared: 2 August 2018

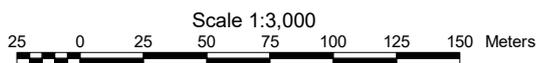
KEY

- Marine Farm Boundary (existing)
- Proposed Realigned Marine Farm

Aerial Image flown 2012.
Image sourced from LINZ Data Service and licensed for re-use under Creative Commons Attribution License 3.0
www.data.linz.govt.nz

Marine Farm 8307
Brightlands Bay, Tawhitinui Reach

Realigned Marine Farm





Topomap 50 Sheet: BP28

Base Topographical Data sourced from Land Information New Zealand data service (www.data.linz.govt.nz) and Licenced for re-use under Creative Commons Attribution 3.0 Licence.



Prepared
1 August 2018

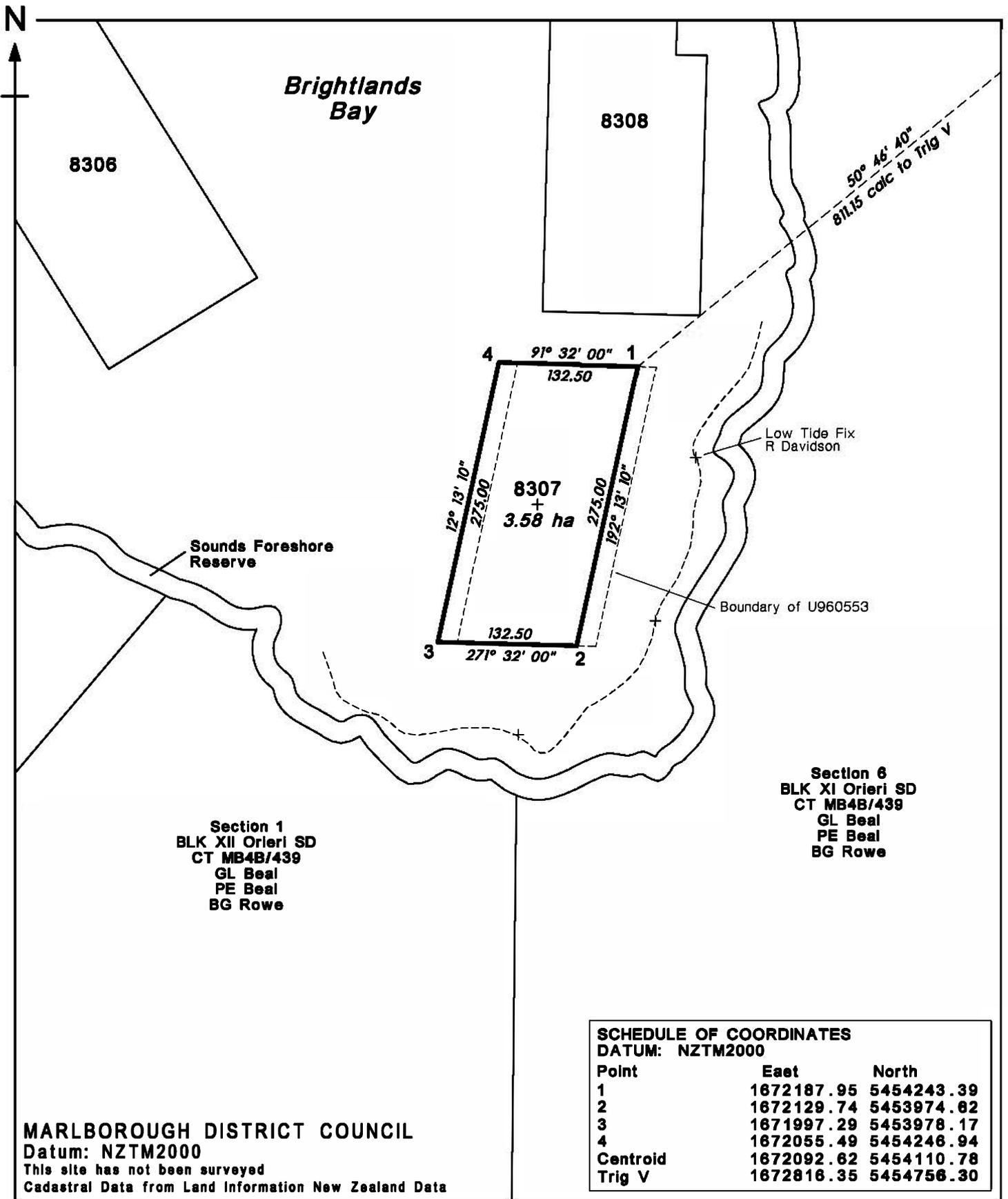
Ref: MF_2573

Locality Map

Renewal of Marine Farm 8307
Brightlands Bay, Tawhitinui Reach

Scale 1:50,000

500 0 500 1000 1500 2000 2500 3000 3500 Meters

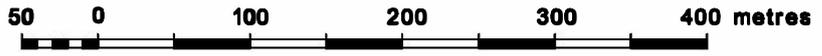


Coastal Permit Renewal

Renewal of Marine Farm 8307

Brightlands Bay, Tawhitinui Reach

SCALE 1:5,000



31 July 2018
MF_2573