Application for renewal of resource consent ES302167

For Nathan's Island site

Submitted: 6th July 2019

On Behalf of Suelen Properties Ltd

Contents

To:
Environment Southland
Private Bag 90116
Invercargill 9840

From:
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Stewart Island 9818

On behalf of:
Suelen Properties Ltd
PO BOX 102
Stewart Island 9818

Southern Seafoods Ltd
PO BOX 119
Stewart Island 9818

Platinum Fisheries Ltd
Malloch McLean Ltd
Don Street, Invercargill 9810

6th July 2019

Cover letter in support of consent renewal for permit ES302167 - Nathan's Island

To Whom It May Concern:

With this cover letter is an application for the renewal of resource consent ES302167 for 5 years. The consent is for marine farming and the occupation of space on a site in the coastal marine area near to Horseshoe Bay, Stewart Island/Rakiura.

Summary of proposal
I am submitting on behalf of the consent holder Suelen Properties Ltd. Parties to the application are Southern Seafoods Ltd and Platinum Fisheries Ltd who currently operate on the consented space in co-operation with the consent holder. The consent was initially granted in 2014 and expires 10th October 2019.

The activity taking place in the consented space is the on-growing of dredge or Foveaux oysters (*Ostrea chilensis*) from spat for human consumption. The original application was for a 5 year 'trial' to assess the feasibility of growing oysters in this location using a particular method using temporary or 'transient' equipment. The 2017 outbreak of the exotic oyster parasite *Bonamia ostreae* (as opposed to the endemic *Bonamia exitiosa* which has affected the Foveaux Strait oyster beds since the 1960s) has interrupted the farm activities and as such we request a 5-year duration under s123A (2a,b) of the Resource Management Act (1991) in order to further assess any potentially unforeseen adverse effects.

Stewart Island/Rakiura is renowned for its natural values and is enjoyed by a population of around 400 residents. Commercial fishing and aquaculture are the main drivers of our local economy along with tourism. The area is famous for high quality local seafood; mainly blue cod, crayfish, salmon and mussels. Until

the *Bonamia ostreae* outbreak in 2017, oysters were farmed in Big Glory Bay. These oysters were destroyed as part of the biosecurity response and this consented farm site is one of the last operating oyster farms on the island. Therefore, the economic, social and cultural benefits of the activity are very high.

Existing environment and potential effects

Included in this application are assessments of the current environment and the potential effects of the activity. The site, Nathan's Island, is in the coastal marine area and the seabed in these areas is sandy with kelp forests on the rocks around the coast. The relative lack of large-scale industry on the island means that sediment and nutrient levels in the water are very low, contributing to high water quality values. The coastal landscape has been modified by farming and development in the past and is currently regenerating. These modified areas still have "high" or "very high" levels of natural character, features and landscapes but not "outstanding" like most of the island, particularly the areas inside Rakiura National Park. The main potential impacts of the activity on local residents would be in terms of the visual impact of the buoys, which we are working to reduce, and the noise of the farm activities, which are not obtrusive and similar to current boat traffic that passes by the Nathan's Island site.

Analysis of policy

The Resource Management Act (1991) and New Zealand Coastal Policy Statement (NZCPS) (2010) both have requirements to manage the use of resources in order to "provide for the economic, cultural and social well-being" of people and communities. The NZCPS specifically directs local authorities to make sure that development "does not make water quality unfit for aquaculture activities". However, development can only be allowed in "appropriate" areas as defined by Policies 13 and 15 of the NZCPS that cover "natural landscapes, features and character" and emphasized in 2014 by the Supreme Court in what has become known as the "King Salmon" decision. Under these policies, adverse effects of development are not allowed in areas that have "outstanding" values. The coastal areas around the site in this application are modified and although they have "very high" values, development is permitted so long as efforts are made to "avoid, remedy or mitigate" adverse effects. The Regional Coastal Plan (2013) also regards Aquaculture as a discretionary activity at this site.

Conclusion

We seek an extension of 5 years to further explore the economic viability of this activity. Aquaculture is an important part of the economic, social and cultural well-being of the Stewart island community and this farm site is an important part of that. Current legislation and policy allows for development at this site, provided that the effects are minor and any adverse effects are avoided.

Kind Regards,

Alasdair Burns (Southern Seafoods Ltd)

Application for Resource Consent (PART A)

environment SOUTHLAND REGIONAL COUNCIL Te Taiao Tonga

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

The purpose of this Part A form and the relevant Part B form(s) is to provide applications with guidance on information that is required under the Resource Management Act 1991. Please note that these forms are to act as a guide only, and Environment Southland reserves the right to request additional information.

To: Environment Southland
Private Bag 90116
Invercargill 9840

Full name, address and contact details of applicant *(in whose name consent is to be issued)*

Name: **Suelen Properties Limited**

Address: **c/o Mr Len Lind**

PO BOX 102, Halfmoon Bay, Stewart Island

Email: **len@lind.co.nz**

Phone: **03 219 1258** *Preferred* _____ *Additional* Fax: _____

Date(s) of birth: **13/7/1941**

Consultant contact details *(if different from above)*

Contact name/agent:	**Alasdair Burns (Main)**	**Southern Seafoods Ltd**	**Platinum Fisheries**
Address:	**46 Thule Road, Oban**	**PO BOX 119**	**Mailoch McLean Ltd**
	Stewart Island 9846	**Stewart Island 9846**	**Don Street, Invercargill 9810**
Email:	**alasdair.burns@gmail.com**	**helencave@xtra.co.nz**	**platinumfisheriesnz@gmail.com**
		richardlangdon21@gmail.com	
Phone:	**021 028 49892** *Preferred*	**027 487 2191** *Additional*	Fax:

Please tick the box for the consent(s) you are applying for and complete the relevant Part B form(s) where available:

Land Use

- ☐ Bore/well
- ☐ New or expanded dairy farming
- ☐ Effluent storage
- ☐ Cultivation
- ☐ Tree planting
- ☐ Gravel extraction
- ☐ Feed-pad, wintering pad, calving pad or silage pad
- ☐ Riverbed activity
- ☐ Bridges and culverts

Discharge

- ☐ To air
- ☐ To water
- ☐ To land

Water

- ☐ Take and use surface water
- ☐ Take and use groundwater
- ☐ Dam water
- ☐ Divert water

Coastal

- ☐ Whitebait stand
- ☑ Structures/occupation of space
- ☐ Removal of natural materials
- ☐ Disturb foreshore/seabed
- ☐ Discharge/deposit substances
- ☐ Commercial surface water activity
- ☐ Reclaim/drain foreshore/seabed
- ☑ Marine farming
- ☐ Other coastal activities

1 Are there any **current** or **expired** consents relating to this proposal? [X] Yes [ ] No

If yes, please provide consent number(s) and description:

Coastal Permit ES302167 - Issued 2014

2 Are any other consents required from Environment Southland or **other authorities**? [X] Yes [ ] No

If yes, please state the relevant authority and the type of consent(s) required:

MPI fish farm license FW211

MPI Aquaculture Decision

3 For what **purpose** is this consent(s) required: (e.g. discharge of effluent, gravel extraction etc.)

Marine farming and (preferential) occupation of coastal space

4 **Location** of proposed activity

Address: **410 Horseshoe Bay Road** **(nearest road address)**

Halfmoon Bay, Stewart Island, 9846

Legal Description: **Southland coastal marine area**

Map Reference (NZTM 2000): **Nathans Island site - E 1229423, N 4799159** **(3.33 hectares)**

5 The name and address of the **owner /occupier**: (if other than the applicant)

Name:	**Southern Seafoods**	**Platinum Fisheries**	Phone: **SSF: 03 219 1368**
			PF: 021 685 699
Address:	**PO BOX 119**	**Malloch McLean Ltd.**	
	Stewart Island 9846	**101 Don Street, Invercargill 9810**	

6 **Please attach a map or a coloured aerial photograph, showing at a minimum, the location of the proposed activities.**

There are survey maps of the Nathan's Island consented site attached to this application (see appendix (i))

Precise co-ordinates of the corners of the area can be found on pages 4-6 of the Assessment of Environmental Effects submitted in 2013 (see appendix (vi))

7 Assessment of effects on the environment (AEE)

Please complete the applicable Part B form(s) for the proposed activities. For those activities where no Part B form is available, please attach a written statement that assesses the effects that your activities may have on the environment. An assessment of effects **must** include the following information:

(a) *if it 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;*
(b) *an assessment of the actual or potential effect on the environment of the activity;*
(c) *if the activity includes the use of hazardous substances and installations, an assessment of any risks to the environment that are likely to arise from such use;*
(d) *if the activity includes the discharge of any contaminant, a description of—*
  (i) *the nature of the discharge and the sensitivity of the receiving environment to adverse effects; and*
  (ii) *any possible alternative methods of discharge, including discharge into any other receiving environment;*
(e) *a description of the mitigation measures (safeguards and contingency plans where relevant) to be undertaken to help or prevent or reduce the actual or potential effect;*
(f) *identification of the persons affected by the activity, any consultation undertaken, and any response to the views of any persons consulted;*
(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;*
(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).*

You should also include:

(a) *an assessment of the activity against any relevant provisions of any relevant objectives, policies, or rules;*
(b) *any information specified to be included in the application in accordance with the relevant regional plan;*
(c) *for an application to replace an existing consent, an assessment of the value of the investment of the existing consent holder:*

An assessment of effects **must** address the following matters:

(a) *any effect on those in the neighbourhood and, where relevant, the wider community, including any social, economic, or cultural effects;*
(b) *any physical effect on the locality, including any landscape and visual effects;*
(c) *any effect on ecosystems, including effects on plants or animals and any physical disturbance of habitats in the vicinity;*
(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;*
(e) *any discharge of contaminants into the environment, including any unreasonable emission of noise, and options for the treatment and disposal of contaminants;*
(f) *any risk to the neighbourhood, the wider community, or the environment through natural hazards or the use of hazardous substances or hazardous installations.*

8 **Affected Parties**

Please attach written approval from parties who may be affected by your activity. *Written Approval of an Affected Party* forms are available on the Environment Southland website. During the processing of your application, Council may determine that additional approvals are required.

9 **Correspondence from Council when using a consultant**

It is standard practice that both you and your consultant are copied into all correspondence relating to the consent process. This is so that you know what is going on with your application. Please let us know below if you would like us to only contact your consultant. This means you will only hear from us when your application is/is not accepted, when a decision is made or if we feel that you need to be contacted.

I want all correspondence about my application to go to my consultant only ☐ Yes ☒ No

10 **Site visit from the Consents Team**

Consents staff are able to meet with you, visit your site and see what you are proposing to do. We find that this is beneficial to everyone involved. The cost of the visit will be included in the total cost of processing your consent. However, we find that applications that have an on-site visit are processed with less congestion and at a similar or lesser overall cost. Please let us know below if you would like us to come and see your site.

I would like a member of the Consents Team to visit my site ☒ Yes ☐ No

11 **How much will it cost to process my application?**

The cost of a consent depends on the complexity of the activities. Staff time is charged out at a rate of $145/hr and vehicle use for site visits is charged at $0.73/km (inclusive of GST).

The fees shown below under section two are **deposits to be paid at the time of application**. Due to the complexity of these activities, this deposit will not usually cover the full cost of processing the application. **Further costs may be incurred** relating to staff time, disbursements, legal charges, consultation fees, and hearing commissioner fees. Environment Southland's User Charges and Fees document is available at:

www.es.govt.nz/fees-and-charges

When the consent has been processed you will receive an invoice for an additional fee, or for a refund.

The Council's user charges are fixed under Section 36 of the Resource Management Act 1991. Our fee schedule is:

1. Fixed fee:	
Bores and wells	**$290**
Whitebait stand	**$220**
2. Deposit:	
All other non-notified applications including: • Certificates of compliance • Changes to consent conditions (variations) • Change of lapse date	**$1,500**
Applications that require notification or limited notification	**$2,000**

How to pay

Environment Southland accepts payment in the forms of cash, Eftpos, cheque, or electronic transfer. All electronic transfers must include the applicant's name and "consent application" as a reference. Please make electronic payments to: Environment Southland, 01-0961-0018998-00.

User Charges

Please note that additional Annual User Charges will apply to all consents. These are payable in advance on the first day of July each year. Tables 4, 5 and 6 of the Environment Southland User Charges and Fees Schedule outlines the fees associated with Annual Administration Charges and Annual Consent Monitoring and Inspection Charges. Table 7: Annual Research and Monitoring Charges applies only to surface and groundwater takes and comprises the following:

- **Surface water takes (per consent, for volumes up to 50,000 m^3/day):**
  - A charge of **$1.89** per year per cubic metre authorised as a maximum daily take.
  - Minimum of **$138**, maximum of **$7,585**.
- **Surface water takes (per consent, for volumes over 50,000 m^3/day):**
  - **$0.0031** per cubic metre authorised as a maximum daily take.
- **Groundwater takes (per consent):**
  - A charge of **$0.89** per year per cubic metre.
  - Minimum of **$162**, maximum of **$1,782**.

Municipal and stock water discount (of 50%) no longer applies.

12 Checklist: Have you included the following?

- [x] Payment of the required deposit *(see fee schedule)*
- [ ] Written approval from all potentially affected parties *(forms available from the Environment Southland website)* PARTIES HAVE BEEN CONTACTED
- [x] Site plan/location map/sketch of the proposed activity
- [x] A copy of the Certificate of Incorporation (*where applicant is a company*)
- [x] Part B form(s) specific to your activity and/or a separate assessment of environmental effects (AEE)

Note:

(a) If your application does not contain the necessary information and the appropriate fee, Environment Southland must return the application.

Signature of applicant

I hereby certify that to the best of my knowledge and belief, the information given in this application is true and correct.

I undertake to pay all actual and reasonable application processing costs incurred by Environment Southland.

Name (block capitals) LEN LIND

Signed [signature] **Date** 5.7.19

(Signature of applicant or person authorised to sign on behalf of applicant)

Application for a Coastal Permit (Part B) – Supplemental Information sheet ES302167

- Nathan's Island site

1. **What is this application for?**
   Marine farming and occupying space within the coastal marine area

2. **What duration of resource consent is sought?**
   5 years

3. **Please describe how the activity will be carried out. For structures, you must include engineering diagrams showing the dimensions and position of the structures.**

   The activity concerns the settlement of juvenile oysters obtained from brood stock on suitable substrates within a land-based hatchery and the growing-on of these oysters to useable size in crayfish pots resting on the seafloor and baskets suspended within the water column. This occurs on one of the consented sites (Horseshoe Bay) with the hope that this may be expanded to the other two consented spaces. After an initial five-year trial period these techniques have been honed and the current proposal is for an extension of the consent for another five years to develop the concept further. The current space can house up to 2 million oyster spat (Stage 1) and as the oysters grow the number that can be accommodated diminishes. Currently the farm has 1-200,000 juvenile (Stage 2) and adult (Stage 3) oysters and these can be viewed on a site visit.

   The trial operation over the past 5 years has been successful and the intention of this consent renewal application is to provide time to develop these techniques further and test the economic viability of the activity in the context of current Ministry for Primary Industries (MPI) restrictions on Stewart Island shellfish movements. Harvesting oysters for local consumption (within the area covered by the MPI June 2017 Controlled Area Notice) would be part of this.

   As part of this activity plastic baskets and crayfish pots housing oyster spat are suspended from ropes in the water column and marked with buoys for location and recovery (see photos (Appendix (ii)). Trays contained inside recycled crayfish pots are also used for growing oysters and are marked in the same way. This style of aquaculture is known as "Transient Gear Shellfish Aquaculture" (see Rheault R.B. and Rice M.A., World Aquaculture March 1995; Appendix (iii)) as it does not involve the use of permanent structures in the consented space. This type of aquaculture using temporary structures with a relatively light footprint is not common in New Zealand but is best practice in areas like Stewart Island/Rakiura where the natural character and features of the landscape need to be protected.

The crayfish pots and plastic baskets are lifted using a winch on a 10m boat (the 'Stingray', see photo Appendix (ii)) used to service the farm. This boat is moored approximately 100m offshore when not in use and farm maintenance at present takes approximately 1 day per week. The boat is not anchored while at the farm. Light maintenance tasks such as checking on the growing oysters are carried out using a smaller (4m) boat - "Stardust" (see photo Appendix (ii)). The hatchery site is located on the nearby Horseshoe Bay wharf. This is where the work of settling juvenile oysters on substrate and transferring them to baskets ready to be moved out to the farm takes place.

This application is for the activity at a coastal site – Nathan's Island (see form A and appendix (vi) pgs 4 - 6). The current permit allows 33 crayfish pots to be placed on the this site and to allow for more oysters to be grown in pots and suspended baskets this application will suggest replacing the limit on pots with a limit of 56 buoys (1 per 590m^2), which are the main source of visual impact. These buoys would mostly be coloured light grey to blend in with the environment, and the Council Harbourmaster has approved this.

4. **Please state the proposed date of commencement of the activity/works and the proposed date of completion.**

The activity received consent from Environment Southland in June 2014 (see Appendix (xii) – Permit ES302167) and from the MPI in August of the same year (see Appendix (v) - Aquaculture Decision Report). As such the activity has been ongoing for the past five years and it is hoped that this permit will be renewed for a further five years. The activity has been interrupted several times by changes in the management of the farm sites and especially by restrictions on shellfish and equipment movements brought in following the outbreak of *Bonamia ostreae* in 2017.

The current expiry date for Coastal Permit ES302167 is 10th October 2019.

5. **Details of the contractor (or any other person) who will undertake the activity works.**

(Answered in full on Application for a Coastal Permit (Part B) form)

Existing environment

6. **Are any of the following features found within the existing environment of the proposed activity? Describe these features in the space below, along with details of the assessment undertaken to determine the presence of these features.**

a) Signs of marine life

The following is an excerpt from the Assessment of Environmental Effects submitted in 2013 in support of the original application (Appendix (vi)), which remains an accurate account:

"The benthos (sea floor) is characterised by sand containing small amounts of shell from different species of shellfish, some containing hermit crabs, small octopus, green lettuce weed and drifting macrocystis. Near the proposed sites are rocky outcrops. These outcrops form an anchor for kelp forests which vary in size from season to season but can be quite extensive. Kelp appears intermittently on the sea surface in the general area of the proposed operations" (Assessment of Environmental Effects 2013; page 6)

Dolphins are pelagic visitors to the area and are occasionally seen in Horseshoe Bay, as are fur seals/kekeno, while NZ Sea Lions/rāpoka and Leopard Seals sometimes use the beach as a haul-out area (Helen Cave - pers. comm.). Several species of whale, mainly Humpback/paikea and Southern Right Whales/tohorā, use Foveaux Strait/Te Ara a Kiwa as a migration route and occasionally become entangled in commercial crayfish and cod pots. However, they rarely visit the bays of Stewart Island/Rakiura and they haven't been seen in the area of the farm sites in living memory. Dolphins are also discussed in the letter to Matthew Hoffman (Environment Southland) from William J Watt dated 10 September 2013 in response to a request for additional information (Appendix (vii) para. 17, pg 6):

"Local knowledge is that dolphins do not habitually pass near the coast in this area, and not within the area within which it is proposed to site the marine farms."

Penguins (Blue/kororoa, Fiordland Crested/tawaki and Yellow-eyed/hoiho) all nest along the coastline of Stewart Island/Rakiura and are known to visit mussel

farms in Big Glory Bay (pers. obs.). Blue Penguins/kororoa and Fiordland Crested Penguins/tawaki nest in the area of Oban township but no interactions between penguins and the marine farms in the Horseshoe Bay area have been observed or are expected due to the low density of the structures and low level of biofouling due to the regular cleaning schedule. Pelagic seabirds (most often Buller's and White-capped Mollymawks/toroa) commonly aggregate around boats in the coastal areas of the island, as they have learned that fish frames are often thrown overboard. This is likely to be an unhealthy association as it may be altering natural foraging behavior. They can be attracted by the activities of the marine farms, especially after following fishing boats into Horseshoe Bay, but oyster cultivation does not produce edible discarded material so this unhealthy association is not reinforced (pers. obs.). Paradise shellducks/pūtakitaki and Black-backed gulls/karoro also make use of the beach despite the presence of people and dogs.

Rāpoka, kekeno, paikea, tohorā, kororoa, tawaki, hoiho, karoro, pūtakitaki and toroa are all marine animals found in the area that Kai Tahu regard as 'taonga' species.

b) Areas where food is gathered from (e.g. watercress, eels, wildfowl)?

The area around Horseshoe Bay is a common recreational fishing area and this would be the only food gathering practiced in the local area as hunting along the coastline is rare. The main species collected are typically crayfish/kōura (*Jasus edwardsii*), pāua (*Haliotis iris*) and finfish (mainly Blue Cod (Parapercis colensoi) and Trumpeter (*Latris lineata*). Blue Cod and crayfish are caught recreationally using pots although Blue Cod are also fished for with baited lines, along with other finfish. Pāua are collected from rocks in sub-tidal areas either in shallow water on foot or from deeper areas by free-diving. Commercial fishing boats do not fish in the Horseshoe Bay area, although commercial pāua divers may visit the Nathan's Island area very occasionally. There is no indication that the applied-for activity would have any effect on the abundant 'kai moana' in the area or Kai Tahu interests in mahinga kai.

c) Wetlands, wildlife habitats or bird nesting habitats (e.g. swamp areas)?

There are no wetlands in the surrounding area, however there are obviously habitats that support wildlife and sites where seabirds (particularly penguins and shags) could live. It is possible that taonga bird species such as kororoa and tawaki could nest around the coast. although no nesting activity has been observed (pers. obs.). The seabed, rocky coastline and the coastal environment

are all habitats for certain sea and land species of flora and fauna. The forest type is coastal mixed broadleaf/podocarp, as is much of Stewart Island/Rakiura. The sites are close to the Mamaku Point Conservation Reserve wherein pest species such as rats, possums and feral cats are maintained to low or non-existent levels in order to protect native species. Much of the habitat inside the Reserve is regenerating native bush, however the coastline near to Nathan's Island retains a grassland character from when the area was grazed by cattle and sheep in the past.

d) Other activities occurring in the area

As noted during the decision hearing (see Appendix (iv) - Council decision, June 2014) the use of the site is not exclusive and other members of the public are free to use the space. Boat users pass by Nathan's Island along the coast for commercial or recreational reasons, however (as noted in the Council decision 2014 pg 36 (Appendix (iv)) the council Harbourmaster Kevin O'Sullivan "considered that there were no navigational issues associated with the proposal and that vessels, albeit limited in size and length, could still maneuver through the site if need be". The site at Nathan's Island is close to shore and not on a normal navigational route so the impact here is expected to be small.

Local residents of Oban often use the beach at Horseshoe Bay for recreational activities (dog walking, family gatherings, running etc) and the Horseshoe Bay site can be seen from the beach using binoculars. A walking track follows the coastline of Horseshoe Point and two of the sites could possibly been seen from the track, although the low visual footprint of the activity means that it is often mistaken for a group of cod or crayfish pots.

One activity that would be precluded by the presence of pots and lines within the consented space is the dredging of oysters, however as noted in the Additional Information request response letter 2013 (Appendix (vii), para. 22, pg. 8) "The area is not used by oyster fishermen. There is occasional recreational diving around the shoreline, the main species taken being pāua"

e) Areas of particular aesthetic, cultural, heritage or scientific value (e.g. archaeological sites)?

Most of Stewart Island/Rakiura is regarded by a recent landscape study as having "high" or "outstanding" natural character, feature and landscapes – excluding the "more modified" areas around Halfmoon Bay, Horseshoe Bay and Big Glory Bay. The area around Horseshoe Bay and Mamaku Point is all private

land that has been modified, although parts are regenerating. The Horseshoe Bay beach is a popular recreational area, partly due to its high aesthetic value as a sandy, crescent-shaped beach.

The New Zealand Archaeological Society (NZAS) lists several Māori archaeological sites around the coast of Mamaku Point (ArchSite site identifiers E48/3, E48/4, E48/47, E48/49, E48/50, E48/52, E48/86). These may be wahi tapu sites for local iwi and the Rakiura coastal marine area has important cultural and historic value for Kai Tahu. The coast around Rakiura was an important site for early Māori and was an important seasonal food resource. It was not possible to acquire information on the nature of the archaeological sites before the application was submitted, due to the applicants not having access to the NZAS records, but it is hoped that Environment Southland will have access to information on these sites.

The coastline around Frenchman's Beach on the south side of Mamaku Point contains geological formations – known as hornblende hornfels – that are classed as 'Regionally Significant' on the NZ Geopreservation Inventory.

f) Waste discharges, water takes and/or monitoring sites

The only discharges in the local vicinity, to our knowledge, are the storm water drains that discharge storm water from the Horseshoe Bay drainage system onto the beach at Horseshoe Bay. The only water take known to the applicant is permit 97112 to take water for the facility at Horseshoe Bay wharf.

7. **In addition to the above description of the existing environment, please describe the following**:

a) *Is the beach aggrading or degrading (if applicable)? Are there any signs of shoreline erosion?*

In the original 2013 application, William Watt provided the following evidence.

"the coast in the vicinity of Mr Lind's proposal is on the eastern, sheltered, side of Stewart Island and there are no obvious signs of coastal erosion or accretion. Sedimentation is not an issue in this part of Stewart Island because there are no large rivers flowing into the sea in the vicinity carrying sediment." Assessment of Environmental Effects 2013 (Appendix (vi), pg. 21, clause 'r')

To my knowledge, this information is still completely accurate. The level of the beach naturally aggrades and degrades due to weather patterns or conditions in Foveaux Strait affecting the amount of sand that is washed up on the beach. These changes can be seen on all of the island's beaches and are especially noticeable in the Oban township after a strong easterly wind. The activities at the farm could not be reasonably expected to affect the nearby coastline.

b) *What is the nature of the seabed (i.e. muddy, sandy, silty, rock etc)?*

The following evidence is sourced from the original 2013 application:

"The benthos (sea floor) is characterised by sand containing small amounts of shell from different species of shellfish, some containing hermit crabs, small octopus, green lettuce weed and drifting macrocystis. Near the proposed site are rocky outcrops. These outcrops form an anchor for kelp forests, which vary in size from season to season but can be quite extensive. Kelp appears intermittently on the sea surface in the general area of the proposed operations" (Assessment of Environmental Effects 2013; page 6)

This is still an accurate depiction of the character of the sea floor around the three sites. In all three locations the seabed is sandy, as evidence by the benthic surveys and monitoring that was carried out while activity was occurring at the site (see photos appendix (ii)).

c) *In what way has the foreshore/seabed been altered as a result of other activities occurring in the area? Please provide cross sections and any other supportive evidence as required.*

In the original application it was stated, "no alteration of the foreshore or seabed is proposed" (Assessment of Environmental Effects 2013; page 20, clause 'p').

The only alteration to the foreshore in the vicinity of the three sites is through the erection of structures such as Horseshoe Bay wharf and the fence surrounding the reserve at Mamaku Point. The only activities that involve the seabed would be the placement of permanent mooring blocks for commercial fishing boats in the area around the wharf at Horseshoe Bay and the storage of cod and crayfish pots on the seafloor when not in use, marked with buoys.

It could be argued that placing objects temporarily on the seabed constitutes some kind of disturbance. The only objects that are be placed on the seabed through the farm activity are crayfish pots, in a similar way to how these pots

are used around the Stewart Island coastline already, and anchors for rope lines (see photos appendix (ii)) in keeping with local practice. On occasion the pots may be placed high on the beach at Horseshoe Bay at high tide in order to be collected for disposal or maintenance by vehicle at low tide. All of these objects are easily removable and non-permanent.

Assessment of effects

8. **How will the proposed activity affect the coastal environment in the short term? For example, how do the initial stages of the proposed activity (including, but not limited to, construction and sea bed disturbance) affect the coast, particularly in terms of coastal erosion and effects on ecosystems?**

   As the application is for a renewal there is little change proposed to what is already happening (i.e. the 'initial stages' have already happened).

   There are currently only navigation buoys at the Horseshoe Nugget site so the initial stages of the activity there may involve the placement of crayfish pots and lines for baskets. If the number of baskets were to be increased then there may be anchored rope lines added to the site and crayfish pots lowered onto the seafloor from a boat winch.

   No construction and negligible seabed disturbance is proposed. There may be an increase in the number of anchors for rope lines that are placed on the seafloor but the effects of this would be minor. An increase in the number of oysters housed on the site would increase the amount of phytoplankton being ingested by shellfish on the site, and a consequent increase in shellfish excreta, however *Ostrea chilensis* is a native inhabitant of the area so this would be a restoration of activity that would have been typical of the local ecosystem in the past.

9. **How will the proposed activity affect the coastal environment in the long term? For example, through the long-term occupation of the coast.**

   The past five years of activity have shown the long-term effects on the coastal environment are minor, as predicted in the Council decision of June 2014 (Appendix (iv)).

   In his recent 'Addendum' to the Assessment of Environmental Effects (April 2019; Appendix (viii)), William J Watt relates that there has been no shell deposition on the seabed (para. 7, pg. 6), no detection of any unwanted

organisms (para. 8(b), pg. 6) and there have been no incidents of mammal or bird entanglements recorded during the past five years (para. 11, pg. 8).

The monitoring that was undertaken showed no impact of the activity on dissolved oxygen or chlorophyll a levels between the farm sites and nearby control sites and no impact on the invertebrate infaunal diversity of the seabed. This supports our view that oyster farming activity on these sites would have no significant adverse effects on the surrounding environment (see monitoring data - appendix (xiii) and photos of the benthos (appendix (ii)).

Additionally, if the presence of the buoys has discouraged recreational fishermen in the area from setting pots in the small area between the floats due to courtesy or etiquette then the long-term effects on local fish and shellfish populations may be beneficial, much like the effect that offshore wind farms have been proven to have by preventing trawl fishing in their footprint.

10. How will your activity affect any other users of the coastal area and/or activities occurring on adjoining land?

Nearby land users would include recreational users of the beach at Horseshoe Bay and the operators of the nearby Mamaku Point Conservation Reserve (previously the Dancing Star Foundation ecological reserve).

The impact from the noise from the boat while working at the farm is infrequent (roughly once per week at present) and not abnormal for the area which is a mooring and unloading area for much larger commercial fishing vessels (see Appendix (vi) pg 18, para. 'k' and Appendix (vii) para. 16 "Boat noise").

The visual impact on beach users would be minimal due to the lack of surface structures other than navigation buoys and the low aspect of the beach, which makes the buoys hard to pick out. In all three sites the buoys are small (<30cm across) and usually cannot be seen until the observer is within around 100m of the farm sites. We have sought advice from the council Harbourmaster, Lyndon Cleaver, around painting our coloured marker buoys light grey to blend in with the surface of the water. We would not do anything to camouflage the boundary markers which are bright white so that they are obvious to other boat users but we can reduce the visual impact of the buoys in between as much as possible so long as navigational safety is not affected.

The effect on the biosecurity and 'predator-free' nature of the Mamaku Point Conservation Reserve was addressed at length in the original hearing (see

Appendix (iv) para. 49-51, also para. 58, also para. 68) and the Commissioner ruled that "the potential for the risk (of rat invasion) to be significantly exacerbated as a result of the proposed marine farms is relatively low if appropriate pest management measures are undertaken by the applicant as required by a condition of consent". The relevant condition was included in the permit (see appendix (xii)). Since the Reserve has changed ownership and become the Mamaku Point Conservation Reserve the operators have been more open about the constant reinvasion of the Reserve by rodents that swim around the ends of the fence where it drops down to the sea. This is a constant problem for 'predator proof' fences protecting peninsulas around New Zealand and it not unique to this site. The increased risk of rodents reaching the Reserve after swimming from the boats used to service the farm can be eliminated by a renewed condition of the consent requiring pest control on the vessels in my opinion. We have suggested such a condition.

The effect of preferential occupation on navigation by boat users has been touched upon previously in this form (Q6, pg. 3). The normal route for approaching the wharf and the area of the boat moorings at Horseshoe Bay is through the middle of the bay, away from the Horseshoe Bay farm site. This is because an old breakwater extends from the coastline east of the wharf and boats have to go around this already. The Nathan's Island and Horseshoe Nugget sites sit well away from the normal routes of navigation through these areas. Aside from this, as the equipment on the farm is largely submerged 1 fathom (1.82 metres) below the surface, the farm sites can be traversed by boats without interacting with them.

11. Are there any structures near to the proposed activity? If yes, will the proposed activity have any effect on these structures? Please provide specific details including the type of structure, owner of structure, distance from proposed activity, what effects the proposed activity will have on the stability/function of the structure.

There are no permanent structures on the water near to the three marine farm sites. The only nearby structures on land are the predator-proof fence of the Mamaku Point Conservation Reserve, the Horseshoe Bay wharf, where the hatchery facility is located, and boats moored nearby.

The boats used to service the farm sites – the "Stingray" and "Stardust" – are loaded and unloaded at Horseshoe Bay wharf. The only impacts that the boats would have on the wharf would be normal 'wear and tear' on the wharf timbers

from being tied up to the wharf during loading and unloading. The wharf is owned by Southern Seafoods Ltd, which is currently operating the Horseshoe Bay site.

There would be a risk of collision between the vessels used to service the farm and other vessels or structures in the area. The activity is not abnormal for the area and so this risk is not increased by the farm activity.

The non-permanent equipment and lines at the marine farm sites do not have any noticeable effect on current and they are not attached to any other structure. They also pose a very low risk of drifting and affecting nearby structures in that way, no more than cod or crayfish pots that are already in common use throughout the local area. Observations over the past five years of operation have also shown no evidence of the crayfish pots used in the operation affecting sedimentation or sediment flow in any meaningful way. It is also hard to imagine a situation where the end of the predator-proof fence that terminates near to the Horseshoe Bay farm site would be affected.

12. Pursuant to Schedule 4 of the Resource Management Act, 1991, there are a number of matters that must be addressed by an assessment of environmental effects. Please discuss what effects the proposed activity will have on the following:

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

William J Watt, in his Assessment of Environmental Effects included with the original 2013 application, concluded that the proposal was exactly the kind of locally-based initiative, adding value to local resources, that he advocated in a paper he presented at the ITCT conference in Hobart in 2011 as part of a future economy for Stewart Island, sustainable both economically and environmentally.

In the Resource Management Act (1991) and in the NZ Coastal Policy Statement (2010) there is a requirement to manage coastal resources "in a way, or at a rate, that enables people and communities to provide for their social, economic and cultural well-being". While the effects of the current activity on residents of the Horseshoe Bay area are minor, the social, cultural and economic effects could be very positive for the island as a whole. The cultivation of oysters could provide skilled employment for several people and contribute to the culture of

the island, which is renowned for it's seafood – both commercially caught and farmed.

The Ngai Tahu ki Murihiku Natural Resource and Environmental Iwi Management Plan (2008) stresses the importance of Southland's coastal environment for local iwi. The "General Policy for Southland's Coastal Environment" stresses the need to "respect, protect and enhance" the coastal environment and to "protect and enhance kaimoana and kaimataitai for future generations". Obviously, taking good care of coastal resources is very important and avoiding any adverse effects on the environment is paramount.

Economically, oysters are a highly valuable product and farming provides many advantages over wild catch. These include a lower cadmium content, which gives access to different markets which are not in competition with wild-caught oysters (see Appendix (x)). The recent May 2017 detection of the *Bonamia ostreae* parasite and subsequent destruction of the oyster farms at Big Glory Bay on Stewart Island/Rakiura was devastating economically and culturally for the local community. Jobs were lost and community pride in establishing a local oyster farming industry was dented. The consents applied for are a possible route to keeping the skills and techniques that were developed during the years up to 2017 alive and at the same time keeping the door open to an economic opportunity which has the potential to provide important revenue for the local economy via an activity which is environmentally benign and sustainable. A technical advisory group is being established by Biosecurity NZ to look at the future potential for resuming oyster aquaculture and these marine farms would be an important part of that future.

On current estimates, based on the oysters that are currently being grown, is that there would be around 100,000 oysters to harvest in 2020, rising to 200,000 from 2021 onwards. We expect sales to be of raw oysters to the local market (within the controlled area) and export of "fully processed" oysters outside the controlled area. We expect that aside from securing the current full-time equivalent (FTE) role that this would create at least one other FTE role on the farm. In addition, we believe that oyster processing may provide enough work at the processing facility on Stewart Island that three part-time roles there could be turned into FTE roles. That would make 5 FTE roles created by the oyster growing activity. Not included in this are the harder-to-estimate effects of having oysters on the menu at the South Seas Hotel and Church Hill restaurant again, which may result in an increase in staff there, and the service, maintenance and repair work created by the activity. However, these exist despite being hard to quantify.

b. *any physical effect on the locality, including any landscape and visual effects*

As previously discussed, the effects on the landscape are minimal – mainly restricted to the visual impact of the buoys used to mark infrastructure on the farm. We are seeking to reduce these impacts still further by painting the buoys to blend in with the sea surface, in collaboration with the Council Habourmaster.

The type of aquaculture envisaged has a much lower visual impact than the mussel farms that can be seen in Big Glory Bay. Mussel lines are extremely heavy, with millions of mussels hanging from them, and the mussel buoys that are used to float them are large (many locals cut them in half and use them as garden planters) and dark in colour. It is clear from many of the submissions against the Horseshoe Bay marine farm application in 2013 that most submitters were imagining the visual impact of a mussel farm. In contrast, since oysters are worth far more per ton than mussels, a farm does not need as many shellfish and therefore the buoys can be far smaller (since they do not need to lift the same weight). The buoys on the marine farms at Nathan's Island are small (<30cm) and if we are able to paint them with low-contrast colours they will have a very low visual impact except at close range. The only people who would be able to see the Nathan's Island site would be on passing boats as it is not visible from Horseshoe Bay or Lee Bay along the coast. The site is overlooked by private land, the Mamaku Point Conservation Reserve, where trapping occurs. The coastal area above Nathan's Island has been heavily grazed in the past and its character is mainly grassland giving way to trees at the top of the hill. The coastal area has been modified but is regenerating.

c. *any effect on ecosystems, including effects on plants or animals and any physical disturbance of habitats in the vicinity*

The main two effects of oyster aquaculture on the aquatic ecosystem are through what they eat and what they excrete. Oysters filter phytoplankton from the water column and excrete the digested plankton as waste. Whether these two processes in this type of oyster farm have any effect on the wider ecosystem is not fully understood. This is one of the reasons why we seek a short, 5-year extension of the permit and conditions that include rigorous monitoring.

Another potential effect that shellfish farms can have on the wider ecosystem is through the creation of novel habitat on the equipment of the farm e.g. for seaweed or tunicates. This is an issue on mussel farms which have hundreds of kilometres of rope in the water, however it is hard to assess whether it would

have any effect on a farm such as the one at Horseshoe Bay, where the equipment is de-fouled with a brine solution on a regular basis and the density is much lower.

To protect the biosecurity of the site we have several measures in place. Any equipment that is brought on to the farm is sterilized using a 1:20 solution of Hypostat (>12.5%) and air-dried for 24 hours before being taken to the farm site. Any open (dead) oysters found on the farm are also brought back to the wharf to be thoroughly sterilized before being disposed of on land. The operators abide by all conditions of the controlled area notice issued by the MPI in 2017 and request permits for all oyster movements into and out of the zone. On top of this there is ongoing testing of oysters on the farm by NIWA and this would be expected to pick up pathogens if they were to get to the site.

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 main natural and physical resources that could be affected are the water quality at the site and the space itself. What monitoring that has been done suggests that the effects on water quality are minimal (dissolved oxygen levels, chlorophyll a levels and clarity) with no difference inside or outside the footprint of the site (see appendix (xiii)). If monitoring continues to show the same results it would suggest that the quality of the water on these sites would not be degraded long-term by the activity. As for the space, the application is not for 'exclusive' occupation, but 'preferential'. The former means nobody else may access the consented spaces, but the latter is true of these sites and recreational users of the coastal marine area can still use these areas for enjoyment. The equipment in the consented space is also temporary in nature so there will not be any permanent or semi-permanent structures whose presence may damage the quality of the site for future generations.

As mentioned previously, the New Zealand Archaeological Society (NZAS) lists several Māori archaeological sites around the coast of Mamaku Point (ArchSite site identifiers E48/3, E48/4, E48/47, E48/49, E48/50, E48/52, E48/86). These may be wahi tapu sites for local iwi and the Rakiura coastal marine area has important cultural and historic value for Kai Tahu. The coast around Rakiura was an important site for early Māori and was an important seasonal food resource. It was not possible to acquire information on the nature of the sites before the application was submitted, due to the applicants not having access to the NZAS records, but it is hoped that Environment Southland will have access to

information on these sites. Since the interaction between the coastline and the farm activities is minimal it is unlikely that the farm activities would have any effect on these sites.

The cultural and spiritual value of the coastal resource to iwi is high and these need to be protected. Kai tahu act as kaitiaki for the resources in the Southland region and their consent has been sought for the current activity. There are no significant effects forecast from this activity on the coastal resource and the small footprint of oyster aquaculture should mean that the resource is protected for future generations.

In terms of scientific value, the coastline around Frenchman's Beach on the south side of Mamaku Point contains geological formations – known as hornblende hornfels – that are classed as 'Regionally Significant' on the NZ Geopreservation Inventory. Again, it's hard to see how the marine farm activity would have any effect on these formations.

e. *any discharge of contaminants into the environment, including any unreasonable emission of noise, and options for the treatment and disposal of contaminants*

Oysters are filter feeders and as such do not require additional food or nutrients to be added to the water column. There are no permanent structures used at the farm sites so there are no discharges as there would be from a permanently-moored barge or similar structure and the boat used to service the site has a full-containment sewage system.

There is noise associated with the operation of the farm (as previously discussed in this form - Q10) and while this is not abnormal for the area (which is close to the route that boats use to traverse the northern coastline of Stewart Island) the ambient noise levels would be expected to be lower here than at the Horseshoe Bay sites (see also Appendix (vi) pg 18, para. 'k.' and Appendix (vii) para. 16 "Boat noise"). Also, since the boat engine is idling while on the far site the noise is much lower than when boats are moving past at full power on their way to points up the coast.

The main chemical used on the boat is 'Hypostat' (>12.5% sodium hypochorite) which is sometimes used from a sprayer at a dilution of 1:20 in water to clean larger pieces of equipment such as crayfish pots. If any of this cleaning solution leaks overboard while the boat is on the water it could be classed as a discharge of contaminant. The receiving environment, coastal seawater, is sensitive but the

amounts being used are small and mitigation techniques could be used such as cleaning the equipment inside a contained vessel such as a fish tub to contain any spill. All material that could theoretically be contaminated with oyster pathogens (e.g. shells) is brought back to the wharf facility and submerged in the 'Hypostat' 1:20 dilution for 24 hours before disposal.

f. any risk to the neighbourhood, the wider community, or the environment through natural hazards or the use of hazardous substances or hazardous installations

The proposal poses no credible risk to the wider community as far as we are aware. There are no natural hazards, hazardous substances or hazardous installations involved in, or affected by, this activity.

13. Please include a description of the monitoring or mitigation measures (including safeguards and contingency plans where relevant) to be undertaken to help avoid, remedy or mitigate the actual or potential effects on environmental features and values.

The current monitoring regime of water quality and benthic surveys was set out in the original Council Decision and is addressed in the Addendum of April 2019 (Appendix (viii), pg. 9):

"My understanding is that Platinum Fisheries Ltd supplied returns (on behalf of the consent holder) to Environment Southland for the first years [sic] or so but that it was agreed that there was no point in submitting further returns until such time as the MPI enables the operation to proceed as planned, there was no useful purpose to be served by continuing to provide the information pursuant to this suite of conditions"

The monitoring that was carried out showed no adverse effects on the water quality or seabed of the site before it was suspended (see appendix (xiii)). In addition, the marine farm has complied with monitoring and testing of oysters by NIWA as part of the response to the recent detection of *Bonamia ostreae*. To date, this monitoring has not found any evidence of *Bonamia ostreae* in the oysters at the farm in two years of testing.

I have set out a suggested monitoring regime in the proposed conditions of consent submitted with this application. I would regard water quality and the health of the benthos as the two most important factors to monitor so I have suggested that the current monitoring continue but with more regularity and rigour. Additionally, we are suggesting regular direct measurements of noise and the time spent on the farm sites by each boat.

14. **For construction works, please describe how you will minimise the release of silt, sediment, concrete and other contaminants into water.**

There are no construction works associated with this proposal per se so this section is not applicable. However the crayfish pots and anchors are placed onto the seafloor from boats using a hydraulic winch or crane. There is no dragging of equipment along the seafloor.

15. **Please include a description of any possible alternative locations or methods for undertaking the activity and why these alternatives have not been selected.**

The reasons for the site selection were fully canvassed in the original application (Appendix (vi) pg. 13, clause 'g') and were not considered to be a principle issue in contention by Commissioner Barry Kaye in his conclusions (Appendix (iv), para. 62, pg. 50-51). We feel that these justifications and conclusions are still relevant to this application for renewal of the consent. Further, to move the site to an alternative location at this point after 5 years of operations would defy logic and might be problematic with the controlled area notice that has been placed on shellfish in the area by the MPI.

There are benefits to the farm being located at the proposed site. The farm is situated adjacent to private land where very few people will be able to see it, which lowers the visual impact and is in a sheltered bay. The site is also away form normal navigation routes and in water of a depth of 5-10 metres which is ideal for the proposed activity. The area is also not considered to have "outstanding" values, although the natural values are high, and is not near to any mataitai or marine reserve areas. Moving the sites elsewhere would increase their visual impact and move them into areas where the noise generated would have more of an impact.

Another method of cultivating oysters is on elevated baskets in tidal zones, where the oysters are submerged at high tide but exposed during low tides. The impact of this type of oyster cultivation would be much greater in terms of visual

impact as the trays of oysters take up space in beach or mudflat areas, and would also affect recreational use of these areas (especially beaches). There are no obvious areas where this method of oyster cultivation would be possible in the Oban township area.

16. **Please include evidence of any consultation undertaken for this application. This may include (but not be limited to) consultation with adjoining landowners, other consent holders in the immediate area, iwi (e.g. Te Rūnanga O Ngāi Tahu, Te Ao Marama Inc), government departments/ministries (e.g. DOC, Maritime NZ), territorial authorities, advisory bodies (e.g. Fiordland Marine Guardians), non-governmental organisations (e.g. Forest & Bird), industry representatives (e.g. CRA8 Management Committee and recreational associations).**

A letter has been drafted and circulated amongst those who have property or businesses nearby who either submitted on the original application when it was publicly notified in 2013 or who could reasonably be expected to be able to see or hear the farm activity from their residence, any responses received will be added to this application. A copy of the letter is included with this application (see Appendix ix). Consultation has also been sought with Te Runaka o Kai Tahu (Rihari Dargaville) and also Cletus Maanu Paul (on behalf of all Maori) who both hold Customary Marine title for the coastal area that the consent covers. We have not had any response from these individuals at present.

An assessment of the value of the consent to the existing consent holder

This information is required by the document "Application for Resource Consent (Form A)" for all resource consent renewals. The consent holder (Suelen Properties Ltd) has valued their investment at approximately $300,000 and a more accurate figure could be arrived at on request after a thorough audit of the farm's finances over the past five years.

END OF FORM

Analysis of legislation and policy relevant to ES302167 renewal

- Nathan's Island

Introduction

This application is for consent for marine farm activity on a site (Nathan's Island) in the Horseshoe Bay area of Stewart Island/Rakiura. The intended farmed species is the Foveaux Strait, Bluff or Dredge oyster (*Ostrea chilensis*) and the relevant permit for culturing this species will be sought from the Ministry for Primary Industries (MPI). Consent for this activity was grated in 2014 for an initial 'trial' period of five years, and a renewal for another five years is sought. This is allowed under Section 123A parts 'a' and 'b' of the Resource Management Act (1991) (RMA). The current consent expires on 10th October 2019.

Relevant legislation and case law

The RMA, New Zealand Coastal Policy Statement (NZCPS) (2010), the Southland Regional Policy Statement (SRPS) (2017) and the Stewart Island Landscape and Coastal Natural Character Study (SILCNCS) (2017) are all relevant to this application. Our arguments as to why this application should be approved will mostly draw on the objectives, policies and rules provided in these documents and to a lesser extent on the Southland Regional Coastal Plan (SRCP) (2013), which is under review. We will use the case law set out in the landmark 'Environmental Defence Society Inc vs. New Zealand King Salmon Co Ltd' Supreme Court decision (NZSC 38 (2014)) to interpret the meaning of these documents for development in the coastal marine area.

In NZSC 38, the Supreme Court decided that Policy 13 (preservation of natural character) and Policy 15 (natural features and landscapes) of the NZCPS mean that in areas with "outstanding" natural features, natural character or landscapes adverse effects should be totally avoided ("not allowed"). The RMA directs regional councils to decide which areas of coastline are considered to have "outstanding" values and Environment Southland commissioned the SILCNCS document from planning consultants Boffa Miskell in 2017 in order to do this.

Assessment of the surrounding landscape and natural values

Horseshoe Bay is part of Oban township on Stewart Island/Rakiura. The island is renowned for it's unspoiled coastline and forest. Much of the coastal marine area was considered to be "outstanding" in the Boffa Miskell study with the exception of areas that have some degree of modification. In the study, Horseshoe Bay was placed within the Eastern Bays terrestrial character area (TCA) and the Paterson inlet marine character area (MCA). When considering which parts of the Eastern Bays TCA should be considered "outstanding", the study has this to say:

> *"the **least-modified** parts of this Character meet the high threshold for being an Outstanding Natural Landscape.....The only area of exclusion would be **the more modified area around Oban and Halfmoon Bay**"*

and also:

> *"much of this Character area retains Outstanding Natural Character, notably where there is **least or no modification**"*

On the classification of the Paterson Inlet MCA the study has this to say:

> *"the majority of this Seascape Character area meets the high threshold for being an Outstanding Natural Landscape..... There are areas that have been excluded from this overlay, which include the **more modified embayments of Big Glory Bay, Halfmoon Bay and Horseshoe Bay**"*

The study makes a clear distinction between unmodified areas, which should be considered "outstanding", and those that have some modification, which are still classed as having "high" or "very high" landscape or natural character but not "outstanding". This is important as Horseshoe Bay is a beautiful area that has had some modification and while it's natural and landscape character is high, it is not so high that development should be prohibited. Rather the area falls under a lower threshold, where development is appropriate so long as there are no "significant adverse effects" while "avoiding, remedying or mitigating" other adverse effects.

Application of landscape assessment to policy

Policies 13(1)(a) and 15(a) of the NZCPS provide strong direction that in areas of outstanding natural character, values and landscapes adverse effects should be avoided.

Policy 13 - Preservation of natural character

(1) To preserve the natural character of the coastal environment and to protect it from inappropriate subdivision, use, and development:

. *(a) avoid adverse effects of activities on natural character in areas of the coastal environment with outstanding natural character; and*

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

Policy 15 - Natural features and natural landscapes

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

- *(a) avoid adverse effects of activities on outstanding natural features and outstanding natural landscapes in the coastal environment; and*

- *(b) avoid significant adverse effects and avoid, remedy, or mitigate other adverse effects of activities on other natural features and natural landscapes in the coastal environment;*

NZSC 38 (2014) decided that the meaning of "avoid" in these policies is 'not allowed'. Thus, these policies can be seen as a 'bottom line' and that adverse effects in areas classed as 'outstanding' should be prohibited.

In areas that are not classed as 'outstanding', such as Horseshoe Bay and it's surrounds, Policies 13(1)(b) and 15(b) apply. These state that in "all other areas" significant adverse effects should be avoided and efforts should be made to "avoid, remedy or mitigate" adverse effects that are not "significant".

On the basis of this set of policies, we think that at the Nathan's Island site, development is appropriate so long as measures are taken to "avoid, remedy or mitigate" adverse effects, such as by adding conditions to the permit. This is because the coastline character has been modified in the recent past and is recovering to its natural state. We would argue that the landscape beyond Lee Bay better fits the category "outstanding".

Te Tangi a Tauira - The Cry of The People (2008)

The area around Te Ara a Kiwa/Foveaux Strait is historically, culturally, and spiritually important to Ngāi Tahu ki Murihiku. This document sets out the principles that should be followed when managing resources in the Southland area. The policies in this document that deal with coastal consents overlap to a large extent with the policies set out in the NZCPS to protect and manage aquaculture (see below). There are no strong directive statements in the "aquaculture and marine farms" section of Te Tangi a Tauira, However, there is direction that aquaculture proposals should "not have adverse effects on customary fishing and practices" and "ensure that the potential introduction of unwanted organisms is monitored to ensure impacts on existing biodiversity is limited". We believe our proposal fits these requirements and the many others that are included in this document.

Aquaculture in the New Zealand Coastal Policy Statement (2010) and Southland Regional Policy Statement (2017)

There are two regional policy statements that provide direction for considering aquaculture resource consents within the Southland region; the Southland Regional Policy Statement (SRPS) (2017) and the Southland Regional Coastal Plan (SRCP) (2013). This renewal application draws more from the SRPS, which was developed after the NZSC 38 decision and shares a common language with the NZCPS (e.g. "outstanding natural features, landscapes and natural character" and "avoiding, remedying, or mitigating"). The original application based its rules assessment on the SRCP and this reasoning is included in this renewal

application in the Assessment of Environmental Effects (2013) (see appendix (vi))

The SRCP was developed before the NZCPS and the SRPS and therefore doesn't give proper effect to these higher-level documents. There is also misalignment between the policies set out in the NZCPS and the policies in the SRCP. For example, whereas the SRCP refers to coastal areas where activities are "prohibited", "non-complying" or "discretionary" the NZCPS and SRPS refer to "adverse effects" which should be avoided in areas of "outstanding natural features, landscapes and natural character"

In the RMA and in the NZCPS there is direction that the value of aquaculture should be recognized. For example, Policy 8 (Aquaculture) of the NZCPS requires local authorities to "recognize the significant existing and potential contribution of aquaculture to the social, economic and cultural well-being of communities". According to this Policy, local authorities should recognize "the need for high water quality for aquaculture activities" and make sure that development "does not make water quality unfit for aquaculture activities". We would argue that this gives strong direction to consider resource consent applications such as ours but only so long as they do not conflict with Policy 13 and Policy 15 of the NZCPS.

The most relevant section of the SRPS for this application is Chapter 7 ("Coast"), particularly Objective COAST.5- Aquaculture:

> *"Recognise the contribution of aquaculture to the well-being of people and communities by making provision for aquaculture in* ***appropriate locations*** *while:*
>
> *a) Protecting coastal indigenous biodiversity in accordance with Policy BIO.3;*
> *b) Protecting outstanding natural features, landscapes and natural character in accordance with Policy COAST.3; and*
> *c) Avoiding, remedying, or mitigating other adverse effects"*

The location in this application is deemed to be appropriate because the surrounding coastal area does not fit the definition of "outstanding" natural character and there are no significant effects anticipated from this activity.

There are a number of policies set out in the SRPS (Chapter 7) that give effect to this objective, namely:

> *Policy COAST.1- Direction on locations for activities*
> *Policy COAST.2 – Management of activities in the coastal environment*
> *Policy COAST.3 – Protection of the coastal environment*
> *Policy COAST.4 – Infrastructure, port, aquaculture, mineral extraction and energy projects*
> *Policy COAST.5 - Management of effects on coastal water quality and ecosystems*

Policy COAST.6 - Natural character
Policy COAST.7 – Management of activities in the coastal marine area

Policy COAST.1 allows for regional or district plans to identify areas where development is "appropriate" or that "may be inappropriate without the consideration of effects through a resource consent application...". These are the areas, such as Horseshoe Bay, that are not listed as having "outstanding" values in the Boffa Miskell study because the coastal area has been somewhat modified. Therefore aquaculture is an appropriate development for the area but it is right that a resource consent process is being worked through to establish the potential effects of the activity.

In Policy COAST.2 the direction is to:

(a) protect indigenous biodiversity, historic heritage, natural character and natural features and landscape values
- As discussed in Form B, Form B supplemental information and the Assessment of Environmental Effects, there is little in the proposed activity that could put these resources at risk.

(b) maintain or enhance amenity, social, intrinsic, ecological or cultural values, landscapes of cultural significance to tangata whenua and coastal dune systems
- We talk elsewhere in this application about the social and cultural value of preserving oyster farming activity on Stewart Island and measures to avoid, remedy or mitigate adverse effects in areas such as Foveaux Strait/Te ara a Kiwa that are important to tangata whenua.

(c) maintain or enhance public access; and
- Most of the structures on the farm, except for the surface buoys, are a fathom (1.82 metres) underneath the surface. As such they do not impede navigation by boats and we are applying only for preferential occupation of the coastal marine space, rather than exclusive, which would constrain public access.

(d) avoid or mitigate the impacts of natural hazards, including predicted sea level rise and climate change.
- These impacts are hard to estimate, however the proposed activity does not take place on land or affect the erosion or aggradation of the coast so increased risk from sea level rise or tsunami events is unlikely in our view. Also, the low density of temporary structures should not block or divert water current or mixing in any meaningful way so the risk of anomalously high surface water temperature or damaging currents such as in storm surges or tsunami should be non existant.

This all supports our view that development at these sites should be considered to be appropriate since any adverse effects can be avoided, remedied or mitigated.

Policy COAST.3 (b) gives the following direction:

> "that ... development activities avoid significant adverse effects, and avoid, remedy or mitigate other adverse effects on other natural features and landscapes and/or natural character in the coastal environment"

Again, we see this as strong direction that in this area of less-than-outstanding natural values, aquaculture development of the kind sought by this application can be allowed given reasonable conditions are placed on the permit. We have suggested appropriate permit conditions elsewhere in this application.

Further direction that aquaculture is an appropriate activity for the coastal marine area, given that the location is appropriate, is provided in Policy COAST.4:

> *Recognise and make provision for nationally significant, regionally significant or critical infrastructure that has a functional, operational or technical need to be located within the coastal environment, and appropriate port,* ***aquaculture****, mineral extraction activities and energy projects that must be located within the coastal environment.*

Maintaining the quality of coastal water and ecosystems is dealt with in Policy COAST.5, which directs that marine activities in the coastal marine area should "avoid, remedy or mitigate adverse effects". The proposed activity should have a restorative effect on these resources since oysters were once present in the local ecosystem, but now are rare, and they are exceptional filterers of water. Oysters filter water prodigiously and do not need to be fed other than the microscopic food already present in the water column, unlike salmon. This means feed inputs are non-existent and water quality may by improved rather than 'adversely affected' by this activity.

Policy COAST.6 – Natural character. This is obviously an important policy for our application due to the high natural values and character of Stewart Island/Rakiura. The policy directs local government to establish what areas should be considered to have "high" or "outstanding" levels of natural character. This has been done (in the Boffa Miskell Landscape Study) and, as stated previously, our interpretation is that the "more modified" areas around the three farm sites would not be considered "outstanding" and therefore "appropriate" development is allowed for provided that "adverse effects" are "avoided, remedied or mitigated".

The final Policy in this section, Policy COAST.7, directs authorities to "provide a framework to avoid or mitigate adverse effects on the coastal environment" and we feel that the imposition of conditions on a permit satisfies this Policy. Particularly it specifies impacts such as "occupation of coastal space" and "emission of noise" which are both dealt with elsewhere in this application.

Summary and conclusion

In Part 2 of the RMA there is direction that resources should be managed "in a way, or at a rate, that enables people and communities to "**provide for their social, economic and cultural well-being**" in the management of resources. This is especially true in a small community like Stewart Island/Rakiura that is renowned for it's seafood and connection to the sea.

This is echoed in Policy 8 of the NZCPS which concerns the need to "recognize the significant existing and potential contribution of aquaculture to the social, economic and cultural well-being", and to include "provision for aquaculture activities in **appropriate places**". However, this can only happen if the activities do not conflict with policies 13 and 15 protecting natural features, character and landscapes.

Policies 13 and 15 of the NZCPS act as a bottom line of protection for areas considered to have "**outstanding natural character, natural features or landscapes**". In order to define which areas qualify as outstanding, a landscape study has been commissioned by Environment Southland. The conclusion of this study was that most of the island falls under this category, but not the "**more modified**" areas around the township of Oban. The Nathan's Island site sits within this area of modified landscape. In these areas, " **significant** adverse effects" should be avoided and efforts should be made to "avoid, remedy or mitigate" adverse effects.

Oyster farming is not a type of aquaculture that could be reasonably said to have "significant adverse effects". Oysters filter water prodigiously, do not need to be fed other than the microscopic food already present in the water column and this particular marine farm is designed so that the structures that the oysters are grown on are temporary and have a smaller footprint on the environment. In short, the positive effects on the social, cultural and economic fabric of the island would more than outweigh any minor adverse effects of the marine farms. We believe that the activity is appropriate for the area and a positive development for the Stewart Island/Rakiura community.

Proposed conditions 2019-2024 – Nathan's Island (ES302167)

Listed below are our proposed conditions for the renewal of consent for sites covered by permit ES302167. In red text are our changes from the previous consent conditions.

There are two main differences. Firstly, the previous consent was not transferable. We think this is at odds with section 135 (1)(a) of the Resource Management Act (1991), which allows a permit holder to transfer "their interest in the permit to any other person". We have suggested a change to Conditions 1 and 14 to reflect this. Secondly, we suggest a different way of controlling the farm activity. In the previous conditions this was achieved by putting a limit on the number of crayfish pots allowed on the sites. However, we think that a limit on the number of buoys allowed on each site would better address the visual impact of the sites.

We are happy to receive feedback and discuss the conditions but these are our initial suggestions.

Suggested conditions for Nathan's Island consent 2019 - 2024

1. This consent is granted for a period of five years and is exclusive to the consent holder until such time as the consent is transferred to another person, party or entity (refer also Condition 14).

   (Note: Pursuant to Sections 123 and 124 of the Resource Management Act 1991, a new application for consent will be required at the expiration of this consent. The application will be considered in accordance with the relevant statutory documents in effect at that time and the results of monitoring the effects of approved activities at the three consented sites.)

2. This consent authorises the placement of structures in, on and over the seabed, and the occupation of the coastal marine area with the structures to be used for the purpose of farming Bluff oysters (*Ostrea chilensis*), as described in the application documents.
   Spat and stock shall only be obtained from the Stewart Island/Rakiura coastal waters and in compliance with current and possible future movement restrictions placed on shellfish species and equipment by the Ministry for Primary Industries or other authorities.

   This consent also authorises the deposition, on the seabed, of material, arising from farming Bluff oysters (*Tiostrea chilensis*), as described in the application documents.

3. The occupation of the coastal marine area for marine farming activities, pursuant to this consent, shall only occur within the application co-ordinates as detailed below (co-ordinates in New Zealand Transverse Mercator co-ordinate system) and for the total areas and number buoys as specified below:

   (a) "Nathans Island" site (3.35 ha-56 buoys)

4799039 1229394
4799341 1229139
4799160 1229424
4799284 1229096

(b) "Nugget" site (0.73 ha-12 buoys)

4797954 1230057
4797959 1230088
4798168 1229947
4798174 1229978

(c) "Horseshoe Bay" site (1.82 ha-32 buoys)

4797379 1229574
4797464 1229531
4797246 1229353
4797282 1229328

and as shown on the attached maps dated 3 September 2013, comprising a total of approximately 5.9 hectares and 100 buoys at a density of one every 590m^2 on average. (As the main visual and navigational impact of the sites is produced by the buoys on the surface we propose putting a limit on the number of surface buoys that are allowed in the consented space, with several pots being able to be marked by a single buoy).

4. In accordance with s108 (2)(h) of the RMA except to the extent that it is necessary to achieve the purpose of this consent and for public safety, members of the public shall not be excluded from the marine farm site at all times.

(Advice Note: This consent does not authorise exclusive occupation within the authorised area even though the marine farming structures and operations will result in some physical exclusion over part of that area. The extent that the physical exclusion over part of the authorised area is necessary for the normal operation of the marine farm is provided for by this consent - refer to Section 122(5) of the Resource Management Act 1991.)

Restrictions on Operations

5. (a) The consent holder shall at all times during the continuance of this consent maintain the marine farm structures, including but not restricted to the associated structures of lines, buoys, oyster baskets, oyster pots and any marker lights, in good repair, appearance and condition. No significant alteration or deviation from the authorised structures that may adversely alter the impact on the environment is permitted without the prior written approval of the Council's Compliance Manager.
(Note: any such alteration may require an application for a new resource consent or a variation to this consent.)

(b) Any authorised officer of the Council may, at any time, inspect the marine farm structures and view their state of repair. Upon receipt of a notice in

writing, of any defect or want of repair in the structures, requiring the consent holder to repair the structures, the consent holder shall, forthwith, cause the defect to be remedied or the repairs to be made.

6. (a) The consent holder shall ensure that the external boundaries and all pots within the marine farm are marked out with buoys and where required by the Harbourmaster, lit in accordance with the specified navigation and safety requirements of the Council's Harbourmaster or their delegate. The consent holder shall install all such markers and lighting to the satisfaction of the Harbourmaster within one month of any pots and buoys being installed in any of the three consented areas.
(Note: Navigation and safety guidelines for aquaculture areas can be found in the "Guideline for Aquaculture Management Areas and Marine Farms" booklet dated December 2005 produced by Maritime New Zealand, or its replacement booklet.)

7. (a) The consent holder shall manage the marine farming operation in such a way that deposition of shell, and other material, on the seabed is minimised. Any shell and other material collected from the site shall not be disposed of in the coastal marine area in an unauthorised manner.

(b) Any shell from farmed oysters that is accumulated on vessels during farm activities will be brought back to the wharf and submerged in a 20:1 dilution of Hypostat (12.5% sodium hypochlorite) for 24 hours. The disinfected oysters will then be disposed of on land.

8. (a) Any equipment or materials, excluding vessels, used in the coastal marine area, for marine farming purposes, which have been previously used or stored in another geographic coastal marine area, shall be thoroughly cleaned and sterilised with Hypostat (12.5% sodium hypochorite) before transport to the marine farm site and being used. All equipment treated in this way will be left to dry for 24 hours before being placed in the water. It shall be the consent holder's responsibility to ensure that any marine farming structure, including associated structures, is maintained free of unwanted organisms and pests as identified by either or both Biosecurity New Zealand or the Council's Regional Pest Management Strategy. Any removed unwanted organism or pest shall be disposed of at an authorised land disposal site, to the satisfaction of the Council's Compliance Manager.
(Note:
(i) Under Section 44 of the Biosecurity Act 1993 every person has a duty to inform Biosecurity New Zealand, as soon as practicable, of the presence of an organism not normally seen or otherwise detected in New Zealand.
(ii) Under Section 46 of the Biosecurity Act 1993 every person is required, without unreasonable delay, to notify the chief technical officer at Biosecurity New Zealand of the presence or possible presence of notifiable organisms. Unwanted organisms also fit under this category.)

(b) The consent holder shall advise the Council's Biosecurity Manager, no later than five working days after detecting any incidence of unwanted organisms and/or pests not normally seen or detected in the area.

9. The consent holder shall ensure that:

(a) the marine farm site identification number is displayed above the water level at each four corners of each marine farm site, at all times to the satisfaction of the Council's Compliance Manager;
(b) no equipment or materials from the marine farming activity is stored in an unauthorised manner;
(c) all debris is removed from the marine farm site and disposed of at an authorised refuse site;
(d) any material or structure lost from the marine farm site is retrieved as soon as practicable;
(e) any lost material or structure from the marine farm site that could constitute a navigation hazard shall be notified to the Council's Harbourmaster immediately after discovery and the consent holder shall forthwith retrieve any such material or structure;
(f) other than the deposition authorised under Condition 2, no oil, diesel, petrol, grey water, detergents, cleaning materials, bilge water, sewage or any other toxic or polluting substances, shall be discharged into the coastal marine area at any of the three sites, either directly or indirectly, as a result of exercising this consent;
(g) in the event of any spill of oil or fuel at the marine farm site, the first person to the scene shall:
    (i) take immediate steps to contain the spill and to recover it; and
    (ii) notify as soon as practicable the Southland Regional Council's pollution hotline on 0800 76 88 45 that a spill has occurred. Notification shall include the type and quantity of oil or fuel spilled and the steps taken to remedy or mitigate any adverse effects; and
(h) in the event of a spill of any contaminant, no dispersants or degrading agents shall be discharged to water without the approval of the Southland Regional Council.

10. (a) The consent holder shall inspect the hull of any vessel used to service the marine farms authorised by this consent for pests and fouling organisms at least three times each year. Proof of such inspections shall be provided to the Council in writing along with photographic evidence of the hull condition at the time of each inspection. If such organisms are found the consent holder shall notify the Council's Compliance Manager prior to removal and disposal of the pests or organisms to a designated refuse site on land.

(b) The consent holder shall:

    (i) maintain the vessel in a rodent free state at all times;
    (ii) provide and maintain at least one pest bait station and one baited trap on the vessel at all times;
    (iii) inspect any vessel used to service the marine farms authorised by this consent, including its compartments and any cargo, for pests, in particular, rodents, on each occasion of operating;
    (iv) maintain a log of inspections [including a photographic record] for pest animals, noting the number of pest animals detected aboard the vessel for each inspection; and

(v) provide the pest inspection log in writing to the Council's Compliance Manager by 30 June each year, or upon 24 hours' notice if requested.

11. In the event a marine mammal or bird is entangled or stranded within the marine farm structures, the consent holder shall immediately advise the Department of Conservation Southern South Island Conservancy.

12. Neither the granting of this consent nor anything contained in it shall affect the liability of the consent holder for any injury caused by any marine farm structures to any vessel or person through any default or neglect of the consent holder.

13. Upon expiry of the five year period for which the consent is granted, or on any cancellation or lapse of the consent, the consent holder shall, where required by the Council to do so, remove all marine farm structures, including buoys and lights, entirely from the site and restore the site as near to its original condition within three months of the date of expiry, cancellation or lapse. If the consent holder fails to do so, the Council may cause all marine farm structures, including buoys and lights, to be removed and the site restored, and may recover the costs incurred by the removal and restoration from the consent holder.

14. Pursuant to section 135(1)(a) of the RMA the consent holder can transfer this consent, in whole or in part, to any other person or party at any time during the duration of this consent.

Monitoring

15. The consent holder shall carry out the Monitoring Programme specified in Appendix 1.

16. Monitoring in accordance with the Monitoring Programme specified in Appendix 1 shall conform with the following standards:

(a) sample collection, preservation and analysis of the seabed samples shall be carried out by a suitably qualified person or as agreed to, in writing, by the Council's Compliance Manager;
(b) sample collection, preservation and analysis of the water quality samples shall be carried out in accordance with the most recent edition of APHA "Standard Methods for the Examination of Water and Wastewater" or as agreed to, in writing, by the Council's Compliance Manager;
(c) the monitoring and analyses are to be carried out by a laboratory with IANZ accreditation or equivalent, or as agreed to, in writing, by the Council's Compliance Manager;
(d) the result of seabed analysis shall be supplied to the Southland Regional Council no later than five working days of the consent holder receiving them. The methods of analysis are to be specified with the results;
(e) the results of water quality analysis shall be supplied to the Southland Regional Council no later than 20 working days from the end of the month in which the samples are taken. The methods of analysis are to be specified with the results; and
(f) the Southland Regional Council may audit monitor sample collection up to once each year at a cost covered by the consent holder.

(g) A monitoring schedule shall be provided to the Council's Compliance Manager on renewal of the consent, showing the dates of upcoming analyses and sample collections for the next year as an article of good faith. The schedule will be renewed yearly for the length of the consent.

17. The consent holder shall undertake an investigation, if the result from any one sample in the Monitoring Programme identifies an adverse effect on the environment, to determine the probable cause of the adverse effect. A report shall be provided summarising the results and analysis on completion of the investigation sampling, but no later than two months from the initial sample that identified an adverse effect being provided to the Council.

18. The consent holder shall provide an annual report summarising and interpreting the results and analysis of the Monitoring Programme on completion of the sampling but no later than 31 July each year.

Other Permits

19. The granting of this consent does not absolve the consent holder from the responsibility to obtain any approval, permit, licence, concession or consent from any other body.

Bond

20. The consent holder shall enter into a bond, with sureties or refundable deposit, of $7,500 to act as security against non-compliance with the conditions of this consent and to guarantee removal of the structures in the event that the site is abandoned. The bond is to be lodged with the Southland Regional Council within three months of the commencement of this consent. The council shall retain the bond paid at the commencement of the initial consent.

Council Charges

21. In consideration of the right to occupy Crown land in the coastal marine area for the activity specified above, the consent holder shall, each year, pay to the Southland Regional Council the appropriate coastal occupation charge specified in the Regional Coastal Plan. Each financial year, commencing 1 July, the charge shall be adjusted for inflation in accordance with the Consumer Price Index. The sum payable in the first year of this consent (or the proportion thereof for which the consent is current) is $XXX.xx plus GST, and shall be payable in advance on invoice. The revenue from this charge shall be used only for the purpose of promoting the sustainable management of the coastal marine area.

22. In addition to the above sum, the consent holder shall pay an administration and monitoring charge to the Southland Regional Council collected in accordance with Section 36 of the Resource Management Act, payable upon invoice.

Review of Conditions

23. The Southland Regional Council may, in accordance with Sections 128 and 129 of the Act, serve notice, during the months of August to October in any year, of its intention to review the conditions of the consent for the purposes of:

    (a) dealing with any adverse effect or cumulative effects on the environment which may arise from the exercise of this consent; or
    (b) considering any changes to information on the effects of marine farming, particularly information gained from monitoring; or
    (c) complying with the requirements of a regional plan; or
    (d) providing for a bond if further investigation and/or information, including relevant case law on the application of bonds to consents, shows that one is necessary to avoid, remedy or mitigate potential adverse effects on the environment.

Lapse of Consent

24. Pursuant to Section 125(1) (b) of the RMA, this consent shall lapse three years after the date of commencement of the aquaculture activities unless the consent is given effect to.

Appendix 1
Monitoring Programme

1. The consent holder shall monitor the effects of the marine farming activity on the seabed, as follows:

   (a) (i) monitoring of the seabed at representative locations under the marine farm sites shall be undertaken twice in the first year of activity and thereafter annually for the duration of the consent. The monitoring locations shall be approved, in writing, by the Council's Compliance Manager.

   (ii) in addition to Clause 1(a)(i), monitoring of the seabed in the wider area associated with the marine farms, at two control sites approved, in writing, by the Council's Compliance Manager. The monitoring shall occur twice each year for the first three years, then once every year thereafter.

   (b) the samples will be analysed for the following to assess the sediment quality:

   - sediment colour, including providing a colour photograph of the sediment sample;
   - depth of the oxygenated layer below the sediment surface;
   - occurrence of hydrogen sulphide;
   - sediment texture and grain size;
   - total organic carbon content; and
   - infaunal and epifaunal community composition.

   Monitoring records shall include photographic evidence.

2. The consent holder shall monitor the effects of the marine farming activity on water quality, as follows:

   (a) (i) monitoring of the water column shall be undertaken three times during the period of 1 November to 30 June each year and once during the period of 1 July to 31 October each year for the first two years after commencement of this consent, by taking a sample at each marine farm site and two control sites outside the marine farm sites, at a depth of 5 metres.

   (ii) after the first two years outlined in clause 2(a)(i), monitoring of the water column shall be undertaken once during the period of 1 November to 30 June each year and once during the period of 1 July to 31 October each year, by taking a sample at each marine farm site and two control sites outside the marine farm sites, at a depth of 5 metres.

   (iii) the location of the sample sites in clauses 2(a)(i) and 2(a)(ii) above shall be approved, in writing, by the Council's Compliance Manager.

   (b) the water quality samples will be analysed for the following:

   - water temperature;

- chlorophyll *a;*
- vertical seechi depth; and
- dissolved oxygen.

Transient Gear Shellfish Aquaculture

Robert B Rheault
and
Michael A Rice

Transient-gear aquaculture is a method of growing shellfish that is designed to minimize multiple-use conflicts and avoid the need for a conventional fixed lease

For the past three years, Spatco, Ltd. has been testing a novel method of oyster aquaculture that we call "Transient-Gear Aquaculture." The method involves placing hatchery-reared shellfish in cages resembling lobster pots on the pond bottom. The cages are marked by buoys and hauled every few weeks for cleaning and tending. The primary reason we became interested in this approach was to avoid conflicts with other user groups, principally the commercial shellfishermen and boaters. The buoyed "oyster pots" pose no more of a threat to navigation or shellfishing than do lobster pots or eel pots. Since the gear is periodically relocated, even the wild shellfish resource directly underneath the "oyster pots" becomes accessible to the wild-harvest digger periodically. In short, this method of aquaculture no more requires the exclusivity of a lease than does lobster fishing with traditional traps.

In New England one of the primary obstacles to the growth of aquaculture is resistance to the leasing or privatization of public waters. Since transient gear does not require exclusive use of one area for more than a short period of time, it should not require a conventional exclusive-use lease. If transient-gear aquaculture proves to be an economical method of rearing shellfish, many areas that are closed to aquaculture because of resistance to leasing could become open to productive shellfish aquaculture. As wild harvests decline and per capita seafood consumption rises, aquaculture must make up the difference. The United States currently imports 60% of its seafood, exacerbating a multibillion dollar trade deficit. We can either continue to increase our imports of seafood from other countries that have developed their aquaculture potential, or we can cultivate new approaches allowing us to develop our own natural resources to their full production potential.

Regulatory issues

To date no state or federal authorities have developed regulations to permit transient gear aquaculture, but pending applications by Spatco, Ltd. in Narragansett, Rhode Island, are likely to force regulators to examine the issue. Officials from Rhode Island's Department of Environmental Management (DEM) have stated that they prefer the transient gear approach to conventional fixed

leases as a way to avoid conflicts with the wild harvest fishermen. DEM has agreed to develop appropriate regulations in a timely fashion if Spatco's experimental transient-gear aquaculture permit is approved by the Coastal Resources Management Council (CRMC). Similarly, the US Army Corps of Engineers is aware of this permit application and may have to make some adjustments in their regulatory policies if this approach is permitted.

Since there is little difference between an oyster pot and a lobster pot, the regulations regarding their placement should be similar. Both growers and lobstermen must exercise the same common sense in placing their gear, avoiding the main navigational channels, areas where towed dredges would foul their gear, and shallow waters where their pots might be crushed by boats. In fact, since the investment in each pot is greater for a grower, the motivation to keep the gear out of harm's way is greater.

One regulatory approach being examined by DEM would allow the grower to operate within a "permitted area," but unless the applicant is given sufficient space to move his gear around to accommodate the wild-harvest fishermen, the advantages of the technique are lost. Other regulations would be essentially the same as for lobster fishing. In Rhode Island, lobstermen purchase commercial fishing licenses, attach identification tags on their pots, paint and brand their buoys, and place their pots wherever they think they will catch the most lobsters. Periodically, the pots are hauled and placed in a new location. The same regulations should apply for transient gear aquaculture.

The only real difference between lobster pots and oyster pots is that the former qualifies as a "fish attracting device" and the latter (while it does attract many fish and crustaceans) is designed primarily to hold and grow shellfish. From a regulatory point of view this is a very important distinction to the US Army Corps of Engineers (COE). "Fish attracting devices" (pots, traps and weirs) are covered under Nationwide Permit Number 4, giving individual states control over regulation of fishing gear. Aquaculture gear is not covered under Nationwide Permit Number 4 so it requires individual permits from the COE. This policy may change once the technique has been demonstrated, as it is unlikely that the COE is going to want loran coordinates for a few hundred pots that move around every month.

Techniques

Fundamentally the transient gear approach is no different from many rack-and-bag shellfish aquaculture techniques that have been developed.[11] The only difference is that instead of placing the bags on fixed racks in the intertidal zone, the bags are held in buoyed cages that are mobile. This allows the grower to operate in deeper waters and to grow more shellfish in the same area by stacking in the vertical dimension. It also obligates the grower to haul the gear from a boat rather than tending it while standing on the shore.

We have designed our oyster pots with four shelves to hold 12 mesh bags, four high by three wide. This design is a modification of enclosures previously designed for nursery culture of shellfish seed under floating docks in marinas.[17] The pots are constructed of vinyl-coated galvanized wire identical to that used in lobster pots. We use a 2-inch mesh (5 cm), 10-gauge wire[19] to construct a cage that is 183 cm wide x 61 cm deep x 61 cm high (6 x 2 x 2 feet) with shelves to hold the bags 15 cm (6 inches) apart vertically. The pots are fitted with 10-cm high (4-inch) metal or wood skids to keep the bottom of the cage out of the mud (Figure 1). The mesh bags are made of plastic,[20] 61 cm x 61 cm x 5 cm deep (24 x 24 x 2 inches). The open end of the bag is closed with a slit piece of PVC pipe 1.9 cm in diameter (3/4 inch). Different mesh sizes are used at various stages of growth: 3 mm, 6 mm and 12 mm (1/8, 1/4 and 1/2 inch).

To facilitate management, we place our pots in trawls of 10, spaced 3 meters (9 feet) or more apart along the trawl line with buoys at each end. Management of the oysters involves removal of fouling organisms, restocking the bags, and harvesting the oysters. Most of the labor is devoted to keeping the gear clear of the various fouling organisms that settle on the cages or on the bags inhibiting the flow of water to the shellfish and competing for food. In dense assemblages shellfish growth is food-limited as their feeding will rapidly deplete the food available unless currents are swift enough to replenish the food.[9] Shellfish growth is maximized under conditions of high seston flux —food-rich seawater and moderate or high current speed.[10,12] The cages and bags are rapidly colonized by algae, tunicates, ascidians, sponges, polychaetes, barnacles, and even oysters. Removal of these fouling organisms is accomplished by jetting the gear with a 3000-psi pressure washer driven by an 11-hp gasoline-

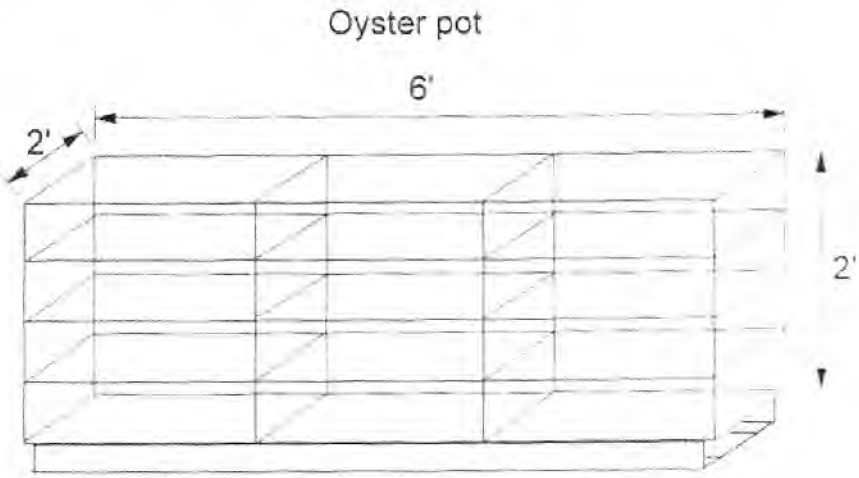

Figure 1. Schematic drawing showing the dimensions of an oyster pot. Each oyster pot has 12 shelves to accommodate plastic mesh shellfish bags. Typically the oyster pots rest on the estuary bottom and are marked by a small buoy.

powered engine. Growth of the fouling organisms varies seasonally with factors such as temperature, light and depth. During the summer we find it necessary to clean individual oyster pots every four to six weeks.

The second most labor intensive aspect of bag culture involves restocking the bags to maintain a proper density for optimal growth. Typically at this time the shellfish are also passed through a sieve to separate them by size. Within a given bag it is desirable to minimize variability in size because the larger shellfish will filter most of the water available, further slowing the growth among the smaller animals. Shellfish have inherently high variability in growth rates and should be sieved periodically for ease of management and maximal growth. It is usually desirable to use the largest mesh size possible that will effectively retain the shellfish since the larger mesh size material has a greater percentage of open area permitting better flow of water to the shellfish.

Restocking the bags is necessary to accommodate the geometric increase in volume resulting from the growth of the shellfish. Our experience in Rhode Island is that 200 mL of 1-mm seed in May will grow to 500 L in July, and about 10000 L by the end of the growing season (Figure 2). We attempt to stock each bag so that the shellfish form a layer no more than one animal deep. Juvenile shellfish can be stocked at great densities in terms of numbers per bag; however, juveniles are stocked at much lower volumes per bag than adults (Table 1). At each location optimal stocking densities must be determined experimentally as this figure varies with temperature, current speed and food concentration.

When sieving and restocking the bags a considerable amount of time may be spent breaking apart clumps of oysters that have grown together. This is imperative if one is targeting the high-end halfshell market. Clumps of oysters, sold for their meats alone, are worth about one quarter what they would bring as singles. We also take this opportunity to dip the oysters in a saturated brine solution. This eliminates the parasites *Polydora websteri* (a polychaete that causes mud blisters) and *Cliona* spp. (boring sponges) as well as controlling barnacles and oyster overset.[7,12]

When shellfish are cultured at commercial densities, growth is almost invariably food limited.[5,18] Locations with high seston flux can sustain good growth rates at higher stocking densities than comparable sites with less current or phytoplankton. Optimal stocking density can be defined in terms of maximizing growth, minimizing gear and labor, or some combination of the two. Lower stocking densities will always result in faster growth, but at some point additional thinning becomes uneconomical because the gear and labor costs increase as the number of individuals per bag declines. Seasonal variations in growth rate or market demand may also dictate that densities should be varied. In our location we have found that for good growth, 6-mm oysters in 3-mm mesh bags should be stocked at 1.5 liters/bag, whereas 40-mm oysters in 12-mm mesh bags can be stocked at 6 liters/bag or more (Table 1).

Optimal stocking densities will vary with the organism in culture as well. The bay scallop, *Argopecten irradians*, filters far more water than a similar sized oyster.[15] To achieve economically optimal growth with scallops we use initial stocking densities that are one-third those that we use for oysters.

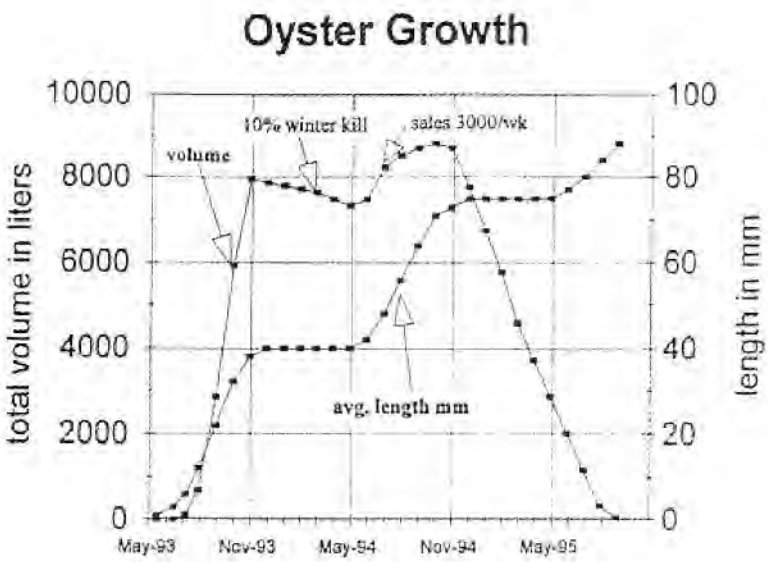

Figure 2 Typical oyster growth during a two year cycle in oyster pots. Oysters reach market size of about 65mm shell height in about two growth seasons. Once oysters reach market size, total volume of the oyster pote is limited by the weekly sales of product.

Production Model

The following model incorporates four years of data using transient gear to grow oysters and scallops. This model can be used as a general guide to estimate start-up gear costs and to generate estimates of expenses and income. Actual production using this system will vary greatly from location to location depending on temperature, current speed, phytoplankton concentration, and the source of the seed.

Mortality

In the four years that Spatco has been working with bag culture we have run the gamut of possible mortalities from negligible to total losses. Two crops have been victims of Unidentified Juvenile Oyster Mortality[3,5,8] and one crop was wiped out by an undescribed pathogen. Since it is impossible to predict losses to disease, this model has been constructed to assume realistic mortality due to breakage and handling of 1-2 percent per month and winter kill of 10 percent.

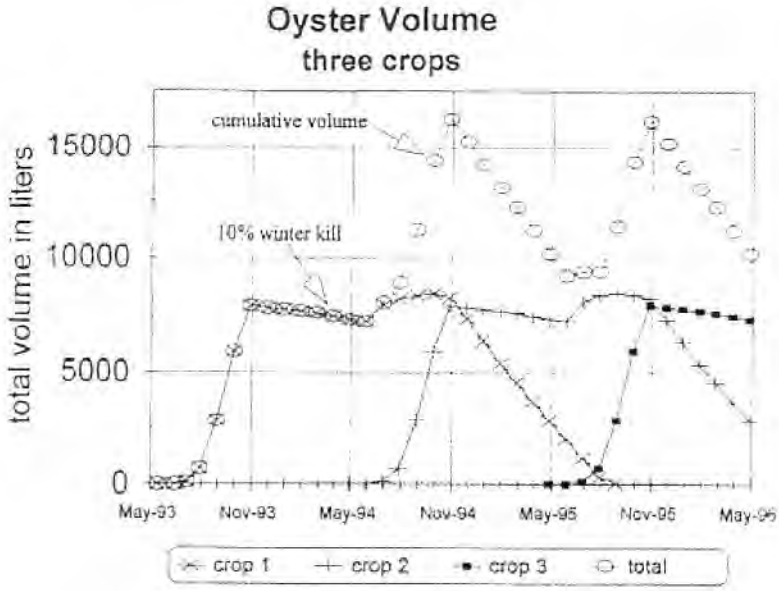

Figure 3 A multi-year production model showing the disposition of three crop years. Cumulative volume totals determine the number of oyster pots to be deployed at any time.

Growth

Based on an annual crop planting of 200 thousand 1-mm seed in May, the model projects that the average oyster will grow to 40 mm in the first season while the entire crop will grow to a total volume of 8000 liters (Figure 3), held in 1300 bags in 110 of our 2-m (6 foot) pots. Growth drops to zero when temperatures drop below 10°C. (November to May). Oysters begin to reach market size by the middle of their second growing season and are picked out and sold year-round at a rate of 3000 oysters per week. Cumulative mortality over the 25-month period for one crop is 25%. By the end of the third summer the first crop has been harvested, the second crop is just reaching market size and the third crop is averaging 35 mm (1.5 inches) long (Table 1).

Economics:

Depending on how the product is marketed, one can expect to receive 20-55 cents apiece. This model projects sales of 150 thousand oysters and gross revenues of US$30 thousand to US$82 thousand per year. To maintain an annual crop planting of 200 thousand requires a maximum of 220 of the 2-meter pots at roughly US$110 per pot, representing an expenditure of US$24 thousand for pots and bags alone.

Labor costs are highly variable regionally and will also vary with the season and the fouling rate at each site. Aquaculture is labor intensive and many person-hours are devoted to growout, cleaning, sorting, marketing, sales, deliveries, maintenance, and constructing new gear. During the peak of summer we employ four people full time, but during the winter months labor is limited to 20 person-hours per week for harvesting and shipping and maintenance.

Depending on the source and size of seed purchased, seed costs will vary tremendously. Oyster seed cost will triple if 10-mm seed are purchased instead of 2-mm seed, however seed costs tend to be a minor expense in the overall budget. Seed costs for this model are US$1500/yr. Seasonal availability of larger sized seed may also change the projections of this model. Other variable costs include a boat, permits, insurance, testing, legal fees, and expendables such as gas, ice, and salt. We estimate our profit margin (in the absence of disease-related mortality) to be around 20%, but we foresee several areas where automation, economies of scale, and aggressive marketing should improve this margin. Substantial savings could be realized by a fisherman who already has a boat and much of the equipment needed for this work.

Other considerations

In our location, oysters take two to three years to reach market size. During this period the entire crop is susceptible to disease-related mortalities such as Unidentified Juvenile Oyster Mortality, MSX, or Dermo.[10] Each of these diseases has at one time ravaged American oyster populations and has the potential to kill a large percentage of the crop. The shellfish also can be lost to storm damage and theft; however the motivation to steal from a grower is slight because at any given time 90% of the stock is typically of sublegal size. We have also attempted to minimize theft by making the pots large enough to deter lifting by the casual boater. Each of our 2-m pots can weigh up to 180 kg (400 pounds) when fully loaded and fouled.

Species

We have used this method to culture northern quahogs, (*Mercenaria mercenaria*), bay scallops, (*Argopecten irradians*), American oysters, (*Crassostrea virginica*), and European flat oysters, (*Ostrea edulis*). Bag culture works well for bay scallops if the seed are made available early enough in the season. There is an emerging market for whole bay scallops, live in-shell, at 5-8 cm for 15 to 25 cents each. This size can be achieved in 4 to 5 months at proper stocking densities. Unfortunately, bay scallops cultured at commercial densities will suffer very high winter mortalities (50 - 95%) if they do not make it to market size in their first season. In spring and summer the adductor tissue glycogen levels are low, making them less palatable.[9] We have found that this system is inappropriate for quahog culture. The labor and gear costs are too high for an animal that takes 2-3 years to reach market size and brings only 15 to 20 cents each. Clams will also suffer high winter mortalities unless they are permitted to bury themselves in the sediment. *Ostrea edulis* is attractive because of its fast growth and high market price, but *O. edulis* has a short shelf life, is vulnerable to low winter temperatures, and may be considered an undesirable exotic species in some states.

Table 1. An economic model for oyster production using a transient-gear aquaculture system. Estimates of mortality, growth, and sales are based on data collected in the 1990 to 1994 growing seasons in Point Judith Pond, Narragansett, Rhode Island. For optimum growth, oysters are held to a maximum biovolume of 6 liters per bag. See text for details of gear and discussion of model assumptions.

Date	Mean size (mm)	Volume (liters)	Liters/bag	Number of bags	Number of cages	Sales	Number of oysters	Mortality (%)	Revenue @$0.50 ea
15 May 93	1	0.2	0.05	4			200 000	2%	
15 Jun 93	3	2.5	0.25	10			196 000	2%	
07 Jul 93	6	120	1	120			192 080	2%	
30 Jul 93	12	695	2	347	29		190 159	1%	
30 Aug 93	22	2842	3	947	79		188 258	1%	
30 Sep 93	32	5940	5	1188	99		186 375	1%	
30 Oct 93	38	7960	6	1327	111		184 511	1%	
30 Nov 93	40	7880	6	1327	111		182 666	1%	
30 Dec 93	40	7801	6	1327	111		180 840	1%	
30 Jan 94	40	7723	6	1327	111		179 031	1%	
28 Feb 94	40	7646	6	1327	111		177 241	1%	
30 Mar 94	40	7943	6	1327	111		173 696	2%	
30 Apr 94	40	7343	6	1224	102		170 222	2%	
30 May 94	42	7490	6	1248	104		168 520	1%	
30 Jun 94	48	8239	6	1373	114		166 835	1%	
30 Jul 94	56	8530	6	1422	118	8 000	157 166	1%	$4000
30 Aug 94	64	8699	6	1450	121	10 000	145 595	1%	$5000
30 Sep 94	71	8820	6	1470	123	12 000	132 139	1%	$6000
30 Oct 94	73	8691	6	1448	121	12 000	118 817	1%	$6000
30 Nov 94	75	7768	6	1295	108	12 000	105 629	1%	$6000
30 Dec 94	75	6767	6	1128	94	12 000	92 573	1%	$6000
30 Jan 95	75	5776	6	963	80	12 000	79 647	1%	$6000
28 Feb 95	75	4579	6	763	64	12 000	66 851	1%	$6000
30 Mar 95	75	3711	6	619	52	12 000	54 182	1%	$6000
30 Apr 95	75	2852	6	475	40	12 000	41 640	1%	$6000
30 May 95	77	2002	6	334	28	12 000	29 224	1%	$6000
30 Jun 95	80	1160	6	193	16	12 000	16 932	1%	$6000
30 Jul 95	84	326	6	54	5	12 000	4 762	1%	$6000
30 Aug 95	88	49	6	8	1	4 000	715	1%	$2000
TOTALS							154 000		$77 000

Advantages

The primary advantage of this approach is that it allows growers flexibility in the placement of their gear so that user conflicts can be minimized. Gear can also be moved to take advantage of seasonal blooms, to avoid red tides, or to minimize winter kill. Since the product is all contained in bags there are no losses to predators. Oysters grown off-bottom reach market size in two to three years, a full year faster than those cultured on the bottom. Bags also afford growers easy access to the shellfish for sorting and inspection, giving the grower greater control over the quality and uniformity of the product while facilitating harvest. Single oysters for the halfshell trade bring a high price premium over wild-harvest product. Cultured shellfish are exempt from many of the regulations designed to protect the wild resource (eg, seasonal harvest restrictions). Most states permit cultured shellfish to be sold year-round and several have relaxed their minimum size regulations for cultured shellfish.

Disadvantages

Transient-gear aquaculture also has disadvantages when compared to other more extensive methods of shellfish aquaculture. The method is extremely gear- and labor-intensive. During the peak of summer our company employs four people full time and labor costs can reach [US]$1000 a week. This is a very expensive method of culturing shellfish, justified only by the quality of the product and the ability to avoid user conflicts.

Benefits

- Shellfish are filter feeders and will improve water quality and clarity by filtering the water. The shellfish in each of our cages will clear an estimated 70-300 m^3/d (17,500-75,000 gal/d). These "biological filters" are highly efficient at removing phytoplankton from the water column, incorporating nitrogen and phosphorus into oyster tissue, thereby improving sunlight penetration and slowing eutrophication.[14]
- Cultured shellfish will spawn and release millions of larvae to the wild-harvest fishery. For every oyster in culture an estimated 1 million eggs are released each year. Of these a minute fraction will survive to be recruited into the wild-harvest fishery, but we estimate conservatively that 200 thousand oysters should bring [US]$50 thousand to the wild harvest each year.
- The oyster pots provide an excellent refuge and foraging site for myriads of juvenile fish. The cages become small portable artificial reefs, enhancing the juvenile survival of many commercially important fish species.

Transient-gear aquaculture is a novel approach designed primarily to resolve multiple-use conflicts currently hampering the expansion of shellfish aquaculture in the Northeast. Our work has demonstrated that the method works well in rich, coastal salt ponds where oysters can reach market size in two to three years. It remains to be proven whether or not this approach is viable in deeper waters. Since there is insufficient space in the salt ponds for the technique to have any real economic significance in terms of regional production, future studies are aimed measuring growth rates in deeper, colder, more oligotrophic waters. It is likely that growth rates will be slower, meaning that gear will be tied up for longer periods, making labor and gear costs per oyster proportionately higher. It is equally plausible that fouling growth will also be less of a problem in deeper waters. The question remains whether or not this technique can be economically viable outside of the salt pond environment.

Transient-gear aquaculture has the potential to alleviate traditional user conflicts while allowing aquaculture to develop without the need for conventional, exclusionary fixed leases. If the aquaculturist can operate without a conventional lease then the potential exists for aquaculture to proliferate in areas where leasing is not a viable option. Landings of the wild-harvest shellfishery in Rhode Island are down about 60% from five years ago. If the state wants to maintain its position as a major shellfish producer it must look to aquaculture to fill the void.

The technique also has great potential as a supplementary income source for wild-harvest fishermen without significantly altering their way of life, since transient gear aquaculture requires a minimal capital investment for gear and uses the traditional tools and skills of the waterman. An investment of [US]$15 thousand in gear can be sufficient to raise 100 thousand oysters a year, potentially worth over [US]$40 thousand if marketed properly. Many fishermen already have the skills and equipment necessary to get started in transient-gear aquaculture.

Notes and References

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Suelen

Decision of Commissioner following the hearing of an application for resource consent

IN THE MATTER OF:

Application for resource consent under section 88 of the Resource Management Act 1991 by Suelen Properties Limited seeking consent to establish marine farms at 3 locations adjacent to Stewart Island for the purposes of trialling the cultivation of Bluff Oysters, held on Wednesday 15th May and Thursday, 16th August at Environment Southland Council Chambers commencing at 9.00am.

CONSENT, PURSUANT TO SECTIONS 104 AND 104B OF THE RESOURCE MANAGEMENT ACT 1991, IS GRANTED.

THE FULL DECISION IS SET OUT BELOW

Hearing Panel:	The Application was heard by a single Hearings Commissioner	
	Mr Barry Kaye	(Chairperson)
Council Officers:	Stephen West	Consents Manager
	Matt Hoffman	Reporting Senior Planner
	Kevin O'Sullivan	Council's Harbourmaster
	Elizabeth Ryley	Hearings Secretary (16th May only)
APPEARANCES:		
For the applicant:	Mr Rex Chapman	Applicant's legal counsel
	Mr. William (Bill) Watt	Planning Consultant
	Mr Lind	Applicant
	Mr Bob Street	Marine Scientist
	Mr Ford & Mr Hansen	Individual submitters in support who gave their evidence as part of the applicant's case

Submitters Appearing:		
	Ms Clare Lenihan Kari Beaven	Dancing Star Foundation (DSF) Legal Counsel DSF witness
	Mr Trevor Johnson	Personal submission
	M Lawson	CRA8 Management Committee Inc
	Helen Cave	Horseshoe Bay resident-Personal submission
	Ruth Shaw	Ruth Shaw representing Forest & Bird Soc.

		Ruth Shaw also presented her evidence in support of the individual submissions by Lance and Ruth Shaw By prior arrangement her evidence was presented by telephone on public speaker at the hearing venue.

Application and Property Details

Application Number:	
Site Address:	The co-ordinates of each site (in the New Zealand Transverse Mercator co-ordinate system) are as follows: **Nathans Island** 47990391229394 47993411229139 47991601229424 47992841229096 **Nugget** 47979541230057 47979591230088 47981681229947 47981741229978 **Horseshoe Bay** 47973791229574 47974641229531 47972461229353 47972821229328
Applicant's Name:	Suelen Properties Ltd
Lodgement Date:	27 March 2013
Notification Date	5 October 2013
Hearing Commencement:	15 May 2014
Hearing Adjourned	16th May 2014
Commissioners Site Visit:	14th May 2014
Hearing Closed:	9th June 2014

INTRODUCTION

1. This decision is made on behalf of Environment Southland by Independent Hearing Commissioner, Mr. Barry Kaye acting under delegated authority pursuant to the Resource Management Act 1991 (RMA).

2. The hearing related to a notified resource consent to establish three marine farms adjacent to Stewart Island for the purpose of trialling Bluff oyster cultivation.

3. Twenty three submissions were received in response to the notification, 12 opposing the proposal, 8 supporting and 3 with no specified relief.

4. The Commissioner visited the site and the surrounding locality on 14th May 2014. A boat trip was undertaken and each of the proposed sites viewed. The accurate location of each site was shown on the GPS on the vessel used thus the accuracy of the areas viewed was good. The boat inspection went as far as Bobs Point and around to the Rakiura National Park gateway (which was also viewed from the land). A trial pot was hauled up and able to be inspected. Cod pot storage areas were also visited. The site visit also included travelling by vehicle to various viewing points so that the proposed locations could be seen. The DSI' pest proof fence was also viewed from various locations.

5. The Council's section 42A report prepared by Mr Hoffman was circulated prior to the hearing and was taken as read, prior to the applicant's case being presented.

6. At the start of the hearing, an email from the Council's Harbourmaster Mr Kevin O' Sullivan was tabled which indicated that he had no issues with the proposal but if it was approved wished to include conditions requiring lights to be installed to mark the outer corners of the farm areas. It was subsequently requested by the Chair that Mr O'Sullivan be present on Day 2 of the hearing so that he could be questioned on a number of matters around navigation and safety matters.

SUMMARY OF PROPOSAL AND ACTIVITY STATUS

7. The proposal was described fully in Mr Hoffman's report and the full detail of that is not repeated here. Suffice to say that the applicant (following clarification at the hearing of duration sought) seeks consent for five (5) years to establish and operate a marine farm for the cultivation of Bluff dredge oysters, Tiostrea chilensis, in crayfish pots at three sites, situated in the area between Horseshoe Bay and Bob's Point, Stewart Island. The purpose of the proposed marine farm is to experimentally on-grow oyster spat and brood stock to test spat recruitment rates, and then, if recruitment and on-growth of spat prove to be viable, the applicant intends to operate the marine farm as a small-scale commercial operation. The trials involve testing methods of cultivation as well as the marine growing environments. The area was chosen for its relative uniformity of water depth, with water depth at all three sites being between 8.23 m and 9.75 m at mid tide. This depth was chosen to avoid the effects of most swell conditions, while being shallow enough to allow the applicant to work on the marine farm effectively.

8. The benthic environment is similar at each site, with a sandy, shelly bed. Hermit crabs and small octopus are present, as well as sea lettuce and *Macrocystis* seaweed. There are rocky outcrops nearby, which provide habitat for kelp. The presence of kelps varies seasonally, but can be extensive when conditions allow. The applicant also notes that mud is occasionally present on the benthos at the proposed sites. The mud is transitory, and may be related to easterly swell conditions. The location of the proposed marine farm is not considered by the applicant to be an especially sensitive habitat.

9. The three sites are referred to as the Nathans Island site, the Nugget site, and the Horseshoe Bay site. The area of the Nathans Island site is 3.35 hectares, and the landward boundary of this site is between 37 m and 134 m from the shore. The area of the Nugget site is 0.73 hectares. The landward boundary of the Nugget site is between 55 m and 102 m from the shore. The Horseshoe Bay site is 1.81 hectares in area, and the landward boundary is between 83 m and 130 m from the shore.

10. A boat is used to service the marine farm. When hauling out pots for servicing, the boat is not anchored to the seafloor. Each pod is then replaced in its original location using GPS. The boat is moored at Horseshoe Bay when not in use. The boat will not be moored unattended at the site.

11. The co-ordinates of each site (in the New Zealand Transverse Mercator co-ordinate system) are as follows:

Nathans Island

47990391229394
47993411229139
47991601229424
47992841229096

Nugget

47979541230057
47979591230088
47981681229947
47981741229978

Horseshoe Bay

47973791229574
47974641229531
47972461229353
47972821229328

12. As noted in Mr Hoffman's s42A report, and as was submitted by the applicant and in submitter's evidence and reflecting discussions during the course of the hearing, the reasons for which consent must be sought were said to include the following;

- Rule 15.1. 7 Marine farming in areas other than those referred to in Rules 15.1.2 - 15.1.6 is a discretionary activity. All three sites therefore require consent under this rule.

- Rule 11.2.6. 1 (a) required that consent be sought as a non complying activity for the marine farm structures associated with the Nathans Island site as the site was located outside of *"the imaginary line from Mamaku Point to Ackers Point"*. As a consequence of this rule the Nathans Island marine farm structures should be assessed as a non complying activity.

- Rule 11.2.6.2 required that consent be sought as a discretionary activity for the marine farm structures associated with the Horseshoe Bay and Nugget sites as they are not included within any of the areas where a non complying activity status applies.

- Rule 10.2.4 required that consent be sought as a discretionary activity for all three sites in relation to deposition of material on the seabed arising from the marine farm activities.

- Rule 9.1.1 provided for exclusive or preferential occupation of the CMA as a discretionary activity.

I have examined the relevant Plan provisions and note as follows.

13. At Part 1.1.1 the Introduction to the Plan states;

In some cases, an activity may produce effects that are covered by many sections in this Plan. For example, marine farming can have effects that are covered in the deposition and amenity sections. In such instances the reader will be directed to other relevant sections by horizontal cross referencing, shown in brackets below the "Explanation" with

the words "See also.". It will then be possible to find objectives, policies and rules that relate to the proposal in that section by using the vertical cross referencing.

In the case of Chapter 15 Marine Farming there are cross references below the explanation that state;

'See also Sections 3, 4, 5, 7, 9, 10.2, 11, 12, 13, 16'

Those sections cover in the respective order as listed above;

3-Values of the CMA-area specific

4-Fundamental Principles

5-General Matters-natural character, amenity, access and so on

7-Coastal Water-water quality, discharges, taking/using/damming/diversion of water

9-Occupation

10.2-Deposition

11-Structures

12-Coastal processes and protection works

13-Cruise ships

16-Surface water activities in Fiordland

14. **Use**

Marine Farming is defined in the RCP as;

Marine Farming - the activity of breeding, hatching, cultivation, rearing, or on-growing of fish, aquatic life, or seaweed for harvest; but does not include -

a any such activity undertaken pursuant to regulations made under Section 91 of the Fisheries Act 1983; or

b any such activity where fish, aquatic life, or seaweed are not within the exclusive and continuous possession or control of the holder of a marine farming permit issued under Section 67J of the Fisheries Act 1983; or

c any such activity where the fish, aquatic life, or seaweed being farmed cannot be distinguished, or be kept separate from naturally occurring fish, aquatic life, or seaweed -

and "to farm" has corresponding meaning which includes any operation in support of, or in preparation for, any marine farming.

A Marine Farm is defined in the ESRCP as follows;

Marine Farm *-*

a in relation to a leased area, all that part of the area that is being or has been developed into a farm for the farming of fish or marine vegetation; ***includes all structures and rafts used in the area in connection with the farm, and all boundary markings,*** *and all fish or marine vegetation for the time being farmed in the area by the lessee; and*

*b in relation to any licensed area, all that part of the area in which the licensee is for the time being carrying on the business of farming of fish or marine vegetation in accordance with [their] licence; **and includes all structures and rafts used** in the area in connection with the farm, and all fish or marine vegetation for the time being farmed in the area by the licensee: (Marine Farming Act 1971).*

As a Marine Farm is defined to include **all structures and boundary markings** (or rafts) and given Rule 15.1.7 requires that marine farms in the particular areas proposed by the applicant be consented as discretionary activities, the question arises as to whether the provisions of Rules 11.2.6.1-Structures [and Rules10.2.4-deposition and 9.1.1-occupation] also still apply.

15. **Structures**

The ESRCP defines structures as;

***Structure** - any building, equipment, device, or other facility made by people and which is fixed to land; and includes any raft or cable.*

Rule 11.2.6 states that;

> ***Except as provided elsewhere in the Plan**, the erection of temporary or permanent structures in the coastal marine area:*
>
> *1. is a non-complying activity in:*
>
> *a the internal waters and open coast of Fiordland;*
>
> *b the internal waters and open coast of Stewart Island, excluding Big Glory Bay and all that part of the coastal marine area located between Stewart Island and the imaginary line from Mamaku Point to Ackers Point, thence to Ringaringa Point, and finally to Cow and Calf Point.*
>
> *2. is a discretionary activity in those parts of the coastal marine area not referred to in (1)(a) or (b) above.*

The explanation to the above rule states;

Explanation - Because it is difficult to anticipate the size, nature, scale or detail of many potential structures in the coastal marine area, there needs to be a process where the appropriateness and detail of each is assessed against the policies in this Plan on a case-by-case basis. Section 12(1)(b) of the Resource Management Act 1991 states that:

No person may, in the coastal marine area, -

*Erect, reconstruct, place, alter, extend remove, or demolish any structure or any part of a structure that is fixed in, on, under, or over any foreshore or seabed, **... unless expressly allowed by a rule in a regional coastal plan** and in any relevant proposed regional coastal plan **or a resource consent.** However, there are some instances where the effects of certain structures are reasonably predictable. Such structures include whitebait stands in certain areas, lights, navigation aids less than or equal to two metres in height, temporary buoys within Awarua Bay and Bluff Harbour, and mainais in parts of New River Estuary, Jacobs River Estuary and which existed prior to 1 July 1995, which are provided for elsewhere in this Plan as controlled or permitted activities.*

Fiordland and Stewart Island contain amenity and natural character values which are very high due to the pristine nature of the areas. As significant development has occurred in Big Glory Bay and the Oban area, the pristine nature of these two areas have already been compromised and the effects of development in these two areas would not need to be considered under as stringent tests as other areas on Stewart Island or in Fiordland.

See also Sections 4.2, 4.4, 4.5, 5.3, 11.7, 11.8 and 12

16. The RCP then includes Rule 15.1.5 which makes marine farming in the areas specified in the rule a **prohibited activity**.

Those areas include;

- *Port Pegasus;*
- *Lords River;*
- *Paterson Inlet, except Big Glory Bay and the Salmon Farming Refuge Zone;*
- *Port William from Peters Point to the eastern most extremity of the headland enclosing the northern end of Port William*

Similarly, Rules 15.1.2 through to 15.1.4 make marine farming in Fiordland, any Marine Reserve and Awarua Bay a prohibited activity, while Rule 15.1.6 makes marine farming in the Bluff Port Zone a non-complying activity.

The Plan provisions thus establish a clear hierarchy in relation to the consenting status for marine farming.

In the introduction to Chapter 15 Marine Farming of the RCP there is a useful introductory statement that I set out below.

"Marine farms in the Southland region are located at Bluff Harbour (seaweed) and Big Glory Bay (salmon and mussels). The seaweed farm is currently not operating. Some oyster farming is also being undertaken in both Bluff Harbour and Big Glory Bay.

In 1983, the Minister of Fisheries determined that the coastal waters surrounding Stewart Island, except for Big Glory Bay, were unavailable for marine farm leasing or licensing. This determination had the effect that the transitional Regional Coastal Plan deemed marine farming to be a prohibited activity within the areas to which the determination applies.

Marine farming is an important issue in the Southland region, with many people strongly opposed to it in areas of high natural character, such as Fiordland and parts of Stewart Island. Given the strength of public feeling, it is considered that for some areas the public require more certainty about the way in which marine farming will be managed in the future. It is preferable for that certainty to be provided through this Plan rather than a series of resource consent applications and perhaps Environmental Court hearings. ***Consequently, in some areas marine farming is a prohibited activity or a non-complying activity rather than discretionary.***

Therefore, in some areas no application for marine farming can be made and in others, while applications can be made and considered on a case-by-case basis, those applications face a more stringent environmental test. This is preferable to marine farming being treated as a discretionary activity everywhere, the outcome depending on the values of the area within which the application is made. To a large extent, those values and marine farming techniques and subsequent effects are already known and there is sufficient uncertainty about marine farming aspirations to make marine farming a prohibited activity in some areas for the life of this Plan. In other areas, where the values are highly regarded and there is a known interest for marine farming, it is appropriate that innovative marine farming practices, that adequately manage any adverse effects on the environment, be provided for.

The contribution that marine farming makes to the regional and national economy is recognised, and there is potential for this to increase in the future. As an activity, however, it can give rise to adverse effects. These include:

- *exclusive occupation of large areas*
- *interference with navigation*

- *reduced amenity values*
- *visual impacts*
- *build up of benthic sediments*
- *discharge of contaminants*
- *interference with heritage values*
- *water quality impacts*
- *loss of natural character*
- *loss of habitats of significant indigenous fauna and significant indigenous vegetation*

Marine farms can also occupy different types of areas, such as tidal foreshore (in the case of some shellfish species) or permanent water. Those types of marine farming occupying intertidal areas are more visible, and therefore more likely to have impacts upon natural character .

Marine farms generally require very high water quality, sheltered waters, cool water temperatures and appropriate water depths. For these reasons, the waters of Southland are seen as suitable for marine farming purposes. Where farms are established, there is a need to ensure that non-marine farming activities do not have adverse effects on the water quality. It is also important that discharges from one marine farm are not allowed to affect the ability of other sites to operate. Where marine farms are concentrated, such as in Big Glory Bay and below the Tiwai causeway in Bluff Harbour (Maps 12, 12a of Appendix 3), the cumulative adverse effects of marine farms will require assessment.

Problems have arisen in the past with abandoned marine farm sites. Structures and equipment have been left and difficulties have arisen in getting them removed. As with other structures in the coastal marine area, marine farming structures must be removedat the end of any farming activities.

Development of marine farms on land is now beginning to occur, with all structures being above mean high water springs. Where this occurs, the territorial authorities also have a role in considering the activity. The Regional Council, however, will still need to consider any structures in the coastal marine area, any taking of water from the coastal marine area, and any coastal discharges that may be required.

Species of Gracilaria seaweeds can proliferate in eutrophic estuaries, as is evidenced in the Pourakino Arm of the Jacobs River Estuary. It is also likely that in the future Undaria, an introduced seaweed species, will grow in Southland's coastal marine area as is evidenced by its discovery in 1997 in Big Glory Bay and Bluff Harbour. The Department of Conservation has responded with an eradication programme with follow-up monitoring.

The Resource Management Act regulates the erection of structures including those required for commercial seaweed operations while the Fisheries Act controls harvesting of seaweed.

NB: Water quality aspects of marine farming are dealt with in Section 7.3.8.1.

See also Section 10.2"

While the Nathans Island site is in "*the internal waters and open coast of Stewart Island, excluding Big Glory Bay and all that part of the coastal marine area located between Stewart Island and the imaginary line from Mamaku Point to Ackers Point*" Rule 11.2.6 relates to temporary or permanent structures '***except as provided elsewhere in the Plan***".

Elsewhere in the Plan, Rule 15.1.7 clearly provides for a Marine Farm as a discretionary activity for all three of the proposed sites and by definition any Marine Farm includes structures, boundary

markings and rafts. The introduction to Chapter 15 makes it clear that "***in some areas marine farming is a prohibited activity or a non-complying activity rather than discretionary".***

17. The Plan clearly has set out through the rules those locations where marine farming is a prohibited or a non-complying activity.

The application sites do not fall into any of those identified locations.

In the RCP Chapter 11 Structures it is stated in the introductory text that;

Within the coastal marine area, some structures are necessary to enable people and communities to provide for their social, economic and cultural well-being. For example, structures like boat ramps, jetties and wharves, navigation aids, and slipways, can all provide community benefit and enhance the enjoyment and general use of the coastal environment.

Coastal structures in many ways define the built character of the coastal environment, which, while not natural, may have a charm in itself, as many a photograph or painting will testify. However, structures can also give rise to adverse effects such as reduced visual amenity, loss of public access, loss of habitat, and reduced natural character. The natural character of an area, which in itself may not be easily definable, is a very important background factor, regardless of the activity being undertaken. The presence of structures in the coastal marine area can also restrict the use of an area by other lawful activities and limit the availability of that area for potential activities that may have a greater operational need for a coastal locality.

Structures are defined by the Resource Management Act as "any building, equipment, device, or other facility made by people and which is fixed to land; and includes any raft." "Land" includes the seabed and "raft" is further defined to include any moored floating platforms that provide buoyancy support.

***The definition of structures includes marine farming structures**, but does not include fishing equipment used to harvest populations of aquatic organisms covered by the Fisheries Act.*

Within the coastal marine area of Southland, the most common structures are:

i moorings

ii whitebait stands

iii navigation aids

iv seawalls

v jetties and wharves

vi boatsheds

vii launching ramps

viii pipelines, drains (including tidal flap gates) and cables in, on or over the seabed or foreshore

ix marine farms

x erosion protection works

xi power and telephone poles/ pylons and lines

xii fences

xiii floating fishing bases including helicopter pads

xiv moorings

xv bridges

As already noted, the definition of structures includes marine farming structures.

Rule 15.1.7 clearly establishes that marine farms which include structures and all boundary markings are discretionary activities. Boundary markings [which are not defined in the Plan] can reasonably be taken to include buoys and navigation lights in my opinion.

Noting that the Regional Coastal Plan sets out a clear consenting hierarchy for Marine Farms and that the definition of a marine farm includes any associated structures it would be inconsistent in my opinion (and contrary to the explicit activity hierarchy for marine farms set out in the Plan) to interpret Rule 15.1.7 such that for any marine farm, consent is also needed for Structures as a separate activity as that would take away from what appears to be a carefully considered integrated regulatory framework for marine farming in the Plan. That may not be the case for deposition or occupation but as those aspects are discretionary activities for the proposal there is little material significance to that aspect of my interpretation.

18. Deposition

In relation to Rule 10.2.4 and deposition I note that the ESRCP at Rule 10.2 Deposition states in the introductory text that;

"Deposition can result from the accumulation of material on the seabed or foreshore of the coastal marine area. This is a process that can occur naturally over a period of time, but the types of deposition this plan is concerned with are those resulting from human activities. Deposition can occur deliberately, for example where spoil from excavation or dredging is deposited on the foreshore or on the seabed. It can also occur as a result of a discharge that occurs in the coastal marine area. Deposition occurs when the material settles on the foreshore or seabed and is unable to be moved by currents, wave action or other natural forces such as wind. Deposition can arise out of the following:

i residual material from activities taking place within the coastal marine area can end up on the seabed. For example, activities such as fin-fish marine farming can result in the deposition of uneaten feed and fish waste. ***Other marine farming activities can result in the deposition of the farmed species and waste products such as pseudofaeces.*** *The extent of any deposition is dependent on currents and concentration of the farmed species. Inorganic material on the seabed, including shell, has largely physical effects. Organic material can affect benthic life directly, and also give rise to secondary effects, such as production and release of gases and other chemicals as it decomposes. Such faecal material can alter the ecosystem within which the farming activity is located;*

ii structures erected within the coastal marine area, for example, reclamations, hazard protection works and groynes, can alter coastal processes, resulting in erosion in some areas and deposition in others. Deposition usually occurs within areas where water velocity or wave action is reduced;

iii disposal of material that has been either dredged or otherwise extracted from the coastal marine area, or from excavation on land;

iv remedying or mitigating the erosive effects of coastal processes, for example through beach renourishment. Where renourishment is being carried out, care is required to ensure that the material is of a type that is compatible with the area in which it is being deposited, and that adverse effects will not arise. For example, in high energy situations fine material will be easily washed away, and this could result in unwanted deposition in others areas. Similarly, the use of material that is too coarse could result in a steepening of a beach profile and loss of sand;

v inappropriate management practices on adjoining land. For example, the clearing of vegetation, or the carrying out of earthworks near to the coast, could result in material washing into the coastal marine area, discolouring water, and aggregating in adjoining coastal areas.

While reclamation and the construction of coastal protection works involve the deposition of material on the seabed, these activities are principally addressed in Section 10.4 (Reclamation) and Section 12.2 (Coastal Protection Works).

Under the provisions of Section 12(1)(d) of the Resource Management Act, no person may deposit in, on, or under any foreshore or seabed any substance in a manner that has, or is likely to have, an adverse effect on the foreshore or seabed unless ***expressly allowed by a rule in this Plan*** *or* ***a resource consent****.*

See also Sections 7.3 and 15".

19. **Rule 10.2.4** requires that *'Except for materials described in Rules 10.2.1, 10.2.2, 10.2.6, 10.2.7 and 7.3.5.1, deposition of material on the seabed, from activities occurring in the coastal marine area, is a discretionary activity'.*

The explanation to the rule states;

"Explanation - Deposition may result in any of the following:

- *accelerated sedimentation;*
- *smothering of indigenous vegetation and fauna;*
- *an alteration to substrate type due to accumulation of deposited material;*
- *chemical reactions between the deposited material and the receiving environment that result in biotransformation and/or chemical transformation producing more noxious residuals;*
- *non-compliance with water quality classification standards outlined in Rule 7.2.2.1 and, where applicable, Rule 7.2.2.2;*
- *an increase in volume of decomposition gases such as H2S, CH4, NH3;*
- *an alteration in biodiversity;*
- *loss of existing habitat;*
- *an alteration in water circulation patterns.*

While many of the above effects may occur naturally, there is a need to address human acceleration of these effects. This Rule provides a process for considering the effects of human initiated deposition activity on the seabed. Deposition can have major impacts on the biota within the coastal marine environment. It can cause changes physically and chemically leading to biological change. Organisms that have adapted to specific habitats cannot adjust to the sudden changes resulting from deposition. This may lead to the displacement of some species and an alteration of community composition.

There is a specific concern regarding the effects of deposition on benthic ecosystems. There is also concern regarding effects of chemical reactions between the chemical components of the material being deposited and the chemical components and the biota of the receiving environment. The disposal of contaminated material, obtained from dredging or excavations within the coastal marine area, into another part of the coastal marine area needs to consider the effects of disposal on the receiving environment. This includes the effects on marine life and coastal processes. Contaminated material can, for example, come from material dredged near wharves or from the mouths of watercourses that have principally urban catchments. It may be inappropriate to dispose of contaminated material removed from one part of the coastal marine environment into another part.

Where one area is deemed appropriate for receiving contaminated material, another seemingly similar site, may not be. Alternatives need to be considered, including land-based facilities.

See also Sections 5.4, 7.2, 7.3, 10.1 and 12".

Based on the above provisions, consent is also required under Rule 10.2.4 as a discretionary activity for all three sites in relation to deposition of material on the seabed.

20. **Occupation**

In relation to occupation of the CMA I note that Rule 9.1.1 provides for exclusive or preferential occupation of the CMA as a discretionary activity (see below).

*"**Except as provided elsewhere in the Plan**, exclusive or preferential occupation of Crown land in the coastal marine area is a discretionary activity.*

Explanation – Exclusive or preferential occupation alienates the public right to use the coastal marine area. Use and development within the coastal marine area that seeks exclusive or preferential occupation will be required to demonstrate why exclusivity is required, and why that use and development is incompatible with other uses and development that may already be established.

See also Sections 4.4, 5.3, 5.4, 5.5, 14.1 and 14.2"

The Plan definitions state that;

Exclusive Occupation - where no one is allowed access to an area other than the person with the right to occupy.

And

Preferential Occupation - allows the use of an area by the general public except in circumstances where the person with the occupation right wants to use the area.

The applicant has not sought exclusive occupation rather consent is sought for preferential occupation.

I note that while the marine farm proposal is provided for as a discretionary activity under Rule 15.1.7 the definition of marine farming does not specifically include (or exclude) reference to occupation or deposition thus while that activity in all practicality must include those elements it is not clear whether Rule 15.1.7 is mutually inclusive of those aspects (notwithstanding the explanation at Section 1.1.1 of the ESRCP which is not a rule).

My interpretation of the rules based on the above analysis is that all three marine farm sites fall to be considered as a discretionary activity under Rule 15.1.7. That listed activity relates to a use which inevitably includes occupation of the CMA as well as deposition of waste on the seafloor. The Plan clearly sets out a hierarchy where marine farms are prohibited, non-complying or discretionary activities. That approach allows for all aspects of any marine farm to be considered in their entirety.

Rule 11.2.6 clearly states;

> ***"Except as provided elsewhere in the Plan**, the erection of temporary or permanent structures in the coastal marine area;……"*

The Cross Referencing explanation at 1.3.1 set out in the Introduction to the RCP which I refer to in my **para 13** above does not alter my views on the activity status matter noting that 1.3.1 is not a rule and that an examination of the proposal as a discretionary activity (involving the necessary

s104 consideration of all relevant objectives and policies as well as effects) addresses all matters set out in those other *effects related chapter* s of the Plan.

Para 1.3.1 of the RCP also states:

Where an activity is not specifically identified, the reader will need to have regard to several sections. For example, anyone wishing to erect a drilling platform in the coastal marine area would need to consider several sections including but not restricted to: structures, seabed and foreshore, coastal processes and protection works, navigation and safety and occupation.

The rationale for including both activity-oriented and effects-based sections is to provide greater certainty for plan users. ***Also, it is often necessary to deal with an activity to address its adverse effects.***

The last sentence above reinforces that taking an activity based approach will address any adverse effects in relation to marine farm proposals.

For the above reasons I consider that the activity based provisions for Marine Farms in Chapter 15 should prevail and that an assessment as a discretionary activity overall enables consideration of all effects relating to the proposal.

While there is no specific reference in the definition of a marine farm to deposition or occupation (but there is for structures) it is difficult to contemplate that any marine farm will not involve some extent of occupation, whether preferential or exclusive, and similarly, not involve some degree or form of deposition. As those aspects are discretionary activities under Rule 10.2.4 and 9.1.1 whether they need a separate consent or not does not alter the overall activity status.

In the event that I am wrong on the above discretionary consenting status analysis, then the proposal would fall to be considered as a non complying activity for the Nathans Island site (due to Rule 11.2.6 pertaining to structures) and as a discretionary activity for the Horseshoe Bay and the Nugget sites.

If that possibility eventuates and for the benefit of all parties to the proposal, I have also considered section 104D of the Act in relation to the Nathans Island site and reached the conclusion based on the evidence, that the proposal passes at least one of the gateway tests of s104D, being the objectives and policies limb of the test and therefore falls to be considered in association with the other two sites under the provisions of s104 and 104B. On that basis, the assessment of the evidence and my subsequent conclusion that the proposal can be granted consent remains valid.

RELEVANT STATUTORY PROVISIONS CONSIDERED

21. Subject to Part 2 of the RMA, when considering an application for resource consent and any submissions received a council must, in accordance with s104(1) of the RMA have regard to:

- any actual and potential effects on the environment of allowing the activity;
- any relevant provisions of a NES, other regulations, national policy statement, a regional policy statement or proposed regional policy statement; a plan or proposed plan; and
- any other matter a council considers relevant and reasonably necessary to determine the application.

Section 104(2) allows any effects that may arise from permitted activities set out in a NES or a plan to be excluded from the assessment of effects related to the resource consent. This is known as the permitted baseline test. The 'baseline' constitutes the existing environment (excluding existing use rights) against which a proposed activity's degree of adverse effect is assessed.

Generally it is only the adverse effects over and above those forming the baseline that are relevant when considering whether the effects are minor. It is at the Council's discretion whether to apply the assessment of the permitted baseline to any proposal.

Essentially, the consent authority may disregard an adverse effect of any activity on the environment if a NES or an operative plan (or an operative rule in a proposed plan) permits an activity with that effect.

Under s104B a consent authority may grant or refuse consent for a discretionary activity or non complying activity and, if it grants the application, may impose conditions under s108 of the RMA.

Section 104D sets out the 'threshold test' for non-complying activities. A consent authority may only grant consent to a non complying activity if it is satisfied that the adverse effects on the environment are minor, or the activity will not be contrary to the objectives and policies of the relevant plan or proposed plan. If either of the limbs of the test has been passed then the application is able to be considered for approval subject to consideration under s104 of the RMA.

Section 106 sets out the circumstances under which a consent authority may grant or refuse to grant a subdivision consent.

Section 108 provides for consent to be granted subject to conditions and sets out the kind of conditions that may be imposed.

All considerations are subject to Part 2 of the RMA, which sets out the purpose and principles that guide this legislation. This means the matters in Part 2 prevail over other provisions of the RMA or provisions in planning instruments (e.g. regional plans) in the event of a conflict. S5 states the purpose of the RMA and sections 6, 7 and 8 are principles intended to provide additional guidance as to the way in which the purpose is to be achieved.

The application of s5 involves an overall broad judgement of whether a proposal will promote the sustainable management of natural and physical resources. The RMA's use of the terms "use, development and protection" are a general indication that all resources are to be managed in a sustainable way, or at a rate which enables people and communities to provide for their social, economic, and cultural wellbeing, and for their health and safety, while sustaining the potential of natural and physical resources to meet the reasonably foreseeable needs of future generations, safeguarding the life-supporting capacity of air, water, soil and ecosystems, and avoiding, remedying and mitigating any adverse effects of activities on the environment. The enabling and management functions found in s5(2) should be considered of equal importance and taken as a whole.

Sections 6, 7 and 8 of the RMA provide further context and guidance to the constraints found in s5(2)(a),(b) and (c). The commencing words to these sections differ, thereby laying down the relative weight to be given to each section.

Section 6 of the RMA sets out the matters of national importance which need to be recognised and provided for and includes among other things and in no order of priority, the protection of outstanding natural features and landscapes, the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna, and the protection of historic heritage. Relevant matters are considered in the evaluation section of this report.

Section 7 of the RMA requires the consent authority to give particular regard to those matters listed in the section. Section 7 matters are not expressly ranked in order of priority. Therefore, all aspects of this section are to be considered equally. Relevant matters are considered in the evaluation section of this report.

Section 8 of the RMA requires the consent authority to take into account the principles of the Treaty of Waitangi. This section of the RMA recognises the relationship of Tangata Whenua with natural and physical resources and encourages active participation and consultation with Tangata Whenua. Any relevant matters are considered in the evaluation section of this report.

RELEVANT NATIONAL ENVIRONMENTAL STANDARDS, REGULATIONS, POLICY STATEMENTS AND PLAN PROVISIONS CONSIDERED

22. In accordance with section 104(1)(b)(i)-(iv) of the RMA, any decision made must have had regard to the relevant statutory provisions which were identified in detail by Mr Hoffman in his s42A report and also set out in the evidence of Mr Watt and the legal submissions of Ms Lenihan and Mr Chapman.

In summary those included the NZCPS 2010, the operative and proposed Regional Policy Statements, the Operative Environment Southland Regional Coastal Plan (ESRCP hereafter) and the DOC's Conservation Management Strategy for Stewart Island /Rakiura (noting that no evidence was provided by any party on that document even though Mr Hoffman referenced it in his s42A report). I note that the ESRCP, except Chapter 15 (Marine Farming), became operative on 12 April 2007. The provisions in Chapter 15 (Marine Farming) were approved by Council on 10 September 2008, with Minister of Conservation providing approval on 14 February 2013. The Coastal Plan became fully operative on 16 March 2013.

I do not intend to repeat the content of those provisions but note that in the findings on the key issues I have identified and discussed those matters that are relevant.

I note that the ESRCP sets out at Section 18 'Information to be submitted with an application for a resource consent (coastal permit) **and assessment matters'**.

Examining those provisions I note they state;

The information to accompany an application "shall be in such detail as corresponds with the scale and significance of the actual or potential effects that the activity may have on the environment" [Section 88(6)(a)]. In other words, if the environmental effects are likely to be minor, either because the activity is of a minor nature or involves little disruption, then less detail will be required.

And

In many instances, our knowledge of the ability of the coastal marine area to absorb uses and developments is limited. There will be limits on the extent and intensity of use and development that can be accommodated within parts of the coastal marine area, either because of the direct effects of some activities, or the cumulative effects of a number of identical or non-related uses, but in most instances it cannot be determined what those limits are. This does not mean that development and use should be limited altogether within the coastal marine area, but that:

a activities located within the coastal marine area should be restricted to those that have a functional necessity or for which there is no practicable alternative location;

b action should be taken to avoid, remedy or mitigate the adverse effects of those developments and uses; and

c monitoring of both individual and collective developments and uses will be required to ensure that if unforeseen adverse effects arise, they are remedied or mitigated.

A precautionary approach is one that adopts prudent foresight, and involves the making of judgements based on existing knowledge and understanding as to whether use and development of parts of the coastal marine area are appropriate. Where the actual and potential effects of an activity are known, the precautionary principle does not apply.

Where the effects are unknown or little understood the principle applies and the Council is required to avoid, remedy or mitigate any potential adverse effects. This differs from a cautious approach, where in the absence of full information, use and development is restricted. However, if the effects would be permanent, irreversible, or of a large scale, a cautious approach may be appropriate.

At 18.3 the Plan sets out the Fourth Schedule to the Act as guidance on what must be in an assessment of effects. At 18.4 a list of general information required with an application is set out.

At 18.5 in respect of Structures the Plan states the following matters are relevant;

18.5.1 Placement or Modification

IN ADDITION TO THE GENERAL INFORMATION REQUIRED BY SECTION 18.4, where the proposed activity involves the:

a erection or placement; or

b extension, alteration, replacement or reconstruction of a structure;

then the following information shall also be supplied:

1 a description of the structures' dimensions, the number of structures involved and the colour of the structure;

2 whether or not the structure (proposed for modification) or any proposed site for a new structure is registered as an archaeological site in the coastal marine area (refer to Appendix 8);

3 a description of the proposed method of construction including:

a the material to be used to erect or place, or extend, alter, replace or reconstruct the structure; and

b the equipment to be used; and

c a construction plan; and

d anchoring and tethering systems; and

e design life of structures;

4 an assessment of the visual effect of the erection or placement, or extension, alteration, replacement or reconstruction of the structure on the existing character of the area;

5 an assessment of the likely effect of the erection or placement, or extension, alteration, replacement or reconstruction of the structure on any natural physical coastal processes operating in the area;

6 an assessment of the need for a permanent structure rather than a temporary one;

7 a description of any hazardous substances, chemicals or other potential contaminants to be used or stored on or within the structure.

Most of that information does not appear to be relevant to a marine farm of the type proposed.

At 18.6.4 a list of matters relevant to deposition are set out.

At 18.13 a list in relation to occupation as follows;

IN ADDITION TO THE GENERAL INFORMATION REQUIRED BY

'SECTION 18.4*, where the proposed activity involves occupation of any part of the coastal marine area, the following additional information shall be provided:*

- the effect of the occupation on navigation safety;
- the method proposed for storage and disposal of human sewage;
- the method proposed for storage and disposal of rubbish;
- alternatives to occupation of the proposed site in the coastal marine area, *including adjacent land.*

The applicant may also need to refer to the information requirements of Section 18.5 – Structures'.

No specific details are set out in Section 18 in relation to marine farms. While the assessments by the applicant and in the s42A report do not specifically refer to that part of the Plan provisions they do traverse most of the matters set out therein.

Beyond those considerations the assessment of proposals is largely assessed against objectives and policies.

I note also that ESRCP Chapter 3 Value of the Coastal Marine Area states the following as principal issues.

3.14.11 Principal Issues

1 Preservation of natural character, heritage sites and amenity values.

2 Preservation of water quality.

3 Effects of increasing tourism.

4 Potential impact of increased marine farming.

5 Lack of local non-marine sources of sand and shingle.

In addition in respect of s104 (1)(c) Mr Chapman brought to my attention two other documents that in his opinion were relevant as 'other matters'.

Those were the Southland Aquaculture Strategy and the Aquaculture Zoning in the Southland Region Project.

23. **The Aquaculture Zoning in the Southland Region Project** document notes that "*the operative Regional Coastal Plan for Southland prohibits aquaculture in certain areas of Southland. Other parts of the region can be considered through the resource consent process on a "first come first served" basis. This framework for aquaculture was developed in the mid 1990s and was a robust approach at that time. However, it does not take into account a strategic planning approach for aquaculture in the Southland region; such as assessing what aquaculture could be possible where, rather it leaves this to be determined on an ad-hoc basis through the resource consent process.*

The Project

To ensure aquaculture development in the region does not continue in an ad-hoc practice, a strategic planning approach is needed for the Southland region. The project provides overall strategic planning guidance for aquaculture in the Southland region by identifying areas where aquaculture may be constrained by the environment and other unique features or habitats (whales or dolphins).

A Ministry for Primary Industries 'Aquaculture Planning Fund' grant has provided 50% of the costs for the first two phases of the project that relate to identifying potential locations for aquaculture development.

Intended Outcomes

The project will facilitate the sustainable growth and diversification of aquaculture in the Southland region within a framework focused on minimising environmental risk. The main benefit of this project is that it will provide clear guidance on aquaculture development to the community. Being able to show what aquaculture could be possible where will assist members of the community to better understand why a potential location has been identified. This type of information may help resolve conflicts regarding allocation of space, which often contribute significantly to opposition of aquaculture activities taking place in the coastal marine area. It may also promote effective communication among stakeholders, with all stakeholders utilising the same strategic direction to support their decision-making minimising the risk of conflicting information which often leads to conflict and expensive processes.

In addition to the benefit of increasing public knowledge, the project will also be beneficial for:

1. *updating the Regional Coastal Plan for Southland, where appropriate;*
2. *giving guidance for consent processing and aquaculture sector on where aquaculture investment should be progressed to support growth;*
3. *giving guidance for aquaculture sector and research providers on what possible new aquaculture species should be progressed to support growth; and*
4. *giving guidance for aquaculture sector and research providers on priority research matters, which will also contribute to research and field trials being completed in a timely manner.*

The project and draft documents associated with it have no statutory basis to the extent that they can influence any decision on the application. It does however reinforce that the current regulatory regime may well be due for review and that the current RCP provisions enable a discretionary approach to any proposed marine farm outside of the specified areas where marine farming is either a prohibited or non complying activity under the RCP rules.

"*the operative Regional Coastal Plan for Southland prohibits aquaculture in certain areas of Southland. Other parts of the region can be considered through the resource consent process on a "first come first served" basis. This framework for aquaculture was developed in the mid 1990s and was a robust approach at that time. However, it*

does not take into account a strategic planning approach for aquaculture in the Southland region; such as assessing what aquaculture could be possible where, rather it leaves this to be determined on an ad-hoc basis through the resource consent process".

24. In regards to the **Southland Aquaculture Strategy** (which is a joint venture between Environment Southland and Venture Southland) I note that that its purpose is to;

"provide all parties with an interest in aquaculture development with guidance on potential opportunities and risks, and to identify a set of practical actions to achieve the following four outcomes for aquaculture in Southland:

1. Optimal use of existing coastal space

2. Efficient access to new coastal space

3. Commercially successful development of new species, technology and products; and

4. Infrastructure and services that make Southland a desirable location for aquaculture".

It notes that;

"However, investment in aquaculture is not straightforward – potential developers must contend with extensive consultation, regulation requirements[1] and spatial constraints, the rugged and often challenging southern environment and climate, and the needs and aspirations of myriad others who use and value our marine resources. Up-front costs can be high and returns uncertain.

[1] The Regional Coastal Plan adopts a flexible approach to aquaculture development in the Coastal Marine Area "

The document sets out a number of outcomes and strategies that are desired in relation to aquaculture. At Appendix 1 the document sets out a summary and analysis of the existing regulatory framework for aquaculture in Southland.

Usefully, given the lack of any other information provided at the hearing, the document notes that;

"7.1 Stewart Island/Rakiura Conservation Management Strategy

Stewart Island has its own CMS which sets out DOC's management approach for the period 2011-2021. The CMS recognises that marine farming provides "a leverage point for environmental protection due to its requirement for clean water and the threat posed by introduced organisms". However, it also notes that the national and international significance of some areas of Stewart Island means that any structure or development is likely to detract from important natural values. It identifies Port Pegasus and Paterson Inlet (excluding Big Glory Bay) as two particularly important areas which contain significant landscape and ecological values, are relatively large and free from structures, and border largely unmodified terrestrial landscapes.

According to the CMS, DOC will advocate that inlets within the Stewart Island/Rakiura CMS area including Paterson Inlet (excluding Big Glory Bay), Port William, Port Adventure and Port Pegasus remain free of marine farming structures and marine farming activities. The Department will advocate for a precautionary approach for proposals to introduce new species for marine and freshwater farming".

While the Strategy provides a number of useful directions in relation to the regulatory regime for aquaculture being more focussed and site specific it does not provide any usable information or direction beyond that already provided for under the existing statutory framework relevant to the proposal.

SUMMARY OF THE EVIDENCE HEARD

25. The evidence presented at the hearing responded to the application and the issues and concerns identified in the section 42A report. The evidence is responded to within the Findings on the Principal Issues in Contention, set out below.

On behalf of the Council

26. Mr M Hoffman, the Council's reporting Senior Planner, prepared a comprehensive section 42A report in which he recommended that the Nathans Island site be declined but made no particular recommendation on the Horseshoe Bay or Nugget sites. That report was taken as read for the purposes of the hearing.

27. Mr Hoffman's conclusion and recommendations stated;

> *"The effects of the proposal may be more than minor.*
>
> *Overall, marine farming in this location is believed to be consistent with the objectives and policies of the Regional Coastal Plan, although there are aspects of the operation (and, arguably, any marine farming operation) that are not consistent with these provisions. Of particular concern are the effects on other users of the area, the appropriateness of the structures to be used, and the biosecurity risk posed by the proposal, particularly in terms of pest organisms and rodent incursions. Additionally, the applicant has provided little comment on the level of deposition of material on the seabed by the farmed species.*
>
> *While the landscape around the operation has a high degree of natural character, marine farming activities generally have a low visual profile and Horseshoe Bay, at least, has a history of human habitation and utilisation. It occupies a small proportion of the total Stewart Island marine environment.*
>
> *Marine farming requires water of a high quality where the risk factors for contamination, particularly by bacteria, are very low. If it is to operate successfully, it will be around the Stewart Island/Rakiura coastline, although care needs to be taken with the siting of marine farms.*
>
> *Marine farming activities do have an impact and monitoring is essential to determine the extent and significance of them.*
>
> *I recommend that resource consent for the Nathans Island's site described in the application be declined in accordance with Section 104D of the Resource Management Act 1991.*
>
> *I cannot confirm that approval of the Horseshoe Bay and Nugget sites described in the application will have a less than minor adverse effect on the environment. However, these sites are not contrary to the objectives, policies and rules of the Regional Coastal Plan. Therefore, I make no formal recommendation with regard to these sites in advance of the hearing".*

28. The only other Council witness appearing was Mr K O'Sullivan, the Harbourmaster.

Mr Stephen West, the Councils Consents Manager, was in attendance for the duration of the hearing and also assisted Mr Hoffman with answers to questions from the Chair as well as helping with the Council's response on the EDS vs King Salmon decision as requested by the Chair.

On Behalf of the Applicant on 15 May

Legal Submissions

29. The applicant's legal counsel, Mr Rex Chapman provided opening submissions. It was noted that the applicant's evidence had been pre-circulated.

The key points he made are summarised as follows.

The application is for a very small scale 'experimental' marine farm designed to prove the viability of the collection and on-growing of oyster spat. The scale of the proposal is a relevant matter. Some 60 pots each marked by a single buoy will be placed on the seabed over the 3 sites at a density of around 1 pot per 983m2 of water area.

Mr Chapman confirmed the applicant's interpretation of the Plan rules to mean that the Nathan's Island site was a non complying activity while the other two sites (Nugget and Horseshoe) were discretionary activities.

In his submissions Mr Chapman summarised the actual and potential effects of the proposal to include visual effects, water quality, effects on the seafloor, effects on marine life, effects on access to the CMA and navigation, effects on natural character and positive effects. Those matters were addressed by the applicant's witnesses and/or in his submissions.

Mr Chapman also referred to the Westpac Mussel Distributors Limited decision (Decision No 2014, NZ EnvC 092) and provided a copy of that decision which he noted was albeit in relation to a large scale mussel farm but enshrined considerations directly relevant to the applicants proposal.

He also referenced the Council's s42A report and the identification of the relevant statutory instruments therein relevant to the proposal, which he concurred with.

He also brought my attention to two other non statutory documents (Part 2 Other Matters) which he submitted were relevant. Those were the Southland Aquaculture Strategy and work carried out for Environment Southland in relation to the Aquaculture Zoning in the Southland Region project.

In respect of the Westpac decision Mr Chapman noted that consideration needed to be given to determining the weighting and/or balance between the range of relevant statutory documents.

Mr Chapman also submitted in reference to the s42A report at page 44 that where the reporting planner Mr Hoffman noted that the proposal is 'not necessarily directly contrary to this specific wording of the policy of the coastal plan' that the proposal passed the s014D threshold test as the proposal is not contrary to the Policy and referenced the NZ Rail Ltd vs Marlborough District Council case in that regard in respect of the interpretation of the word contrary.

Mr Chapman then went on the discuss Mr Hoffman's s42A report in some detail. He submitted that while Mr Hoffman noted at page 16 of his report that the adverse effects of the proposal 'may be more than minor' it was not clear how that conclusion was reached.

30. The visual effects of the buoys were likely to be minor, no navigation issues arose based on the Council Harbourmasters advice (which was reaffirmed by the Harbourmaster on the second day of the hearing when he appeared), no real risk to water quality had been identified, no noise would be generated by the farm itself,. He also noted that while the risk of entanglement for birds and marine animals was raised there was no evidence to support that suck risk was significant. The possibility of a marine farm being a vector for the incursion of pest animals was acknowledged but Mr Chapman submitted that the recommended conditions (set out in the s42A report) mitigated such risks.

In respect of Mr Hoffman's s42A report at page 27 where it was stated that the proposal may not be consistent with the natural character of the land adjoining Nathans Island and the Nugget sites, Mr Chapman submitted that there was no basis upon which to reach that conclusion. Again he referenced the Westpac Mussel case to support his position.

He also submitted that the s42A report had not identified (at para 34) what aspects of the proposal 'offended' natural character.

Mr Chapman also submitted that in any event, the proposal was effectively a temporary activity as consent was only sought for 5 years.

In noting that Mr Hoffman recommended that the Nathans Island site be refused consent and that no basis for that recommendation was outlined in the s42A report Mr Chapman submitted that while that recommendation was presumably because neither of the s104D tests was met, there was no evidence supporting that conclusion and the Nathans Island site could not be regarded as contrary to the objectives and policies and no effects that were greater than minor had been identified.

Mr Chapman submitted that the Dancing Star Foundation land was not subject to any additional statutory protection (beyond the relevant planning instruments) and that it was private land and not a park. He noted that previously it had been a farm and that parts of it were still in grass.

He concluded by submitting that a useful approach to considering the proposal was to accept that the Nathans Island site passed at least one of the s104D threshold tests and then following that determination, all three sites could be considered against s104 and s104B.

In exercising the discretionary judgement s104B s6 (a) and (b) must be considered and the word 'inappropriate' had particular bearing on an assessment of the proposal. In Mr Chapman's submission, if the proposal is found to not be 'inappropriate use and development' (or conversely if the proposal is found to be appropriate) then it followed that the proposal will not offend any of the other relevant subordinate planning instruments.

Mr Chapman concluded that having regard to the 'minor benign adverse effects and positive (although modest) economic and associated socio-economic effects there is no basis for refusing the consent and the sustainable management purpose of the Act is better served by the grant of consent'.

31. **Mr Lind**

Mr Lind then presented his evidence. His evidence set out his background in fishing and history in the industry which included an involvement in paua farming both in Otago and later on Stewart Island. He also had experience in larvae collection and use associated with the Big Glory Mussel farm.

Mr Lind set out some history dating from 2008 onwards related to initiating the current proposal. A letter from ES dated 29 September 2010 was attached to his evidence in relation early trialling of pots for oyster cultivation. He also described the environmental benefits of the waters around Stewart Island for activities such as he proposed.

Mr Lind then described the cultivation process that the proposed pursuing if consent was granted. He noted how initially he could use an existing licensed oyster opening facility on the Island (owned by a Mr J Barrett) given the early volumes would not support setting up his own facility.

Mr Lind then set out his opinion on the potential effects on marine wildlife based on his experience and observations as a lifelong fisherman with 11 years local experience.

He noted that the effects of the proposed oyster pots would be little different to those associated with existing lobster cod pots-for which no consent was required. During the course of the hearing a debate ensued as to whether the cod pots were permitted or not noting that the Coastal Plan policy sought their reduction and/or consolidation. (Policy 11.7.91, 11.7.9.2).

As noted in a separate discussion following to that extent the cod pot storage activity and associated effects could not readily be seen as a baseline for RMA purposes. It was concluded having heard from various parties on this matter that cod pot storage was part of the fishing regime and associated statues and was not something that the RMA could fetter.

Mr Lind in response to a question from the Commissioner noted that the proposal involved the use of 'transient' gear-which can be moved around and can be lifted-which was a fundamental part of the proposal.

Mr Lind then set out his vision for the proposal noting that implementation would be slower in the first year or two but that he hoped there would be enough income to sustain a cottage industry scale. Ultimately Mr Lind hoped the venture would create some local employment and generally add value to the local economy.

32. **Mr H Hansen**

The next witness for the applicant, Mr Herbert Hansen, a retired seaman, described briefly his opinion on the likely effects of the proposal on navigation. He noted that he had lived on Stewart Island all his life as had his father. He had owned and skippered commercial fishing and passenger charter boats since he was 14 years old and was now 70 years of age. His present boat needed 4 meters of water to navigate safely.

He indicated he was familiar with the proposed 3 sites subject of the application. In his opinion the proposal would not interfere with any boat navigating around the coast. The proposed pot locations were in his opinion, close to shore to the extent that no skipper would try to take a vessel or anchor.

He also noted all charts advise mariners to be aware of and keep a lookout for marine farms.

He saw no navigation or other reasons why the application should be refused consent.

33. **Mr B Ford**

Mr Ford noted he was the current Stewart Island Councillor for Southland District Council.

He set out his background and experience in the fields of fishing, fish processing, hospitality industry and aquaculture tourism and a water taxi operator. He was a qualified skipper and also holds a NZ Food Safety Approval Authority for Sampling Officer, Big Glory (1901) Aquaculture Area. He has lived on Stewart Island for 45 years and has been involved in local government on island for much of that time. He noted that since a transition from fishing to aquaculture as a main employment generator that stability in employment had ensued.

That assisted in reducing adverse effects associated with tourism seasonality incomes.

He opined that to ensure survival of the local community innovation and resourcefulness were needed. Now that the Big Glory aquaculture area has expanded to full utilisation there was a need to expand into other experimental areas. Each proposal needed to be tested and judged on its merits.

He was of the opinion that the economic potential of Stewart Island was good if local opportunities are capitalised on and that there was massive possibilities for marine farming.

He also noted that it was well proven that recreation could co-exist with marine farming. He also noted the increasing Government support for increased seafood production. He strongly supported the applicant's proposals as it was a positive economic initiative.

It would support economic growth of the local community.

34. **Mr Street**

Mr Robert Street, a very experienced expert in fisheries next was called in support of the proposal. As noted in his evidence Mr Street was qualified with a B.Sc in biological sciences from Victoria University (1954) . He had worked for the Marine Department then Ministry of Agriculture and Fisheries. Since leaving government employment in 1986 he has been a consultant for marine industry focussing on oysters, rock lobster, paua and marine farming.

He is well known in his field as a series of articles appended to the application and evidence testified.

Mr Street described in detail oyster types and characteristics. He set out current examples of trial marine farming involving oysters, paua and rock lobster. He also quoted from a 1989 Clyde MacKenzie article in the Marine Fisheries Review magazine as well as noting other articles in Seafood New Zealand (articles included in the bundle of papers provided by Mr Chapman).

Mr Street highlighted the need to investigate new methods of marine farming provided that there were no associated adverse social or environmental effects and noted the growing global need for food.

He described the feeding habits of oysters and the benefits of locations with strong tidal movements and high water quality. He also noted in contrast to salmon farms where feeding of pelletized food leads to sea bottom waste deposition the farming of bivalves (oysters) does not have that problem as they feed on naturally occurring phytoplankton.

In his opinion the farming of oysters suspended off the sea bottom would have no adverse effect on the benthos in the proposed site areas.

Mr Street then went on to describe the 'transient gear' concept of farming. He noted its origins in Rhode Island. He also noted that in hio9s opinion buoyed oyster pots raised no more threats to navigation of shell fishing than craypots did.

He noted that the concept of collecting oyster spat and growing them on to harvestable stage was the basis of many highly productive oyster fisheries. In conclusion he noted that the Suelen proposal was a relatively small scale 'cottage type' industry and initially would be a pilot project which was prudent before too heavy an investment was made.

35. **Interruption of Applicant's Case**

Following the conclusion of Mr Streets evidence a discussion was held between the Chair, the applicants lawyer Mr Chapman and the Dancing Star Foundation lawyer Ms Clare Leniham as to whether the applicant was willing to let the presentation of his case be interrupted by a witness for DSF as that person was constrained by time frames and commitments that could not be altered. Similarly, a submitter from Stewart Island Mr Johnson also indicated his time difficulties and it was agreed between that parties that he could present his evidence after Ms Beavan.

Following hearing of Ms Beavan's and Mr Johnson's evidence the applicant's case resumed.

36. **Evidence of Mr W Watt**

The applicant's Planning Consultant, Mr W Watt, who is an experienced planning practitioner with a long personal association with Stewart Island, provided written evidence and spoke to that. He also advised that he was a qualified yachtsman and was familiar with the coastal waters around Stewart Island.

While the AEE stated that the proposal was discretionary, Mr Watts subsequently agreed with Mr Hoffman's view that the proposal was more correctly discretionary for the Nugget and Horseshoe Bay sites but non-complying for the Nathans Island site.

He noted that his evidence should be taken to include his AEE and correspondence with the Council in response to their s92 request for further information. That additional information is set out in the appendices to the s42A report and included comments on potential noise effects from the proposal.

Also comments were provided in that s92 response in relation to visual effects where Mr Watt stated that the visual effects of the proposed buoys will be no greater than the visual effects of a cluster of buoys for cod or Cray pots in storage. On the assumption that storage of pots was a permitted activity such a level of visual effect was considered to be permitted under the Regional Coastal Plan. Mr Watt also clarified that the service vessel will not be left moored at any of the farm sites and that pots are hauled up without anchoring and reinstated in the same position using GPS fixing. As an associated matter I note that Mr Lind in his evidence noted that his vessel was moored and not tied up to the wharf at Horseshoe Bay (thus a significantly reduced potential for rats to get on to the boat). Mr Watt also clarified the number and 'density' of the pots/buoys and noted that each pot would contain around 350 brood stock.

In respect to the matter of sensitive habitats Mr Watt noted that there was no reason to conclude that the subject application areas had any greater sensitivity than the north east coast of Stewart Island as a whole noting also that at Appendix 5 of the RCP (Areas containing significant Values) there was a general reference on pages 96 and 97 to the values of the wider area including all the islands, stacks and reefs between the main Stewart Island and the Ruapuke Group and around the latter; and, Paterson Inlet west of a line from Bullers Point to Ackers Point (excluding Big Glory Bay) and including the tubeworm mound communities on either side of Bravo Passage (Item 14-09 and Item 14-10 of that Appendix). Those areas were given a respective value of maximum natural character and moderately High to high values by Alan Petrie in his 1993 and 1989 assessments. A Coastal Landscape assessment by Mr Petrie is also included at Appendix 4 of the RCP.

37. Mr Watt noted that storage *pots* were not part of the application as some confusion seemed to exist around that aspect. He summarised the proposal and details associated with the proposed trial venture. As already noted there will be around one pot per 980m2 of the overall total area of the three subject sites with there being some 34 pots at the Nathans Bat site, 9 AT the Nugget site and 18 at the Horseshoe Bay site.

Regular servicing of the pots or frames will be on a monthly basis to monitor growth and carry out any repairs and/or cleaning. A Karitane type vessel of 10m length owned by the applicant will be used for that purpose. A small winch on board is used to lift the pots for repairs and servicing. Mr Watt corrected a reference in his AEE to clarify that the source of the oyster spat initially used by the applicant.

I note that given the termination of that initial (illegal) trial operation that matter is no longer seen as particularly relevant.

Mr Watt went on to set out the activity status of the proposal. He noted that the operative Regional Coastal Plan for Southland was the key statutory document. His evidence at para 4.8 agreed (with Mr Hoffman) that the Nathans Island site required consent as a non-complying activity while the other two sites were provided for as discretionary activities. (see Rule 11.2.6 ES RCP).

Mr Watt also set out what other statutory document were in his opinion relevant.

Those included the RMA Part 2 and the NZCPS with special reference to Policy 8, relating to aquaculture.

He also referenced the proposed Regional Policy Statement 2012 and proposed Policy Coast 4 as being most relevant. That policy recognised a place for aquaculture in the coastal environment. He went on to discuss consultation and the fact that while Iwi had been notified no submissions had been made. That signalled a lack of concern for the proposal by Iwi in his opinion.

In respect of environmental effects Mr Watt referred to the AEE lodged with the application as well as his 10 September 2013 response to the Councils request for further information.

38. He also made some additional points that should in his opinion be considered. Those points included consideration of how to establish a suitable monitoring regime for the proposal. Apart from any impacts on landscape or navigation the most useful (obvious) areas to monitor were the benthos (seabed) and the water column.

In regards to potential effects on benthos Mr Watt noted that the proposal was at a low density at 1 pot per 983m2 of water area. The nature of oysters in suspended pots off the bottom was no different to natural oysters growing in Foveaux Strait in his opinion. He also noted that strong easterly winds can result in changes to the benthos along the eastern coast.

Mr Watts considered possible alternative locations and methods at clause (g) of his AEE. Further discussion on that matter follows in the findings on the key issues.

For monitoring purposes, Mr Watt suggested that a series of photographs of the benthos at predetermined points every five (5) years both inside of and outside of the proposed sites and assessed by an independent marine scientist would be appropriate.

Mr Watt then turned to the explanation to Rule 11.2.6 justifying the activity status as non-complying for structures in coastal waters north of Mamaku Point as being based on preserving the very high amenity and natural character values of those areas. He questioned whether that was in fact true for the coast from Horseshoe Bay to Lee Bay. He noted that the land there which is the DSF land had been cleared in part and grazed as late as 1960. He noted that the DSF land had little or no special status or protection under the operative or proposed District plans for Southland.

In respect of economic impacts of the proposal, Mr Watts evidence was that there was a need to diversify and add value to the economic base of Stewart island. He referred to his AEE at page 12 in relation to a paper he presented to the ICTC conference in Hobart 2011 which was about sustainability for Stewart Island.

He reiterated the statement in his AEE that the applicant's proposal was precisely the sort of venture that his Hobart paper advocated.

He then set out a theoretical assessment of potential income from the oyster pots when productive which was about $60, 000 per annum or as he said ' a Full Time Equivalent' (FTE's) on a cottage industry basis. Mr Watt noted that in the AEE he has estimated that for a full time (meaning permanent operation about 9 sites would be required and that based on his estimates that would sustain an operation with 2-3 FTE's.

He went on to state that based on his experience and observation in general every job in primary production creates a further two service type jobs. As much of Stewart islands employment was part time the creation 2-3 FTE's would have a considerable positive impact on the Island's economy.

39. Mr Watt then discussed the 'transient' gear aquaculture method and noted the positive effects associated with that method such as the ability to resolve multiple use conflicts. That allowed such aquaculture to operate without conventional, exclusionary fixed leases. In addition modern GPS systems may allow for surface marker buoys to be eliminated or reduced in number. The transient

gear approach does not preclude others navigating across marine farms of that type. He was of the opinion that in the medium term it was not difficult to imagine 20 or more areas similar to those proposed by Mr Lind within the Mamuku Point to Ackers Point area.

He also thought it was 'highly likely' that experience will show pot density can be doubled to one pot per 400-500m2 of water area and that would be ecologically sustainable and viable. In the longer term the potential for improving the yield and availability of Bluff Oysters was seen as exciting. It was considered to be in the long term interests of the fishery industry that proposals such as the applicants were explored and developed to help diversify sources and areas of [oyster] supply.

Mr Watt then briefly addressed the 'permitted baseline' matter. He noted that cod (storage) pots and rock lobster pots were discouraged by Policy 11.7.9.1 of the ESRCP.

However he opined that while that was a policy the status of the activity was that of a permitted activity. Upon questioning Mr Watt on that matter a discussion ensued whereby the separation between the RMA controls on marine farms as opposed to the Fisheries Act management of fishing activities was established. Effectively, cod pots and the like were part of commercial fishing activities and not an activity that could be constrained under the RMA through the Regional Coastal Plan.

Mr Watt went on to describe how cod pots were used routinely around Stewart Island and were not classed as structures by the Regional Coastal Plan. As in his AEE he considered that the cod pot activity arguably established a baseline context. However I note here that as the applicant essentially agreed that cod pots were not constrained under the RMA then it is unlikely that an RMA baseline could be established.

Mr Watt [in conjunction with Mr Chapman] confirmed that the applicant sought a term of 5 years for the proposal.

40. Mr. Watt then concluded his evidence by noting that;

- The proposal is consistent with Policy 8 of the NZCPS
- The proposal is provided for under the ESRCP as a discretionary activity for two of the sites and that the third site at Nathans Island was a non complying activity
- The application should be granted as the proposal is consistent with s5 of the RMA
- The application is consistent with the proposed Southland regional Policy statement
- Provision is made in the ES RCP for marine farming as a discretionary/non complying activity
- The effects on the environment are minor or less than minor.

Evidence from Submitters [15/16 May]

41. **Evidence of Mr T Johnson**

Mr Johnson was a local resident of some 40 years. He was an experienced 4th generation fisherman with lengthy historical knowledge. He was particularly concerned about the navigation hazards that would arise if the proposal were to be consented. He referred in particular to the passage through an area known as the ' Mucks' which provided for a safe inshore passage when weather and/or

tidal conditions meant the normal outside passage was undesirable to use. He noted that vessels typically enter Horseshoe Bay on the northern side and that pots and kelp drag with the tide and become a navigation hazard. He noted that he opposed all of the three proposed sites.

In his opinion the Nugget site was too rough for the proposed activity.

Mr Johnson also noted that the proposal will adversely affect recreational fishermen especially Horseshoe Bay.

Following questions from the Chair Mr Johnson was asked to draw on aerial maps (made available by the applicant) the usual navigational passages that vessels use in relation to the three proposed sites. He asked to do that in order to illustrate his opinion that the proposal will interfere with navigational passage for vessels. That interference applied to all three sites. Looking at each site and those drawings in turn it is noted that Mr Johnson showed the navigational ways as follows;

For The Nugget site-the passage drawn was between 10-20 m inside the ourtside boundary of the proposed farming area which is some 32m wide and 241m long (0.734ha) .

For the Horseshoe Bay site-the passage drawn was from 10-65m inside the farm area which is some 44-95m in width and 258m to 272m in length (1.815ha).

For the Nathans Islands site-the drawn passage intersected the outer boundary of the farm at a point about 160m along its 338m long outside boundary and then ran to the northwest for about 180m so that it intersected the north-western boundary approximately 35m landwards of the northern 71m boundary width. That site is some 71-124m wide and 338-386m long (3.354ha).

There was some apparent disagreement (voiced out of order) by the applicant over those suggested navigational routes.

Mr Johnson concluded by requesting that the proposal be refused consent in its entirety.

42. Evidence of Helen Cave

Ms Cave a resident of Stewart Island and Horseshoe bay for over 40 years spoke in support of her written submission opposing the proposal. She noted the long history of enjoyment of the Bay by her family and others for recreational purposes. Her main concern was that those recreational values and access would be adversely affected by the proposal. While she did not object to the small scale of the proposal she considered it to be the thin end of the wedge. In her opinion aquaculture should be carried out in or near Big Glory at Paterson's Inlet.

She noted that she could accept the granting of a temporary permit for two years with no automatic right of renewal and where regular monitoring by Environment Southland occurred. She noted the opinion that ES' monitoring record was poor. She also wished to see any consent if granted being made personal to the applicant so that it could not be transferred to another person or entity. Ms Cave opposed any potential precedent for an extension of the applicant's proposal to one of larger scale mariner farming in the Bay.

43. CRA8-Mr Malcolm Lawson

Mr Lawson spoke to his written submissions. He noted he was the CEO of CRA8 Management Committee Inc which is an entity commercial stakeholder group representing the interests of the commercial rock lobster industry in the southern South Island.

Mr Lawson raised the issue of 'permitted baseline' (explaining an earlier interjection he had made on the subject) and stated that there was none. The reason for that was the storage of Cod Pots (or other pots such as Cray pots) was associated with commercial fishing and fell under the control of

the Fisheries Act rather than the RMA. Also such uses were intermittent as opposed to the proposal having permanent effects. As such a permitted activity status could ne be ascribed to that activity in his opinion as the ESRCP could not constrain fishing activities other than aquaculture or marine farming.

He advised the hearing that there was no justification established in the application to support a grant of consent for the non complying site proposed at Nathans Island. Also contrary to the application the proposed sites were used for navigation purposes and the proposal would constitute a navigational hazard.

Mr Lawson also considered that for the two areas that had a discretionary activity status, the matter of economic viability should be considered. He was of the opinion that there was no evidence that the proposal would be economically viable and noted that the applicant acknowledged the uncertainties of the proposal (hence why it was a trial proposal).

He also submitted that the matter of whether the proposal would encourage 'ad hoc' style marine farming operations should be considered. Mr Lawson also noted that is there were navigation lights on the marine farm locations they would flash and be a nuisance. In respect of Health and safety matters related to marine farming he considered far stronger enforcement by the Council was needed. He also noted that as buoys will move around with tides and wind that they will effectively create areas of exclusion. He also referenced an number of Plan provisions (ESRCP) including Outcome 15.1.1 and section 11 policy around structures (Policy 11.2.10). In regards to Objection 11.2.2 (economic benefits) he noted that Mr Watt and Mr Lind appeared to offer divergent information on economic benefits arising from the proposal. While he was neutrall on that matter he stressed it was in his opinion an important consideration.

In respect of the proposed methodology Mr Lawson questioned the appropriateness of using re-cycled Cray pots which may result in debris in the CMA and on shorelines.

Dancing Star Foundation (DSF)

44. Submissions by Ms Clare Lenihan, Legal Counsel for DSF

Ms Lenihan opened the case for DSF and presented written submissions which she spoke to. She noted that the written submissions by Dr Michael Tobias of the DSF still stand but he could not attend the hearing. However she did have Kari Beaven as a witness [whose evidence had already been heard at this point in the proceedings].

Ms Lenihan position in essence was that there were plenty of other locations where the proposed activities could occur but if the proposal was to proceed in the chosen areas it would have a significant adverse effect (which was effects that are more than minor) and must be declined.

She also noted that where there were significant effects the RMA required accordingly that alternatives be investigated

She noted that DFS opposed all three proposed sites. She also noted that the EDS vs NZ King Salmon Company decision essentially had 'thrown out' the broad judgement test applicable under Part 2 of the Act (this is further discussed later)..

The essence of her submissions is summarised as follows.

Ms. Lenihan questioned the lack of certainty in the s42A report concerning the activity status of the proposal. She noted that while the staff report cited Rule 9.1.2 for occupation as a discretionary activity that it may more correctly be Rule 9.1.1. She also noted that under rule 11.2.6 the proposal (for structures) was non-complying for the Nathans Island site and a discretionary activity for the

other 2 sites. She also highlighted that marine farming was a listed discretionary activity under Rule 15.1.7.

Further, while the s42A report referred to deposition of material on the foreshore under Rule 10.2.2 it appeared that it was more likely that consent as a discretionary activity under Rule 10.2.4 (deposition of material on the sea floor) was required.

In respect of the relevant statutory framework Ms Lenihan submitted that the proposal must be assessed in respect of s104D and s104 which is subject to Part 2 of the Act. Consideration must first be given to the s104D 'gateway' tests and only if one of those is met can the application proceed to be assessed under s104 and Part 2.

Following her discussion of the statutory context Ms Lenihan then made submissions on a number of preliminary matters as follows.

45. Bundling

Ms Lenihan referenced the principle of bundling and referenced case law that she considered relevant to that matter (Tairua Marine Ltd vs Waikato regional Council) where it was stated that there is a longstanding principle that where there is overlap between two consents so that consideration of one will affect the outcome of the other it is generally appropriate to treat the application as one requiring overall assessment on the basis of the most restrictive activity. Her interpretation of the proposal was that just because there were three disconnected sites the applicant's proposal was to establish a 'marine farm' singular-not marine farms plural. Also all three sites abut land owned by one entity being her client DSF.

In her submission, the consents should be bundled and thus should be determined as a non-complying activity overall. She went on to note that even if that approach was rejected the DSF submitted that the applicant should be declined consent for the reasons she went on to set out.

Turning to the NZ King Salmon Company &Ors [2014] NZCS 38 917 April 2014) decision Ms Lenihan submitted that the prior position regarding consent authorities making a 'broad judgement' as to whether a proposal is consistent with the principles of sustainable management had now changed following that decision.

The essence of the decision and its applicability to the proposal as Ms Lenihan read the decision was that the polices in the NZCPS provided an environmental bottom line and that was consistent with Part 5(2) of the Act. The issue was around whether while Part 2 does not give primacy to preservation or protection that does not mean that a planning document such as the NZCPS cannot do so in particular circumstances.

Following that she NOTED the Courts finding that the word 'avoid' in NZCPS polices 13(1)(a) and 15(a) gives a strong direction. Those polices were submitted to be consistent with NZCPS polices 7 and 8 that support aquaculture as they protect only limited areas of the coastal region-being the areas of outstanding natural character and landscape.

The Court also considered that the overall broad judgement approach created uncertainty. The conclusion of that decision was that the Supreme Court found that the Board of Inquiry decision to allow the Plan Change would not give effect to the NZCPS as required by s67 of the Act as it did not give effect to Policies 13(1)(a) and 15(a) of the NZCPS.

Following her opening remarks Ms Lenihan then submitted on the matter of describing alternative site assessments. As required under clause 1(b) Schedule 4 of the Act. That then becomes a relevant matter to consider under s104(1) (c0 of the Act. Ms Lenihan posed the question of what was expected for a description of alternatives noting it did not extent to a full cost benefit analysis,.

Nor was an applicant required to demonstrate its proposal is the best use of a resource or is best in net benefit terms.

In her submission the consideration is whether, if the same or similar marine farm can be located at any identified alternative site whether it would have less adverse environmental effects. That consideration needed to be weighed against any diminution of benefits of the proposal and any other considerations such as the availability of alternative sites.

In her submission if the proposal goes ahead there will be 'significant' adverse effects as substantiated by the submissions of Dr Tobias and the evidence of Ms Beaven.

Ms Lenihan submitted that the application AEE fails to adequately address the matter of alternatives. She submitted that the sites were simply chosen as they are conveniently located in relation to the applicants home. In her submission there is enough evidence to demonstrate that the adverse effects adjacent to the DSF sanctuary could be significant but if the marine farm was related elsewhere they would not be. That was said to be enough of a basis to conclude that there are alternatives available.

Turning to the consents applied for, Ms Lenihan noted that the s42A report referred to consents for deposition of wastes from the marine farms on the seafloor. She noted that the AEE or application did not clearly identify that as a reason for consent

She submitted that perhaps that was an error and no such reason for consent exists but if that is not the case, there is no information supporting a grant of such a consent.

46. Ms Lenihan went on to reference s91 of the Act that empowers a consent authority to not proceed to hear an application if other consents are required which facilitate a better understanding of a proposal and under and s104(6), enables a consent authority to decline an application on the grounds that it has inadequate information to determine the application.

Ms Lenihan then addressed the matter of a permitted baseline. She noted that the applicant contends that the permitted baseline applies as the ESRCP permits the storage of Cray pots. She noted that CRA8 a submitter referenced a difference in intensity between the Cray pot storage activity and the proposal. One is short term with the marine farm being year round. On that basis the permitted baseline was not applicable in her submission certainly not for the time over and above any cray pot storage time.

Turning to concerns around pests and rats in particular and noting the submissions of Dr Tobias and evidence of Ms Beavan, she highlighted the risk even if only one rat managed to get into the DSF sanctuary. The adverse effects of such events were described as both financial and environmental being the potential loss of marine life and bird life.

In terms of biodiversity matters Ms Lenihan questioned to AEE stating dolphins did not 'habitually' pass by the coast noting that an assessment is not eliminated just because an event may be infrequent.

She noted that evidence from Ms Beavan and Dr Tobias in his submission contradicted the AEE in that respect.

47. In terms of the NZCPS and other policies and plans and the need to have regard to those Ms Lenihan submitted that did not constitute an obligation to give effect to those which would elevate the meaning being its statutory intent. Her submission was the Act and s104 simply means genuine consideration must be given to those other plans and policies.

In the case of the application, Ms Lenihan submitted that there are matters that 'colour' that regard and noted that the NZCPS 2010 has not been given effect to in the ESRCP.

While the marine farming provisions of the ESRCP were not made operative until 2013 the bulk of the RCP was made operative in April 2007 over 7 years ago. She submitted that the ESRCP was essentially deficient as it has not been amended to respond to the NZCPS 2010 direction that the NZCPS needs to be given effect to in policy statements and plans. She highlighted this by noting that the ESRCP in Section 5 refers to the NZCPS 1994.

She also noted that the RPS was made operative in 1997 so does not give effect to the NZCPS and that the draft RPS has not been approved but should at least be considered.

She also noted that while Policy 8 of the NZCPS provides for aquaculture to occur in appropriate places the ESRCP does not do that as marine farming is a discretionary or for the proposal, non complying activity if her bundling argument is accepted.

Ms Lenihan also noted that while there was no evidence by any party concerning natural character and landscape that such matters must be considered. (Policies 13 and 15 of the NZCPS). She set out the obligation to consider certain matters relating to adverse effects on natural character and outstanding landscapes.

As there will be adverse effects on natural character as the DSF evidence demonstrated that there will be significant adverse effects such adverse effects must be avoided as the King Salmon case was clear on that point. Effectively in Ms Lenihan's submissions the weight for decision making falls with the NZCPS.

She also submitted that there was an onus to establish a functional need to locate at any site and noted that in her submission there has not been any evidence supporting any such functional need for the proposal. On the other hand there was clear evidence that there will be significant adverse effects and precedent effects if the proposal goes ahead and that it will facilitate establishment /expansion of marine farming at an inappropriate location.

48. She also referred to Objective 20 of the ESRCP which sought facilitation of integrated management of land, the CMA and the economic exclusive zone. In her submission granting consent would not achieve that integrated management as it would demonstrate a disregard for the management and use of the adjacent DSF land and the underlying functional purposes of the DSF.

In terms of precedent effects, Ms Lenihan submitted that was a matter that should be taken into account in making a decision.

So too were cumulative effects. In respect of such considerations she noted that the applicant had postulated that he may seek an increase in the number of pots and would likely seek to expand the operation if the trial proved successful.

Ms Lenihan at para's 72 and 73 of her submissions then went on to set out perceived deficiencies in the RCP in relation to marine farming noting recent law changes and the age of that Plan and the current public information from Environment Southland concerning progressing a more coherent strategic framework for marine farming in order to avoid ad hoc development.

Turning to the suggested conditions of consent in the s42A report Ms Lenihan noted the early history to the applicants initial trail oyster rearing activities and issues around illegal actions.

In her submission, that 'history' signalled a likelihood that the applicant may not comply with any conditions of consent. As the sites are remote there are known issues around the Council's compliance and monitoring efficiency and effectiveness and resource capacities for Stewart Island matters.

Commenting on a number of other matters Ms.Lenihan noted that noise had not been adequately addressed by the applicant and that Mr Watt was not a noise expert so any evidence he presented did not stand up.

In summarising Ms Lenihan noted that the Nathans Island site was for a non complying activity and as the adverse effects were more than minor consent should be declined for that part of the proposal. She submitted that even if the bundling approach was not adopted then the effects of the proposal were such that consent overall should still be declined.

In her submission the proposal will create a precedent for marine farming in the area and does not constitute sustainable management. It will not avoid, remedy or mitigate the adverse effects arising from the activity and will not achieve the environmental bottom lines enshrined in the Act.

Furthermore she submitted (her para 82), the proposal is contrary to the objectives and policies of the *District Plan and Proposed Plan*, inconsistent with Polices 13 and 15 of the NZCPS and Part 2 of the Act ; sections 6(a) (b) and (c) in particular and s5 (2)(a) (b) and (c).

In her submission the proposal should also be declined as there was inadequate information relating to the deposition aspect of the proposal and the failure to investigate and provide information on alternative sites.

The Hearing then adjourned until 10am on the 16th of May.

49. **Evidence of Kari Beavan for DSF** (presented on Day 1)

As noted earlier Ms *Beavan* was able to present her evidence before Ms Lenihan's submissions by breaking into presentation of the applicant's case by mutual agreement of the parties. She presented a PowerPoint slideshow as well as explanatory written evidence that accompanied the slides.

Ms Beavan noted her association with DSF was as a self employed contractor engaged to help DSF run its sanctuary (known as the DANCING Star Foundation Ecological Preserve) on Stewart Island./

She set out her extensive background and experience in conservation projects over some 14 years noting she ran her own conservation and project management business.

Her evidence covered background explanation of the DSF and their decision to set up a Sanctuary on Stewart Island, the nature of the DSF sanctuary, the nature of pest management to keep the land free of pests, the benefits of the sanctuary to the local and wider New Zealand community, the risks that the proposal poses for the Sanctuary and the associated costs that the proposal will impose on the DSF, the significant costs to DSF arising from the proposal, concerns over the nature of suggested conditions in the s42A report with reference to previous experiences, risks of entanglement of marine mammals and seabirds including those that the DSF fosters, issues around pots and debris washing up on shore and how that may affect wildlife and the issue of precedent underpinning future further marine farming and higher risk industry.

We were told that the DSF has invested $3m to date on the Stewart Island site and is a global non profit organisation. The DSF land is 178ha which is about ¼ the size of Ulva Island. Ms Beaven then provided a synopsis of global conservation contexts and the role that DSF plays in that bigger picture. She discussed New Zealand's biodiversity challenges and threats to a range of species. She then went on to describe the reasons DSF bought the particular land they own. She noted that "*a key goal for DSF is that the local community is privileged to have an increase in native species living in and around their backyards*:. As ecotourism was a key focus for many local businesses the positive effects of DSF's activities such as increased Rifleman numbers was 'good news'.

50. Ms Beavan noted that promotion had lead to a 21% increase in the use of the Rakiura Track and that such users did not come to Stewart Island to see 'interrupted' coastlines. She noted that the potential revenue from tourism was far higher than the potential revenue from the proposed marine farm.

She described the predator proof fence of 2.1 km erected by DSF and how it worked. She went out describe a three stage network of defence against predators used by the DSF. Using the methods she described the DSF sanctuary was said to be rat free for over 6 years.

In regards to the proposal Ms Beavan noted that there will be permanent structures in Horseshoe Bay in some cases just 37m off shore. The need for boats to visit the farm(s) introduced a pest risk, as rats can stowaway on boats and then swim ashore. She noted that suggested Condition 10B in the s42A report was aimed at mitigating that pest risk but in her opinion failed for a range of reasons including lack of training in pest prevention on boats, the reliance on bait rather than also using traps (on vessels) and the likelihood of poor compliance monitoring and enforcement of conditions of consent. She noted that if rats did get ashore it costs DSF $15,000 to clear them out again. She noted that where threatened species were re-establishing that the use of bait was undesirable and that loss of any birds had a greater impact as total populations were low.

In her opinion, the proposal will cost DSF money every year as they must centre their pest management activities around areas of highest risk Currently those areas are the ends of the pest proof fence. The proposal represented a new risk at the furthest point from any road or gate. To highlight the risk DSF was concerned about, Ms Beaven noted that on Ulva Island an 'ecological treasure' they trapped an average of 1-2 rats every year-with boats being the most likely source.

At para 57 of her evidence Ms Beavan then set out some costs that she anticipated arising for DSF if the proposal was consented. Those equated to $1350 for traps plus labour costs for inspection etc noting that traps would probably need replacement after 5 years.

Ms Beaven then went on to discussion entanglement risks associated with ropes and buoys. She also noted suggested Condition 11 requiring reporting of any such events to DOC was unhelpful as the mammal or bird would most likely be dead anyway. Pots and other debris breaking away from the farms also posed a serious risk. Ms Beaven then noted that as a consequence of the DSF enhancement of their land the adjoining coastal water were cleaner thus making them more desirable to the applicant. In her opinion the opposite was true and the potential adverse effects would mean that the sites were the worst possible choices.

51. Ms Beaven noted that apart from issues and risks around adverse effects on the DSF land and undermining the DSF purposes in managing their land, the proposal set an undesirable precedent.

In her opinion the proposal would open the door to larger scale marine farm operations such as those that required regular feeding with feedstock and/or structures such as walkways and mooring posts.

In summary she noted that the sites were not suitable for the proposed activity. While some local income may be generated it would be at immediate costs to DSF and the work DSF undertook would be at risk and the DSF contribution to the local community would be undermined.

In her opinion the contribution DSF made to the community economy and local tourism far outweighed the potential contribution of the proposal.

The Hearing re-convened at 10am on the 16th of May.

52. Prior to continuing with the hearing of evidence the Chair put a question to Mr Chapman concerning whether the three different sites had been selected because there was a different success likelihood potential for each site and thus the trial was effectively establishing which

locations were most suitable for a subsequent longer term marine farming activity rather than being a trial simply to test the proposed farming re-used Cray pot methodology as proposed viz; transient gear method. Or was the trialling a combination of site testing as well as methodology testing. In the reply from Mr Chapman he confirmed it was the latter.

Submitters Continued

53. **Ruth Shaw**–witness on behalf of **Forest & Bird Society** presented by phone from Sydney

Ms Shaw spoke to her personal submission (Lance and Ruth Shaw) as well as in support of the Forest and Bird submission. Essentially she amplified on the matters set out in both of those written submissions.

Ms Shaw stated that the Nathan's Island site was a non-complying activity under Rule 11.2.6.1(b) of the Regional Coastal Plan. She argued that there was insufficient evidence in the application to justify approval of the site. Further, Section 11 of the Regional Coastal Plan clearly outlined the reasons for protecting the natural character of an area. Also the entirety of Stewart Island (apart from Oban) was classified as an ONL. The adverse effects on the ONLK values had not been adequately addressed for the Nathans Island site in particular and she supported the s42A officers recommendation to decline consent for that site. It was noted that was the largest of the proposed 3 sites.

She also noted that Forest and Bird would prefer that the Nugget and Horseshoe Bay sites also be declined consent acknowledging that such activities there were a discretionary activity.

Ms Shaw noted that the Horseshoe Bay and Nugget sites were discretionary activities. Further, she stated that there was no evidence to suggest that the existing pilot operation in Horseshoe Bay was successful and therefore there was no basis for allowing the operation to expand further.

She noted that the proposal if approved would create an undesirable precedent for the proliferation of marine farms. An additional concern was the spread of Undaria.

She referred to adverse visual effects identified with mussel farms as an example. She also noted that there was no factual evidence from the applicant on the actual employment benefits of the proposal

Ms Shaw submitted that approving this application may open up the coast for additional marine farms. Marine farming can give rise to adverse effects, as set out in the Regional Coastal Plan.

Effects of specific concern were:

- proliferation of Undaria;
- visual impact; and
- proliferation of similar-scale marine farming operations, and the loss of a pristine coastal environment.

She questioned the method to be used by the applicant and noted the experimental nature of the proposal. She also noted that if approved the proposal would compromise values associated with Stewart Island in adversely affect activities such as eco-tourism-which she was involved in.

Ms Shaw agreed that the oyster farm(s) would have less impact compared to a mussel farm. She submitted that the matter of financial viability of the proposal as relevant and referenced the Nick Smith decision on the Monorail proposal as an example.

In terms of the suggested conditions in the s42A report she supported the proposed bond and associated conditions for removal of structures and equipment. She considered that monitoring by the Council was not as resilient as was desirable. She also agreed with a limitation to a 5 year duration if consent was granted.

By way of relief the Forest and Bird Society sought the following:

- that no decision be made prior to a fact-finding trip to the area;
- that the application in respect of the Nathan's Island area be declined;
- that the Commissioner consider whether it is in the best interests of the local community and environment to grant consents for a discretionary activity.

On their personal submission Ruth and Lance Shaw sought the following:

- that no decision be made prior to a fact-finding trip to the area;
- that the application in respect of the Nathan's Island area be declined;
- that the Commissioner consider whether it is in the best interests of the local community and environment to grant consents for a discretionary activity;
- that the Commissioner needs to consider whether the intended method of establishing the oyster pots is "appropriate".

54. Kevin O' Sullivan –Council Harbourmaster

At request of the Chair, Mr O'Sullivan the Council's Harbourmaster, was asked to appear on the second day of the hearing [as he was unavailable on Day 1] so he could answer a number of question concerning his role and expertise in relation to navigation and safety matters. Mr O'Sullivan advised the hearing that the passage through the ' Mucks' would not in his experience be impeded by the proposal. Overall he considered that there were no navigational issues associated with the proposal and that vessels albeit limited by draft and length could still manouver through the marine farm sites if need be. He considered that lighting the outer boundaries of the marine farm sites was appropriate and that such lighting would be notified to mariners.

In his opinion lighting was necessary but was a matter that could be determined in association with the applicant as a separate matter under his jurisdiction as Harbourmaster should consent be granted. At least one light per farm was likely to be needed with the Mucks being a key area where lighting would assist mariners. There would typically be an orange buoy for each pot and those well adequately visible. Overall he did not oppose the proposal.

55. Other Submissions

There were a number of other supporting and opposing submissions where the submitters did not appear at the hearing in person. Overall there were eight supporting submissions, 12 opposing submissions and three which no stated position. The s42a report summarises those submissions accurately and they have been considered when making this decision.

I note that the Southland Conservation Board who lodged a submission commenting on the proposal specifically chose not to appear at the hearing. They submitted that the avoidance of adverse effects on the area's natural values was particularly relevant due to the proximity to the

DSF land. As such a precautionary approach should be taken and the relief sought was that a condition should require rodent traps on vessels servicing the marine farms.

I also note that the Stewart Island/Rakiura Community Board submitted in favour of the proposal as it would have economic benefits to Stewart Island. Real Journeys a tourism operator sought that the proposed farms be marked by radar reflectors and lit buoys. Some submitters opposed the Horseshoe Bay site in particular noting its recreational use.

56. Officers response

Following the completion of the applicants case and hearing from all submitters the Council's reporting officer Mr Hoffman was asked to provide a response on any matters that had arisen during the course of the hearing and where some additional comment may be helpful to the decision making process. A brief adjournment was taken so that Mr Hoffman and his Manager Mr West could put that response together.

On re-convening Mr Hoffman advised the hearing as follows.

In respect of lighting to mark the marine farms (noting that a question arose over whether consent was needed for that) Mr Hoffman stated that consent as a controlled activity was required under Rule 11.7.6.1. However as the proposal required consent for two sites as a discretionary activity and one site as a non complying activity any lighting was captured by the more onerous activity status in any event.

I note that additionally, the definition of a marine farm includes all boundary markings and given the need to preserve navigational safety with any marine farm any proposed navigational aids associated with marine farms can reasonably be seen to fall in the context of a marine farm proposal per se without a need to distinguish any consenting requirements separately refer RCP definitions below).

Marine Farm -

a in relation to a leased area, all that part of the area that is being or has been developed into a farm for the farming of fish or marine vegetation; includes all structures and rafts used in the area in connection with the farm, and all boundary markings, and all fish or marine vegetation for the time being farmed in the area by the lessee; and

b in relation to any licensed area, all that part of the area in which the licensee is for the time being carrying on the business of farming of fish or marine vegetation in accordance with (their) licence; and includes all structures and rafts used in the area in connection with the farm, and all fish or marine vegetation for the time being farmed in the area by the licensee: (Marine Farming Act 1971).

Navigation Aid - includes -

a any light ship and any floating or other light exhibited for the guidance of ships;

b any description of a fog signal not carried on a ship;

c all marks and signs in aid of marine navigation;

d any electronic, radio, or other aid to marine navigation not carried on board any ship;

(Source: Maritime Transport Act 1994, Section 2).

In respect of the discussion around whether or not there was a relevant permitted baseline to be considered Mr. Hoffman noted as follows.

57. The RCP specifically provides at Objective 11.7.9.1 a direction in regards to desirable outcomes in relation to storage of rock lobster and cod pots. There are no rules relating to that activity and as submitted by Mr Lawson in his evidence and as noted by Mr Chapman, the Fisheries Act 1996 specifically keeps the management of fishing activities away from RMA control apart from where there is specific provision for marine farms.

The storage of rock lobster and cod pots is associated with commercial fishing activities in the main based on the evidence I heard and as that activity is not subject to any ESRCP rule it cannot constitute a useful baseline-even if it may be a relevant part of the existing environment context.

As noted by Mr Hoffman, the storage of rock lobster and cod pots is generally a temporary activity anyway compared to the proposal for permanent buoys and pots (even if only for a 5 year term) and there was little useful relevance to pursuing that line of inquiry in his opinion.

In respect of the 'bundling' discussion that evolved during the course of the hearing Mr Hoffman noted that the sites are 'distinct' and clearly separate. They also have a different activity status in his opinion as already noted.

Prior to the applicants right of reply and in response to the Chairs questions Mr Hoffman also commented that after hearing the evidence he had 'softened' his position. However after further questioning by the Commissioner it still remained unclear as to what his final position on or recommendations for the proposal were.

He advised the hearing that his site visit (just prior to the hearing) had been helpful and assisted him to conclude that in terms of any visual effects on natural those would be minor. He noted that Horseshoe Bay was already modified. For the Nathans Island site he noted that the nearby land (DSF land) was grassed and has obvious signs of erosion and thus was not a pristine natural environment. He also noted that the scale of the proposal was small especially given the split into three separate sites.

In respect of submitters who sought to confine all marine farming to Big Glory he advised that a) it was pretty well at capacity and b) there was no moratorium on marine farming outside of Big Glory thus that in itself was not a reason to decline consent. In terms of navigation and safety matters he agreed with the views of the Harbourmaster Mr O'Sullivan who had no issues with the proposal subject to determining appropriate navigational marking methods. If lights were to be used for that purpose then in Mr Hoffman's opinion they were already included within the discretionary activity scope of the marine farm proposal.

In terms of potential pest and rat threat in particular Mr Hoffman considered that an appropriate condition of consent as suggested in his report can reduce risk and mitigate any identifiable risk.

58. **Applicants Right of reply**

Mr. Chapman provided a written right of reply on 16 May and spoke to that. He addressed a number of matters that arose through the course of the hearing.

In regards to the submissions from Ms Lenihan noted as follows.

In respect of 'bundling the consents' he submitted that there was no overlapping of the consents. There were three distinctly separate application sites and the proposal simply sought consent for those three separate sites within one resource consent application. In any case, even if the sites were 'bundled' for consenting purposes there was no obstacle to the granting of consent as one of the threshold tests in regards to the Nathans Island site was met and thus the proposal could be determined under s104 and s104B accordingly after that.

In respect of the submission by Ms Lenihan that the AEE should address alternative sites in some detail because the potential adverse effects were 'significant' he noted that an AEE is only required to provide a description of any possible alternative sites where it is likely that an activity will result in significant adverse effects on the environment. In his submission the effects of the proposal were not significant.

Apart from that the AEE had addressed alternatives to the extent required and he referred to page 11 clause (g) of the AEE in that context.

Turning to the matter of the 'permitted baseline' and the storage of Cray pots (or cod pots) he submitted that where any such storage activity was associated with commercial fishing then it is not subject to or controlled by the RMA or any other planning instrument. In his opinion RCP Policy 11.7.9.1 and 11.7.9.2 could arguably be ultra vires but in any event 'could not be supported by any rule in the Plan'. His submission was that Cray/cod pot storage did not form part of the permitted baseline for an assessment under s 104(2).

In regards to the matter of potential increased risk and cost arising from rat invasion as a consequence of the applicant's vessel providing a vector for entry Mr Chapman acknowledged that the applicant understood the fears expressed by the DSF.

He noted that risk was a present and ongoing risk for DSF that they will need to manage. He acknowledged that marine farms do pose an additional risk in that they will provide a point of entry into the Sanctuary.

However the real consideration said Mr Chapman was the extent of the additional risk posed by the applicant's activity.

He noted that the applicant's boat was moored 100m from the shore at Horseshoe bay. It was not refuelled off the wharf but at anchor. The potential risk was one of whether a rat may swim to the boat and then travel on it to one of the three proposed marine farms where it may chose to leave the boat and swim ashore. While that may be feasible the applicant had advised him that in 70 years he has had only one rat on a boat. In his submission the risk from rats was adequately mitigated by suggested condition 10(b) of the s42A report requiring a pest bait station on the vessel at all times.

With reference to potential entanglement risk to marine animals and birds Mr Chapman submitted that if it was a risk then it was a risk present throughout the entire CMA regardless of where a marine farm may be located. It is a present risk with established marine farms at Big Glory Bay and with extensive use of crayfish pots yet reported occurrences are rare.

Having regards to matters around the consistency of the proposal with the NZCPS and other Policy Statements and Plans Mr Chapman submitted that the difference in timing between the NZCPS 2013 and the date of the RCP becoming operative was not ideal. However any perceived problems were resolved by adopting the approach set out at para 41 of his opening submissions. His para 41 stated that as the Nathans Island site meet the s104D tests then all three sites can be considered under the discretionary judgement enabled by s104B.

That judgement needed to be exercised in relation to s6(a) and (b) of the RMA. He went on to note that notwithstanding that the ESRCP considers the entirety of Stewart Island with the exception of Halfmoon Bay and Oban to be an area with outstanding natural features and landscapes, marine farming is in fact only prohibited in certain areas and in others it is either discretionary or non complying. He submitted that there are clear signals in the Plan that there are appropriate locations for marine farming. He also submitted that although DSF spoke of there

being significant adverse effects arising from the proposal it had not been made clear what those effects were apart from the potential rat risk.

He also noted that while some submitters sought marine farming be confined to the Big Glory area the fact was that area was at capacity. Also the proposal was for an entirely different type of marine farming (which he noted in opening was better called transient gear aquaculture which distinguished it from mussel and salmon farms) which had different locational needs.

Turning to the submissions from Mr T Johnson, Mr Chapman submitted that Mr Johnson had conveniently (when asked by the Commissioner) drawn his preferred navigation route right through the middle of two of the proposed sites. In his submission it was 'inconceivable' that the proposed farms would pose a risk to competent mariners. The marine farms will pose no greater hazard than any other marine hazard. In terms of recreational or visiting boaties he submitted that they can be expected to be conscious of their surroundings particularly when so close to shore.

In relation to the submissions from Mr Lawson, he noted that contrary to his argument cray pots were effectively stored for most of the year such that they were a permanent activity thus could be usefully referenced as a comparative visual effect to the proposal. He also rebutted Mr Lawson's concerns over the use of 'recycled' gear but noting that Mr Lind clearly would want his equipment to survive the consent period at the least. In regards to the possibility for buoys to be submerged and become a navigational hazard he noted that the tides in the proposed site areas were not that strong.

In terms of the submissions by Helen Cave and her concerns about loss of recreational opportunity and precedent he noted that her concern was really that the proposal would lead to something larger. He submitted that the proposed farms do not set a precedent. The ESRCP makes it clear that each case must be judged on its merits. This was an application to farm oysters on a particular way. Any proposal to alter the proposed method or the farmed species would require a variation to any consent or a fresh consent. He also submitted that the notion that the farms will fetter recreational use does not really carry much weight. The matter of the small scale and location of the farms was relevant to that consideration.

Turning to the submissions from Forest and Bird he noted that only one buoy was needed per pot. He noted that Ms Shaw indicated that aquaculture per se was not opposed-she simply believed that the proposed sites were not the best areas.

He also noted that the matter of economic viability was not relevant and was the applicant's risk.

Mr Chapman agreed that lighting was already included in the proposal by way of being a part of a marine farm and that one navigational light per farm area may be appropriate. In his opinion there was no need for a separate consent for any navigational lights and that if a condition was imposed to require such lighting it would be within the scope of the application. In his opinion the matter of navigation lights could be delegated to the Harbourmaster by a condition as that was within his jurisdiction.

In respect of noise standards he submitted that the applicant would be required to meet the relevant 50dBa daytime standard. Mr Chapman also restated the trial nature of the proposal noting multiple sites were needed as one or more sites may not prove to be suitable. The trial aspect of the proposal was the reason why a five year consent term was sought.

Mr Chapman also noted that there were a number of supporting submitters and that their views should not be discounted. He noted that the applicant would be adding to the body of knowledge about aquaculture and that was a positive benefit.

In regards to Mr Hoffman's assessment, Mr Chapman noted that Mr Hoffman agreed that the proposal was not contrary to the relevant objectives and policies.

I note here that Mr Hoffman stated at page 43 of his report;

> *'However, the proposal is not necessarily directly contrary to the specific wording of the policies of the Coastal Plan'.*

He also noted that Mr Hoffman appeared reluctant to reach a conclusion in respect of effects and that he had adopted a precautionary approach in regards to water quality, effects on benthos and alternative sites.

In regards to water quality Mr Chapman submitted that Mr Street was an expert on such matters and that he had concluded that any effects were benign. In Mr Street's expert opinion there would be no adverse effects on water quality of benthos beyond what existed now.

In addition Mr Chapman noted that there were suggested conditions around monitoring that addressed such effects.

In respect of alternative site consideration he referred to the AEE submitted with the application and clause (g) therein in particular. As a final point he noted that there were no grounds to limit the consent to the applicant and fetter the transferability of any consent.

The hearing was then adjourned at 1.30pm.

59. **Chairs Request for a Council Response on the EDS vs NZ King Salmon Company Supreme Court decision**

Following the adjournment on the hearing and after reviewing the papers and noting that in the officer's response before the applicants right of reply Mr Hoffman (and Mr West) had indicated that they had not had time to form a view on the implications of the EDS vs NZ King Salmon Company decision in relation to the proposal, the Commissioner requested that they provide such a response in a memorandum to Mr Hoffman dated 19 May 2014.

In that memorandum it was stated that;

'Once you have completed your response that should be provided to the applicant and submitters so that they have an opportunity to respond in writing to any comments that you provide'.

I received that response from Mr Hoffman by an email dated 23 May 2014 and that was provided to the parties attending the hearing with their response sought by the 9th June 2014.

Following the receipt of responses from Mr Chapman and Ms Lenihan the hearing was then closed at 5pm on the 9th of June 2014.

60. Mr Hoffman commented on the **EDS vs NZ King Salmon Company decision as follows.**

"As I read it, one of the key issues was expressed in Paragraph 43:

The fundamental issue raised by the EDS appeal is whether the "overall judgement" approach as the Board applied it is consistent with the legislative framework generally and the NZCPS in particular. In essence, the position of EDS is that, once the Board had determined that the proposed salmon farm at Papatua would have high adverse effects on the outstanding natural character of the area and its outstanding natural landscape, so that policies 13(1)(a) and 15(a) of the NZCPS would not be given effect to, it should have refused the application. EDS argued, then, that there is an 'environmental bottom line' in this case, as a result of the language of policies 13(1)(a) and 15(a).

Paragraph 151 outlines that

Section 5 was not intended to be an operative provision in the sense that it is not a section under which particular planning decisions are made; rather it sets out the RMA's overall objective. Reflecting the open-textured nature of Part 2, Parliament has provided for a hierarchy of planning documents the purpose of which is to flesh out the principles in s5 and the remainder of Part 2, in a manner that is increasingly detailed, both as to content and location. It is these documents that provide the basis for decision-making, even though Part 2 remains relevant. It does not follow from the statutory scheme that because Part 2 is open-textured, all or some of the planning documents that sit under it must be interpreted as being open-textured.

Paragraph 88

....there may be instances where the NZCPS does not "cover the field" and a decision-maker will have to consider whether Part 2 provides assistance in dealing with the matter(s) not covered. ...If there is uncertainty as to the meaning of particular policies in the NZCPS, reference to Part 2 may well be justified to assist in a purposive interpretation However this is against the background that the policies in the NZCPS are intended to implement the six objectives it sets out, so that reference to one or more of those objectives may well be sufficient to enable a purposive interpretation of particular policies.

Paragraph 149

Section 6 does not, we agree, give primacy to preservation or protection; it simply means that provision must be made for preservation and protection as part of the concept of sustainable management. The fact that ss 6(a) and (b) do not give primacy to preservation or protection with the concept of sustainable management does not mean, however, that a particular planning document may not give primacy to preservation or protection in particular circumstances. This is what policies 13(1)(a) and 15(a) in the NZCPS do. Those policies are, as we have interpreted them, entirely consistent with the principle of sustainable management as expressed in s 5(2) and elaborated in s 6.

Paragraph 152

The NZCPS is an instrument at the top of the hierarchy. It contains objectives and policies that, while necessarily generally worded, are intended to give substance to the principles in Part 2 in relation to the coastal environment. Those objectives and policies reflect considered choices that have been made on a variety of topics. As their wording indicates, particular policies leave those who must give effect to them greater or lesser flexibility or scope for choice. Given that environmental protection is an element of sustainable management, we consider that the Minister was fully entitled to require in the NZCPS that particular parts of the coastal environment be protected from the adverse effects of development. That is what she did in policies 13(1)(a) and 15(a), in relation to coastal areas with features designated as "outstanding".

Paragraph 24 (c) made the following point about s5(2):

There has been some controversy concerning the effect of the word "while" in the definition..... it should be read as an integrated whole. This reflects the fact that elements of the intergenerational and environmental interests referred to in sub-paras (a), (b) and (c) appear in the opening part of the definition as well (that is, the part preceding "while"). That part talks of managing the use, development and protection of natural and physical resources so as to meet the stated interests – social, economic and cultural well-being as well as health and safety. The use of the word "protection" links particularly to sub-para (c). In addition, the opening part uses the words "in a way or at a rate". These words link particularly to the intergenerational interests in sub-paras (a) and (b). As we see it, the use of the word "while" before sub-paras (a), (b) and (c) means that those paragraphs must be observed in the course of the management referred to in the opening part of the definition. That is, "while" means "at the same time as".

Paragraph 24(d):

The use of the word "protection" in the phrase "use, development and protection of natural and physical resources" and the use of the word "avoiding" in sub-para (c) indicate that s 5(s) contemplates that particular environments may need to be protected from the adverse effects of activities in order to implement the policy of sustainable management; that is, sustainable management of natural and physical resources involves protection of the environment as well as its use and development. The definition indicates that environmental protection is a core element of sustainable management, so that a policy of preventing the adverse effects of development on particular areas is consistent with sustainable management. This accords with what was said in the explanatory note when the Resource Management Bill was introduced:

"The central concept of sustainable management in this Bill encompasses the themes of use, development and protection."

Paragraph 29:

The use of the phrase "inappropriate subdivision, use or development" in s 6.....

.. a protection against "inappropriate" development is not necessarily a protection against any development. Rather it allows for the possibility that there may be some forms of "appropriate" development.

The decision has particular implications for coastal plan development, as outlined in the following paragraphs:

Paragraph 85

While we acknowledge that a regional council is directed by s66(1) to prepare and change any regional plan "in accordance with" (among other things) Part 2, it is also directed by s67(3) to "give effect to" the NZCPS. As we have said, the purpose of the NZCPS is to state policies in order to achieve the RMA's purpose in relation to the coastal environment. That is, the NZCPS gives substance to Part 2's provisions in relation to the coastal environment. In principle, by giving effect to the NZCPS, a regional council is necessarily acting "in accordance with" Part 2 and there is no need to refer back to the part when determining a plan change.

Paragraph 91

We acknowledge that the scheme of the RMA does give subordinate decision-makers considerable flexibility and scope for choice. This is reflected in the NZCPS, which is formulated in a way that allows regional councils flexibility in implementing its objectives and policies in their regional coastal policy statements and plans. Many of the policies are framed in terms that provide flexibility and, apart from that, the specific methods and rules to implement the objectives and policies of the NZCPS in particular regions must be determined by regional councils. But the fact that the RMA and NZCPS allow regional and district councils scope for choice does not mean, of course, that the scope is infinite. The requirement to "give effect to" the NZCPS is intended to constrain decision-makers.

Essentially there is a difference between the requirements of Sections 67 and 104 which deal, respectively, with plan development and resource consents.

Section 67(3) requires that

A regional plan must give effect to:

(a) Any national policy statement;
(b) Any New Zealand coastal policy statement;
(c) And any regional policy statement

By contrast, Section 104 requires that:

(1) When considering an application for a resource consent and any submissions received, the consent authority must, subject to Part 2, have regard to:
(a) Any actual and potential effects on the environment of allowing the activity; and
(b) Any relevant provisions of:
(i) A national environmental standard
(ii) Other regulations
(iii) A national policy statement
(iv) A New Zealand coastal policy statement
(v) A regional policy statement or proposed regional policy statement
(vi) A plan or proposed plan; and
(c) Any other matter the consent authority considers relevant and reasonably necessary to determine the application.

The difference being that a plan must give effect to the NZCPS, whereas in deciding a resource consent application, regard shall be had, subject to Part2, to any relevant provisions of the NZCPS.

Mr Hoffman also noted in his email to the parties in respect of the above response that;

'The key tension in the judgement appears to be between whether to use the objectives and policies of the New Zealand Coastal Policy Statement as a means for making an overall judgement or whether the objectives and policies represent environmental bottom lines, each of which must be satisfied in each case.

The decision has quite specific implications for plan development, as it highlights the requirement in Section 67(3) to 'give effect to' the NZCPS. It seems apparent that the wording of S67(3) is intended to give decision-makers a framework to work within, while still giving scope for them to develop approaches that are appropriate within their specific regional milieu.

However, the implications for resource consent decisions are less clear, as the consent authority is only required to 'have regard to' the provisions of the NZCPS under Section 104(1). This is quite plainly less prescriptive than the 'give effect to' clause in S 67(3). Further, the NZCPS delineates the space in which all Regional Coastal Plans must operate.

The wording in Polices 13 and 15 of the NZCPS, to 'avoid' effects on natural character within landscapes of outstanding natural character, sets quite a clear bottom line. Notwithstanding the fact that the current Regional Coastal Plan for Southland was in place before the current NZCPS, the policies around natural character and outstanding landscapes are consistent with those in the NZCPS. In particular the wording of Objective 5.2.1, to '...protect outstanding natural features and landscapes...from the adverse effects of use, development, and subdivision' is similar in the tone and level of protection it provides. Policy 5.2.1 employs similar wording. That

policy goes on to specifically identify the coastal environment of Stewart Island/Rakiura (with the exception of Halfmoon and Horseshoe Bays) as one of outstanding natural character.

There is a hierarchy of documents under the umbrella of the RMA, with provisions running from general principles down to site-specific rules. The natural character policies in the RCP are consistent with those in the NZCPS, and are more site-specific. Therefore, while the decision maker must have regard to the policies and objectives of the NZCPS in accordance with S 104, the objectives and policies within the RCP should be used to more closely guide decision-making at the consents level".

Mr Chapman

In response to Mr Hoffman's comments, **Mr Chapman** for the applicant replied as follows.

"I have conferred with Bill Watt and considered your comments and those of Steve West which were circulated.

We concur generally with your conclusions. We do not consider that the New Zealand King Salmon decision is directly relevant. That decision was concerned with an application for changes to the Marlborough Sounds Resource Management Plan and the effect of policies 13 (1) (a) and 15 (a) of the New Zealand Coastal Policy Statement (NZCPS).

The Board of Enquiry found that the area in question was an area of outstanding natural character and outstanding natural landscape and that the proposed salmon farm would have significant adverse effects on that natural character and landscape. Consequently, if the plan change was granted policies 13 (1) (a) and 15 (a) would not be complied with. Despite this, the Board granted the plan change. The Board said that it was required to give effect to the NZCPS "as a whole" and to reach an "overall judgment" on King Salmon's application in light of the principles contained in Part 2 of the Resource Management Act.

The Supreme Court held that because the Board did not give effect to policies 13 (1) (a) and 15 (a) in allowing the plan change, the Board did not "give effect to" the NZCPS as required by section 67 (emphasises added).

We agree that in deciding a resource consent application regard shall be had, subject to Part 2, to any relevant provisions of the NZCPS which is not the same as the requirement under section 67 to give effect to the NZCPS".

61. **Ms Lenihan,** for the Dancing Star Foundation responded with the following comments.

"Introduction

1. The Dancing Star Foundation (the Foundation) appeared at the hearing for the above matter on Thursday 15 May 2014 presenting evidence and legal submissions. The legal submissions addressed, amongst other things, the recent Supreme Court decision of Environmental Defence Society Inc. v The New Zealand King Salmon Company & Ors [2014] NZSC 38 (the King Salmon case).

2. Environment Southland (ES) has subsequently provided comment on this decision (by e-mail 30 May 2014) and provided an opportunity for the Foundation to respond.

Relevance of King Salmon

3. In terms of non-complying activities[1] and s104D Resource Management Act 1991 (the RMA) gateway test, consideration of the King Salmon case only becomes relevant if the activity meets one of the gateway tests in s104D – then, and only then, does consideration under s104 arise.

[1] Relevant for Nathan's Island, and if you accept the Foundation's bundling argument, also relevant for the other two sites).

4. The starting point for this case is the area where the proposed activity is to be carried out has been identified as an ***outstanding landscape*** *in the Regional Coastal Plan (RCP). This designation has not been challenged by the applicant so, in the absence of evidence to the contrary, it must stand.*

5. In terms of the relevant provisions of the New Zealand Coastal Policy Statement 2010 (NZCPS), adverse effects (any adverse effects) on areas identified as outstanding landscapes must be ***avoided,*** *Policy 15(a). Policy 15(a) states:*

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

> *(a) avoid adverse effects of activities on outstanding natural features and outstanding natural landscapes in the coastal environment.*

Issues

6. The issues arising from consideration of the King Salmon case are:

(i) what relevance do the findings from King Salmon have in the context of considering a resource consent as opposed to a regional plan?

(ii) is the environmental bottom line approach in King Salmon relevant in the context of a resource consent and s104 considerations?

Comment

7. The Foundation agrees with ES that the implications for resource consent decisions are, as set out in the RMA, different for regional plans and resource consents – for regional plans the requirement is to "give effect" to the NZCPS s67(3); for resource consents, the requirement is to "have regard" to the NZCPS, s104.

8. The Foundation also agrees with ES that there is a hierarchy of documents under the umbrella of the RMA.

9. The position of the Foundation is that despite this being an application for a resource consent;

(i) the relevant directive provisions of the NZCPS provide an environmental bottom line, and

(ii) a great deal more weight must be given to these directive provisions of the NZCPS given:

i. their position in the hierarchy of statutory documents; and

ii. the fact that the inferior policy statement and plans do not give effect to the directive provisions of the NZCPS, as required to do so by s67(3) RMA.

10. The reasons for the position of the Foundation are set out below:

Weighting

(i) It can be appropriate to place more weight on some section 104 matters than others. Clifford Bay Marine Farms Ltd v Marlborough DC2 involved a proposed marine farm and potential effects on Hector's dolphins. The Court placed a "great deal of weight" on the relevant policies (on natural character) in the NZCPS3 "because of its place in the hierarchy of instruments to be considered".

(ii) Conversely, also in the above case, the Court placed little weight on the relevant RPS, noting it added little to the NZCPS or indeed to Part 2 of the RMA. The Court

considered the proceedings showed some omissions in both of the mid-level policy documents it had to consider4.

(iii) More weight should be given to the relevant provisions of the NZCPS, and less weight to the Regional Policy Statement (RPS), Proposed Regional Policy Statement (PRPS) and Regional Coastal Plan (RCP), as these documents do not "give effect to" the relevant provisions of current NZCPS 2010 as required by the RMA (I will comment more about this below) - therefore the "have regard" requirement in s104 should be interpreted bearing this in mind;

(iv) The Courts have held that the appropriate treatment for any inconsistency between statutory documents is a matter to be weighed under s104, Auckland RC v Roman Catholic Diocese of Auckland5. In that case the inconsistency was between an RPS and a district plan but the same reasoning would apply here, where there are inconsistencies between the RPS, PRPS and the RCP – the inconsistency arising because the relevant statutory documents do not give effect to provisions of the NZCPS.

Have regard to

(v) The reason why s104 states "have regard to" (policy statements, plans etc.) is contained in other provision of the RMA.

(vi) A regional plan must give effect to—

(a) any national policy statement; and

(b) any New Zealand coastal policy statement; and

(c) any regional policy statement, s67(3).

(vii) Further, a regional plan must not be inconsistent with any other regional plan, s67(4).

(viii) There is a clear hierarchy of policy statements and plans through the NZCPS (and other national policy statements) down through regional policy statements, regional plans and district plans.

(ix) So in theory, a plan at the bottom of the hierarchy of statutory documents will have given effect to the higher order documents and not be inconsistent with any peer document. By the time you get to a s104 resource consent consideration, there should be a clear line back up through the documents to, in this case, the NZCPS.

[2] C131/03, para [25].

[3] The 1994 version, but the version is irrelevant to the point of weighting to be given.

[4] Para [27].

[5] (2008) 14 ELRNZ 166 (HC). See [9], [40]–[47], [92]–[95] and [113].

(x) In King Salmon6 the Court noted there is considerable flexibility and scope for choice for decision makers, but the scope is not infinite - the requirement to "give effect" to the NZCPS is intended to constrain decision makers.

(xi) The Court also held that the Minister of Conservation was fully entitled to require in the NZCPS that particular parts of the coastal environment be protected from adverse effects of development. That is what she did in policies 13(1)(a) and 15(a) in relation to coastal areas with features designates as "outstanding"7.

(xii) Although the requirements in s104 may appear less prescriptive than s67(3), given the reasoning set out above, far greater weight should be placed on the relevant provisions of the NZCPS, which are directive and set a clear environmental bottom line.

Giving effect to the NZCPS 2010

(xiii) ES contends that notwithstanding the fact the current RCP was in place before the NZCPS 2010 was promulgated, the policies around natural character and landscape are consistent with those.

(xiv) The differences between the 1994 NZCPS and the 2010 NZCPS were addressed by the Minister of Conservation. She noted8:

i. the language overall in the 1994 NZCPS was in relevant respects, less directive and allowed greater flexibility for decision makers than the language of the NZCPS 2010. The greater direction given by the NZCPS was a feature emphasised by the Minister of Conservation when the NZCPS was released [134].

ii. the NZCPS 2010 was more specific than the 1994 statement about how some matters of national importance under the RMA should be protected from inappropriate use and development. Among the key differences were the direction on protection of natural character and outstanding landscapes. The emphasis is on local councils to produce plans that more clearly identify where development will need to be constrained to protect special areas of the coast.

iii. the NZCPS made provision for aquaculture in "appropriate places".

(xv) There are clear intentional differences between provisions of the 1994 NZCPS and the intentionally more directive provisions in the 2010 NZCPS, particular in relation to outstanding natural character and landscape. These are not just in relation to the increased protection given to these specific areas, but an intentional highlighting of the differences between natural character and natural features and landscape i.e. Policy 13(2) states

"Recognise that natural character is not the same as natural features and landscapes or amenity values".

(i) Such differences would require a reframing of objectives and policies emanating from the 1994 NZCPS, given the clear differences in the two documents.

(ii) Without doing a thorough analysis of all the provisions of the RPS, PRPS and the RCP (the Foundation submits this is a major information gap in this case), below I merely highlight a few of the objectives9 to indicate they do not give effect to the NZCPS. Therefore little if any weight should be placed on these provisions and a "great deal more weight" should be placed on the directive provisions of the NZCPS.

[6] Para [91].

[7] *Para [152].*

[8] *King Salmon para [134].*

RPS

i. Objective 13.1 of the RPS is "To preserve the Natural character of the coastal environment". Objective 13.2 is "To avoid wherever practicable, remedy or mitigate any adverse effects from the use and development of the natural and physical resources within the coastal environment".

ii. Give effect to is to "implement". "To avoid wherever practicable" is clearly not the same as avoid. Therefore, these objectives do not implement the avoid adverse effects requirements of policies 13 and 15 and do not give effect to the NZCPS.

Proposed RPS

iii. There are no provisions from the PRPS quoted in the staff report that relate to outstanding natural character or landscape.

iv. Objective COAST.3 provides that coastal water quality, ecosystem and natural character are maintained. This does not give effect to the avoid adverse effects requirements of policies 13 and 15 and do not give effect to the NZCPS.

RCP

v. There are no provision from the PRPS quoted in the staff report that relate specifically to outstanding natural character or landscape (apart from the plan identifying such areas).

vi. ES notes in particular the wording of Objective 5.2.1, to '...protect outstanding natural features and landscapes...from the adverse effects of use, development, and subdivision' is similar in the tone and level of protection it provides. Policy 5.2.1 employs similar wording. I deal with this contention belowObjective 4.1.1 mirrors objective 13.1 of the operative RPS and states "To avoid wherever practicable, remedy or mitigate any adverse effects from the use and development of the natural and physical resources within the coastal environment". "To avoid wherever practicable" is clearly not the same as avoid. Therefore, these objectives do not implement the avoid adverse effects requirements of policies 13 and 15 and do not give effect to the NZCPS.

vii. Objective 4.7.2 states "To obtain a level of use which is appropriate in the coastal marine area, particularly in areas where remoteness, wilderness and tranquillity are significant components of the environment.

viii. ES notes in particular the wording of Objective 5.2.1, to '...protect outstanding natural features and landscapes...from the adverse effects of use, development, and subdivision' is similar in the tone and level of protection it provides." This objective is much broader and more flexible than the avoid adverse effects requirement of policies 13 and 15 in relation to outstanding natural character and landscapes. This objective does not implement the avoid adverse effects requirements of policies 13 and 15 and does not give effect to the NZCPS.

[9] *As policies are to implement objectives (s67(1)(b) RMA), below I only note objectives (given the short time in which to respond).*

Conclusion

11. Although a policy in the NZCPS cannot be a "rule" in the RMA sense, it may, nevertheless, have the effect of what in ordinary speech would be considered a rule

12. The use of the word "avoid" in policies 13(1)(a) and 15(a) gives a strong direction. These policies are consistent with the other policies supporting the development of aquaculture (policies 7 and 8 in particular), because they protect only particular limited areas of the coastal region – the areas of outstanding natural character and landscape. Essentially there is no inconsistency between Policies 13(1)(a) and 15(a) on the one hand and Policy 8 on the other.

13. The relevant directive provisions of the NZCPS provide an environmental bottom line, and a great deal more weight must be given to these directive provisions of the NZCPS given:

i. their position in the hierarchy of statutory documents; and

ii. the fact that the inferior policy statement and plans do not give effect to the directive provisions of the NZCPS, as required to do so by s67(3) RMA.

14. Conversely, very little if any weight should be placed on the relevant provisions of the RPS, PRPS and RCP, for the reasons set out above.

15. The deliberate change in direction from the 1994 NZCPS to the more directive provisions of the 2010 NZCPS have not been given effect to in the RPS, PRPS or the RCP.

16. It is still the position of the Foundation that the application be declined (for reasons set out in these and the original submissions).

No response to Mr Hoffman's comments was received from any other party.

PRINCIPAL ISSUES THAT WERE IN CONTENTION

62. After analysis of the application and evidence (including any proposed mitigation measures), undertaking a site visit, reviewing the Council reports and specialist comments, reviewing the submissions and concluding the hearing process, the Commissioner considered that the proposal raised the following key issues and these are set out below as the principal issues that were in contention (in no order of primacy).

1. Whether the information in front of the Commissioner was adequate to determine the application

2. What the correct activity status of the proposal is.

3. Whether the application(s) should be treated as bundled if the Nathans Island site was a non complying activity while the Horseshoe Bay and Nugget were discretionary activities.

4. Whether there was a relevant permitted baseline.

5. Whether economic viability considerations is a relevant matter.

6. The extent of pest risks (and rats in particular) for adjacent land [in particular the DSF land] and whether that risk was significant (or more than minor) such that the proposal should be refused consent.

7. Whether the proposal will adversely affect navigation and safety of vessels.

8. The nature and extent of actual or potential effects on the environment.

9. Whether the activity will result in any significant adverse effect on the environment such that a description of any possible alternative locations or methods for undertaking the activity should be provided and/or examined in the application but has not been.

10. The extent of relevance if any of the Environmental Defence Society Inc v New Zealand King Salmon Company Ltd decision by the Supreme Court.

11. Whether the proposal is consistent with the relevant planning documents particularly the relevant objectives and policies.

12. Whether the proposal merits the grant of consent in terms of section 104 and 104B of the RMA.

13. Whether the proposal will promote the sustainable management of natural and physical resources as contemplated by Part 2 of the RMA.

14. Whether conditions of consent can be imposed to avoid, remedy or mitigate any actual or potential adverse effects on the environment.

FINDINGS ON THE PRINCIPAL ISSUES IN CONTENTION

63. **Whether the information in front of the Commissioner was adequate to determine the application**

The question of adequacy of information was raised by Ms Lenihan [acting for DSF] in her submissions at her para's. 42 through to 45.

The applicant provided a detail set of application documents in support if the proposal. A s92 request from the Council requiring additional information was responded to and satisfied the Council reporting officer that there was adequate information provided to properly make an assessment of the proposal.

Based on the evidence in front of me there is adequate information available to enable a proper assessment under the relevant statutory provisions.

I do note however that while little was made of it in the evidence from any party, in light of the generally acknowledged significance placed on the natural and landscape values associated with Stewart Island (and as reflected in the RCP) , there was a lack of any expert assessment on the landscape and visual effects of the proposal.

While from my site visit and the evidence that was provided I consider that there is enough information available to me to make a balanced determination on those types of effects and noting that the proposal is for comparatively small scale marine farm areas and also for consents that would have a five (5) year duration rather than the normal minimum 20 years, I would expect that any future applications by the same applicant, if they are made, for more permanent marine farms (and whether at the proposed sites subject of this decision or not) to include a rigorous assessment of landscape and visual effects carried out by an appropriately qualified expert.

64. **What the correct activity status of the proposal is.**

The activity status of the proposal was subject to debate between the applicant and DSF's lawyer in particular. In the initial AEE lodged by the applicant the proposal was treated as a discretionary activity for all three sites. Subsequently reflecting the s42A report at the hearing the applicant's lawyer presented the applicant's case on the basis that the proposal was a non complying activity for the Nathans Island site and a discretionary activity for the other two sites. The DSF's lawyer Ms Lenihan generally agreed with that but took the matter further by submitting that the consents should be bundled and accordingly the proposal was for a non complying activity overall.

Mr Hoffman in his s42A report noted that;

"The erection of temporary or permanent structures in the coastal marine area at the "Nathans Island" site is a non-complying activity and is subject to Section 104D of the Resource Management Act."

However Mr Hoffman did not make a clear statement as to the overall activity status of the proposal although he agreed in his response prior to the applicant's right of reply that the consents should not be bundled as they were clearly separate sites with the relevant associated activity status applying to each. He did however note that the Nugget and Horseshoe Bay sites were discretionary activities.

As set out in paragraphs 12 to 16 of this decision I have examined the RCP provisions and reached the conclusion that all three sites require consent as discretionary activities.

As noted earlier In the event that conclusion is incorrect and that the non complying status for structures in *"that part of the coastal marine area located between Stewart Island and the imaginary line from Mamaku Point to Ackers Point"* applies separately even though a marine farm inherently includes structures (and occupation and deposition) , then the Nathans Island site would, by a bundling approach for that site alone, be a non complying activity, notwithstanding that marine farming is a discretionary activity in that particular area.

If that was the case, then based on the evidence in front of me, I conclude that the Nathans Islands part of the proposal will pass one of the s104D tests in that it would not be inconsistent with or contrary to the relevant objectives and policies and thus would then fall to be determined under s104 and s104B of the Act.

65. **Whether the application(s) should be treated as bundled if the Nathans Island site was a non-complying activity while the Horseshoe Bay and Nugget sites were discretionary activities.**

Both Ms Lenihan and Mr Chapman made detailed submissions on this matter and Mr Hoffman also provided his opinion. Having regard to the respective views put to me I find that the sites or consents should not be bundled. The sites are geographically distinct and well away from each other. Even if the Nathans Island site was found to be a non complying activity overall, there are no reasonable grounds upon which to conclude that the three sites should then be bundled and thus take on a non complying activity status overall.

Apart from the fact that each of the site could have been applied for separately (and as noted by Mr Chapman it was simply a matter of practicality that one application be lodged) the ESRCP provisions are clear that there is a hierarchy of activity status in relation to marine farms ranging from prohibited through to non-complying to discretionary.

The Plan has identified that in the area where the Nathans Island site is proposed stand alone structures are a non-complying activity but where such structures form part of a proposed marine farm then the overall assessment of that activity as a discretionary activity also properly considers that matter of structures in any case.

There is no evidence in front of me that conclusively demonstrates that all three applications should be bundled together. As Mr Chapman also noted, even if the Nathans site was non-complying, it passed at least one of the s104D tests and thus ended up being assessed under s104 and 104B the same as the other two sites. The only perceived advantage to bundling may be that if one site failed both s104D tests then all sites would declined consent.

My finding is that the application should not be bundled and that each of the three sites takes on the activity status that is ascribed to it under the Plan provisions.

66. **Whether there was a relevant permitted baseline.**

The matter has been traversed earlier in this decision and while it was ultimately agreed that Cod and Cray pots which are associated with commercial fishing are not subject to the ESRCP rules the issue still remained as whether they were there temporarily or permanently. In essence those activities may be part of the existing environment but are not part of any permitted baseline consideration. Marine farms are provided for as discretionary, non-complying or prohibited activities in the ESRCP provisions and as such there is no permitted baseline applicable to the proposal.

67. **Whether economic viability considerations is a relevant matter.**

This matter was raised by several submitters including Mr Lawson for CRA8 Management Committee Inc who considered it reasonable to consider the economic viability of the application, as it was a discretionary activity. He argued that insufficient evidence of the viability of the operation had been provided, and that the application acknowledged the level of uncertainty with regard to the success of the operation.

The application is based on and acknowledges that the consents are sought for a trial operation hence the requested 5 year duration. Obviously, part of that trial will involve economic viability considerations by the applicant. The suggested conditions in the s42A report include a bond to ensure removal of all structures and/or debris associated with the proposal should it fail or cease. While clearly the ability of the applicant to meet any conditions of consent is a consideration and that may involve financial abilities ultimately such considerations can be addressed through monitoring of the applicant's compliance with conditions. Enforcement action can be taken where conditions of consent have not or are not being given effect to.

Beyond those considerations the matter of whether an applicant is likely to succeed in a venture is not one that can influence decision making to the extent suggested by submitters.

68. **The extent of pest risks (and rats in particular) for adjacent land [in particular the DSF land] and whether that risk was significant (or more than minor) such that the proposal should be refused consent.**

The DSF made strong submissions that the risk of pest incursion and rats in particular was significantly increased by the proposal and that consent should be refused as a consequence. Reference was made to the Ulva Island Marine Reserve (Stewart Island) which was established in 2004. It was submitted that there were incidents each year where 1-2 rats were found on the island. The evidence from DFS did not however provide any factual details or analysis of how and why those incidents occurred.

There was no evidence around the effects of such incidents and what steps had been taken especially in relation to consequent management costs given the DSF placed emphasis on that aspect being a matter of concern given potential costs of reacting to rat invasion on the Sanctuary.

I note that the applicant's planner Mr Watt advised me that there were often large numbers of recreational boats anchored around Ulva Island and the in proportion to those numbers 1-2 rat events per annum did not seem extremely high. He also noted that the proposal would not have a high frequency of vessel movement compared to those associated with Ulva Island.

The DSF evidence was that bait stations alone (as suggested by a recommended condition in the s42A report) on board the applicants vessel(s) were not adequate and that traps also were needed. They also were of the opinion that there would be inadequate monitoring of such a condition and the applicant was unlikely to comply with such a requirement. The applicant indicated that he had never had a rat on his vessels in over 70 years and that his vessel was anchored in Horseshoe Bay and was refuelled at anchor thus any risks related to rats potentially swimming 100m to board his vessel and then swimming from the vessel to land when the boat was engaged in pot retrievals and inspections-which was carried out without anchoring.

Mr Hoffman noted that;

Marine farms can provide a habitat for pest species such as Undaria. Additionally, the vessel used to service the marine farm may provide a vector for incursions of pest animals, particularly rodents, into the adjacent Dancing Star Foundation ecological preserve.

Mr Watt was of the opinion that with a condition requiring rat bait on the servicing vessel risks were reduced to an acceptable level.

The applicant acknowledged that there was a risk from rats but that risk was very low and providing bait on board as suggested in the condition was adequate mitigation.

I note that there is no DIRECT ability to manage rat vector risk associated with recreational vessels who may visit Stewart Island and Ulva Island. Those risks will continue to be there and even if there were no marine farms as proposed. That point was made by Mr Chapman in his submissions and right of reply.

Having heard the evidence, my finding is that while risk to the Sanctuary (and also the National Park, DoC and other land on Stewart Island) from rats does and will continue to exist, the potential for such risk to be significantly exacerbated as a result of the proposed marine farms is relatively low if appropriate pest management measures are undertaken by the applicant as required by a condition of consent and where regular monitoring of those risk management measures is carried out by the Council.

69. **Whether the proposal will adversely affect navigation and safety of vessels.**

A number of submitters contended that the proposal will affect the safe and efficient movement of vessels with Mr Johnson providing some evidence on that matter. Other submitters were of the view that there were no navigation and safety issues arising from the proposal.

The Council's Harbourmaster Mr O'Sullivan advised that he did not believe that there any navigation issues arsing from the proposal and that safety can be addressed by appropriately coloured buoys and if and where necessary lighting. As many vessels did not have radar the suggested use of radar reflectors was considered to add little value.

Mr Johnson, at the Chair's request, drew 'existing' navigation ways on three aerial photographs of the proposed farm areas provided by the applicant. The applicant advised that in his opinion they were not shown correctly as drawn by Mr Johnson.

All three proposed farms are located close to shore. The Nathans Island site ranges from 37m to 134m seaward of MHWS with a maximum width of about 110m. The Nugget site ranges from 55m to 102m seaward of MHWS with a maximum width of about 32m. The Horseshoe Bay site

ranges from 83m to 130m seaward of MHWS with a maximum width of about 90m but ranging from 44m to 99m.

Based on the evidence and having made a site visit and looking at navigation aspects particularly I prefer to rely on the evidence of the Harbourmaster and noting the size, shape and locations of the tree farm areas find that the proposal will not raise any navigation and safety effects that are more than minor. Provided the farms are marked out appropriately in accordance with the Harbourmaster's directions and requirements I believe any potential safety risks can be minimised.

Boaties generally exercise caution when close to shore and there is no reason why that will not continue to be the case especially where a marine farm is known to exist as normally marine charts will be notated to indicate the marine farms.

70. **The nature and extent of actual or potential effects on the environment.**

Mr Chapman in his opening submissions summarised what the application identified as the actual and potential effects arising from the proposal. Those were stated to include visual effects, water quality, effects on the seafloor, effects on marine life, effects on access to the CMA and navigation, effects on natural character and positive effects

Mr Hoffman also addressed effects n his s42A report at Section 2.

His report was not entirely definitive noting he stated at Section 2 para 1 that;

The adverse effects of the activity may be more than minor. However, the effect is likely to be less than those of currently-consented, traditional marine farms, due to the relatively low density of structures, and the relatively low level of biomass to be produced within the marine farm sites.

Visual Effects

In terms of visual effects Mr Hoffman noted that;

Page 16 s42A report" I consider that the visual effects of the activity will be greater than that of the storage of cod and lobster pots".

Mr Watt submitted in his AEE and s92 response that the surface visual effect of buoys will be minor or less than minor and similar to the storage of cod or Cray pots which is permitted by the ESRCP.

The Forest and Bird Society were the only other submitters who specifically mentioned visual effects as an issue. No evidence was provided in support of their concerns.

Having considered the application detail and all evidence I have reached the conclusion that the proposal will not have more than minor adverse visual effects. That is based on my own site visit, the scale and location of the marine farms and the number of pots thus buoys in each location as well as the location of the sites in relationship to Oban and public viewing points which include the CMA and navigable waters.

There are a number of buoys in the waters around Stewart Island at any time associated with recreational fishing and in Horseshoe bay there are concentrations of buoys associated with storage pot activities (associated with commercial fishing). The Horseshoe Bay and Nugget sites will contain 18 and 9 pots/buoys respectively. The proposed spacing of such pots/buoys was identified by Mr Watt to be at a one pot per 980m2 of water surface area. The buoys are likely to move with the tide and wind such that they will not continuously form an even spacing pattern. While buoys are usually orange in colour to maximise visibility to mariners the size of those buoys means that in other than perfectly calm water conditions they will have intermittent visibility as they rise and fall.

The Horseshoe bay and Nugget sites are based well enough away from settlement areas such that they will not have any significant visual effect for residents or visitors. While they may be visible to boaties, that will be for short periods of time unless vessels anchor nearby.

As noted in the discussion on navigation and safety the farms are comparatively close to shore and unlike some farms are not located in open waters where they become a standalone feature with high visibility. The Nathans Island site is more removed from Oban and has far less potential visibility except to the DFS land users-and we were informed that the DSF Sanctuary does not have open public access. Also in respect of the potential rat risk issue we were told that the land adjacent to the Nathans Island site was some distance from gates and thus of poor accessibility suggesting that there would be a limited number of viewers on that land who may see the marine farm.

I also note that while not a baseline comparison, the storage of cod or Cray pots with associated, [which if associated with commercial fishing is not an RMA matter], could in theory occur at any of the subject sites-putting aside theft risk issues which may prevent that from being realistic.

While I am satisfied that the proposal will have no more than minor adverse visual effects I do note that if following this *trial activity* consent is sought for permanent marine farm activity at the subject sites I would expect that a expert landscape and visual assessment would be needed to support such an application. As the current proposal has a fixed duration of 5 years the lack of expert visual assessment was not a matter that my site visit and evidence, limited as it was, could not overcome.

71. Water Quality and Deposition effects

In regard to water quality Mr Hoffman noted at page 17 of the s42A report that;

There are risks to water quality associated with intensive marine farming, as a large number of molluscs in one location can unbalance the ecosystem. The Council's Coastal Scientist, Nick Ward, commented that a significant area of risk arises from the build-up of organic matter and sediment such as pseudofaeces and shell fragments on the sea floor, which can lead to anoxia on the seabed as bacteria consume the material. The pots to be used will not confine debris created by the oysters. However, the operation is less intensive than other marine farming operations such as mussel long lines, and it is anticipated that the level of debris created by the proposal should be less than that by more intensive marine farm operations.

The species farmed at the sites are filter feeders and do not require artificial feeding.

Mr Street the applicant's expert witness was definitive in that he did not consider there were any adverse effects on water quality likely to arise from the proposal. No other expert evidence was called that contradicted his conclusions.

Based on the evidence I concur with Mr Street's findings and note that irrespective of that conclusion and taking a precautionary approach, appropriate conditions should be imposed requiring the monitoring of water quality.

In regards to deposition and effects on benthos the only expert evidence was from Mr Street a Marine Scientist of some standing and extensive experience relevant to marine farming. His evidence was that there was unlikely to be an adverse effects arising form the proposal given the impact nature of it. I accept that evidence and find that any adverse effects arising in relation to deposition will be no more than minor.

72. Noise

Mr Hoffman noted in his s42A report that;

No noise will be generated from the marine farm itself, as there are no mechanical elements. The applicant's consultant has not specifically measured noise levels produced by the boat used to service the marine farm. There are noise-reduction measures in place on the boat, however, such as:

- *fibreglass hull;*
- *rubber engine mounts; and*
- *dry-stack exhaust silencing.*

Mr Watt in his s92 reply stated that;

"Rule 5 .3.4 provides that it is a permitted activity to generate noise that will not exceed 50dBA 'at the landward boundary of the coastal marine area' between 7.00 a.m. and 10.00 p.m. Rule 5.3.6 provides that it is a permitted activity for ships in motion to emit noise that does not exceed a sound exposure level of 90 dBA 'in any single drive-by position beyond a line situated 25 meters back from the line of travel'.

We have not taken noise readings of the boat, however the matter is addressed on page 15 of the March 2013 Assessment of Environmental Effects where I noted that it is possible to converse comfortably on deck while the boat is under way. It is relevant to note that:
The boat is a "Karitane" class fishing boat with a fibreglass hull (fibreglass is a sound absorber and not prone to resonance, in contrast to steel or aluminium hulls)
The engine is a 4 cylinder Perkins normally aspirated diesel of about 40 horsepower, mounted on rubber engine mounts. These are quiet, sweet-running units.
The exhaust is a dry-stack silenced system.

On the basis of the table of comparative examples attached - obtained from the OSH website - it might be reasonable to infer that the noise on deck could be in the order of 50 - 60 dB while the boat is under way. At idle it is more likely to be nearer or below 50 dB. Noise decreases with distance. The nearest boundaries of the marine farm sites are (with one exception) more than 50 m from the shore. On-line calculators suggest that a noise of 60 dB when measured 5 meters from source is likely to reduce to nearer 40 dB when measured 50 meters from source.
The author is not a noise expert and the above figures are not offered as expert opinion. Empirically, actual noise experienced in the coastal environment varies hugely with wind conditions, wind direction, and sea conditions.
However the above comments indicate there is good reason to believe that the noise generated by Mr Lind's boat will comply with the permitted activity baseline of the Regional Coastal Plan. Further, if Mr Lind's boat does not comply, neither will just about every other boat at Stewart Island including the ferries".

While there has been no expert noise assessment of the proposal I am satisfied that a suitable s128 review condition and enforcement of the applicable noise standards by the Council will adequately ensure that noise levels associated with the proposed marine farms are kept to the specified limits. There is no evidence that allows me to conclude that there will be any adverse noise effects.

73. Marine animal and Bird Entanglement Effects

Mr Hoffman noted at page 17 of his s42A report that;

"Numerous marine mammal and bird species are present in the vicinity of the proposed activity, including fur seals, sea lions, blue penguins, Fiordland crested penguins, skua, titi, petrels and prions. The application poses a risk of entanglement of marine animals and birds in the lines used to attach the buoys to the pots".

Mr Watt noted that local knowledge is that dolphins do not habitually pass near the coast in this area, and not within the area within which it is proposed to site the marine farms. Mr Chapman

submitted that there was no evidence provided that showed a significant risk existed and that any such risk existed in relation to the Big Glory marine farms and other random cray and cod pots and buoys that area scattered around Stewart Island.

The DSF witness, Ms Beaven raised this matter in her evidence and illustrated that with photographs. However while the risk was acknowledged by all parties that was no evidence provided which showed any empirical or causal relationship between marine farming and marine mammal or bird entanglement events and frequencies. Nor was there any evidence as to what such events occurred in association with other marine structures or buoys that are outside of any resource management control process.

My conclusion based on the evidence is that while such risks do and will continue to exist they have no defined pattern such that consent should be declined based on such a risk potential.

In the circumstances I consider that a notification condition relating to any such entanglement events is appropriate in order that a body of information can be built up around the circumstances of such events.

74. Pests/Rats Incursion Effects

These matters are addressed separately. In that discussion I note that overall provided appropriate risk prevention measures are undertaken, include on board baiting and standard rodent traps, as reflected in proposed conditions, there will be no more than minor effects in my finding.

75. Effects on Navigation and safety

There were a number of submitters who argued that the proposed farms would constitute a navigational hazard. One witness in particular, Mr Johnson, drew navigational pathways on maps of the three sites to demonstrate that such risks do exist. The applicant rebutted that saying Mr Johnson had deliberately drawn routes that showed conflict.

On the other hand the applicant had two witnesses who, based on their appropriate experience, were of the opinion that the marine farms would not constitute a navigational hazard nor would there be any additional safety risks arising.

Finally, the Council's Harbourmaster [consistently] put forward his opinion that the proposal would not raise adverse navigational hazards while noting appropriate markers and lighting were needed which was normal practice.

From my site visit and based on the evidence I conclude that the proposal will not raise navigational hazards such that consent should be declined. The proposed sites are close to shore and generally will not be areas where mariners will chose to go if they are simply making way to or from Oban or Halfmoon Bay. While the inner bad weather passage known as the 'Mucks' is close to a site there is adequate navigational separation to provide for safe passage of vessels.

Overall I conclude that the adverse navigation and safety related effects from the proposal will be no more than minor.

76. **Whether the activity will result in any *significant* adverse effect on the environment such that a description of any possible alternative locations or methods for undertaking the activity should be provided and/or examined in the application but has not been.**

This matter was raised by Ms Lenihan in respect of clause 1(b) Schedule 4 of the RMA and responded to by Mr Chapman in his right of reply.

Essentially Ms Lenihan submitted that the effects of the proposal were significant and that there was no evidence to the contrary. Accordingly the applicant needed to and had failed to carry out the alternatives consideration referred to in clause 1(b) Schedule 4 of the RMA.

Mr Chapman countered by stating that the AEE had in fact included consideration of alternatives at clause (g).

I have considered the evidence and noting that my conclusion is that the adverse effects will be no more than minor then the provisions of clause 1(b) Schedule 4 of the RMA will not apply. Irrespective of that the applicant has cast his mind to site suitability matters, which is not exactly the same as considering alternatives, but in doing that eliminated a number of locations for a range of reasonable reasons. The DSI[1] submitted that the sites seemed to have been chosen solely for convenience being close to Mr Lind's home but that is going too far in my opinion. As put by Mr Chapman there may be other locations but those may well have higher environmental values associated with them than the proposed sites. As Ms Lenihan noted, it is not simply a matter of whether the proposed sites are the best sites.

77. **The extent of relevance if any of the Environmental Defence Society Inc v New Zealand King Salmon Company Ltd decision by the Supreme Court**

As noted elsewhere the matter of the relevance of the Environmental Defence Society Inc v New Zealand King Salmon Company Ltd decision by the Supreme Court in respect of the relationship between Part 2 of the Act and the NZCPS was raised by Ms Lenihan in her submissions. Those were responded to by Mr Chapman in his right of reply. Subsequent to the adjournment of the hearing after the applicant and all submitters had presented their cases the Council's reporting planner was as a matter of further information asked to provide the Council's interpretation of the relevance of that decision to the proposal. That comment was then sent to the hearing participants for their response. Those comments and response are set out elsewhere in this decision.

Mr Hoffman did note that;

"The key tension in the judgement appears to be between whether to use the objectives and policies of the New Zealand Coastal Policy Statement as a means for making an overall judgement or whether the objectives and policies represent environmental bottom lines, each of which must be satisfied in each case.

The decision has quite specific implications for plan development, as it highlights the requirement in Section 67(3) to 'give effect to' the NZCPS. It seems apparent that the wording of S67(3) is intended to give decision-makers a framework to work within, while still giving scope for them to develop approaches that are appropriate within their specific regional milieu.

However, the implications for resource consent decisions are less clear, as the consent authority is only required to 'have regard to' the provisions of the NZCPS under Section 104(1). This is quite plainly less prescriptive than the 'give effect to' clause in S 67(3). Further, the NZCPS delineates the space in which all Regional Coastal Plans must operate.

The wording in Polices 13 and 15 of the NZCPS, to 'avoid' effects on natural character within landscapes of outstanding natural character, sets quite a clear bottom line. Notwithstanding the fact that the current Regional Coastal Plan for Southland was in place before the current NZCPS, the policies around natural character and outstanding landscapes are consistent with those in the NZCPS. In particular the wording of Objective 5.2.1, to '...protect outstanding natural features and landscapes...from the adverse effects of use, development, and subdivision' is similar in the tone and level of protection it provides. Policy 5.2.1 employs similar wording. That policy goes on to specifically identify the coastal environment of Stewart Island/Rakiura (with the exception of Halfmoon and Horseshoe Bays) as one of outstanding natural character.

There is a hierarchy of documents under the umbrella of the RMA, with provisions running from general principles down to site-specific rules. The natural character policies in the RCP are consistent with those in the NZCPS, and are more site-specific. Therefore, while the decision maker must have regard to the policies and objectives of the NZCPS in accordance with S 104, the objectives and policies within the RCP should be used to more closely guide decision-making at the consents level."

78. The submission for DSF by Ms Lenihan was essentially that the decision meant that the proposal must give effect to the NZCPS and that the word 'avoid' in Polices 13(1)(a) and 15(a) was tantamount to a rule. She submitted that there was no longer a Part 2 balancing consideration applicable.

The response by Ms Lenihan to the additional information provided by Mr Hoffman in respect of the King Salmon decision was more detailed than her initial submissions.

She noted that there was no challenge to the identification of the areas where the marine farms are being proposed as being an outstanding landscape. In terms of the NZCPS Policy 15(a) states adverse effects on outstanding landscapes must be avoided.

Ms Lenihan's submission was that the issues arising from consideration of the King Salmon case are:

(i) what relevance do the findings from King Salmon have in the context of considering a resource consent as opposed to a regional plan?

(ii) is the environmental bottom line approach in King Salmon relevant in the context of a resource consent and s104 considerations

She agreed with Mr Hoffman that that *"the implications for resource consent decisions are, as set out in the RMA, different for regional plans and resource consents – for regional plans the requirement is to "give effect" to the NZCPS s67(3); for resource consents, the requirement is to "have regard" to the NZCPS, s104".*

79. Ms Lenihan noted that;

"The position of the Foundation is that despite this being an application for a resource consent;

(i) the relevant directive provisions of the NZCPS provide an environmental bottom line, and

(ii) a great deal more weight must be given to these directive provisions of the NZCPS given:

i. their position in the hierarchy of statutory documents; and

ii. the fact that the inferior policy statement and plans do not give effect to the directive provisions of the NZCPS, as required to do so by s67(3) RMA

80. Ms Lenihan also submitted that

'More weight should be given to the relevant provisions of the NZCPS, and less weight to the Regional Policy Statement (RPS), Proposed Regional Policy Statement (PRPS) and Regional Coastal Plan (RCP), as these documents do not "give effect to" the relevant provisions of current NZCPS 2010 as required by the RMA '

Mr Chapman submitted that the New Zealand King Salmon decision is not directly relevant. He noted that decision was concerned with an application for changes to the Marlborough Sounds Resource Management Plan and the effect of policies 13 (1) (a) and 15 (a) of the New Zealand Coastal Policy Statement (NZCPS).

He also noted that the Board of Enquiry found that the area in question was an area of outstanding natural character and outstanding natural landscape and that the proposed salmon farm would have significant adverse effects on that natural character and landscape. Consequently, it the plan change was granted policies 13 (1) (a) and 15 (a) would not be complied with. Despite this he said, the Board granted the plan change. He noted also that the Board said that it was required to give effect to the NZCPS "as a whole" and to reach an "overall judgment" on King Salmon's application in light of the principles contained in Part 2 of the Resource Management Act.

His understanding was that the Supreme Court held that because the Board did not give effect to policies 13 (1) (a) and 15 (a) in allowing the plan change, the Board did not "give effect to" the NZCPS as required by section 67 (emphasises added).

In Mr. Chapman's submission, in deciding a resource consent application, regard shall be had, subject to Part 2, to any relevant provisions of the NZCPS which is not the same as the requirement under section 67 to give effect to the NZCPS.

My finding on this matter is that while the Environmental Defence Society Inc v New Zealand King Salmon Company Ltd decision clearly needs careful consideration, for a resource consent application it does not mean that Part 2 of the Act should be disregarded in making a decision on the proposal and that any balancing considerations should be avoided.

While the ESRCP clearly pre-dates the 2010 NZCPS and as a result probably needs a review in respect of the NZCPS, that process has partly been initiated as evidenced by the two sets of documents Mr Chapman referenced; being the Southland Aquaculture Strategy and the Aquaculture Zoning in the Southland Region Project. Those documents clearly signal intent to formulate new strategies and directions for aquaculture, which ultimately may result in changes to the ESRCP.

Irrespective of perceived deficiencies in the operative ESRCP [which was only made operative in respect of Chapter 15 on Marine Farming in 2013] the Plan does in my finding reflect the 2010 NZCPS to a large degree in that;

a) it contains a clear planning hierarchy in respect of provisions regulating marine farming (objectives, policies and rules), and

b) the rules clearly establish areas where marine farming is to be avoided (by way of specific areas where marine farming is a prohibited activity) and other areas where such activities are non-complying and thus where the s104D tests apply.

At para.59 of her primary submissions, Ms Lenihan noted that Policy 8 of the NZCPS provides for aquaculture in appropriate places and contrary to what the applicant's AEE stated, the ESRCP does not provide for marine farming in the subject areas-it was in her submission a discretionary activity or non complying if her 'bundling' argument was accepted.

I note that my understanding of the Act is that the listing of an activity as being discretionary equates to provision.

In her later submissions in relation to the Supreme Court decision, Ms Lenihan argued that there was a weighting consideration that should be applied and that where there is inconsistency between statutory documents, s104 applied. She submitted that there were inconsistencies between the

statutory documents as they do not give effect to the NZCPS. She opined that more weight should be given to the NZCPS.

Ms Lenihan also noted in her later submissions that;

The Court also held that the Minister of Conservation was fully entitled to require in the NZCPS that particular parts of the coastal environment be protected from adverse effects of development. That is what she did in policies 13(1)(a) and 15(a) in relation to coastal areas with features designates as "outstanding"

And

Although the requirements in s104 may appear less prescriptive than s67(3), given the reasoning set out above, far greater weight should be placed on the relevant provisions of the NZCPS, which are directive and set a clear environmental bottom line'.

Submitting further on the matter of giving effect to the NZCPS, Ms Lenihan noted that;

ES contends that notwithstanding the fact the current RCP was in place before the NZCPS 2010 was promulgated, the policies around natural character and landscape are consistent with those'.

She went on to describe the differences between the 1994 NZCPS and the 2010 NZCPS as addressed by the Minister of Conservation in that case.

"i. the language overall in the 1994 NZCPS was in relevant respects, less directive and allowed greater flexibility for decision makers than the language of the NZCPS 2010. The greater direction given by the NZCPS was a feature emphasised by the Minister of Conservation when the NZCPS was released [King Salmon para 134].

ii. the NZCPS 2010 was more specific than the 1994 statement about how some matters of national importance under the RMA should be protected from inappropriate use and development. Among the key differences were the direction on protection of natural character and outstanding landscapes. The emphasis is on local councils to produce plans that more clearly identify where development will need to be constrained to protect special areas of the coast.

iii. the NZCPS made provision for aquaculture in "appropriate places".

She noted that *"there are clear intentional differences between provisions of the 1994 NZCPS and the intentionally more directive provisions in the 2010 NZCPS, particular in relation to outstanding natural character and landscape. These are not just in relation to the increased protection given to these specific areas, but an intentional highlighting of the differences between natural character and natural features and landscape i.e. Policy 13(2) states :*

"Recognise that natural character is not the same as natural features and landscapes or amenity values".

In Ms Lenihan's opinion such differences would require a reframing of objectives and policies emanating from the 1994 NZCPS, given the clear differences in the two documents.

Ms Lenihan also set out what she considered were a number of deficiencies in the assessment of the proposal, both by the reporting planner in his s42A report and by the applicant's planner in his AEE. In particular she noted that without doing a thorough analysis of all the provisions of the RPS, PRPS and the ESRCP, but using a few examples, the objectives failed to give effect to the NZCPS. She noted one particular difference or deficiency where the RPS states to 'avoid wherever practicable' which she submitted was clearly not the same \as the NZCPS directive to 'avoid'.

In her conclusion in those later submissions Ms Lenihan noted that

Para 11 "Although a policy in the NZCPS cannot be a "rule" in the RMA sense, it may, nevertheless, have the effect of what in ordinary speech would be considered a rule"

And

Para 12. "The use of the word "avoid" in policies 13(1)(a) and 15(a) gives a strong direction. These policies are consistent with the other policies supporting the development of aquaculture (policies 7 and 8 in particular), because they protect only particular limited areas of the coastal region – the areas of outstanding natural character and landscape. Essentially there is no inconsistency between Policies 13(1)(a) and 15(a) on the one hand and Policy 8 on the other".

and

Para 13. "The relevant directive provisions of the NZCPS provide an environmental bottom line, and a great deal more weight must be given to these directive provisions of the NZCPS given:

> *i. their position in the hierarchy of statutory documents; and*
>
> *ii. the fact that the inferior policy statement and plans do not give effect to the directive provisions of the NZCPS, as required to do so by s67(3) RMA.*

Para 14 " Conversely, very little if any weight should be placed on the relevant provisions of the RPS, PRPS and RCP, for the reasons set out above."

Para 15" The deliberate change in direction from the 1994 NZCPS to the more directive provisions of the 2010 NZCPS have not been given effect to in the RPS, PRPS or the RCP".

Having carefully reviewed the evidence on this matter I do not concur with a number of Ms Lenihan's conclusions and prefer Mr Hoffman's and Mr Chapman's conclusions on the relevance of the King Salmon decision.

I note that in section 5(2)(c), "avoiding" has its ordinary meaning of "not allowing" or "preventing the occurrence of".

The ESRCP does clearly 'provide' for marine farming as a discretionary activity in defined location (defined by excluding specific areas for marine farming using a prohibited activity status or specifying area where the activity is a non complying activity).

To that extent the ESRCP cannot be seen to be inconsistent with the NZCPS or failing to give effect to the NZCPS.

The real issue for DSF it seems is whether the discretionary activity status for marine farming in the ESRCP is 'too generous' and not in their minds sufficiently reflective of the 2010 NZCPS, particularly in respect of identified outstanding natural landscapes and associated relationships to aquaculture and marine farms in particular.

That perceived defectiveness of the ESRCP however is a different matter to examining the proposal under the operative ESRCP provisions.

Notwithstanding Ms Lenihan's 'weighting' argument, the provisions of Part 2 are in my opinion relevant to a determination on the applicant's proposal.

Based on the evidence and the content of the relevant provisions of the statutory documents, I conclude that there is a clear policy direction in the ESRCP that essentially does give effect to the NZCPS 2010 and that the rules do establish a regulatory framework for marine farming that distinguishes those parts of Stewart Island where such activities should be avoided (by way of a prohibition) and those parts where a higher level test by way of a non complying activity status applies to such uses.

Elsewhere marine farming is provided for a discretionary activity and is subject to an assessment under s104 and 104B of the Act and thus the relevant policy provisions of the applicable Plans.

While the NZCPS may provide an environmental bottom line, the King Salmon decision is particular to a Plan Change and for resource consent applications, the provisions of Part 2 are still relevant.

The Minister of Conservation signed off on the Chapter 15 part of the ESRCP in 2013 which is some time after the NZCPS can into being. While clearly the NZCPS placed an obligation on Councils to review their plans for consistency with the NZCPS the fact that a plan has not been reviewed since 2010 does not automatically mean that it is flawed and/or does not give effect to the NZCPS.

The activity hierarchy found in the ESRCP does on my finding establish certainty around inappropriate locations (avoidance) for marine farming and relies on a policy direction as a means of assessing marine farm proposals in areas where such activities are discretionary. That in my opinion provides an appropriate means of assessing any proposal in relation to the values associated with Stewart Island's outstanding natural landscape and values as well as those associated with the surrounding waters.

81. **Whether the proposal is consistent with the relevant planning documents particularly the relevant objectives and policies.**

The Regional Coastal Plan provides for marine farms as a discretionary activity as noted in the separate discussion herein on the activity status of the proposal. The ESRCP largely relies on an assessment of such proposals against the relevant objectives and policies set out in the Plan.

Mr Hoffman in his s42A report set out in some detail the relevant objectives and policies that should be considered. Mr Chapman concurred with that analysis and reinforced it in his submissions. Ms Lenihan also addressed the relevant objectives and policies in some detail and in particular focussed on the NZCPS in relation to the relevant regional planning documents.

In respect of the NZCPS, Mr Hoffman referred to Objectives 1-7 and Policies 1, 2, 6, 8, 12, 13, 15 and 18. After his assessment of those he concluded that the proposal was consistent with the NZCPS 2010.

In particular he noted that;

Policy 13 is to preserve and protect natural character. Stewart Island/Rakiura is considered to have exceptional natural character in general. Horseshoe Bay is modified to some extent by human activities and habitation, therefore it is considered that the "Horseshoe Bay" marine farm site may indeed be consistent with the natural character of the area. However, the "Nathans Island" and "Nugget" sites adjoin an ecological preserve with a large area of regenerating native bush. The marine farm structures and associated activities are unlikely to be consistent with the natural character of this section of the coast.

Similarly, Policy 15 requires that the effects of activities on outstanding natural features and landscapes be avoided. The entirety of Stewart Island/Rakiura, with the exception of Oban and Halfmoon Bay, is considered to be "outstanding" under the Regional Coastal Plan.

Ms Leniham took an opposing view particularly in respect of Policy 13. She also disagreed with Mr Hoffman's analysis in respect of the RCP, RPS and PRPS.

82. In regards to the ESRCP Mr Hoffman noted that;

Objective 4.6.1 and Policy 4.6.1 are to protect areas free from use and development by seeking to concentrate use and development in area where those activities are already taking place. This application is not consistent with these objectives and policies, as all marine farms at Stewart Island/Rakiura are concentrated in Big Glory Bay. Conversely however, there is no longer a moratorium on marine farming outside Big Glory Bay, allowing marine farming to occur outside this area, though some areas remain prohibited.

He also concluded that;

The application is not consistent with Objective 9.1.1 and Policy 9.1.1.

Objective 9.1.2 requires that any exclusive or preferential occupation of the CMA is justified. Policy 9.1.2 requires that that Commissioner prefer preferential occupation rather than exclusive occupation. In this case, the activity requires occupation of the coastal marine area, although not exclusive occupation. <u>However, the presence of the structures will effectively limit access by others'.</u>

In respect of the above conclusion I note the evidence showed that the separation of the buoys at 980m^2 spacing will not preclude access by other CMA users nor will the proposal unduly impede navigable ways. Access will be constrained but not limited in my finding based on the evidence.

83. Mr Hoffman also concluded that;

Objective 10.2.1 requires that deposition resulting from human activities in the coastal marine area is minimised, and the effects of any deposition that does occur are avoided, remedied or mitigated. Policy 10.2.7 requires that the effects of the deposition of organic material are avoided, remedied or mitigated. The application provides little commentary on the likelihood and extent of deposition on the seabed, although it does comment that the proposed marine farm operation is less intensive than those located in Big Glory Bay.

I note that Mr Streets evidence was unequivocal that there will be little deposition beyond that which may occur naturally and that evidence was not challenged by any other expert.

In regards to objectives and policies in relation to structures Mr Hoffman noted that the proposal was consistent with many of those. He did state that' *the contribution of the application to the social, economic and cultural wellbeing of the local community is uncertain, largely due to its small scale and experimental nature (page 40 of s42A report).*

84. My conclusion on that matter is that a decision on the proposal does not turn on whether or not it makes a substantial contribution to the social, economic and cultural wellbeing of the local community. The proposal is only for duration of 5 years and given the start up period and implementation and growth phases it is unlikely that the proposal will have a significant economic benefit in that time especially given that the applicant is most likely the main beneficiary of any income coming from the proposal.

85. While Mr Watt provided analysis of the likely future returns from the proposal he acknowledged he was not an expert in such matters. He also postulated that if the trial was successful there could be more sites used for similar purposes and that they would provide a proportionately higher economic and social return. However that is not the proposal and thus has little bearing on a decision.

86. There will be social and economic benefits in that a person (the applicant) will be able to remain employed using an Island home base and they will undoubtedly spend some money locally.

Overall and on balance I consider the proposal to be consistent with the Chapter 11 ESRCP objectives and policies.

In terms of the section 15 the ESRCP objectives and policies related to marine farming

Mr Hoffman noted at page 41 of the s42A report that;

Provision is made in the Regional Coastal Plan for marine farming, however, the coastal environment requires protection, particularly those areas with significant values. An extensive monitoring programme is suggested as a condition of consent.

Looking at Objective 15.1.1 in particular and having regard to Ms Lenihan's submissions in relation to the NZCPs and the King Salmon decision I conclude that the ESRCP adequately reflects that objective given the hierarchical approach imbedded in the Plan in relation to spatial limitation for marine farming. The proposal is provided for as a discretionary activity as a marine farm as it is not in any of the areas where such activities are non-complying or prohibited.

The ESRCP clearly contemplates marine farming occurring in locations where there will be no more than minor adverse environmental effects. The outstanding natural values/landscapes associated with much of Stewart Island will clearly temper the suitability of many activities.

The applicant's proposal has several unusual features in that;

a) consent is only sought for a five year duration, and

b) the marine farm does not involve surface structures other than buoys and the oyster rearing infrastructure is based on Cray type pots resting on the sea floor.

There are only to be a total of 60 pots and they are spread out such that they have a 'density' of one per 980m². The proposal has totally different characteristics and thus effects when compared to typical salmon or mussel farms which are the most common type of marine farms noting the Big Glory examples.

The proposal is essentially a cottage scale of marine farming where effects are demonstrably no more than minor and where suitable conditions can address necessary monitoring requirements.

87. Having considered the objectives and policies that were put in front of me I note that there are some of those that that are clearly more relevant than others in terms of making a discretionary judgement and exercising balance having regard to Part 2 of the Act. Those include;

Objective 4.1.1	*To avoid, wherever practicable, remedy or mitigate any adverse effects from the use and development of the natural and physical resources within the coastal environment.*

Objective 4.6.1	*To protect areas free from use and development by seeking, wherever practicable, to concentrate use and development into areas where those activities are already taking place*
Objective 4.7.2	*To obtain a level of use which is appropriate in the coastal marine area, particularly in areas where remoteness, wilderness and tranquillity are significant components of the environment.*
Objective 5.2.1	*To protect outstanding natural features and landscapes in the region's coastal marine area from the adverse effects of use, development, and subdivision.*

Policy 5.3.6 Limit activities and structures in the coastal marine area to those that:

a have a functional need for that location; or

b contribute to the amenities of that area;

c are a necessary and functional part of activities also undertaken on adjoining land.

Objective 9.1.1	*Maintain or enhance the availability of the coastal marine area for public recreation and other uses not requiring any form of preferential occupation.*
Objective 9.1.2	*To ensure that any exclusive or preferential occupation of the coastal marine area is justified.*
Policy 9.1.6	*Limit occupation rights to a period that will satisfy the immediate foreseeable needs of the activity.*
Policy 10.2.7	*Avoid, wherever practicable, remedy or mitigate the adverse effects of the deposition of organic material from activities occurring in the coastal marine area, on the seabed or foreshore.*
Objective 11.2.1	*To ensure that structures are located in the most appropriate site so as to avoid, remedy or mitigate adverse effects of their presence.*
Policy 11.2.5	*Structures that could cause an impediment to safe navigation and are not readily visible shall be marked and/or lit in a manner that indicates the extent of the structure.*
Policy 11.2.16	*Avoid, remedy or mitigate the adverse effects of structures on the natural character, amenity, landscape, seascape and open space values of the coastal marine area.*
Objective 15.1.1	*Avoid, remedy or mitigate any adverse effects of marine farming operations.*
Policy 15.1.1	*Require resource consents for the establishment and operation of marine farming developments.*
Policy 15.1.4	*To require monitoring of individual marine farm sites.*

In respect of the NZCPS I particularly note the following objectives and policies.

Objective 2	*To preserve the natural character of the coastal environment and protect natural features and landscape values through:*

- *recognising the characteristics and qualities that contribute to natural character, natural features and landscape values and their location and distribution;*

- *identifying those areas where various forms of subdivision, use, and development would be inappropriate and protecting them from such activities; and*
- *encouraging restoration of the coastal environment.*

Objective 6

To enable people and communities to provide for their social, economic, and cultural wellbeing and their health and safety, through subdivision, use, and development, recognising that:

- *the protection of the values of the coastal environment does not preclude use and development in appropriate places and forms, and within appropriate limits;*
- *some uses and developments which depend upon the use of natural and physical resources in the coastal environment are important to the social, economic and cultural wellbeing of people and communities;*
- *functionally some uses and developments can only be located on the coast or in the coastal marine area;*
- *the coastal environment contains renewable energy resources of significant value;*
- *the protection of habitats of living marine resources contributes to the social, economic and cultural wellbeing of people and communities;*
- *the potential to protect, use, and develop natural and physical resources in the coastal marine area should not be compromised by activities on land;*
- *the proportion of the coastal marine area under any formal protection is small and therefore management under the Act is an important means by which the natural resources of the coastal marine area can be protected; and*
- *historic heritage in the coastal environment is extensive but not fully known, and vulnerable to loss or damage from inappropriate subdivision, use, and development.*

Policy 8

Aquaculture

Recognise the significant existing and potential contribution of aquaculture to the social, economic and cultural well-being 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 water quality 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.

Policy 13

Preservation of natural character

1. To preserve the natural character of the coastal environment and to protect it from inappropriate subdivision, use, and development:

a. avoid adverse effects of activities on natural character in areas of the coastal environment with outstanding natural character; and

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

c. *assessing the natural character of the coastal environment of the region or district, by mapping or otherwise identifying at least areas of high natural character; and*

d. *ensuring that regional policy statements, and plans, identify areas where preserving natural character requires objectives, policies and rules, and include those provisions.*

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

a. *natural elements, processes and patterns;*

b. *biophysical, ecological, geological and geomorphological aspects;*

c. *natural landforms such as headlands, peninsulas, cliffs, dunes, wetlands, reefs, freshwater springs and surf breaks;*

d. *the natural movement of water and sediment;*

e. *the natural darkness of the night sky;*

f. *places or areas that are wild or scenic;*

g. *a range of natural character from pristine to modified; and*

h. *experiential attributes, including the sounds and smell of the sea; and their context or setting.*

Policy 15

Natural features and natural landscapes

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

a. *avoid adverse effects of activities on outstanding natural features and outstanding natural landscapes in the coastal environment; and*

b. *avoid significant adverse effects and avoid, remedy, or mitigate other adverse effects of activities on other natural features and natural landscapes in the coastal environment; including by:*

c. *identifying and assessing the natural features and natural landscapes of the coastal environment of the region or district, at minimum by land typing, soil characterisation and landscape characterisation and having regard to:*

i. *natural science factors, including geological, topographical, ecological and dynamic components;*

ii. *the presence of water including in seas, lakes, rivers and streams;*

iii. *legibility or expressiveness – how obviously the feature or landscape demonstrates its formative processes;*

iv. *aesthetic values including memorability and naturalness;*

v. *vegetation (native and exotic);*

vi. *transient values, including presence of wildlife or other values at certain times of the day or year;*

vii. *whether the values are shared and recognised;*

viii. *cultural and spiritual values for tangata whenua, identified by working, as far as practicable, in accordance with tikanga Māori; including their expression as cultural landscapes and features;*

ix. *historical and heritage associations; and*

x. *wild or scenic values;*

d. *ensuring that regional policy statements, and plans, map or otherwise identify areas where the protection of natural features and natural landscapes requires objectives, policies and rules; and*

e. *including the objectives, policies and rules required by (d) in plans.*

The above objectives and policies define some of the key considerations in terms of making a decision on the proposal. The RPS and PRPS reflect the higher level Part 2 provisions of the Act and NZCPS objectives and policies but often restate in different words the objectives and policies found in the ESRCP.

Having considered the detailed submissions of Ms Lenihan, the submissions of Mr Chapman and the assessment of Mr Hoffman, as well as the evidence in front of me, I find that overall the proposal is consistent with the relevant objectives and policies including those in the NZCPS and the ESRCP.

88. **Whether the proposal merits the grant of consent in terms of section 104 of the RMA.**

Essentially for the reasons already discussed above I find that in terms of section 104(1)(a) of the RMA, subject to the conditions of consent that have been imposed, the actual and potential effects on the environment of allowing the proposal will be appropriately avoided, remedied or mitigated to the extent that they will be no more than minor.

In terms of section 104(1)(b) and again subject to the conditions that have been imposed, I find the proposal is consistent with the relevant provisions of the Regional Coastal Plan.

The proposal is for a small trial aquaculture venture by a local Stewart Island resident who is an experienced fisherman. The chosen trial sites are located where the associated infrastructure, being dominantly buoys and pots, will have low visibility particularly when compared to more traditional marine farms. The proposal is for a duration of only 5 years compared to the minimum 20 years that is usually the case.

The proposed conditions address any potential adverse effects that need mitigation and establish a monitoring regime that will add to the body of knowledge regarding aquaculture.

There was no expert evidence put in front of me by any submitters in relation to any of the key issues that I have identified. The only experts were Mr Watt and Mr Street appearing for the applicant and no submitters called any expert evidence to rebut their opinions.

Submitters individually did have extensive local knowledge which was still relevant and helpful to an understanding of the potential adverse effects of the proposal.

Granting consent will not set a precedent and any future long term aquaculture activity building on the results of this trial venture will need fresh consents that will be subject to appropriate assessment at that time should such consents be sought.

89. **Whether the proposal will promote the sustainable management of natural and physical resources as contemplated by Part 2 of the RMA.**

The purpose of the RMA under Section 5 is the sustainable management of natural and physical resources. This means managing the use of natural and physical resources in a way that enables people and communities to provide for their social, cultural and economic well-being while sustaining those resources for future generations, protecting the life supporting capacity of ecosystems, and avoiding, remedying or mitigating adverse effects on the environment.

Section 6 of the Act sets out a number of matters of national importance which need to be recognised and provided for, and includes among other things and in no order of priority, the protection of outstanding natural features and landscapes, the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna, and the protection of historic heritage.

Section 7 identifies a number of "other matters" to be given particular regard by a council in the consideration of any assessment for resource consent, and includes the efficient use of natural and physical resources, and the maintenance and enhancement of amenity values. Section 8 requires a council to take into account the principles of the Treaty of Waitangi.

For the applicant, the proposal will enable the reasonable trialling of an experimental method of on growing Bluff oysters to a saleable size. That 'experiment' will also enable to Council to obtain information relating to water quality effects associated with such activities as well as obtain information on noise effects and pest control (rats). The Council will also be able to accurately see the visual effects of such activities at a small scale and establish empirical information which may assist with future policy making in relation to aquaculture.

The grant of consent will enable a short term use of the application sites and will maintain the quality of the marine environment and associated amenity values.

Section 123A of the RMA provides for a term of a minimum of 20 years unless the applicant requests otherwise. In this case the applicant has sought a term of five years which is considered to be an appropriate period for the consent holder to trial the proposed oyster growing method.

In terms of Part 2 and particularly having regard to sections 5, 6 and 7 of the RMA, the proposal together with the conditions that have been imposed, will promote the sustainable management of the application sites and the wider environment of Stewart Island.

Making an overall broad judgement, I find that the proposal, as constrained by the conditions that have been imposed, will promote the sustainable management of natural and physical resources as contemplated by the RMA. The limitation of the consent to a 5 year duration is also a relevant matter.

90. **The conditions of consent that should be imposed to avoid, remedy or mitigate any adverse effects on the environment.**

Mr Chapman advised that the recommended conditions of consent were acceptable to the applicant. As indicated at the hearing, there were some conditions that needed change to be more accurate (such as water quality testing) and others which following the hearing of evidence need

amendment to better achieve the environmental outcomes and safeguards that are necessary for a proposal of this type in the proposed locations.

A range of conditions are appropriate and proposed to manage matters such as navigation and safety, monitoring, duration of consent, source of spat, limitations to marine farm areas, debris removal and retrieval, spillages, inspections of service vessel(s), rat management on board the consent holders vessels, non transferability of consent and bonds.

There was also debate over whether the consent should be limited to the applicant and not be transferrable.

Mr Chapman submitted that there was no basis to do that and that there were no unusual circumstances or other grounds that supported such a limitation.

I note that the proposal is very specific to the applicant's expertise and that he has devised a particular approach which is not standard and carries some risks in relation to success or failure and also in relation to potential yield and economic viability. If the consent was to be transferred to some other person or party and Mr Lind's expertise was no longer associated with the proposal then there is no certainty that the proposal would continue to implemented in the form it was proposed.

In my opinion, the specificity of the proposal and its close association with one person as to implementation viability and enforceability by the Council is such that there are reasonable grounds to limit the consent to the applicant and to ensure that it is not transferable or able to be subject to some variation to the nature of the proposal as consented.

Accordingly, a condition should be imposed to that extent.

Overall I find that subject to the conditions of consent that I have imposed any adverse effects on the environment will be avoided, remedied or mitigated.

85 Decision

That pursuant to sections 104, 104B and 108 of the Resource Management Act 1991 (RMA), consent is **granted** to the application by Suelen Properties Limited to carry out marine farming activities for Bluff Oyster cultivation involving structures and buoys and occupation of the Coastal Marine Area at the specified sites at Nathans Island, Horseshoe Bay and the Nugget.

Reasons

Pursuant to s113 of the Act, the reasons for this decision are as follows:

a) In terms of section 104(1)(a) of the Act, subject to the conditions of consent that have been imposed, the proposal will not adversely affect the character or amenity values of the coastal environment including the coastal marine area at Stewart Island.

b) Subject to the consent conditions including those relating to navigation and safety, monitoring, duration of consent, source of spat, limitations to marine farm areas, debris removal and retrieval, spillages, inspections of service vessel(s), rat management on board the consent holders vessels, non transferability of consent and bonding, effects on the environment can be avoided, remedied or mitigated to an extent that will be no more than minor.

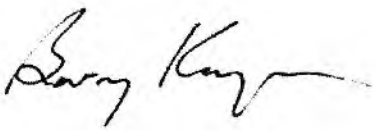
c) In terms of section 104(1)(b) of the Act, subject to the conditions that have been imposed the proposal is consistent with the relevant provisions of the Regional Coastal Plan and the NZCPS.

c) In terms of section 104(1)(c) of the Act, other relevant matters, including monitoring have been considered in the determination of the application.

d) Overall in terms of Part 2 and particularly section 5, 6 and 7 of the RMA, the proposal together with the conditions that have been imposed, will promote the sustainable management of the application sites and the wider environment. The grant of consent will enable the efficient use and development of the application sites and will maintain the quality of the surrounding environment and coastal amenity values.

Chairperson

Commissioner Barry Kaye



25 June 2014

15 August 2014

AQUACULTURE DECISION REPORT — SUELEN PROPERTIES LIMITED, (COASTAL PERMIT ES302167), HORSESHOE BAY, STEWART ISLAND

PURPOSE

1 This report sets out my aquaculture decision (as the relevant decision maker[1]) for an aquaculture request made under section 114(4)(c)(ii) of the *Resource Management Act 1991* (**RMA91**) for an aquaculture decision. The aquaculture decision request is described below. My aquaculture decision is made under section 186E of the *Fisheries Act 1996* (**Fisheries Act**).

SUMMARY

2 I am satisfied the aquaculture activities proposed within coastal permit area ES302167 will not have an undue adverse effect on:

- recreational fishing — for the reasons set out in this report and summarised in paragraph 44;
- customary fishing — for the reasons set out in this report and summarised in paragraph 68;
- commercial fishing — for the reasons set out in this report and summarised in paragraph 96.

AQUACULTURE DECISION REQUEST DETAILS

Regional Council:	Environment Southland (**ES**)
Date of Request:	24 July 2014
Coastal Permit Number and Applicant:	ES302167 — Suelen Properties Limited
Location of marine farm site:	Horseshoe Bay, Stewart Island
Size of farm:	Three sites with a total area of 5.90 hectares
Species to be farmed:	Dredge oysters (*Ostrea chilensis*)
Farm structures:	Experimental oyster pots totalling 60 over the three sites

[1] Acting under authority delegated to me by the Director-General of the Ministry for Primary Industries (**MPI**) in accordance with section 41 of the *State Sector Act 1988*.

Location

3 Coastal permit area ES302167 covers three sites around a peninsula between Horseshoe Bay and Lee Bay on the east coast of Stewart Island on the south west of Foveaux Strait (Map 1). The coastal permit area is within Fisheries Management Area 5 (**FMA5**).

Map 1[2]: Location of Horseshoe Bay and Lee Bay on the east coast of Stewart Island. The enlargement shows the three sites comprising coastal permit area ES302167[3].

4 If approved, the three sites of coastal permit area ES302167 will cover a total area of 5.90 ha. This total comprises of the Nathans Island site (3.35 ha), the Nugget site (0.73 ha) and the Horseshoe Bay site (1.82 ha).

5 Coastal permit area ES302167 is located between 37 and 134 meters (**m**) from shore (see Figure 1). Water depth in all three sites of the coastal permit area is approximately 8 to 10 m at mid tide. Watt (2013) reports the coastal permit area consists of sand substratum with some natural shell.

Structures

6 Coastal permit area ES302167 will consist of a maximum of 60 pots at an average density of approximately 1 pot per 1000m^2. Pot design is experimental and may consist of recycled rock lobster pots, Aquatrays or plastic mesh discs (see Figure 2). Pots will be tethered to a standard rock lobster pot type float.

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[2] Maps (Maps 1-5) in this document are intended to be used as guides only, in conjunction with other data sources and methods, and should only be used for the purpose for which they have been developed. Although the information on these maps has been prepared with care and in good faith, no guarantee is given that the information is complete, accurate or up-to-date.

[3] Image: NZ Mainland topo50 maps. Sourced from Land Information New Zealand and Landcare Research under CC-By. http://creativecommons.org/licenses/by/3.0/nz/

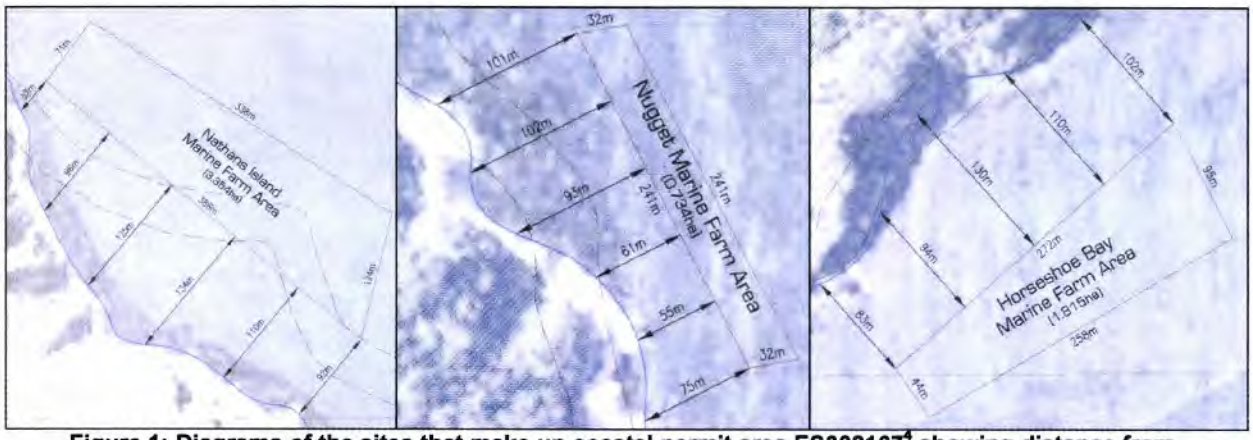


Figure 1: Diagrams of the sites that make up coastal permit area ES302167[4] showing distance from shore.

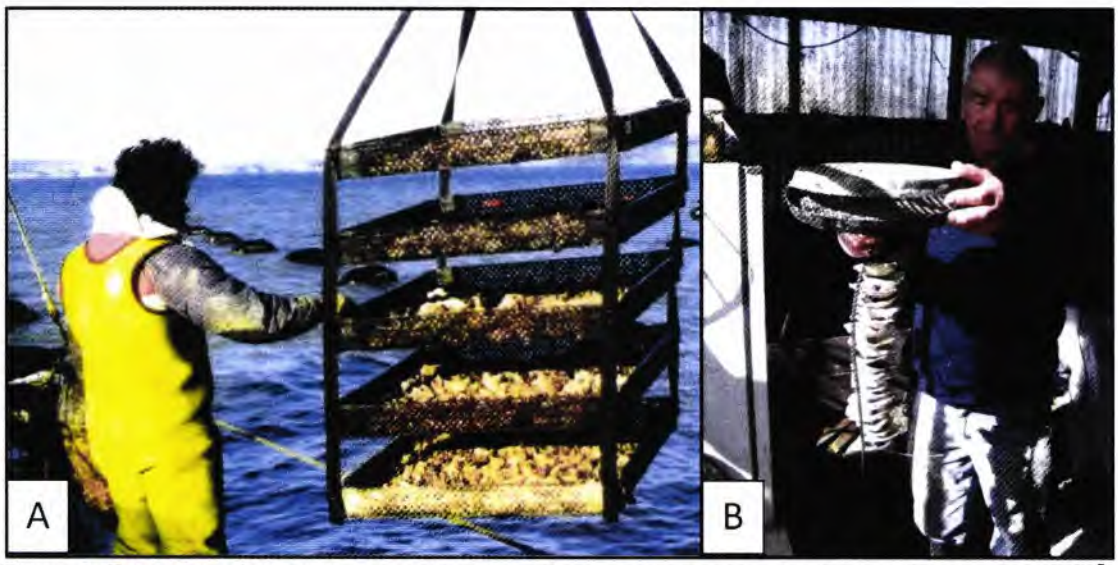


Figure 2: Examples of experimental pot designs that may be used in coastal permit area ES302167[5]. A – Aquatrays. B – plastic mesh discs attached to wooden members that attach to steel frames of the pot.

Input from stakeholders

7 MPI publicised coastal permit application ES302167 on its website on 8 October 2013. This gave persons and organisations potentially affected by the proposed aquaculture activities an opportunity to provide information on their fishing activities in the area of coastal permit ES302167. The closing date for providing information to MPI was 4 November 2013. No submissions were received in response to the consultation.

STATUTORY CONTEXT

8 Section 186E(1) of the Fisheries Act requires me to, within 20 working days after receiving a request for an aquaculture decision from a regional council, make a determination or

[4] Figures sourced from William. J. Watt Consulting's response to the further information request sent to Environment Southland on 10 September 2013.

[5] Figures sourced from William. J. Watt Consulting's response to the further information request sent to Environment Southland on 10 September 2013.

reservation (or one or more of them in relation to different parts of the area to which the request relates).

9 A '*determination*' is a decision that I am satisfied that the aquaculture activities authorised by the coastal permit will not have an undue adverse effect on fishing. A *'reservation'* is a decision that I am not satisfied that the aquaculture activities authorised by the coastal permit will not have an undue adverse effect on fishing.

10 If I make a reservation, I am required to specify whether the reservation relates to customary, recreational or commercial fishing or a combination of them. If the reservation relates to commercial fishing, I must specify the stocks and areas concerned—section 186H(4).

11 Section 186C of the Fisheries Act defines "adverse effect," in relation to fishing, as restricting access for fishing or displacing fishing. An "undue adverse effect" is not defined. However, the ordinary meaning of "undue" is an effect that is unjustified or unwarranted in the circumstances. For the purpose of my decision under section 186E, an undue adverse effect will mean the significance of the effect on restricting access for fishing, displacing fishing or increasing the cost of fishing is unjustified or unwarranted in the circumstances.

12 Section 186E(3) of the Fisheries Act[6] requires me, in making an aquaculture decision, to have regard to any:

(a) information held by the Ministry for Primary Industries; and

(b) information supplied, or submissions made, to the Director-General under section 186D(1) or (3) by:

i. an applicant for or holder of the coastal permit;

ii. any fisher whose interests may be affected;

iii. persons or organisations that the Director-General considers represent the classes of persons who have customary, commercial or recreational fishing interests that may be affected by the granting of the coastal permit or change to, or cancellation of, the conditions of the coastal permit; and

(c) information that is forwarded by the regional council; and

(d) any other information that the Director-General has requested and obtained.

13 Section 186F of the Fisheries Act specifies an order of processing that must be followed in making aquaculture decisions. But section 186F(5) allows aquaculture decisions to be made in a different order from that specified if I am satisfied that in making an aquaculture decision out of order it will not have an adverse effect on any other aquaculture decision that has been requested. I am so satisfied in this case.

14 Section 186GB(1) of the Fisheries Act specifies the only matters I must have regard to when making an aquaculture decision. These matters are as follows:

(a) the location of the area that the coastal permit relates to in relation to areas in which fishing is carried out;

[6] Section 186E(3)(a) of the Fisheries Act refers to the 'Ministry of Fisheries' which is now the Ministry for Primary Industries. Section 186E(3)(b) and (d) refers to the 'chief executive' who is now the director-general.

(b) the likely effect of the aquaculture activities in the area that the coastal permit relates to on fishing of any fishery, including the proportion of any fishery likely to become affected;

(c) the degree to which the aquaculture activities in the area that the coastal permit relates to will lead to the exclusion of fishing;

(d) the extent to which fishing for a species in the area that the coastal permit relates to can be carried out in other areas;

(e) the extent to which the occupation of the coastal marine area authorised by the coastal permit will increase the cost of fishing; and

(f) the cumulative effect on fishing of any authorised aquaculture activities, including any structures authorised before the introduction of any relevant stock to the quota management system.

15 Section 186GB(2) of the Fisheries Act specifies that if a pre-request aquaculture agreement has been registered under section 186ZH in relation to the area that the coastal permit relates to, I must not have regard to the undue adverse effects on commercial fishing in respect of any stocks covered by the pre-request aquaculture agreement when having regard to the matters specified in section 186GB(1). No pre-request aquaculture agreements have been registered in relation to the coastal permit.

16 Section 186GB(1)(b) requires an assessment of the likely effects of the aquaculture activities on fishing of any fishery including the proportion of any fishery likely to be affected. "Fishery" is not defined either in section 186 or elsewhere in the Fisheries Act. However, "stock" is defined in section 2 to mean any fish, aquatic life, or seaweed of one or more species that are treated as a unit for the purposes of fisheries management. Parts (3) and (4) of the Fisheries Act focus on "stocks" for the purpose of setting and allocating Total Allowable Catches and managing species within the quota management system (**QMS**). Sections 186GB(1)(f) and (2) also refer to "stock" with specific regard to adverse effects on commercial fishing.

17 For the purpose of my decision under section 186E, I consider a commercial fishery is a fish stock delineated by a fisheries management area (**FMA**) or quota management area (**QMA**). However, because recreational and customary fishers are not bound to restrict their fishing activity by FMA or QMA, I consider the relevant customary and recreational fishery are as I have described in the assessment below in my consideration of section 186GB(1)(a)—*Location of the coastal area relative to fishing areas*.

18 Section 186C of the Fisheries Act does not define "cumulative effect" beyond what is provided in section 186GB(1)(f) that the effect includes any structures authorised before the introduction of any relevant stock to the QMS. For the purpose of my decision under section 186E, "cumulative effect" on commercial fishing includes the total effect of all authorised aquaculture activities within the relevant QMA or FMA. For customary and recreational fisheries, the relevant areas for considering "cumulative effects" are as I have described in the assessment below in my consideration of section 186GB(1)(a) and (f).

19 The *Fisheries (South Island Customary Fishing) Regulations 1999* (**the South Island Regulations**) define customary food gathering as the traditional rights confirmed by the Treaty of Waitangi and the *Treaty of Waitangi (Fisheries Claims) Settlement Act 1992*, being the taking of fish, aquatic life, or seaweed or managing of fisheries resources, for a purpose authorised by Tangata Tiaki/Kaitiaki, including koha, to the extent that such purpose is consistent with tikanga Māori and is neither commercial in any way nor for pecuniary gain or trade.

20 The South Island Regulations and regulation 50 and 51 of the *Fisheries (Amateur Fishing) Regulations 1986* (**the Amateur Regulations**) provide for Tangata Tiaki/Kaitiaki to determine the customary purpose for which fish, aquatic life, or seaweed may be taken, methods used, seasons fished, size and quantity taken etc. The South Island Regulations and regulation 50 and 51 do not contemplate restrictions under the Fisheries Act on the quantity of fish taken or the methods used to take fish. Should tangata whenua fish without customary authorisations, all the recreational limits under the Amateur Regulations apply.

ASSESSMENT

21 When making my aquaculture decision under section 186E of the Fisheries Act, I have considered all relevant information before me. The following sections of this paper provide an assessment of the effects of the proposed aquaculture activities on recreational, customary and commercial fishing against the matters set out above.

22 For the purpose of my assessment, customary fishing differs from recreational fishing if it is undertaken outside of the recreational limits provided in the Amateur Regulations and is instead authorised by a customary authorisation.

Recreational fishing

Location of the coastal permit area relative to fishing areas

23 I consider recreational fishing for benthic finfish and shellfish species such as blue cod, flat oysters and rock lobster may occur in coastal permit area ES302167.

24 To determine the importance of a coastal permit area for recreational fishing MPI, uses the following sources of information:

- information provided in submissions;
- fishing surveys[7]; and
- MPI information (fisheries officer observations, previous submissions and local knowledge).

25 MPI received no submissions regarding the application and no recreational aerial surveys overlap coastal permit area ES302167. However, MPI considers that some recreational fishing is likely to occur in the general vicinity of the coastal permit area. This is because MPI fisheries compliance officers regularly observe recreational fishing occurring in the vicinity of coastal permit area ES302167.

26 All three sites that make up the coastal permit area are positioned over sandy substrate relatively close to coastal reef and the area supports species such as oysters, blue cod and rock lobster. Recreational fishers dredge and dive for oysters, use rod and line methods to target blue cod and pots to target rock lobster.

27 MPI considers the commonly caught species on the east coast of Stewart Island such as dredge oysters, blue cod and rock lobster, may be caught in the coastal permit area. This is because:

[7] Most recreational fishing surveys only indicate spatial use across a region and are typically inaccurate at the scale of small marine farms.

- Watt (2013) concluded the habitat of coastal permit area ES302167 was sandy substratum that supports shellfish such as flat oysters; and
- MPI fisheries compliance officers observe recreational dredging and diving for dredge oysters, rod and line fishing for blue cod and potting for rock lobster in coastal permit area ES302167.

Exclusion of fishing

28 I consider the aquaculture activities proposed for coastal permit area ES302167 will exclude only a small amount of recreational fishing, if any.

29 As mentioned, the substrate in the coastal permit area is sand. Recreational fish species targeted over soft substrate generally are:

- pelagic species — which have a wide home-range and can be caught using mobile methods (e.g. trolling) or stationary methods (e.g. anchored rod and line fishing, set netting, long lining);
- sedentary species — which are taken by dredge or hand gathering methods (e.g. diving, snorkeling); and
- demersal species — which live or feed on or near the bottom. These species often have a small home-range and that can be caught using stationary methods (e.g. potting, anchored rod and line fishing, set netting) and some mobile methods (e.g. drift fishing).

30 MPI acknowledges the experimental pot structures can prevent or impede dredging for oysters due to the risk of entanglement. However, the main species identified as occurring in the coastal permit area (dredge oysters, blue cod and rock lobster) could still be caught within marine farm structures by diving, potting or rod and anchored line fishing.

31 Therefore, MPI considers the aquaculture activities proposed in coastal permit area ES302167 will only exclude a small amount of recreational fishing, if any.

Availability of other fishing areas

32 I consider there are other recreational fishing areas available on the east coast of Stewart Island and the wider Foveaux Strait area.

33 The *Fisheries (Amateur Fishing) Regulations 1986* provide some restrictions that affect the availability of other recreational fishing areas around Stewart Island. Restrictions affecting methods that recreational fishers may use in the coastal permit area include prohibition of dredging on the north-east coast of Stewart Island (Ruapuke Island and around Saddle Point) and the waters of Paterson Inlet.

34 MPI notes the substrate in the coastal permit area is widespread on the east coast of Stewart Island. Furthermore, most local recreational fishers launch from the boat ramps in Halfmoon Bay and are able to target oysters, blue cod, and rock lobster to the north and south from Lee Bay to Native Island (see Map 2). I therefore consider that there are other areas available to recreational fishers who may fish in the area of coastal permit ES302167.

Map 2: Coastal permit area ES302167 and the surrounding coastal features.

Increased cost of fishing

35 I consider that occupation of coastal permit area ES302167 will result in a minimal, if any, increase in the cost of recreational fishing. There is a high likelihood that any fishing excluded from the coastal permit area could be carried out using alternative fishing methods, or by accessing adjacent or nearby fishing areas that could be reached with minimal additional cost.

Likely effect on fishing

36 I consider the aquaculture activities proposed in coastal permit area ES302167 will only have a small effect on recreational fishing.

37 MPI can only make an assessment of the effect of the proposed aquaculture activities on recreational fishing based on qualitative information such as submissions, recreational fishing surveys and MPI information.

38 As noted, available information suggests the coastal permit area is located in an area used for recreational fishing. However, the fish species targeted by recreational fishers in the coastal permit area could easily be caught elsewhere on the east coast of Stewart Island and the wider Foveaux Strait area or within the coastal permit area using stationary or dive fishing methods.

39 For the above reasons I consider the proposed aquaculture activities will only have a small effect on recreational fishing, if any.

Cumulative effects

40 I consider the cumulative effects on recreational fishing from authorised aquaculture activities around Stewart Island are not unduly adverse and that the activities proposed for coastal permit area ES302167 will only add slightly to the total cumulative effect.

41 There is no quantitative catch data available to assess the cumulative effects of authorised aquaculture activities on recreational fishing catch because recreational fishers are not required to report catch or fishing locations. Therefore, MPI can only make an assessment about the cumulative effects of the proposed aquaculture activities, on recreational fishing, based on the likely importance of the coastal permit area for fishing and the amount of aquaculture already authorised in the relevant recreational fishery.

42 There are approximately 160 ha of authorised aquaculture activities on the east coast Stewart Island, all of which is located in Paterson Inlet. There are no existing authorised aquaculture activities in the Horseshoe Bay area. I consider that the existing marine farms around Stewart Island have had a small cumulative effect on recreational fishing because some recreational fishing methods are excluded from the marine farms. However, overall the effect on recreational fishing around Stewart Island is not undue. This is because some recreational fishing (e.g. diving and anchored rod and line fishing) can occur within the existing farms and some farms are not located in popular recreational fishing areas.

43 As mentioned, I consider the adverse effect of coastal permit area ES302167 on recreational fishing is small. Taking into account the existing authorised aquaculture areas I consider the total cumulative effect on recreational fishing will not become undue.

Conclusion on effects on recreational fishing

44 I am satisfied the aquaculture activities proposed within coastal permit area ES302167 will not have an undue adverse effect on recreational fishing because:

- no submissions were received from recreational fishers regarding the importance of coastal permit area ES302167 for recreational fishing;
- the proposed aquaculture activities will exclude only a small amount of recreational fishing, if any;
- there are other recreational fishing areas available along the east coast of Stewart Island and the wider Foveaux Strait area;
- occupation of the coastal permit area will result in a minimal, if any, increase in the cost of recreational fishing;
- the effect on recreational fishing will only be small and the catch that may be taken in the coastal permit area could be caught using alternative fishing methods or taken in other areas nearby; and
- the additional adverse effect of coastal permit area ES302167 on recreational fishing is only small and will not cause the total cumulative effect on recreational fishing to become undue.

Customary fishing

The location of the coastal permit area relative to fishing areas

45 I consider coastal permit area ES302167 is located in an area where customary fishing may occur.

46 Available information on customary fishing includes qualitative information from submissions and some quantitative catch information from customary authorisations[8]. There is limited information on customary catch at the small scale of a marine farm because fishing locations for customary authorisations do not need to be reported at a scale finer than the FMA or QMA.

47 Under regulation 5 of the South Island Regulations, Oraka-Aparima Runaka representing the whanau and hapu of Ngai Tahu Whanui, have notified their Tangata Tiaki/Kaitiaki for an area/rohe moana that encompasses fisheries waters from Piopiotahi to Tokata (Milford Sound to the Nuggets) including South Island waters about and within Rakiura (Stewart Island) and other offshore islands situated within the exclusive economic zone.

48 MPI did not receive any submissions on customary fishing methods or species taken in relation to the coastal permit area. Although, customary authorisations[9] issued between January 2009 and October 2013 do contain information on species targeted. While site-specific fishing locations are not typically reported with customary authorisations, some of the authorisations do include information on where fishing occurs.

49 In customary authorisations with site-specific information on fishing location, 16 have been issued, all for the collection of oysters in the wider Foveaux Strait area which includes both the east coast of Stewart Island and the south coast of the South Island.

50 As mentioned, coastal permit area ES302167 has a sandy substrate and oysters could be caught there.

51 However, I consider customary fishing intensity in the coastal permit area for oysters is likely to be low. These species were authorised for collection in relatively small quantities over the whole Foveaux Strait area, which is very large in comparison to the coastal permit area.

52 MPI does not hold any further information regarding the importance of the coastal permit area to customary fishing.

Exclusion of fishing

53 I consider the aquaculture activities proposed for coastal permit area ES302167 will only exclude a small amount of customary fishing, if any.

54 As mentioned above, the most likely species to be caught in the coastal permit area are oysters. This species is taken using dredging and diving methods.

55 MPI acknowledges that marine farm structures would likely prevent customary fishers dredging for oysters in coastal permit area ES302167. This is because marine farm structures can prevent or impede certain fishing methods (e.g. dredging, trolling, drift fishing, set netting) due to the risk of entanglement. However, oysters could still be caught within marine farm structures by diving.

[8] Effects on customary fishers who fish within the recreational limits under the Amateur Regulations are considered in the assessment of effects on recreational fishing.
[9] Issued under regulation 27A of the Amateur Regulations.

Availability of other fishing areas

56 I consider there are other customary fishing areas available on the east coast of Stewart Island.

57 Apart from the Ulva Island Marine Reserve in Paterson Inlet, all of the east coast of Stewart Island and the wider Foveaux Strait area is available for customary fishing under regulations 50 and 51 of the Amateur Regulations. As noted, the proposed aquaculture activities will only exclude a small amount of customary fishing, if any. I therefore consider there are other customary fishing areas along the east coast of Stewart Island and the wider Foveaux Strait area that could accommodate any customary fishing displaced from the coastal permit area.

Increased cost of fishing

58 I consider the aquaculture activities proposed for coastal permit area ES302167 will result in a minimal, if any, increase in the cost of customary fishing.

59 Based on available information, I consider that any fishing displaced from the coastal permit area could be carried out nearby with minimal additional cost, and that species targeted in the coastal permit area could still be taken using alternative fishing methods within the coastal permit area or nearby.

Likely effect on fishing

60 I consider the likely effect on customary fishing from the aquaculture activities proposed for coastal permit area ES302167 will be small.

61 As noted, there is little available quantitative data on customary catch taken from the coastal permit area. MPI is therefore unable to estimate an average annual customary catch, or proportion of customary catch, likely to be affected by the proposed aquaculture activities. Rather, MPI can only make an assessment of the effect of the proposed aquaculture activities on customary fishing based on qualitative information.

62 Available information suggests the coastal permit area may be used for customary fishing but that:

- popular fish species likely to be targeted by customary fishers in the coastal permit area are widespread and common throughout the east coast of Stewart Island and the wider Foveaux Strait area; and
- any catch that may be taken in the coastal permit area could be taken nearby or by alternative methods.

63 For the above reasons I consider the proposed aquaculture activities will only have a small effect on customary fishing, if any.

Cumulative effects

64 I consider the cumulative effects on customary fishing from authorised aquaculture activities around Stewart Island are not unduly adverse and that the activities authorised by coastal permit ES302167 will only add slightly to the total cumulative effect.

65 There is no quantitative catch data available to MPI to assess the cumulative effects of authorised aquaculture activities on customary fishing. As noted, site-specific fishing locations are not typically reported with customary authorisations. Therefore, MPI can only make an assessment of the cumulative effect of the proposed aquaculture activities on customary fishing

based on the likely importance of the coastal permit area for fishing and the amount of aquaculture activities already authorised in the relevant customary fishery.

66 As noted, there are no existing aquaculture authorisations in the Horseshoe Bay area and approximately 160 ha on the east coast of Stewart Island. MPI considers the existing farms on the east coast of Stewart Island have had some effect on customary fishing. However, the effect is not considered undue because some customary fishing (e.g. anchored rod and line fishing or diving) can still occur within marine farms and it is unlikely all the farms are located in popular customary fishing areas.

67 As mentioned, I consider the adverse effect of coastal permit area ES302167 on customary fishing is small and, taking into account the existing authorised aquaculture areas, will not cause the total cumulative effect on customary fishing to become undue.

Conclusion on effects on customary fishing

68 I am satisfied the aquaculture activities proposed within the area of coastal permit ES302167 will not have an undue adverse effect on customary fishing because:

- no submissions were received from customary fishers regarding the importance of coastal permit area ES302167 for customary fishing;
- the proposed aquaculture activities will exclude only a small amount of customary fishing, if any;
- there are other areas available for customary fishing on the east coast of Stewart Island and the wider Foveaux Strait area;
- occupation of the coastal permit area will result in a minimal, if any, increase in the cost of customary fishing;
- the effect on customary fishing will be small and the catch that may be taken in the coastal permit area could be caught using alternative methods or taken in other areas nearby; and
- the additional adverse effect of coastal permit ES302167 on customary fishing is only small and will not cause the total cumulative effect on customary fishing to become undue.

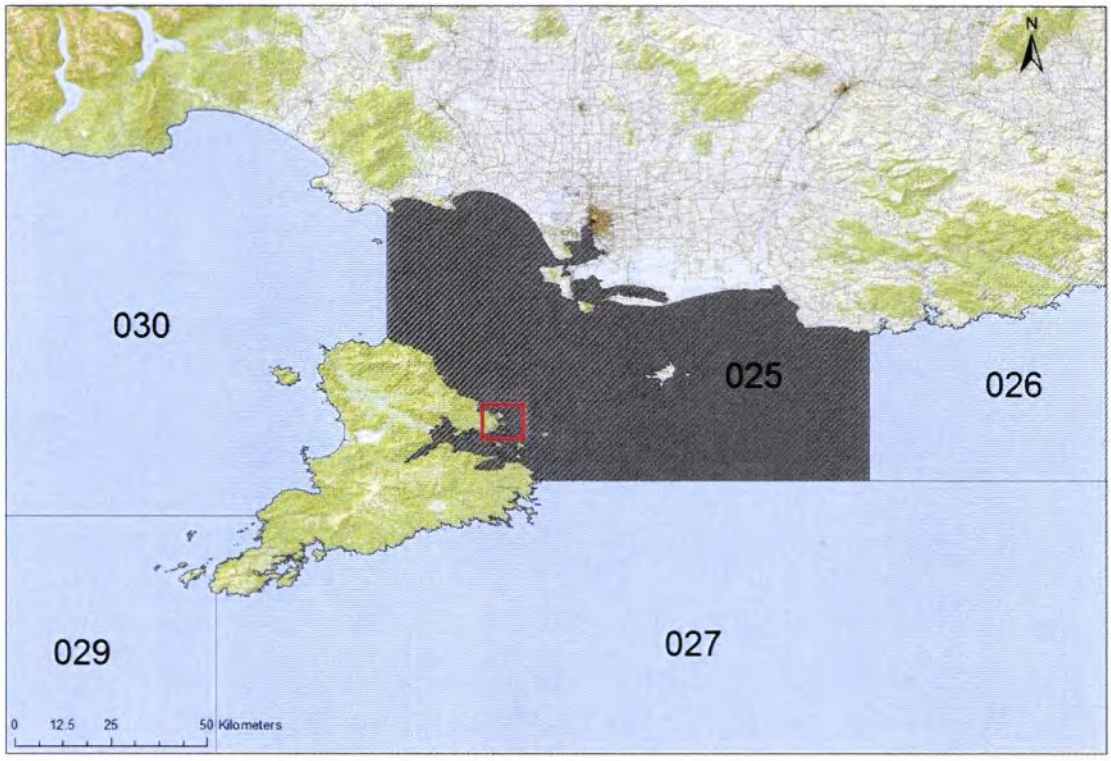
Commercial fishing

The location of the coastal permit area relative to fishing areas

69 I consider coastal permit area ES302167 is located where only a small amount of commercial fishing may occur.

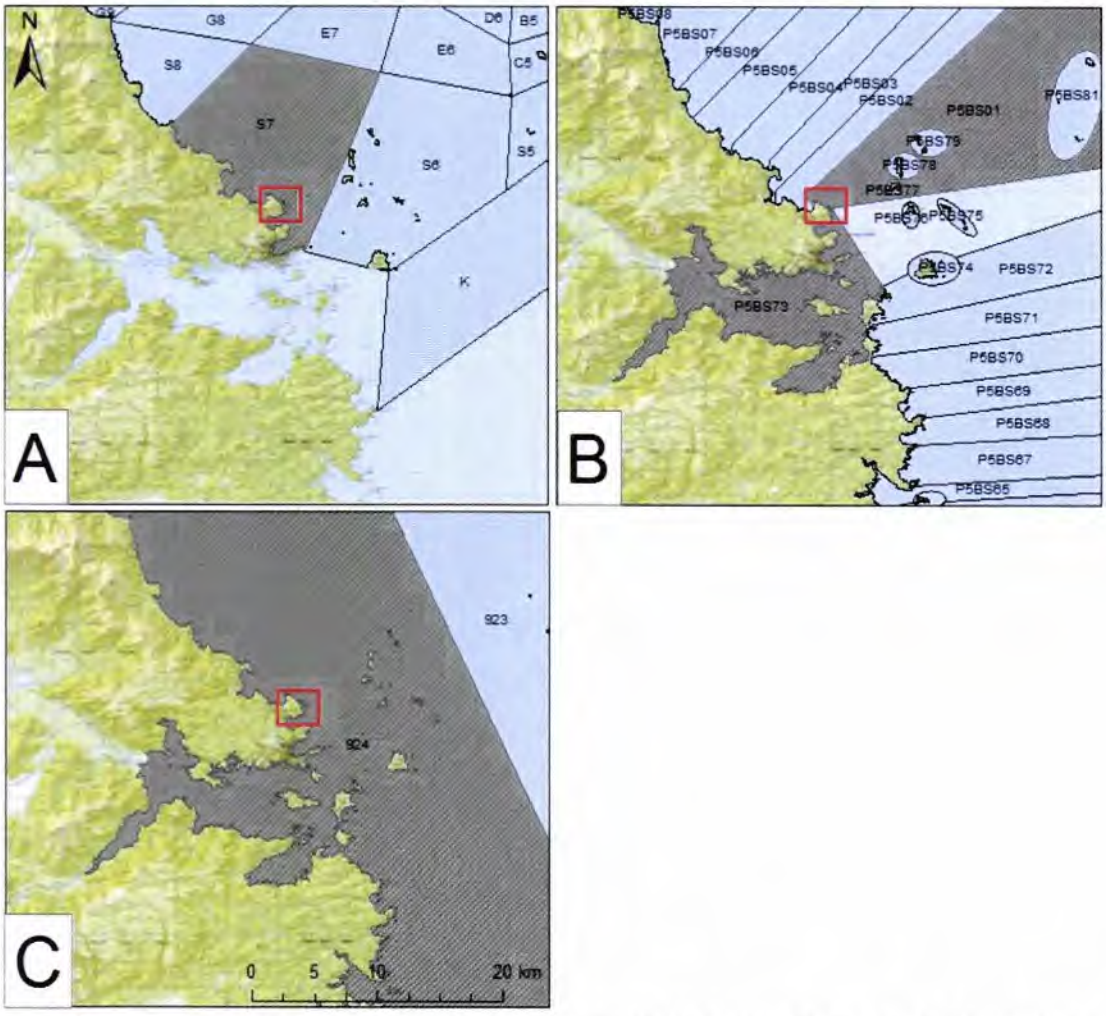
70 The coastal permit area is located in an area where box nets, teichi nets, purse seine, Danish sine, trawl nets and lampara nets are prohibited.

71 Historically, most commercial fishing has been reported by statistical areas. Coastal permit area ES302167 is located in statistical area 025 (**SA025**), which extends from Oraka Point to Slope Point incorporating the east coast of Stewart Island to the south and covers an area of 428,200 ha (Map 3).



Map 3: Location of SA025. The red box marks the approximate location of coastal permit area ES302167.

72 Scallops, oysters, rock lobster and paua are reported by species-specific statistical areas rather than by general statistical areas. The coastal permit area falls within statistical area S7 for oysters (Map 4A), paua statistical areas P5BS01 and P5BS73 (Map 4B) and rock lobster statistical area 924 (Map 4C). Coastal permit area ES302167 does not fall within a scallop statistical area.



Map 4: Species-specific statistical areas that encompass the coastal permit areas. A – Oyster statistical area S7. B – Paua statistical areas P5BS01 and P5BS73. C - Rock lobster statistical area 924.

73 Reporting by statistical area only provides coarse-scale information about where commercial fishing occurs. Although, since 2007/08 vessels over 6 m long that use trawl or line fishing methods[10] have had to report the start position of each fishing event by latitude and longitude to within 1 minute, which equates to around 1 nautical mile (**nm**). Since 2006/07 start positions for netting methods (i.e. set netting or drift netting) have had to report to within 2 nm[11].

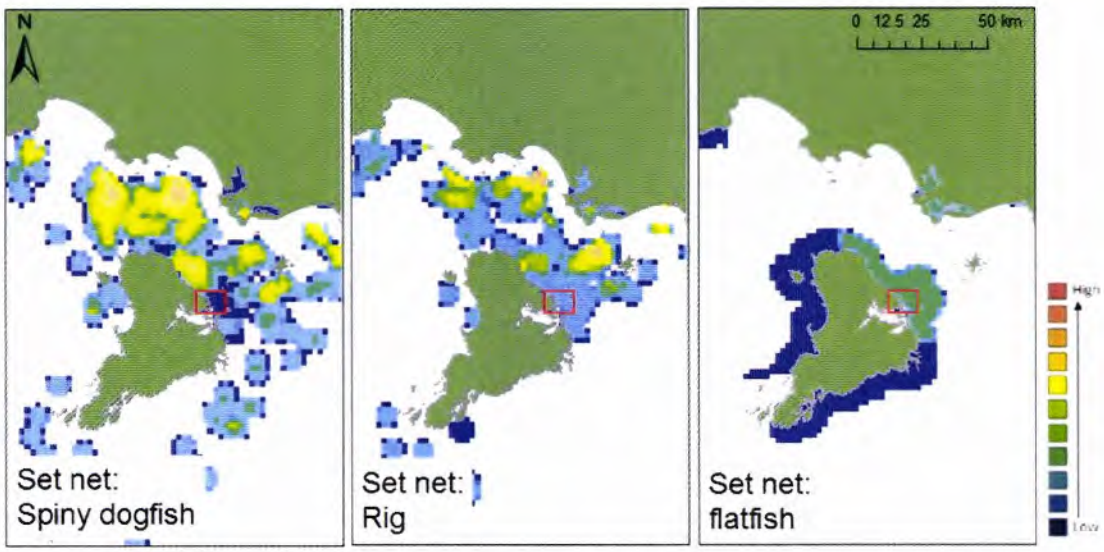
74 The location of fishing by vessels less than 6 m long within SA025 is unknown. However, based on information from fisheries officers and Maritime New Zealand, MPI considers these small vessels fish in enclosed bays and no more than 3 nm off open coasts.

75 Using the fine scale position data (reporting by position), MPI has modelled and mapped fishing intensity for different segments of fishing characterised by a type of fishing gear and the main species caught in the Foveaux Strait area . Map 5 shows the annual average fishing effort per

[10] Bottom long lining, surface long lining or trot lines
[11] *Fisheries (Reporting) Regulations 2001.*

ha (for fishing years 2007/08-2011/12) for the main set net fishery segments that overlap coastal permit area ES302167 (trawling being prohibited).

76 Map 5 also includes coarse-scale information, from vessels less than 6 m, which has been evenly apportioned across the area available for fishing (i.e. within enclosed bays and 3 nm of open coasts). This is the best information available from fisheries statistics but knowledge about species, habitat and bathymetry can also help to determine whether specific types of fishing are likely to occur in an area.



Map 5: Fishing intensity of set net fishery segments. The red box indicates the approximate location of coastal permit area ES302167.

77 Table 2 below lists the main fishery segments known to occur in SA025 and summarises those included in the commercial fishing assessment for coastal permit ES302167. The table also gives the relative amounts of trawl, line and net fishing that report by start position. The higher the proportion of vessels reporting by start position, the greater confidence in the location of fishing as depicted in Map 5.

Table 1: Fishery segments that are included in the commercial fishing assessment: Summary of the main fishery segments, defined by fishing method and main fishstock caught or fishing depth range, in relevant statistical areas from 2007/2008 to 2011/2012.

Fishery segment (Main fishstock or depth range and main fishing method) [A]	Statistical area	% of fine scale fishing events	Average annual no. fishing days [B]	% of main fishstock caught in statistical area	Included in proposed farm assessment?	Rationale for excluding a fishery from proposed farm assessment [C]
Blue cod (BCO5), Potting	025	1%	1965	43%	Yes	
Rock Lobster (CRA8), Potting	924	0%	523	2%	Yes	
Oysters (OYU5), Dredge	S7	100%	133	0.1%	Yes	
Rig (SPO3), Setnet	025	0%	53	12%	Yes	
Spiny Dogfish (SPD5), Setnet	025	100%	50	18%	Yes	
Flatfish (FLA3), Setnet	025	100%	47	14%	Yes	
Butterfish (BUT5), Setnet	025	100%	42	55%	Yes	
School Shark (SCH5), Setnet	025	94%	27	10%	Yes	
Other species, potting	025	100%	13	N/A	Yes	
Flatfish (FLA3), Bottom Trawl	025	100%	229	14%	No	This type of fishing is prohibited in the coastal permit area
Inshore Mix <80m depth, Trawl	025	0%	125	N/A	No	This type of fishing is prohibited in the coastal permit area
Gurnard (GUR3), Trawl	025	0%	95	10%	No	This type of fishing is prohibited in the coastal permit area
Spiny Dogfish (SPD5), Trawl	025	100%	70	18%	No	This type of fishing is prohibited in the coastal permit area
Barracouta (BAR5), Trawl	025	2%	53	9%	No	This type of fishing is prohibited in the coastal permit area
Seaweed (SEO5), Handgathering	025	63%	46	100%	No	The coastal permit area is too deep for this fishing method
Elephant fish (ELE5), Trawl	025	100%	45	49%	No	This type of fishing is prohibited in the coastal permit area
Hapuka Bass (HPB5), Dahn Line	025	100%	45	14%	No	This type of fishing is prohibited in the coastal permit area
Warehou (WAR3), Trawl	025	100%	40	65%	No	This type of fishing is prohibited in the coastal permit area
Stargazer (STA5), Trawl	025	99%	35	7%	No	This type of fishing is prohibited in the coastal permit area
Red cod (RCO3), Trawl	025	0%	22	1%	No	This type of fishing is prohibited in the coastal permit area

A Main fishstock refers to the species most often caught by the relevant method, it does not include all species taken by that method.

B Excludes segments with less than ten days average fishing per year.

C Unless stated, fishing is permitted and MPI has no information to indicate that it does not occur in the vicinity of the coastal permit area.

Exclusion of fishing

78 I consider the aquaculture activities proposed for coastal permit area ES302167 will exclude a small amount of commercial fishing, if any.

79 The exclusion zone for commercial fishing methods in this assessment is deemed to be coastal permit area ES302167 with the exception of dredge methods which assumed an additional exclusion zone of 50m to allow fishing vessels room to maneuver around the farm.

80 As Table 2 illustrates, set netting and dredging for species such as blue cod, rig and oysters may occur in the coastal permit area. I consider these methods will be excluded..Potting for rock lobster and blue cod may also occur in the coastal permit area but I consider this type of fishing would still be able to occur between the marine farm structures.

Availability of other fishing areas

81 I consider that if any commercial fishing is displaced from coastal permit area ES302167, it could occur in other commercial fishing areas in SA025 and FMA5.

82 As stated above, the east coast of Stewart Island is closed to box nets, teichi nets, purse seine, Danish sine, trawl nets and lampara nets, and open to all other fishing methods, although some gear and deployment restrictions apply.

83 There are commercial closures or restrictions in other parts of SA025, the relevant QMAs or FMA5 (including various species, method, time period, fishing gear, or a combination of these criteria)[12]. However, I consider the extent of the closures does not significantly limit the potential for alternative fishing grounds. I therefore consider there are other fishing areas available within SA025 and the relevant QMAs or FMA5 that could absorb any fishing that may be displaced from the coastal permit area.

84 As noted, there are no authorised marine farms in the Horeshoe Bay area and 160 ha of authorized marine farms on the east coast of Stewart Island. In SA025 there are approximately 280 ha of marine farms comprising all the aquaculture in FMA5. The cumulative effect of the existing aquaculture is considered further below.

Increased cost of fishing

85 I consider that the aquaculture activities proposed in coastal permit area ES302167 will not increase the cost of commercial fishing.

86 While the coastal permit area is located within a region used for commercial fishing, I consider the use of alternative commercial fishing grounds would not result in an increase in the cost of commercial fishing. This is because the coastal permit area will only excluded a small area from commercial fishing and there are equally productive fishing grounds available nearby.

Likely effect on fishing

87 I consider the proposed aquaculture activities in coastal permit area ES302167 will have a small, if any, adverse effect on any commercial fishery.

88 The maps of fishing intensity (effort per ha) for each fishery segment were used to calculate the average annual amount of fishing effort that is likely to be displaced from the exclusion zone of the coastal permit area. Average landings per unit effort for all species caught in each fishery

[12] *Fisheries (Southland and Sub-Antarctic Areas Commercial Fishing) Regulations 1986*

segment were then used to estimate the amount of fish likely to have been landed from the coastal permit area.

89 Fishing effort that is reported by statistical area was apportioned evenly across the area available for fishing. The parts of the statistical area available for fishing for each type of fishing method are defined by using all available information (including regulated closures, bathymetry, seabed substrate, and consultation with fishers) about where the method is likely to be used. Where fishing is reported to the statistical area level, there is increased uncertainty as to where fishing events have taken place within the statistical area.

90 The amount of fishing was averaged over October fishing years 2007/08 to 2011/12. I consider five years long enough to take into account natural variation in the abundance and distribution of fish stocks and fishing effort so that likely average future fishing is fairly represented.

91 For this period the amount of fishing effort estimated to be displaced by the activities proposed in the area of coastal permit ES302167 is negligible. For fishing assessed (as indicated in Table 2) less than 4 kg of average annual catch is likely to be affected by the proposed aquaculture activities of coastal permit ES302167.

92 Given the very small catch quantities likely to be affected by the proposed aquaculture activities, MPI has not attempted to determine the changes in catch rates for the displaced fishing in order to estimate the net effect on commercial fishing. This assessment is based on the worst-case scenario that all of the catch displaced from the coastal permit area would be lost from the affected fisheries and not caught elsewhere.

Cumulative effects

93 I consider the cumulative effect on commercial fishing from authorised aquaculture activities in FMA7 are not unduly adverse and that coastal permit ES302167 will only add slightly to the total cumulative effect.

94 Approximately 280 ha of authorised aquaculture activities in FMA5 have previously been assessed for their total cumulative effect on fishing. The highest cumulative effect on any individual fish stock potentially affected by coastal permit ES302167 to date is approximately less than 0.1% and not undue.

95 As noted, less than 4 kg of average annual catch is likely to be affected by the proposed aquaculture activities of coastal permit ES302167. I consider this negligible increase would not cause the new level of total cumulative effect on any fishery to become undue.

Conclusion on effects on commercial fishing

96 I am satisfied the aquaculture activities proposed within coastal permit area ES302167 will not have an undue adverse effect on commercial fishing because:

- no submissions were received by commercial fishers regarding the importance of coastal permit area ES302167 to commercial fishing;
- the proposed aquaculture activities will only exclude commercial fishing from a small area;
- occupation of the coastal permit area will not result in an increase in the cost of commercial fishing;

- effects on commercial fishing will be small and the catch that may be taken in the coastal permit area could be caught in other areas nearby; and

- the cumulative effects on commercial fishing from authorised aquaculture activities in FMA5 are not undue for the fish stocks affected by coastal permit ES302167. The adverse effect of coastal permit ES302167 is only small and will not cause the total cumulative effect on any fish stock to become undue.

Aquaculture decision

97 I am satisfied – based on all relevant information available to me – the activities proposed for coastal permit area ES302167 will not have an undue adverse effect on:

a) recreational fishing, and

b) customary fishing, and

c) commercial fishing.

98 Accordingly, my decision is a determination for coastal permit ES302167 with regard to:

a) recreational fishing, and

b) customary fishing, and

c) commercial fishing.

99 The area of the determination on recreational, customary and commercial fishing is a 5.90 ha area over three sites with the following coordinates (NZTM2000):

Nathans Island:

Point	Easting	Northing
1	1229394	4799039
2	1229139	4799341
3	1229424	4799160
4	1229096	4799284

Nugget:

Point	Easting	Northing
1	1230057	4797954
2	1230088	4797959
3	1229947	4798168
4	1229978	4798174

Horseshoe Bay:

Point	Easting	Northing
1	1229574	4797379
2	1229531	4797464
3	1229353	4797246
4	1229328	4797282

100 The reasons for my decision are set out in the conclusions for recreational, customary and commercial fishing in this report.

David Scranney
Spatial Allocations Manager
Ministry for Primary Industries

Dated this 15th August 2014

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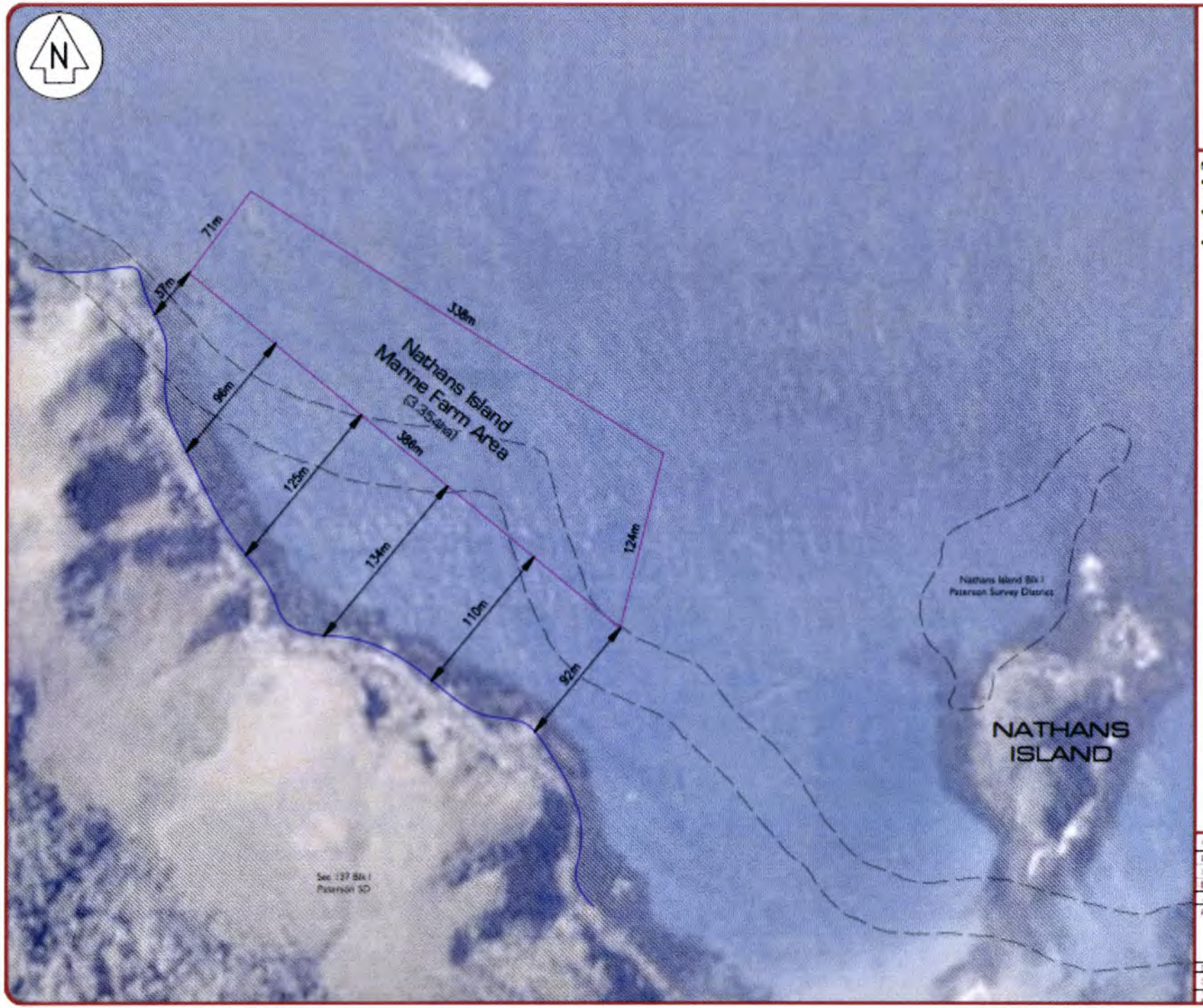

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NOTE:

- All areas and dimensions are subject to final survey.
- LINZ Parcel Data may not be spatially accurate.
- Aerial imagery is sourced from LINZ and is spatially accurate (geo-referenced).

NATHANS ISLAND MARINE FARM LOCATION PLAN STEWART ISLAND

CLIENT	Wilkin & Watt Consulting Ltd
DATE	9 September 2013
SURVEYED	
DRAWN	C. Malcolm
JOB NUMBER	4516-SP1
REVISION NUMBER	
DATE PRINTED	9/09/2013 4:20:54 p.m. BY: Brian
SCALE	1:2,500 @ A3

Appendix (ii) – Illustrative photos (all photos R. Langdon or H. Cave)

Photo 1 – A line of buoys floating a rope line from which baskets are suspended. Horseshoe Bay site, Frenchman's Beach and Mamaku Point conservation sanctuary in the background. The end buoys are white for navigation, and we are currently testing buoys painted grey for the middle buoys to reduce their visual impact further (inset, lower left)

Photos 2-5: (Clockwise from top left) 2) an example of the recycled crayfish pots used to grow oysters to harvestable size, 3) the trays, stacked within each cray pot, on which the oysters are spread, 4) a stack of baskets that are suspended in the water column from floated ropes (as seen in Photos 1 and 6). 5) the same baskets seen from side-on with the chambers that oysters are placed in.

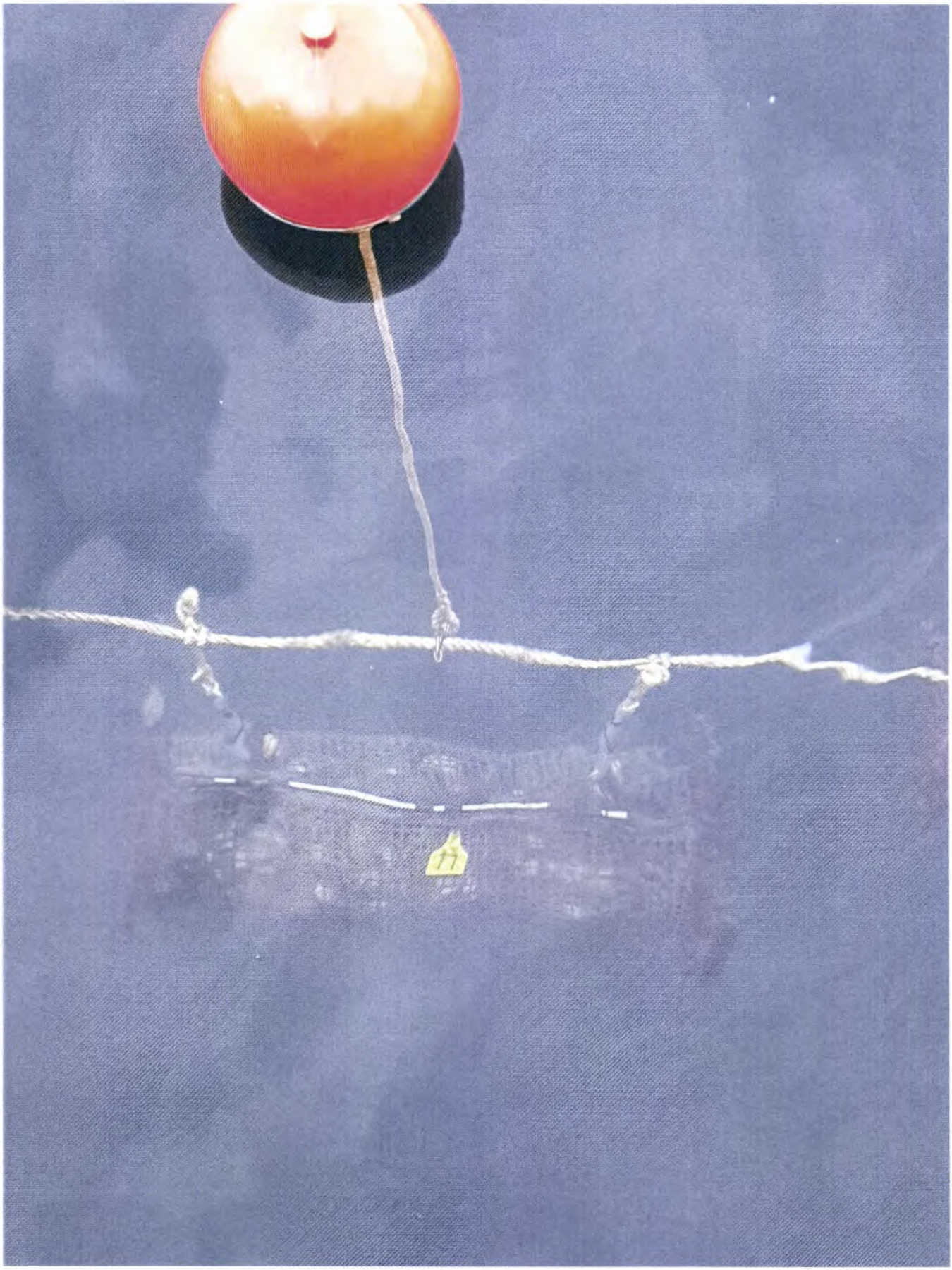
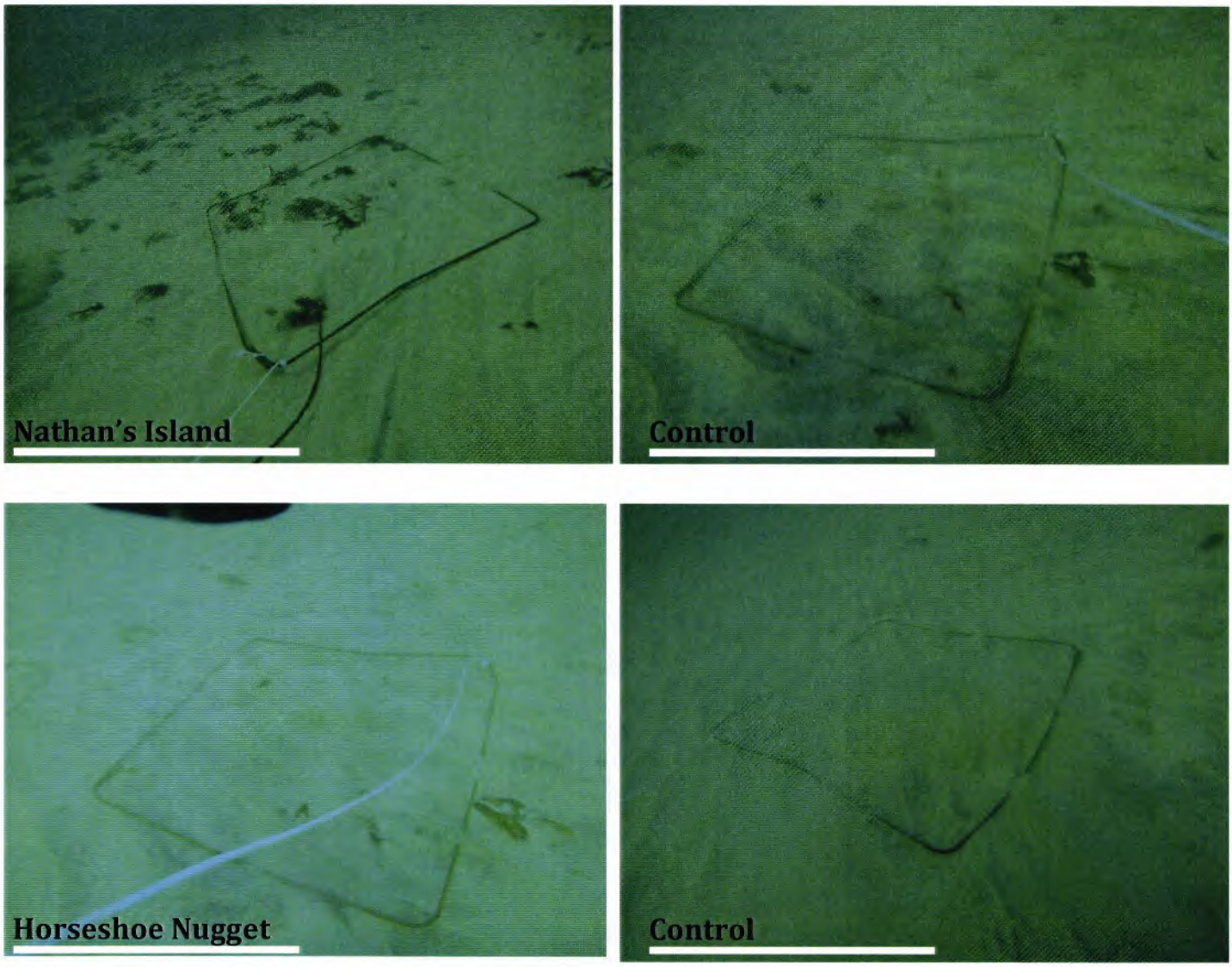


Photo 6: A basket, labeled and containing juvenile oysters, suspended from a floated rope 1-2 metres below the surface

Photos 7-10: (Clockwise from top left) Juvenile oysters with teaspoon for scale (photo 7); similarly aged oysters placed in a basket for suspension in the water column (photo 8); larger juveniles in the hand (photo 9); oysters on-growing to harvestable size in a tray (photo 10).

Photos 11-12: The Stingray (top) and the Stardust (bottom) are the boats used to service the farm sites. The Stingray has a hydraulic crane for lifting equipment whereas the Stardust can be used for minor jobs such as inspecting baskets. Both are moored off the wharf at Horseshoe Bay.

Photo 13: One of the anchors for a line of buoys being lifted onto the Stingray.



Photos 14-17: A series of photos of the benthos below the farm sites taken from monitoring that was completed in 2017. On the left are the images from sampling locations under the consented space – Nathan's Island (top, **photo 14**), Horseshoe Nugget (bottom, **photo 15**). On the right are control sites from nearby areas outside the consented space – Nathan's Island control (top, **photo 16**) and Horseshoe Nugget (bottom, **photo 17**).

P.O.Box 119
Stewart Island
New Zealand 9846

July 6, 2019

Phone +64 3 219 1368
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helencave@xtra.co.nz

New Zealand Suppliers of Live Lobster, Lobster Tails, Greenshell Mussels, Abalone, Fresh and Frozen Seafood

---

6/6/19

Bruce Ford

Dear Bruce

With Dick Langdon, Southern Seafoods has been putting oyster spat from our Horseshoe Bay hatchery for on-growing on the Suelen trial oyster farm at Frenchman's Bay.

The trial period for the Suelen Farm will end this year and we are approaching Environment Southland for a 5 year extension to continue to on-grow oysters. Len has agreed to sell the farm on to us if we do get the consent.

There will still be the MPI part to negotiate, but I feel the future of oyster farming will be good for us and for the island.

Being a long time Horseshoe Bay resident, I am very aware of the need to protect our bay, our waters, and our beach. Any effect on the seabed or water will be minimal, and with oysters naturally occurring in the immediate vicinity, we would not expect any adverse effects. The visual impact will be in keeping with current use in the area.

We hope you will support us, but if you have any concerns about this please let me or Dick know.

Thank you

Helen Cave

Bruce J. Ford J.P.

5 Argyle Street, Stewart Island
(Postal: P.O. Box 91, Stewart Island 9846)
Ph: (03) 2191 282. Email: bruce@thefords.nz

27 June 2019

Helen Cave
Southern Seafoods
P.O. Box 119
Stewart Island

Dear Helen,

Re: Oysters

In response to your letter of 6 June 2019, I confirm that am keen to assist and support the further operations of oyster farming at Stewart Island. I am familiar with the Suelen consent arrangements with ES. It is very important that this consent continues by whatever commercial arrangement is appropriate.

As you will recall, I presented a submission, with others, in support of this project.

I believe there is considerable opportunity to advance aquaculture in general and many areas require evaluation.

Apparently, some research has been undertaken in the Port William region and beyond, that may be useful to enhance our community well-being. I am endeavouring to trace the details of a $500k grant for mussel and salmon hatcheries in Southland as allocated to SRDA a couple of years ago.

I would be pleased to assist with ES consent submission, and also the MPI considerations for the future. There is a strong interest from Government agencies to further aquaculture and we must continue to pursue this.

Yours sincerely,

(original signed – copy emailed 27 June 2019)

Bruce J. Ford J.P.

From: Ricky Kershaw <ricky@kershawaviation.com>
Date: 24 June 2019 at 2:06:13 PM NZST
To: helencave@xtra.co.nz
Subject: Southern Seafoods

Hi Helen
We have received your letter dated 6/6/19 and fully support your venture. If we can be of assistance please do not hesitate to contact us.

Dave and Ricky

Ikana New Zealand Ltd
24 Klondyke Drive, Hornby, Christchurch, New Zealand.
P.O.Box 16988, Hornby, Christchurch 8441, New Zealand.
Phone +64 3 9749 078 **Email** alive@ikana.co.nz
www.ikana.com

Mr Richard Langdon
Southern Seafoods Ltd.

11.06.2019

Live Flat Oyster Export – Market Demand

Dear Mr Langdon,

Thank you for the discussions we had last week, and that you have had earlier with my General Manager, Mr Tony Gimblett, when he visited with you on Stewart Isle.

Your farm production of flat oyster would be of great commercial interest to our company, and others I am sure. We believe that there is a very significant market potential for farmed flat oyster throughout South East Asia and in China particularly, given our experience with live Greenshell Mussel and live Blackfoot Paua product in these markets. Of course the flat oyster offers a difference to the more commonly found variants of the rock and pacific oyster species found more commonly around the world. We believe the uniqueness of texture and flavour sets this oyster apart as an exciting, superior and premium alternative.

Over 2014/15 we completed shelf-life validations that showed we can preserve farmed flat oyster in the live state for 12 days (Day0 = day of packing) using our high-oxy MAP technology. The presentation and branding that comes with this form of packaging, combined with the assurance of shelf life stability and flavour predictability, we think is an ideal format for the export of such a high-value seafood.

The challenges around supply and sourcing of the wild-catch variant (ex Bluff) for export of this same oyster species are well recognised. The shortness of effective season (after local demand is met), weather disruption to harvest, quota limits, and cadmium content are all factors that limit the commercial viability of an export proposition. A farmed source of this fantastic oyster steps us away from all of these issues, and would fill an obvious gap and opportunity for export markets.

The value for export will be influenced by the size that you might choose to, or are able to, produce. As an approximate guide, our opinion of FOB value for the equivalent of the standard premium size offered to the domestic market from wild catch may be in the range $2.50 -$3.00 each. For the "jumbo" size that used to be marketed through the SSF ChCh facility to domestic food service, the export value is likely to be more in the range of $4.00-$5.00 each.

Yours Faithfully,

Stephen D Glass
Director
Ikana NZ Ltd.
www.ikana.com

NEW ZEALAND COMPANIES OFFICE COMPANIES REGISTER

Certificate of Incorporation

SUELEN PROPERTIES LIMITED

1821298

NZBN: 9429034096383

This is to certify that SUELEN PROPERTIES LIMITED was incorporated under the Companies Act 1993 on the 31st day of May 2006.

Registrar of Companies
8th day of April 2019

REGISTRAR OF COMPANIES NEW ZEALAND

Certificate generated 08 April 2019 02:07 PM NZST

AUTH-302167

environment SOUTHLAND

Cnr North Road and Price Street
(Private Bag 90116)
Invercargill

Telephone (03) 211 5115
Fax No. (03) 211 5252
Southland Freephone No. 0800 76 88 45

Coastal Permit

Pursuant to Section 104B of the Resource Management Act 1991, a resource consent is hereby granted by the Southland Regional Council (the "Council") to **Suelen Properties Ltd** (the "consent holder") C/- **Len Lind, P O Box 102, Halfmoon Bay, Stewart Island 9846** from **10 October 2014**

Please read this Consent carefully, and ensure that any staff or contractors carrying out activities under this Consent on your behalf are aware of all the conditions of the Consent.

Details of Permit

Purpose for which permit is granted:		To occupy the coastal marine area with a marine farm at three sites
Location	- site locality	Nathan's Island, Nugget Point and Horseshoe Bay
	- map reference	1229139E 4799341N
	- receiving environment	Coastal Marine Area
	- catchment	Port William
Legal description of land at the site:		Section 137 Block I Paterson Survey District
Expiry date:		10 October 2019

Schedule of Conditions

1. This consent is granted for a period of five years and is exclusive to the consent holder and is not transferable to any other person, party or entity (refer also Condition 14).

   (Note: Pursuant to Sections 123 and 124 of the Resource Management Act 1991, a new application for consent will be required at the expiration of this consent. The application will be considered in accordance with the relevant statutory documents in effect at that time and the results of monitoring the effects of approved activities at the three consented sites.)

2. This consent authorises the placement of structures in, on and over the seabed, and the occupation of the coastal marine area with the structures to be used for the purpose of farming Bluff oysters (*Tiostrea chilensis*), as described in the application documents.
Spat and stock shall only be obtained from the Stewart Island/Rakiura coastal waters.

This consent also authorises the deposition, on the seabed, of material, arising from farming Bluff oysters (*Tiostrea chilensis*), as described in the application documents.

3. The occupation of the coastal marine area for marine farming activities, pursuant to this consent, shall only occur within the application co-ordinates as detailed below (co-ordinates in New Zealand Transverse Mercator co-ordinate system) and for the total areas and number of pots as specified below:

(a) "Nathans Island" site (3.35 ha-34 pots)

4799039 1229394
4799341 1229139
4799160 1229424
4799284 1229006

(b) "Nugget" site (0.73 ha-9 pots)

4797954 1230057
4797959 1230083
4798168 1229947
4798174 1229978

(c) "Horseshoe Bay" site (1.82 ha-18 pots)

4797379 1229574
4797464 1229531
4797246 1229353
4797282 1229328

and as shown on the attached maps dated 3 September 2013, comprising a total of approximately 5.9 hectares and 60 pots.

4. In accordance with s108 (2)(h) of the RMA except to the extent that it is necessary to achieve the purpose of this consent and for public safety, members of the public shall not be excluded from the marine farm site at all times.

(Advice Note: This consent does not authorise exclusive occupation within the authorised area even though the marine farming structures and operations will result in some physical exclusion over part of that area. The extent that the physical exclusion over part of the authorised area is necessary for the normal operation of the marine farm is provided for by this consent - refer to Section 122(5) of the Resource Management Act 1991.)

Restrictions on Operations

5. (a) The consent holder shall at all times during the continuance of this consent maintain the marine farm structures, including but not restricted to the associated structures of lines, buoys, oyster pots and any marker lights, in good repair, appearance and condition. No significant alteration or deviation from the authorised structures that

may adversely alter the impact on the environment is permitted without the prior written approval of the Council's Compliance Manager.
(Note: any such alteration may require an application for a new resource consent or a variation to this consent.)

(b) Any authorised officer of the Council may, at any time, inspect the marine farm structures and view their state of repair. Upon receipt of a notice in writing, of any defect or want of repair in the structures, requiring the consent holder to repair the structures, the consent holder shall, forthwith, cause the defect to be remedied or the repairs to be made.

6. (a) The consent holder shall ensure that the external boundaries and all pots within the marine farm are marked out with buoys and where required by the Harbourmaster, lit in accordance with the specified navigation and safety requirements of the Council's Harbourmaster or their delegate. The consent holder shall install all such markers and lighting to the satisfaction of the Harbourmaster within one month of any pots and buoys being installed in any of the three consented areas.
(Note: Navigation and safety guidelines for aquaculture areas can be found in the "Guideline for Aquaculture Management Areas and Marine Farms" booklet dated December 2005 produced by Maritime New Zealand, or its replacement booklet.)

7. The consent holder shall manage the marine farming operation in such a way that deposition of shell, and other material, on the seabed is minimised. Any shell and other material collected from the site shall not be disposed of in the coastal marine area in an unauthorised manner.

8. (a) Any equipment or materials, excluding vessels, used in the coastal marine area, for marine farming purposes, which have been previously used or stored in another geographic coastal marine area, shall be thoroughly cleaned and sterilised before transport to the marine farm site and used. It shall be the consent holder's responsibility to ensure that any marine farming structure, including associated structures, is maintained free of unwanted organisms and pests as identified by either or both Biosecurity New Zealand or the Council's Regional Pest Management Strategy. Any removed unwanted organism or pest shall be disposed of at an authorised land disposal site, to the satisfaction of the Council's Compliance Manager.
(Note:
(i) Under Section 44 of the Biosecurity Act 1993 every person has a duty to inform Biosecurity New Zealand, as soon as practicable, of the presence of an organism not normally seen or otherwise detected in New Zealand.
(ii) Under Section 46 of the Biosecurity Act 1993 every person is required, without unreasonable delay, to notify the chief technical officer at Biosecurity New Zealand of the presence or possible presence of notifiable organisms. Unwanted organisms also fit under this category.)

(b) The consent holder shall advise the Council's Biosecurity Manager, no later than five working days after detecting any incidence of unwanted organisms and/or pests not normally seen or detected in the area.

9. The consent holder shall ensure that:

(a) the marine farm site identification number is displayed above the water level at each four corners of each marine farm site, at all times to the satisfaction of the Council's Compliance Manager;

(b) no equipment or materials from the marine farming activity is stored in an unauthorised manner;
(c) all debris is removed from the marine farm site and disposed of at an authorised refuse site;
(d) any material or structure lost from the marine farm site is retrieved as soon as practicable;
(e) any lost material or structure from the marine farm site that could constitute a navigation hazard shall be notified to the Council's Harbourmaster immediately after discovery and the consent holder shall forthwith retrieve any such material or structure;
(f) other than the deposition authorised under Condition 2, no oil, diesel, petrol, grey water, detergents, cleaning materials, bilge water, sewage or any other toxic or polluting substances, shall be discharged into the coastal marine area at any of the three sites, either directly or indirectly, as a result of exercising this consent;
(g) in the event of any spill of oil or fuel at the marine farm site, the first person to the scene shall:
  (i) take immediate steps to contain the spill and to recover it; and
  (ii) notify as soon as practicable the Southland Regional Council's pollution hotline on 0800 76 88 45 that a spill has occurred. Notification shall include the type and quantity of oil or fuel spilled and the steps taken to remedy or mitigate any adverse effects; and
(h) in the event of a spill of any contaminant, no dispersants or degrading agents shall be discharged to water without the approval of the Southland Regional Council.

10. (a) The consent holder shall inspect the hull of any vessel used to service the marine farms authorised by this consent for pests and fouling organisms at least three times each year. Proof of such inspections shall be provided to the Council in writing along with photographic evidence of the hull condition at the time of each inspection. If such organisms are found the consent holder shall notify the Council's Compliance Manager prior to removal and disposal of the pests or organisms to a designated refuse site on land.

(b) The consent holder shall:

  (i) maintain the vessel in a rodent free state at all times;
  (ii) provide and maintain at least one pest bait station and one baited trap on the vessel at all times;
  (iii) inspect any vessel used to service the marine farms authorised by this consent, including its compartments and any cargo, for pests, in particular, rodents, on each occasion of operating;
  (iv) maintain a log of inspections [including a photographic record] for pest animals, noting the number of pest animals detected aboard the vessel for each inspection; and
  (v) provide the pest inspection log in writing to the Council's Compliance Manager by 30 June each year, or upon 24 hours' notice if requested.

11. In the event a marine mammal or bird is entangled or stranded within the marine farm structures, the consent holder shall immediately advise the Department of Conservation Southland Conservancy

12. Neither the granting of this consent nor anything contained in it shall affect the liability of the consent holder for any injury caused by any marine farm structures to any vessel or person through any default or neglect of the consent holder.

13. Upon expiry of the five year period for which the consent is granted, or on any cancellation or lapse of the consent, the consent holder shall, where required by the Council to do so, remove all marine farm structures, including buoys and lights, entirely from the site and restore the site as near to its original condition within three months of the date of expiry, cancellation or lapse. If the consent holder fails to do so, the Council may cause all marine farm structures, including buoys and lights, to be removed and the site restored, and may recover the costs incurred by the removal and restoration from the consent holder.

14. Pursuant to s135 of the RMA the consent holder cannot transfer this consent, in whole or in part, to any other person or party at any time during the duration of this consent.

Monitoring

15. The consent holder shall carry out the Monitoring Programme specified in Appendix 1.

16. Monitoring in accordance with the Monitoring Programme specified in Appendix 1 shall conform with the following standards:

    (a) sample collection, preservation and analysis of the seabed samples shall be carried out by a suitably qualified person or as agreed to, in writing, by the Council's Compliance Manager;
    (b) sample collection, preservation and analysis of the water quality samples shall be carried out in accordance with the most recent edition of APHA "Standard Methods for the Examination of Water and Wastewater" or as agreed to, in writing, by the Council's Compliance Manager;
    (c) the monitoring and analyses are to be carried out by a laboratory with IANZ accreditation or equivalent, or as agreed to, in writing, by the Council's Compliance Manager;
    (d) the result of seabed analysis shall be supplied to the Southland Regional Council no later than five working days of the consent holder receiving them. The methods of analysis are to be specified with the results;
    (e) the results of water quality analysis shall be supplied to the Southland Regional Council no later than 20 working days from the end of the month in which the samples are taken. The methods of analysis are to be specified with the results; and
    (f) the Southland Regional Council may audit monitor sample collection up to once each year at a cost covered by the consent holder.

17. The consent holder shall undertake an investigation, if the result from any one sample in the Monitoring Programme identifies an adverse effect on the environment, to determine the probable cause of the adverse effect. A report shall be provided summarising the results and analysis on completion of the investigation sampling, but no later than two months from the initial sample that identified an adverse effect being provided to the Council.

18. The consent holder shall provide an annual report summarising and interpreting the results and analysis of the Monitoring Programme on completion of the sampling but no later than 31 July each year.

Other Permits

19. The granting of this consent does not absolve the consent holder from the responsibility to obtain any approval, permit, licence, concession or consent from any other body.

Appendix 1
Monitoring Programme

1. The consent holder shall monitor the effects of the marine farming activity on the seabed, as follows:

   (a) (i) monitoring of the seabed at a representative locations under the marine farm sites shall be undertaken twice in the first year of activity and thereafter annually for the duration of the consent. The monitoring locations shall be approved, in writing, by the Council's Compliance Manager.

   (ii) in addition to Clause 1(a)(i), monitoring of the seabed in the wider area associated with the marine farms, at two control sites approved, in writing, by the Council's Compliance Manager. The monitoring shall occur twice each year for the first three years, then once every year thereafter.

   (b) the samples will be analysed for the following to assess the sediment quality:

   - sediment colour, including providing a colour photograph of the sediment sample;
   - depth of the oxygenated layer below the sediment surface;
   - occurrence of hydrogen sulphide;
   - sediment texture and grain size;
   - total organic carbon content; and
   - infaunal and epifaunal community composition.

   Monitoring records shall include photographic evidence.

2. The consent holder shall monitor the effects of the marine farming activity on water quality, as follows:

   (a) (i) monitoring of the water column shall be undertaken three times during the period of 1 November to 30 June each year and once during the period of 1 July to 31 October each year for the first two years after commencement of this consent, by taking a sample at each marine farm site and two control sites outside the marine farm sites, at a depth of 5 metres.

   (ii) after the first two years outlined in clause 2(a)(i), monitoring of the water column shall be undertaken once during the period of 1 November to 30 June each year and once during the period of 1 July to 31 October each year, by taking a sample at each marine farm site and two control sites outside the marine farm sites, at a depth of 5 metres.

   (iii) the location of the sample sites in clauses 2(a)(i) and 2(a)(ii) above shall be approved, in writing, by the Council's Compliance Manager.

   (b) the water quality samples will be analysed for the following:

   - water temperature;
   - chlorophyll *a*;
   - vertical seechi depth; and
   - dissolved oxygen.

10 September 2013

Mr Matthew Hoffman
Consents Officer
Environment Southland
Private Bag 90116
INVERCARGILL

Dear Matt

FURTHER INFORMATION REQUEST – 21 AUGUST

We reply as follows.

In general, it is disappointing that so many of the questions refer to matters that have already been raised, and addressed, in the Assessment of Effects. The list may have been reduced considerably had you visited the site and better understood the application and its documentation. Further, you had the opportunity to review the Assessment of Effects prior to our lodging the application and we could reasonably have expected that matters of detail and clarification could have been raised then – not over 5 months after the application was lodged.

Nevertheless, we reply to your points 1 – 22 in your letter of 21 August 2013 as follows.

1. **SPECIFIC DIMENSIONS:**
   In response to your request we have engaged Bonisch Consultants to draw dimensioned plans of the proposed sites. They are attached.

   Please note: This revealed a juxtaposition of figures in the information originally supplied with respect to the "Nugget" site. The amended, and correct, information is as follows:
   Horseshoe nugget inshore south. 46*52.134S 168*08.727E
   Horseshoe nugget offshore south 46*52.013S 168*08.676E
   Horseshoe nugget inshore north 46*52.015S 168*08.651E
   Horseshoe nugget offshore north 46*52.132S 168*08.752E

   NZTM

Northing	Easting
4797953.60	1230056.96
4797959.45	1230088.34
4798168.15	1229946.90
4798173.44	1229978.32

2. **WATER DEPTH:**

One of the criteria for the selection of the sites was uniformity of water depth. Mr Lind has confirmed from actual measurement that the depth of water over all three sites is between 8.23m (27 ft) and 9.75m (32ft) at mid tide. This water depth was chosen to avoid the effects of all but extreme swell conditions, while being shallow enough for practical working.

3. **DISTANCE FROM SHORELINE:**

Please see maps attached.

4. **BENTHIC ENVIRONMENT OF EACH SITE**

This is described on page 5 of the March 2013 Assessment of Environmental Effects. Mr Lind confirms on the basis of his knowledge of the area that it is the same at each of the three sites. In addition, we note that Mr Lind has observed that from time to time there is mud on the benthos in these areas, especially the Horseshoe Bay site. This mud comes and goes and seems to vary with the presence/absence of easterly swell conditions.

5. **SENSITIVE HABITATS NEARBY**

There has been no known overview study and characterisation of the marine habitats on Stewart Island. The area in which it is proposed to locate the marine farms is not specifically mentioned in Appendix 5 of the Regional Coastal Plan, although there is a general reference on page 96 to 'islands, stacks and reefs between the main Stewart Island and the Ruapuke Group'. The area is outside of Paterson Inlet, which is specifically mentioned (page 97).

There is no known presence of black coral, bottom-living brachiopod, or other species believed to be rare and endangered, in this area.

On the basis of local knowledge there are not believed to be any reasons why the areas in which the marine farm are proposed contain any marine environments of greater sensitivity than the north eastern coast of Stewart Island as a whole.

6. **PRESENCE OF MOORINGS OR ANCHORAGES NEARBY (and navigation)**

This is addressed on page 10 of the March 2013 Assessment of Environmental Effects and also on page 12. These areas would be unsuitable areas for boat moorings due to their exposure to the east, and there would be no reason to anchor in these areas when there are more sheltered and secure anchorages around Port William and in Horseshoe Bay itself.

7. **SIZE OF ON-GROWN STOCK**

When the lavae fall from the parent oysters they are microscopic in size. After several months after they have developed into spat they can be observed with a hand lense.

Since the application was lodged, it has become apparent to those with marine farms in Big Glory Bay that the lavae from the oyster farming in Big Glory are not developing sufficiently to sustain production. It is hoped that some of the spat from Mr Lind's operation may be used to help sustain the oyster farm production in Big Glory Bay, helping in turn to sustain their markets. Oysters will also be grown to the size where they can be sold for human consumption – generally a minimum of about 20mm across the flesh of the oyster.

8. HARVESTING

Indicative figures to the best of the applicant's knowledge were given in the March 2013 Assessment of Environmental Effects. However the application, as noted on page 2, is for a 'meaningful trial'. Inevitably, productivity will vary from year to year and at this stage accurate productivity is an 'unknown.

9. DENSITY OF STOCK PER POT

Each 'pot' will contain approximately 350 brood stock. Lavae fall and spat formation numbers are not known.

10. NUMBER OF POTS PER FARMING AREA.

On page 7 of the March 2013 Assessment of Environmental Effects we noted that *"for the current proposal, pots will be placed incrementally, reaching a maximum of 60 pots in three years."*

The total "marine farm' area applied for, aggregated over the three sites, is 5.903 ha. (59,030 sq.m) Therefore the average density for the 60 pots is one pot per 983 sq.m.

It may well be, depending on the nature of the trial, that Mr Lind wishes to increase the number of pots or to vary his aquaculture method. In that event, a variation to the consent would be sought. The present application is for the 60 pots over the three sites.

11. **CONFIRMATION OF THE TYPE OF POTS TO BE USED**

The original intention at the time of the application was to use recycled crayfish pots, which are constructed of mild steel rod. Synthetic netting is attached to the frame with stainless steel wire.

While the application has been with Environment Southland awaiting processing, the option of using specially constructed plastic "Aquatrays" has arisen for the grow-out phase of the operation. Ordering these trays has had to be put 'on hold' while this consent application is considered. The photographs (page 4) show these trays in marine farming operations elsewhere in New Zealand.

STANDARD AQUATRAYS SUSPENDED FIVE HIGH BY SIDE CLIPS WITH SEATBELT WEBBING – PAKIHI MARINE, CLEVEDON COAST, NEW ZEALAND. NO LIDS USED AS NO PREDATOR PROBLEMS. OYSTERS AND MUSSELS SHARE FARMING AREA. TRAY DROPS ARE SECURED TO LONGLINES AND BUOYS.

It is important to stress (yet again) the experimental nature of the application. Another method that is being considered is attaching plastic mesh discs to 2" x 1" wooden (non-treated) members attached to the steel frames of the pot, 12 to 16 discs per pot, 8 'brood stock' oysters in each one. The lavae would fall from the brood stock onto the oyster shells threaded on synthetic line and suspended below the plastic mesh discs.

12. ANTI-CORROSION ON STEEL POTS

As noted in your email of 22 August, and already stated, zinc anodes will be used to slow corrosion of steel on the port frames.

13. SECURING THE BOAT WHILE ON THE MARINE FARM SITES

The normal operation is that the boat will manoeuvre up to the buoy of the potline to be serviced. The potline will then be hauled aboard using a normal pot hauler. The boat drifts while pot servicing is carried out. Once this is completed the boat will then manoeuvre back on site using the GPS coordinates for that particular pot and then the pot will be lowered to the sea floor. Experience has shown that pots can be positioned to within 1 metre of their original location using this method.

14. NORMAL MOORING OF THE BOAT.

The home mooring of the boat is within the mooring area at the northernmost end of Horseshoe Bay, within the group shown below. The mooring is a normal swing mooring. Mr Lind has owned this mooring for many years. Boats have been moored in this area since early European settlement.

15. MOORING AT THE MARING FARM SITES

The boat will not be moored in or near the marine farm sites. It would be foolhardy to leave a boat unattended anywhere in this area. The boat has 'day' accommodation only and there could be no reason to leave it on site overnight.

16. BOAT NOISE

Rule 5.3.4 provides that it is a permitted activity to generate noise that will not exceed 50 dBA 'at the landward boundary of the coastal marine area' between 7.00 a.m. and 10.00 p.m. Rule 5.3.6 provides that it is a permitted activity for ships in motion to emit noise that does not exceed a sound exposure level of 90 dBA 'in any single drive-by position beyond a line situated 25 meters back from the line of travel'.

We have not taken noise readings of the boat, however the matter is addressed on page 15 of the March 2013 Assessment of Environmental Effects where I noted that it is possible to converse comfortably on deck while the boat is under way. It is relevant to note that:

- The boat is a "Karitane" class fishing boat with a fibreglass hull (fibreglass is a sound absorber and not prone to resonance, in contrast to steel or aluminium hulls)
- The engine is a 4 cylinder Perkins normally aspirated diesel of about 40 horsepower, mounted on rubber engine mounts. These are quiet, sweet-running units.
- The exhaust is a dry-stack silenced system.

On the basis of the table of comparative examples attached – obtained from the OSH website - it might be reasonable to infer that the noise on deck could be in the order of 50 - 60 dB while the boat is under way. At idle it is more likely to be nearer or below 50 dB. Noise decreases with distance. The nearest boundaries of the marine farm sites are (with one exception) more than 50 m from the shore. On-line calculators suggest that a noise of 60 dB when measured 5 meters from source is likely to reduce to nearer 40 dB when measured 50 meters from source.

The author is not a noise expert and the above figures are not offered as expert opinion. Empirically, actual noise experienced in the coastal environment varies hugely with wind conditions, wind direction, and sea conditions.

However the above comments indicate there is good reason to believe that the noise generated by Mr Lind's boat will comply with the permitted activity baseline of the Regional Coastal Plan. Further, if Mr Lind's boat does not comply, neither will just about every other boat at Stewart Island including the ferries.

17. DOLPHINS

Local knowledge is that dolphins do not habitually pass near the coast in this area, and not within the area within which it is proposed to site the marine farms.

18. TIDES

Without taking tidal flow measurements it is not possible to add to the information provided on page 5 of the March 2013 Assessment of Environmental Effects. Tidal flows will be less at the Horseshoe Bay site (we estimate – up to 0.5 knot) and greatest at the Nathans Island site (we estimate – up to 1.0 knots).

19. **DO THE STRUCTURES CONFINE ANY DEBRIS**

The structures are not designed to collect or confine debris because it is anticipated there will be little, if any 'debris'. Oysters grow at comparative densities in the 'wild'. As noted on page 12 of the March 2013 Assessment of Environmental Effects, the density of Mr Lind's proposal is a far cry from the 'intense mussel raft culture' referred to in the cited reference. The very low density of the initial proposed operation is indicated above (one pot per 983 sq m on average). Further, it is well documented that debris even from mussel long lines is minor compared with debris from salmon cages.

20. DEBRIS

See (19) above

21. VISUAL EFFECTS

This photo shows an example of a single marker buoy marking the position of the individual structure. These are not large, visually obtrusive buoys although they need to be brightly coloured so that can be seen.

I refer on page 10 of the March 2013 Assessment of Environmental Effects to the current use of areas in Halfmoon and Horseshoe Bays for storage of cod and crayfish pots. This activity is permitted under the Regional Coastal Plan. The effect of Mr Lind's proposal on the general appearance of the area will be no different than the effect of this permitted activity.

The visual effect of a group of these buoys will be no greater than the visual effect of a cluster of buoys of cod or cray pots in storage. The best indication we can give of this is the photo (below) of a cluster of such buoys off Butterfields Beach. There are visible, but not intrusive, but this is the level of visual effect that is permitted under the Regional Coastal Plan.

The only difference is that the buoys attached to pots in storage are there for part of the year whereas Mr Lind's pots will be there all year.

In terms of the underwater scenery, it is relevant to compare the very low impact of the pots which Mr Lind proposes to use, which are small compared with the very large pots used to store crayfish in the general vicinity and for which resource consent is not required.

22. USE OF AREA BY OYSTER FISHERMEN

The area is not used by oyster fishermen. There is occasional recreational diving around the shoreline, the main species taken being paua.

I hope this clarifies the matters you are concerned about.

I draw your attention to Section 5 of the Resource Management Act which states
"(2) ...sustainable management means managing the use, development and protection of physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being.....(underlining mine).

In this context, Mr Lind and I consider it will be helpful for you to have a copy of the paper I presented to the ICTC Society Conference in Hobart in 2011 and this is included as an attachment to this application. Mr Lind's proposal is just the kind of local initiative I advocated in that paper which was written before I met Mr Lind.

After this long delay we look forward to the application being processed forthwith.

Yours sincerely

William J Watt
Planning Consultant.

WILLIAM J WATT CONSULTING LTD

PROPOSAL TO ESTABLISH AND OPERATE A MARINE FARM FOR CULTIVATION OF "FOVEAUX STRAIT" OYSTERS On three sites situated in the area between Horseshoe Bay and Bob's Point, Stewart Island

ASSESSMENT OF ENVIRONMENTAL EFFECTS

Owners and Applicants: Suelen Properties Ltd
C/o Mr Len and Mrs Sue Lind
P O Box 102 Halfmoon Bay, Stewart Island
Phone: 03 219 1258

Report prepared by: William J Watt
Resource Management qualifications: B.A. Dip T.P. MNZPI FNZIM
Nautical qualifications: Yachtmaster (Coastal); Restricted Limit Launch master
Updates (in red text) provided by Alasdair Burns (Southern Seafoods Ltd) June 2019

William J Watt Consulting Ltd, P O Box 6203, Invercargill North 9841
Phone: 027 495 9288

March 2013

Background

Mr Lind has already established a very small, pilot operation in Horseshoe Bay . A letter to Mr Lind from C. Keogh, CEO of Environment Southland, and dated 29 September 2010, referred to (then) pending changes in existing aquaculture legislation and concluded,
"Council is accommodating your existing activity in the knowledge that the proposed changes that will allow you to go through an easier and cheaper process (than detailed previously in the letter) to legalise your operation are expected within the year".

The legislation change referred to was the 2011 amendment to the Resource Management Act (RMA) that enabled applications for marine farms to be made outside recognised Aquaculture Management Areas but otherwise within the provisions of a Regional Coastal Plan.

This current application seeks consent for the current, pilot operation to be extended to a meaningful trial on three sites in the Horseshoe Bay – Bob's Point Area on the north east coast of Stewart Island.

Update: As of June 2019 this activity has been ongoing, albeit with interruptions due to the response to the outbreak of *Bonamia ostreae* in nearby Big Glory Bay, and the current renewal application seeks a renewal for 5 years to give time to investigate any unforeseen adverse effects. No significant adverse effects from the proposed activity are anticipated.

This Assessment of Environmental Effects has been compiled to supply the information specified in the Fourth Schedule to the Resource Management Act and the Regional Coastal Plan, Objectives and Policies (Sections 4, 9, 11 and 15) and Chapter 18, pages 3, 4, 5 and 6.

Matters from the Fourth Schedule to the Resource Management Act

a) Full Description of the Activity Proposed

Summary of the proposal

The proposal involves the 'Foveaux Strait' oyster (Ostrea chilensis). The rationale for Mr Lind's proposal is summarised in comment received by the author from Mr Bob Street of Southern Shellfish, as follows:

"Two of the world's most common oysters, Pacific and Eastern American, are broadcast spawners. Both of these species are cupped oysters. Like most other species of flat oysters (one valve is flat) Bluff oysters have internal fertilization and the developing lavae are brooded inside the parent oyster. About 50,000 lavae are developed in this way and on release are capable of immediate settlement. They seek out clean surfaces free of other marine growth to settle and on-grow on".

The essence of Mr Lind's proposal is to provide substrate for this process of settlement and on-growth. In his pilot operation, Mr Lind is using the frames of pots originally used for catching rock lobster. These frames are placed on the sea floor but are not anchored in any other way. They are marked by a single buoy on the sea surface in the same manner as a rock lobster or cod pot.

Mr Lind's proposal has strong parallels with the concept of "Transient Gear Shellfish Aquaculture" practised in New England, a full description of which is set out in an article (Rheault R.B. and Rice M.A. , World Aquaculture March 1995), copy attached as an Appendix to this report.

Update: This method of shellfish aquaculture is still considered to be best-practice in areas such as Horseshoe Bay where any adverse affects (typically visual impacts and noise) need to be mitigated and where the density of cultivation is low.

The current proposal is to establish three sites, to prove the technology and provide a basis for what is ultimately planned as a cottage industry based at Stewart Island. Initial indications are that for a full time operation, a total of nine sites of this size would be required.

This current application is only for the initial three sites.

Update: The same three sites are the sites applied for in this renewal. There are currently no plans to expand beyond these three sites, however the current renewal requests an increase in the efficiency of these sites by including rope lines and suspended plastic baskets in addition to the 61 crayfish pots allowed across the three sites (Horseshoe Bay (18), Horseshoe Nugget (9), Nathan's Island (34)).

Under Rule 15.1.7 of The Regional Coastal Plan for Southland – July 2005 – the proposal is a discretionary activity.

Update: In the subsequent 2014 hearing it was decided that two of the sites (Horseshoe Bay and Horseshoe Nugget) were discretionary and the Nathan's Island site was non-complying. The New Zealand Coastal Policy Statement (2010) directs that areas with "outstanding" natural character, features and landscapes should have protection from any adverse effects. These three sites should be allowed, as the coastline nearby has 'high" or "very high" values, which means that development is appropriate providing that adverse effects are avoided, remedied or mitigated.

The Proposed Sites

The general context of the area is well illustrated in the following from Google Earth:

Update: In this satellite image the approximate positions of the sites are marked with stars. The beach at Horseshoe Bay can be seen at the bottom of the image with the road infrastructure and hosing clearly visible. The beach at Lee bay is in the top left of the image and the road connecting it to Horseshoe Bay can clearly be seen. The coastline in between is regenerating following the removal of grazing and mostly belongs to the Mamaku Point Conservation Reserve. Near the Nathan's Island site (star top centre) the effects of historic grazing by cattle can be seen with grassland predominating around the coast. The modified coastline between Horseshoe Bay and Lee Bay has "high" or "very high" natural values but it does not posess "outstanding" values as exhibited by the coastline of Rakiura National Park, beginning at Lee Bay.

The three sites are as follows:

Horseshoe Bay:

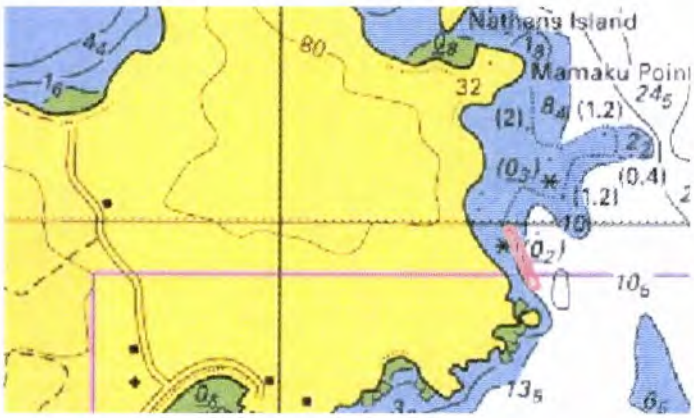
Area: 1.89292 ha

GPS positions:
Outside east: 46*52.427S 168*08.32E
Inside east: 46*52.38S 168*08.29E
Outside west: 46*52.491S 168*0814E
Inside west: 46*52.471S 168.122E

NZTM
Northing Easting

4797379.013	1229573.788
4797463.675	1229530.292
4797246.317	1229352.59
4797281.93	1229327.434

Nugget:

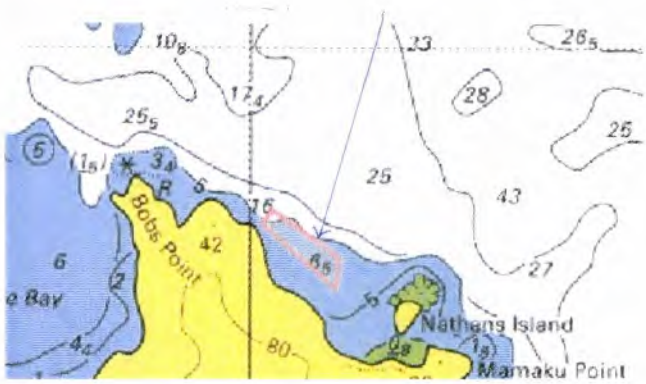


Area: 0.7744 ha

GPS Positions:
Inshore south: 46*52.134S 168*08.727E
Offshore south: 46*52.013S 168*08.676E
Inshore north: 46*53.015S 168*08.651E
Offshore north: 46*52.132S 168*08.752E

NZTM	
Northing	Easting
4797921.618	1229541.382
4798173.157	1229970.684
4796316.33	1230061.596
4797959.268	1230088.475

Nathans Island:



Area: 3.3342 Ha

GPS Positions:
Offshore north: 46*51.528S 168*08.26E
Inshore north: 46*51.357S 168*08.074E
Inshore south: 46*51.464S 168*08.289E
Offshore south: 46*51.386S 168*08.038E

NZTM	
Northing	Easting
4799038.895	1229394.263
4799340.854	1229138.353
4799159.685	1229423.741
4799284.316	1229095.961

The depth of water varies between five and ten meters from chart datum, as shown on the excerpts from the nautical chart reproduced above.

Tidal currents flow southeast (flood) and northwest (ebb) offshore from the sites proposed. Half a nautical mile or so offshore, current speeds can approach 2 knots and significant flows can be observed between Nathans Island and Mamaku Point. Inside Horseshoe Bay tidal flows are less than 1.0 knot.

The benthos (sea floor) is characterised by sand, containing small amounts of shell from various species of shellfish, some containing hermit crabs, small octopus, green lettuce weed and drifting macrosystis. Near the proposed sites are rocky outcrops. These outcrops form an anchor for kelp forests which vary in size from season to season but can be quite extensive. Kelp appears intermittently on the sea surface in the general area of the proposed operations.
"*Bull kelp or rimurapa (*Durvillaea *species) is the most striking seaweed of the exposed coasts. Its tough, flexible fronds are secured to intertidal rocks by a solid disc-shaped holdfast capable of withstanding tremendous forces when storm waves crash onto reefs and cliffs. The seaweed grows to 10 metres in length and can live for 10 years. Bull kelp forests are highly productive systems, contributing vast quantities of organic matter and nutrients to coastal food chains. Four species of bull kelp are found around New Zealand, and the most common,* Durvillaea antarctica, *also grows around the subantarctic islands and southern coasts of South America. In northern New Zealand it grows only on very exposed headlands and becomes more common in the cooler waters south of Cook Strait. Fronds of* Durvillaea antarctica *have an internal honeycomb-like tissue, full of air, which keeps the blade buoyant. The form of the frond differs according to conditions: the more exposed the site, the more divided the fronds."* (Te Ara – Encyclopaedia of New Zealand)

The coastal waters around Stewart Island/Rakiura generally are well known to have some interesting species of fish. Blue cod, blue moki and tarakihi weave through the kelp forests to 10 meters. Dolphins and fur seals sometimes make friendly passes. An encounter with a shark would be unusual but cannot be ruled out.

Update: This information is still accurate as of June 2019 and has been expanded upon in the attached document "Application for a Coastal Permit (Part B) – supplemental information"

The Proposed Operation

DREDGE OYSTER (OYU 5)-Foveaux Strait

(Ostrea chilensis)

Figure 1: Foveaux Strait (OYU 5) stock boundary and outer boundary of the 1999 dredge survey area encompassing almost all the commercial fishery.

To initiate his 'pilot' operation referred to on page 1, Mr Lind, believing he was acting as a bona fide amateur, dredged Foveaux Strait oysters from the area to the north east of Port William, in the survey area marked "57" on the map opposite.

No oysters were taken with visible juvenile or spat attached. The quantity of oysters taken was within the allowable limit for an amateur take. Although this may be a technical transgression of the Fisheries (Amateur Fishing) Regulations 1986 the impact on the fishery and the impact on the environment are no different than if Mr Lind had simply taken his allowable catch, eaten them, and disposed of the shells in the normal manner. *(Source:Fs.fish.govt.nz/Doc5542/OYU5 page 176).*

However, Mr Lind has found, examining these oysters with a hand lens once they have been opened, that many have active spat inside. These oysters have been placed in Mr Lind's trial frames (see page 2) and returned to the sea in the areas of the proposed farming operations, where spat have been observed growing on the shell of the 'parent' oysters. The current indications are that the existing stock will be sufficient to supply all the breed stock required. There will be no need for any further taking of oysters from the Foveaux Strait beds.

Update: These matters were dealt with in full during the hearing proceedings in 2014 and have no bearing on the current application. The current operators (Southern Seafoods Ltd) will apply to the Ministry for Primary Industries (MPI) for permission to collect wild oysters for brood stock if required, however the population of oysters on the farm is currently self-sustaining over the long term.

Once the operation is consented, these 'parent' oysters will be placed within the recycled lobster pots or similar type structures. These structures measure approximately 1.4 m square and up to 1.0 m high. Oysters will be grown in mesh bags or baskets attached within the pot frames. The pots will be placed within one of the three of the proposed sites, at a density of around 50 meters between pots. The pot rests on the sea floor, and its position is marked by a single synthetic line to a small surface float, in the same manner as a lobster or cod pot.

Update: This information on the crayfish pots is still fully accurate in most respects. The only minor detail would be that the current operators typically use stacked plastic trays within the crayfish pots (see photos, appendix (ii)) rather than mesh bags or baskets.

The following comment on the biology of the oyster is relevant to what happens next:

"Ostrea chilensis is a protandrous hermaphrodite that may breed all the year round, but breeding peaks in the spring and summer months. Females produce few large (280-290 um) yolky eggs, which after fertilisation continue to develop to pediveligers in the inhalant chamber for 18 – 32 days (depending on temperature). Most lavae are thought to settle immediately on release (at a size 444 – 521 um) and thought to seldom disperse more than a few centimetres from the parent oyster. Some lavae are released early, at smaller sizes, and spend some time in the plankton, and are capable of dispersing widely. Little is known about the timing and proportion of lavae released early

in the plankton, and how this strategy may vary spatially, both within natal populations and the fishery.

In Foveaux Strait, spat settlement is primarily during the summer months from December to February. Mean fertility of incubating oysters in Foveaux Strait was determined to be 5.09 x 10 (4) lavae, and only 6 – 18% of the sexually mature oysters spawned as females each year."

(Fs.fish.govt.nz/Doc5542/OYU5, page 182).

The pilot operation by Mr Lind has proved that recruitment occurs (the author has seen, with a hand lens, juvenile oysters attached to substrate in one of Mr Lind's trial cod pots). However, there is little data available on recruitment in the natural situation and none in an enhancement-type operation as proposed by Mr Lind. Again the following comment is relevant:

"Stock recruitment relationships for the Foveaux Strait dredge oyster are unknown, but most oysters surviving post settlement, are typically found on live oysters, and to a lesser extent, oyster shell and circular saw Astraea heliotropium (Keith Michael, NIWA, pers comm.). Generally, recruitment of sessile organisms is highly variable and often environmentally and predation driven (Cranfield, 1979). About 2% of oyster spat survive the first winter; most mortality appears to result from predation by polychaetes, crabs and small gastropods.....Mean density of six month old oyster spat settled on spat plates at six sites in western and eastern Foveaux Strait over the summer of 1999-2000 was 1,700 m3 (range 850 – 2,900 m3) (Cranfield et al unpublished data). (Ibid).

One of the objectives of the current proposal is to test empirically recruitment rates and growth rates.

"Spat typically grow 5 to 10 mm in height by the winter after settlement. Mean height after one year is 18 to 25, 25 to 35 mm after two years, 30 to 51 mm after three years, 40 to 65 mm after four years, and 65 to 75 mm after the fifth year. Oysters recruit to the legal sized population.....at ages of 4 – 8 years". (Ibid, page 183)

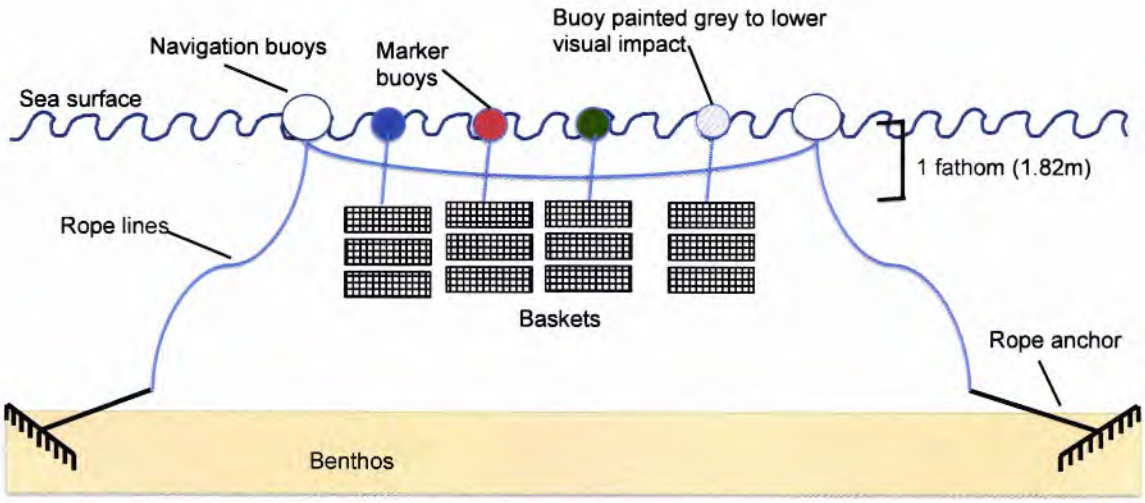
Experience in Big Glory Bay, Stewart Island, indicates that faster growth rates may be achieved in the type of operation envisaged by Mr Lind (J. Barrett, pers. comm.) and it is hoped that oysters may be suitable for collection after three years.

For the current proposal, pots will be placed incrementally, reaching a maximum of 60 pots in three years.

Mr Lind has built his business case anticipating, after three years, around 100 dozen market size oysters per pot – overall, a production of 120 dozen per week.

Update: Unfortunately a full exploration of the economic aspects of the proposal has not been possible due to interruptions to the farm activity. The current operators (Southern Seafoods Ltd) intend to give full effect to the permit in the next 5 years and should be able to provide a full, evidence-based, assessment of the economic benefits when the consent comes up for renewal again.

The current operators intend to use stacks of baskets suspended from rope lines in addition to the crayfish pots suggested as part of the initial consent application. The ropes are floated by white navigation buoys (c. 50 cm diameter) and the locations of baskets are marked by smaller 'marker' buoys that are arohund 30 cm across and are coloured green, red and blue. The rope between navigation buoys site 1 fathom (1.82 metres) below the surface. We are proposing to reduce the visual impact of these marker buoys by painting them light grey and have sought guidance from the council harbourmaster as to the effect this may have on navigational safety. The diagram below shows the basic concept described (not to scale).



In the event that the proposal proved to be economically non-viable, the pots would be simply removed and disposed of ashore to the local recycling centre which is at the southern end of Horseshoe Bay. Removing 60 pots could take up to a week allowing for weather.

Update: This is still the case. The non-permanent nature of the structures on the farm means that they can be uplifted and removed at any time if required by a higher authority.

b) Results of Consultation with Tangata Whenua:

In 2011 Mr Lind contacted Te Ao Marama Inc and Te Runanga o Ngai Tahu. Preliminary information on his proposal was included and he requested advice if further information would be required before the party decided whether to oppose, remain neutral or approve his application.

Update: Kai Tahu and applicants/holders of customary marine title have been contacted as part of the current application but no response has been received as yet.

c) Results of Consultation with Adjacent Landowners and others

In 2011 Mr Lind contacted the following list of persons or organisations who he believed, on the basis of discussions with Environment Southland, to be the parties potentially affected by his proposal. As in (b) above, preliminary information on his proposal was included and he requested advice if further information would be required before the party decided whether to oppose, remain neutral or approve his application.

In addition to the organisations referred to under (b) above, those organisations were as follows:
Stewart Island Community Board
Southland District Council
Dept of Conservation
Fish and Game New Zealand
Royal Forest and Bid Protection Society

The only written reply he received was from Dancing Star Foundation, who indicated they would be likely to oppose any application on the basis that:

- They felt that the wildlife values of the shoreline had been underestimated
- They believed that natural behaviours of sea mammals, nesting shorebirds, Little Blue Penguins, would be disrupted
- They believed the noise of harvesting would disrupt wildlife
- They believed the operation would increase the risk of re-infestation (of the adjacent land) with rats
- They believed the operation would compromise the potential for a tourist operation adjacent to their property.

Having reviewed the comment from Dancing Star Foundation, it is the view of the author of this report that the Foundation was unfamiliar with the small-scale nature of the operation proposed by Mr Lind and also unfamiliar with the 'permitted activity' status established in the Regional Coastal Plan in relation to cod and crayfish pots. The Foundation appears to have anticipated an operation with much greater impact than will actually be the case.

Update: Parties that could be reasonably be said to be affected by the activity have been notified of our intent to renew the consents and two responses have been received so far, both in support. We shall continue to notify affected parties and distribute 'Written approval' forms to those who wish to give their consent. We will wait until Environment Southland has determined what type of notification to apply to the two applications before contacting residents with 'Submission forms'.

d) Timing, Duration and Frequency

It is proposed to develop the three sites simultaneously, for the obvious reason that it is possible that the oysters may do better on one site than the others. If that occurred it would be necessary to find out why.

The farm will be serviced initially using a 9 meter displacement "Karitane" type fishing launch. As the operation develops a special purpose servicing launch or self-propelled barge may be considered.

Mr Lind has indicated that servicing will be done monthly. In view of the number of 'pots' envisaged (60), and on the basis of it taking perhaps 30 - 60 minutes to service each pot, the servicing launch could be in the vicinity of any of the three sites for a total of 30 – 60 hours per month. Overall this suggests that one week in every four, on average, there could be a vessel in the vicinity of the farm sites.

Update: The general level of activity described here is still applicable, although only one site is visited with regularity at present. The current farm manager for Southern Seafoods Ltd, Richard Langdon, estimates that the boat is used at the farm site on one day per week to inspect the oysters currently growing there and to perform maintenance tasks. When activity is scaled up the above estimates may hold to be true (i.e. one day in every four). If deemed to be necessary by Environment Southland we are happy to keep a log of farm activities and provide it to ES as part of our regular monitoring.

e) Other Resource Consents

Depending on the success of the pilot operation, Mr Lind may wish to establish a 'cottage industry' at his residence at Horseshoe Bay. Resource Consent from the Southland District Council would be required for this.

In the initial period, processing of any oysters sold commercially would be undertaken at one of the existing approved fish processing facilities on Stewart Island.

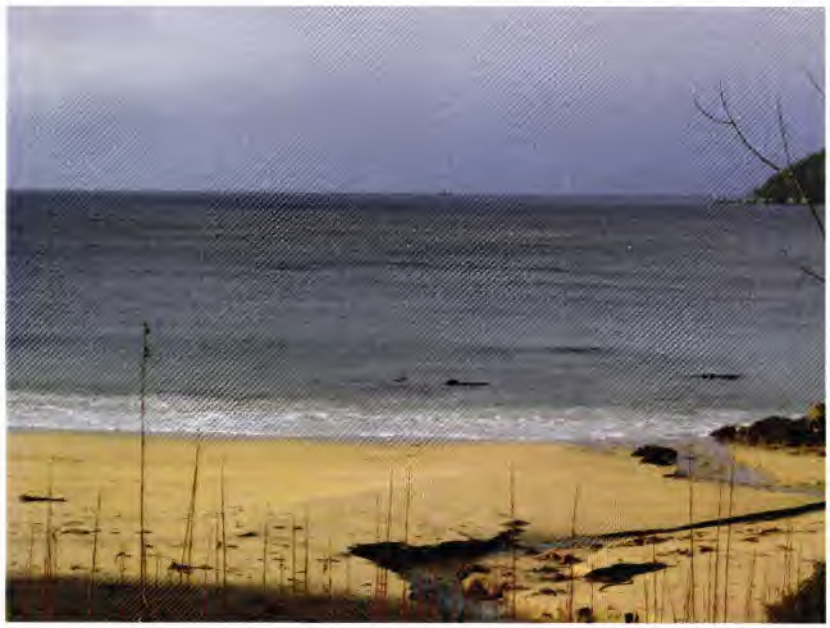
Update: Updated information is provided in the attached document "Application for a Coastal Permit (Part B) – supplemental information" but to summarise, an Aquaculture Decision, a license to hold osyters and farm registration will be required from the Ministry for Primary Industries,

f) Current Uses of the General Area

The area in which Mr Lind wishes to establish his farm is on the eastern, open sea, coast of Stewart Island between Horseshoe Bay and Bob's Point. Bob's Point is the southernmost extremity of the large open bay that includes Port William to the north, Maori Beach and Lee

Bay. The photo gives an impression of the Horseshoe Bay site, seen from the water.

The adjacent land is owned by the Dancing Star Foundation and managed as an ecological restoration project. The 'pest proof fence' is clearly visible on the Google Earth air photo on page 3, and one end of it is visible in the photo (page 9). The public are not permitted access to this land, so the only public access to the coastline is from the sea.



The most obvious current use of the area is for the storage of cod and crayfish pots. It is one of several areas in the vicinity of Halfmoon Bay and Horseshoe Bay used for this purpose. Pots deteriorate more slowly if they are stored fully submerged when not in use. It is also more convenient to recover pots stored in this way than tranship them to a boat from a shore base. For these reasons, following maintenance, pots are stored in areas close to fishing boat mooring areas. The photo (above) shows an area used for pot storage off Butterfields Beach in Halfmoon Bay. While the marker buoys can be seen in the photo, they are not obtrusively visible.

The areas affected by Mr Lind's proposal are not used, and would be unsuitable, for boat mooring. The traditional mooring area is in the northwest corner of Horseshoe Bay where there is good all-round shelter and where there is also a wharf and associated fish processing facility. The Regional Coastal Plan recognises a mooring area in the southern portion of Horseshoe Bay (Chapter 11 page 58).

There would be no reason to anchor in the area affected by Mr Lind's proposal, with better and safer anchorages nearby. There are only ever one or two visiting boats at anchor in Horseshoe Bay, and that happens only occasionally.

The normal passage route for water taxis and other craft moving along the coast on their way to and from Port William or points further afield is to pass around 0.5 nautical miles offshsore from Mamaku Point, avoiding the foul ground shown on the nautical chart. Water taxis may pass through this foul ground (known locally as 'The Mucks') to enable passengers to see seals and other wildlife.

Prudent navigation for small vessels entering Horseshoe Bay would not take them close to either the northern or the southern shore of Horseshoe Bay, where kelp beds suggest foul ground. Even for a yacht entering Horseshoe Bay in an offshore wind there is plenty of room to tack up the middle.

There is occasional use of the area for diving, recreational fishing or simply cruising using small boats or kayaks.

Update: This is still an accurate depiction of the area and extra information is given in the attached document "Application for a Coastal Permit (Part B) – supplemental information". One change to note is the change in ownership of the land formerly owned by the Dancing Star Foundation. The current owners are the Mamaku Point Conservation Trust.

g. Possible alternate locations and methods

The kind of operation envisaged by Mr Lind could, physically, be carried out around much of the eastern Stewart Island coast. Several considerations suggest that the area chosen is operationally the optimum and environmentally the least-impact of the choices available:

(i) The areas are within a very few minutes' travelling time from Mr Lind's boat mooring and residence at Horseshoe Bay. There are clear operational efficiencies (and fuel savings) in having the sites in such close proximity.
Update: Although the operator is no longer Mr Lind, the convenience of servicing the sites from Horseshoe Bay wharf is beneficial to all involved.

(ii) The area is not adjacent to the Rakiura National Park. The nearest boundary of the National Park is at Lee Bay, in the south west corner of Port William.
Update: The sites are all in areas where devlopment should be allowed so long as adverse effects are avoided, remedied and mitigated.

(iii) The landscape context is a modified natural environment. The adjacent land, on the northern side of Horseshoe Bay, has been partially cleared for many years and was grazed by cattle. It is now managed, regenerating indigenous vegetation. Except in the vicinity of Halfmoon Bay and Horseshoe Bay the rest of the Stewart Island coast retains a higher degree of 'naturalness'.
Update: This is still accurate. Although the Boffa Miskell-produced lanscape study of Stewart Island lists the Mamaku Point reserve as an area of "outstanding" natural character, we would argue that it's recently-modified nature gives it "high" or "very high" values but not "outstanding".

(iv) The area is not in Port William, or Paterson's Inlet, where marine farming is a prohibited activity outside Big Glory Bay.

(v) The area is removed from Halfmoon Bay, which is the only settlement on Stewart Island, where fishing boats, tourist boats and ferries come and go frequently and where there is a certain amount of recreational use of the shoreline.

(vi) There is no regular pattern of navigation through the area. Nor is there likely to be.

(vii) There is little recreational use of the area, and no public recreational use is allowed on the immediately adjoining shore. Views of the area from the land from areas accessible to the public are mid to long distance – a kilometre or more.

(viii) Local tidal flows give good water circulation.

Update: To my knowledge, the rest of these points are still accurate. The visual impact of these sites is very low and the area already has commercial activity in the form of commercial fishing and wharf activities. As such, the presence of buoys at these sites is not abnormal for the area.

The purpose of the application is to enable Mr Lind to trial, with a small commercial operation, a 'farming' method which utilises equipment very similar to cod or crayfish 'potting' . The proposal is directly comparable to that 'permitted baseline' in the Regional Coastal Plan.

h. Avoiding, Remedying or Mitigation Adverse Effects

(i) Visual effects: The surface visual effect of Mr Lind's proposal will be of a series of buoys, the same kind of buoys as cod or crayfish pot buoys, distributed about 15 meters apart over the farmed areas. These buoys are brightly coloured so they can be seen (and avoided) in the course of normal navigation and also easily seen by the owner of the pot. They are round or ovoid and measure approx. 0.5 m in diameter. The visual effect of these buoys will be minor or less than minor, and similar to the storage of cod or cray pots which is permitted by the Regional Coastal Plan. They will be barely visible from the shoreline where it is accessible to the public. (See photo on page 9).

Update: This statement is still true, the only difference is the extra method of housing oysters in plastic baskets being trialled by the current operator (see diagram pg 9). This may mean an increase in the number of buoys but they would be smaller and we are attempting to lower their visual impact using low contrast colouring in conjunction with the Harbourmaster.

(ii) Effects of introducing new species. The proposal utilises species which occur naturally in the immediate vicinity. No new species will be introduced. A review of the historical record suggests that the Foveaux Strait oyster was once considerably more abundant , overall, than it is now. There are references to 'shovelling' oysters into boats beached at Port Adventure, and it is reasonable to infer that oysters were once plentiful in the other bays and inlets along the eastern coast of Stewart Island. The overall effect, therefore, is likely to be one of enhancing numbers of oysters in areas where they were once more plentiful than they are today. There will be no effects arising from the introduction of new species.

Update: This statement is still accurate. No new species are being introduced as part of this poposal. Dredge (Foveaux Strait) oysters (*Ostrea chilensis*) are a natural part of the coastal ecosystem around Horseshoe Bay and Mamaku Point.

(iii) Effects of introducing structures. The recycled cod pot or similar structures proposed by Mr Lind rest on the sea floor while the oysters are growing and are hauled to the surface for inspection and servicing on board the launch. At the end of their service life the pots will be removed and replaced with new, similar structures. In the event that the line to the surface

float is inadvertently cut, the pots are at a depth where a new line can readily be attached by a diver. There will be no 'littering' of the sea floor with decaying redundant pots. As noted above, in the event that the proposal proved to be economically non-viable, the pots would be simply removed and disposed of ashore.

Update: In addition to the crayfish pots described above there will be anchors for rope lines place don the seafloor. These will anchor ropes suspended from buoys and plastic baskets will be hung from the rope in order to suspend oysters in the water column. This setup is shown in the diagram on page 9. It is not known yet whether this will be better for growing oysters than the crayfish pots which is why both are being trialled.

(iv) Effects on water quality. Oysters are filter feeders and the success of the farming operation depends on the clear and unpolluted waters that characterise the site. The following comment is relevant:
"Shellfish feed at the base of the food chain – as first order consumers that are vegetarians. Filter feeding bivalve molluscs are an essential link between the bottom dwelling aquatic communities and phytoplankton production in the water column. Shellfish are highly efficient water filters that directly remove particulate material thus reducing turbidity and indirectly removing nitrogen and other nutrients. Via this process, these highly efficient water purifiers remove or reduce organic matter, nutrients, silt, bacteria and viruses, and improve clarity and light transmission which, in turn, improved the condition of critical habitat species such as sea grasses and other submerged vegetation. Thus they produce a net gain for the environment. As with any other living organism, too many shellfish in a given area can result in an unbalanced ecosystem, as has been demonstrated by intense mussel raft culture operations in Spain." (Shumway S.E., Davis C., Downey R., Karney R., Kraeuter J., Parsons j., Rheault R. and Wilkfors G. Shellfish aquaculture – In praise of sustainable economies and environments. World Aquaculture Vol 34 No 4 4 Dec 2003)

The density proposed by Mr Lind is a far cry from the 'intense mussel raft culture' referred to above and replicates the conditions in which oysters grow naturally. Further, the progress of each 'pot' will be monitored monthly.

Update: In my opinion this is still accurate. The low density of cultivation is an important factor in estimating any effects on water quality. There is no evidence to suggest that this form of aquaculture will have any adverse effects on water quality, and the monitoring that was completed supports this conclusion.

(v) Effect on navigation: The sites proposed by Mr Lind are closer to the coast than any normal, prudent navigational track. Surface floats can be a hazard, if they tangle around propellers or other underwater appendages of small craft, and a prudent mariner keeps a good look out around the whole of the Stewart Island coast. It would be foolhardy for any vessel to be this close to a coast of this nature at night. The marine chart warns of the possible presence of marine farms in Stewart Island waters.

Update: This is all still relevant. The boundaries of the consented spaces are clearly marked with buoys and we are seeking advice from the Harbourmaster on the safety implications of reducing the visual impact of the remaining buoys. We do not seek priviledged occupation of the coastal marine area and the boats can pass through the sites. A normal navigation route does not take a boat through the farms however.

(i) Effects on People and Communities

In a paper presented to the ICTC Conference in Hobart, August 2011, the author outlined the 'epochs' of development at Stewart Island (Watt, W.J. STEWART ISLAND/RAKIURA (NZ) – TOWARDS SUSTAINABILITY). The abstract noted:

"Stewart Island (Rakiura) is New Zealand's southernmost island. An important area in Maori legend and held in high regard for the beauty of its natural environment since the early 20th century, it is the site of New Zealand's latest National Park which covers 85% of the land area. The settlement of Oban (population 350) occupies part of the remaining 15%.

"The Island has an interesting history. The pre-European Maori tradition is of sustainable resource use. European occupation has been characterised by periods of resource exploitation starting with sealing and whaling, some mining, milling of indigenous timber, and most recently, fisheries. All have brought prosperity to the inhabitants of Oban. All were unsustainable.

"Over the last 25 years the community has had to move from primary dependence on an unsustainable fishery, to dependence on a more diversified economy based on a managed fishery regime and a niche market visitor industry. In the process the community has also had to embrace, sometimes reluctantly, the new concepts of environmental responsibility and presenting a 'clean and green' image."

The paper had this to say specifically about marine farming:
"Only a limited area is available for marine farming. If expansion into other areas occurs it has the potential to seriously compromise the high quality of the natural environment, which is the Island's major asset. There is pressure for expansion. In part this is about large companies and territory, the creation of assets. In part it is about a small community looking for ways to enhance its sustainability, adding value to what can be produced locally. The marine farms that are locally owned and operated are showing considerable innovation and willingness to experiment with different species and methods".

The paper offered the following conclusions:
"Stewart Island offers an interesting case study of a community that has had to move from primary dependence on a series of unsustainable exploitations of natural resources, toward sustainability.

"The journey has not been easy. But the permanent population has sustained at 350 - 400 people through this period of change and the economy has diversified and strengthened. The Island community is much less reliant on central government subsidy than it was 25 years ago.

"The Island will continue to depend for a significant part of its economic base on tourism. Although it has never been a destination for mass tourism, it is well placed to attract niche market and specialty tourism based on the quality of its natural environment. Its tourism future will depend on the extent to which small local operators can work together and improve the quality of the visitor experience.

"The resources of the Island will continue to offer opportunities for value-added processing. This should be considered as a policy dimension in resource allocation.

"The natural environment of the Island will continue to inspire. Managed properly, the Island will become one of the increasingly rare places of the world where an authentic natural environment can be readily experienced and enjoyed.

"Improving the quality of the township environment will be an important part of positioning the Island as a destination of choice and a great place to live and do business.

The proposal by Mr Lind is exactly the kind of locally based initiative, adding value to local resources, that the paper advocated as part of a future economy for Stewart Island, sustainable both economically and environmentally. The comment made about locally owned and operated marine farms was almost prophetic in that at the time the author was unaware of Mr Lind's proposal.

If Mr Lind's proposal can form the basis of a locally based 'cottage' industry, which is his current intention, the effect on the local community can only be positive.

Update: The activity is socially, culturally and economically beneficial to the community on Stewart Island as described in the attached document "Application for a Coastal Permit (Part B) – supplemental information". This is especially the case in the context of the recent response to the *Bonamia ostreae* outbreak in 2017, which many in the community saw as heavy-handed and overly punitive. Keeping the door open to growing 'local' oysters would have a social and cultural benefit on it's own, regardless of the obvious economic benefit.

The Rakiura marine area has obvious historic, cultural and spiritual importance to Kai Tahu and Rakiura Māori. The coastline around Mamaku Point has several māori archaeological sites (wāhi tapu) and the island is renowned for its kai moana. We recognise the importance of the area to iwi and although we have not received any responses from holders of or applicants for customary marine title we will continue to seek to consult with them. The policies in the Ngaī Tahu Ki Murihiku Natural Resource and Environmental Iwi Management Plan 2008 "Te Tangi a Tauira – the Cry of the People" are in keeping with the policies that we are already following from the New Zealand Coastal Policy Statement (2010) and other plans and pieces of legislation. Te Tangi a Tauira places importance on protecting traditional food gathering areas and areas of customary marine title, especially with regard to the water quality and taonga species. We do not anticipate any adverse effects on these areas from the permitted activity.

j. Effects on Values

The author's paper to the 2011 ICTC conference offered the following summary of the values of Stewart Island:

"The values of Stewart Island/Rakiura are best summarised in the overall outcome which forms the basis of the Conservation Management Strategy:

'The Stewart Island/Rakiura CMS area as a whole is more than the sum of its parts. It is made up of the overall combination and diversity of the natural environments, the extent of native forests, wetlands, estuaries, dunes and many special places, whether the impressive and internationally significant dune system of Mason Bay, the tranquil waters of Paterson Inlet/Whaka a Te Wera and Port Pegasus/Pikihatiti, or the wind-blasted and granite-sculpted tops of the Tin Range. It is the collection of these environments, habitats and ecosystems, landscapes and landforms that makes this whole area so special. '(Dept of Conservation 2008 – page 102)

"The majority of the Island's natural environments appear to the visitor to be in natural or pristine condition. This is the appeal of the Island. It is an environment where the natural state seems to predominate, a link with our origins, a glimpse of the world as it once was."

As already noted, the area of Mr Lind's proposal is adjacent to a block of regenerating indigenous vegetation which has been milled, partially cleared, and grazed by cattle within the last 20 years or so. While the landscape is attractive, it does not present visually as pristine natural environment. Further, the pest-proof fence, while there for a very good reason, is itself an intrusive element on the landscape.

Update: As previously discussed, this evaluation is still current. When talking about the Eastern Bays terrestrial character area (which includes Horseshoe Bay) the Boffa Miskell landscape study commissioned by Environment Southland describes the "least modified" areas as "outstanding". Since the coastal areas around these farm sites are regenerating from significant modification, their character is "high" or "very high" but not "outstanding".

k. Noise

Stewart Island is characterised by very low ambient noise levels in calm weather. Noises of wind and sea predominate, punctuated by the sounds of birds and wildlife.

The only noise associated with the operation will be that of the engine of Mr Lind's fishing launch. While I have not taken sound readings, I have been aboard with Mr Lind when the boat is under way and it has been possible to converse with him comfortably over the noise of the engine, which appeared to be fitted with a dry-stack silenced exhaust. The noise is a perfectly normal, boat noise which will be on site intermittently (and then most frequently at idle) and there is no-one normally nearby for the noise to affect.

Update: Although the boats used to service the farm have changed since the original application, this description of the noise levels is still accurate. The "Stingray" and the "Stardust" are typical boats for the area and the noise of the farm activities is not abnormal for a commercial wharf where fishing boats regularly load and unload.

We are currently in the process of procuring a decibel meter to measure the sound of the farm activities. We intend to measure the ambient sound levels, the levels on the boat during normal activity and the noise of the farm activity from several locations around the bay e.g. Horseshoe bay beach. We will be able to submit these results as part of a further information request but they will not be ready prior to the application deadline of 10th July 2019

l. Effect on Indigenous Species, Habitats and Communities

Besides the effects on the benthos and water column described above, the effect on marine mammals must be considered.

There are seal rookeries on the island offshore from Halfmoon Bay, notably Bench Island. Seals or sea lions are observed from time to time on the beaches around Halfmoon Bay, Sydney Cove (Ulva Island) and on Horseshoe Bay Beach. However seals or sea lions have not been observed by locals to come ashore along the coast any near where Mr Lind is proposing his oyster enhancement operation.

In Big Glory Bay, the very much greater density of lines associated with mussel farming has not proven to be a problem in terms of entrapping marine mammals (J Barrett, pers comm.).

There have been no known strandings of Pilot Whales at Horsehoe Bay. Such strandings occur infrequently along the Stewart Island coast. The author recalls (as a small boy, in the late 1950's) seeing a whale that stranded and died on Horsehoe Bay beach, having had its tongue torn out (it was said) by killer whales, but such strandings are extremely rare.

Blue Penguin nest all along the shoreline and it would be expected that there would be blue penguin nests along the coast of the land belonging to the Dancing Star Foundation. The storage of cod pots has not proven to be a problem in terms of interfering with blue penguin and it is reasonable to infer that Mr Lind's proposal will have no greater effect.

Update: This information is correct and is expanded upon in the attached document "Application for a Coastal Permit (Part B) – supplemental information". No detectable effect on the habitats surrounding the farms (e.g. the benthos, the coastal forest) or the ecological communities in the area (e.g. benthic infauna) have been observed. The results of the sediment testing performed as part of the monitoring program back this up.

m. Planting Proposed

There is no planting proposed.

Update: the current operators have no such plans

n. Effect on Public Access

As previously noted there is no public access to or along the foreshore of the adjacent land owned by the Dancing Star Foundation. The proposal will have no effect on public access.

Update: This is still the case. Public access is still restricted on the private land adjacent to the farm sites, although ownership of the land has changed. Navigation across the sites by boat is also not restricted.

o. Taking, damming or diversion of coastal water

No taking, damming or diversion of coastal water is proposed.

Update: This statement is still accurate

p. Alteration of the foreshore and seabed

No alteration of the foreshore or seabed is proposed.

Update: This statement is still accurate

q. Use of structures

The only structures proposed are the recycled cod pots described on page 7 above. The picture (opposite) offers a further impression of the type of pot Mr Lind proposes to use.

Update: This statement is still accurate but with the addition of the anchors and rope lines used to suspend plastic baskets as described on page 9 (see also diagram page 9)

r. Effect in relation to coastal processes

The coast in the vicinity of Mr Lind's proposal is on the eastern, sheltered, side of Stewart Island and there are no obvious signs of coastal erosion or accretion. Sedimentation is not an issue in this part of Stewart Island because there are no large rivers flowing into the sea in the vicinity carrying sediment.

An extreme storm event from an easterly direction could affect Mr Lind's proposed operation, but historically the rate of cray or cod pot loss in the area due to storm is low.

Update: This description of the coastal processes on this side of the island is still accurate. The main determinant of sediment in this area is the action of wind and tides and the beach aggrades and erodes naturally over the years.

s. Effect on navigation

See h (v) above (page 11). The area of Mr Lind's proposal is well inshore of any normal prudent navigational track.

Update: This statement is still accurate

t. Monitoring

As noted in (d) above, the pots will be inspected monthly and Mr Lind will keep a boat log of the results of these inspections.

Update: A monitoring programme was added as a condition of the original permit and was discontinued with the agreement of Environment Southland after the outbreak of *Bonamia ostreae* which attenuated farm activities. We have proposed to continue with this monitoring and have added extra suggested metrics, such as noise levels and the amount of boat time spent servicing the farm sites (see the attached "Proposed Conditions" document.

u. Restoration or rehabilitation

Any adverse effect will be minor or less than minor. In the event that the trial operation proved unsuccessful, all pots would be easily removed in a few days. The success of the operation depends on maintaining the high environmental and water quality standards that currently prevail. No restoration or rehabilitation is seen to be necessary.

Update: Again, this is still true. All structures at the site have a low footprint and are non-permanent so their removal and disposal would be straightforward.

v. Reclamation

Mr Lind's proposal does not involve any reclamation.

Update: This is still true. The current proposal (2019) does not include any such activity.

Policy matters: Regional Coastal Plan for Southland.

The following section of this report considers the proposal in relation to relevant objectives and policies of the Regional Coastal Plan for Southland.

In a separate document we have assessed this proposal against the objectives and policies of the National Coastal Policy Statement (2010) and the Southland Regional Policy Statement (2017) (see "Analysis of legislation and policy ES302167"). We have been advised that these were more current and therefore more relevant for the renewal. However, the policy analysis below is accurate and still relevant as the new Regional Coastal Plan is being developed and the 2013 plan remains the operative Coastal Plan.

1. **Need for Coastal location (Objective4.2.1) and Policies 4.2.1, 4.2.2 and 4.2.3**

- (Policy 4.2.1 – Justifying coastal location). The proposal as it stands obviously requires space in the coastal marine area.
- (Policy 4.2.2 – Consideration of alternatives). Any kind of shore based operation involving tanks and taking and discharging sea water would be a completely different concept with very different development economics. The adverse effects are minor or less than minor.
- (Policy 4.2.3 – Minimising size). The structures proposed are small and of a size that it is practicable to handle aboard the boat.

2. **Coastal Occupation (Objectives 9.1.1 and associated Policies)**

- (Policy 9.1.1 – Public right of use). Unlike a more intense form of marine farming like a salmon cage or mussel line, the proposal will not prevent navigation by small craft through the areas of the operation. However as discussed under (h) above the area of the proposal is inshore from a normal, prudent route for a powered craft. A rowing boat or kayak could move through the operation with little difficulty but it is unlikely anyone would need or want to on a regular basis.
- (Policy 9.1.2 – Preferential occupation). Depending on the terms and conditions, right of preferential occupation could be acceptable to the applicants.
- (Policy 9.1.3 – Use it or lose it). It would be reasonable to grant the applicant a period of 5 years to establish the proposal
- (Policy 9.1.4 – Minimise area of exclusive occupation). The spacing of the pots and buoys proposed by the applicant reduces the visual impact of the proposal, enables small craft to pass through the area if necessary, and reduces the change of adverse effects on wildlife. Reducing the area would result in a resultant higher density of buoys and floats. Further, there is an operational requirement for the applicant to manoeuvre his boat within the 'farm' area.
- (Policy 9.5 – Effect on other users). The area applied for is the minimum required on the basis of the concept that the applicant has developed. There is no 'spare' area applied for.
- (Policy 9.1.6 – Duration of rights to occupy). The applicant would appreciate sufficient time to develop the operation to commercial viability before having to re-apply. A time limit on the consent of 10 years is suggested, with right of renewal (Policy 9.1.7).
  Update: The consent was issued for 5 years and we are seeking another 5 years.
- (Policy 9.1.9 – Coastal occupation charging regime). The applicant accepts that a charging regime will apply and is willing to pay a reasonable fee for coastal occupation. Table 1, page 7, Chapter 9 indicates the probably quantum of this fee as $425 p.a.

3. Structures

In terms of 'structures', the applicant's proposal has parallels with the storage of rock lobster/cod pots (identical structures have been used in the pilot operation). It should be noted that while the Plan contains Objectives and Policies in relation to these pots, they have the status of a permitted activity.

- (Policy 11.7.9.1 – Storage and use of rock lobster and cod pots). The proposal does not involve the use of pot structures where they are likely to damage significant vegetation and fauna (terrestrial or marine) or be a hazard to navigation, safety, anchorage or recreation activities.
- (Policy 11.7.9.2 – Encourage storage plans). This proposal parallels the intent of this policy in that the area is clearly delineated in a public document. Further, through the resource consent process, if approved, it will have been the subject of public consultation.

4. Marine Farming.

- (Policy 15.1.1 – Resource consents required). This application is in response to Policy 15.1.1.
- (Policy 15.1.2 – New and changing activities in the same area). This policy does not apply in that the application is the first in this area.
- (Policy 15.1.3 – Avoid adverse effects). This application is outside of the water bodies specified in the Policy.
- (Policy 15.1.4 – Monitoring). As explained in (d) above, each pot will be hauled to the surface for inspection monthly. In the unlikely event that any wildlife or marine life is inadvertently trapped in the pot this would be immediately apparent. The applicant intends to maintain a daily work diary of these inspections and a condition could be imposed requiring periodic reporting regarding any wildlife or marine life entrapment. Any changes to the benthos could be monitored by a marine biologist carrying out a survey comparing the fauna and flora of samples from the area within the marine farm with similar areas outside farm and some distance from it, once the farm is established. It is suggested that five years after the date of the consent could be an appropriate time for this survey.
- (Rule 15.1.5 – Stewart Island and Rule 15.1.7). It is important to note that this application involves an area outside the areas specified in Rule 15.1.5 where marine farming is prohibited. Marine farming is 'provided for' in this part of the Southland coastal marine area as a discretionary activity.

Conclusion

The proposal is for a Discretionary Activity. A consent authority may allow or refuse an application for a discretionary activity, and if allowed it may impose conditions.

In this instance it would be in accord with the RMA and with the Regional Coastal Plan to approve the application because:

1. The effects of the proposal on the environment have been identified in this report and are minor or less than minor.
2. The effects of the proposal are broadly similar to the storage of cod or cray pots, a practice for which provision is made in the Regional Coastal Plan.
3. The proposal involves the enhancement of species endemic to the area, not the introduction of species alien to the area.
4. The proposal offers the prospect of a small-scale 'cottage' industry that would be a valuable, and valued, diversification to the Stewart Island economy.
5. The proposal does not affect recreational or other usage of the area.

Acknowledgements:

This report has been peer reviewed from a fisheries perspective by Mr Bob Street of Southern Shellfish Ltd. The positioning information for the sites of the operation was supplied by Mr Dave Mundy of IX Survey. Mr Jim Barrett was of considerable assistance with supplying references and offering helpful comment.

For the update, the input of the original author William J Watt has been very helpful as have the personal observations of farm manager Richard Langdon, consent holder Len Lind and Helen Cave.

The generous assistance of these people with the preparation of the report is gratefully acknowledged.

APPENDIX

Rheault R.B. and Rice M.A. Transient Gear Shellfish Aquaculture.

World Aquaculture

March 1995.

ADDENDUM TO:

PROPOSAL TO ESTABLISH AND OPERATE A MARINE FARM FOR CULTIVATION OF "FOVEAUX STRAIT" OYSTERS
On three sites situated in the area between Horseshoe Bay and Bob's Point, Stewart Island

ASSESSMENT OF ENVIRONMENTAL EFFECTS

Owners and Applicants: Suelen Properties Ltd
C/o Mr Len and Mrs Sue Lind
P O Box 102 Halfmoon Bay, Stewart Island
Phone: 03 219 1258

Report prepared by William J Watt
Resource Management qualifications: B.A. Dip T.P. MNZPI FNZIM
Nautical qualifications: Yachtmaster (Coastal); Restricted Limit Launch Master (ring-fenced)

April 2019

[Updated by Alasdair Burns (Southern Seafoods Ltd), June 2019]

1. OVERVIEW

1.1 I prepared much of the documentation including the Assessment of Environmental Effects which accompanied the application by Suelen properties which was the subject of a fully notified application under the RMA and which was granted by Environment Southland in August 2014. The consent was granted for the unusually short period of 5 years. The reason for that short period was to enable the 'effects' of what was openly a pilot/experimental operation, to be deduced.

1.2 The consent holder has been prevented from giving full effect to the consent because – despite the 15 August 2014 decision under the Fisheries Act – the applicant has been unable to obtain full and final approval of MPI to go ahead with the venture. This is because of the subsequent outbreak of *Bonamia ostreae* among farmed oysters in Big Glory Bay, concern that this could spread to the Foveaux Strait oyster fishery, and the Ministry for Primary Industries (MPI) invoking their powers under the Biosecurity Act.

1.3 This action by MPI should (in my view) be seen as a 'stop the clock' action by MPI, acting under emergency powers, and should be taken into account by Environment Southland in response to this application for renewal of the consent. To the best of my knowledge, the applicant has received no compensation from MPI despite having gone to considerable expense to obtain a resource consent for an operation to which MPI (at the time) have made every indication they would agree.

1.4 Reviewing the original documentation, namely the Assessment of Environmental Effects and its attachments, the 'Further Information' supplied to Environment Southland, the Commissioner's decision, and the consent documents, in my opinion little has changed.

1.5 It would be onerous and unreasonable, in my view, for Environment Southland to insist on a completely new suite of consent documents, despite an application for renewal being technically a 'fresh' application, because of the short duration of the original consent and the unusual circumstances surrounding it and preventing the consent holder giving full effect to it.

1.6 While the Council's intention to review the Regional Coastal Plan has been advertised, some position papers produced and some consultation conducted, the relevant document for consenting purposes remains the Operative Regional Coastal Plan, the relevant provisions of which are unchanged since the Suelen consent was granted in 2014. However, given the lack of strong direction in the Regional Coastal Plan (2013) as to where aquaculture should be considered an "appropriate" development, and given the recent "King Salmon" decision in the NZ Supreme Court, in this renewal we will also refer to the strong direction given by the New Zealand Coastal Policy Statement (2010) which the new Regional Coastal Plan will be more closely aligned with (see the 'Analysis of legislation and policy relevant to ES302167' document).

1.7 Below, I cite the conditions of the original consent, comment on their relevance (in the light of what has occurred since the consent was granted), and also comment on compliance within my knowledge and understanding.

2. REVIEW OF CONDITIONS IMPOSED ON THE CONSENT

(The numbering corresponds with the numbering of the conditions in the consent document)

1. *This consent is granted for a period of five years and is exclusive to the consent holder and is not transferable to any other person, party or entity (refer also Condition 14).*

   Comment: As noted above the consent holder has been prevented from giving full effect to the consent

   In my opinion it would be fair and within the spirit of the existing consent to simply renew it at least for a further 5 years. This is especially the case given that, due to the outbreak of *Bonamia ostreae*, the monitoring programme specified in the conditions has not been completed and

therefore it is not possible to prove beyond doubt that there are no "significant adverse effects". Nothing in the monitoring that we do have would suggest that there have been any adverse effects on either water quality or the benthos. However, a 5-year extension would be a precautionary measure that would allow a full monitoring programme to be undertaken and any unforeseen effects to be detected.

In addition, the evolving situation with regard to the *Bonamia ostreae* outbreak at Big Glory Bay and the movement restrictions that have been placed on shellfish and equipment by the MPI mean that forecasting the future economic viability of the farming activity is impossible. Because of this, it would not be sensible to grant a 20-year consent for the activity.

2. *This consent authorizes the placement of structures in, on and over the seabed, and the occupation of the coastal marine area with the structures to be used for the purpose of farming Bluff oysters (Ostrea chilensis), as described in the application documents.*
Spat and stock shall only be obtained from the Stewart Island/Rakiura coastal waters.

Comment: I understand that the Horseshoe Bay site has been used for placement of structures associated with oyster culture by Southern Seafoods by arrangement with Mr Lind (consent holder).

Further, I understand that there has been no long-term placement of structures on either the Nathans Island or the Nuggets sites.

This consent also authorizes the deposition, on the seabed, of material, arising from farming Bluff oysters (Ostrea chilensis), as described in the application documents.

I conclude that the applicant has complied with this condition. Also, it is the policy of the recent contractors (Southern Seafoods Ltd) that the shells from all deceased oysters are brought back to the wharf facility and disinfected, whether or not there is evidence of infection by the endemic *Bonamia exitiosa* (different to *Bonamia ostreae*). This, and the containment of oysters in trays and baskets while out at sea, mean that the only deposition of shell would be accidentally in very small amounts.

3. *The occupation of the coastal marine area for marine farming activities, pursuant to this consent, shall only occur within the application co-ordinates as detailed below (co-ordinates in New Zealand Transverse Mercator co-ordinate system) and for the total areas and number of pots as specified below:*

(a) "Nathans Island" site (3.35 ha-34 pots)

4799039 1229394

4799341 1229139

4799160 1229424

4799284 1229096

(b) "Nugget" site (0.73 ha-9 pots)

4797954 1230057

4797959 1230088

4798168 1229947

4798174 1229978

(c) "Horseshoe Bay" site (1.82 ha-18 pots)

4797379 1229574

4797464 1229531

4797246 1229353

4797282 1229328

and as shown on the attached maps dated 3 September 2013, comprising a total of approximately 5.9 hectares and 60 pots.

Comment: On the basis of my knowledge and subsequent site visits my understanding is that the applicant has complied with this condition. This can be confirmed on a site visit.

The actual number of pots used has been much less than 60, certainly over the past two years, and may continue to be so. However, as reflected in the proposed conditions (see "Proposed renewal conditions 2019"), it would be desirable from an economic perspective to be able to use more than 60 pots for a farm of this size. We have applied for space to house XX,000 recruit oysters (larger than 58mm); roughly xx pots or xx baskets or a mixture of the two.

4. *In accordance with s108 (2)(h) of the RMA except to the extent that it is necessary to achieve the purpose of this consent and for public safety, members of the public shall not be excluded from the marine farm site at all times.*

Comment: The current use of the Horseshoe Bay site does not impede navigation by small vessels (kayaks, dinghies and the like) and requires larger vessels to deviate only slightly, if at all,

from a normal approach to Horseshoe Bay. Because the other sites have not been developed there is no impediment to navigation, but in my opinion there would have been little impediment to navigation in practical terms had they been developed. All of the equipment at the farm site, excluding buoys, is suspended at least 1 fathom (1.82 metres) below the surface, which makes the risk of entanglement low, even for vessels that navigate straight over the consented space.

5. (a) *The consent holder shall at all times during the continuance of this consent maintain the marine farm structures, including but not restricted to the associated structures of lines, buoys, oyster pots and any marker lights, in good repair, appearance and condition. No significant alteration or deviation from the authorised structures that may adversely alter the impact on the environment is permitted without the prior written approval of the Council's Compliance Manager.*

(Note: any such alteration may require an application for a new resource consent or a variation to this consent.)

(b) *Any authorised officer of the Council may, at any time, inspect the marine farm structures and view their state of repair. Upon receipt of a notice in writing, of any defect or want of repair in the structures, requiring the consent holder to repair the structures, the consent holder shall, forthwith, cause the defect to be remedied or the repairs to be made.*

Comment: No inspection has been requested or carried out as far as the consent holder is aware. It is hard to produce reliable evidence that shows that the structures have been kept in good condition. However, the photos included in the appendices, showing pots and baskets used to grow oysters, and a visual inspection on a site visit should demonstrate that the consented sites are kept in good repair and free of fouling.

6. (a) *The consent holder shall ensure that the external boundaries and all pots within the marine farm are marked out with buoys and where required by the Harbourmaster, lit in accordance with the specified navigation and safety requirements of the Council's Harbourmaster or their delegate. The consent holder shall install all such markers and lighting to the satisfaction of the Harbourmaster within one month of any pots and buoys being installed in any of the three consented areas.*

(Note: Navigation and safety guidelines for aquaculture areas can be found in the "Guideline for Aquaculture Management Areas and Marine Farms" booklet dated December 2005 produced by Maritime New Zealand, or its replacement booklet.)

Comment: None of the sites has been lit and this has not caused any known navigational problem. In the general area of Horseshoe Bay there is storage of 'coff' pots by other than the consent holder and if you are navigating in the area you proceed with caution maintaining a good lookout. As part of this renewal we are happy for the Council

Harbourmaster to review the navigational safety requirements included in section 6(a) of the permit conditions.

7. *The consent holder shall manage the marine farming operation in such a way that deposition of shell, and other material, on the seabed is minimised. Any shell and other material collected from the site shall not be disposed of in the coastal marine area in an unauthorised manner.*

Comment: There has been no deposition of shell within or in the vicinity of the sites. See earlier response for current policies - section 2, page 3.

8. *(a) Any equipment or materials, excluding vessels, used in the coastal marine area, for marine farming purposes, which have been previously used or stored in another geographic coastal marine area, shall be thoroughly cleaned and sterilised before transport to the marine farm site and used. It shall be the consent holder's responsibility to ensure that any marine farming structure, including associated structures, is maintained free of unwanted organisms and pests as identified by either or both Biosecurity New Zealand or the Council's Regional Pest Management Strategy. Any removed unwanted organism or pest shall be disposed of at an authorised land disposal site, to the satisfaction of the Council's Compliance Manager.*

Comment: This condition is intended to address biosecurity issues. It is a protocol that has been followed by the applicant with respect to any equipment used on the subject sites. The current procedures involve de-fouling oysters and gear once per month and all shell from dead oysters plus any gear that comes on to the farm from elsewhere is sterilised with Hypostat (>12.5% sodium hypochlorite).

(b) The consent holder shall advise the Council's Biosecurity Manager, no later than five working days after detecting any incidence of unwanted organisms and/or pests not normally seen or detected in the area.

Comment: There have been no incidents necessitating the implementation of this condition.

9. *The consent holder shall ensure that:*

(a) the marine farm site identification number is displayed above the water level at each four corners of each marine farm site, at all times to the satisfaction of the Council's Compliance Manager;
(b) no equipment or materials from the marine farming activity is stored in an unauthorised manner;
(c) all debris is removed from the marine farm site and disposed of at an authorised refuse site;
(d) any material or structure lost from the marine farm site is retrieved as soon as practicable;

(e) any lost material or structure from the marine farm site that could constitute a navigation hazard shall be notified to the Council's Harbourmaster immediately after discovery and the consent holder shall forthwith retrieve any such material or structure;

(f) other than the deposition authorised under Condition 2, no oil, diesel, petrol, grey water, detergents, cleaning materials, bilge water, sewage or any other toxic or polluting substances, shall be discharged into the coastal marine area at any of the three sites, either directly or indirectly, as a result of exercising this consent;

(g) in the event of any spill of oil or fuel at the marine farm site, the first person to the scene shall:

(i) take immediate steps to contain the spill and to recover it; and

(ii) notify as soon as practicable the Southland Regional Council's pollution hotline on 0800 76 88 45 that a spill has occurred. Notification shall include the type and quantity of oil or fuel spilled and the steps taken to remedy or mitigate any adverse effects; and

(h) in the event of a spill of any contaminant, no dispersants or degrading agents shall be discharged to water without the approval of the Southland Regional Council.

Comment: The sites have been marked in accordance with (a). I am not aware of any incident that would have necessitated a response under (b) through (h) above.

10. *(a) The consent holder shall inspect the hull of any vessel used to service the marine farms authorised by this consent for pests and fouling organisms at least three times each year. Proof of such inspections shall be provided to the Council in writing along with photographic evidence of the hull condition at the time of each inspection. If such organisms are found the consent holder shall notify the Council's Compliance Manager prior to removal and disposal of the pests or organisms to a designated refuse site on land.*

(b) The consent holder shall:

(i) maintain the vessel in a rodent free state at all times;

(ii) provide and maintain at least one pest bait station and one baited trap on the vessel at all times;

(iii) inspect any vessel used to service the marine farms authorised by this consent, including its compartments and any cargo, for pests, in particular, rodents, on each occasion of operating;

(iv) maintain a log of inspections [including a photographic record] for pest animals, noting the number of pest animals detected aboard the vessel for each inspection; and

(v) provide the pest inspection log in writing to the Council's Compliance Manager by 30 June each year, or upon 24 hours' notice if requested.

Comment: MPI survey requirements have necessitated the use by the consent holder of different vessels from the "Karitane" type launch originally envisaged. The one with which I am familiar is an aluminium vessel of comparable overall size powered by a twin Volvo stern leg installation. When not in use it is kept on a trailer in Bluff. From personal observation and noise readings I know this vessel to be very quiet in operation. Overall, the difference in environmental effect of using these different vessels is minimal and while the consent holder should have liaised with Environment Southland on this point the use of different vessels has meant that compliance with this condition was not practicable.

11. *In the event a marine mammal or bird is entangled or stranded within the marine farm structures, the consent holder shall immediately advise the Department of Conservation Southland Conservancy.*

Comment: There have been on such incidents.

12. Neither the granting of this consent nor anything contained in it shall affect the liability of the consent holder for any injury caused by any marine farm structures to any vessel or person through any default or neglect of the consent holder.

Comment: There have been on such incidents.

13. Upon expiry of the five year period for which the consent is granted, or on any cancellation or lapse of the consent, the consent holder shall, where required by the Council to do so, remove all marine farm structures, including buoys and lights, entirely from the site and restore the site as near to its original condition within three months of the date of expiry, cancellation or lapse. If the consent holder fails to do so, the Council may cause all marine farm structures, including buoys and lights, to be removed and the site restored, and may recover the costs incurred by the removal and restoration from the consent holder.

Comment: The consent holder is seeking a renewal of the consent that, if granted, will make this condition on the current consent redundant.

14. Pursuant to s135 of the RMA the consent holder cannot transfer this consent, in whole or in part, to any other person or party at any time during the duration of this consent.

Comment: Section 135 subsection 1 enables " *A holder of a coastal permit (to) (a) ....transfer the whole or any part of the holder's interest in the permit to any other person....*" The condition is in direct opposition to the enabling wording of the RMA provision and the condition may therefore be ultra vires.

The applicant has NOT transferred the interest in the permit to any other person but would seek the ability to do so under any new consent and as anticipated by the RMA.

My understanding is that the applicant HAS delegated aspects of the day to day operation of the subject sites to Platnium Fisheries and Southern Seafoods.

Monitoring

15. *The consent holder shall carry out the Monitoring Programme specified in Appendix 1.*

16. *Monitoring in accordance with the Monitoring Programme specified in Appendix 1 shall conform with the following standards:*

    (a) *sample collection, preservation and analysis of the seabed samples shall be carried out by a suitably qualified person or as agreed to, in writing, by the Council's Compliance Manager;*

    (b) *sample collection, preservation and analysis of the water quality samples shall be carried out in accordance with the most recent edition of APHA "Standard Methods for the Examination of Water and Wastewater" or as agreed to, in writing, by the Council's Compliance Manager;*

    (c) *the monitoring and analyses are to be carried out by a laboratory with IANZ accreditation or equivalent, or as agreed to, in writing, by the Council's Compliance Manager;*

    (d) *the result of seabed analysis shall be supplied to the Southland Regional Council no later than five working days of the consent holder receiving them. The methods of analysis are to be specified with the results;*

    (e) *the results of water quality analysis shall be supplied to the Southland Regional Council no later than 20 working days from the end of the month in which the samples are taken. The methods of analysis are to be specified with the results; and*

    (f) *the Southland Regional Council may audit monitor sample collection up to once each year at a cost covered by the consent holder.*

17. *The consent holder shall undertake an investigation, if the result from any one sample in the Monitoring Programme identifies an adverse effect on the environment, to determine the probable cause of the adverse effect. A report shall be provided summarising the results and analysis on completion of the investigation sampling, but no later than two months from the initial sample that identified an adverse effect being provided to the Council.*

18. *The consent holder shall provide an annual report summarising and interpreting the results and analysis of the Monitoring Programme on completion of the sampling but no later than 31 July each year.*

COMMENT: My understanding is that Platinum Fisheries supplied returns (on behalf of the consent holder) to Environment Southland for the first years or so but that it was agreed that there was no point in submitting further returns until such time as MPI enables the operation to proceed as planned, there was no useful purpose to be served by continuing to provide the information pursuant to this suite of conditions.

I am not aware of information Southern Seafoods has provided Environment Southland with respect to the Horseshoe Bay site, but note that their oysters will be subject to regular inspection and testing by MPI in the context of biosecurity.

The results of monitoring undertaken on the site prior to the MPI Bonamia outbreak response have been submitted with this application and Environment Southland has permission to access them from the Compliance team at Environment Southland

Review of Conditions

23. *The Southland Regional Council may, in accordance with Sections 128 and 129 of the Act, serve notice, during the months of August to October in any year, of its intention to review the conditions of the consent for the purposes of:*

    (a) dealing with any adverse effect or cumulative effects on the environment which may arise from the exercise of this consent; or
    (b) considering any changes to information on the effects of marine farming, particularly information gained from monitoring; or
    (c) complying with the requirements of a regional plan; or
    (d) providing for a bond if further investigation and/or information, including relevant case law on the application of bonds to consents, shows that one is necessary to avoid, remedy or mitigate potential adverse effects on the environment.

COMMENT: This suite of conditions would have enabled a review of conditions had Environment Southland seen it necessary to do so. No notice of the Council's intention to review conditions has been received by the consent holder.

Lapse of Consent

24. *Pursuant to Section 125(1) (b) of the RMA, this consent shall lapse three years after the date of commencement of the aquaculture activities unless the consent is given effect to.*

COMMENT: The consent has been given effect to insofar as the sites have been marked and the Horseshoe Bay site occupied. The fact that the other sites have not been occupied continuously is a consequence of the applicant being unable to proceed with the operation as planned due to the

intervention of MPI. The applicant has not received any compensation under the Biosecurity Act in recognition of the investment in the resource consent, nor has there been any indication by MPI that they will 'never' allow the operation to proceed.

3. POLICY ANALYSIS

An assessment of the application against the policy framework of the Regional Coastal Plan and its parent documents was fully covered in my brief of evidence to the hearing in May 2014 and is reproduced below. A further updated assessment of the application against the New Zealand Coastal Policy Statement (2010) (in the context of the greater weight given to this document following the 'King Salmon' Supreme Court decision (2014)) and the recent Southland Regional Policy Statement (2017) is provided in an attached document – "Analysis of legislation and policy relevant to ES302167 renewal" – authored by Alasdair Burns (Southern Seafoods Ltd).

1. Introduction

1.1 This report has been prepared by William J. Watt. My company, William J Watt Consulting Ltd, offers consultancy services in planning and resource management including research, consultation facilitation, policy formulation and evaluation, hearings commissioner and mediation roles. I am currently the sole practitioner in that company.

1.2 I hold the qualifications of Bachelor of Arts and Diploma of Town Planning. I am a Full Member of the New Zealand Planning Institute and also a Fellow of the New Zealand Institute of Management. I am also an accredited Hearings Panel Chairman under the MfE 'Making Good Decisions' programme and a mediator accredited with LEADR. Before setting up my consultancy I had 40 years' experience in local government in regional, local and project planning and senior management roles.

1.3 A brief curriculum vitae is attached as Appendix 1.

1.4 In the current context, it is also relevant to note that I am an experienced yachtsman and hold the nautical qualifications of Yachtmaster Coastal and Restricted Limit Launchmaster.

1.5 I have a long association with Stewart Island. My wife and I currently own property on Stewart Island that my parents bought in 1955. Family holidays on Stewart Island for 3 – 4 weeks a year were a

highlight of my youth. Since I moved back to Invercargill in 1978, most years I have spent several weeks on Stewart Island.

2. My role in this matter

2.1 I (William J Watt) have been engaged by Suelen Properties Ltd to provide professional planning and resource management services with respect to their application to Environment Southland to use three sites for 'marine farming' off the north eastern coast of Stewart Island. This has included preparing an Assessment of Environmental Effects (March 2013) and also supplying Further Information requested by Environment Southland (10 September 2013)

June 2019 update – I, Alasdair Burns, have been employed by Southern Seafoods Ltd for the purpose of collating and submitting the resource consent renewal application for ES302167. I am a resident on Stewart Island/Rakiura and my background is in conservation work, particularly for the Department of Conservation (DOC) and the Stewart Island/Rakiura Community and Environment trust (SIRCET). My opinions are my own and are not representative of those of SIRCET or DOC.

3. The Proposal by Suelen Properties Ltd

3.1 The proposal of Suelen Properties Ltd is described in the above-named documents. The main features are:

(a) Suelen Propeties Ltd has applied for use of three sites. The correct dimensions and locations of these sites are as detailed in the Further Information supplied to Environment Southland on 10 September 2013. These plans were prepared by Bonisch Consultants and are attached as Appendix 2.

(b) The proposal by Suelen Properties Ltd involves the 'Foveaux Strait" oyster (Ostrea chilensis).

(c) The operation proposed by Suelen Properties Ltd is best described, not as 'marine farming' (which tends to evoke images of salmon cages and lines of mussel buoys) but as 'transient gear shellfish aquaculture'. This description correctly conveys the impression of a low-impact operation involving the use of gear distributed at a low density that is regularly lifted and serviced.

(d) In essence, the operation involves:

- *The use of 'pots' or frames, no larger than approximately 2m long by 1m deep by one m high, that rest on the seabed at an average density of one pot per around 980 sq.m. These are marked on the surface by a single float.*
- *The collection of any free-swimming spat and the on-growing of spat sourced locally in the Foveaux Strait area on substrate attached within the frames to the size where they can be sold for human consumption.*

- *Regular servicing of each frame (about once a month) to monitor growth and carry out any cleaning or repairs needed.*

(e) *This implies the regular presence in the area of the three sites of one servicing vessel, currently a "Karitane" type fishing boat of approx. 10 m in length.*

3.2 Details of the proposal and of the associated science are given in my Assessment of Environmental Effects (pages 5 – 8) and also in my response to the Environment Southland request for further information (pages 1-4).

3.3 There is one statement in my Assessment of Environmental Effects that I wish to correct. At page 6 I wrote that "To initiate his pilot operation....Mr Lind....dredged Foveaux Strait oysters from the area north east of Port William.....No oysters were taken with visible juvenile or spat attached. The quantity of oysters was within the allowable limit for an amateur take...." This was my understanding at the time I wrote the report, and in environmental terms I saw it as very low-impact. However I have subsequently been informed that

- *No live oysters dredged from Foveaux Strait were held in Mr Lind's pots*
- *Mr Lind did dredge Foveaux Strait oysters, consumed the oysters, and put the shells (on which the spat had settled) in the frames*
- *In addition Mr Lind was given 58 oysters from a Big Glory farming operation. These were placed in the pot frame.*
- *Other oyster spat came from Mr Bob Street who supplied Mr Lind with 2 to three oyster sacks full of shells (from which the oysters had been removed) with spat on them.*

4. Status of the Application under the Regional Coastal Plan (2013)

4.1 The planning document directly most directly relevant to the application is the Operative Regional Coastal Plan for Southland, (July 2005) which was approved by the Minister of Conservation on 10 September 2008.

4.2 The provisions of the Plan refer to certain place names. The location of the relevant named places is shown on the map below. This is a scanned copy of part of the "Geographx" Rakiura Track and Rakiura National Park 1:50,000 map.

4.3 At Chapter 11 page 10, Rule 11.2.6 states:

"Except as provided elsewhere in the Plan, the erection of temporary or permanent structures in the coastal marine area:

1. ***Is a non-complying activity in***
   a. .....
   b. ***The internal waters and open coast of Stewart Island, excluding Big Glory Bay and all that part of the coastal marine area between Stewart Island and the imaginary line from Mamaku Point to Ackers Point....***

2. ***Is a discretionary activity in those parts of the coastal marine area not referred to in (1) (a) or (b) above.***

Explanation - .....

Fiordland and Stewart Island contain amenity and natural character values that are very high due to the pristine nature of these areas. As significant development has occurred in the Big Glory Bay and Oban area, the pristine nature of these two areas have already been compromised and the effects of development in these two areas would not need to be considered under as stringent tests as other areas on Stewart Island.....

4.4 It is arguable whether the placement of a 'pot' – whether it be a crayfish pot, a cod pot or a very similar pot used to on-grow oysters – is the 'erection of a temporary structure'. For the purposes of this application and on the advice of Environment Southland I accept that it is, but I note that I have observed a large number of crayfish or cod pots in the area north of Mamaku Point over the years which under this provision are non-complying and for which consent should have been sought.

4.5 At Chapter 15 page 6, Rule 15.1.7 – Marine Farming states:

"Marine farming in areas other than those referred to in Rules 15.1.2 – 15.1.6 is a discretionary activity.

Explanation – Regional Policy Statement Policy 13.19 makes provision for aquaculture in the Southland coastal marine area. However it also acknowledges the need to protect the coastal environment, especially those areas containing significant values. Consent applications will be assessed on a case-by case basis and it will be necessary to ensure that any adverse effects associated with marine farming are avoided, wherever practicable, remedied, or mitigated."

4.6 In the Appendices page 11 the Regional Coastal Plan includes the following definition:

***"Marine Farming** – the activity of breeding, hatching, cultivation, rearing, or on-growing of fish, aquatic life, or seaweed for harvest...." Under this definition the Suelen proposal is marine farming.*

4.7 Rules 15.,1.2 – 15.1.6 are as follows:

- *Rule 15.1.2 refers to marine farming in Fiordland. This application is not in Fiordland.*
- *Rule 15.1.3 refers to farming within marine reserves. The proposal by Suelen properties is no-where near a marine reserve.*
- *Rule 15.1.4 refers to Awarua Bay, to the east of the Tiwai causeway. This is inside Bluff Harbour.*
- *Rule 15.1.5 refers to areas within the coastal waters of Stewart Island, in which marine farming is a prohibited activity. They are Port Pegasus, Lords River, Paterson Inlet (except Big Glory Bay and the Salmon Refuge Zone), and Port William from Peters Point to the easternmost extremity of the headland enclosing the northern end of Port William.*
- *Rule 15.1.6 applies to marine farming in the Bluff Port Zone. The Suelen proposal is not in the Bluff Port Zone.*

4.8 From this analysis I conclude that

- ***(a) The Nathans Island site proposed by Suelen Properties is for a non-complying activity***
- ***(b) The "Nugget" and "Horseshoe Bay" sites proposed by Suelen Properties are in each case for a discretionary activity***

5. Other Relevant Statutory Documents.

5.1 The Resource Management Act 1991 (RMA) has for its general purpose at Section 5 the promotion of sustainable management, being

"S.2 .....the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety while

- *(a) Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and*
- *(b) Safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and;*
- *(c) Avoiding, remedying or mitigating any adverse effects of activities on the environment.*

5.2 In my opinion the proposal by Suelen Properties is fully consistent with Section 5 of the RMA.

5.3 The New Zealand Coastal Policy Statement contains the following policy which is directly relevant to the Suelen Properties application.

"Policy 8: Aquaculture

Recognise the significant existing and potential contribution of aquaculture to the social, economic and cultural well-being 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 water quality 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."*

5.3 The Proposed Southland Regional Policy Statement 2012 rightly has a strong emphasis on identifying and protecting coastal values. However ***Policy COAST.4*** *is relevant to the Suelen application:*

" Recognise and provide for infrastructure, port, aquaculture and energy projects that must be located in the coastal environment.

Explanation/Principal Reasons: .....there is a need for high water quality for aquaculture activities .....Activities such as these can be economically and socially beneficial to the region, increasing the wellbeing of communities through employment or enabling growth of local businesses that utilise and/or support the activities."

6. Consultation undertaken

6.1 In the Assessment of Environmental Effects I detailed on page 8 the consultation that had been undertaken prior to lodging the application.

6.2 The application has been publicly notified. The number of submissions, both in support and in opposition, indicates that the public notification process has been open and transparent. Furthermore, there have been articles in both the Southland Times and the local newsletter, Stewart Island News.

6.3 Te Ao Marama is an organisation which has been formed to coordinate and present the views of the local Runaka on resource management and other local government matters. Te Ao Marama is regarded as an affected party to any marine farm application, and as such was served with the documents that would have enabled it to submit had it so wished. That no submission was made is an indication that the proposal is acceptable to Iwi

At the current stage of the renewal application, prior to the application being submitted, we have contacted parties that may be regarded as affected and made them aware of the renewal. We have only received responses in support so far. Our next step is to disseminate "Written approval" letters and meet with the parties we deem to be most likely to be affected.

7. Environmental Impact

7.1 My assessment of the Environmental Impacts of the Suelen proposal are fully covered in my March 2013 Assessment of Environmental Effects and also in my response of 10 September Request for Further Information from Environment Southland. There are however some additional points to be made.

7.2 In the course of preparing the application, we considered with the applicant how we could suggest a monitoring regime.

7.3 Beside any impact on landscape or navigation, the most obvious areas for possible impact could be on the water column and on the benthos (sea floor). However, any effect on water quality would immediately reflect on the quality of the grown oysters. As Mr Street notes in his evidence, the water quality in which oysters are grown has to be high with no trace of coliform bacteria.

7.4 In terms of any effect on the benthos, several considerations are relevant.

a. *The low density of the proposed operation. As stated on page 3 of my 10 September Further Information the application for 60 'pots' spread over the three sites results which total 5.903 ha is an average of one pot per 983 sq.m. This is much less than a mussel longline.*

b. *The nature of the proposed operation. Again as noted by Mr Street, the introduction of any oysters suspended off the bottom in pots or frames would be no different from natural oysters grown on the bottom in Foveaux Strait.*
c. *Natural benthic change. Mr Lind has observed that a period of strong easterly winds, which occur from time to time, can make significant changes to the benthos along the eastern coast.*

7.5 In my opinion it would be relevant to commission a series of photographs of the benthos at predetermined points every five years inside and outside the farm sites and seek a written opinion from an independent marine scientist. That would pick up on any change, which we believe to be unlikely.

7.6 It is relevant to note that in the 'explanation' to Rule 11.2.6, the Southland Regional Coastal Plan justifies its stance of making structures non-complying in coastal waters north of Mamaku Point in the "very high " "amenity and natural character values". While this is true along the great majority of the Stewart Island coastline, it is questionable whether it applies around the coast from Horseshoe Bay to Lee Bay. This block of land, now owned by the Dancing Star Foundation, was previously at least partially cleared and as late as the 1960 I recall it being used for winter grazing of beef cattle by the late Mr Derek Turnbull. While it is acknowledged that the Dancing Star Foundation have an objective of ecological restoration of their land, that land use (as a private reserve) appears to have little status or protection under either the Operative or the Proposed District Plans for Southland.

8. Economic Impact

8.1 In the 2013 Assessment Of Environmental Effects I draw attention to the socio-economic history of the Stewart Island community and the need for the Island community to diversity its economic base, 'adding value' to the very high quality of the natural environment that residents and visitors enjoy.

8.2 On page 13 of the Assessment of Environmental Effects I refer to a paper I presented to the ICTC Conference in Hobart in August 2011. The paper was entitled Stewart Island/Rakiura (NZ) – Towards Sustainability. In that paper I concluded

"The Island will continue to depend for a significant part of its economic base on tourism. Although it has never been a destination for mass tourism, it is well placed to attract niche market and speciality tourism based on the quality of its natural environment. Its tourism future will depend on the extent to which small local operators can work together and improve the quality of the visitor experience.

"The resources of the Island will continue to offer opportunities for value-added processing. This should be considered as a policy dimension in resource allocation."

8.3 As I note on page 14 of the Assessment of Environmental Effects, the proposal by Suelen Properties is exactly the kind of locally based initiative (adding value to local resources) that my Hobart paper advocated as part of the future economy of Stewart Island.

8.4 This current application is for three initial sites, containing a combined total of 60 'pots' or trays. On the basis of informal trials to date and his own experience and observations, Mr Lind estimates that each pot or tray will be yielding, on average and on an ongoing, sustainable basis, one dozen oysters per pot

each week. At, say, $20 per dozen, the 60 pots will be yielding a gross income of $1,200 per week, or just over $60,000 per year (based on a 50 week year).

8.5 That is sufficient to sustain a "Full Time Equivalent" (FTE) on a cottage industry basis. I indicate on page three of the Assessment of Environmental Effects that initial indications were that for a full time operation, a total of nine sites would be required. On the basis of the above figures, that would sustain an operation with 2 -3 FTE's.

8.6 In a rural community, it is my experience and observation that in general every job in primary production creates and sustains a further two 'service' type jobs. The population of Stewart Island in the 2013 census was 381, virtually unchanged from 2001 (387). New Zealand's Labour Force Participation Rate is approximately 68%, but it is my observation that much employment on Stewart Island is part time. In this context, even one FTE is welcome but 2 – 3 FTE creating or supporting further service jobs is will help make the difference between stability and decline and population numbers.

8.7 The long-term possibilities for transient gear aquaculture also need to be considered. As noted in the article Transient Gear Shellfish Aquaculture (Rheault R.B. and Rice M.A.) appended to the Assessment of Environmental Effects, transient gear aquaculture is a novel approach that can resolve multiple-use conflicts, allowing aquaculture to develop without the need for conventional, exclusionary, fixed leases. With modern GPS systems the need for surface marker buoys can conceivably be reduced or eliminated, and the transient gear aquaculture concept does not preclude others navigating across the 'farm' area.

8.8 In the medium term, on this basis, it is not hard to imagine 20 or more areas similar to the three proposed by Mr Lind, within the area Mamaku Point to Ackers Point, and it is also highly likely that experience will show that at least a doubling of pot density (to say one pot every 400 – 500 m2 is ecologically sustainable and viable.

8.9 Conservatively:

Twenty areas x 20 pots per area

= 400 pots producing one dozen oysters per pot per week

= 4,800 oysters per week x $1.66 each

= gross income per week of just under $8,000 x 50 weeks

= just under $400,000 gross income per year, directly creating 4 – 5 jobs and sustaining or creating further service jobs in the community.

8.10 In the long term, and over a wider area, the implications for improving the yield and availability of oysters from the Foveaux Strait oyster fishery as a whole are exciting. The Foveaux Strait oyster is a highly regarded delicacy. The oyster fishery is an important feature of the Southland economy. An indication of its importance is as follows:

"Bluff Oyster Management Company spokesman Graeme Wright said the oyster industry had experienced huge growth since 2005.

It had made a strong recovery from the parasite bonamia, and commercial fisherman had chosen not to harvest up to catchment limits, Mr Wright said.

The harvest had increased from 7.5 million oysters in 2009 to 13 million last year, with an industry turnover of about $15 million to $20m a year, he said." (Southland Times article by Terri Russell as reported in STUFF, updated 15/11/2013).

It is in the long-term interests of the fishery that initiatives such as the proposal by Suelen Properties are explored and developed, diversifying sources and areas of supply.

9. The "Permitted Baseline"

9.1 Section 11.7.9 of the Regional Coastal Plan contains specific provision with respect to rock lobster/cod pots.

Policy 11.7.9.1 is to "Discourage the storage of rock lobster and cod pots and use of storage (coff) pots in locations where they could damage significant vegetation and fauna, be a hazard to navigation safety, anchorages, recreational activities, or have an adverse effect on visual amenity"

9.2 It should be noted that while the Plan contains objectives and policies in relation to these pots, they have the status of a permitted activity.

9.3 On page 8 of my 10 September Further Information there are photographs of these coff pots - which are considerably larger than the pots or frames proposed by Suelen Properties.

9.4 Pots of a size similar to that proposed by Suelen Properties are routinely used for rock lobster and cod fishing around the Stewart Island coastline and are not classed as 'structures' in terms of the Regional Coastal Plan.

10. Conclusion

10.1 The proposal by Suelen Properties is consistent with Policy 8 of the New Zealand Coastal Policy Statement and Policy COAST.4 of the Proposed Southland Regional Policy Statement 2012.

10.2 The proposal by Suelen Properties is provided for by the 2008 Southland Regional Coastal Plan as a discretionary activity for two of the three sites, and as a non-complying activity for the third.

10.3 In my view, the application should be granted because

a. *The application is consistent with Section 5 of the RMA*
b. *The application is consistent with Policy 8 of the NZ Coastal Policy Statement*
c. *The application is consistent with the Proposed Southland Regional Policy Statement*
d. *Provision is made in the Southland Regional Coastal Plan for marine farming in this area as a discretionary/noncomplying activity*
e. *The effects on the environment are minor or less than minor*

Hill Laboratories
TRIED, TESTED **AND TRUSTED**

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ANALYSIS REPORT

Client:	Platinum Fisheries Limited	**Lab No:**	1820926 SPv1
Contact:	Paul Stirling	**Date Received:**	05-Aug-2017
	C/- Platinum Fisheries Limited	**Date Reported:**	15-Aug-2017
	277 Weatherhill Road	**Quote No:**	86968
	RD 1	**Order No:**	
	Otautau 9689	**Client Reference:**	
		Submitted By:	Paul Stirling

Sample Type: Saline

	Sample Name:	H Control 1 A 04-Aug-2017	H Control 2 A 04-Aug-2017 9:00 am	H Farm A 04-Aug-2017 9:00 am	Nathans Control 1 B 04-Aug-2017 9:00 am	Nathans Control 2 A 04-Aug-2017 9:00 am
	Lab Number:	1820926.1	1820926.3	1820926.5	1820926.7	1820926.8
Dissolved Oxygen*	g/m³	9.6	9.8	10.0	9.9	9.8

	Sample Name:	Nathans Farm A 04-Aug-2017 9:00 am	H Control 2 04-Aug-2017 9:00 am	H Control 1 04-Aug-2017 9:00 am	H Farm 04-Aug-2017 9:00 am	Nathans Control 1 04-Aug-2017 9:00 am
	Lab Number:	1820926.9	1820926.21	1820926.22	1820926.23	1820926.24
Dissolved Oxygen*	g/m³	9.8	-	-	-	-
Chlorophyll a	g/m³	-	0.0006	0.0005	0.0006	0.0003

	Sample Name:	Nathans Control 2 04-Aug-2017 9:00 am	Nathans Farm 04-Aug-2017 9:00 am			
	Lab Number:	1820926.25	1820926.26			
Chlorophyll a	g/m³	0.0004	0.0004	-	-	-

Sample Type: Sediment

	Sample Name:	Nathans Control 1 A 04-Aug-2017 9:00 am	Nathans Control 2 A 04-Aug-2017 9:00 am	H Farm B 04-Aug-2017 9:00 am	H Farm A 04-Aug-2017 9:00 am	Nathans Control 1 B 04-Aug-2017 9:00 am
	Lab Number:	1820926.11	1820926.12	1820926.13	1820926.14	1820926.15
Total Organic Carbon*	g/100g dry wt	0.13	0.13	0.14	0.15	< 0.13

	Sample Name:	Nathans Farm A 04-Aug-2017 9:00 am	H Control 1 A 04-Aug-2017 9:00 am	H Control 1 B 04-Aug-2017 9:00 am	Nathans Control 2 B 04-Aug-2017 9:00 am	H Control 2 A 04-Aug-2017 9:00 am
	Lab Number:	1820926.16	1820926.17	1820926.18	1820926.19	1820926.20
Total Organic Carbon*	g/100g dry wt	< 0.13	0.16	< 0.13	< 0.13	< 0.13

	Sample Name:	Nathans Farm B 04-Aug-2017 9:00 am	H Control 2 B 04-Aug-2017 9:00 am			
	Lab Number:	1820926.27	1820926.28			
Total Organic Carbon*	g/100g dry wt	< 0.13	0.14	-	-	-

SUMMARY OF METHODS

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively clean matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis.

Sample Type: Saline

Test	Method Description	Default Detection Limit	Sample No
Dissolved Oxygen*	Winkler / iodometric titration with azide modification. Analysed at Hill Laboratories - Chemistry; 101c Waterloo Road, Christchurch. APHA 4500-O C 22nd ed. 2012.	0.10 g/m³	1, 3, 5, 7-9
Chlorophyll a	Acetone extraction. Fluorometer. APHA 10200 H (modified) 22nd ed. 2012.	0.0002 g/m³	21-26

Sample Type: Sediment

Test	Method Description	Default Detection Limit	Sample No

ilac-MRA IANZ ACCREDITED LABORATORY

This Laboratory is accredited by International Accreditation New Zealand (IANZ), which represents New Zealand in the International Laboratory Accreditation Cooperation (ILAC). Through the ILAC Mutual Recognition Arrangement (ILAC-MRA) this accreditation is internationally recognised.
The tests reported herein have been performed in accordance with the terms of accreditation, with the exception of tests marked *, which are not accredited.

Sample Type: Sediment			
Test	**Method Description**	**Default Detection Limit**	**Sample No**
Environmental Solids Sample Preparation	Air dried at 35°C and sieved, <2mm fraction. Used for sample preparation. May contain a residual moisture content of 2-5%. Analysis performed at 1 Clyde Street, Hamilton.	-	11-20, 27-28
Total Organic Carbon*	Acid pretreatment to remove carbonates present followed by Catalytic Combustion (900°C, O2), separation, Thermal Conductivity Detector [Elementar Analyser]. Analysed at 1 Clyde Street, Hamilton.	0.05 g/100g dry wt	11-20, 27-28

These samples were collected by yourselves (or your agent) and analysed as received at the laboratory.

Samples are held at the laboratory after reporting for a length of time depending on the preservation used and the stability of the analytes being tested. Once the storage period is completed the samples are discarded unless otherwise advised by the client.

Martin Cowell - BSc
Client Services Manager - Environmental

OYSTER FARM MONITORING

FOR SUELEN LTD

Monitoring done by Platinum Fisheries Ltd

AUGUST 17, 2017

PLATINUM FISHERIES

The samples were taken by Paul Turner and Paul Stirling of Platinum Fisheries on Friday 4th of August. The method was via scuba. The weather was fine with a 10 knot NE breeze and sea was slight. There was a small wind chop.

The sediment was tested by Brian Stewart of Ryder consulting.(Attached is report. Please not that Brian refers to Nuggets site which we are using and should actually refer to Nathans Island.)

The dissolved oxygen, chrophyll a and Total Organic Carbon was tested by Hill Laboratories with the assistance of environment southland with supply of bottles.

1 Sediment

The sediment texture can be seen in the following photos.

There was only a slight Hydrogen Sulphide smell on the Horseshoe Bay farm site and all other were free form any Hydrogen Sulphide.

For the Total Organic Carbon all the sites had A and B samples taken. (Attached is the Hill Test)

All other Sediment samples were sent to Brian Stewart of Ryder Consulting and his report is also attached

2 Water Quality

The water temperature at both sites was 10 degrees

The vertical see chi disc depth was 10 meters at both sites.

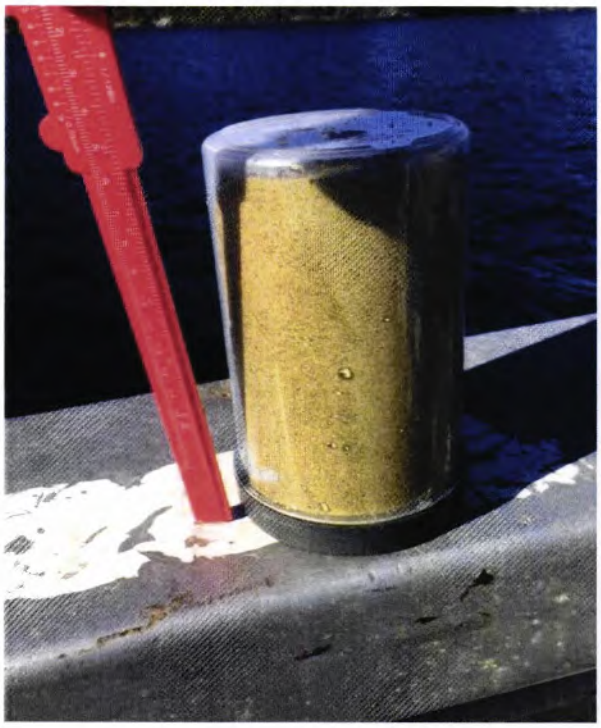
The chlorophyll a and dissolved oxygen are attached in the Hills Test.

PHOTOS

Horseshoe control 1

Horseshoe Farm

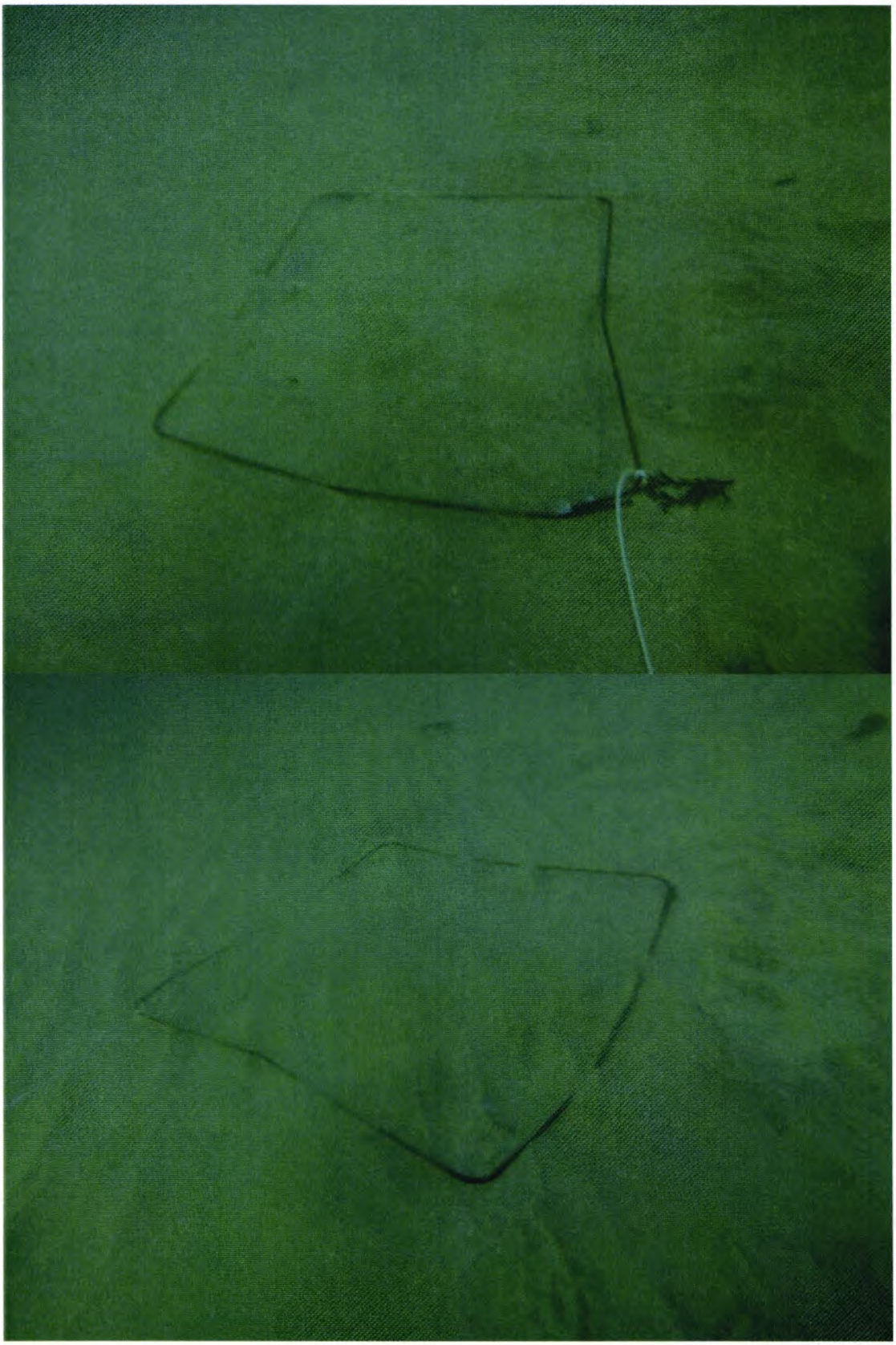
Horseshoe control 2



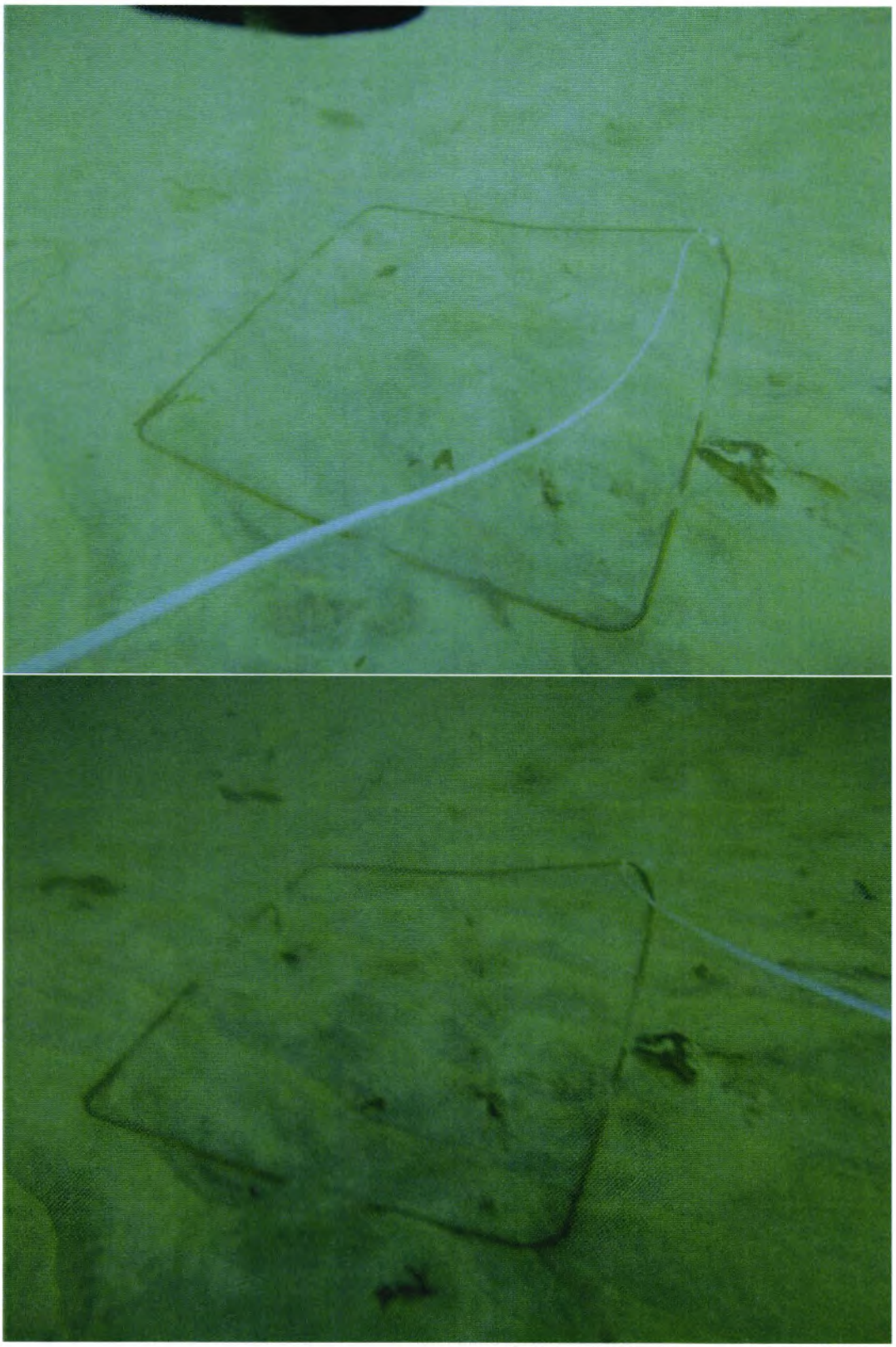
Nathans control 1

Nathans control 2

Nathans Farm



From top Horseshoe control 1 and 2



Top Horseshoe Farm and Bottom is Nathans Control 1

Top is Nathans Control 2 and Bottom is Nathans Farm