



15 February 2018

## AQUACULTURE DECISION REPORT — NEW ZEALAND KING SALMON LIMITED, COASTAL PERMIT U150081, TE PANGU BAY, TORY CHANNEL

### PURPOSE

1 This report sets out my aquaculture decision (as the relevant decision maker<sup>1</sup>) 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 U150081 will not have an undue adverse effect on:

- recreational fishing — for the reasons set out in this report and summarised in paragraph 56;
- customary fishing — for the reasons set out in this report and summarised in paragraph 71;
- commercial fishing — for the reasons set out in this report and summarised in paragraph 100.

### AQUACULTURE DECISION REQUEST DETAILS

Regional Council:	Marlborough District Council ( <b>MDC</b> )
Date of Request:	27 July 2016
Coastal Permit Applicant:	The New Zealand King Salmon Co. Limited ( <b>King Salmon</b> )
Location of marine farm sites:	Te Pangu Bay, Tory Channel
Size of farm:	21.092 hectares (ha), being 7.34 ha of new space and 13.752 ha of existing space currently authorised by marine farm licence 484 ( <b>Li 484</b> ) and marine farming permit 466 ( <b>MF466</b> ).
Species to be farmed:	Chinook salmon ( <i>Oncorhynchus tshawytscha</i> ).
Farm structures:	Standard moorings, anchors, ropes, droppers, net pens and barges, floats and lights and other necessary navigational aids associated with farming salmon.

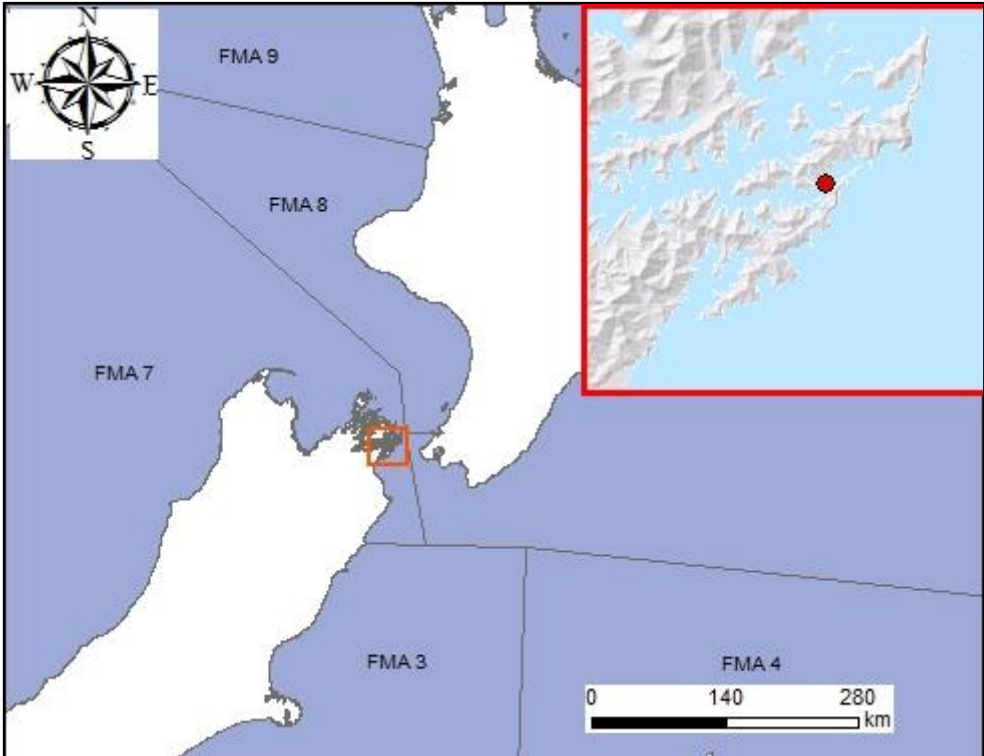
#### **Location and structures**

3 Coastal permit U150081 applies to an area of Te Pangu Bay in Tory Channel. Te Pangu Bay is within Fisheries Management Area 7 (**FMA7**) (Map 1). The proposed coastal permit

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<sup>1</sup> 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*.

replaces the 13.752 ha authorised by Li 484 and MF466, and extends the authorised area seaward by 7.34 ha.

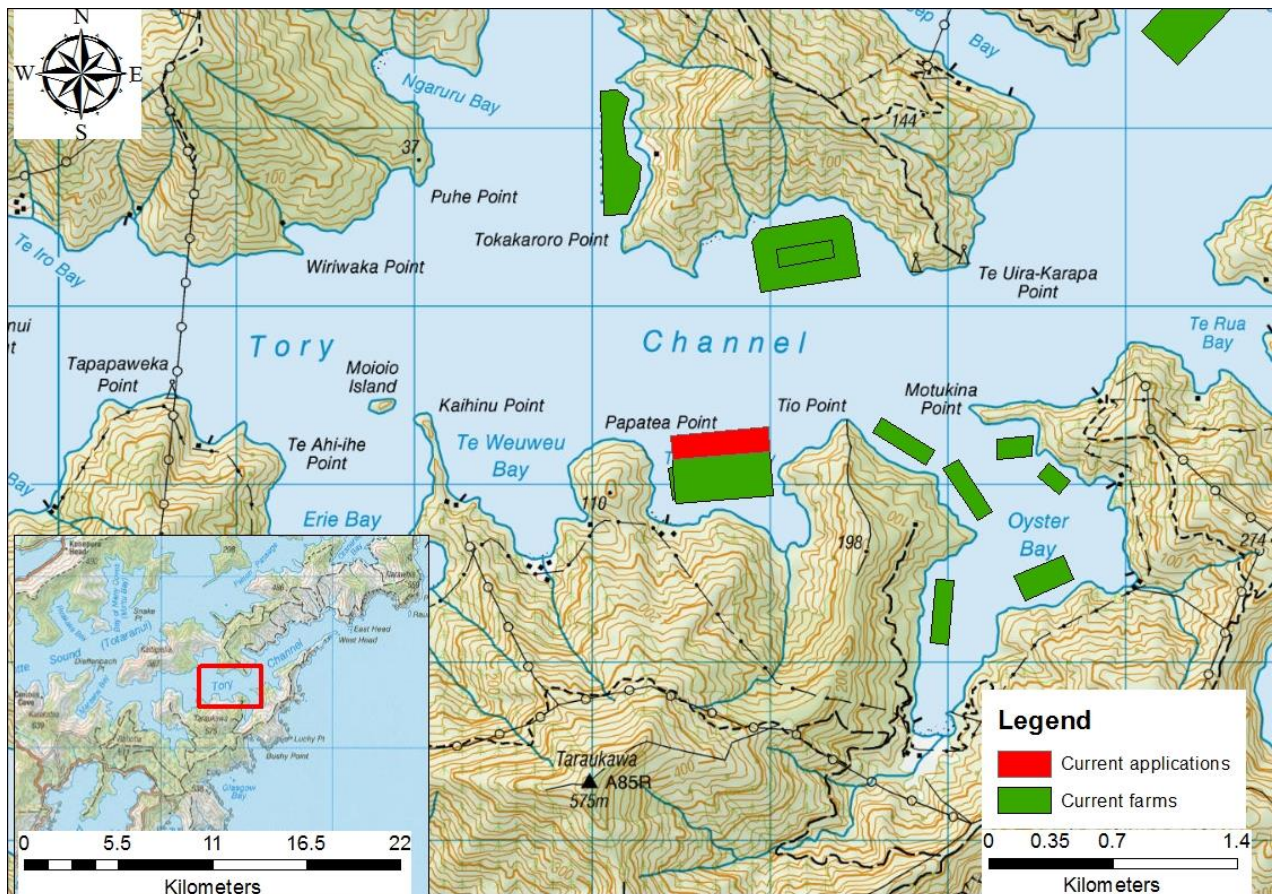


**Map 1<sup>2</sup>: Location of the area of coastal permit U150081 in Te Pangu Bay, Tory Channel within FMA7.**

4 Aside from the existing marine farm, there are eight other existing marine farms, six in Oyster Bay to the east of the current site, and two farms on the opposite side of Tory Channel and north of Te Pangu Bay, at Ngaruru Bay and east of Takakaroro Point (Map 2).

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<sup>2</sup> Maps (Maps 1-5) in this document are intended to be used as guides only, in conjunction with other data sources and methods, and should only be used for the purpose for which they have been developed. Although the information on these maps has been prepared with care and in good faith, no guarantee is given that the information is complete, accurate or up-to-date.



**Map 2: Location of marine farms adjacent to coastal permit U150081 (shown in red).**

5 Of the 21.092 ha total area, only 9.027 ha will be actively used for net pens and mooring / anchoring structures. Within this 9.027 ha area an area of up to 1.50 ha of net pens is permitted by proposed coastal permit U150081, which may be moved between two locations within the consented area (see Figure 1), which includes the 1.5 ha area occupied by either the landward or seaward pens, as well as the ‘transit’ area between the landward and seaward pens. The remaining 12.065 ha (ie 21.092 less 9.027) will be the area outside the pens and transit area, and will not be used, except for anchoring devices.

6 U150081 will extend closer to the entrance to the bay, extending predominantly north, but not into Tory Channel itself.

7 The current salmon farm pens are twelve 25 x 25m and six 30 x 30m steel pens, a total of 1.29ha of the 1.5 ha allowed. No increase in structure area is proposed or allowed by coastal permit U150081, though the area that these structures can be placed is proposed to be increased. Due to the nature of salmon farming pens, fishing will be totally excluded from the area of

surface structures. This is unlike mussel farming where some types of fishing can occur between the area of structures.

8 Proposed coastal permit U150081 allows for the movement of salmon pens to an alternative position<sup>3</sup> within the 21.092ha site, but the applicants *may* do this once only during the term of the consent (expiring 1 February 2036).

8 The benthic substrate beneath MF246 site is described by Taylor *et al.* (2015) as ‘soft sediment habitat’ being sand and mud bottom . Water depth at the site is 30 to 35m deep and currents are classed as ‘high’ with an average velocity of 15cm/s.

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<sup>3</sup> The two positions are referred to as the ‘inshore net pen area’ and ‘seaward net pen area’

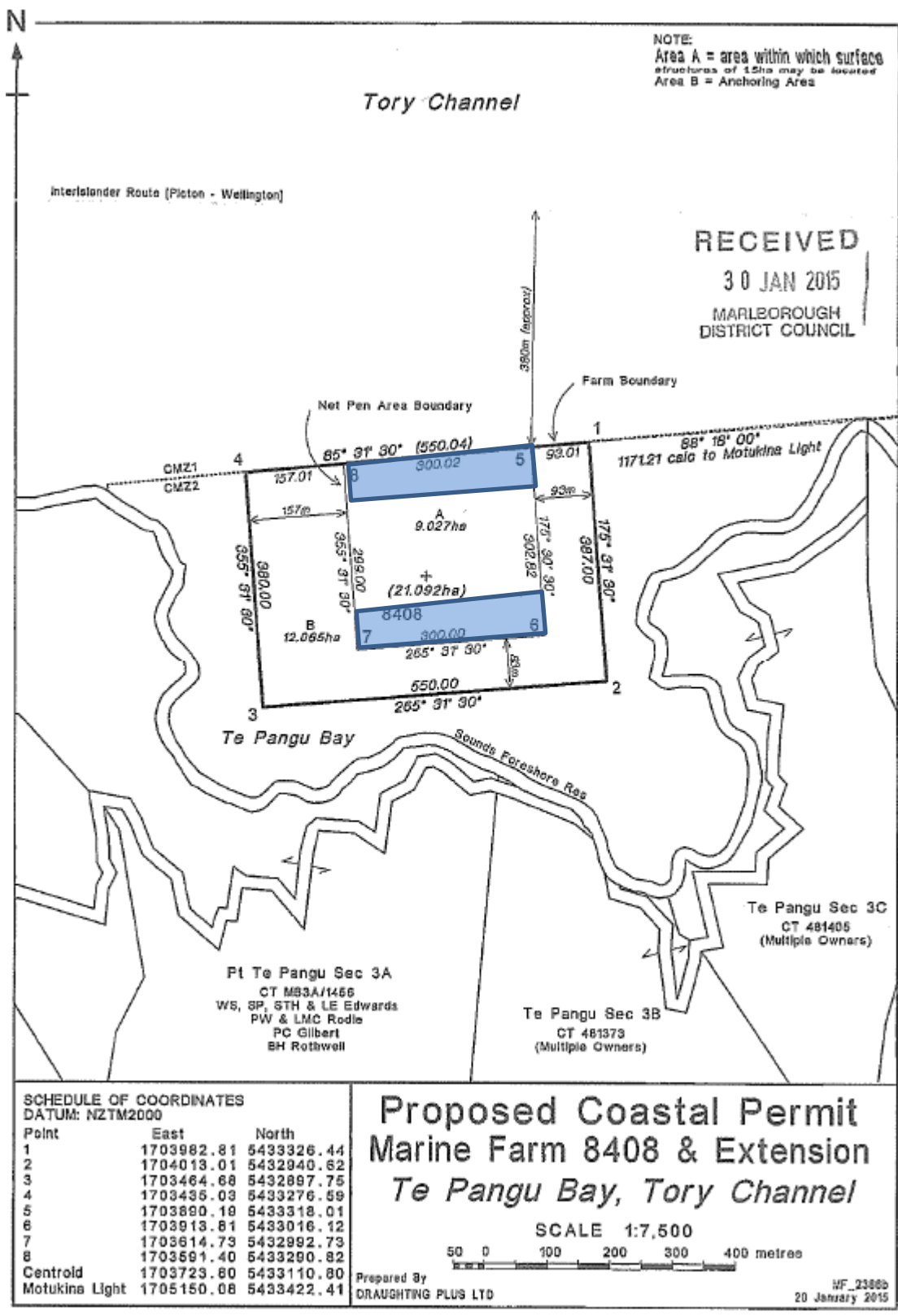


Figure 1: Structures diagram for proposed coastal permit U150081. The 9.027 ha 'active' portion (contains the 1.5 ha seaward and 1.5 ha landward net pens, as well as the 'transit' area), and the 12.065 ha 'inactive' portion, all within the 21.092 ha site.

## ***Input from stakeholders***

9 The Ministry for Primary Industries (**MPI**) publicised the coastal permit application on its website on 24 February 2015. This gave persons and organisations potentially affected by the proposed aquaculture activities an opportunity to provide information on their fishing activities in the extension site.

10 The submissions closing date was 23 March 2015. MPI did not receive any submissions.

## **STATUTORY CONTEXT**

11 Section 186E(1) of the Fisheries Act requires me to make a determination or reservation (or one or more of them in relation to different parts of the area to which the request relates), within 20 working days after receiving a request for an aquaculture decision from a regional council,

12 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.

13 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).

14 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.

15 When making an aquaculture decision, Section 186E(3) of the Fisheries Act<sup>4</sup> requires me 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.

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<sup>4</sup>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.



16 Section 186F of the Fisheries Act specifies an order of processing that must be followed in making aquaculture decisions. However 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.

17 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 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.

18 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 U150081.

19 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.

20 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.*

21 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).

22 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.

23 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.



## **ASSESSMENT**

24 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.

25 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.

26 This assessment relates to the 7.34 ha of new marine farming space authorised by coastal permit U150081.

### **Recreational fishing**

#### ***Location of the coastal permit area relative to fishing areas***

36 I consider the area of the proposed site is located where a moderate amount of recreational fishing occurs. Methods likely to be used include mobile rod/line from a private boat, diving, some dredging, set netting and spearing. The main species likely to be caught are sea perch, terakihi, kingfish, kahawai and snapper.

37 A moderate amount of Amateur Charter Vessel<sup>5</sup> (ACV) fishing has been reported that may overlap Te Pangu Bay. This moderate level is consistent in ACV fishing reported for the wider Tory Channel.

38 Aerial survey results<sup>6</sup> suggest there is a moderate amount of recreational fishing at the proposed site. The diary survey published in 2008 by Davey et al recorded 9% of fishing trips in the Marlborough Sounds occurring in the survey zone of Tory Channel, which includes Te Pangu Bay.

39 As noted above, no submitters provided information on the importance of the coastal permit area for recreational fishing. Te Pangu Bay is only accessible by boat. This limits the amount of fishing likely to occur in the area.

40 Table 1 below summarises my assessment of the main methods used and species targeted and caught by recreational fishers at the coastal permit area based on available information.

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

<sup>6</sup> Recreational fishing survey of the Marlborough Sounds (Davey *et al*, 2008)

**Table 1: Current recreational fishing methods likely used, and species caught and targeted at the area of the proposed coastal permit U150081 based on the available information.**

	Source of Information			My assessment
	Davey <i>et al.</i> (2008) results for the survey zone including Tory Channel	ACV data for Tory channel	Other information	
<b>Methods used</b>	Rod/line from boat (69% of trips), diving (13%), drag netting (9.5%), spear, longline & dredge (all <2% of trips)	Hand line, anchored and drift fishing, dredging, potting, diving and some set netting.	The muddy and relatively flat seabed in the proposed coastal permit area is suitable for most of the methods identified as occurring in the Davey <i>et al.</i> (2008) survey zone containing Te Pangu Bay  No species targeted by dredging were seen in the Cawthron 2015 survey.	Stationary and mobile rod/line methods, longlining and a small amount of diving, set netting, dredging and potting may be used at the proposed coastal permit area.
<b>Species caught<sup>7</sup></b>	Blue cod (244), sea perch (88), cray (76), terakihi (70), scallops (68), kingfish (60), moki (45), kahawai (25) mussel (20)	Blue cod, terakihi, sea perch, crayfish, snapper, kahawai and scallops were caught and retained		Sea perch, terakihi, kingfish, kahawai, snapper are likely the most commonly caught species in the proposed coastal permit area.  However, it is unlikely that blue cod, moki and crayfish could be caught at the proposed coastal permit area due to the mud and silt bottom.

<sup>7</sup> The number of species caught and kept at Tory Channel, the survey zone covering the proposed site U150081, over the 12 month survey period for the Davey survey (2008). For the ACV data the species are listed in order of catch numbers for the 2012to 2017 fishing years.

### ***Exclusion of fishing***

41 I consider the aquaculture activities in proposed coastal permit area U150081 will exclude only a small amount of recreational fishing. The exclusion of recreational fishing will be predominantly limited to the area of the net pens, with some exclusion for set netting and longlining, and mobile fishing methods within the anchoring and warp sites.

42 Te Pangu Bay is not an area which is frequently transited. The primary access point to and from the coastal marine area is the Te Pangu Lodge jetty, which is well clear of the salmon farm.

43 Anchored rod/line fishing and potting, could continue within the wider coastal permit area but these methods would be completely excluded from the area of the net pens, and partially excluded from areas with anchor lines within the 7.34ha of the proposed site. Mobile rod/line fishing from boats (ie, drift fishing, trolling) and longlining may be excluded from the entire proposed site (not just the net pens). It may be feasible to spear fish underneath the net pens, however this may be impractical due to visibility being restricted from debris. The area of complete exclusion is relatively small (1.5 ha).

### ***Availability of other fishing areas***

44 In addition to the coastal permit area not occupied by salmon net pens and associated structures, I consider there are other areas available for recreational fishing in Te Pangu Bay and elsewhere at Tory Channel, as well as the greater Queen Charlotte Sound area.

45 There are no specific regulations that apply to recreational fishing in Te Pangu Bay or Tory Channel under the Fisheries (Amateur Fishing Regulations) 2016. For Queen Charlotte Sound, Marlborough Sounds and the wider FMA 7 area there are some year-round method and species restrictions, in particular:

- (a) minimum length for blue cod apply in the Marlborough Sounds ;
- (b) blue cod must be possessed in whole or gutted state in the Marlborough Sounds;
- (c) a closed season may apply for blue cod apply in the Marlborough Sounds;
- (d) set netting is prohibited along the east coast of the South Island between Clarence Point and Cape Jackson;;
- (e) finfish may not be taken using a line with more than two hooks; and
- (f) take of toheroa is prohibited nationwide.<sup>8</sup>

46 There are also seasonal restrictions on the take of scallops and dredge oysters in the wider area of FMA7.<sup>9</sup> Set netting may also restrict the take of species likely to be targeted by recreational fishers within the area of coastal permit U150081. However, no information suggests the coastal permit area 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 the area of coastal permit U150081.

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<sup>8</sup> Take of toheroa is prohibited under the Amateur Regulations.

<sup>9</sup> Scallop and oyster take is seasonally restricted for recreational fishing under the Amateur Regulations.

### ***Increased cost of fishing***

47 I consider the aquaculture activities proposed for the area of coastal permit U150081 will result in a minimal, if any, increase in the cost of recreational fishing.

48 Taking into account the availability of alternative areas for recreational fishing, I consider there is a high likelihood that any recreational fishing excluded from the area of coastal permit U150081 could be carried out nearby with minimal additional cost.

### ***Likely effect on fishing***

49 I consider the likely effect on recreational fishing catch from the aquaculture activities proposed in the area of coastal permit U150081 will be small.

50 MPI is unable to estimate an average annual recreational catch, or proportion of recreational catch, likely to be affected by the proposed aquaculture activities due to a paucity of information. There is little quantitative data available on recreational catch taken from Te Pangu Bay or the wider area of Tory Channel. This means MPI can only make an assessment of the effect of the proposed aquaculture activities on recreational fishing based on qualitative information.

51 As noted, I consider it likely that the area of coastal permit U150081 is located where recreational fishing intensity is relatively low. In addition, as noted, there is likely to be other areas available for fishers who may fish the coastal permit area. For these reasons I consider the proposed aquaculture activities will only have a small effect on recreational fishing, if any.

### ***Cumulative effects***

52 I consider effects from the aquaculture activities proposed for the area of coastal permit U150081, added to the effects of existing aquaculture in Queen Charlotte Sound and the wider Marlborough Sounds, will not have an undue cumulative effect on recreational fishing.

53 There is no quantitative catch data available to assess the cumulative effects of authorised aquaculture activities on recreational fishing catch. As discussed previously, 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 the coastal permit area for recreational fishing.

54 There is 90 ha of existing authorised aquaculture space at Tory Channel, most of which is on the Channel's northern side, with 3700 ha of existing aquaculture in the Marlborough Sounds. 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 inside the existing marine farms.

55 As noted above, I also consider that occupation of the area of coastal permit U150081 would have a small effect on recreational fishing catch. I subsequently consider that the new aquaculture space authorised by coastal permit U150081, added to the existing aquaculture in the Marlborough Sounds would not have an undue cumulative effect on recreational fishing.

### ***Conclusion on effects on recreational fishing***

56 I am satisfied the aquaculture activities proposed within the area of coastal permit U150081 will not have an undue adverse effect on recreational fishing because:

- no information suggests the coastal permit area 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 Te Pangu Bay, elsewhere at Tory Channel and the wider Queen Charlotte Sound / Marlborough Sounds;
- occupation of the coastal permit area will result in a minimal, if any, increase in the cost of recreational fishing;
- the effect on recreational fishing catch will be small; and
- the additional adverse effect of the coastal permit area on recreational fishing is only small and will not cause the cumulative effect on recreational fishing to become undue.

## **Customary fishing**

### ***The location of the coastal permit area relative to fishing areas***

57 I consider the area of coastal permit U150081 is located where there is a relatively low intensity of customary fishing for a variety of finfish and some shellfish, primarily by rod/handline fishing long lining and hand gathering. No information suggests the coastal permit area is especially important for customary fishing.

58 Available information on customary fishing is primarily qualitative information from submissions and quantitative catch information from customary authorisations. There is limited information on customary catch at the scale of small marine farms, however. Fishing locations for customary authorisations only need to be reported at the FMA or QMA scale, although more specific sites are sometimes identified.

59 No submitters provided information to MPI on the importance of the coastal permit area for customary fishing. No taiāpure or mātaītai reserves are established in the Tory Channel area. King Salmon provided a copy of their draft application to each of the iwi that may have an interest in the area.

60 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 mātaītai 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.<sup>10</sup>

61 Although customary authorisations<sup>11</sup> contain information on species targeted, methods are not typically reported.

62 Tables 2 below summarises my assessment of the main methods used and species targeted and caught by customary fishers at the area of coastal permit U150081, based on the available information. Species targeted and caught may be rig, kahawai and terakihi.

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<sup>10</sup> 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.

<sup>11</sup> Issued under the South Island Regulations.

**Table 2: Customary fishing methods likely used and species likely caught or targeted in the Marlborough Sounds, which may overlap the area of proposed coastal permit U150081<sup>12</sup>**

	Source of information		
	Customary authorisations for Tory Channel	Other information	My assessment
<b>Methods used</b>	N/A	Recreational fishers commonly use stationary and mobile rod/line methods, longlining and some dredging diving and set netting, and spearfishing. Customary fishers may also use these methods.	Rod/line from boat, some longlining and some dredging, diving and set netting and some spearfishing are the most common methods for recreational fishers and may also be used by customary fishers in the proposed coastal permit area.
<b>Species caught or targeted</b>	Scallops, oysters, paua, rig, kahawai, blue cod, rock lobster, kina, butterfish, flatfish, blue moki, mussels, hapuku, school shark, rig, hapuku, bluenose, cockle, crayfish, flatfish, oysters.	Paua, crayfish, kina, butterfish, blue moki or green-lipped mussels are not typically found over the reef and algae-free substrate at the proposed coastal permit area.  The proposed coastal permit area is likely to be too shallow for hapuku fishing.	Rig, kahawai and terakihi likely to be the most commonly caught species at the proposed coastal permit area. It is unlikely that blue cod, moki and crayfish could be caught at the proposed coastal permit area due to the mud and silt bottom.

### ***Exclusion of fishing***

60 I consider the aquaculture activities proposed for the area of coastal permit U150081 will exclude only a small amount of customary fishing.

61 Te Pangu Bay is not an area which is frequently transited. The primary access point to and from the coastal marine area is the Te Pangu Lodge jetty, which is well clear of the salmon farm.

62 Anchored rod/line fishing and potting, could continue within the wider coastal permit area but these methods would be completely excluded from the area of the net pens, and partially excluded from areas with anchor lines within the 7.34ha of the proposed site. Mobile rod/line fishing from boats (ie, drift fishing, trolling), set netting and longlining may be excluded from the entire proposed site (not just the net pens). It may be feasible to spear fish underneath the net pens, however this may be impractical due to visibility being restricted from debris. The area of complete exclusion is relatively small (1.5 ha).

### ***Availability of other fishing areas***

62 In addition to the coastal permit area not occupied by net pens and supporting structures, I consider there are other areas available for customary fishing in Te Pangu Bay and elsewhere in Tory Channel and the wider Queen Charlotte Sound. Furthermore, the proposed aquaculture activities will only exclude a small amount of customary fishing. I therefore consider there are other customary fishing areas within Te Pangu Bay, Tory Channel and the wider Queen Charlotte Sound area that could accommodate any customary fishing displaced from the area of coastal permit U150081.

<sup>12</sup> From January 2009 to April 2016 no customary authorisations with site-specific information were issued for Te Pangu Bay. Customary authorisations for the Tory Channel and wider Marlborough Sounds were issued for a large number of species.

### ***Increased cost of fishing***

63 I consider the aquaculture activities proposed for the area of coastal permit U150081 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 the area of coastal permit U150081 could be carried out nearby with minimal, or no, additional cost.

### ***Likely effect on fishing***

65 I consider the likely effect on customary fishing from the aquaculture activities proposed in the area of coastal permit U150081 will be small.

66 As noted above, there is no available quantitative data on customary catch taken from the area of coastal permit U150081 or Te Pangu Bay. 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 above, I consider it likely that the area of coastal permit U150081 is located where customary fishing intensity is relatively low, and there is likely to be other areas available for fishers who may fish the coastal permit area. 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 the area of coastal permit U150081, added to the effects of existing aquaculture in the Marlborough Sounds, 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 discussed above, 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 the coastal permit area for customary fishing and the amount of aquaculture activities already authorised in the relevant customary fishery.

70 As discussed earlier, I consider that the area of coastal permit U150081 would have a small effect on customary fishing. 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 the existing marine farms. I therefore consider that the new aquaculture space authorised by coastal permit U150081, added to existing aquaculture activities in the Marlborough Sounds, would not have an undue cumulative effect on customary fishing.

### ***Conclusion on effects on customary fishing***

71 I am satisfied the aquaculture activities proposed within the area of coastal permit U150081 will not have an undue adverse effect on customary fishing because:

- no information suggests the coastal permit area 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 Tory Channel and the wider Marlborough Sounds.
- occupation of the coastal permit area will result in a minimal, if any, increase in the cost of customary fishing;
- the effect on customary fishing will be small; and
- the additional adverse effect of the coastal permit area on customary fishing is only small and will not cause the cumulative effect on recreational fishing to become undue.

## Commercial fishing

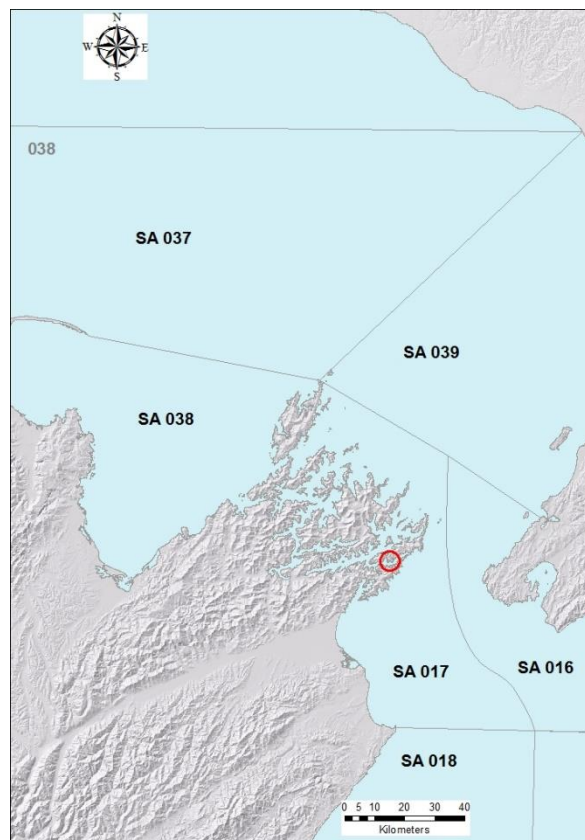
### *The location of the coastal permit area relative to fishing areas*

72 I consider the area of coastal permit U150081 is located where only a small amount of commercial fishing may occur. This is largely due to trawling, Danish seining and set netting being prohibited in Te Pangu Bay under the Fisheries (Challenger Area Commercial Fishing) Regulations 1986 (discussed below), the small area occupied by U150081, as well as benthic characteristics.

73 As noted, no submitters provided information on the importance of the area of coastal permit U150081 for commercial fishing.

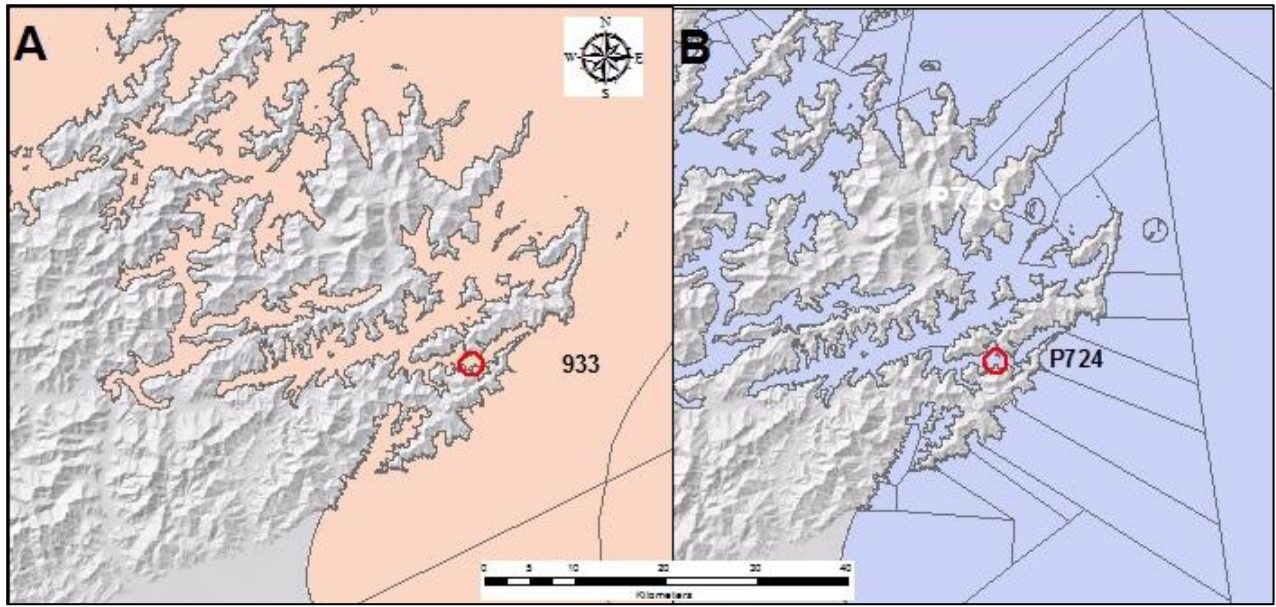
74 The only other information available on commercial fishing is reported catch data. Historically, most commercial fishing has been reported by statistical area. The area of coastal permit U150081 is located in statistical area 017 (**SA017**), which extends from Cape Campbell on the east coast to Cape Stephens at the top of D’Urville Island. (14,914 km<sup>2</sup>) (Map 3).

75



**Map 3: Location of SA017. The red circle marks the approximate location of the area of coastal permit U150081.**

76 Scallops, oysters, rock lobster and paua are reported by species-specific statistical areas rather than by general statistical area. The area of coastal permit U150081 falls within rock lobster statistical area 933, paua statistical area P724 (Maps 4A and 4B), scallop statistical area 7LL and oyster statistical area 7LL.



**Map 4: Species-specific statistical areas that encompass the area of coastal permit U150081. The red circle marks the approximate location of the area of coastal permit area U150081. A – Rock lobster statistical area 933. B – Paua statistical area P724.<sup>13</sup>**

<sup>13</sup> Hillshade imagery produced by Geographx. Sourced from [www.koordinates.com](http://www.koordinates.com) under CC-By. <http://creativecommons.org/licenses/by/3.0/nz/>

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 methods<sup>14</sup> 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).

78 Since 2006/07, start positions for netting methods<sup>15</sup> used by vessels over 6 m long, have had to report to within 2 nm.<sup>16</sup> 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.

79 The location of fishing by vessels less than 6 m long within SA017 is unknown. However, based on information from fisheries officers and Maritime New Zealand, 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. This information may be complemented with information from commercial fishers and fisheries management intelligence to help to determine whether specific types of fishing are likely to occur in an area.

80 Table 3 below lists the main fishery segments known to occur in SA017 and summarises my assessment of which fishery segments are likely to overlap the area of coastal permit U150081.

81 Table 3 also gives the relative amounts of trawl, line and net fishing that report by start position. The higher the proportion of vessels reporting by start position, the greater the confidence we have in the analysis.

82 The remainder of this assessment of the effects on commercial fishing relates to the fishing sectors identified in Table 3 as potentially occurring in the area of coastal permit U150081. As shown in Table 3, with the prohibition on trawling, set netting and Danish seining, lining is the main method that may occur in the area of coastal permit U150081.

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<sup>14</sup> Bottom long lining, surface long lining or trot lines

<sup>15</sup> Set-netting or drift-netting

<sup>16</sup> *Fisheries (Reporting) Regulations 2001*.

**Table 3: 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 in the area of proposed coastal permit U150081**

Fisheries (main fishstock or depth range and main fishing method) <sup>17</sup>	Statistical area	% of fine scale fishing events	Average annual no. fishing days <sup>18</sup>	% of main fishstock caught in statistical area	Included in the proposed site assessment?	Rationale for excluding a fishery from proposed farm assessment <sup>19</sup>
School shark (SCH7), Long Lining	017	23%	95	14%	Yes	
Sea cucumber (SCC7A), Diving	017	0%	33	90%	Yes	
Mixed fishery, Long Lining	017	82%	17	N/A	Yes	
Other species, Diving	017	0%	13	N/A	Yes	
Mixed fishery, Hand Lining	017	0%	10	N/A	Yes	
Rock Lobster (CRA5), Lobster Pot	017	0%	731	14%	No	Rock lobsters concentrate in areas of rocky reef, although they may move across an open sandy bottom at certain times of the year. There is no rocky reef in the area of coastal permit U150081.
Hoki (HOK1), Trawl	017	100%	421	22%	No	A year round trawl closure exists in the area of coastal permit U150081.
Scallops (SCA7), Dredge	7JJ	0%	218	47%	No	Commercial scallop fishing is not reported in Tory channel.
Ghost shark (GSH7), Trawl	017	99%	214	57%	No	A year round trawl closure exists in the area
Sea Urchin (SUR7A), Diving	017	0%	209	84%	No	This type of fishing is highly unlikely to be affected. Kina are found on rock substrate. There is no rock substrate in the area of coastal permit U150081.
Inshore Mix <80m depth, Trawl	017	98%	204	N/A	No	A year round trawl closure exists in the area
Butterfish (BUT7), Set Net	017	40%	183	27%	No	Set netting is prohibited in the area.
Red cod (RCO7), Trawl	017	100%	176	18%	No	A year round trawl closure exists in the area
Flatfish (FLA7), Set Net	017	72%	155	6%	No	A year round set closure exists in the area

<sup>17</sup> Main fishstock refers to the species most often caught by the relevant method; it does not include all species taken by that method. Figures from 2007/08 to 2011/12.

<sup>18</sup> Excludes fisheries with less than 10 days fishing per year.

<sup>19</sup> Unless otherwise stated, fishing is permitted and MPI has no information to indicate it does not occur in the vicinity of the coastal permit area.

Fishery segment (Main fishstock or depth range and main fishing method)	Statistical area	% of fine scale fishing events	Average annual no. fishing days	% of main fishstock caught in statistical area	Included in the proposed farm assessment?	Rationale for excluding a fishery from proposed farm assessment
Inshore Mix >80m <300m, Trawl	017	100%	149	N/A	No	The proposed site is too shallow for this type of fishing.
Blue cod (BC07), Cod Pot	017	0%	134	40%	No	Blue cod potting is highly unlikely to be affected as fishers are unlikely to set pots over the soft substrate in area of coastal permit U150081.
Hapuku and Bass (HPB7), Long Lining	017	52%	132	32%	No	Hapuku and bass are unlikely to be found in the shallow waters of the proposed site.
Flatfish (FLA7), Trawl	017	99%	68	6%	No	A year round trawl closure exists in the area
Mixed fishery, Set Net	017	71%	63	N/A	No	A year round set netting closure exists in the area
Barracouta (BAR7), Trawl	017	99%	62	2%	No	A year round trawl closure exists in the area
Gurnard (GUR7), Trawl	017	99%	62	8%	No	A year round trawl closure exists in the area
Tarakihi (TAR7), Trawl	017	100%	54	17%	No	A year round trawl closure exists in the area
Blue cod (BC07), Hand Lining	017	0%	36	40%	No	Blue cod predominate over rocky or biogenic reef habitat. The coastal permit site indicates silt and mud.
Surf clams, Dredge (PDO7)	017	0%	34	0%	No	Tuatua are generally found in sandy intertidal zones. The proposed site does not overlap this substrate.
Other species, Potting	017	0%	19	N/A	No	Other species are likely bycatch from rock lobster or blue cod potting. Rock lobster and blue cod pots are unlikely to be set over soft substrate.
Other species, Dredging	017	0%	18	N/A	No	Other species is likely to occur as bycatch from scallop dredging. This is unlikely to occur at the proposed site.
Snapper (SNA7) Trawl	017	98%	17	10%	No	A year round trawl closure exists in the area
School shark (SCH7), Set Net	017	98%	15	14%	No	A year round set netting closure exists in the area
Blue Warehau (WAR7), Trawl	017	100%	11	6%	No	A year round trawl closure exists in the area

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

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

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

### ***Exclusion of fishing***

83 I consider the aquaculture activities proposed for the area of coastal permit U150081 will exclude only a small amount of commercial fishing.

84 As shown in Table 3, a small amount of long lining may occur in the area of coastal permit U150081. The main stocks landed are ling and spiny dogfish (dahn long lining), with smaller amounts of rig landed by bottom long lining. In all cases, estimated landings from the CatchMapper model in the proposed area of the extension are less than three kilograms.

85 I consider that long lining can occur adjacent to but not inside marine farming structures. The area occupied by marine farming structures is less than the 7.34 ha area subject to this aquaculture decision. However, because the net pens can be moved within the area of coastal permit U150081, I consider the full 7.34 ha area may be excluded.

### ***Availability of other fishing areas***

86 I consider that any commercial fishing displaced from the area of coastal permit U150081 could occur in other areas in SA017 and Fisheries Management Area 7 (FMA7).

87 Trawling, set netting and Danish seining are all prohibited in Te Pangu Bay and other parts of the Tory Channel.

87 There are also commercial closures or restrictions in other parts of SA017, or FMA7 (including various species, method, time period, fishing gear, or a combination of these criteria) as described above. Furthermore, aside from the area of coastal permit U150081 and the existing structures at that site, the permitted methods could occur elsewhere in Te Pangu Bay and other parts of SA017 and the relevant QMA. I consider the extent of the closures does not significantly limit the potential for alternative fishing grounds and that any fishing displaced from the area of the coastal permit could be absorbed.

88 I recognise areas of authorised aquaculture space have reduced the availability of other commercial fishing areas over time. As noted, there are around 90 ha of authorised aquaculture space in Tory Channel and another 150 ha authorised around Queen Charlotte Sound. This existing aquaculture space makes up around 1.2% of the aquaculture in FMA7. The cumulative effect of the existing aquaculture is considered further below.

### ***Increased cost of fishing***

89 I consider that the aquaculture activities proposed for the area of coastal permit U150081 will not increase the cost of commercial fishing.

90 While the area of the coastal permit may be located within a region used for commercial fishing, I consider the use of alternative commercial fishing grounds would not result in an increase in the cost of commercial fishing. This is because the area of the coastal permit will only exclude a small area from commercial fishing and there are likely to be equally productive fishing grounds available nearby.

### ***Likely effect on fishing***

91 I consider the aquaculture activities proposed in the area of coastal permit area U150081 will have a small, if any, adverse effect on any commercial fishery.

92 The maps of fishing intensity (effort per ha) for each fishery segment were used to calculate the average annual amount of fishing effort likely to be displaced from the exclusion zone of the of

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

93 Fishing effort that is reported by statistical area was apportioned evenly across the area available for fishing. The parts of the statistical area available for fishing for each type of fishing method are defined by using all available information (including regulated closures, bathymetry, seabed substrate, and consultation with fishers) about where the method is likely to be used. Where fishing is reported to the statistical area level, there is increased uncertainty as to where fishing events have taken place within the statistical area.

94 The amount of fishing was averaged over October fishing years 2007/08 to 2013/14. Seven 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.

95 For this period, the amount of fishing effort estimated to be displaced by the activities proposed in the area of coastal permit U150081 is negligible. For fishing assessed (as indicated in Table 3) less than three kg of average annual catch is likely to be affected by the proposed aquaculture activities.

96 Given the very small catch quantities likely to be affected by the proposed aquaculture activities, MPI has not attempted to determine the changes in catch rates for the displaced fishing in order to estimate the net effect on commercial fishing. This assessment is based on the worst-case scenario that all of the catch displaced from the area of the coastal permit would be lost from the affected fisheries and not caught elsewhere.

### ***Cumulative effects***

97 I consider the cumulative effect on commercial fishing from authorised aquaculture activities in FMA7 is not unduly adverse and that the occupation of the area of coastal permit U150081 will only add slightly to the cumulative effect.

98 Around 12,300 ha of authorised aquaculture activities in FMA7 have previously been assessed for their total cumulative effect on fishing. The highest cumulative effect on any individual fish stock (with more than one tonne of average annual catch) affected by authorised aquaculture activities is 1.5% and not undue.

99 As noted, less than 3 kg of average annual catch is likely to be affected by the aquaculture activities proposed in the area of coastal permit U150081. I consider this negligible amount would not cause the cumulative effect of authorised aquaculture on any fishery to become undue.

### ***Conclusion on effects on commercial fishing***

100 I am satisfied the aquaculture activities proposed within the area of coastal permit U150081 will not have an undue adverse effect on commercial fishing because:

- no information suggests the coastal permit area is especially important for commercial fishing;
- the proposed aquaculture activities will exclude only a small amount of commercial fishing;
- with the exception of long longing, the main fishing methods are prohibited in Te Pangu Bay;



- there are available areas elsewhere in Te Pangu Bay, SA017 and the relevant QMA's for any commercial fishing excluded;
- occupation of the coastal permit area will not increase the cost of commercial fishing;
- the effect on commercial fishing catch will be small; and
- the additional adverse effect of the coastal permit area on commercial fishing is only small and will not cause the cumulative effect on recreational fishing to become undue.

## Aquaculture decision

101 I am satisfied – based on all relevant information available to me – the activities proposed for coastal permit area U150081 will not have an undue adverse effect on:

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

102 Accordingly, my decision is a determination for coastal permit U150081 with regard to:

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

103 The area of the determination on recreational, customary and commercial fishing is 7.34 ha comprising an area with the following coordinates (NZTM2000):

<u>Point</u>	<u>Easting</u>	<u>Northing</u>
1	1703982.810	5433326.440
2	1703991.163	5433188.731
3	1703445.249	5433146.089
4	1703435.030	5433276.690

104 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  
Ministry for Primary Industries

Dated this 15<sup>th</sup> February 2018

## References

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