



31 January 2019

AQUACULTURE DECISION REPORT — AROMA AQUACULTURE LIMITED, COASTAL PERMIT U170941, PIGYARD BAY, KENEPURU SOUND

PURPOSE

1 This report sets out my aquaculture decision (as the relevant decision maker¹) for an aquaculture decision request made under section 114(4)(c)(ii) of the *Resource Management Act 1991 (RMA)*. 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 the area of coastal permit U170941 will not have an undue adverse effect on the following fishing sectors:

- *customary* - for the reasons set out in this report and summarised in paragraph 17;
- *recreational* - for the reasons set out in this report and summarised in paragraph 17;
- *commercial* - for the reasons set out in this report and summarised in paragraph 31.

AQUACULTURE DECISION REQUEST DETAILS

Regional Council:	Marlborough District Council (MDC)
Date of Request:	23 July 2018
Coastal Permit Applicant:	Aroma Aquaculture Limited
Location of marine farm site:	Pigyard Bay, Kenepuru Sound
Size of farm:	10.49 hectares (ha), being 3.49 ha of new space and 7.00 ha of existing space currently authorised by marine farm licence 93 (Li 111), marine farming permit 170 (MF 170) and marine farming permit 779 (MF 779). ²
Species to be farmed:	Green-lipped mussels (<i>Perna canaliculus</i>) and blue mussels (<i>Mytilus galloprovincialis</i>).
Farm structures:	Standard marine farm longlines and anchors with droppers.

Location and structures

3 Coastal permit U170941 applies to an area of Pigyard Bay in Kenepuru Sound (Map 1). Coastal permit U170941 replaces the 6.25 ha authorised by Li 93 and MF 779,

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*.

² If coastal permit U150653 is approved, Li 93, MF170 and MF779 will be surrendered

and the 0.75 ha authorised by MF 170. It also authorises an additional 3.49 ha of space that joins the existing farms.

4 Aside from Li 93, MF 779 and MF 170, the closest existing farm to the area of coastal permit U170491 is marine farming licence 20 (**Li 20**) and marine farming permit 775 (**MF 775**), to the east. The nearest other existing marine farms are over 1 km to the west and east.



Map 13: Location of the area authorised by coastal permit U170941 in Kenepuru Sound (MPI, 2019).

³ Disclaimer: Maps 1-3 and all accompanying information accompanying (the “Maps”) is intended to be used as a guide only, with other data sources and methods, and should only be used for the purpose for which it was developed. The information shown in the Maps is based on a summary of data obtained from various sources. While all reasonable measures have been taken to ensure the accuracy of the Maps, MPI: (a) gives no warranty or representation in relation to the accuracy, completeness, reliability or fitness for purpose of the Maps; and (b) accepts no liability whatsoever in relation to any loss, damage or other costs relating to any person’s use of the Maps, including but not limited to any compilations, derivative works or modifications of the Maps. Crown copyright ©. The maps are subject to Crown copyright administered by Ministry for Primary Industries (MPI). Data Attribution:

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5 The area of coastal permit U170941 ranges from around 50 m to 375 m from shore. Water depths range from 3.8 m to 6 m. The substrate in the area of coastal permit U170941 consisted of soft silt and clay. No hard substrate and almost no natural shell was observed in the benthic survey (Davidson, 2017).

6 The proposal is to have one block of longlines across the combined area of the existing farms and the extension area. It is proposed to have 14 longlines with an average length of 370 m. Appendix A has a site map showing the structures layout in the existing and proposed areas.

Input from stakeholders

7 Fisheries New Zealand publicised the application for coastal permit U170941 on its website on 27 July 2018. This gave persons and organisations potentially affected by the proposed aquaculture activities an opportunity to provide information on their fishing activities at the coastal permit area.

8 The submission closing date for those notified via the website was 24 August 2018. Fisheries New Zealand did not receive any submissions.

STATUTORY CONTEXT

9 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 reservation (or one or more of them in relation to different parts of the area to which the request relates).

10 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 customary, recreational, or commercial fishing⁴. 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.

11 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 area concerned—section 186H(4).

12 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;
- (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;

⁴ 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.

- (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.

13 For the purpose of my assessment, customary fishing differs from recreational fishing if it is undertaken outside of the recreational limits provided in the *Fisheries (Amateur Fishing) Regulations 2013 (Amateur Regulations)* and is instead authorised by a customary authorisation.

14 Appendices B and C have further information on the statutory context of aquaculture decisions and customary fishing respectively.

ASSESSMENT

15 The following is an assessment, within the statutory context, of the effects of the proposed aquaculture activities on recreational customary, and commercial fishing. It is based on all the relevant information available to me.

16 This assessment relates to the 3.49 ha of new marine farming space authorised by coastal permit U170941 (**proposed site**).

Recreational and Customary fishing

17 I am satisfied the proposed aquaculture activities will not have an undue adverse effect on recreational or customary fishing because:

- only a moderate amount of recreational fishing and a small amount of customary fishing is likely to occur at the proposed site;
- anchored rod/line fishing and diving could still occur at the proposed site;
- there are other recreational and customary fishing areas available in Kenepuru Sound and the wider Marlborough Sounds;
- occupation of the proposed site will result in a minimal, if any, increase in the cost of recreational or customary fishing;
- the likely effect of occupation of the proposed site on recreational and customary fishing is only small; and
- this small effect added to existing effects of approved aquaculture space will not cause the cumulative effect on recreational or customary fishing to become undue.

18 The above conclusions were reached following the more detailed assessment below.

Location of the coastal permit area relative to fishing areas

19 The location of the coastal permit area relative to fishing areas for recreational and customary fishing is considered separately below.

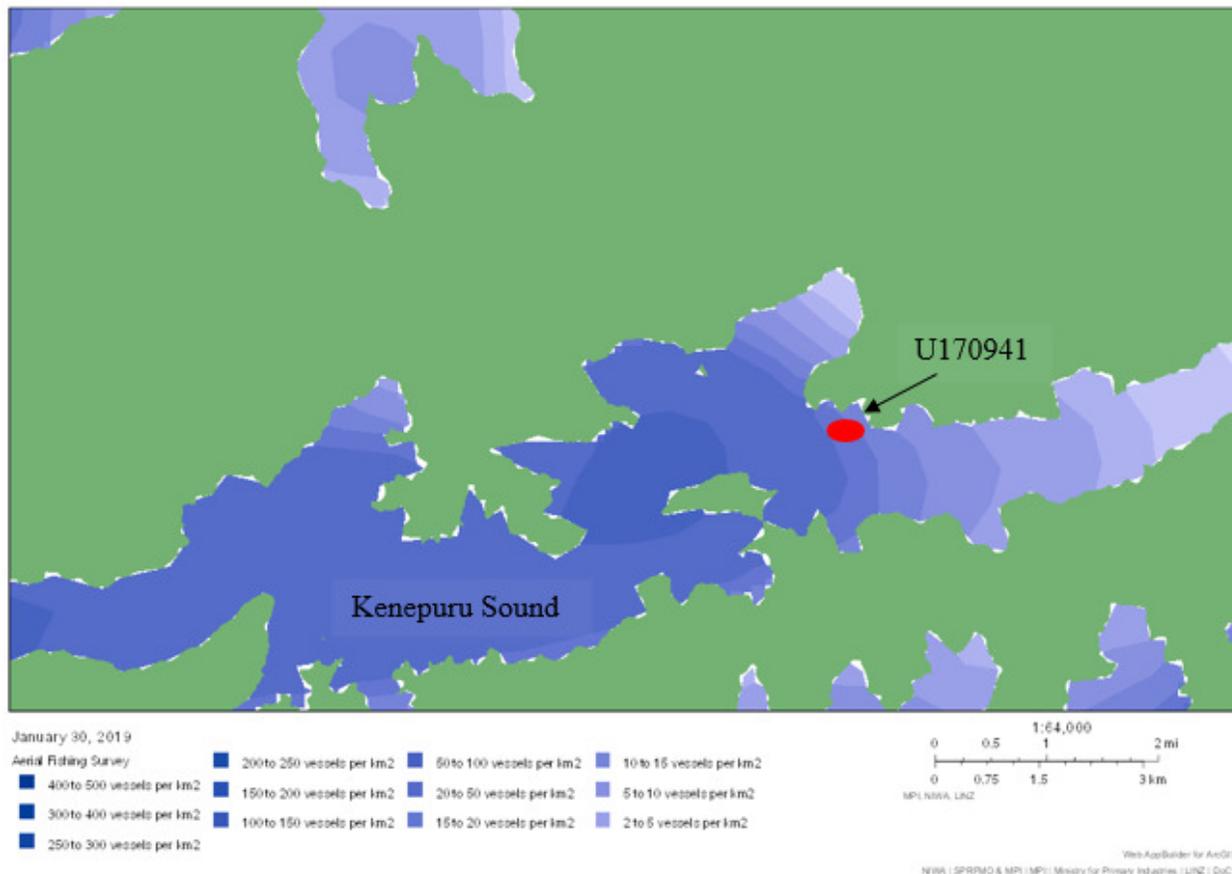
Recreational Fishing

19 I consider the proposed site is located where a relatively small amount of recreational

fishing occurs. Methods likely to be used include mobile rod/line fishing, longlining, and some diving and potting. The main species likely to be caught include snapper, kahawai, yellow-eyed mullet, gurnard and jack mackerel.

20 Recreational fishing surveys and Amateur Charter Vessel (ACV)⁵ data and recreational fishing surveys identify methods used and species caught within zones in the Marlborough Sounds. Some ACV fishing has been reported in Kenepuru Sound, with a higher amounts being reported in the wider Pelorus Sound.

21 Aerial survey results suggest there is a moderate amount of recreational fishing at the proposed site, with an average of 15 – 20 vessels / km² observed⁶ (Map 2). The 2006 diary survey reported that 12.7 % of all fishing trips were in the Kenepuru Sound survey zone. The survey did not identify the proportion of fishing events in Kenepuru Sound which occurred in Pigyard Bay (the location of the marine farm site).



Map 2. Aerial survey results from 2006 of recreational fishing intensity (Davey *et al*, 2008).

22 Table 1 summarises my assessment of the main methods used and species likely to be caught at the proposed site based on the Davey *et al.* (2008) recreational fishing survey, ACV data and other sources.

⁵ ACV data is reported through Activity Catch Returns and includes fishing positions, target and caught species numbers, and methods used.

⁶ Recreational fishing survey of the Marlborough Sounds (Davey *et al*, 2008). Overflights of the survey area was carried out on the first day of each month from 1 December 2005 to 1 December 2006 inclusive.

Table 1: Recreational fishing methods used and species caught and targeted at the area of coastal permit U170941 based on the available information.

Source of Information				
	Davey <i>et al.</i> (2008) results for the Kenepuru Sound survey zone ⁷	ACV data for Kenepuru Sound ⁸	Other information	My assessment
Methods used (% of trips)	Rod/line from private boat (69% of trips), shore fishing - rod / hand line (19%), shore fishing – drag net / beach seine (10%), longline private, hand gathering (<1% of trips)	Hand line, anchored and drift fishing are the most commonly used methods, with some dredging and trolling also used.	The muddy and relatively flat seabed is suitable for most of the methods identified as occurring in the survey zone containing Kenepuru Sound by Davey <i>et al.</i> (2008) and in ACV data. No species taken by dredging were seen in the Davidson (2017) biological survey.	Stationary and mobile rod/line methods and a small amount of longlining may be used at the site. Some shore-based rod line fishing may occur in the near shore part of the site. The other shore-based methods will not be used at the site. The low number of scallops in Kenepuru Sound and the current closure of the SCA7 scallop fishery means that dredging is unlikely to be used.
Species caught	Number of each species caught ⁹ : Snapper (277), flatfish (185), spotty (133), kahawai (96), green-lipped mussel (85), yellow-eyed mullet (72), jack mackerel (54), cockle (34), pipi (23), trevally (10), barracouta (7).	Number of fishing events (54): ¹⁰ snapper (87%), kahawai (20%), scallops (6%), blue cod (2%), gurnard (2%), kina (2%), sea perch (2%).	No scallops were seen in the Davidson (2017) biological survey.	Snapper, flatfish, kahawai, yellow-eyed mullet, jack mackerel, trevally and barracouta are likely to be caught in the vicinity of the area of coastal permit U170941. Snapper, in particular, is likely to be taken around existing mussel farms. The soft silt / clay substrate and water depth / distance from shore of proposed marine farm make is unlikely green-lipped mussel, cockle and pipi would be caught.

⁷ Over the 12 month survey period (October 2005 to September 2006).

⁸ January 2011 to December 2018.

⁹ The number of each species caught and kept in Kenepuru Sound survey zone, covering the proposed site U170941 over the 12 month survey period (October 2005 to September 2006).

¹⁰ Percentage of ACV fishing events where that species was caught.

Customary Fishing

23 I consider the proposed site is located where there is likely to be little, if any, customary fishing. Any customary fishing is likely to be by rod/line from a boat or set netting, and some longlining. Species targeted and caught may be snapper, flatfish, rig and kahawai.

24 Available information on customary fishing is primarily qualitative information on species caught from submissions and quantitative catch information from customary authorisations,¹¹ supported by benthic surveys and other information. Direct information on the methods used by customary fishers is typically not available. Information on customary fishing in the Marlborough Sounds can be found in Appendix C.

25 I have assessed likely customary fishing in the proposed site in Table 2 below.

Table 2: Customary fishing methods used and species caught or targeted at the area of coastal permit U170941¹²

	Source of information		
	Customary authorisations for Kenepuru Sound	Other information	My assessment
Methods used	N/A	Recreational fishers in Kenepuru Sound commonly use stationary and mobile rod/line methods, shore-based fishing methods and some longlining and dredging, so customary fishers may also use these methods.	Rod/line from boat and some longlining are the likely to be the most common methods used by recreational fishers in Kenepuru Sound. These methods may also be used by customary fishers. The low number of scallops in Kenepuru Sound means that dredging is unlikely to be used.
Species caught or targeted	Snapper, flatfish, rig, kahawai, kina, green-lipped mussels.	Kina or green-lipped mussels are not typically found over the reef and algae free- substrate at the coastal permit area.	Snapper, flatfish, rig and kahawai are likely to be the most commonly caught species at the coastal permit area. I consider it is unlikely kina or green-lipped mussels would be caught at the coastal permit area as the substrate is not suited to these species.

Exclusion of fishing

23 I consider a small amount of recreational and customary fishing, including longlining, trolling and some shore-based line fishing and would be excluded¹³ from the proposed site because of the risk of entanglement.

24 However, I consider that anchored fishing could continue between the proposed structures, as anecdotal information suggests fishers commonly fish by rod/line within mussel farms. The majority of fishing in the area of the proposed marine farm is anchored rod and line fishing for snapper.

¹¹ Fishing locations for customary authorisations are usually only reported at the Fisheries Management Area (FMA) or Quota Management Area (QMA) although more specific sites are sometimes identified. Customary authorisations issued under regulations 50 and 51 of the Amateur Regulations do not need to be routinely reported.

¹² From January 2009 to July 2018 no customary authorisations with site-specific information were issued that identified Pigyard Bay. Customary authorisations for the wider Marlborough Sounds were issued for a large number of species.

¹³ Anecdotal information from recreational fishers suggests that spaces between longlines of mussel farms in the Marlborough Sounds are too narrow for longlining, set netting and trolling without risk of entanglement. I also consider that drift fishing is unlikely to occur within marine farms because of risk of entanglement. The near shore part of the proposed marine farm is within reach by surf casting from shore.

Availability of other areas

25 I consider alternative areas in the Marlborough Sounds could absorb recreational and customary fishing displaced from the proposed site because:

- the site occupies only a small area and the amount of fishing that would occur there is likely small also;
- the mud substrate beneath the site is widespread in Kenepuru Sound and the wider Marlborough Sounds. No information suggests the site offers special fishing habitats or mix of species; and
- the same methods used at the site could be used elsewhere in Kenepuru Sound and most other parts of the Marlborough Sounds. Sufficient alternative areas also exist especially for rod/line fishing which can occur within mussel farms.

26 I consider other areas are available for customary fishing in Kenepuru Sound and the wider Marlborough Sounds. Apart from the Long Island Marine Reserve and Fighting Bay¹⁴, all of the Marlborough Sounds is available for customary fishing under regulations 50 and 51 of the Amateur Regulations. Many alternative areas are therefore available for customary fishers.

27 I also consider other areas are available for recreational fishing elsewhere in Kenepuru Sound and the wider Marlborough Sounds. However these areas also have closures and various species and method restrictions in place, particularly for set netting and longlining.¹⁵ While these restrictions limit the available area, there is still a large amount of area available relative to the area of the proposed site and the small amount of fishing by these methods likely to occur in the proposed site.

28 Areas of authorised aquaculture space have reduced the availability of recreational and customary fishing areas over time. The cumulative effects of existing aquaculture are further considered below.

Increased cost of fishing

29 I consider that there will be a minimal, if any, increase in the cost of recreational and customary fishing from the aquaculture activities at the proposed site.

30 I consider that any recreational or customary fishing excluded from the site could be carried out nearby with minimal additional cost, as a result of a marginal increase in fuel cost or change in method. I consider that most species targeted at the site can still be taken using alternative fishing methods or continue to be taken using the same methods.

Likely effect on fishing

31 I consider the effect on recreational and customary fishing¹⁶ from the proposed aquaculture activities will be small because:

- not all recreational or customary fishing methods would be excluded from the site. For example, boat based rod and line fishing for snapper will be able to continue

¹⁴ *Marine Reserves Act 1971* and the *Submarine Cables and Pipelines Protection Act 1996*.

¹⁵ Amateur regulations.

¹⁶ There is little quantitative data available on customary or recreational catch taken from the proposed site to assess the likely effect. Fishing locations for customary authorisations are usually only reported at the Fisheries Management Area (FMA) or Quota Management Area (QMA) although more specific sites are sometimes identified. Customary authorisations issued under regulations 50 and 51 of the Amateur Regulations do not need to be routinely reported. Recreational fishers are not required to report catch or fishing locations.

Fisheries New Zealand is therefore unable to estimate an average annual recreational catch or proportion of recreational catch likely to be affected by the proposed aquaculture activities. Rather, Fisheries New Zealand can only assess the effect of the proposed aquaculture activities on recreational fishing based on qualitative information.

(and this is the major component of both recreational and customary fishing that is likely to occur at the site;

- the area of the proposed marine farm is small and is unlikely to be of particular importance to recreational or customary fishers; and
- alternative areas within Kenepuru Sound and the wider Marlborough Sounds could absorb the recreational and customary fishing displaced from the proposed site.

Cumulative effects

32 I consider existing aquaculture in the Marlborough Sounds has affected recreational and customary fishing. There are approximately 3,700 ha of existing aquaculture in the Marlborough Sounds, approximately 265 ha of which is in Kenepuru Sound.¹⁷

33 However, I consider the cumulative effects on recreational and customary fishing, including the aquaculture activities at the proposed site, will not be undue because:

- some recreational and customary fishing (eg, anchored rod/line fishing) can still occur within marine farms; and
- not all existing farms are located in popular recreational and customary fishing areas.

Commercial fishing

31 I am satisfied the proposed aquaculture activities will not have an undue adverse effect on commercial fishing because:

- a very small amount of commercial fishing is likely to occur in the area;
- of this, a negligible amount of commercial fishing is likely to be excluded from the proposed site;
- there are alternate fishing grounds in Kenepuru Sound, SA017 and the relevant QMAs or FMA7;
- occupation of the proposed site will result in a minimal, if any, increase in the cost of commercial fishing;
- the additional adverse effect on commercial fishing is only small and will not cause the cumulative effect on commercial fishing for any fish stock to become undue.

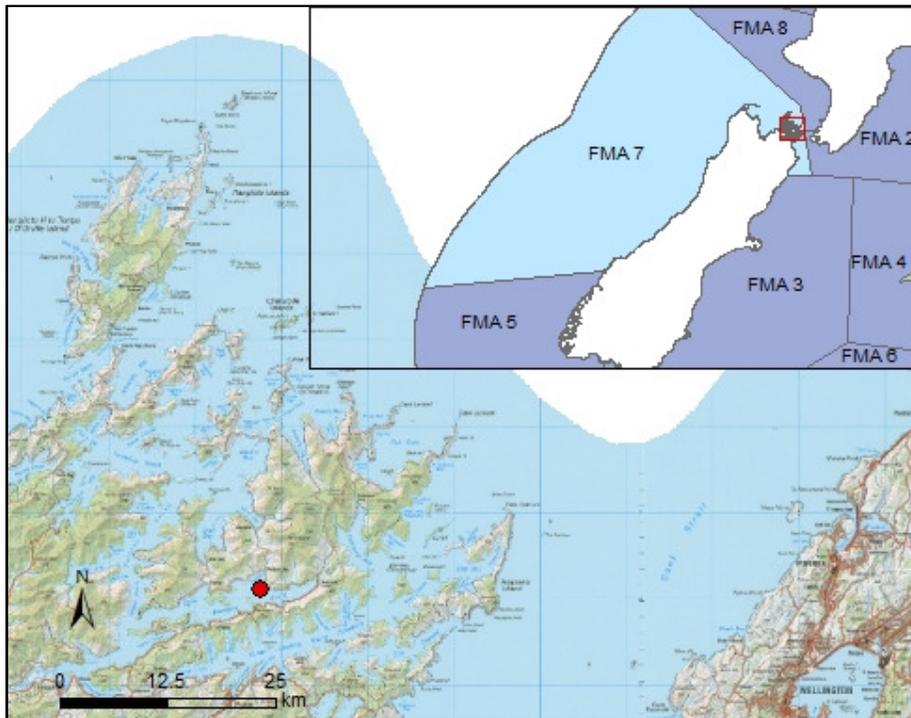
32 The above conclusions were reached following the more detailed assessment below.

Location of the coastal permit area relative to fishing areas

33 I consider the proposed site is located where there is little, if any, commercial fishing.

34 Kenepuru Sound is within Fisheries Management Area 7 (**FMA7**) (Map 3). Historically, most commercial fishing has been reported by statistical area. The area of the proposed site is in general statistical area 017 (**SA017**), which extends from the eastern edge of d'Urville Island to Cape Campbell, north of Kaikoura (415,286 ha). Further detail on fisheries management areas and statistical areas is available in Appendix D.

¹⁷ As noted, there is limited quantitative data available to assess the cumulative effects of authorised aquaculture on customary or recreational fishing. Therefore, Fisheries New Zealand can only assess cumulative effects on recreational fishing based on the amount of aquaculture already authorised in the relevant customary or recreational fishery and the likely importance of the area of the proposed site for fishing.



Map 3. Fisheries Management Area 7 (FMA7). Red circle marks approximate location of the area of coastal permit U170941.

35 Fisheries New Zealand has assessed the main fisheries, bathymetry and habitat known to occur in SA017 and the relative amounts of fishing that report by start position. This information, along with institutional knowledge has been used to inform Table 3 and the commercial fishing assessment below. Fisheries New Zealand considers a negligible amount of commercial fishing occurs at the proposed site.

36 Further detail on how Fisheries New Zealand analyses commercial fishing can be found in Appendix D.

Table 3: Fisheries that are included in the commercial fishing assessment

Fisheries (main fishstock or depth range and main fishing method) ¹⁸	Statistical area	% of fine scale fishing events ¹⁹	Average annual no. fishing days ²⁰	% of main fishstock caught in statistical area ²¹	Included in the proposed site assessment?	Rationale for excluding a fishery from proposed farm assessment ²²
School shark (SCH7), Long Lining	017	23%	95	14%	Yes	
Sea cucumber (SCC7A), Diving	017	0%	33	90%	Yes	
Blue cod (BCO7), Hand Lining	017	0%	36	40%	Yes	
Mixed fishery, Long Lining	017	82%	17	N/A	Yes	
Other species, Diving	017	0%	13	N/A	Yes	
Mixed fishery, Hand Lining	017	0%	10	N/A	Yes	
Rock Lobster (CRA5), Lobster Pot	017	0%	731	14%	No	Rock lobsters concentrate in areas of rocky reef, although they may move across an open sandy bottom at certain times of the year. There is no rocky reef in the coastal permit area.
Hoki (HOK1), Trawl	017	100%	421	22%	No	Trawling is prohibited in the area of the proposed marine farm. Hoki are also unlikely to be found in the shallow waters of the proposed site.
Scallops (SCA7), Dredge	7JJ	0%	218	47%	No	Commercial dredging is prohibited in the area of the proposed marine farm.
Ghost shark (GSH7), Trawl	017	99%	214	57%	No	Trawling is prohibited in the area of the proposed marine farm.
Sea Urchin (SUR7A), Diving	017	0%	209	84%	No	This type of fishing is highly unlikely to be affected. Kina are found on rock substrate. There is no rock substrate in the proposed site.
Inshore Mix <80m depth, Trawl	017	98%	204	N/A	No	Trawling is prohibited in the area of the proposed marine farm.
Butterfish (BUT7), Set Net	017	40%	183	27%	No	Commercial set netting is prohibited in the area of the proposed marine farm. Butterfish are unlikely to be found over the soft substrate in the proposed site.

¹⁸ Main fishstock refers to the species most often caught by the relevant method; it does not include all species taken by that method.

¹⁹ Figures from 2007/08 to 2011/12.

²⁰ Excludes fisheries with less than 10 days fishing per year. Figures from 2007/08 to 2011/12.

²¹ Figures from 2007/08 to 2011/12.

²² Unless otherwise stated, fishing is permitted and Fisheries New Zealand has no information to indicate it does not occur in the vicinity of the coastal permit area.

Table 3 continued: Fisheries that are included in the commercial fishing assessment

Fisheries (main fishstock or depth range and main fishing method)²³	Statistical area	% of fine scale fishing events²⁴	Average annual no. fishing days²⁵	% of main fishstock caught in statistical area²⁶	Included in the proposed site assessment?	Rationale for excluding a fishery from proposed farm assessment²⁷
Red Cod (RCO7), Trawl	017	100%	176	18%	No	Trawling is prohibited in the area of the proposed marine farm.
Flatfish (FLA7), Set Net	017	72%	155	6%	No	Commercial set netting is prohibited in the area of the proposed marine farm.
Inshore Mix >80m <300m, Trawl	017	100%	149	N/A	No	Trawling is prohibited in the area of the proposed marine farm.
Blue cod (BCO7), Cod Pot	017	0%	134	40%	No	Blue cod potting is highly unlikely to be affected as fishers are unlikely to set pots over soft substrate.
Hapuku and Bass (HPB7), Long Lining	017	52%	132	32%	No	Hapuku and bass are unlikely to be found in the shallow waters of the proposed site.
Flatfish (FLA7), Trawl	017	99%	68	6%	No	Trawling is prohibited in the area of the proposed marine farm.
Mixed fishery, Set Net	017	71%	63	N/A	No	Commercial set netting is prohibited in the area of the proposed marine farm.
Gurnard (GUR7), Trawl	017	99%	62	8%	No	Trawling is prohibited in the area of the proposed marine farm.
Barracouta (BAR7), Trawl	017	99%	62	2%	No	Trawling is prohibited in the area of the proposed marine farm.
Tarakihi (TAR7), Trawl	017	100%	54	17%	No	Trawling is prohibited in the area of the proposed marine farm.
Surf clams, Dredge (PDO7)	017	0%	34	0%	No	Commercial dredging is prohibited in the area of the proposed marine farm.
Other species, Potting	017	0%	19	N/A	No	Other species are likely bycatch from rock lobster or blue cod potting. Rock lobster and blue cod pots are unlikely to be set over soft substrate.
Other species, Dredging	017	0%	18	N/A	No	Commercial dredging is prohibited in the area of the proposed marine farm.
Snapper (SNA7), Trawl	017	98%	17	10%	No	Trawling is prohibited in the area of the proposed marine farm.
School shark (SCH7), Set Net	017	98%	15	14%	No	Commercial set netting is prohibited in the area of the proposed marine farm.
Blue Warehou (WAR7), Trawl	017	100%	11	6%	No	Trawling is prohibited in the area of the proposed marine farm.

²³ Main fishstock refers to the species most often caught by the relevant method; it does not include all species taken by that method.

²⁴ Figures from 2007/08 to 2011/12.

²⁵ Excludes fisheries with less than 10 days fishing per year. Figures from 2007/08 to 2011/12.

²⁶ Figures from 2007/08 to 2011/12.

²⁷ Unless otherwise stated, fishing is permitted and Fisheries New Zealand has no information to indicate it does not occur in the vicinity of the coastal permit area.

Exclusion of fishing

37 I consider that some commercial fishing could be excluded from the proposed site.

38 For the methods able or assessed as being likely to occur in the vicinity of the proposed marine farm, with the exception of diving for sea cucumber I consider they would be excluded from the proposed marine farm. However, I am satisfied these methods could occur immediately adjacent.

39 I consider diving for sea cucumber could occur within the proposed site.

Availability of other fishing areas

40 I consider alternative areas in Kenepuru Sound and other parts of SA017 could absorb any commercial fishing displaced from the proposed site because:

- the same methods as those possibly used at the coastal permit area could be used elsewhere in Kenepuru Sound or other parts of SA017²⁸;
- the species potentially targeted by commercial fishers within the area are typically found over silt and clay substrate, which is common throughout the rest of Kenepuru Sound, elsewhere in SA017 and in the relevant QMAs or FMA7; and
- the area from which commercial fishing would be excluded is small compared to the available area.

41 Areas of authorised aquaculture space have reduced the availability of commercial fishing areas over time. The cumulative effects of the existing aquaculture is considered further below.

Increased cost of fishing

42 I consider that the aquaculture activities at the proposed site will not increase the cost of commercial fishing.

43 While the coastal permit area may be located within a region used for commercial fishing, I consider that using 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 exclude a small amount of commercial fishing and there are equally productive fishing grounds available nearby.

Likely effect on fishing

44 I consider the aquaculture activities at the proposed site will have a negligible adverse effect on commercial fishing.

45 Fisheries New Zealand estimates the amount of fishing that would be displaced by the aquaculture activities in the proposed site is less than 5 kg in total for all species included in the assessment, as indicated in Table 3.

Cumulative effects

46 I consider existing aquaculture in the Marlborough Sounds has affected commercial fishing. There are around 265 ha of authorised aquaculture space in Kenepuru Sound.

²⁸ All commercial fishing methods able to be used in Kenepuru Sound (ie, hand lining and long lining) can be used in most other parts of SA 017 and FMA 7.

Approximately 3,500 ha of marine farms exist in SA 017 that make up about 24% of the 14,900 ha of aquaculture in FMA7.

47 However, I consider the cumulative effects on commercial fishing, including the aquaculture activities at the proposed site will not be undue because:

- Fisheries New Zealand estimates less than 5 kg of average annual catch occurs within the site, as assessed in Table 3;
- for any fisheries targeting stocks at the proposed site, the cumulative effect has previously been assessed as a maximum of approximately 3.3% of the average annual catch of any fishery, and not undue; and
- this level of effect is small and would not cause the cumulative effects of approved aquaculture space to become undue.

AQUACULTURE DECISION

48 I am satisfied – based on all relevant information available to me at this time – the activities proposed for coastal permit area U170941 will not have an undue adverse effect on:

- a) recreational fishing, and
- b) customary fishing, and
- c) commercial fishing.

49 Accordingly, my decision is a determination for coastal permit U170941.

50 The area of the determination on recreational, customary and commercial fishing is 3.49 ha comprising two areas with the following coordinates (NZTM2000):

Area 1

<u>Point</u>	<u>Easting</u>	<u>Northing</u>
1	1687651.570	5441160.620
2	1687765.850	5441023.570
3	1687875.780	5441038.000
4	1687916.230	5440729.680
5	1687726.540	5440758.210
6	1687684.153	5440797.322
7	1687794.972	5440889.724
8	1687779.602	5441007.050

<u>Point</u>	<u>Easting</u>	<u>Northing</u>
1	1687481.861	5441019.067
2	1687609.436	5440866.266
3	1687461.860	5441002.440

51 The reasons for my decision are set out in the conclusions for recreational, customary and commercial fishing in this report.



Blake Abernethy
Acting Manager, Customary Fisheries and Spatial Allocations
Ministry for Primary Industries

Dated: 5 February 2019

References

Davey, N.K.; Hartill, B.; Cairney, D.G.; Cole, R.G. 2008. Characterisation of the Marlborough Sounds recreational fishery and associated blue cod and snapper harvest estimates. *New Zealand Fisheries Assessment Report 2008/31*. 63 p.

Davidson, R. J. 2017. Biological report for the re consenting and extension to marine farms 8493 & 8494, Kenepuru Sound, Pelorus Sound. Prepared by Davidson Environmental Limited for Aroma Limited. Survey and monitoring report no. 873.

APPENDIX A: Site and Structures Diagram



Figure 1. Site map showing the layout of structures in the existing (red) and extension areas (blue) of the marine farm.

APPENDIX B: ADDITIONAL STATUTORY CONTEXT

1 Section 186E(3) of the Fisheries Act¹ 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.

2 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.

3 Section 186GB(2) of the Fisheries Act says that if a pre-request aquaculture agreement has been registered under section 186ZH in relation to the areas 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 coastal permit U150653.

4 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. So 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**).

5 I consider the relevant recreational and customary fisheries are as I have described in the assessment above in “*Location of the coastal areas relative to fishing area.*”

¹ 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.

6 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 recreational and customary fisheries, the relevant areas for considering “cumulative effects” are as I have described in the assessment above in my consideration of section 186GB(1)(a) and (f). Sections 186GB(1)(a) and (f) relate to location at proposed site in relation to where fishing occurs and the cumulative effect of aquaculture, respectively.

7 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.

The South Island Regulations and regulation 50 and 51 of the *Fisheries (Amateur Fishing) Regulations 2013* (**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 regulations 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.

APPENDIX C: CUSTOMARY FISHING

1 At least eight iwi at the top of the South Island may have customary fishing interests in the coastal permit area. While there are no existing customary management areas in the Marlborough Sounds (eg, taiāpure-local fishery or mātaimai reserves), the eight iwi have jointly notified their Tangata Tiaki/Kaitiaki for an area/rohe moana that encompasses the new coastal permit area. The notification is currently in dispute.¹

2 The eight iwi, collectively known as Te Tau Ihu o Te Waka o Maui (**Te Tau Ihu Iwi**), include those defined as tangata whenua in regulation 2 of the Fisheries (South Island Customary Fishing) Regulations 1999: the whānau, hapu or iwi that hold manawhenua manamoana over a particular area and are represented by Ngāti Apa Ki Te Rā To Trust; or Ngāti Koata Trust; or Ngāti Rarua Iwi Trust; or Ngāti Tama kit e Waipounamu Trust; or Te Rūnanga o Toa Rangatira; or Te Atiawa o Te Waka a Māui Trust; or Te Rūnanga A Rangitāne o Wairau; or Te Rūnanga O Ngāti Kuia Trust.

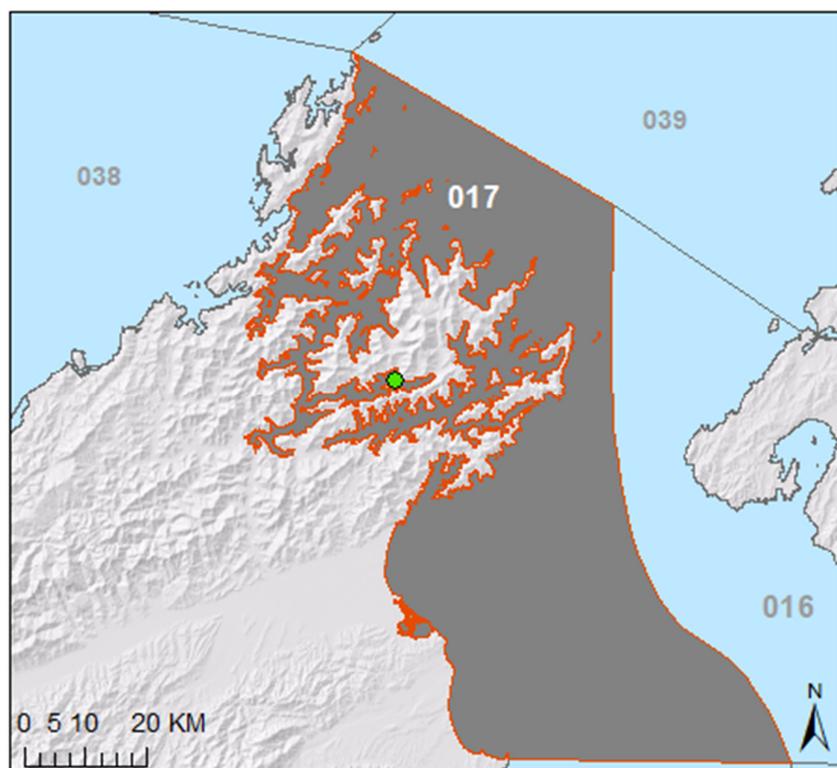
¹ Because the notification is in dispute, customary authorisations for the top of the South Island are issued under regulations 50 and 51 of the Amateur Regulations.

APPENDIX D: COMMERCIAL FISHING

Fisheries boundaries

1 New Zealand's 200nm Exclusive Economic Zone (EEZ) is divided into ten Fisheries Management Areas (FMAs) for fisheries management purposes. A Quota Management Area (QMA) is an area within which a designated fish stock is managed under the Quota Management System, and is generally based around FMAs. As noted, the proposed site is in FMA7.

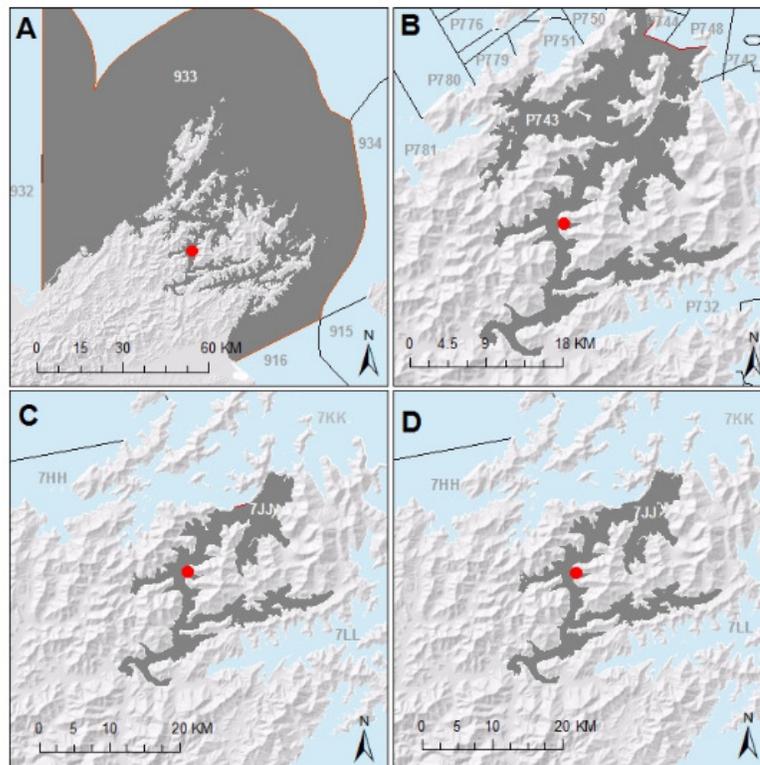
2 Fisheries reporting historically occurred by general statistical area. There are 120 of these areas in the New Zealand 200nm EEZ and this provides for more fine scale data to be collected than at an FMA scale. As noted, the proposed site is in general statistical area 017 (Map 1).



Map 1: General statistical area SA017. The green circle marks the approximate location of coastal permit area U170941.¹

3 Scallops, oysters, rock lobster and paua are reported by species-specific statistical areas rather than by general statistical area. The area of coastal permit U150653 falls within rock lobster statistical area 933, paua statistical area P743, scallop statistical area 7JJ and oyster statistical area 7JJ (Maps 2A, 2B, 2C and 2D).

¹ Hillshade imagery produced by Geographx. Sourced from www.koordinates.com under CC-By. <http://creativecommons.org/licenses/by/3.0/nz/>



Map 2: Species-specific statistical areas that encompass the area of coastal permit U170941 (approximate location as red circle). A – Rock lobster statistical area 933. B – Paua statistical area P743. C – Scallop statistical area 7JJ. D – Oyster statistical area 7JJ.

Commercial fishing reporting and analysis

1 Reporting by statistical area only provides coarse-scale information about where commercial fishing occurs. However, since 2007/08 vessels over 6 m long that have used trawl or line fishing methods have reported the start position of each fishing event by latitude and longitude to within 1 minute, which equates to around 1 nautical mile (nm). And, since 2006/07, start positions for netting methods have reported to within 2 nm. Using this fine scale position data, Fisheries New Zealand has modelled and mapped fishing intensity for different segments of fishing, characterised by a type of fishing gear and the main species caught.¹

2 The location of fishing by vessels less than 6 m long within SA017 is unknown. However, based on information from fisheries officers and Maritime New Zealand, Fisheries New Zealand has mapped long lining, bottom trawling and set netting by vessels less than 6 m as being within enclosed bays and within 3 nm of open coasts. This detail can be commercial sensitive and cannot be publically released. Knowledge about species and information from commercial fishers and fishing companies, and compliance officers can also help to determine whether specific types of fishing are likely to occur in an area.

3 Maps of fishing intensity (effort per ha) for each fishing sector were used to calculate the average annual amounts of fishing effort that is likely to be displaced from the exclusion

¹ The Catchmapper tool is used to model the estimated catch from landing data, and is the best information available from fisheries statistics. This informs our assessment, and particularly, Table 3.

zone/s of the coastal permit area.² Average landings per unit effort for all species caught in each fishery segment were then used to estimate the amount of fish likely to have been landed.

4 Fishing effort that is only reported by statistical area was apportioned evenly across the area available for fishing although some areas are likely to include more productive habitats than others. 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.

5 The amount of fishing was averaged over October fishing years 2007/08 to 2014/17. Eight years is 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.

² The “exclusion zone” used for commercial fishing methods assessed is the coastal permit area, with the exception (where applicable) of dredging, trawling and seining. In sheltered waters, buffers of 50m, 250m and 500m respectively are applied. In open water buffers of 75m, 500m and 500m respectively are applied.