



22 April 2020

AQUACULTURE DECISION REPORT — OKIWI BAY AQUACULTURE LIMITED, COASTAL PERMIT U190782, SQUALLY COVE, CROISILLES HARBOUR

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 U190782 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 16;
- customary - for the reasons set out in this report and summarised in paragraph 16;
- commercial - for the reasons set out in this report and summarised in paragraph 40.

AQUACULTURE DECISION REQUEST DETAILS

Regional Council:	Marlborough District Council (MDC)
Date of Request:	17 December 2019
Coastal Permit Applicant:	Okiwi Bay Aquaculture Limited
Location of marine farm site:	Squally Cove, Croisilles Harbour
Size of farm:	Renewing and repositioning of MFL 216 with U190782 (3.0 hectares (ha)) to occupy 1.9 ha of new space and surrendering 1.1 ha of previously consented space.
Species listed on consent:	Green-lipped mussel <i>Perna canaliculus</i> , scallop <i>Pecten novaezelandiae</i> . Pacific oyster <i>Crassostrea gigas</i> , Pāua <i>Haliotis iris</i> , <i>Haliotis australis</i> , <i>Haliotis virginea</i>
Farm structures:	Standard marine farm longlines and anchors.

Location and structures

3. Coastal permit U190782 renews and repositions marine farm licence 216 (Li 216) in the southwest of Squally Cove. U190782 extends the northern boundary (further offshore) and

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*.

authorises 1.9 ha of new space. The northern extension brings the existing structures wholly within the new farm boundaries. Site and structures maps can be found in Appendix A.



Map 1²: Location of the area authorised by coastal permit U190782 at Squally Cove, Croisilles Harbour.

Environment

4. An independent survey of the proposed site in August 2019 found the current consented area was dominated by silt and fine sand with natural shell (ie, not derived from the farm). Mussel shell was sparse under backbones located in the consented area. The benthos offshore of the consented area is comprised of silt, clay and natural shell. Mussel shell was recorded in photos collected from this area due to the presence of multiple backbones offshore of the

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: This map uses data sourced from LINZ under CC-BY. <http://creativecommons.org/licenses/by/3.0/nz/>

consent (Davidson, Richards and Scott-Simmonds, 2019). U190782 will authorise the space offshore from the currently consented marine farm.

5. The proposed reconfiguration of Li 216 moves lines away from hard substrate areas. The deeper waters have silt and clay substrate more suitable for mussel farming.

6. Species seen on the benthos offshore from the consented space included cushion stars. Epibenthic species abundance and diversity from the marine farm area was very low compared to high current flow locations in the Marlborough Sounds. Soft substrate also has lower epibenthic species diversity and abundance compared to rock substrate. The area of the marine farm which is being surrendered has some hard substrate, while the new area to be consented is further offshore with only soft substrate. No habitats or communities regarded as ecologically significant were observed during the ecological survey (Davidson, Richards and Scott-Simmonds, 2019).

Input from stakeholders

7. Fisheries New Zealand did not seek input from stakeholders on this application as it involves only a very minor change in location of an existing farm and is within an area dominated by marine farming.

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 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 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.

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 area concerned—section 186H(4).

11. 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:

- the location of the area that the coastal permit relates to in relation to areas in which fishing is carried out;
- 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;

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.

- the degree to which the aquaculture activities in the area that the coastal permit relates to will lead to the exclusion of fishing;
- the extent to which fishing for a species in the area that the coastal permit relates to can be carried out in other areas;
- the extent to which the occupation of the coastal marine area authorised by the coastal permit will increase the cost of fishing; and
- 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.

12. 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.

13. Appendix B gives further information on statutory context.

ASSESSMENT

14. 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.

15. This assessment relates to the 1.9 ha of new consented space authorised by coastal permit U190782 (the proposed site) as if it had not been previously occupied.

Recreational and customary fishing

16. 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:

- only a small amount of recreational and customary fishing is likely to occur at the proposed site;
- anchored rod/line fishing could still occur when the proposed structures are installed;
- there are other recreational and customary fishing areas available nearby;
- 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.

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

Location of the coastal permit area relative to fishing areas

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

Recreational fishing

19. I consider the area of the proposed site is located where some recreational fishing is likely to occur. The locality of the proposed site is not particularly important for recreational fishing, but some does occur around this area. Methods used include stationary rod/line fishing from a boat. Species which could be caught include snapper, kahawai, gurnard and tarakihi.⁴

20. Information on recreational fishing used in this assessment comes from:

- two national interview surveys in the 2011-12 and 2017-18 fishing years (Wynne-Jones *et al.*, 2014, 2019);
- three aerial over-flight surveys coupled with boat ramp surveys covering Fisheries Management Area (FMA) 7 over:
 - 12 months in 2005-06 (Davey *et al.*, 2008);
 - two days in 2014-15 (Hartill, *et al.*, 2015); and
 - 12 months in 2015-16 (Hartill, *et al.*, 2017);
- Amateur Charter Vessel (ACV) returns. Charter fishing must be reported to MPI and reports include location of fishing and catches.

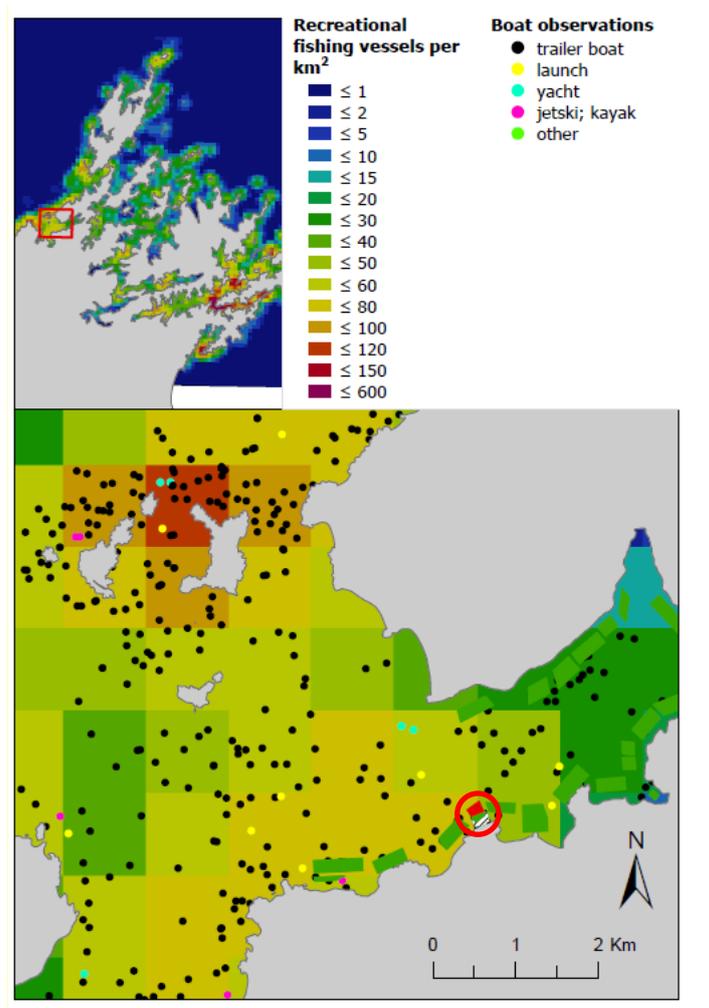
21. Aerial over-flight surveys revealed that rod and line fishing from boats targeting blue cod is the most popular type of fishing in Croisilles Harbour, as well as snapper, rock lobster, and gurnard (Davey *et al.*, 2008).

22. Averaged over the two national interview panel surveys in Tasman Bay and Golden Bay (the survey area which includes Croisilles Harbour), those fishing within Tasman and Golden bays caught mostly snapper (34% of fishing trips), blue cod (30%), kahawai (17%), gurnard (12%) and tarakihi (8%). Other species included scallops, rig, and sea perch (Wynne-Jones *et al.*, 2014, 2019).⁵ Scallops appear in these averages, since they were popular in Croisilles Harbour before the current temporary prohibition on scallop take in this area. However, it is not clear that recreational scallop fishing used to be particularly important in the Squally Cove area.

23. Aerial surveys of fishing boats show a large number of recreational fishing vessels fish in Queen Charlotte Sound, Croisilles Harbour and some areas in the outer Pelorus Sound. As shown in Map 2, fishing intensity is reasonably low in Squally Cove where the proposed site is located. However, there is relatively intense recreational boat fishing nearby on the northwest side of Croisilles Harbour.

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.

⁵ The national survey is designed to give statistically robust estimates at the scale of Fisheries Management Areas (FMAs), not smaller areas. The survey has been used to give a rough characterisation of recreational fishing patterns within a single survey strata covering Pelorus Sound.



Map 2. Estimated annual intensity of recreational fishing from boats in 2015-16 and actual boat observations from all aerial surveys in the Marlborough Sounds (Davey *et al.*, 2008, Hartill *et al.*, 2017). The location of the proposed site in Squally Cove, Croisilles Harbour is circled in red.

24. ACV fishing must be reported to MPI and include location of fishing and amount of catch. In the eight years from October 2010 to September 2018 no ACV reports were received for Squally Cove. On this basis, Squally Cove is not very important for amateur charter fishing.

25. 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 recreational fishing surveys, the applicant's benthic survey (Davidson, Richards and Scott-Simmonds, 2019), ACV data and anecdotal sources.

Table 1: Recreational fishing methods used and species likely to be caught near and around the area of coastal permit U190782, based on the available information.

	ACV data for Squally Cove	Recreational fishing surveys Tasman Bay and Croisilles Harbour	Other information	My assessment
Methods used	None	<p>Rod/line on anchor, dredge, net fishing, and hand gathering by diving are the main methods used.</p> <p>Marlborough Sounds is a high use recreational fishing area. Croisilles Harbour is moderately high use in places, but not in the close vicinity of the proposed site.</p>	<p>The benthic habitats recorded in the benthic survey (Davidson, Richards and Scott-Simmonds, 2019) support line and net finfish fishing methods.</p> <p>Dredging and diving may occur in the general locality and particularly inshore of the proposed site for scallops.</p> <p>Set netting is possible but usually occurs in shallower bays and estuaries.</p>	<p>Stationary rod/line methods may be used at the site.</p> <p>Set netting, mobile rod/line and long lining is possible.</p> <p>Beach seining is not a suitable method at the proposed site because the water is too deep.</p> <p>It is not likely scallops would be dredged or dived for within the proposed site, given their recent declines in this area.</p>
Species caught	None	<p>In Tasman Bay—snapper (34% of fishing trips), blue cod (30%), kahawai (17%), gurnard (12%), and tarakihi (8%) are the main species caught (Wynne-Jones <i>et al.</i>, 2014, 2019).</p> <p>In Croisilles Harbour the main species targeted are scallops (historically), blue cod, snapper, rock lobster, gurnard, kahawai, blue moki and tarakihi. Species caught were scallops, blue cod, snapper, kahawai, gurnard, barracouta, sea perch, tarakihi, blue moki and oyster (Davey, <i>et al.</i> 2008).</p>	<p>Recreational scallop dredging and diving occurred when the season was open, but this area is only moderately important for this activity, compared to the rest of the Marlborough Sounds (Davidson, Richards and Scott-Simmonds, 2019). There is currently a temporary prohibition on the take of scallops across the top of the South Island.</p>	<p>The absence of hard substrates beneath the proposed marine farm extension makes it unlikely blue cod, rock lobster or other reef species would be caught there.</p> <p>Snapper, kahawai, gurnard and tarakihi, are likely to be the main fish species available for fishing at this site.</p>

Customary Fishing

26. I consider the proposed marine farm is located where there may be customary fishing but it is unlikely to be particularly important for this activity. The main method likely to be used, if any, is stationary rod/line fishing from a boat. The main species caught would be tarakihi, and possibly snapper.

27. Up to eight Iwi may have customary fisheries interests in the area of the proposed marine farm.⁶ There are no mātaihai reserves or temporary rāhui customary management areas in the vicinity of the proposed marine farm. The Whakapuaka taiāpure is not in close vicinity to the farm.

28. There is little quantitative data available on customary catch taken from the area of the proposed marine farm. Fishing locations for customary authorisations are usually only reported by FMA or Quota Management Area (QMA), although more specific sites are sometimes identified. Customary fishers are not required to report catch or fishing locations.

29. From January 1998 to March 2020, 58 customary fishing authorisations were reported to Fisheries New Zealand for Croisilles Harbour and nearby areas of the Marlborough Sounds, including Okiwi Bay and Horseshoe Bay. These were mostly for kina, blue cod, scallops, and pāua. It is not possible to say whether any of these authorisations involved customary fishing in the area of the proposed marine farm but it's reasonable to assume they may have. The available data is therefore used as the best available representative species and methods which would also occur in the proposed farm area.

30. I have assessed likely customary fishing in the proposed site in Table 2 below, using the available information.

⁶ Ngāti Tama, Ngāti Apa, Ngāti Koata, Ngāti Kuia, Ngāti Rārua, Ngāti Toa, Rangitāne, Te Āti Awa

Table 2: Customary fishing methods used and species caught or targeted at the area of the proposed marine farm

Source of information		
Customary authorisations issued for Croisilles Harbour and nearby areas of Marlborough Sounds	Other information	My assessment
Methods used	N/A	<p>Recreational fishers commonly use rod/line on anchor, dredge, net fishing, and hand gathering by diving, so customary fishers may also use these methods.</p> <p>Dredging and diving may occur in the general locality and particularly inshore of the proposed site for scallops.</p> <p>Set netting is possible but usually occurs in shallower bays and estuaries.</p> <p>Longlines may be used.</p>
Species caught or targeted	<p>Blue cod, scallops, pāua, and kina, are the most common species taken with customary authorisations from Croisilles Harbour and the wider Marlborough Sounds area. Mussels, hāpuku, bass, and tarakihi are also popular.</p>	<p>Pāua are not typically found over the soft silty substrate at the proposed site.</p> <p>However, kina were found to be present within the site of the proposed farm (Davidson, Richards and Scott-Simmonds, 2019).</p> <p>This area is only moderately important for recreational scallop dredging and scallop diving, compared to the rest of the Marlborough Sounds (Davidson, Richards and Scott-Simmonds, 2019). Customary fishing may have a similar pattern.</p>
		<p>Stationary rod/line methods may be used at the site.</p> <p>Set netting, mobile rod/line and long lining are possible.</p> <p>Beach seining is not a suitable method at the proposed site because the water is too deep.</p> <p>It is not likely scallops would be dredged or dived for within the proposed site, given their recent declines in this area.</p>
		<p>The absence of hard substrates beneath the proposed marine farm extension makes it unlikely pāua, kina or other reef species would be caught there.</p> <p>Tarakihi is likely to be the main fish species available for fishing at this site. While no authorisations were returned for snapper, it is a popular recreational species, so might be targeted.</p>

Exclusion of fishing

31. The proposed marine farming structures are standard mussel longlines, 13.4 m apart. I consider that any recreational or customary set netting, 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.⁷

32. 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.

Availability of other areas

33. I consider alternative areas around Croisilles Harbour 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 to be small;
- the same species seen over the soft substrate at the proposed site could be found in most areas of Croisilles Harbour, 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 nearby; sufficient alternative areas exist, especially for stationary rod/line fishing.

34. Apart from the Whakapuaka taiāpure in Delaware Bay, the Horoirangi Marine Reserve and Tonga Island Marine Reserve, all the waters of Tasman Bay are available for recreational and customary fishing. Many alternative areas are available for the types of fishing that could occur at the proposed site.

Increased cost of fishing

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

36. 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

37. 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

⁷ 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. Drift fishing is also difficult between closely set mussel lines because of risk of entanglement.

- alternative areas around Croisilles Harbour could absorb any recreational and customary fishing displaced from the proposed site.

Cumulative effects

38. I consider existing aquaculture in Tasman Bay and the Marlborough Sounds may have affected recreational and customary fishing. However, I consider the cumulative effects on recreational and customary fishing, including the aquaculture activities at the proposed site, will not be undue.

39. There is about 200 ha of authorised aquaculture space in Croisilles Harbour, where the proposed site is located. There is also about 4 900 ha of marine farms in Tasman Bay and 3 300 ha in the wider Marlborough Sounds.

40. 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;
- 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 Croisilles Harbour and the wider Marlborough Sounds.

Commercial fishing

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

- a negligible amount of commercial fishing is likely to occur in the area;
- a negligible amount of commercial fishing, if any, is likely to be excluded from the proposed site;
- there are alternate fishing grounds within the quota management areas for any fishing excluded from the proposed site;
- occupation of the proposed site will result in a negligible, 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 negligible and will not cause the cumulative effect on commercial fishing for any fish stock to become undue.

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

Location of the coastal permit area relative to fishing areas

43. I consider the proposed site is located where there is likely to be minimal commercial fishing.

44. Fisheries New Zealand used CatchMapper⁸ to identify the fishing that potentially occurs in the vicinity of the proposed site. The proposed site is surrounded by other marine farms and the likelihood that any commercial fishing occurs that close to existing structures is very small, but Table 3 gives the fishing that may occur within the vicinity.

45. Commercial pot, set net and longline all occur in Croisilles Harbour, catching blue cod, spiny dogfish, rig and school shark. However, some of these fisheries may already have been displaced from the area of the proposed site due to the presence of surrounding marine farms.

46. No hard substrate was observed during surveys of the proposed area. Therefore fisheries for species dependent on such habitat are considered unlikely at this site. Such species would have included blue cod, butterfish, and horse mussel.

47. Most of the potentially affected commercial fisheries in Table 3 are managed as stock units over FMA7⁹ which spans the west coast and top of the South Island from Awarua Point in Fiordland to the Clarence River in Marlborough. The proposed site is very small in relation to the area of the potentially affected fisheries.

⁸ CatchMapper is a spatial database of all commercial fishing events for the eleven years from October 2007 to September 2018 (see Appendix C for more explanation).

⁹ FMAs can be seen here <https://fs.fish.govt.nz/Page.aspx?pk=45&tk=389>

Table 3: Fisheries identified as potentially occurring within the affected footprint of the proposed marine farm and estimated relative amount of the fishstock caught within the footprint. ^{10,11}

All 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	Commercial fishing potentially affected	Likelihood of being affected
Blue cod (BCO7), cod pot	0%	35.5	less than 0.01%	Yes	Could occur here, but probably doesn't as habitat not favourable.
Rig (SPO7), set net	0%	3.1	less than 0.01%	Yes	Might occur here and might be slightly displaced.
School shark(SCH7), longline	0%	0.2	less than 0.01%	Yes	Probably doesn't occur here, as it is a deep water species, but could occur.
Other species (mainly SPD7), set net	60.0%	4.0	less than 0.01%	Yes	Might occur here and might be slightly displaced.

¹⁰Main fishstock refers to the main species caught in the fishing cluster but does not include all species taken by those fishing events.

¹¹ The amount of fishing overlapping with farm footprints is more precisely estimated where fishing location is reported by specific point coordinates rather than general statistical areas. The presence of a fishery within a footprint might be mistaken or the number of days overestimated when the fishing events were not mapped to precise locations. In these cases, other knowledge or available information may be used to confirm whether a fishery might potentially be affected.

Exclusion of fishing

48. I consider the amount of fishing that will be excluded is likely to be minimal. Pot, set net, and longline fishing may occur close by. However, given that marine farms already exist immediately adjacent to the site, the additional obstruction to commercial fishing is likely to be negligible.

49. 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 depending on the type of fishing method. Towed fishing methods have larger footprints, ie, larger areas from which they would be excluded, than static fishing methods. Only the new footprint area where fisheries have not already been excluded by existing authorised aquaculture is included in this assessment.

50. Set net, cod potting and longline fishing, if any occurs, would all be excluded from within the immediate boundaries of the proposed site. Trawling is likely to be excluded from an area up to 250 m from the proposed site, but as stated earlier is unlikely to occur that close given the proximity of existing farms.

Availability of other fishing areas

51. I consider alternative areas are available to absorb any commercial fishing displaced from the proposed site, if there is 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 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

52. 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

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

54. Fisheries New Zealand estimated that on average about 1 kg of fish per year were possibly caught from the footprint of the proposed farm over the 11 most recent years (from the fisheries assessed as potentially affected in Table 3).

Cumulative effects

55. I consider existing aquaculture in the Marlborough Sounds has affected commercial fishing. However, I consider the cumulative effects on commercial fishing, including the aquaculture activities at the proposed marine farm, will not be undue.

56. There is about 200 ha of authorised aquaculture space in Croisilles Harbour where the proposed site is located. There is also about 4 900 ha of marine farms in Tasman Bay that make up about 33% of the 14 900 ha of aquaculture in FMA 7.

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

- for any fish stocks potentially affected by the aquaculture activities at the proposed site, the cumulative effect has previously been assessed as a maximum of approximately 1.4% effect on any fishery (carpet shark), and not undue; and
- the amount of additional catch that might have been displaced at the proposed site is considered to be negligible.

AQUACULTURE DECISION

58. I am satisfied – based on all relevant information available to me – the activities proposed for the area authorised by coastal permit U190782 will not have an undue adverse effect on:

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

59. Accordingly, my decision is a determination for coastal permit U190782 with regard to:

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

60. The area of the determination on recreational, customary and commercial fishing is 1.9 ha within the following coordinates (NZTM2000):

Point	Easting	Northing
1	1658490.690	5453429.835
2	1658337.834	5453374.750
3	1658287.000	5453451.000
4	1658437.000	5453551.000

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



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

Dated 8 May 2020

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APPENDIX A: SITE AND STRUCTURES MAP

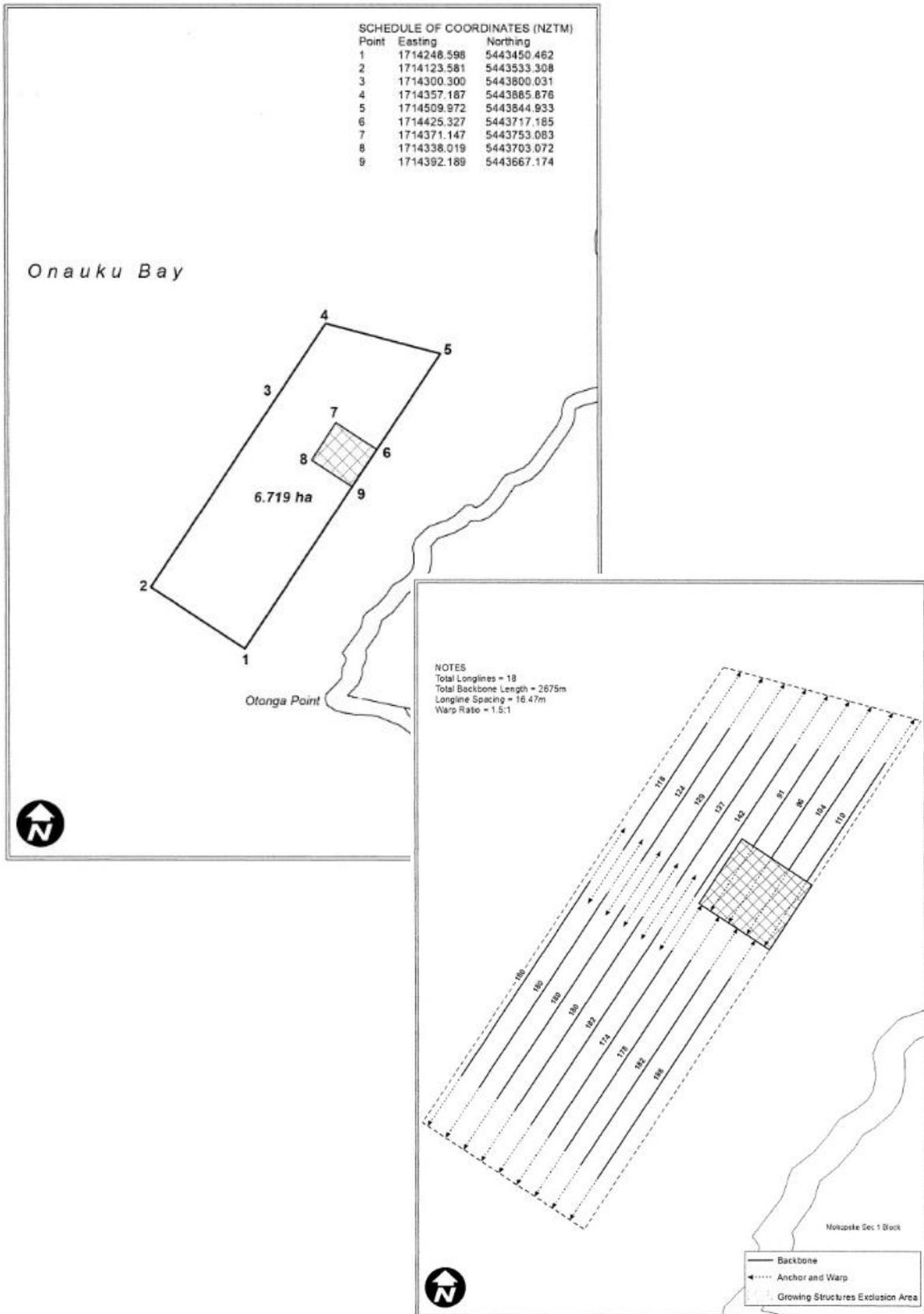


Figure 1. Copies of site map and structures plan showing location of new space and structures taken from Marlborough District Council coastal permit decision paper for U190782.

APPENDIX B: ADDITIONAL STATUTORY CONTEXT

1. Section 186E(3) of the Fisheries Act¹² 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 U180982.
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).

¹² 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.

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.*”

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 1998* (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: 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.¹³ 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 is reported to the statistical area level, there is increased uncertainty as to 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.

¹³ 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>