



**MARLBOROUGH
DISTRICT COUNCIL**

RESOURCE CONSENT APPLICATION

U150590

KPF Investments Limited

Rams Head, Tawhitinui Reach, Pelorus Sound

Submissions Close

**5.00 pm Wednesday
12 August 2015**



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30 June 2015

Anna L Eatherley
Manager Resource Consents
Marlborough District Council
15 Seymour Street
PO Box 443,
Blenheim 7240

Dear Anna

Application for the renewal of resource consent U941323 in Tawhitinui Reach , Marine Farm 8316

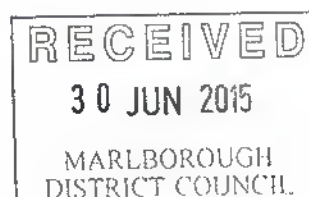
Please find attached a renewal application for the above resource consent. Included with this application are the following documents;

1. Resource Consent Application
2. Locality Map
3. Site Plan
4. Structure Plan
5. Assessment of Environmental Effects (AEE)
6. Ecological report

Please contact me if you have any questions, bruce@aquaculturedirect.co.nz or 021 451 284.

Yours sincerely

Bruce Cardwell
Aquaculture Direct Limited



Resource Consent Application

This application is made under Section 88 of the Resource Management Act 1991



**MARLBOROUGH
DISTRICT COUNCIL**

For Office Use

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Document Number:
RAF0002-CH1579

Lodgement Fee Paid \$ 930=

Receipt No.

Consent No.

Case Officer:

Date Received:

Please read and complete this form thoroughly and provide all details relevant to your proposal. Feel free to discuss any aspect of your proposal, the words used in this form or the application process with Council staff, who are here to help.

This application will be checked before formal acceptance. If further information is required, you will be notified accordingly. When this information is supplied, the application will be formally received and processed further.

You may apply for more than one consent that is needed to cover several aspects of the activity on this form.

1. Applicant Details *(If a trust, list full names of all trustees.)*

Name:

(full legal name)

KPF Investments Limited

Mailing Address: c/- 10 Ngati Kuia Drive, Havelock 7100

(including post code)

Email Address: bbn@unitedfisheries.co.nz

Phone: (Daytime) 03 574 2197

Phone: (Mobile) 021 283 5262

2. Agent Details *(If your agent is dealing with the application, all communication regarding the application will be sent to the agent.)*

Name:

Bruce Cardwell - Aquaculture Direct Ltd

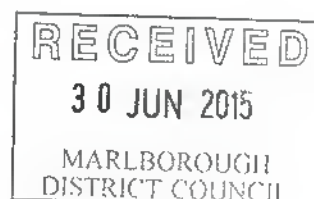
Mailing Address: PO Box 213

(including post code) Blenheim 7240

Email Address: bruce@aquaculturedirect.co.nz

Phone: (Daytime) 021 451 284

Phone: (Mobile) 021 451 284



3. Type of Resource Consent Applied For

☒ Coastal Permit ☐ Discharge Permit ☐ Land Use ☐ Subdivision ☐ Water Permit

4. Brief Description of the Activity

To renew an existing resource consent for Marine Farm 8316 in Tawhitinui Reach, Pelorus Sound, including all activities ancillary to the operation of the marine farm for a term of 20 years.

5. Supplementary Information Provided?

☐ Yes ☒ No

Council has supplementary forms for some activities, such as moorings, water permits, domestic wastewater, discharge permits, to assist applicants with providing the required information.

6. Property Details

The location to which the application relates is (address): Marine Farm 8316

Legal description (i.e. Lot 1 DP 1234): N/A

(Attach a sketch of the locality and activity points. Describe the location in a manner which will allow it to be readily identified, e.g. house number and street address, Grid Reference, the name of any relevant stream, river, or other water body to which application may relate, proximity to any well known landmark, DP number, Valuation Number, Property Number.)

Please attach a copy of the Certificate of Title that is less than 3 months old (except for coastal or water permits).

The names and addresses of the owner and occupier of the land (other than the applicant):

N/A

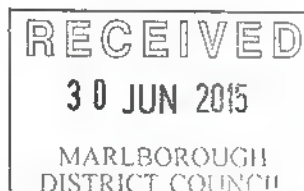
Please attach the written approval of affected parties/adjoining property owners and occupiers.

Note: As a matter of good practice and courtesy you should consult your neighbours about your proposal. If you have not consulted your neighbours, please give brief reasons on a separate sheet why you have not.

7. Assessment of Effects on the Environment (AEE) *(Attach separate sheet detailing AEE.)*

I attach, in accordance with Schedule Four of the Resource Management Act 1991, an assessment of environmental effects in a level of detail that corresponds with the scale and significance of the effects that the proposed activity may have on the environment. Applications also have to include consideration of the provisions of the Resource Management Act 1991 and other relevant planning documents.

Note: Failure to submit an AEE will result in return of this application.



8. Other Information

Are additional resource consents required in relation to this proposal? If so, please list and indicate if they have been obtained or applied for.

N/A

I attach any other information required to be included in the application by the relevant Resource Management Plan, Act or regulations. ☐ Yes ☒ No

9. Fees

1. The applicable lodgement (base) fee is to be paid at the time of lodging this application. If payment is made into Council's bank account 02-0600-0202861-02, please put Applicant Name and either U-number, property number or consent type as a reference. If you require a GST receipt for a bank payment, please tick ☐
2. The final cost of processing the application will be based on actual time and costs in accordance with Council's charging policy. If actual costs exceed the lodgement fee an invoice will be issued (if actual costs are less, a refund will be made). Invoices are due for payment on the 20th of the month following invoice date. Council may stop processing an application until an overdue invoice is paid in full. Council charges interest on overdue invoices at 15% per annum from the date of issue to the date of payment. In the event of non-payment, legal and other costs of recovery will also be charged.
3. Please make invoice out to: ☒ Applicant ☐ Agent
(if neither is ticked the invoice will be made out to Applicant)

10. Declaration

I (please print name) Bruce Cardwell

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

Signature of applicant or authorised agent:

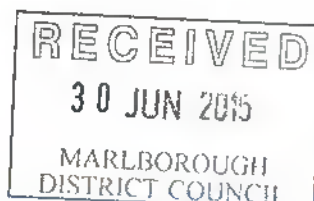
BR Cardwell

Date:

30/06/15

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 make corrections to your details, please contact Council.



Reset Form



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

**APPLICATION BY KPF INVESTMENTS LIMITED (KPF)
TO RENEW EXISTING CONSENT FOR MARINE FARM SITE 8316 IN RAMS HEAD, PELORUS
SOUND, MARLBOROUGH**

1.0 Introduction – the applicant

KPF INVESTMENTS LIMITED (KPF) has applied to renew the existing resource consent for marine farm site 8316 (3.6025 ha) for the purpose of farming Greenshell mussels, (*Perna canaliculus*) Blue mussel (*Mytilus edulis*) Pacific oysters (*Crassostrea gigas*), Dredge oysters (*Tiostrea chilensis*) and NZ scallop (*Pecten novaezelandiae*) using conventional structures. (See attached layout diagrams illustrating the site).

The application is for a continuation of the activities currently consented at the site. No changes to the activities are proposed. The current status of the consent is a discretionary activity.

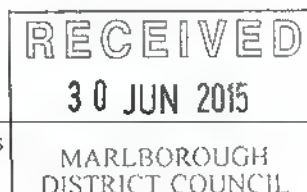
This farm is one of three farms near Rams Head located adjacent to each other. Marine farms 8317 and 8318 are situated to the east.

KPF is an Investment Company that makes its assets available to United Fisheries Limited (UFL) on a commercial basis. Both KPF and UFL are seafood companies which are family owned and have their base in Christchurch. UFL has been involved in aquaculture since 1987 and currently owns 30 marine farms in the Marlborough Sounds. The Christchurch factory is used for both fish and mussel processing.

Bob Nicolle as Aquaculture Manager of UFL has had a long involvement with the mussel industry (35 years). Bob is an Executive Committee member of the Marine Farming Association (MFA) and a past committee member of the Marlborough Shellfish Quality Programme (MSQP).

The applicant adheres to the 'Greenshell Mussel Industry Environmental Code of Practice' and its successor the Environment Management Framework and is an active participant of the Marine Farming Association's Environmental Programme. This programme covers the activities of marine farmers' "on water" activities. This Programme 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'



As this is a 'like for like' application by an existing permit holder, the application should be processed under s 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 s 165ZJ(1).

2.0 Introduction – the application

2.1 Size: The site is 3.6025 ha.

2.2 Structures: The site dimensions will be: inshore boundary 280 metres long, outer boundary 280m, northern boundary 130m long and southern boundary 130 m long.

There will be a total of 9 longlines (see attached layout diagram). There are currently 6 lines on the farm.

2.3 Species: It is proposed to farm and harvest Greenshell mussels (*Perna canaliculus*), Blue mussel (*Mytilus edulis*) Pacific oysters (*Crassostrea gigas*), Dredge oysters (*Tiostrea chilensis*) and NZ Scallop (*Pecten novaezelandiae*) 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.

3.0 Permitted Activities

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 taking and discharging of coastal seawater and discharge of biodegradable and organic waste matter) and all other activities that are ancillary to the operation on site 8316.

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)).

4.0 Terms of Consent

The original Marine Farm Consent U941323/MPE 285, site number 8316 is due to expire on 18 December 2015. KPF seeks a 20 year term expiring in 2035.

5.0 The Site - Location

Marine farm 8316 is located along the southern shoreline of Tawhitinui Reach immediately east of Rams Head. Rams Head is a promontory located south of Maud Island and is approximately 5 km west of Tawero Point and some 40 km by sea from Havelock.

The marine farm 8316 is within CMZ2 zone along with other marine farms located along the southern boundary of Tawhitinui Reach in the Pelorus Sound. The farm is within the area of the Pelorus Sound generally accepted as being appropriate for mussel farming.

The adjacent land to the south is a pastoral farm owned by the Foote 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 as per the layout plans attached. The depth of the water at each of the corners of the site is 21m (NW), 21m (NE), 24m (SE), and 7m (SW).

The application is for 9 long lines each being 8 x 130metres and 1 x 105 metres long.

The site layout is attached to the application. The long lines will be no more than 15m apart.

The warp lengths have been standardised at approximately 75m from each end of the backbone (see line layout diagram for individual longline lengths). The warp ratio is 1:2.5.

The farm is located onsite.

7.0 THE PRESENT ENVIRONMENT

7.1 The Marine Environment

On 23 April 2015 Mr RJ Davidson, of Davidson Environmental Ltd, undertook a biological study of the ecology of the marine area of sites 8316. The report provides an overview of the bay and site specific information for each marine farm. The report is attached as part of this application. The aim of that study was to provide a report on the habitats and the impact zone associated with the current activities at site 8316 and also to identify any potential threats to any ecological, scientific or conservation values posed by the activities sought in the application.

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;

"Benthos

The benthos under the proposed renewal area was dominated by silt substrata with a variable component of natural shell. Natural shell represented a small component at deep offshore areas and a higher component around the inshore edges of the consent. These substratum types are consistent with many sheltered bays in central Pelorus Sound.

Boulder and cobble substrata were observed inshore of the consent along the sloping shore edge. No hard substratum was observed within the consent. Two photos were collected from the cobble and boulder shore. Neither showed any indication that the adjacent farm had impacted this area. Further, no benthic mussel shell was observed from the cobble bank.

Species and communities

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

The closest recognised significant site is 1.7 km further to the west of the present consent. This is well beyond the recognised impact distance associated with mussel farming activities.

The consent likely supports an infauna typical of mud dominated shores (see McKnight and Grange 1991 for descriptions). This habitat type is widespread and the most common soft bottom substratum in the sheltered Sounds.

Mussel farming impacts

Benthic mussel shell was recorded from drop camera photos collected under and near backbones. At particular locations high levels of shell was recorded, while at some locations under backbones little shell was seen. Shell debris impact levels were within the range known for mussel farms in the Marlborough Sounds.

It is probable that the impact of continued mussel farming at this site will result in the deposition of more mussel shell and fine sediment under and in close proximity to droppers. Assuming the present level of activity remains relatively consistent, and based on observations during the present survey, it is very unlikely that the surface sediments would become anoxic.

Boundary adjustments and monitoring

The consent is located on substratum considered suitable for mussel farming activities. No species or habitats of importance were observed. Based on these data no boundary adjustments are suggested nor is any monitoring suggested."

7.2 The Land Environment

The site lies near other marine farms at Rams Head. The site is bounded by marine farms to the east, sites 8317 and 8318. See attached locality map.

The adjacent farm land is owned by the Foote Family.

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 according to the original Cadastral mapping holds with the conventions established in the Marlborough Sounds Resource Management Plan. That is, the inshore boundary of the farm is beyond 50m from the mean low water mark.

8.2 Headlands

There is a headland immediately to the northwest and 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 and either inside or outside of the site.

The original application for the marine farm was refused by the Marlborough District Council mainly on navigation grounds. After consideration of the facts and on appeal a consent order was granted by the Environment Court in favour of the applicant. There have been no reported incidents of navigational incidents since the farm has been in place.

The farm does not impede vessel movements along the coastline.

8.4 Anchorages or Mooring Areas (Formal/Informal)

There are no registered moorings in the immediate vicinity of the site. The small inset within the south western corner of the farm was to allow a local land owner to operate a mooring. However there is no record of a registered mooring in place on the site.

The Marlborough Sounds Guide Book (Bob Radley) does not identify the area as a sheltered anchorage.

8.5 Indirect Effects-Servicing vessels at site

The applicant estimates their farming and harvesting vessels will visit the site on an average of 20-30 days a year for periods of 0.5 to 5 hrs to undertake farm maintenance, seeding and harvesting. The total amount of hours spent on these activities is estimated to be 75-85 hrs annually.

8.6 Water Ski Lanes

There are no formal water ski lanes in the vicinity.

8.7 Sub-Marine Cables

There are no sub-marine cables in the immediate vicinity of the farm.

9.0 AESTHETIC

9.1 Land Zoned for Residential Use or Proximity to Residences

There are no residences near the site. There is a Conservation zoned strip along the Sounds Foreshore Reserve. The land immediately south of the farm is zoned Rural.

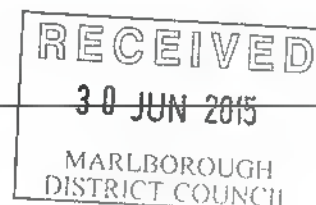
9.2 Scenic Value

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

The foreshore and the hinterland to the west is regenerating bush. The area to the south is a pastoral farm.

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 is ecological value identified in the Marlborough Sounds Resource Management Plan for Site 8316. The area has been identified as 'King Shag feeding habitat'.

Recent studies of the King Shag population by NZ King Salmon show that the King Shag population is larger than initially estimated and is stable in the Marlborough Sounds.

The marine farm will have no effect on the adjacent land including flora and fauna.

11.0 RECREATIONAL VALUE

In terms of recreational use, there is no road access to the area and the only access to this part of the Pelorus Sound is by boat.

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.

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 Fairy 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. The farm structures consist of 9 long lines of 130 metres in length containing black mussel buoys ranging between approximately 4 and 60 per line. 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 high, both in relation to productivity and suitability for harvesting for human consumption, and suitability for mussel farming. The site relies on this high water quality to enable the process of mussel farming to flourish. The site 8316 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 813.

"No species, habitats or communities of scientific, conservation or ecological importance were observed during the present study (see Davidson et al., 2011 for criteria and biological features). The closest recognised significant site is 1.7 km further to the west of the present consent. This is well beyond the recognised impact distance associated with mussel farming activities."

16.0 EFFECTS ON PRODUCTIVITY

Water quality is unlikely to be a problem for mussel farming near Rams Head. The continuing activity itself is unlikely to create any significant detrimental effects on water quality.

17.0 THE BENTHIC ENVIRONMENT

In terms of the benthic environment, the ecology of this area has been documented in Davidson Environmental Ltd report 813 (refer to 7.1 above).

No changes to the site boundaries or the layout are necessary to mitigate any adverse impacts on the seabed.

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 s27 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 to 8.5)

20.0 ON SHORE FACILITIES

The applicant already has onshore marine farm facilities based in Havelock on land leased from Port Marlborough Limited. Farm work is undertaken by the applicant's staff and contractors based out of Havelock. The direct number of staff employed by the applicant, based in Havelock, is four FTE and three casual employees.

UFL use contractors for their harvesting operations, anchor installations and engineering support.

The mussels are transported to Christchurch where they provide a critical part of the production to maintain processing to the factory which employees 45 FTE.

21.0 VALUE OF INVESTMENT

As part of this application to renew site 8316, the applicant is seeking to re-consent the site 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 s 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 s 104(2A).

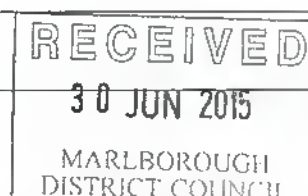
The existing site has been held by the applicant since 1997. Over that time the applicant has expended significantly on the maintenance and upkeep of the farm. The seven lines have been installed at a cost of \$23,000 per line, total cost of \$161,000. The cost of seeding the farm per cycle (18 months) is \$50,000 - \$70,000. The repairs and maintenance is \$15,000 - \$25,000 per cycle.

The farm produces approximately 140 tonnes per annum (\$950/ Green Weight Tonne (GWT)) and after processing the final ½ shell product would be sold on the export market at approximately \$420,000. Approximately 95% of United Fisheries mussel products are exported. All lines are restocked after harvest to achieve 140 GWT/per annum harvest.

The applicant leases berthage and land in Havelock from Port Marlborough Ltd and engages local transport companies to transport the bulk mussels.

The mussels are transported to Christchurch where they provide a critical part of the production to maintain processing to the factory which employees 45 Full-time Equivalents (FTE).

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 Sounds and in the Nelson/Marlborough region.

The majority of mussels produced from the site will be exported, therefore 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 of the application is not identified as adjacent to an area of outstanding landscape value in the current 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 to the west of the farm is regenerating bush. This application will not alter the current regeneration of that vegetation.

- 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 site is not known to be of importance to Maori. 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

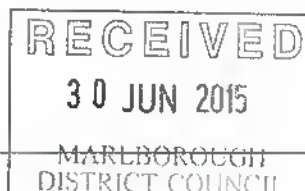
Policy 2 sets out a number of matters which are relevant to the taking into account of the principles of the Treaty of Waitangi and kaitiakitanga, in relation to the coastal environment.

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 applicant has also reviewed the iwi management plans of Ngāti Kōata and Te Ātiawa o Te Waka-a-Māui. No areas of conflict have been identified.

There are no taiāpure or mahinga mātaihai in the area of the application. 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 will discuss the proposal further with relevant iwi representatives if this is requested.



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 Rams Head. 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

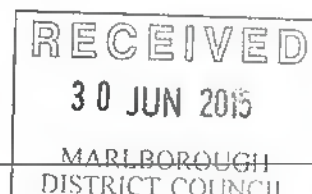
Policy 11 relates to protecting the indigenous biological diversity of the coastal environment.

The farm is 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.

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 of the application site is not recognised as an area of outstanding natural character in the most recent comprehensive natural character study "Natural Character of the Marlborough Coast" (June 2014).



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.

This application is not within an area identified as outstanding landscape value under the Marlborough Sounds Resource Management Plan. 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.

As noted above, the only means of access to this area is by boat. The visual impact of the marine farm will not change. Access to the coast for recreationalists is maintained.

There are no registered moorings in the immediate vicinity of the site, and 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

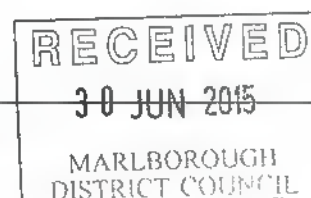
Subpart 1 of Policy 23, which relates to managing discharges to water in the coastal environment, is relevant to this application. Silts and organic matter released at harvest are readily assimilated into the water column and seabed. The effects of harvesting mussels are only transitory, and quickly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

CONCLUSION

This application is not within an area of outstanding landscape value under the Marlborough Sounds Resource Management Plan. The effects of the application on the landscape will be no more than minor and will result in no change to the existing status.

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

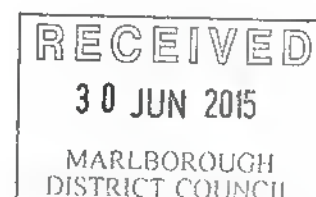
An initial letter has been sent to all Iwi listed below identifying the site prior to the application being submitted. A meeting has been held with Ngati Koata and Ngati Kuia. The adjacent landowner has been contacted.

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
Ngati Rarua Trust	PO Box 1026, Blenheim 7240	(03) 577 8468

26.0 CONCLUSION

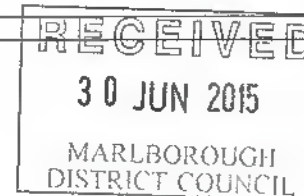
The applicant considers that the renewal of site 8316 is appropriate, thereby allowing the continued farming of greenshell mussels and other species at the site.

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.

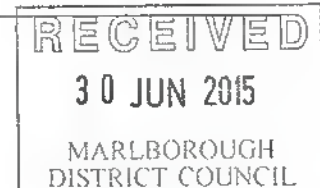


Appendix A: Marlborough Regional Policy Statement – Policy Analysis

Objective	Policy	Assessment
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	5.3.5: Avoid, remedy or mitigate the reduction of coastal water quality by contaminants arising from activities occurring within the coastal marine area.	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.
5.3.10: The natural species diversity and integrity of marine habitats be maintained or enhanced	5.3.11: Avoid, remedy or mitigate habitat disruption arising from activities occurring within the coastal marine area.	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.
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.	7.1.10: To enable appropriate type, scale and location of activities by: <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. 	The marine farm is consistent with the current Policy and the designated consented area is within a bay well established for marine farming.
	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.	The marine farm is located within the consented area which is approved for marine farming. There will be no change in activity or structures when the consent is renewed.

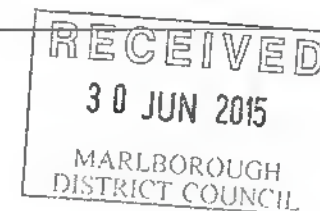


7.2.7 The subdivision use and development, of the coastal environment, in a sustainable way.	7.2.8: Ensure the appropriate subdivision, use and development of the coastal environment.	The marine farm is within a bay well established for marine farming. The marine farm's activity is biologically sustainable.
	7.2.10(a) - (d)	The marine farm is located within the consented area which is approved 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.	The site is not within an area of outstanding natural landscape but will have no additional impact on landscape values. 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.

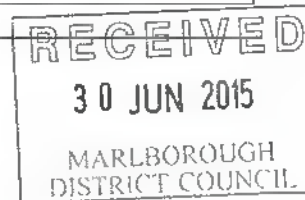


Appendix B: Marlborough Sounds Resource Management Plan – Policy Analysis

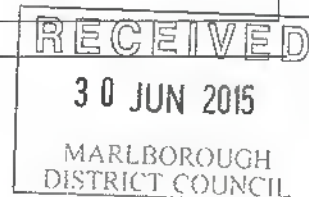
Objective	Policy	Assessment
Ch 2, 2.2, Obj 1: The preservation of the natural character of the coastal environment, wetlands, lakes, and rivers and their margins and the protection of them from inappropriate subdivision, use and development.	Policy 1.1: Avoid the adverse effects of subdivision, use or 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.	This application is set in an area where the foreshore and the hinterland to the west is regenerating bush. The area to the south is a pastoral farm. The marine farm is within a bay well established for marine farming.
	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.	Refer above.
	Policy 1.3: To consider the effects on those qualities, elements and features which contribute to natural character, including: <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. 	These matters have been considered in the assessment of environmental effects.
	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 9.2.1, 9.3.2 and 9.4.1 in recognition of the components of natural character.	The application will not have any additional impact on the components of these policies which impact natural character values.



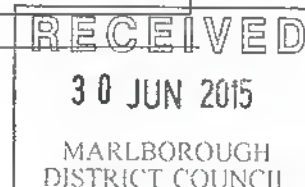
	Policy 1.6: In assessing the appropriateness of subdivision, use or development in coastal and freshwater environments regard shall be had to the ability to restore or rehabilitate natural character in the area subject to the proposal.	Any residual impact on natural character will naturally rehabilitate 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, makes 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.	There is ecological value identified in the Marlborough Sounds Resource Management Plan for Site 8316. The area has been identified as King Shag feeding habitat but the population has been described as stable.
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 application site is not within an area of outstanding landscape value identified in the plan. The effects of the application on the landscape will be the same as the current 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	<p>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</p> <p>The applicant understands there are no known wahi tapu, taiapure, mataitai or other areas of significance to Maori in the vicinity of the application.</p>



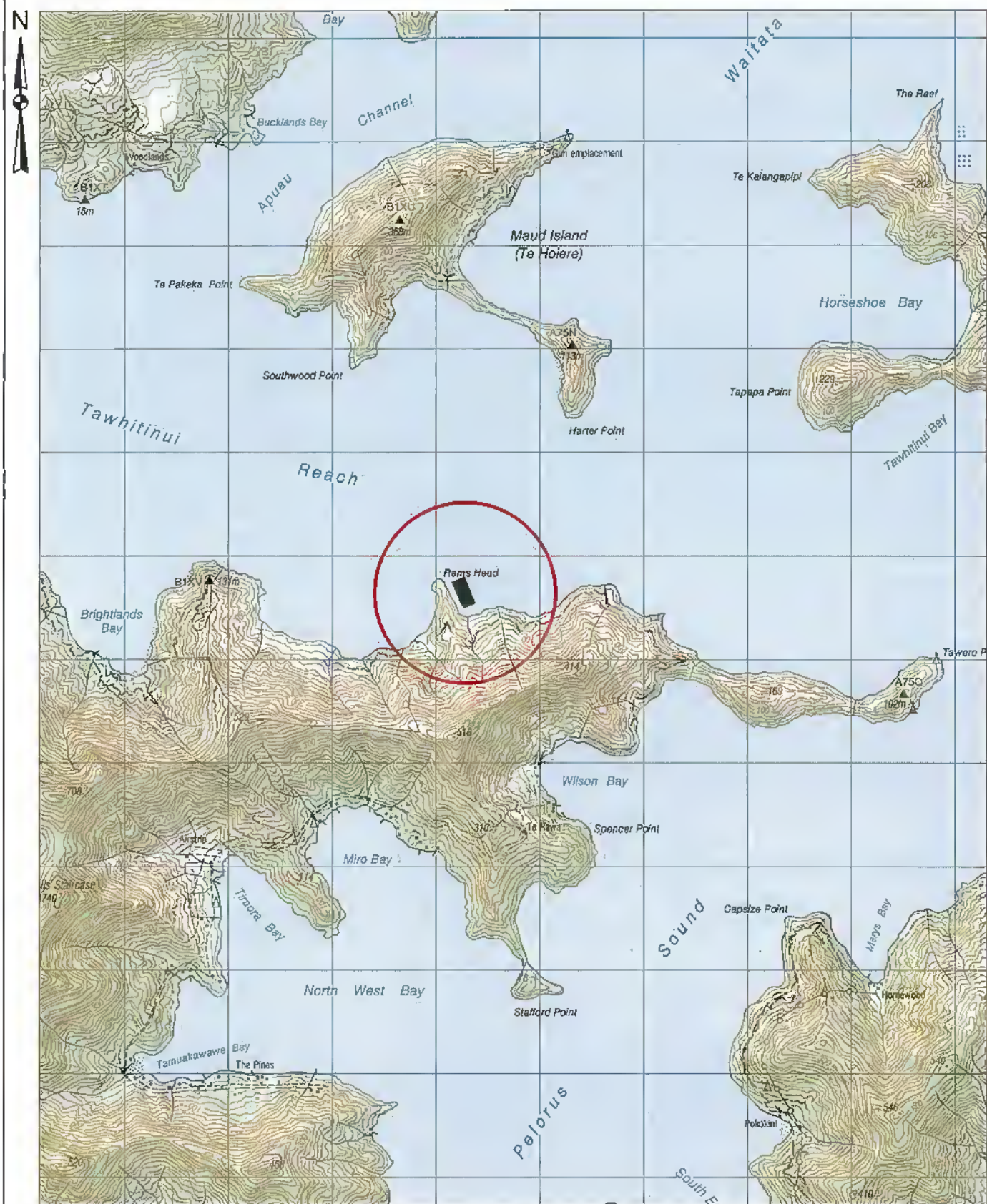
Ch 8, 8.3, Obj 1: That public access to and along the coastal marine area, lakes and rivers be maintained and enhanced.	Policy 1.2: Adverse effects on public access caused by the erection of structures, marine farms, works or activities in or along the coastal marine area should as far as practicable 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 well established for marine farming. 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. The bay is not recognised for casual moorings.
	Policy 1.12: To enable a range of activities in appropriate places in the waters of the Sounds including marine farming, tourism and recreation.	<p>Policy 1.12 enables marine farming in appropriate places. Site 8316 is consented for marine farming, there are two further marine farms adjacent to the site and this area has been consented for marine farming since 1980's.</p> <p>The area around the farm is zoned CMZ2 where aquaculture is permitted.</p> <p>Overall, the application is consistent with this policy.</p>
	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.	This farm is a discretionary activity enabled by this policy.



Ch 9, 9.3.2, Obj 1: Management of the effects of activities so that water quality in the coastal marine area is at a level which enables the gathering or cultivating of shellfish for human consumption (Class SG).	Policies 1.1 to 1.11	This application is not anticipated to have any impact on shellfish quality.
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.	The farm is positioned approximately 3 kilometres away from the closest residents in the area. The applicant's servicing vessel and contractors are estimated to spend approximately 75-85 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'



Topomap 50 Sheet: BP28

Base Topographical Data sourced
from Land Information New Zealand Data.
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Prepared: 2 June 2015

Locality Map

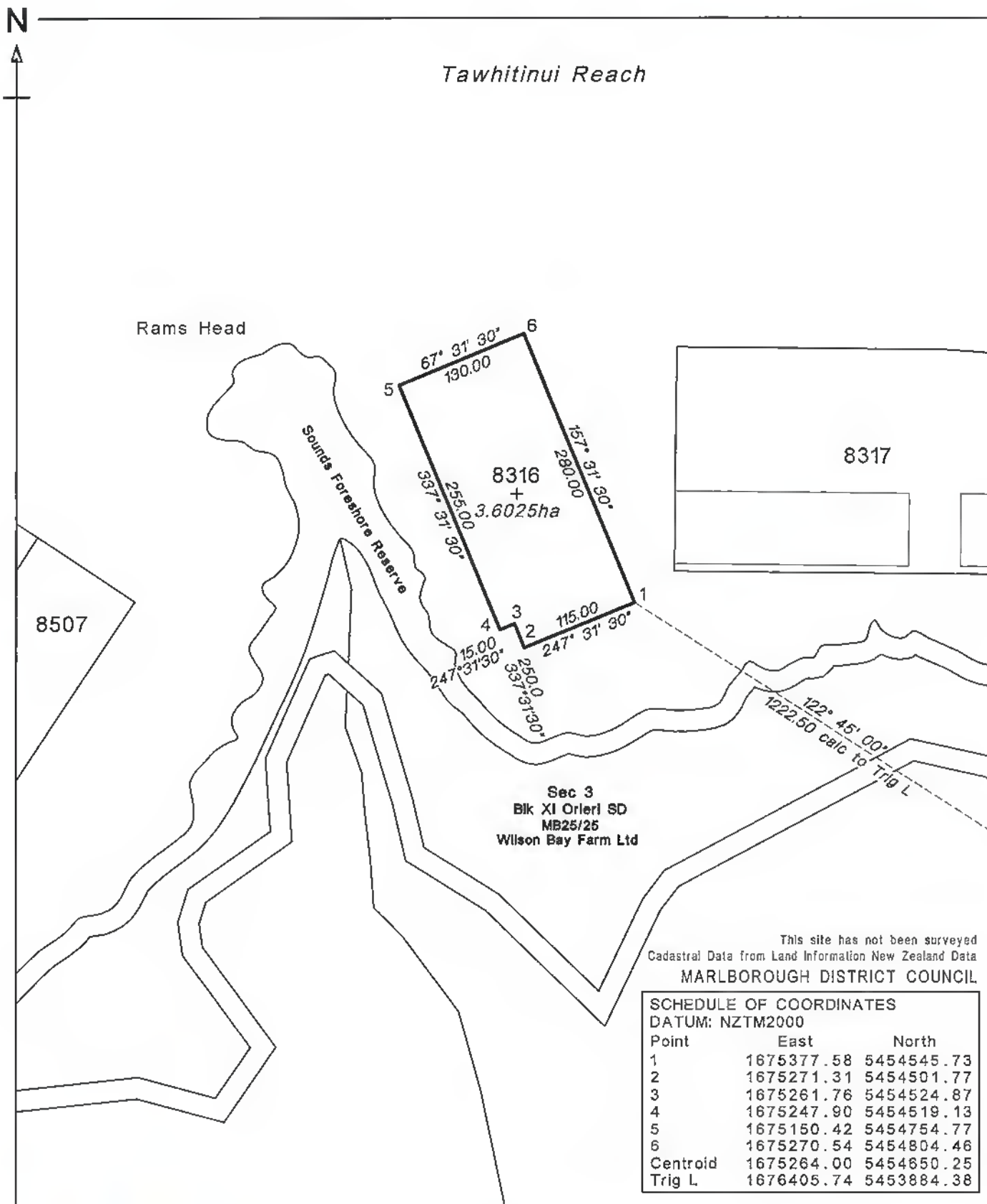
Proposed Coastal Permit
Being Marine Farm 8316
Tawhitinui Reach - Pelorus Sound

Scale 1:50,000

500 0 500 1000 1500 2000 2500 3000 3500 Meters

RECEIVED
30 JUN 2015
MARLBOROUGH
DISTRICT COUNCIL

MF-2309



Date: 2 June 2015
Drawing Ref: MF_2409

Marine Farm 8316

Rams Head, Tawhitinui Reach

RECEIVED
30 JUN 2015
MARLBOROUGH
DISTRICT COUNCIL

SCALE 1:5,000

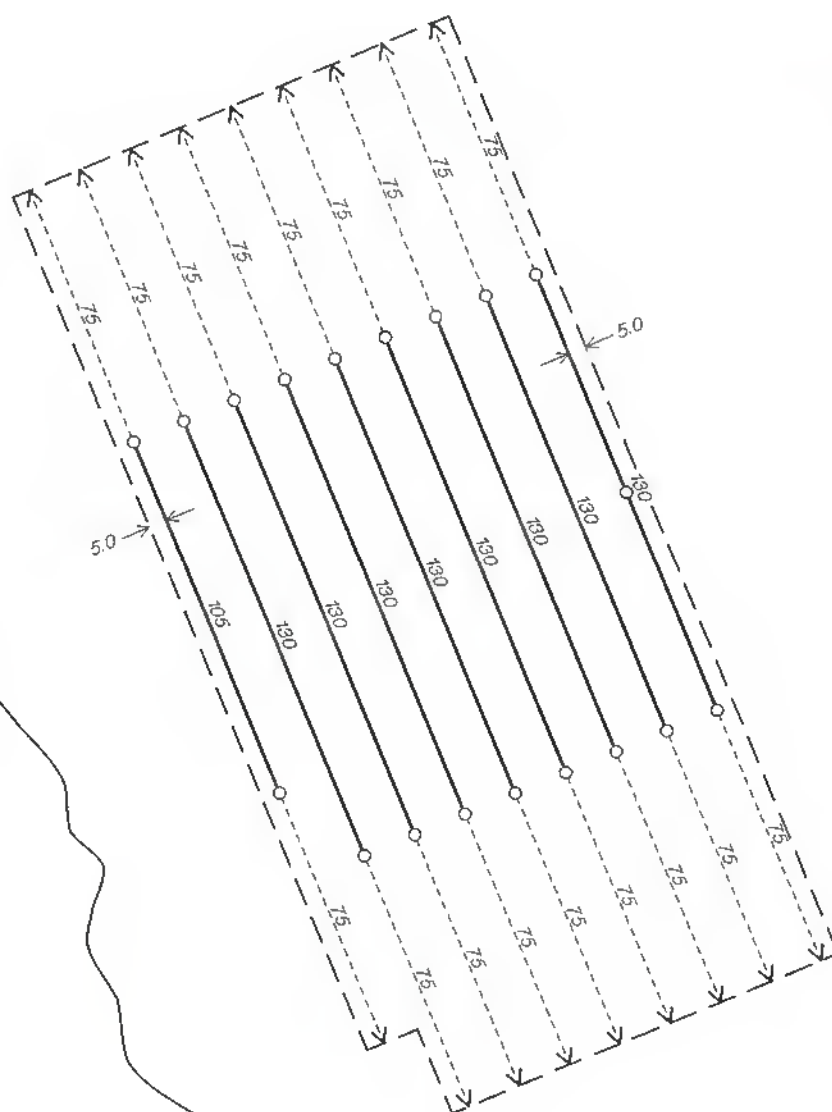
50 0 100 200 300 400 metres



RECEIVED

30 JUN 2015

MARLBOROUGH
DISTRICT COUNCIL



Longline Spacing = 15m
Total Longlines = 9
Backbone Length = 8 @ 130m and 1 @ 105m
Total Backbone Length = 1145m
Warp Surface Loss = 75m

REFERENCE

- Orange Float
- ∧ Anchors
- Anchor Warp (32mm Rope)
- Backbone (24-28mm Rope)



Date: 2 June 2015
Drawing Ref: MF_2409

Layout Details

Marine Farm 8316



SCALE 1:2,000



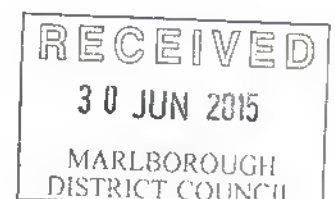
Davidson Environmental Limited

Ecological report for the proposed renewal of a marine farm (8316) located at Rams Head, Tawhitinui Reach, Pelorus Sound

Research, survey and monitoring report number 813

*A report prepared for:
for KPF Investments Limited (farm owner) and United Fisheries Ltd. (Manager)
C/- Aquaculture Direct Ltd
P.O. Box 213
Blenheim*

May 2015



Bibliographic reference:

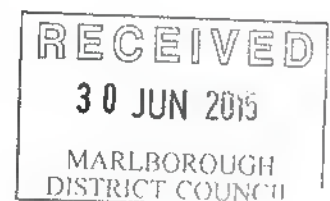
Davidson, R.J. 2015. Ecological report for the proposed renewal of a marine farm (8316) located at Rams Head, Tawhitinui Reach, Pelorus Sound. Prepared by Davidson Environmental Ltd. for KPF Investments Limited (farm owner) and United Fisheries Ltd. (Manager). Survey and monitoring report no. 813.

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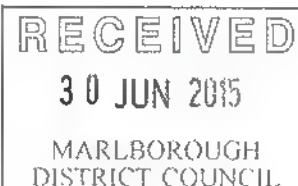




Specialists in research, survey and monitoring

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1.0 Introduction

The aim of the present study was to describe the impact zone and biological features associated with an existing marine farm site (8316) located at Rams Head, Pelorus Sound (Figure 1, Plates 1 and 2). The applicant is applying for a new consent to replace the existing consent that expires in 2024. No change to the present consent is sought by the applicant.

The report also presents information on habitats, substrata, biological attributes and farming impacts associated with the existing activity.

This report was commissioned by Bruce Cardwell (Aquaculture Direct Ltd.) on behalf of the farm owner (KPF Investments) and manager (United Fisheries Limited).



Figure 1. Location of marine farm site 8316 at Rams Head.



Plate 1. Marine farm site 8316 taken from a location north-west and offshore of the farm structures looking south-west towards existing backbones.

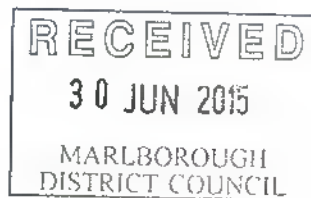
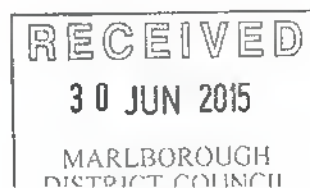




Plate 2. Oblique view of consent located at Rams Head, Pelorus Sound.



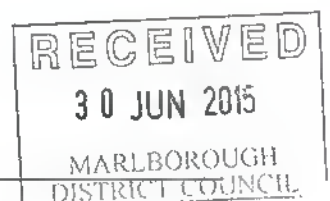
2.0 Background information

2.1 Study area

Marine farm 8316 is located along the southern shoreline of Tawhitinui Reach immediately east of Rams Head (Figure 2). Rams Head is a promontory located south of Maud Island and is approximately 5 km west of Tawero Point and some 40 km by sea from Havelock.



Figure 2. Location of study site (red circle) and other marine farm consents in the area.



2.2 Historical reports

One historical biological report relating to the marine farm site was found during a search of available literature.

First Wave Consultants (1994) produced a biological report that was submitted with the farm application. The authors stated:

"An application to establish a 3.64 ha (280 m x 130 m) marine farm east of Rams Head, Tawhitinui Reach. Depths along the inshore boundary were 15-22 m (east-west) and at the offshore boundary were 19-23 m (east-west).

From shore, a rock/cobble/sand/silt area graded into sandy silt by approximately 25 metres offshore (10 m depth). Starfish, kina, cod and spotties were observed. In the sand/silt habitat to approximately 35 m offshore (13-14 m depth), worm mounds were recorded, with few cushion stars and spotty. From here, the substrate became dead shell and silt. Occasional horse mussels, tube sponges, dog cockles, kina, and spotties were observed in this habitat."

3.0 Methods

The site was sampled on 23rd April 2015. 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 should be 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



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

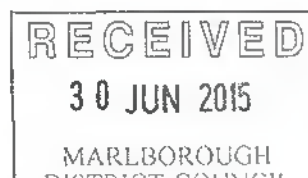
Prior to the collection of underwater photographs, the boundaries of both the consent area and the marine farm surface structure area were investigated using the sonar. Any bottom abnormalities such as reefs, hard substrata or abrupt changes in depth were noted for inspection using the drop camera (see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

3.2 Drop camera stations and site depths

Drop camera photographs were collected from the marine farm site during the present study. A total of 28 photographs were collected from the consent area. Photos were collected under and away from mussel farming structures. 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 benthic mussel shell, Low = 1-30%, Moderate = 31-50%, Moderate to High = 51-75%, and High = 76-100% cover. This assessment is displayed in Table 2 of the present report.

The location of photograph stations was selected in an effort to obtain a representative range of habitats within consent. Additional photographs were taken when any features of particular 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.



4.0 Results

On the day of the survey, high tide was 2.4 m at 12.18 am and low tide was 0.6 m at 6.19 pm. During the present biological survey the tide was incoming for all of the survey.

4.1 Consent corners and surface structures

Corner depths of the marine farm consents were: inshore 9.5 m to 17.9 m depth, and offshore 15.9 to 22.8 m depth.

The bottom topography under the consent comprised a sloping shore that increased from inshore to offshore and also from south to north. The shallowest part of the consent was located at the south-western inshore corner of the consent.

Surface structures consisted of one block of backbones covering 1.96 ha. One backbone was located slightly inshore of the consent on the day of the survey (Figures 3, 4). The distance involved is well within the normal movement range that backbone lines can move due to tide, wind and mussel cycle stage.

4.2 Low tide separation distances

The distance between low tide at the adjacent promontory and the consent boundary was measured from two GPS coordinates collected during the survey. The separation distance was approximately 55 (southern) and 62 m (northern) (Figure 3, Plate 3, Table 1).

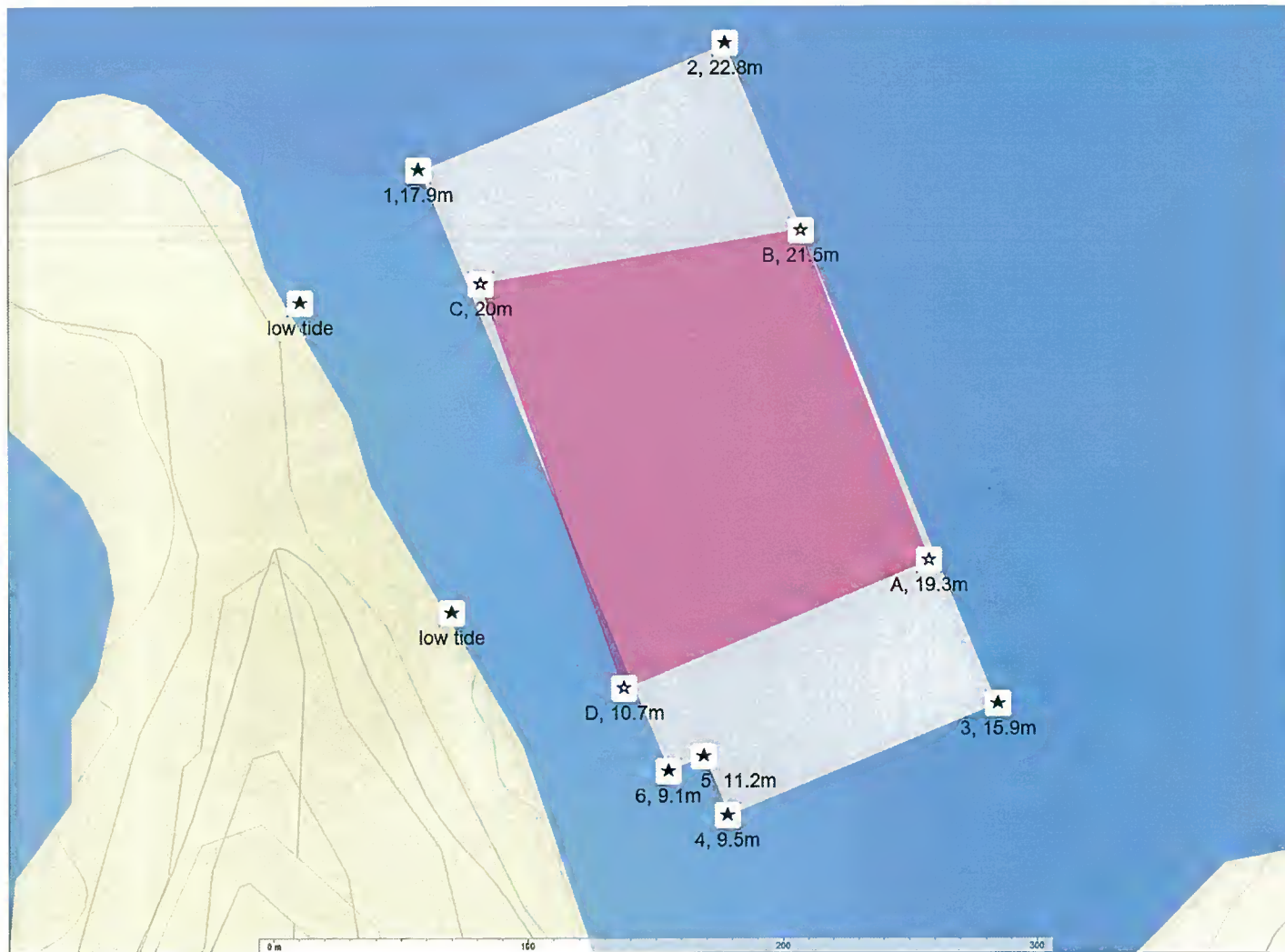


Figure 3. Depths of the marine farm consent area (grey) and extent of surface structures (pink) for site 8316 Rams Head.

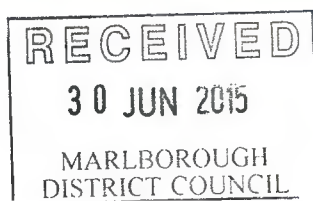




Plate 3. Low tide positions collected using GPS.

4.3 Substratum and benthic mussel shell

Substratum and habitat distribution relative to the consent area were based on drop camera images (Table 2, Appendix 1) and sonar.

Most of the benthos under the consent was characterised by silt with a component of natural shell substratum (Table 2, Plate 4, Appendix 1). Along the southern and western inshore areas of the consent some fine sand and a higher component of natural shell was observed (Plate 5).

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Cobbles, boulders, fine sand and natural shell substratum were observed inshore and west of the consent (Plate 6). No areas of hard substratum were observed within the consent area. No benthic mussel shell was observed on the hard substratum.

Photos collected under backbones showed variable levels of shell debris from low to high Plate 7, Table 2, Appendix 1). Mussel shell was observed in close proximity to the backbones.

Table 1. Depths recorded from the corners of mussel farming surface structures, consent corners and low tide positions relative to farm consent. Depths adjusted to datum. Coordinates = NZTM (Northing/Easting).

Type	No. & Depth (m)	Coordinates
Consent corner	1, 17.9m	1675150.4, 5454754.7
Consent corner	2, 22.8m	1675270.4, 5454804.5
Consent corner	3, 15.9m	1675377.6, 5454545.7
Consent corner	4, 9.5m	1675271.2, 5454502.0
Consent corner	5, 11.2m	1675261.8, 5454524.9
Consent corner	6, 9.1m	1675247.8, 5454519.1
Low tide		1675103.6, 5454702.7
Low tide		1675163.1, 5454581.1
Structure corner	A, 19.3m	1675350.6, 5454601.8
Structure corner	B, 21.5m	1675300.2, 5454731.0
Structure corner	C, 20m	1675174.7, 5454710.1
Structure corner	D, 10.7m	1675230.6, 5454551.7

4.4 Flora and fauna

A variety of animals were observed from the surface of substratum within the consent area. For example, 11 arm seastar, sea cucumber, nestling mussel, scallop and cushion sea stars were observed from photos. One dead scallop shell was observed from photos. Their low presence in photos suggests they are relatively uncommon at this site.

No species or communities of scientific, conservation or scientific interest were observed from under the consent area. No recognised significant sites are located at or near this



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location (see Davidson and Richards 2011). The closest significant site is located 1.7 km to the west (site 3.6).

4.5 Sonar

The sonar run revealed rocky substrata (boulders and cobbles) inshore and north-west of the consent (Figure 5). Rocky features were viewed using the drop camera to confirm their composition (Table 2). No rocky substrata extended into the consent boundary.

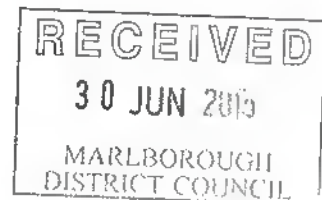
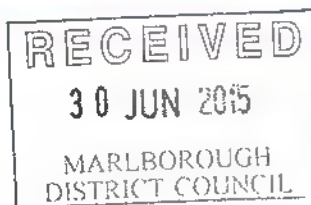


Table 2. Coordinates of drop camera stations showing depths, substratum and level of benthic mussel shell. Depths adjusted to datum. None = no benthic mussel shell, Low = 1-30%, Moderate = 31-50%, Moderate to High = 51-75%, and High = 76-100% cover.

No. & Depth (m)	Coordinates	Location	Position	Substratum	Shell debris
1, 7.2m	1675276.1,5454495.7	Alongshore of consent	No structures	Fine sand, silt, broken natural shell	None
2, 7.2m	1675245.3,5454511.7	Alongshore of consent	No structures	Cobbles, pebbles, silt	None
3, 10.7m	1675224.7,5454550.1	Inshore of consent	No structures	Fine sand, silt, occ cobble, natural shell	None
4, 10.3m	1675209.8,5454584.0	Inshore of consent	No structures	Fine sand, silt, natural shell	None
5, 11m	1675212.6,5454600.6	Inshore of consent	Under backbone	Fine sand, silt, natural and mussel shell	Moderate-high
6, 12.2m	1675192.5,5454641.5	Inshore of consent	No structures	Silt, natural and mussel shell	High
7, 16.3m	1675178.2,5454691.8	In consent	Under backbone	Silt, natural and mussel shell	High
8, 15.6m	1675152.2,5454732.5	Inshore of consent	No structures	Silt, natural shell	None
9, 5.1m	1675131.8,5454695.2	Inshore of consent	No structures	Cobbles, boulder, silt natural shell	None
10, 5m	1675187.7,5454584.5	Inshore of consent	No structures	Cobbles, boulder, silt natural shell	None
11, 11.4m	1675245.6,5454552.9	In consent	Under warps	Silt, natural and mussel shell	Low
12, 13.7m	1675229.1,5454588.6	In consent	Under backbones	Silt, natural and mussel shell	Low
13, 15.2m	1675210.2,5454641.5	In consent	Under backbones	Silt, natural and mussel shell	Moderate
14, 18.2m	1675186.6,5454708.5	In consent	Under backbones	Silt, natural and mussel shell	Moderate
15, 21.5m	1675177.7,5454746.1	In consent	Under warps	Silt, natural shell	None
16, 17.2m	1675317.0,5454565.2	In consent	Under warps	Silt, natural shell	None
17, 18.4m	1675300.8,5454605.0	In consent	Under backbones	Silt, mussel shell	Moderate
18, 19.3m	1675277.4,5454650.6	In consent	Under backbones	Silt, mussel shell	High
19, 21.2m	1675254.6,5454708.7	In consent	Under backbones	Silt, mussel shell	High
20, 26.2m	1675238.6,5454762.2	In consent	Under warps	Silt and clay	None
21, 22m	1675301.8,5454781.7	Offshore of consent	No structures	Silt and clay	None
22, 20.5m	1675300.9,5454706.4	In consent	Under backbones	Silt, mussel shell	High
23, 18.5m	1675340.0,5454619.9	In consent	Under backbones	Silt, mussel shell	High
24, 16m	1675364.9,5454547.6	In consent	No structures	Silt, natural shell	None
25, 13m	1675312.8,5454528.1	In consent	No structures	Silt, natural shell	None
26, 18.5m	1675348.3,5454629.0	Offshore of consent	No structures	Silt, mussel shell	Low-moderate
27, 19.3m	1675336.9,5454691.1	Offshore of consent	No structures	Silt, mussel shell	Low
28, 20.6m	1675316.2,5454744.3	Offshore of consent	No structures	Silt, natural shell	None



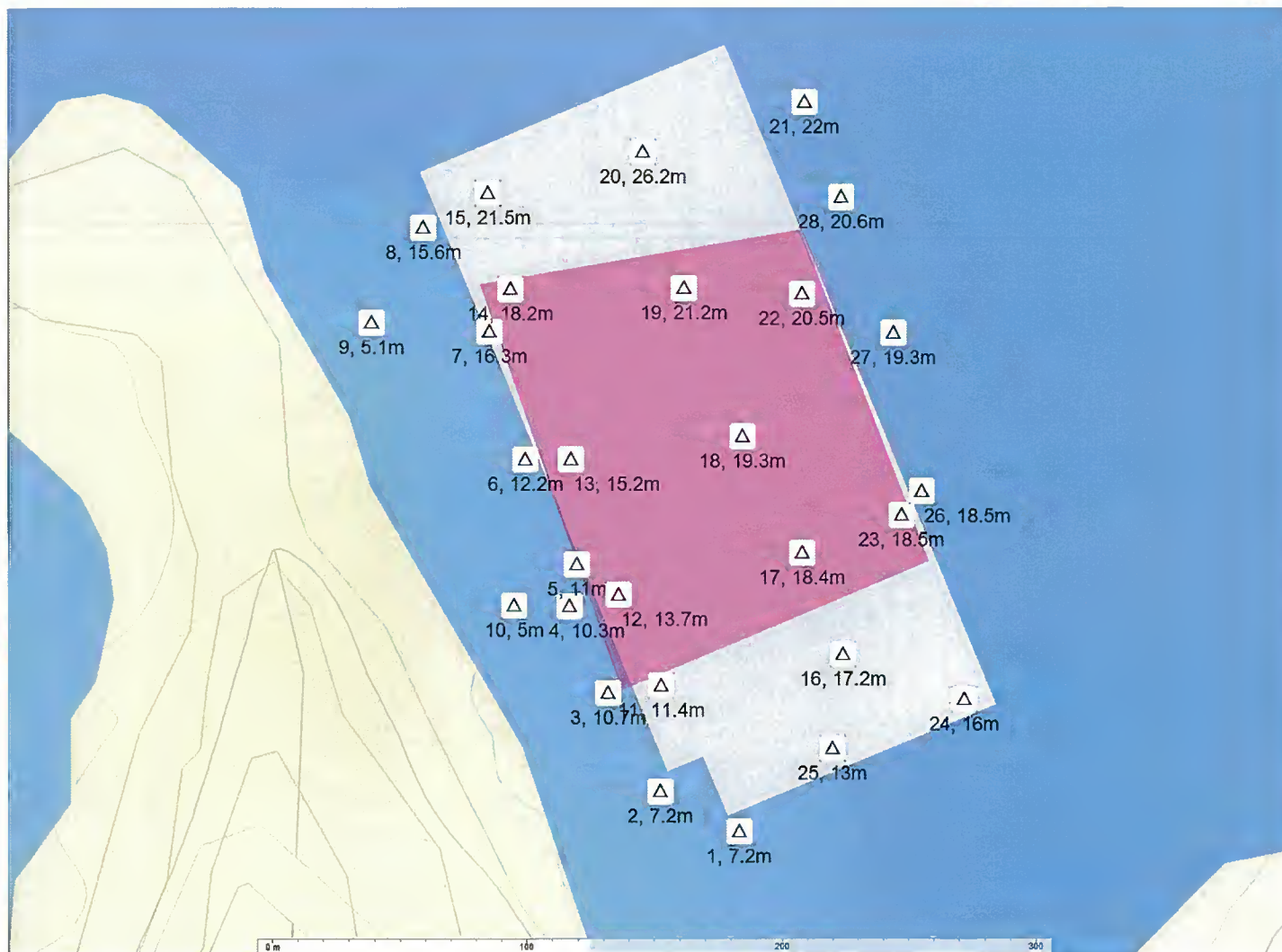


Figure 4. Consent (grey), surface structures (pink) and drop camera stations with depths (triangles).

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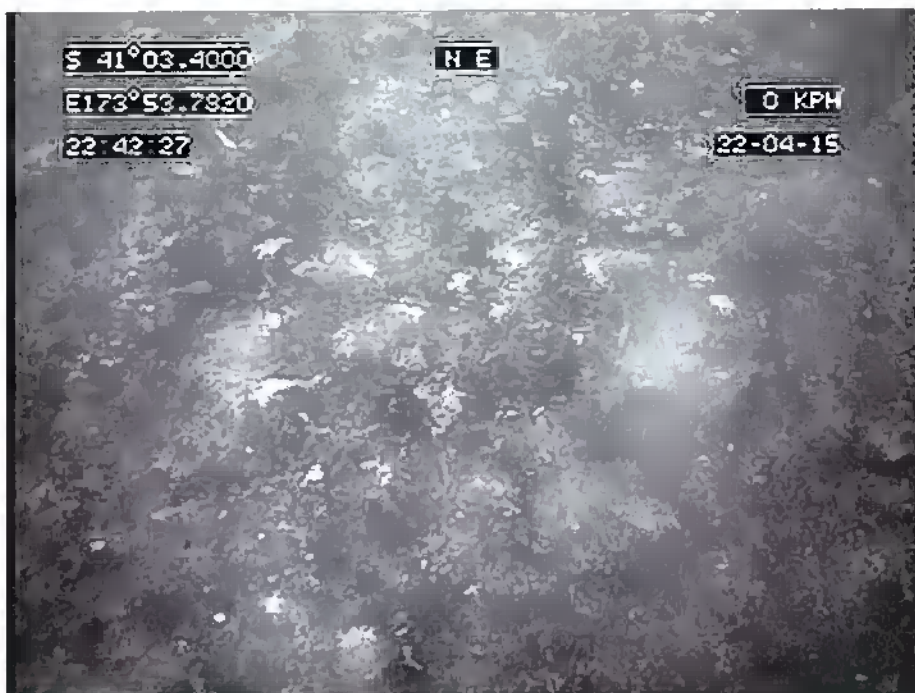


Plate 4. Silt with a small component of natural shell (Photo 16, 17.2 m).



Plate 5. Silt with natural dead whole and broken shell (Photo 15, 21.5 m).

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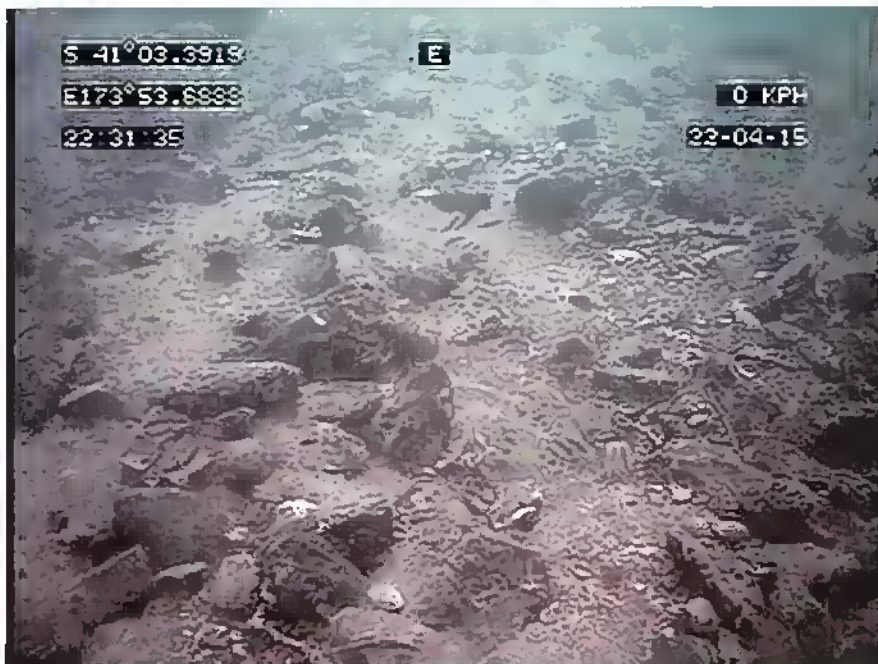
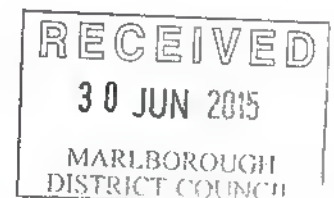


Plate 6. Cobbles and boulders located inshore of consent (Photo 10, 5 m).



Plate 7. Silt and mussel shell (Photo 19, 21.2 m).



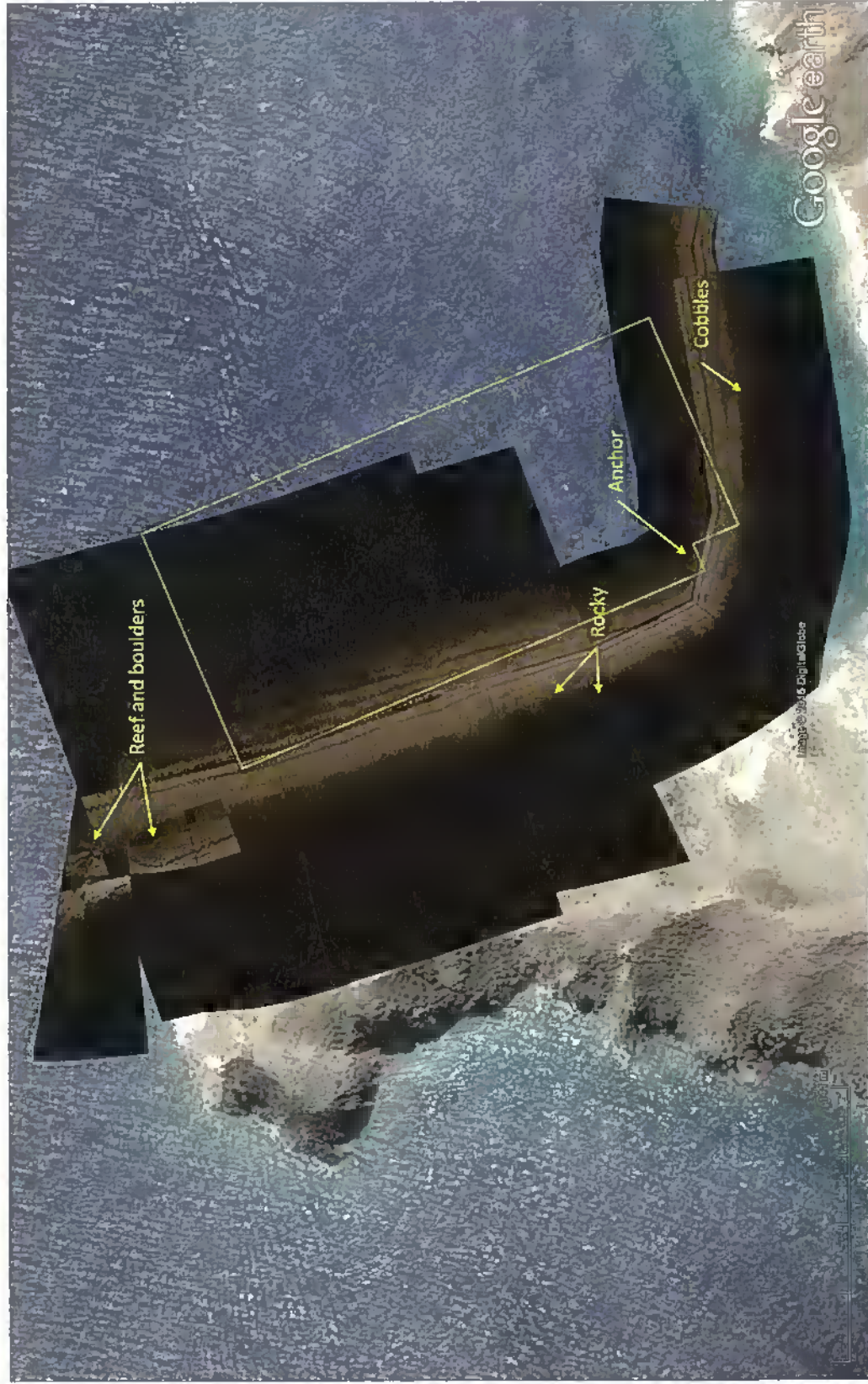


Figure 5. Sonar run for farm 8316 at Rams Head. Yellow polygon = consent boundary.

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5.0 Conclusions

5.1 Benthos

The benthos under the proposed renewal area was dominated by silt substrata with a variable component of natural shell. Natural shell represented a small component at deep offshore areas and a higher component around the inshore edges of the consent. These substratum types are consistent with many sheltered bays in central Pelorus Sound.

Boulder and cobble substrata were observed inshore of the consent along the sloping shore edge. No hard substratum was observed within the consent. Two photos were collected from the cobble and boulder shore. Neither showed any indication that the adjacent farm had impacted this area. Further, no benthic mussel shell was observed from the cobble bank.

5.2 Species and communities

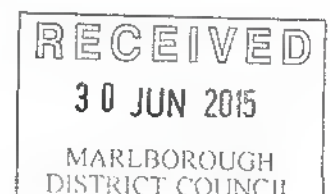
No species, habitats or communities of scientific, conservation or ecological importance were observed during the present study (see Davidson *et al.*, 2011 for criteria and biological features). The closest recognised significant site is 1.7 km further to the west of the present consent. This is well beyond the recognised impact distance associated with mussel farming activities.

The consent likely supports an infauna typical of mud dominated shores (see McKnight and Grange 1991 for descriptions). This habitat type is widespread and the most common soft bottom substratum in the sheltered Sounds.

5.3 Mussel farming impacts

Benthic mussel shell was recorded from drop camera photos collected under and near backbones. At particular locations high levels of shell was recorded, while at some locations under backbones little shell was seen. Shell debris impact levels were within the range known for mussel farms in the Marlborough Sounds.

It is probable that the impact of continued mussel farming at this site will result in the deposition of more mussel shell and fine sediment under and in close proximity to droppers. Assuming the present level of activity remains relatively consistent, and based on



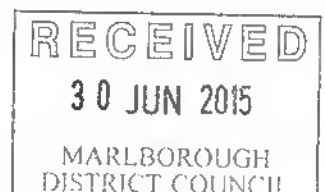
observations during the present survey, it is very unlikely that the surface sediments would become anoxic.

5.4 Boundary adjustments and monitoring

The consent is located on substratum considered suitable for mussel farming activities. No species or habitats of importance were observed. Based on these data no boundary adjustments are suggested nor is any monitoring suggested.

References

- 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.
- 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



Appendix 1. Drop camera photographs

Photo site 1



Photo 2



Photo site 3

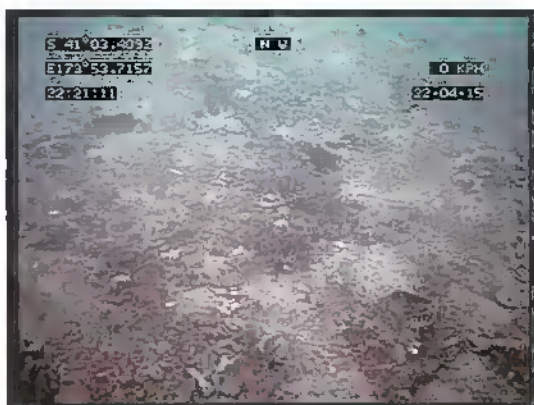


Photo 4



Photo site 5

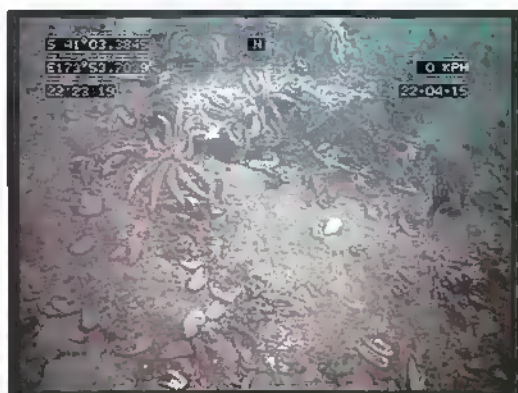
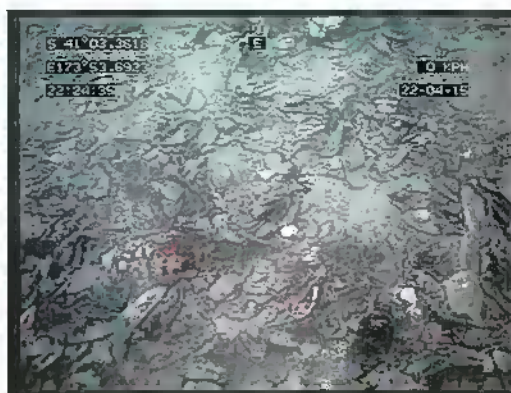


Photo site 6



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Photo site 7



Photo 8

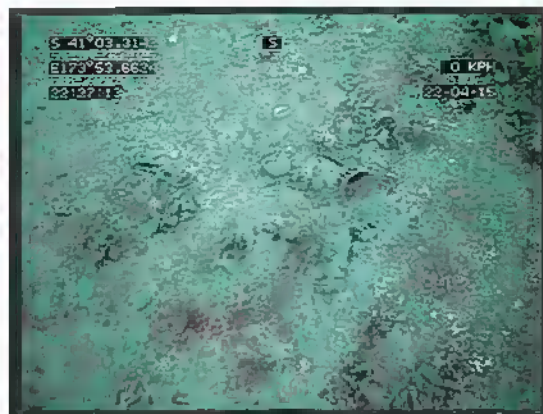


Photo site 9



Photo site 10

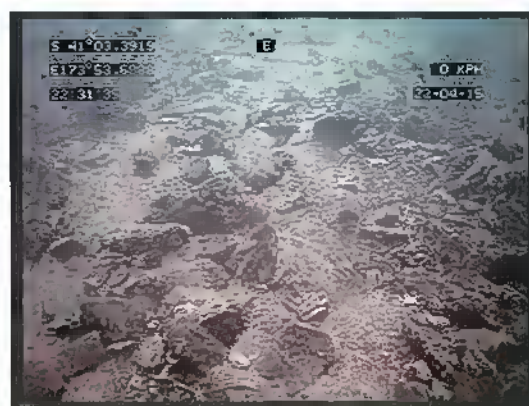


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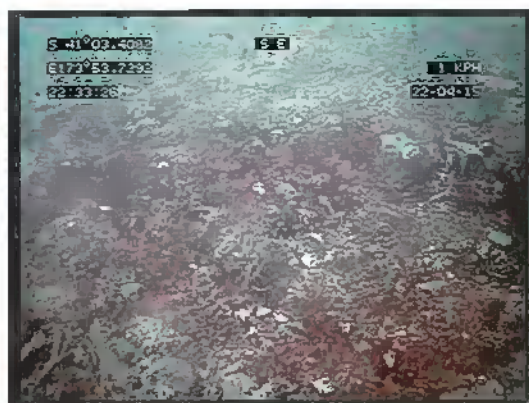


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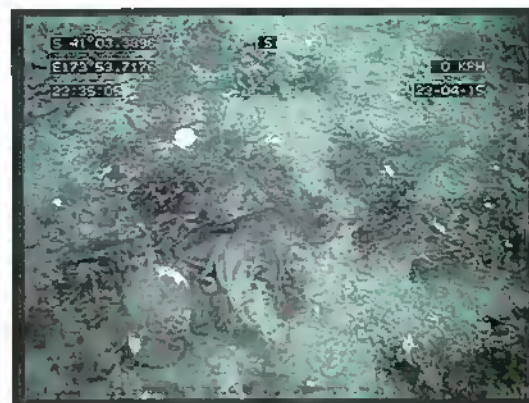


Photo site 13

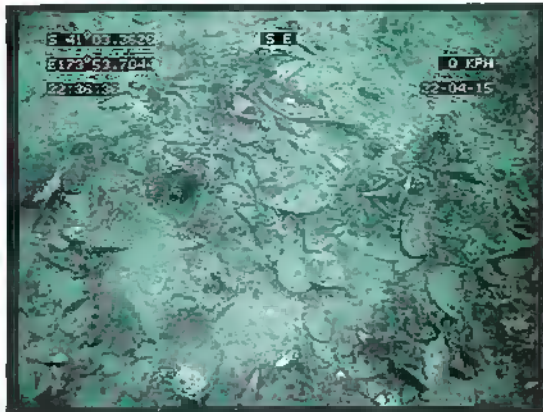


Photo 14

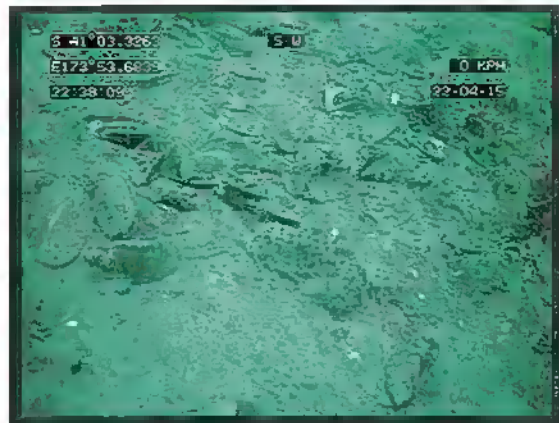


Photo site 15



Photo site 16



Photo site 17

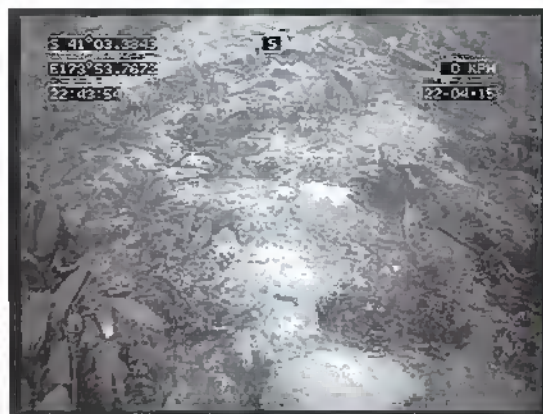


Photo site 18

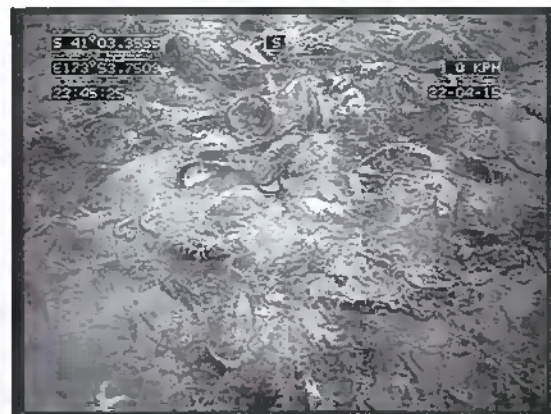


Photo site 19

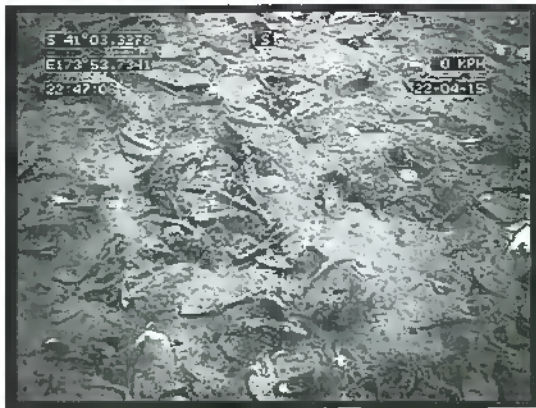


Photo 20

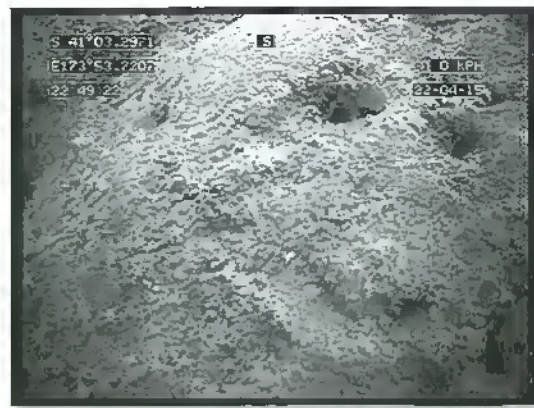


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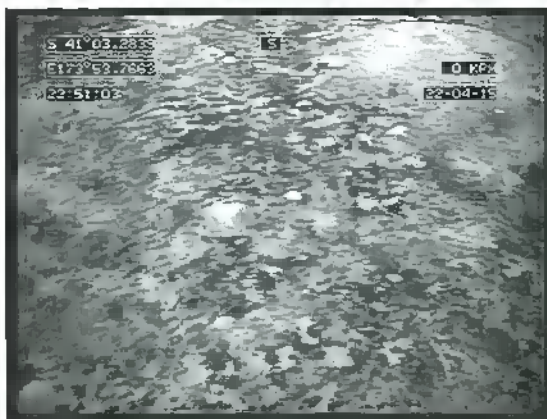


Photo 22



Photo site 23

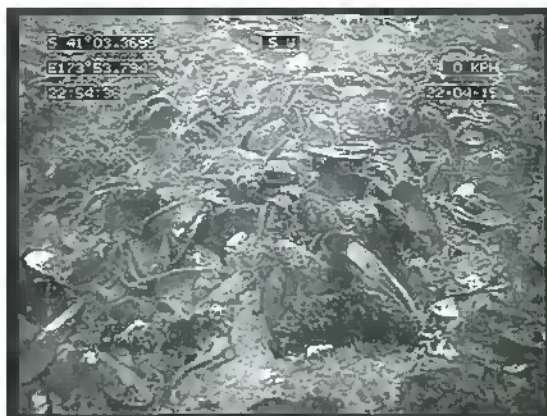


Photo 24



Photo site 25



Photo 26



Photo site 27

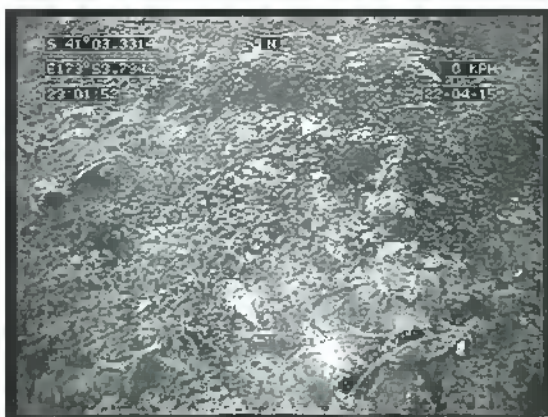


Photo 28



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SUBMISSION ON APPLICATION FOR A RESOURCE CONSENT

1. Submitter Details

Name of Submitter(s) in full

Address for Service *(include post code)*

Email

Telephone *(day)*

Mobile

Facsimile

Contact Person *(name and designation, if applicable)*

2. Application Details

Application Number

U

Name of Applicant *(state full name)*

Application Site Address

Description of Proposal

3. Submission Details *(please tick one)*

I/we support all or part of the application

☐

I/we oppose all or part of the application

☐

I/we are neutral to all or part of the application

☐

The specific parts of the application that my/our submission relates to are *(give details, using additional pages if required)*



The reasons for my/our submission are *(use additional pages if required)*

The decision I/we would like the Council to make is *(give details including, if relevant, the parts of the application you wish to have amended and the general nature of any conditions sought. Use additional pages if required)*

4. Submission at the Hearing

I/we wish to speak in support of my/our submission

☐

I/we do not wish to speak in support of my/our submission

☐

OPTIONAL: Pursuant to section 100A of the Resource Management Act 1991 I/we request that the Council delegate its functions, powers, and duties required to hear and decide the application to one or more hearings commissioners who are not members of the Council. *(Please note that if you make such a request you may be liable to meet or contribute to the costs of commissioner(s). Requests can also be made separately in writing no later than 5 working days after the close of submissions.)*

☐

5. Signature

Signature _____ Date _____

Signature _____ Date _____

6. Important Information

- Council must receive this completed submission before the closing date and time for submission for this application. The completed submission may be emailed to mdc@marlborough.govt.nz
- You must also send a copy of this submission to the applicant as soon as reasonably practicable, at the applicant's address for service.
- Only those submitters who indicate that they wish to speak at the hearing will be sent a copy of the hearing report.

7. Privacy Information

The information you have provided on this form is required so that your submission can be processed under the Resource Management Act 1991. The information will be stored on a public file held by Council. The details may also be available to the public on Council's website. If you wish to request access to, or correction of, your details, please contact Council.