

7 November 2019

AQUACULTURE DECISION REPORT — ALLAN TESTER AND STEPHEN CROSS, COASTAL PERMIT U180102, DEEP BIGHT, PORT UNDERWOOD

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 U180102 will not have an undue adverse effect on the following fishing sectors:

- *recreational* for the reasons set out in this report and summarised in paragraph 17;
- *customary* 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 38.

AQUACULTURE DECISION REQUEST DETAILS

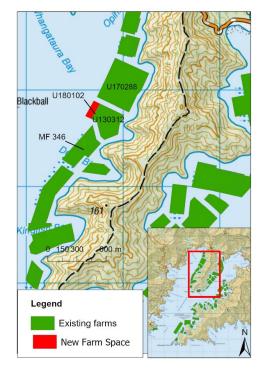
Regional Council:	Marlborough District Council (MDC)
Date of Request:	25 July 2019
Coastal Permit Applicant:	Allan Roy Tester and Stephen Eric Cross
Location of marine farm site:	Port Underwood
Size of farm:	To extend an existing 7.29 ha marine farm (site 8419) by 1.265 hectares
Species listed on consent:	Green shell mussels (<i>Perna canaliculus</i>), scallops (<i>Pecten novaezelandiae</i>), blue shell mussels (<i>Mytilus galloprovincialis</i>), dredge oysters (<i>Ostra chilensis</i>), giant kelp (<i>Macrocystis pyrifera</i>), kelp (<i>Ecklonia radiata</i>), red algae (<i>Gracilaria</i> spp.) and coarse agar weed (<i>Pterocladia lucida</i>).
Farm structures:	Four additional conventional longlines

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 and structures

3 Coastal permit U180102 (proposed site) applies to an area just north of Deep Bight which is a small embayment on the eastern side of the western arm of Port Underwood (Map 1). The proposed site occupies 1.265 ha, extending the existing 7.29 ha marine farm made up of marine farm licence Li 382 and coastal permit (U130312).

4 The proposed site extends the existing parent farm offshore. The parent farm is one of a line of nine mussel farms. Other farms in the nine have also been extended offshore (Map 1).



Map 1²: Location of the proposed site (area authorised by coastal permit U180102) at Port Underwood (MPI, 2019).

5 The proposed site will contain 4 longlines in addition to the existing 14 longlines. Site and structures maps can be found in Appendix A.

Environment

6 An independent survey of the proposed site in January 2018 recorded a depth range of about 12-13 m, and seabed substrate dominated by silt and clay. This type of habitat is considered suitable for shellfish farming. "This type of substrata dominates most of Port Underwood and many areas of the sheltered Marlborough Sounds..." (Davidson and Richards, 2018).

² Disclaimer: Maps 1 and 2 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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7 The abundance and diversity of fauna were reported as low, and typical of the substrate type at the location (Davidson and Richards, 2018). No rocky substratum was observed by sonar survey. No species or communities of fisheries value were observed. The effects of the existing mussel farming activity on the benthic habitat appeared to be lower than typical.

Input from stakeholders

8 Fisheries New Zealand did not seek any information from the public on this application. It involves a relatively small seaward extension to an existing marine farm out to a similar distance from shore as the surrounding marine farms and is in an area traditionally used for marine farming.

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 fishing³. 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;
- (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.

³ 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.

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 statutory context 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 1.265 ha of marine farming space authorised by coastal permit U180102.

Recreational and customary fishing

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

- negligible recreational and customary fishing is likely to occur at the proposed site;
- anchored rod/line fishing and diving could still occur when the proposed structures are installed;
- there are other recreational and customary fishing areas available in Port Underwood 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 negligible; 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

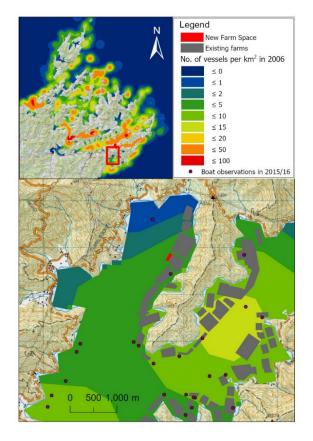
20 The location of the coastal permit area relative to fishing areas for recreational and customary sectors are considered separately below.

Recreational Fishing

21 I consider the area of the proposed site is located where negligible recreational fishing occurs. Methods that could possibly be used include mobile and stationary rod/line fishing from a boat, and perhaps longlining. Species which could be caught include tarakihi, kahawai, gurnard, moki, flatfish and maybe snapper.⁴

⁴ Recreational fishers are not required to report catch or fishing locations. MPI 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, MPI can only assess the effect of the proposed aquaculture activities on recreational fishing based on qualitative information.

22 There have been three surveys of recreational fishing in the Marlborough Sounds that included aerial mapping of fishing location.⁵ About 4.5% of all vessels fishing in the Marlborough Sounds in 2005-06 fished in the survey zone that includes Port Underwood and the coast up to Tory Channel. These surveys provide evidence that the location of the proposed site is of lesser importance for recreational fishing from boats than other areas along the coast nearby (Map 2).



Map 2. Estimated annual intensity of recreational fishing from boats in 2006 and boat observations over 12 months in 2015-16 in the Marlborough Sounds (Davey *et al.*, 2008; Hartill *et al.*, 2017).

23 The proposed site is within an area prohibited for set netting. Set netting is prohibited in the general location from Cape Jackson to the Clarence River to protect marine Hectors and Maui dolphins. Along some of this shore, including Port Underwood, a 200 m strip close to shore has been exempt for certain types of set netting that would allow flatfish and butterfish to be caught. However, the proposed site lies further than 200 m from shore.

24 Very little fishing has been reported in Port Underwood from Amateur Charter Vessels⁶ (ACV).

Table 1 summarises my assessment of the main methods used and species likely to be caught by recreational fishers at the proposed site based on the recreational fishing survey of Davey et al. (2008), the benthic survey (Davidson and Richards, 2017), ACV data, and anecdotal sources.

⁵ A 12 month period in 2005-06 (Davey *et al.*, 2008), for two days in 2014-15 (Hartill, *et al.*, 2015) and again for 12 months in 2015-16 (Hartill, *et al.*, 2017).

⁶ ACV data is reported through Activity Catch Returns and includes fishing positions, target and caught species numbers, and methods used.

Table 1: Recreational fishing methods used and species likely to be caught and targeted at the area of coastal permit U180102 based on the available information.

	Davey <i>et al.</i> (2008) results for the survey zone including Port Underwood	ACV data for Port Underwood	Submissions	Other information	My assessment
Methods used	Rod/line from private boat (44% of trips), diving from private boat (21%), drag netting (16%), hand gathering and potting (5%), rod/line from charter vessel (2%), rod/line and diving from shore (<3%).	Hand lining. ⁷	In submissions on previous applications in the area (mainly northeastern arm of Port Underwood) the main methods cited are line fishing from a private boat, hand gathering and long lining from shore and private boat.	The silt, clay and relatively flat seabed may be suitable for hand lining and set netting. No species that are typically taken by dredging were observed by Davidson and Richards (2018). Set netting is prohibited.	Stationary and mobile rod/line methods, and diving from a private boat are likely the main used methods at the site. Public access to, and distance offshore from, the adjacent shore is limited so shore-based fishing (eg, by rod/line, drag netting or flatfish spearing) is unlikely.
Species caught	Mussels, oysters, paua, rock lobster, blue cod, moki, butterfish, rig, kahawai, tarakihi, and hapuka.	Blue cod, tarakihi, gurnard and sea perch.	Previous submissions note blue cod, kahawai, red cod, tarakihi, kingfish, mussels, pipis, cockles, crabs, crayfish, moki, monk fish, snapper and gurnard as species caught in the northeastern arm of Port Underwood (proposed site is adjacent to headland between two arms of Port Underwood).	No scallops or oysters were observed by Davidson and Richards (2018).	Tarakihi, kahawai, sea perch, gurnard, and flatfish are likely the species most commonly caught at the proposed site. Blue cod unlikely to be caught at proposed site. The proposed site is too deep for species taken by hand gathering. The coastal permit area is likely to be too shallow for fishing for hapuku.

⁷ Including rod / line fishing.

Customary Fishing

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 perhaps longlining. The main species targeted in this area are likely to be butterfish, moki, terakihi, and flatfish.

27 Available information on customary fishing is primarily qualitative information from submissions and quantitative catch information from customary authorisations.⁸ Further details on specific customary fishing information can be found in Appendix C.

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

•	Source of information			
	Customary authorisations for Port Underwood	Other information	My assessment	
Methods used	Methods not specified	Recreational fishers commonly use stationary and mobile rod/line methods and possibly some longlining. Customary fishers may also use these methods.	Rod/line from boat, diving and set netting are likely the most common methods for recreational fishers and may also be used by customary fishers.	
Species caught or targeted	Butterfish, moki, terakihi, rock lobster, kina and paua are the species most commonly targeted by customary fishers in Port Underwood. Other species include blue cod, flatfish, mussels, rig, trevally, kahawai and scallops.	Paua, kina, rock lobster, blue moki, blue cod and green-lipped mussels are not typically found over the reef free substrate at the proposed site.	Tarakihi, kahawai, sea perch, gurnard, and flatfish are likely the species most commonly occurring around the proposed site.	
		Sea Perch are often the reported catch in ACV data	Blue cod unlikely to be caught at proposed site.	
		No scallops were observed at the site by Davidson and Richards	The proposed site is too deep for species taken by hand gathering.	
		(2018)	The coastal permit area is likely to be too shallow for fishing for hapuku.	

Table 2: Customary fishing methods used and species caught or targeted at the area of coastal	
permit U180 <u>102 ⁹</u>	

Exclusion of fishing

29 I consider that any recreational or customary longlining, or rod/line drift fishing occurring in the area of the proposed site may be excluded from the proposed site because of the risk of entanglement.¹⁰

30 However, I consider that stationary rod and line fishing could continue between the proposed structures, as anecdotal information suggests fishers commonly fish by rod/line within mussel farms. Some diving may still occur but is highly unlikely at this site.

⁸ 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. Methods used are not reported. Customary authorisations issued under regulations 50 and 51 of the Amateur Regulations do not need to be routinely reported.

⁹ From January 2009 to June 2018 no customary authorisations with site-specific information were issued for Tongue Bay in Port Underwood but 449 customary authorisations were issued for Port Underwood.

¹⁰ 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.

Availability of other areas

31 I consider alternative areas in Port Underwood and the wider Marlborough Sounds could absorb any recreational and customary fishing displaced from the proposed site because:

- the proposed site is only small and the amount of fishing that would occur there is likely small also;
- the same species seen over the silt and clay substrate at the proposed site could be found in most areas of Port Underwood and the wider Marlborough Sounds, where this substrate is common. No information suggests the proposed site offers unique habitats or species mix; and
- the same methods used at the proposed site could be used elsewhere in Port Underwood and other parts of the Marlborough Sounds; sufficient alternative areas exist especially for stationary rod/line fishing.

32 Apart from the Long Island Marine Reserve, Fighting Bay, and Double Bay (only recreational fishing restricted),¹¹ all of the Marlborough Sounds is available for recreational and customary fishing. Many alternative areas are therefore available for the type of fishing that could occur at the proposed site.

Increased cost of fishing

33 I consider that the aquaculture activities at the proposed site will increase the cost of recreational and customary fishing minimally, if at all.

34 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.

Likely effect on fishing

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

- not all recreational or customary fishing methods would be excluded from the proposed site;
- the area of the proposed site is small and is unlikely to be of particular importance to recreational or customary fishers; and
- alternative areas within Port Underwood and the wider Marlborough Sounds could absorb the recreational and customary fishing displaced from the proposed site.

Cumulative effects

36 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 200 ha of which is in Port Underwood.¹²

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

¹¹ Marine Reserves Act 1971 and the Submarine Cables and Pipelines Protection Act 1996.

¹² As noted, there is limited quantitative data available to assess the cumulative effects of authorised aquaculture on customary or recreational fishing. Therefore, MPI can only assess cumulative effects on customary or 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.

- some recreational and customary fishing (eg, anchored rod/line fishing) can still occur within marine farms;
- not all existing farms are located in popular recreational and customary fishing areas; and
- the area of the proposed site is minimal with regard to all of the space available for recreational and customary fishing in the Marlborough Sounds.

Commercial fishing

38 I am satisfied the aquaculture activities that may operate within the proposed site will not have an undue adverse effect on commercial fishing because:

- only a small amount of commercial fishing is likely to occur in the area;
- a negligible amount of commercial fishing is likely to be excluded from the proposed site;
- there are alternate fishing grounds within the fishstock quota management areas for any fishing excluded from the proposed site;
- occupation of the proposed site will result in a minimal, if any, increase in the cost of commercial fishing;
- effects on commercial fishing catch will be negligible; and
- 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.

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

Location of the coastal permit area relative to fishing areas

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

41 Fisheries New Zealand used CatchMapper¹³ to identify the fishing that has potentially occurred in the vicinity of the proposed site (Table 3).

42 In some fisheries the location data used in CatchMapper was not be the best available. Site specific habitat data provided in the consent application and more specific knowledge of four fisheries were used in the final assessment of whether the fishery could be affected as presented in Table 3.

43 Most of the potentially affected commercial fisheries in Table 3 are managed as stock units over Fisheries Management Area 7 $(FMA7)^{14}$ which spans the north and west of the South Island. The proposed site is very small in relation to the area of the potentially affected fisheries.

¹³ CatchMapper is a spatial database of all commercial fishing events for the eleven years from October 2007 to September 2018 (see Appendix D for more explanation).

¹⁴ FMAs can be seen here <u>https://fs.fish.govt.nz/Page.aspx?pk=45&tk=389</u>

Table 3: Fisheries identified as potentially occurring within the affected footprint of the proposed marine farm and est within the footprint¹⁵. The amount of fishing overlapping with farm footprints is more precisely estimated where coordinates rather than general statistical areas. The presence of a fishery within a footprint might be mistaken or the events were not mapped to precise locations. In these cases, other knowledge or available information may be used be affected.

l types of fishing detected within proposed farm footprint (and main fishstock)	% high spatial resolution	Average annual no. of overlapping fishing days	% of main fishstock caught by this method	Potentially affected	
Blue cod, Cod Pot (BCO7)	0.0	157	less than 0.1 %	Yes	Fishing events were map site but could
School shark longline (SCH7)	0.0	58	less than 0.1 %	Yes	Fishing events were map site but could
Flatfish, Trawl (FLA7)	100.0	2.5	less than 0.1 %	Yes	This fishery certainly hap proposed farm
Red cod, Trawl (RCO7)	100.0	2.0	less than 0.1 %	Yes	This fishery certainly hap proposed farm
Inshore Mixed species, Trawl (MOK1)	100.0	0.5	less than 0.1 %	Yes	This fishery certainly hap proposed farm
Ghost shark, Bottom trawl (GSH7)	100.0	0.1	less than 0.1 %	Yes	This fishery certainly hap proposed farm
Spiny Dogfish, Bottom trawl (SPD7)	100.0	0.1	less than 0.1 %	Yes	This fishery certainly hap proposed farm
Hapuku bass longline (HPB7)	0.0	18	less than 0.1 %	No	Almost certainly doesn't
Other species, Dredge (SUR7A)	0.0	22	less than 0.1 %	No	Kina dredging will not oc
Oyster, Dredge (OYS7C)	0.0	11	less than 0.1 %	No	The oyster dredge fisher
Other species, Beach seine (GAR7)	0.0	6	less than 0.1 %	No	Beach seining cannot oc

¹⁵Main fishstock refers to the main species caught in the fishing cluster but does not include all species taken by those fishing events.

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Exclusion of fishing

44 I consider that minimal exclusion of fisheries will occur at the proposed site except perhaps a small amount of trawling.

45 The fisheries given in Table 3 were identified by overlaying exclusion areas for each fishing method with the mapped fishing events in CatchMapper. The exclusion areas, also termed footprints of the proposed site, include appropriate buffer zones around the farm boundaries of a size depending on the type of fishing method. Towed fishing methods have larger footprints, i.e. larger areas from which they would be excluded, than static fishing methods. Only new footprint area where fisheries have not already been excluded by past aquaculture decisions is included in this assessment.

The proposed site is surrounded by other marine farms so may not be suitable for trawling which generally requires a path free of obstructions. However, trawling is permitted in this locality and has been mapped as occasionally occurring on the route of vessels returning to port past the proposed site. The proposed site may obstruct this fishing practice.

47 Set netting is not permitted at the proposed site so will not be excluded. Long lining might occur within the boundaries of the proposed site but this is considered to be unlikely so exclusion is unlikely. Dredging and Cod potting are permitted in the locality but these fisheries are thought to mainly occur elsewhere in the wider region but not in Port Underwood so exclusion is unlikely.

Availability of other fishing areas

48 I consider alternative areas are available to absorb any commercial fishing displaced from the proposed site, if there was any, because:

- The annual catches of each species potentially caught at this site are a negligible percentage of the total catches for those species within the relevant stock Quota Management Area (QMA) (Table 3);
- The same methods as those possibly used at the proposed site could be used elsewhere in the relevant QMA for each fishstock; and
- There is nothing special or unique about the fisheries habitat in the proposed site.

Increased cost of fishing

49 I consider that the aquaculture activities at the proposed site are highly unlikely to increase any cost of commercial fishing. The proposed site is not unique or especially productive for fishing and the area excluded is very small compared to other fishing grounds available nearby.

Likely effect on fishing

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

51 Fisheries New Zealand estimated on average less than 30kg of fish per year were possibly caught from the footprint of the proposed farm over 11 recent years (from the fisheries assessed as potentially affected in Table 3). This was mostly from trawling passed the proposed site on the way home to port but the direction of these trawl tows is uncertain information. Even if all similar trawl events were displaced in future the effect on the fisheries would not be undue.

Cumulative effects

52 I consider existing aquaculture in the Marlborough Sounds has affected commercial fishing. There is around 200 ha of authorised aquaculture space in Port Underwood. And there is approximately 3,500 ha of marine farms in the wider Marlborough Sounds region that make up about 24% of the 14,900 ha of aquaculture in FMA7.

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

- for any fish stocks potentially affected by the proposed site, the cumulative effect of aquaculture to date has been assessed as a maximum of approximately 3.3% effect on the worst affected fishery, and not undue;
- the amount of additional catch that might have been displaced at the proposed site is considered to be negligible.

AQUACULTURE DECISION

54 I am satisfied – based on all relevant information available to me – the activities proposed for the area authorised by coastal permit U180102 will not have an undue adverse effect on:

- a) recreational fishing, and
- b) customary fishing, and
- c) commercial fishing.
- 55 Accordingly, my decision is a determination for coastal permit U180102 with regard to:
 - a) recreational fishing, and
 - b) customary fishing, and
 - c) commercial fishing.

56 The area of the determination on recreational, customary and commercial fishing is 1.265 ha within the following coordinates (NZTM2000):

<u>Point</u>	Easting	Northing
1	1695605.68	5427733.97
2	1695693.23	5427892.37
3	1695756.38	5427862.16
4	1695668.82	5427703.75

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

Joanna

David Scranney Manager Customary Fisheries and Spatial Allocations Fisheries New Zealand – Tini a Tangaroa Ministry for Primary Industries – Manatū Ahu Matua

Dated 7 November 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.

Hartill, B.; Carter, M.; Bradley, A. (2015). Survey design for recreational fisheries in FMA 7. *New Zealand Fisheries Assessment Report 2015/44*. 17 p.

Hartill, B., N Davy, A. Bradley, M. Carter, L. Olsen, R. Bian. 2017. Aerial-access recreational harvest estimates for snapper and blue cod in FMA 7 in 2015-16. *New Zealand Fisheries Assessment Report 2017/34* 28p.

Davidson, R.J. and Richards, L.A. 2018. Ecological report for a proposed extension to marine farm 8419, Port Underwood. Prepared by Davidson Environmental Ltd. for Allan Tester C/o Jonathon Tester. Survey and monitoring report no. 878.

APPENDIX A: SITE AND STRUCTURES MAP

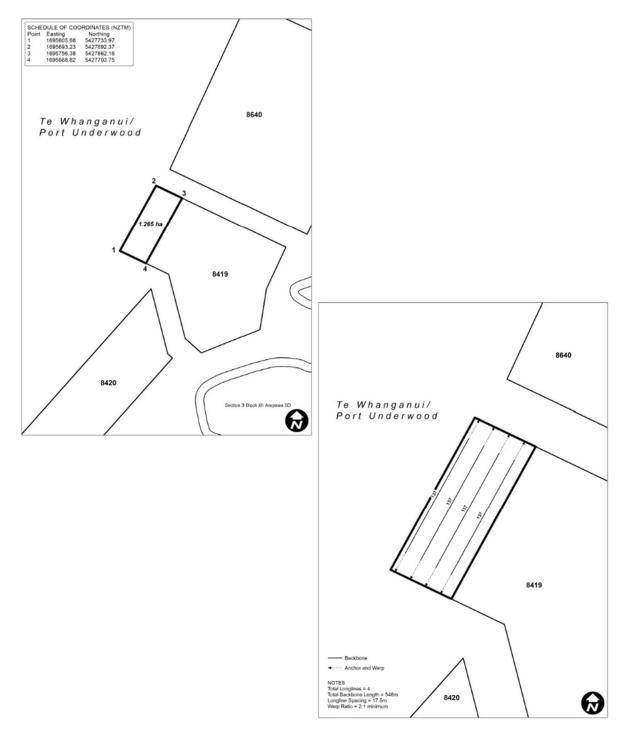


Figure 1. Site maps showing location of new space and structures.

APPENDIX B: ADDITONAL STATUTORY CONTEXT

1 Section 186E(3) of the Fisheries Act ¹⁶ 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 U180102.

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 fishery are as I have described in the assessment above in "*Location of the coastal areas relative to fishing area*."

¹⁶ 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. Page 16 of 19

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.

8 The South Island Regulations and regulation 50 and 51 of 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, taiapure-local fishery or mātaitai 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.¹⁷

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 Ki Te Waipounamu Trust; or Te Runanga o Ngati Toa Rangatira; or Te Atiawa o Te Waka a Maui Trust; or Te Runanga a Rangitane o Wairau; or Te Runanga O Ngāti Kuia Trust.

¹⁷ 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 reporting and analysis

- 1. Historically, fishing catches were reporting by a set of statistical areas providing only 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). 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 clusters of fishing, characterised by a type of fishing gear and the main species caught.¹⁸ This detail can be commercially sensitive and may not be publically released
- 2. Until recently, vessels less than 6 m long still reported by statistical areas and so the precise location of their fishing 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. Knowledge about species and information from commercial fishers and fishing companies, and Fisheries Officers can also help to determine whether specific types of fishing are likely to occur in an area.
- 3. 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 events have taken place within the statistical area.
- 4. The amount of all mapped fishing events that overlap with a proposed farm footprint is calculated. Trip landings are apportioned to the overlapping part of each event. These are summed and annually averaged for each fishery cluster and fishstock to estimate the amount of fish likely to have been landed within the footprint.
- 5. The amount of fishing was averaged over October fishing years 2007/08 to 2017/18. Eleven 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.

¹⁸ MPI developed the Catchmapper tool to spatially model the estimated catch from landing data. This informs our assessment, and particularly, Table 3. For more information see Osborne, TA 2018 Forecasting quantity of displaced fishing Part 2: CatchMapper - Mapping EEZ catch and effort. New Zealand Aquatic Environment and Biodiversity Report No. 200. Downloaded on 4 March 2019 from https://fs.fish.govt.nz/Page.aspx?pk=113&dk=24611