



24 April 2015

AQUACULTURE DECISION REPORT — AKAROA SALMON NEW ZEALAND LIMITED, COASTAL PERMIT CRC155086, TITOKI BAY, BANKS PENINSULA

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* (**RMA91**). 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 CRC155086 will not have an undue adverse effect on:

- recreational fishing — for the reasons set out in this report and summarised in paragraph 49;
- customary fishing — for the reasons set out in this report and summarised in paragraph 72;
- commercial fishing — for the reasons set out in this report and summarised in paragraph 87.

AQUACULTURE DECISION REQUEST DETAILS

Regional Council:	Environment Canterbury (ECan)
Date of Request:	5 March 2015
Coastal Permit Applicant:	Akaroa Salmon New Zealand Limited
Location of marine farm site:	Titoki Bay, Akaroa Harbour, Banks Peninsula
Size of farm:	10.196 hectares (ha) of new space, surrounding marine farm licence 540 (Li 540). Coastal permit CRC155086 encompasses the new space and Li 540
Species to be farmed:	Quinnat salmon (<i>Oncorhynchus tshawytscha</i>), sockeye salmon (<i>Oncorhynchus nerka</i>), Atlantic salmon (<i>Salmo salar</i>), green-lipped mussel (<i>Perna canaliculus</i>), blue mussel (<i>Mytilus galloprovincialis</i>), greenbone (<i>Odax pullus</i>), rock lobster (<i>Jasus edwardsii</i>), snapper (<i>Pagrus auratus</i>), blackfoot pua (<i>Haliotis iris</i>) and yellowfoot pua (<i>Haliotis australis</i>)
Farm structures:	Navigation markers and subsurface structures associated with a mooring system

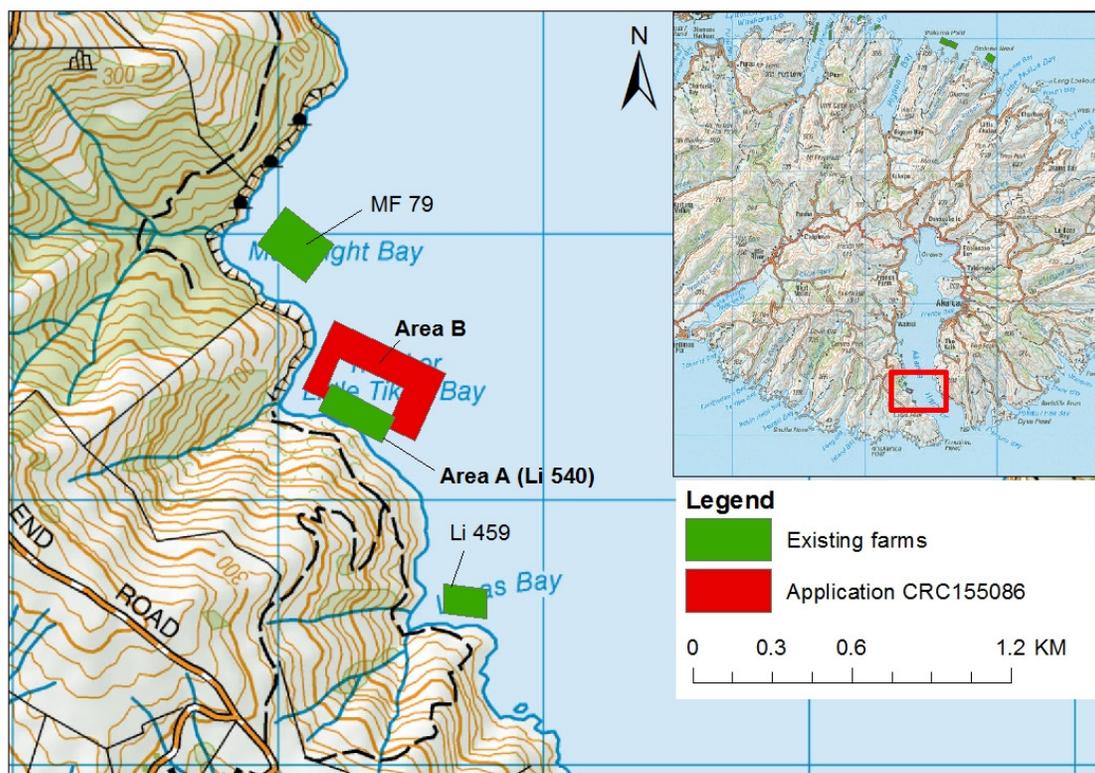
¹ Acting under authority delegated to me by the Director-General of the Ministry for Primary Industries (**MPI**) in accordance with section 41 of the *State Sector Act 1988*.

Location

3 Coastal permit CRC155086 applies to two areas; Areas A and B (existing marine farm Li 540 and the new space respectively) of a salmon farming site in Titoki Bay, a small bay in Akaroa Harbour, Banks Peninsula (Map 1). Akaroa Harbour is within Fisheries Management Area 3 (FMA3) (Map 2).

4 Area B of coastal permit CRC155086 is within the Akaroa Harbour Taiāpure. Area A is not within the taiāpure because marine farms existing at the time the *Fisheries (Akaroa Harbour Taiapure) Order 2006* was made were specifically excluded based on agreement between the taiāpure applicants and the marine farmers.²

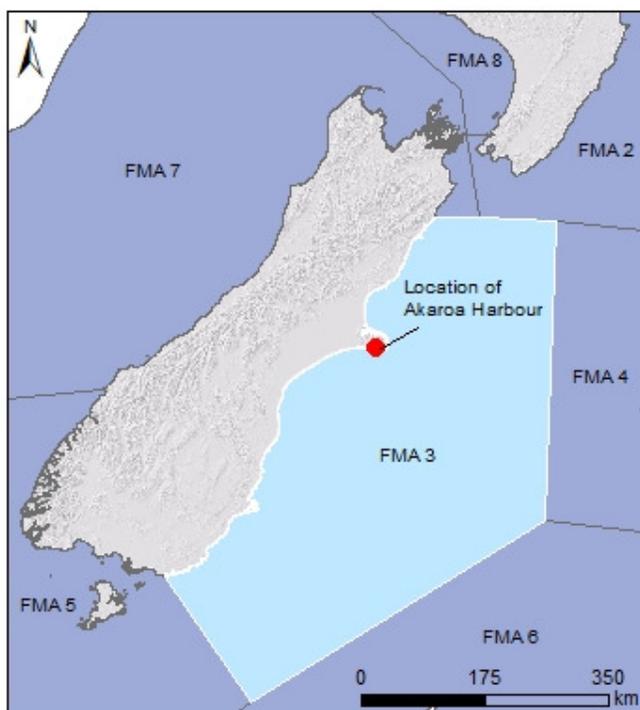
5 Aside from Area A (Li 540), the closest existing marine farms to Area B are marine farming permit 79 (MF 79) to the northwest and marine farm licence 459 (Li 459) so the southeast (Map 1).



Map 1³: Location of the new area authorised by coastal permit CRC155086 in Titoki Bay, Akaroa Harbour, Banks Peninsula (MPI, 2015). Note: the location of Area A shown in the map is incorrect as it sits further offshore and is surrounded by Area B.

² The agreement was formulated so that the existing marine farm areas, and some commercial fishing activities, would not be subject to policies and rules established with the taiāpure.

³ Disclaimer: Maps 1-5 and all information accompanying them are intended to be used as guides only, in conjunction with other data sources and methods, and should only be used for the purpose for which they were 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. The maps are subject to Crown copyright administered by Ministry for Primary Industries (MPI), and are licensed for general use under the Creative Commons Attribution 3.0 New Zealand licence (<http://creativecommons.org/licenses/by/3.0/nz/>). Crown copyright ©. NZ topo data. Sourced from Land Information New Zealand under CC-By. <http://creativecommons.org/licenses/by/3.0/nz/>



Map 2: Location of Akaroa Harbour within FMA3.

6 Area B of coastal permit CRC155086 is roughly 30 m from shore at its closest point (the western edge) and 330 m from shore (along the northern edge).

7 The coastal permit application states that the benthic substrate in the landward side of Area B is cobbles or pebbles with broken shells and fine sand, while silt and clay is within seaward side.⁴ The water depth described in the application is 10-12 m on the landward side of Area B and around 20 m on the seaward side.

Structures

8 Area B of coastal permit CRC141982 will only be used for navigation markers and subsurface structures associated with a mooring system. No fish farming cages will occupy the site.

9 There are already mooring structures within Area B. The mooring structures described in the coastal permit application are mooring lines and mooring blocks that are distributed around the periphery of Area B (Figure 1).

⁴ Application for Resource Consent Under Section 127 of the Resource Management Act 1991, Akaroa Salmon New Zealand Limited, 23 January 2015

Plan View of the Current Mooring System

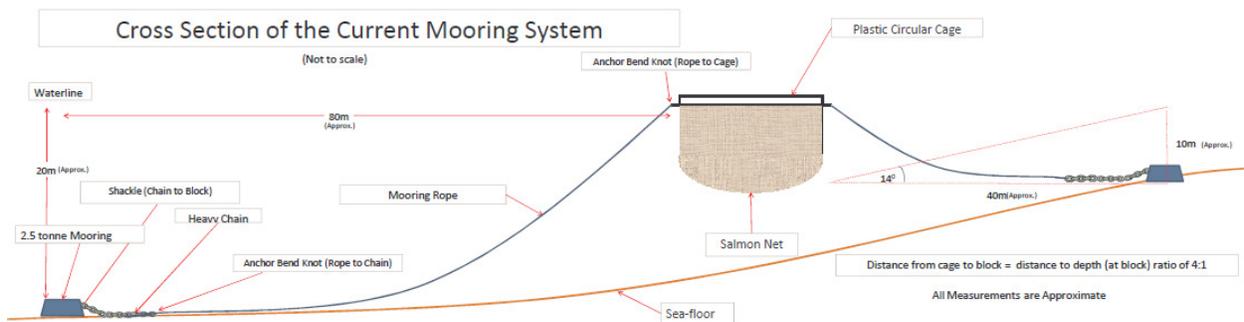
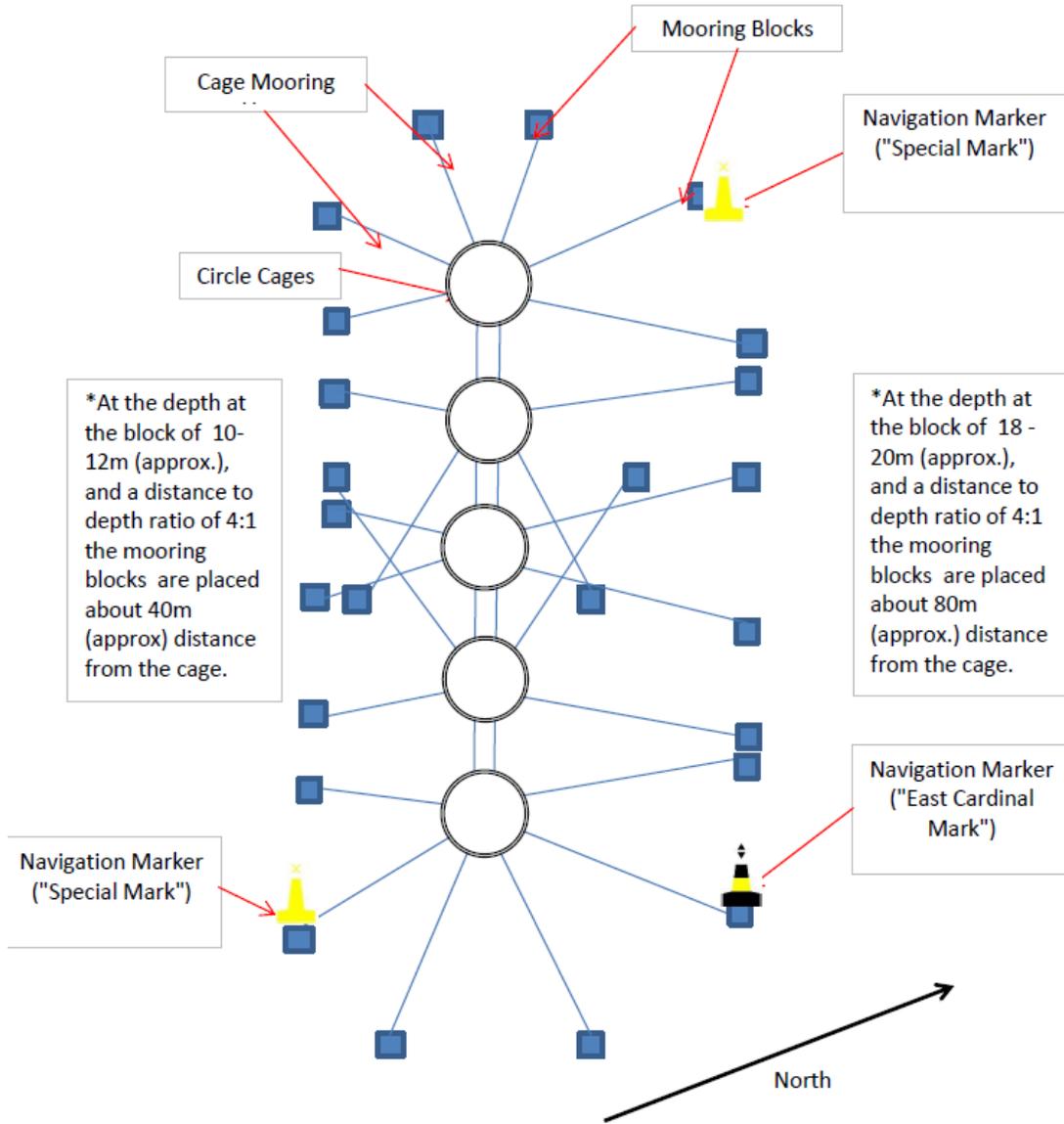


Figure 1: Structures diagrams for Area B of coastal permit CRC155086.

Input from stakeholders

10 ECan processed the application for coastal permit CRC155086 as a non-notified application and requested an aquaculture decision on granting the application on 5 March 2015.

11 MPI publicised the coastal permit application on its website on 3 March 2015. This gave persons and organisations potentially affected by the proposed aquaculture activities an opportunity to provide information on their fishing activities in Area B. The closing date for submissions to MPI was 31 March 2015.

12 MPI received one submission from Roger Beattie in response to the application. Mr Beattie submitted:

- *“there is commercial fishing within Akaroa Harbour — we commercially harvest giant kelp [bladder kelp] under the QMS”;*
- *“as the nearest marine farm to Akaroa Salmon they have not contacted us”;* and
- *“the application casts into doubt the MPI view that the area of marine farm cages will not expand”.*

STATUTORY CONTEXT

13 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).

14 A ‘*determination*’ is a decision that I am satisfied that the aquaculture activities authorised by the coastal permit will not have an undue adverse effect on fishing. A ‘*reservation*’ is a decision that I am not satisfied that the aquaculture activities authorised by the coastal permit will not have an undue adverse effect on fishing.

15 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).

16 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.

17 Section 186E(3) of the Fisheries Act⁵ 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:

⁵ 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.

- 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.

18 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.

19 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 areas 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 areas 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 areas that the coastal permit relates to will lead to the exclusion of fishing;
- (d) the extent to which fishing for a species in the areas that the coastal permit relates to can be carried out in other area;
- (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.

20 Section 186GB(2) of the Fisheries Act specifies that if a pre-request aquaculture agreement has been registered under section 186ZH in relation to the 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 CRC155086.

21 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.

22 For the purpose of my decision under section 186E, I consider a commercial fishery is a fish stock delineated by a fisheries management area (**FMA**) or quota management area (**QMA**). However, because recreational and customary fishers are not bound to restrict their fishing activity by FMA or QMA, I consider the relevant customary and recreational fishery are as I have described in the assessment below in my consideration of section 186GB(1)(a)—*Location of the coastal areas relative to fishing area*.

23 Section 186C of the Fisheries Act does not define “cumulative effect” beyond what is provided in section 186GB(1)(f) that the effect includes any structures authorised before the introduction of any relevant stock to the QMS. For the purpose of my decision under section 186E, “cumulative effect” on commercial fishing includes the total effect of all authorised aquaculture activities within the relevant QMA or FMA. For customary and recreational fisheries, the relevant areas for considering “cumulative effects” are as I have described in the assessment below in my consideration of section 186GB(1)(a) and (f).

24 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.

25 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.

ASSESSMENT

26 When making my aquaculture decision under section 186E of the Fisheries Act, I have considered all relevant information before me. The following sections of this paper provide an assessment of the effects of the proposed aquaculture activities on recreational, customary and commercial fishing against the matters set out above. For the purpose of my assessment, customary fishing differs from recreational fishing if it is undertaken outside of the recreational limits provided in the Amateur Regulations and is instead authorised by a customary authorisation.

27 This assessment relates to the 10.196 ha of new marine farming space authorised by coastal permit CRC155086.

Recreational fishing

Location of the coastal permit area relative to fishing areas

28 I consider that Area B of coastal permit CRC155086 is located where there is likely to be a relatively low intensity of recreational fishing, primarily by rod and line fishing from private boats, mainly for blue cod, flat fish and sea perch.

29 Available information on recreational fishing activity at Akaroa Harbour comprises:

- information provided in submissions;
- MPI information (eg, institutional knowledge); and
- fishing surveys.

30 While no submissions were received from recreational fishers, Akaroa Harbour is a known recreational fishing area so some fishing may occur at Area B.

31 Between December 2007 and February 2009, Källqvist *et al* (2015) used trip records and intercept surveys to survey fishers who regularly fish in the Akaroa Harbour Taiāpure. Källqvist *et al* (2015) found that most recreational fishing trips now occur at the harbour entrance and in area immediately outside, as opposed to the inner harbour, as was the case in a previous 1997 survey and prior to the establishment of the taiāpure in 2006.⁶ Roughly 2% of trip record participants and 6% of intercept survey participants fished the survey zone that encompasses Area B.

32 Källqvist *et al* (2015) found that rod and line fishing from private boats was the most common method of fishing (>55%) reported in both surveys. Set netting was the main method used on 32% of trip records and some fishers also used diving. Few fishers used longlines or undertook spearfishing. I note that since the surveys by Källqvist *et al* (2015) set netting has been prohibited around much of Banks Peninsula, including Area B.⁷ There no method prohibitions in place at Area B due to the Akaroa Harbour Taiāpure.

33 Källqvist *et al* (2015) found that the species most commonly caught within the taiāpure were blue cod, flatfish, rock lobster and sea perch. Of these, I consider it unlikely that rock lobster is caught in Area B given this species is typically associated with rock or reef habitat rather than the cobbles and silt beneath Area B. Aside from a prohibition on the take of sea horses due to the Akaroa Harbour Taiāpure, there no species prohibitions in place at Area B.

34 Based on the available information, I consider it likely that rod and line fishing from a private boat is the main recreational fishing method used at Area B and that blue cod, flatfish and sea perch are the species most likely to be taken. However, because Area B is adjacent to existing salmon farming structures and no information suggests these areas are particularly important for recreational fishing, I consider it likely that fishing intensity at Area B is relatively low.

Exclusion of fishing

35 I consider the aquaculture activities proposed for Area B of coastal permit CRC155086 will exclude only a small amount of recreational fishing.

36 It is likely that mobile rod and line fishing from boats (ie, drift fishing, trolling) and longlining (if it occurs) would be excluded by the mooring lines and mooring blocks in Area B.⁸ However, anchored rod and line fishing could continue within Area B and I consider that the species most likely caught at Area B (ie, blue cod, flatfish and sea perch) could still be taken using anchored fishing between the proposed mooring structures.

⁶ Bell (1998) conducted a recreational fishing survey of Akaroa Harbour in 1997.

⁷ Regulation 137 of the Fisheries (Amateur Fishing) Regulations 2013.

⁸ It is common for fishers to fish within mussel farms but anecdotal information from recreational fishers (FMA7 Recreational Fishing Forum, 27 May 2013) suggests that spaces between long lines of mussel farms in Marlborough Sounds are too narrow for drift fishing, trolling, set netting and long lining without risk of entanglement.

Availability of other fishing areas

37 I consider there are other areas available for recreational fishing in Akaroa Harbour and elsewhere at Banks Peninsula.

38 The only year round area closures for recreational fishing around Banks Peninsula are the Pahutu (Flea Bay) and Akaroa marine reserves, but some year round method and species restrictions apply. Set netting is prohibited along the east coast of the South Island (excluding the Banks Peninsula seasonal flounder areas which include the upper reaches of Akaroa Harbour, Port Levy, Pigeon Bay and Lyttelton Harbour). Taking of skate, stingray, paua and seaweed (excluding Undaria) is prohibited within the Rapaki Bay Mātaitai Reserve in Lyttelton Harbour.⁹ Taking of cockles is restricted in the Koukourarata Mātaitai Reserve.¹⁰ Taking of toheroa is prohibited nationwide.¹¹ And as noted, taking seahorses from the Akaroa Taiāpure is also prohibited, as is taking shellfish from Onawe Peninsula within the taiāpure.¹² There are also seasonal restrictions on the take of scallops and dredge oysters in the wider area of FMA3.¹³

39 However, I consider none of the prohibitions or restrictions noted relate to any species likely to be targeted by recreational fishers within Area B. Additionally, no information suggests Area B is especially productive or important for a particular species. I therefore consider that there are other fishing areas available to recreational fishers who may fish in Area B of coastal permit CRC155086.

Increased cost of fishing

40 I consider the aquaculture activities proposed for Area B of coastal permit CRC155086 will result in a minimal, if any, increase in the cost of recreational fishing.

41 Taking into account the availability of alternative areas for recreational fishing, I consider there is a high likelihood that any recreational fishing excluded from Area B could be carried out nearby with minimal additional cost.

Likely effect on fishing

42 I consider the likely effect on recreational fishing catch from the aquaculture activities proposed in Area B of coastal permit CRC155086 will be small.

43 MPI cannot estimate an average annual recreational catch, or proportion of recreational catch, likely to be affected by the proposed aquaculture activities. There is limited quantitative data available on recreational catch taken from Akaroa Harbour or the wider area of Banks Peninsula. This means MPI can only make an assessment of the effect of the proposed aquaculture activities on recreational fishing based on qualitative information.

44 As noted, I consider it likely that Area B of coastal permit CRC155086 is located where recreational fishing intensity is relatively low. And as noted, there is likely to be other areas available for fishers who may fish Area B. For these reasons I consider the proposed aquaculture activities will only have a small effect on recreational fishing, if any.

⁹ Take of skate, stingray, paua and seaweed (excluding Undaria) from the Rapaki Bay Mātaitai Reserve is prohibited under *Fisheries (Rapaki Bay Mātaitai Reserve Bylaws) Notice 2000 (No. F165)*.

¹⁰ Take of cockles is restricted in the Koukourarata Mātaitai Reserve is restricted under *Fisheries (Koukourarata Mātaitai Reserve Bylaws) Notice 2006 (No. F370)*

¹¹ Take of toheroa is prohibited under the Amateur Regulations.

¹² Take of seahorses and shellfish from the Akaroa Taiāpure is prohibited under the Amateur Regulations.

¹³ Scallop and oyster take is seasonally restricted for recreational fishing under the Amateur Regulations.

Cumulative effects

45 I consider effects from the aquaculture activities proposed for Area B of coastal permit CRC155086, added to the effects of existing aquaculture at Banks Peninsula, will not have an undue cumulative effect on recreational fishing.

46 There is no quantitative catch data available to assess the cumulative effects of authorised aquaculture activities on recreational fishing catch. As noted, recreational fishers are not required to report catch or fishing locations. MPI can therefore only assess cumulative effects on recreational fishing based on the amount of aquaculture already authorised in the relevant recreational fishery and the likely importance of Area B for recreational fishing.

47 There is around 180 ha of authorised aquaculture space at Banks Peninsula, most of which is on the Peninsula's northern side. However, I consider the existing level of authorised aquaculture space has not had an undue adverse effect on recreational fishing because not all the authorised aquaculture space is popular fishing area and some fishing (eg, anchored rod and line fishing) can occur within most existing marine farms, which are typically shellfish farms.

48 As noted, I also consider that Area B of coastal permit CRC155086 would have a small effect on recreational fishing catch. I subsequently consider that the new aquaculture space authorised by coastal permit CRC155086, added to the existing aquaculture at Banks Peninsula, would not have an undue cumulative effect on recreational fishing.

Conclusion on effects on recreational fishing

49 I am satisfied the aquaculture activities proposed within Area B of coastal permit CRC155086 will not have an undue adverse effect on recreational fishing because:

- no information suggests Area B is especially important for recreational fishing;
- the proposed aquaculture activities will exclude only a small amount of recreational fishing;
- there are other areas available for recreational fishing within Akaroa Harbour and elsewhere at Banks Peninsula;
- occupation of Area B will result in a minimal, if any, increase in the cost of recreational fishing;
- the effect on recreational fishing catch will be small; and
- the cumulative effect on recreational fishing would not be undue.

Customary fishing

The location of the coastal permit area relative to fishing areas

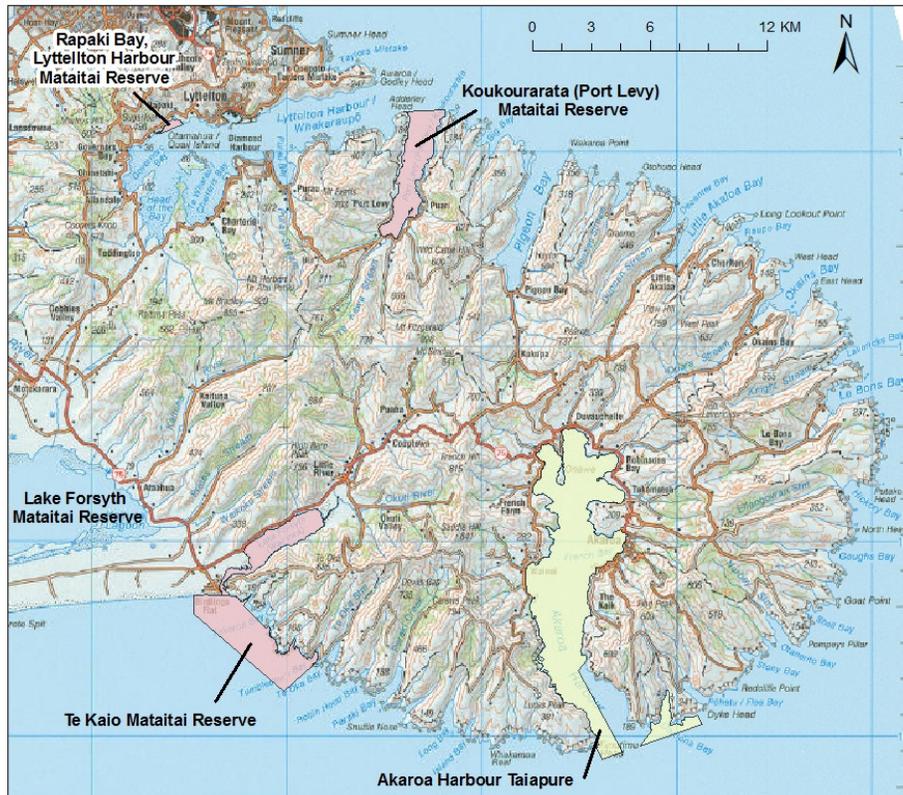
50 I consider that Area B of coastal permit CRC155086 is located where there is likely to be a relatively low intensity of customary fishing, mainly for blue cod, moki, rig, flatfish, yellow-eyed mullet, elephant fish, gurnard and spiny dogfish and green-lipped mussels, probably by rod and line fishing or diving.

51 Available information on customary fishing is primarily qualitative information from submissions and quantitative catch information from customary authorisations. There is no information on customary catch at the scale of small marine farms. Fishing locations for customary

authorisations only need to be reported at the FMA or QMA scale, although more specific sites are sometimes identified.

52 In addition to the Akaroa Harbour Taiāpure, there are four mātaimitai reserves at Banks Peninsula (Map 3). An application has also been made for a taiāpure-local fishery in Whakaraupo/Lyttelton Harbour. As noted, the Akaroa Harbour Taiāpure encompasses Area B of coastal permit CRC155086.

53 Banks Peninsula falls within Ngai Tahu area/rohe. I consider that Ngai Tahu have customary fishing interests in Area B of coastal permit CRC155086.



Map 3: Customary management areas at Banks Peninsula.

54 No submitters provided information on the importance of Area B for customary fishing. However, customary authorisations¹⁴ issued between January 2009 and October 2013 contain information on species targeted at Banks Peninsula. Methods are not typically reported.

55 Customary authorisations show that species targeted by customary fishers in Banks Peninsula include rock lobster, green-lipped mussels, butterflyfish, moki, flatfish, paua, blue cod, hapuku/bass, kina, pipi, yellow-eyed mullet, bull kelp, gurnard, spiny dogfish, rig, cats eye, cockles, elephant fish and tuatua. Of these, I consider it likely that blue cod, moki, rig, flatfish, yellow-eyed mullet, elephant fish, gurnard and spiny dogfish and green-lipped mussels are the main species potentially fished by customary fishers in Area B. I consider it unlikely that rock lobster, kina, paua, butterflyfish or bull kelp are taken because these are not typically associated with cobble and silt habitat like that at Area B. It is unlikely that hapuku/bass are taken because they are usually caught in areas

¹⁴ Issued under the South Island Regulations.

deeper than Area B. It is also unlikely that cats eye, tuatua, pipi and cockles are taken because these are usually taken in intertidal/nearshore areas.

56 As noted, there is no information on customary fishing methods used but I consider the species caught in Area B are most likely to be taken by rod and line fishing or diving. This is because these are common fishing methods used by recreational fishers for the listed species and are likely to also be used by customary fishers.

57 However, no information suggests that Area B is especially important for customary fishing and because Area B is adjacent to existing salmon farming structures I consider it likely that customary fishing intensity at Area B is relatively low.

Exclusion of fishing

58 I consider the aquaculture activities proposed for Area B of coastal permit CRC155086 will exclude only a small amount of customary fishing.

59 I consider that diving for green-lipped mussels would not be excluded by the mooring structures in Area B. And, like anchored rod and line fishing by recreational fishers, anchored rod and line fishing by customary fishers could continue within Area B.

60 It is likely that mobile rod and line fishing from boats (ie, drift fishing, trolling) by customary fishers would be excluded.¹⁵ However, I consider that the finfish species most likely targeted by customary fishers in Area B (ie, blue cod, moki, rig, flatfish, yellow-eyed mullet, elephant fish, gurnard and spiny dogfish) could all be taken by anchored fishing between the proposed mooring structures as an alternative method.

Availability of other fishing areas

61 I consider there are other areas available for customary fishing in Akaroa Harbour and elsewhere at Banks Peninsula.

62 Apart from the Pahutu (Flea Bay) and Akaroa marine reserves, all of Banks Peninsula is available for customary fishing under the South Island Regulations. Customary fishers would still be able to fish unimpeded within most water of Banks Peninsula. And, as noted, the proposed aquaculture activities will only exclude a small amount of customary fishing. I therefore consider there are other customary fishing areas within Akaroa Harbour and the wider Banks Peninsula area that could accommodate any customary fishing displaced from Area B of coastal permit CRC155086.

Increased cost of fishing

63 I consider the aquaculture activities proposed for Area B of coastal permit CRC155086 will result in a minimal, if any, increase in the cost of customary fishing.

64 Taking into account the availability of alternative areas for customary fishing, I consider there is a high likelihood that any customary fishing excluded from Area B of coastal permit CRC155086 could be carried out nearby with minimal additional cost.

¹⁵ It is common for fishers to fish within mussel farms but anecdotal information from recreational fishers (FMA7 Recreational Fishing Forum, 27 May 2013) suggests that spaces between long lines of mussel farms in Marlborough Sounds are too narrow for drift fishing, trolling, set netting and long lining without risk of entanglement.

Likely effect on fishing

65 I consider the likely effect on customary fishing catch from the aquaculture activities proposed in Area B of coastal permit CRC155086 will be small.

66 As noted, there is no available quantitative data on customary catch taken from Area B of coastal permit CRC155086. MPI is therefore unable to estimate an average annual customary catch, or proportion of customary catch, likely to be affected by the proposed aquaculture activities. MPI can only make an assessment of the effect of the proposed aquaculture activities on customary fishing based on qualitative information.

67 As noted, I consider it likely that Area B of coastal permit CRC155086 is located where customary fishing intensity is relatively low. And as noted, there is likely to be other areas available for fishers who may fish Area B. For these reasons I consider the proposed aquaculture activities will only have a small effect on customary fishing, if any.

Cumulative effects

68 I consider effects from the aquaculture activities proposed for Area B of coastal permit CRC155086, added to the effects of existing aquaculture at Banks Peninsula, will not have an undue cumulative effect on customary fishing.

69 There is no quantitative catch data available to MPI to assess the cumulative effect of authorised aquaculture activities on customary fishing. As noted, site-specific fishing locations are not typically reported with customary authorisations. MPI can therefore only make an assessment of the cumulative effect of the proposed aquaculture activities on customary fishing based on the likely importance of Area B for customary fishing and the amount of aquaculture activities already authorised in the relevant customary fishery.

70 As noted, there is around 180 ha of authorised aquaculture space at Banks Peninsula. But, I consider the existing level of authorised aquaculture space has not had an undue adverse effect on customary fishing because not all the space is popular fishing area and some fishing (eg, anchored rod and line fishing) can occur within most existing marine farms, which are typically shellfish farms.

71 As noted, I also consider that Area B of coastal permit CRC155086 would have a small effect on customary fishing catch. I subsequently consider that the new aquaculture space in Area B, added to the existing aquaculture at Banks Peninsula, would not have an undue cumulative effect on customary fishing.

Conclusion on effects on customary fishing

72 I am satisfied the aquaculture activities proposed within Area B of coastal permit CRC155086 will not have an undue adverse effect on customary fishing because:

- no information suggests Area B is especially important for customary fishing;
- the proposed aquaculture activities will exclude only a small amount of customary fishing;
- there are other areas available for customary within Akaroa Harbour and elsewhere at Banks Peninsula;
- occupation of Area B will result in a minimal, if any, increase in the cost of customary fishing;

- the effect on customary fishing catch will be small; and
- the total cumulative effect on customary fishing would not be undue.

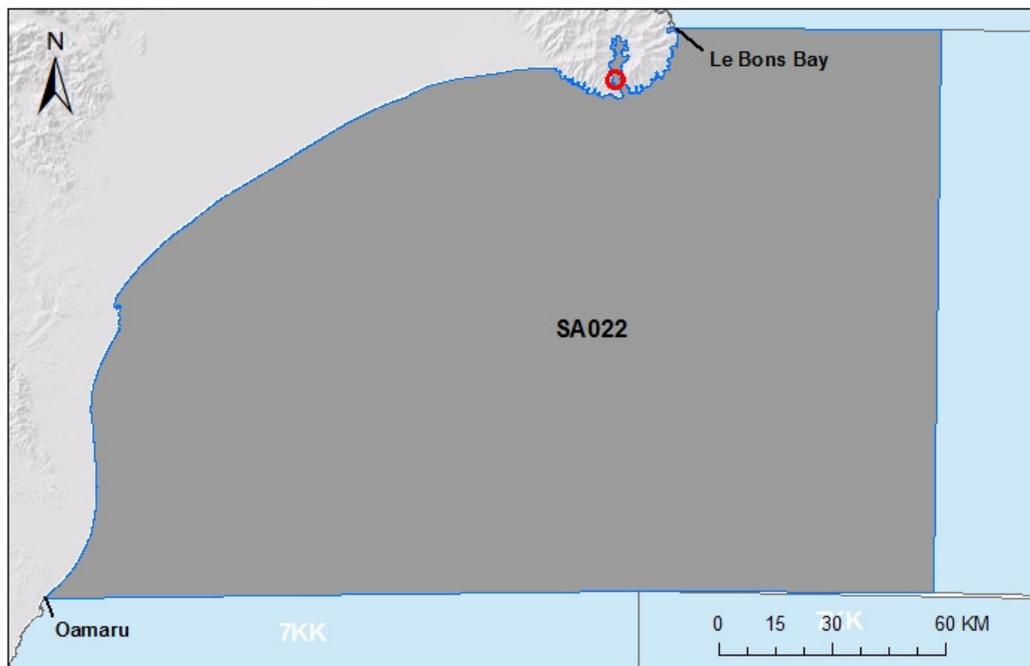
Commercial fishing

The location of the coastal permit area relative to fishing areas

73 I consider that Area B of coastal permit CRC155086 is unlikely to be located where any commercial fishing occurs.

74 As noted, Roger Beattie submitted that he commercially harvests giant kelp in Akaroa Harbour. Mr Beattie did not state where giant kelp harvesting occurs. However, I consider it unlikely that giant kelp is harvested from Area B because it is unlikely to provide suitable habitat (ie, rock, reef or boulders) for bladder kelp.

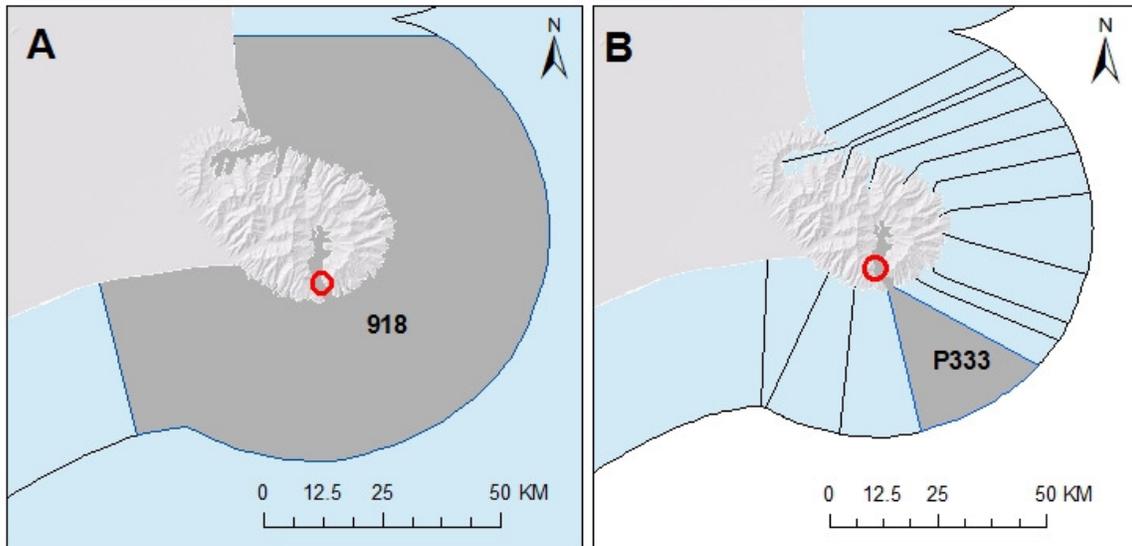
75 The only other information available on commercial fishing is reported catch data. Historically, most commercial fishing has been reported by statistical area. The area of coastal permit CRC155086 is located in statistical area 022 (SA022), which extends from Le Bons Bay on Banks Peninsula, to just north of Oamaru (29,329 km²) (Map 4).



Map 4: Location of SA022. The red circle marks the approximate location of Area B of coastal permit CRC155086.¹⁶

76 Scallops, oysters, rock lobster and paua are reported by species-specific statistical areas rather than by general statistical area. Area B of coastal permit CRC155086 falls within rock lobster statistical area 918 and paua statistical area P333 (Maps 5A and 5B) but is not within any statistical areas for scallops or oysters. No commercial fishing for scallops or oysters occurs at Banks Peninsula.

¹⁶ Hillshade imagery produced by Geographx. Sourced from www.koordinates.com under CC-By. <http://creativecommons.org/licenses/by/3.0/nz/>



Map 5: Species-specific statistical areas that encompass Area B of coastal permit CRC155086. The red circle marks the approximate location of Area B. A – Rock lobster statistical area 918. B – Paua statistical area P333.¹⁷

77 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 methods¹⁸ have had to report the start position of each fishing event by latitude and longitude to within 1 minute, which equates to around 1 nautical mile (**nm**). Since 2006/07, start positions for netting methods¹⁹ used by vessels over 6 m long, have had to report to within 2 nm.²⁰ Using this fine scale position data, MPI has modelled and mapped fishing intensity for different segments of fishing, characterised by a type of fishing gear and the main species caught.

78 The location of fishing by vessels less than 6 m long within SA022 is unknown. However, based on information from fisheries officers and Maritime New Zealand, MPI 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. The fishing by vessels less than 6 m is included in the maps of fine scale position data, which is the best information available from fisheries statistics. Although, knowledge about species and information from commercial fishers can also help to determine whether specific types of fishing are likely to occur in an area.

79 Table 1 below lists the main fishery segments known to occur in SA022 and gives the relative amounts of trawl, line and net fishing that report by start position. The higher the proportion of vessels reporting by start position, the greater confidence in the location of fishing.

80 Table 1 also summarises my assessment of which fishery segments are likely to overlap the area of coastal permit CRC155086. As shown, I consider it unlikely that any fishery segments with an average of five or more days fishing per year overlap Area B. Mapped fishing effort shows that only the mixed species lining fishery segment could potentially overlap Area B and this only had an average of two days fishing per year between 2007/08 to 2011/12.

¹⁷ Hillshade imagery produced by Geographx. Sourced from www.koordinates.com under CC-By. <http://creativecommons.org/licenses/by/3.0/nz/>

¹⁸ Bottom long lining, surface long lining or trot lines

¹⁹ Set-netting or drift-netting

²⁰ *Fisheries (Reporting) Regulations 2001*.

Table 1: Fishery segments that are included in the commercial fishing assessment: Summary of the main fishery segments, defined by fishing method and main fishstock caught or fishing depth range, in relevant statistical areas from 2007/08 to 2011/12.

Fishery segment (Main fishstock or depth range and main fishing method) ^A	Statistical area	% reported by position	Average annual no. fishing days ^B	% of main fishstock caught in statistical area	Included in assessment?	Rationale for excluding fishery from assessment ^C
Barracouta (BAR1), Trawl	022	100%	618	69%	No	Trawling is prohibited at Area B
Inshore Mix <80m depth, Trawl	022	100%	594	N/A	No	Trawling is prohibited at Area B
Red Cod (RCO3), Trawl	022	100%	450	49%	No	Trawling is prohibited at Area B
Rough Skate (RSK3), Trawl	022	100%	386	30%	No	Trawling is prohibited at Area B
Gurnard (GUR3), Trawl	022	100%	349	43%	No	Trawling is prohibited at Area B
Elephant Fish (ELE3), Trawl	022	100%	333	71%	No	Trawling is prohibited at Area B
Flatfish (FLA3), Set Net	022	50%	318	10%	No	Set netting is prohibited at Area B
Elephant Fish (ELE3), Set Net	022	100%	244	71%	No	Set netting is prohibited at Area B
Flatfish (FLA3), Trawl	022	100%	213	10%	No	Trawling is prohibited at Area B
Hoki (HOK1), Trawl	022	100%	184	3%	No	Trawling is prohibited at Area B
Spiny Dogfish (SPD3), Trawl	022	100%	157	43%	No	Trawling is prohibited at Area B
Tarakihi (TAR3), Trawl	022	100%	148	40%	No	Trawling is prohibited at Area B
Rig (SPO3), Set Net	022	100%	147	24%	No	Set netting is prohibited at Area B
Silver Warehou (SWA3), Trawl	022	100%	134	47%	No	Trawling is prohibited at Area B
Rock Lobster (CRA5), Lobster Pot	918	0%	113	1%	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 Area B
Mixed Fishery, Danish Seine	022	100%	58	N/A	No	Danish seining is prohibited at Area B
Arrow Squid (SQU1T&J), Trawl	022	100%	56	6%	No	Trawling is prohibited at Area B

Table 1 continued:

Fishery segment (Main fishstock or depth range and main fishing method) ^A	Statistical area	% reported by position	Average annual no. fishing days ^B	% of main fishstock caught in statistical area	Included in assessment?	Rationale for excluding fishery from assessment ^C
Yellow Eyed Mullet (YEM3), Set Net	022	93%	44	0%	No	Set netting is prohibited at Area B
Inshore Mix >80m <300m, Trawl	022	100%	43	N/A	No	Trawling is prohibited at Area B
Hapuku & Bass (HPB3), Dahn Line	022	21%	42	23%	No	These species are typically caught in areas deeper than Area B are unlikely to occur at commercially viable quantities at Area B
School shark (SCH3), Set Net	022	100%	40	27%	No	Set netting is prohibited at Area B
Oreo (OEO3A), Trawl	022	100%	37	20%	No	Trawling is prohibited at Area B
Arrow Squid (SQU1T&J), Jigging	022	100%	56	6%	No	Based on current fine scale fishing data, this fishery does not occur at Area B
Stargazer (STA3), Trawl	022	100%	24	27%	No	Trawling is prohibited at Area B
Gurnard (GUR3), Danish Seine	022	0%	21	43%	No	Danish seining is prohibited at Area B
Mixed Fishery, Set Net	022	98%	21	N/A	No	Set netting is prohibited at Area B
Seaweed (SEO3), Hand Gathering	022	0%	20	Unavailable	No	Area B is unlikely to contain habitat that supports commercially viable quantities of seaweed
Mixed fishery, Midwater Trawl	022	100%	16	N/A	No	Trawling is prohibited at Area B
Tarakihi (TAR3), Danish Seine	022	0%	16	40%	No	Danish seining is prohibited at Area B
Elephant Fish (ELE3), Danish Seine	022	0%	15	71%	No	Danish seining is prohibited at Area B
Blue Warehou (WAR3), Trawl	022	100%	12	7%	No	Trawling is prohibited at Area B
Red Cod (RCO3), Danish Seine	022	0%	10	49%	No	Danish seining is prohibited at Area B

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

^B Excludes segments with less than five days fishing per year.

^C Unless otherwise stated, fishing is permitted and MPI has no information indicating it does not occur in vicinity of the coastal permit area.

Exclusion of fishing

81 I consider the aquaculture activities proposed for Area B of coastal permit CRC155086 will not exclude any commercial fishing. As shown in Table 2, it is unlikely that any commercial fishing occurs in Area B of coastal permit CRC155086.

Availability of other fishing areas

82 I consider that any commercial fishing displaced from Area B of coastal permit CRC155086 could occur in other areas in SA022 and FMA3.

83 Few commercial fishing methods are permitted in Akaroa Harbour. Trolling, purse seining, lampara netting, box or teichi netting and, as noted in Table 6, trawling, set netting and Danish seining is prohibited in the Area B. There are also commercial closures or restrictions in other parts of SA022, or FMA3 (including various species, method, time period, fishing gear, or a combination of these criteria).²¹ However, aside from Area B of coastal permit CRC155086, the permitted methods (ie, lining) could occur elsewhere in Akaroa Harbour and other parts of SA022 and the relevant QMAs. And, as noted, it is unlikely that any commercial fishing occurs in Area B.

Increased cost of fishing

84 I consider that the aquaculture activities proposed for Area B of coastal permit CRC155086 will not increase the cost of commercial fishing. As noted, it is unlikely that any commercial fishing occurs in Area B of coastal permit CRC155086.

Likely effect on fishing

85 I consider it unlikely that the aquaculture activities proposed in Area B of coastal permit CRC155086 will have an adverse effect on any commercial fishery. As noted, it is unlikely that any commercial fishing occurs in Area B.

Cumulative effects

86 I consider the cumulative effect on commercial fishing from authorised aquaculture activities in FMA3 is not unduly adverse and that occupation of Area B of coastal permit CRC155086 will not add to the cumulative effect. As noted, it is unlikely that any commercial fishing occurs in Area B.

Conclusion on effects on commercial fishing

87 I am satisfied the aquaculture activities proposed within Area B of coastal permit CRC155086 will not have an undue adverse effect on commercial fishing because:

- no information suggests Area B is used for commercial fishing;
- the proposed aquaculture activities are unlikely to exclude any commercial fishing;
- there are other areas available for commercial fishing within Akaroa Harbour, SA022 and the relevant QMAs;
- occupation of Area B will not increase the cost of commercial fishing;
- Area B is unlikely to have an adverse effect on commercial fishing catch; and
- Area B is unlikely to cumulatively affect any commercial fishing in FMA3.

²¹ Fisheries (South-East Area Commercial Fishing) Regulations 1986.

Aquaculture decision

88 I am satisfied – based on all relevant information available to me – the activities proposed for coastal permit area CRC155086 will not have an undue adverse effect on:

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

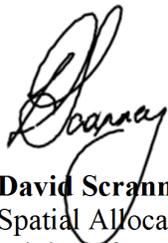
89 Accordingly, my decision is a determination for coastal permit CRC155086 with regard to:

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

90 The area of the determination on recreational, customary and commercial fishing is 10.196 ha comprising two areas with the following coordinates (NZTM2000):

<u>Point</u>	<u>Easting</u>	<u>Northing</u>
1	1593227.43	5143534.45
2	1593469.79	5143423.59
3	1593424.01	5143323.31
4	1593181.39	5143434.44
5	1593205.04	5143678.00
6	1593628.68	5143482.57
7	1593512.31	5143228.46
8	1593086.85	5143420.02

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



David Scranney
Spatial Allocations Manager
Ministry for Primary Industries

Dated this 24th April 2015

References

Bell, J. D. (1998). Results from the Akaroa Harbour Recreational Fishing Survey 1997, Final research report for the Ministry of Fisheries Project REC9705.

Källqvist, M.L.A., Pirker, J. G and Marsden I. D. (2015). Assessment of Recreational Fishing with the Akaroa Harbour Taiāpure Management Area, South Island Te Waipounamu, New Zealand, *New Zealand Natural Sciences* (2015) 40:1-15.