02 March 2018

# AQUACULTURE DECISION REPORT — DOROTHY MCMANAWAY, WAIN AND NAYSMITH TRUSTEES NO2 & TALLEYS GROUP LIMITED, COASTAL PERMIT U170287, KINGFISH BAY, PORT UNDERWOOD

## **PURPOSE**

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 (**RMA**). The aquaculture decision request is described below. My aquaculture decision is made under section 186E of the *Fisheries Act* 1996 (**Fisheries Act**).

## **SUMMARY**

- I am satisfied the aquaculture activities proposed within the area of coastal permit U170287 will not have an undue adverse effect on the following fishing sectors:
  - recreational for the reasons set out in this report and summarised in paragraph 18;
  - *customary* for the reasons set out in this report and summarised in paragraph 18;
  - *commercial* for the reasons set out in this report and summarised in paragraph 39.

## **AQUACULTURE DECISION REQUEST DETAILS**

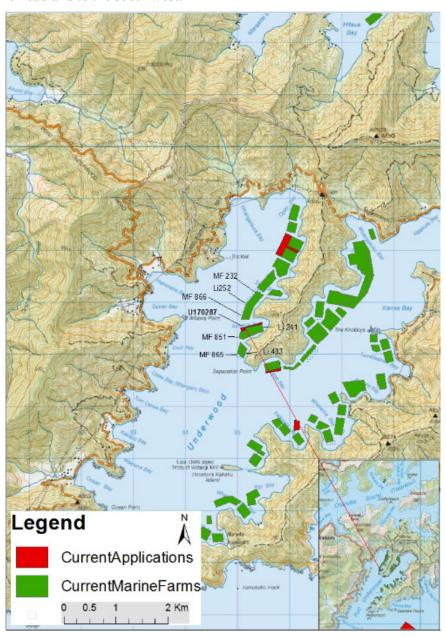
Regional Council:	Marlborough District Council (MDC)
Date of Request:	13 September 2017
Coastal Permit Applicant:	Dorothy McManaway, Wain & Naysmith Trustees No2, & Talleys Group Limited
Location of marine farm site:	Kingfish Bay, Port Underwood
Size of farm:	1.33 hectares (ha) of new space, reconfiguring 2 existing marine farm sites and adding the new space to form a total of 8.50 ha
Species to be farmed:	Green shell mussel ( <i>Perna canaliculus</i> ), scallop ( <i>Pecten novaezelandiae</i> ), Pacific oyster ( <i>Crassostrea gigas</i> ), dredge oyster ( <i>Toistrea chilensis</i> ), blue shell mussel ( <i>Mytilus edulis</i> ), and algae ( <i>Macrocystis pyrifera, Ecklonia radiata, Gracilaria spp, Pterocladia lucida, Asparagopsis armata, Undaria pinnatifida<sup>2</sup>)</i>
Farm structures:	Standard marine farm longlines and anchors with droppers

## Location and structures

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*.

<sup>&</sup>lt;sup>2</sup> Undaria pinnatifida is an unwanted organism as listed in the

- Coastal permit U170287 (**proposed site**) applies to an area near Kingfish Bay in Port Underwood (Map 1). The proposed site occupies 8.5 ha, of which 1.33 ha is new space, also relinquishing 0.184 ha of the south east corner of existing farms: marine farm 851 (**MF 851**) and marine farm licence (**Li 241**), which are shown in Map 1 below.
- The closest existing farm to the area of the proposed new site (apart from marine farm 861 (MF861) and marine farm licence 241 (Li 241) to be combined with the new site), is the combined area of marine farm 866 (MF 866), marine farm licence 252 (Li 252), and marine farm 232 (MF232), to the east. Marine farm licence 464 (Li 464) lies around the headland to the south west.



Map 1<sup>3</sup>: Location of the area authorised by coastal permit U170287 at Kingfish Bay (MPI, 2017). A site map of structures can be found in Appendix A.

<sup>&</sup>lt;sup>3</sup> Disclaimer: Maps 1-6 and all accompanying information accompanying (the "Maps") is intended to be used as a guide only, with other data sources and methods, and should only be used for the purpose for which it was

- The benthic component of the proposed site is mainly silt and clay, with abundant cover of parchment tubeworms. A larger area with parchment worms, red algae and sponges was recommended not to develop. The final proposed site as assessed here covers a smaller area and positioned around 100m from Mean Low Water (MLW) at its closest point and ranging from approximately 10-15m deep ( Davidson Environmental Ltd, 2017). The area relinquished off the existing farm was within 20m of MLW. The new inshore corner of the existing site will be at least 20m away from MLW.
- No species of fisheries interest were seen within the proposed site or within the existing site boundary. Some red algae, sponges and parchment worms were seen, however the red algae and sponges were not in significant volumes as set out in the Department of Conservation's Guidelines for Ecological Investigations of Proposed Marine Farm Areas. The parchment worms have been observed around marine farm structures, handle turbidity well and are not considered to be affected by the proposed site. The substrate is considered to support fishing common to silt and clay benthic habitat.
- 7. The proposed site will increase the length of 18 of the already operational 20 longlines and droppers, and increase the area available for anchors.

#### Input from stakeholders

- 8 MPI publicised the application for coastal permit U170287 on its website on 7 July 2017. This gave persons and organisations potentially affected by the proposed aquaculture activities an opportunity to provide information on their fishing activities at the coastal permit area.
- 9 The submission closing date for those notified via the website was 08 August 2017. MPI did not receive any submissions.

#### STATUTORY CONTEXT

- 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).
- A 'determination' is a decision that I am satisfied that the aquaculture activities authorised by the coastal permit will not have an undue adverse effect on customary, recreational, or commercial fishing<sup>4</sup>. 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.

developed. The information shown in the Maps is based on a summary of data obtained from various sources. While all reasonable measures have been taken to ensure the accuracy of the Maps, MPI: (a) gives no warranty or representation in relation to the accuracy, completeness, reliability or fitness for purpose of the Maps; and (b) accepts no liability whatsoever in relation to any loss, damage or other costs relating to any person's use of the Maps, including but not limited to any compilations, derivative works or modifications of the Maps. Crown copyright ©. The maps are subject to Crown copyright administered by Ministry for Primary Industries (MPI). Data Attribution:

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

<sup>&</sup>lt;sup>4</sup> 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.

- 12 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).
- Section 186GB(1) of the Fisheries Act specifies the only matters I must have regard to when making an aquaculture decision. These matters are as follows:
  - (a) the location of the area that the coastal permit relates to in relation to areas in which fishing is carried out;
  - (b) the likely effect of the aquaculture activities in the area that the coastal permit relates to on fishing of any fishery, including the proportion of any fishery likely to become affected;
  - (c) the degree to which the aquaculture activities in the area that the coastal permit relates to will lead to the exclusion of fishing;
  - (d) the extent to which fishing for a species in the area that the coastal permit relates to can be carried out in other areas;
  - (e) the extent to which the occupation of the coastal marine area authorised by the coastal permit will increase the cost of fishing; and
  - (f) the cumulative effect on fishing of any authorised aquaculture activities, including any structures authorised before the introduction of any relevant stock to the quota management system.
- For the purpose of my assessment, customary fishing differs from recreational fishing if it is undertaken outside of the recreational limits provided in the *Fisheries (Amateur Fishing) Regulations 2013* (**Amateur Regulations**) and is instead authorised by a customary authorisation.
- 15 Appendix B and C have further information on statutory context and customary fishing respectively.

# **ASSESSMENT**

- 16 The following is an assessment, within the statutory context, of the effects of the proposed aquaculture activities on recreational, customary and commercial fishing. It is based on all the relevant information available to me.
- 17 This assessment relates to the 1.33 ha of new marine farming space authorised by the proposed site of coastal permit U170287.

## Recreational and customary fishing

- I am satisfied the aquaculture activities that may operate within the proposed site will not have an undue adverse effect on recreational or customary fishing because:
  - only a small amount of recreational and customary fishing is likely to occur at the proposed site;
  - anchored rod/line fishing and diving could still occur at the proposed site;
  - there are other recreational and customary fishing areas available in Port Underwood and the wider Marlborough Sounds;
  - occupation of the proposed site will result in a minimal, if any, increase in the cost of recreational or customary fishing;

- the likely effect of occupation of the proposed site on recreational and customary fishing is only small; and
- this small effect added to existing effects of approved aquaculture space will not cause the cumulative effect on recreational or customary fishing to become undue.
- 19 The above conclusions were reached following the more detailed assessment below.

# Location of the coastal permit area relative to fishing areas

The location of the coastal permit area relative to fishing areas for recreational and customary<sup>5</sup> sectors are considered separately below.

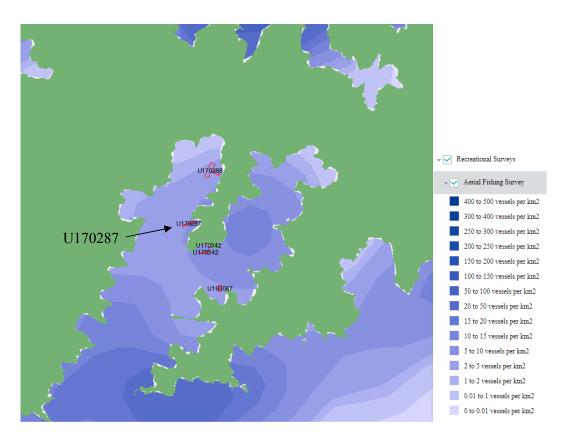
# Recreational Fishing

- I consider the area of the proposed site is located where a relatively small amount of recreational fishing occurs. Methods likely to be used include mobile and stationary rod/line from a boat, diving, dredging and a small amount of longlining. Species which may be caught include tarakihi, kahawai, butterfish, sea perch and snapper.
- A small amount of Amateur Charter Vessel<sup>6</sup> (ACV) fishing has been reported in Port Underwood, though none directly in Kingfish Bay. Species caught and methods used in the wider Port Underwood are considered to reflect those that may be used by ACV recreational fishers in Kingfisher Bay, and reflected by those reported in the 2008 Davey et al survey on recreational fishing.
- Results of the aerial survey in 2006 <sup>7</sup> suggest there is a relatively small amount of recreational fishing at the proposed site. The diary survey published in 2008 by Davey et al recorded 4.5% of fishing trips in the survey zone of Port Underwood, which includes Kingfish Bay.

<sup>&</sup>lt;sup>5</sup> There is little quantitative data available on customary or recreational catch taken from the proposed site. Fishing locations for customary authorisations are usually only reported at the Fisheries Management Area (**FMA**) or Quota Management Area (**QMA**) although more specific sites are sometimes identified. Customary authorisations issued under regulations 50 and 51 of the Amateur Regulations do not need to be routinely reported. Recreational fishers are not required to report catch or fishing locations. MPI is therefore unable to estimate an average annual recreational catch or proportion of recreational catch likely to be affected by the proposed aquaculture activities. Rather, MPI can only assess the effect of the proposed aquaculture activities on recreational fishing based on qualitative information.

<sup>&</sup>lt;sup>6</sup> ACV data is reported through Activity Catch Returns and includes fishing positions, target and caught species numbers, and methods used.

<sup>&</sup>lt;sup>7</sup> 2006 recreational fishing survey of the Marlborough Sounds (Davey et al, 2008)



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

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

Table 1: Recreational fishing methods used and species likely to be caught and targeted at the area of coastal permit U170287 based on the available information.

	Davey et al. (2008) results for the survey zone including Port Underwood	ACV data for Port Underwood	Submissions	Other information	My assessment
Methods used	Rod/line from private boat (44% of trips), diving from private boat (21% of trips), drag netting (16% of trips), hand gathering and potting (5% of trips), rod/line from charter vessel , rod/line and diving from shore (<3%of trips)	Hand line, dredging, diving,	In submissions on previous applications in the area (mainly eastern arm of the bay) the main methods cited are line fishing from a private boat, hand gathering and long lining from shore and private boat	The silt, clay and relatively flat seabed is suitable for most of the methods identified as occurring in the survey zone containing Kingfish Bay by Davey et al. (2008)  No species that are typically taken by dredging were observed by Davidson (2017). Set netting is prohibited at the prohibited in Port Underwood.  The site is too deep for shore fishing or drag netting	Stationary and mobile rod/line methods and diving from a private boat are likely the main used methods at the site. A small amount of longlining may also occur  Shore-based fishing (eg, by rod/line, drag netting or flatfish spearing) does not occur at the proposed site, though may be possible at the relinquished area inshore.
Species caught (top 10)	Mussels (352), blue cod (95), oysters (70), scallops (50), tarakihi (46), kahawai (39), hapuka (38), butterfish (36), paua (28)	Blue cod, tarakihi, sea perch, kahawai, hapuka crayfish gurnard and snapper	Previous submissions note blue cod, kahawai, red cod, tarakihi and kingfish, mussels, pipis, cockles, crabs, crayfish, moki, monk fish, snapper and gurnard as species caught in the eastern arm (proposed new site combined with existing farm is in the western arm) of Port Underwood	No scallops or oysters were observed by Davidson (2017)  The proposed site is too deep for species taken by hand gathering  The coastal permit area is likely to be too shallow for fishing for hapuku  Of the caught species reported by Davey et al. (2008) and ACV data, it is unlikely that blue cod, butterfish, moki or paua are found over the silt and clay and small amount of algae substrate at the coastal permit area	Tarakihi, kahawai, sea perch, gurnard and snapper are likely the species most commonly caught at the proposed site.  Blue cod and butterfish could be caught at the proposed site, however the silt and clay substrate make it unlikely.

## Customary Fishing

- I consider the proposed site is located where there is likely to be little, if any, customary fishing. Any customary fishing is likely to be by rod/line from a boat and some dredging, diving and a small amount of longlining. Species targeted and caught may be rig, kahawai, tarakihi and school shark.
- Available information on customary fishing is primarily qualitative information from submissions and quantitative catch information from customary authorisations.<sup>8</sup> Further details on specific customary fishing information can be found in Appendix C.
- 27 I have assessed likely customary fishing in the proposed site in Table 2 below.

Table 2: Customary fishing methods used and species caught or targeted at the area of coastal permit U1702879

	Source of information							
	Customary authorisations for Port Underwood	Other information	My assessment					
Methods used	N/A	Recreational fishers commonly use stationary and mobile rod/line methods, dredging, diving and some longlining, so customary fishers may also use these methods.	Rod/line from boat, dredging, diving and some longlining are the most common methods for recreational fishers and may also be used by customary fishers.					
Species caught or targeted	Scallops, oysters, paua, rig, kahawai, blue cod, kina, butterfish, flatfish, blue moki, mussels, hapuku, school shark, , bluenose, cockle, crayfish, flatfish.	Paua, crayfish, kina, blue moki, blue cod or green-lipped mussels are not typically found over the reef free substrate at the proposed site.  No scallops, oysters or cockle were seen by the Davidson survey  The proposed site is likely to be too shallow for hapuku or blunose fishing.	Rig, kahawai and tarakihi, school shark likely to be the most commonly caught species at the proposed site.  Blue cod, butterfish and flatfish could be caught at the proposed site, however silt and clay bottom makes it unlikely.					

<sup>9</sup> From January 2009 to April 2016 no customary authorisations with site-specific information were issued for Kingfish Bay. Customary authorisations for the Tory Channel and wider Marlborough Sounds were issued for a large number of species.

<sup>&</sup>lt;sup>8</sup> Fishing locations for customary authorisations are usually only reported at the Fisheries Management Area (FMA) or Quota Management Area (QMA) although more specific sites are sometimes identified. Methods used are not reported. Customary authorisations issued under regulations 50 and 51 of the Amateur Regulations do not need to be routinely reported.

## Exclusion of fishing

- I consider of the recreational and customary fishing occurring in the area, that dredging and longlining would be excluded from the proposed site because of the risk of entanglement.
- However, I consider that rod and line fishing could continue between the proposed structures, as anecdotal information suggests fishers commonly fish by rod/line within mussel farms. Some diving may still occur.

# Availability of other areas

- I consider alternative areas in Port Underwood and the wider Marlborough Sounds could absorb recreational and customary fishing displaced from the proposed site because:
  - the proposed site is only small and the amount of fishing that would occur there is likely small also;
  - the same species seen over the silt and clay substrate at the proposed site could be found in most areas of Port Underwood and the wider Marlborough Sounds, where this substrate is common. No information suggests the proposed site offers unique habitats or species mix; and
  - the same methods used at the proposed site could be used elsewhere in Port Underwood and other parts of the Marlborough Sounds; sufficient alternative areas exist especially for rod/line fishing..
- There are closures and various species and method restrictions in place for recreational fishing, particularly for set netting and longlining<sup>11</sup>, in Port Underwood and the wider Marlborough Sounds. While these restrictions limit the availability of other areas, there is still a large amount of area available for recreational fishing in relation to the small area of the proposed site.
- Apart from the Long Island Marine Reserve and Fighting Bay<sup>12</sup>, all of the Marlborough Sounds is available for customary fishing under regulations 50 and 51 of the Amateur Regulations. Many alternative areas are therefore available for customary fishers.
- Areas of authorised aquaculture space have reduced the availability of other recreational and customary fishing areas over time. The cumulative effects of existing aquaculture are further considered below.

## Increased cost of fishing

- I consider that the aquaculture activities at the proposed site will increase the cost of recreational and customary fishing minimally, if at all.
- I consider that any recreational or customary fishing excluded from the site could be carried out nearby with minimal additional cost, as a result of a marginal increase in fuel cost or change in method. I consider that most species targeted at the site can still be taken using alternative fishing methods.

\_

<sup>&</sup>lt;sup>10</sup> Anecdotal information from recreational fishers suggests that spaces between longlines of mussel farms in the Marlborough Sounds are too narrow for longlining, set netting and trolling without risk of entanglement. I also consider that drift fishing is unlikely to occur within marine farms because of risk of entanglement.

<sup>&</sup>lt;sup>11</sup> Amateur regulations.

<sup>&</sup>lt;sup>12</sup> Marine Reserves Act 1971 and the Submarine Cables and Pipelines Protection Act 1996.

## Likely effect on fishing

- I consider the effect on recreational and customary fishing from the proposed aquaculture activities will be small because:
  - not all recreational or customary fishing methods would be excluded from the proposed site;
  - the area of the proposed site is small and, because it is unlikely to be of particular importance to recreational or customary fishers, the effect will be minimal;
  - alternative areas within Port Underwood and the wider Marlborough Sounds could absorb the recreational and customary fishing displaced from the proposed site.

#### Cumulative effects

- 37 I consider existing aquaculture in the Marlborough Sounds has affected recreational and customary fishing. There are approximately 3,700 ha of existing aquaculture in the Marlborough Sounds, approximately 200 ha of which is in Port Underwood.<sup>13</sup>
- I consider the cumulative effects on recreational and customary fishing, including the aquaculture activities at the proposed site, will not be undue because:
  - some recreational and customary fishing (eg, anchored rod/line fishing) can still occur within marine farms;
  - not all existing farms are located in popular recreational and customary fishing areas; and
  - the area of the proposed site is minimal with regard to all of the space available for recreational and customary fishing in the Marlborough Sounds.

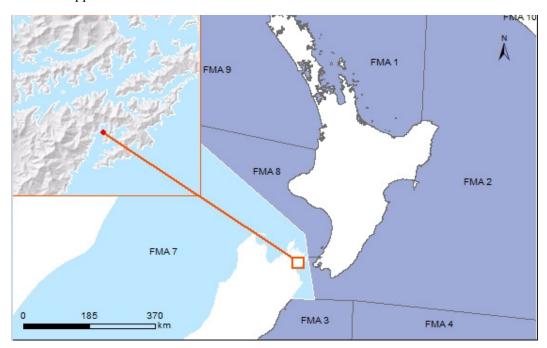
# Commercial fishing

- I am satisfied the aquaculture activities that may operate within the proposed site will not have an undue adverse effect on commercial fishing because:
  - a negligible amount of commercial fishing is likely to occur in the area;
  - a negligible amount of commercial fishing is likely to be excluded from the proposed site;
  - there are alternate fishing grounds in Port Underwood, SA017 and the relevant QMAs or FMA7 for any fishing excluded from the proposed site;
  - occupation of the proposed site will result in a minimal, if any, increase in the cost of commercial fishing;
  - effects on commercial fishing catch will be negligible; and
  - the additional adverse effect on commercial fishing is only small and will not cause the cumulative effect on commercial fishing for any fish stock to become undue.
- 40 The above conclusions were reached following the more detailed assessment below.

<sup>&</sup>lt;sup>13</sup> As noted, there is limited quantitative data available to assess the cumulative effects of authorised aquaculture on customary or recreational fishing. Therefore, MPI can only assess cumulative effects on customary or recreational fishing based on the amount of aquaculture already authorised in the relevant customary or recreational fishery and the likely importance of the area of the proposed site for fishing.

# Location of the coastal permit area relative to fishing areas

- I consider the proposed site is located where there is little, if any, commercial fishing. A year round trawl closure exists in the area, and a set net prohibition covers half of the proposed site. Some set netting could occur, however it is unlikely. Some lining and diving may occur.
- Kingfish Bay is within Fisheries Management Area 7 (**FMA7**) (Map 3). Historically, most commercial fishing has been reported by statistical area. The area of the proposed site is in general statistical area 017 (**SA 017**), which extends from the eastern edge of d'Urville Island to Cape Campbell (415,286 ha). Further detail on fisheries management and statistical areas is available in Appendix D.



Map 3. Fisheries Management Area 7 (FMA7). Insert shows approximate location of proposed site.

- MPI has assessed the main fisheries, bathymetry and habitat known to occur in SA 017 and the relative amounts of fishing that report by start position. MPI has used this, along with institutional information to inform Table 3 and the commercial fishing assessment below. Further detail on how MPI analyses commercial fishing can be found in Appendix D.
- 44 MPI considers a negligible amount of commercial fishing occurs at the proposed site.

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

Fisheries (main fishstock or depth range and main fishing method) <sup>14</sup>	Statistical area	% of fine scale fishing events	Average annual no. fishing days <sup>15</sup>	% of main fishstock caught in statistical area	Included in the proposed site assessment?	Rationale for excluding a fishery from proposed farm assessment <sup>16</sup>
Butterfish (BUT7), Set Net	017	40%	183	27%	Yes	
Flatfish (FLA7), Set Net	017	72%	155	6%	Yes	
School shark (SCH7), Long Lining	017	23%	95	14%	Yes	
Mixed fishery, Set Net	017	71%	63	N/A	Yes	
Sea cucumber (SCC7A), Diving	017	0%	33	90%	Yes	
Mixed fishery, Long Lining	017	82%	17	N/A	Yes	
School shark (SCH7), Set Net	017	98%	15	14%	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	933	0%	731	14%	No	Rock lobsters concentrate in areas of rocky reef, although they may move across an open sandy bottom at certain times of the year. There is no rocky reef in the coastal permit area.
Hoki (HOK1), Trawl	017	100%	421	22%	No	A year round trawl closure exists in the area
Scallops (SCA7), Dredge		0%	218	47%	No	Commercial scallop fishing is already is not reported in Port Underwood.
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 proposed site.

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. Excludes fisheries with less than 10 days fishing per year.

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.

<sup>15</sup> 

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 depth, Trawl	017	98%	204	N/A	No	A year round trawl closure exists in the area
Red cod (RCO7), Trawl	017	100%	176	18%	No	A year round trawl closure exists in the area
Inshore Mix >80m <300m, Trawl	017	100%	149	N/A	No	The proposed site is too shallow for this type of fishing.
Blue cod (BCO7), Cod Pot	017	0%	134	40%	No	Blue cod potting is highly unlikely to be affected as fishers are unlikely to set pots over soft substrate.
Hapuku and Bass (HPB7), Long Lining	017	52%	132	32%	No	Hapuku and bass are unlikely to be found in the shallow waters of the proposed site.
Flatfish (FLA7), Trawl	017	99%	68	6%	No	A year round trawl 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 (BCO7), Hand Lining	017	0%	36	40%	No	
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
Blue Warehau (WAR7), Trawl	017	100%	11	6%	No	A year round trawl closure exists in the area

## Exclusion of fishing

- I consider that some commercial fishing could be excluded from the proposed site, the area of which is assessed to be 1.33ha with no buffers added for dredging or trawling as these methods are prohibited in Port Underwood.
- Of the methods which could occur, I consider diving could occur within the proposed site, however, I consider it unlikely that species caught with this method would be targeted at the proposed site due to changes to the benthic habitat. I consider commercial diving, some set net fishing and longlining could occur immediately adjacent to the proposed site. Hand lining could still occur.

## Availability of other fishing areas

- I consider alternative areas in Port Underwood and other parts of SA 017 could absorb any commercial fishing displaced from the proposed site because:
  - the same methods as those possibly used at the coastal permit area could be used elsewhere in Port Underwood or other parts of SA 017<sup>1</sup> and in the relevant QMAs or FMA7;
  - the species potentially targeted by commercial fishers within the proposed site are typically found over silt and clay substrate common throughout the rest of Marlborough Sounds, elsewhere in SA 017 and in the relevant QMAs or FMA7; and
  - the area excluded to commercial fishing is be small compared to the available area.
- Areas of authorised aquaculture space have reduced the availability of other commercial fishing areas over time. The cumulative effects of the existing aquaculture is considered further below.

# Increased cost of fishing

- 49 I consider that the aquaculture activities at the proposed site will not increase the cost of commercial fishing.
- While the proposed site may be located within a region used for commercial fishing, I consider that using alternative commercial fishing grounds would not result in an increase in the cost of commercial fishing. This is because the coastal permit area will only exclude a small area from commercial fishing and there are equally productive fishing grounds available nearby.

# Likely effect on fishing

- I consider the aquaculture activities at the proposed site will have a negligible adverse effect on commercial fishing.
- Using *CatchMapper* and other commercial fishing analysis tools detailed in Appendix D, MPI estimates the amount of fishing that would be displaced by the aquaculture activities in the proposed site is estimated at approximately 1 kg total for all species included in the assessment as indicated in Table 3.

<sup>&</sup>lt;sup>1</sup> Few closures or restrictions in SA017 limit alternative areas for methods permitted in Tory Channel (ie, set netting and lining for taking finfish, and dredging, diving and other methods for taking non-finfish species) but closures elsewhere in FMA7 limit alternative available areas, particularly for set netting.

#### Cumulative effects

- I consider existing aquaculture in the Marlborough Sounds has affected commercial fishing. There is around 200 ha of authorised aquaculture space in Port Underwood. There is approximately 3,500 ha of marine farms in SA 017 that make up about 28% of the 12,300 ha of aquaculture in FMA7.
- I consider the cumulative effects on commercial fishing, including the aquaculture activities at the proposed site will not be undue because:
  - for any fish stocks potentially affected by the proposed site, the cumulative effect has previously been assessed as a maximum of approximately 1.5% effect on any fishery, and not undue;
  - MPI estimates approximately1 kg of average annual catch occurs within the site, for the fishing as assessed in Table 3 as potentially occurring in the proposed site; and
  - this amount of catch is small and would not cause the cumulative effects of approved aquaculture space to become undue.

## **AQUACULTURE DECISION**

- I am satisfied based on all relevant information available to me the activities proposed for coastal permit area U170287 will not have an undue adverse effect on:
  - a) recreational fishing, and
  - b) customary fishing, and
  - c) commercial fishing.
- Accordingly, my decision is a determination for coastal permit U170287 with regard to:
  - a) recreational fishing, and
  - b) customary fishing, and
  - c) commercial fishing.
- 57 The area of the determination on recreational, customary and commercial fishing is 1.33 ha comprising an area with the following coordinates (NZTM2000):

<b>Point</b>	Easting	<b>Northing</b>
1	1695052.43	5426504.49
2	1695461.05	5426623.74
3	1695468.79	5426588.79
4	1695136.82	5426515.34
5	1695145.56	5426475.80
6	1695066.01	5426443.14

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

David Scrangey

Manager Customary Fisheries and Spatial Allocations

Ministry for Primary Industries

Dated 2 March 2018

## References

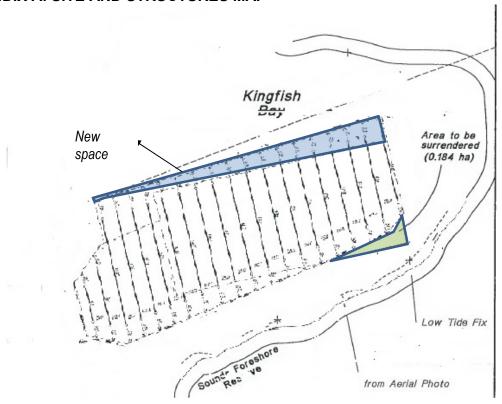
Davey, N.K.; Hartill, B.; Cairney, D.G.; Cole, R.G. 2008. Characterisation of the Marlborough Sounds recreational fishery and associated blue cod and snapper harvest estimates. *New Zealand Fisheries Assessment Report 2008/31*. 63 p.

Davidson, R.J.; Richards, L.A.; Rayes, C.; Sutherland, R. 2017. Ecological report for a proposed extension to farm 8423 in Kingfish Bay, Port Underwood. Prepared by Davidson Evironmental Limited for Talley's Group Limited. Survey and monitoring report no. 847

Davidson, R. J.; Duffy, C.A.J; Gaze, P.; Baxter, A.; DuFresne S.; Courtney S.; Hammill P. 2011. Ecologically significant marine sites in Marlborough, New Zealand. Co-ordinated by Davidson Environmental Limited for Marlborough District Council and Department of Conservation.

Department of Conservation 1995: Guideline for ecological investigations of proposed marine farm areas. Marlborough Sounds. Report prepared for Marlborough District Council by Department of Conservation, Nelson/Marlborough Conservancy. Occasional Publication No. 25. 21p.

# **APPENDIX A: SITE AND STRUCTURES MAP**



**Figure 1.** Site map showing location of new space and structures. New space in blue and area to be relinquished in green

# **APPENDIX B: ADDITONAL STATUTORY CONTEXT**

- 1 Section 186E(3) of the Fisheries Act <sup>18</sup> requires me, in making an aquaculture decision, to have regard to any:
  - (a) information held by the Ministry for Primary Industries; and
  - (b) information supplied, or submissions made, to the Director-General under section 186D(1) or (3) by:
    - i. an applicant for or holder of the coastal permit;
    - ii. any fisher whose interests may be affected;
    - iii. persons or organisations that the Director-General considers represent the classes of persons who have customary, commercial or recreational fishing interests that may be affected by the granting of the coastal permit or change to, or cancellation of, the conditions of the coastal permit; and
  - (c) information that is forwarded by the regional council; and
  - (d) any other information that the Director-General has requested and obtained.
- 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.
- Section 186GB(2) of the Fisheries Act says that if a pre-request aquaculture agreement has been registered under section 186ZH in relation to the areas that the coastal permit relates to, I must not have regard to the undue adverse effects on commercial fishing in respect of any stocks covered by the pre-request aquaculture agreement when having regard to the matters specified in section 186GB(1). No pre-request aquaculture agreements have been registered in relation to coastal permit U170287.
- Section 186GB(1)(b) requires an assessment of the likely effects of the aquaculture activities on fishing of any fishery including the proportion of any fishery likely to be affected. "Fishery" is not defined either in section 186 or elsewhere in the Fisheries Act. However, "stock" is defined in section 2 to mean any fish, aquatic life, or seaweed of one or more species that are treated as a unit for the purposes of fisheries management. Parts (3) and (4) of the Fisheries Act focus on "stocks" for the purpose of setting and allocating Total Allowable Catches and managing species within the quota management system (QMS). Sections 186GB(1)(f) and (2) also refer to "stock" with specific regard to adverse effects on commercial fishing. So for the purpose of my decision under section 186E, I consider a commercial fishery is a fish stock delineated by a fisheries management area (FMA) or quota management area (QMA).
- 5 I consider the relevant recreational and customary fishery are as I have described in the assessment above in "Location of the coastal areas relative to fishing area."

Page 19 of 24

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.

- Section 186C of the Fisheries Act does not define "cumulative effect" beyond what is provided in section 186GB(1)(f) that the effect includes any structures authorised before the introduction of any relevant stock to the QMS. For the purpose of my decision under section 186E, "cumulative effect" on commercial fishing includes the total effect of all authorised aquaculture activities within the relevant QMA or FMA. For recreational and customaryfisheries, the relevant areas for considering "cumulative effects" are as I have described in the assessment above in my consideration of section 186GB(1)(a) and (f). Sections 186GB(1)(a) and (f) relate to location at proposed site in relation to where fishing occurs and the cumulative effect of aquaculture, respectively.
- The Fisheries (South Island Customary Fishing) Regulations 1999 (the South Island Regulations) define customary food gathering as the traditional rights confirmed by the Treaty of Waitangi and the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992, being the taking of fish, aquatic life, or seaweed or managing of fisheries resources, for a purpose authorised by Tangata Tiaki/Kaitiaki, including koha, to the extent that such purpose is consistent with tikanga Māori and is neither commercial in any way nor for pecuniary gain or trade.
- The South Island Regulations and regulation 50 and 51 of the Amateur Regulations provide for Tangata Tiaki/Kaitiaki to determine the customary purpose for which fish, aquatic life, or seaweed may be taken, methods used, seasons fished, size and quantity taken etc. The South Island Regulations and regulations 50 and 51 do not contemplate restrictions under the Fisheries Act on the quantity of fish taken or the methods used to take fish. Should tangata whenua fish without customary authorisations, all the recreational limits under the Amateur Regulations apply.

## **APPENDIX C: CUSTOMARY FISHING**

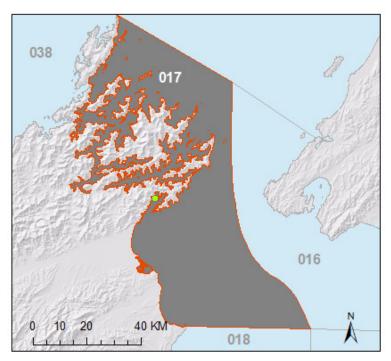
- At least eight iwi at the top of the South Island may have customary fishing interests in the coastal permit area. While there are no existing customary management areas in the Marlborough Sounds (eg, taiapure-local fishery or mātaitai reserves), the eight iwi have jointly notified their Tangata Tiaki/Kaitiaki for an area/rohe moana that encompasses the new coastal permit area. The notification is currently in dispute. 19
- The eight iwi, collectively known as Te Tau Ihu o Te Waka o Maui (**Te Tau Ihu Iwi**), include those defined as tangata whenua in regulation 2 of the Fisheries (South Island Customary Fishing) Regulations 1999: the whānau, hapu or iwi that hold manawhenua manamoana over a particular area and are represented by Ngāti Apa Ki Te Rā To Trust; or Ngāti Koata Trust; or Ngāti Rarua Iwi Trust; or Ngāti Tama Ki Te Waipounamu Trust; or Te Runanga o Ngati Toa Rangatira; or Te Atiawa o Te Waka a Maui Trust; or Te Runanga a Rangitane o Wairau; or Te Runanga O Ngāti Kuia Trust.

<sup>19</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.

## **APPENDIX D: COMMERCIAL FISHING**

## Fisheries boundaries

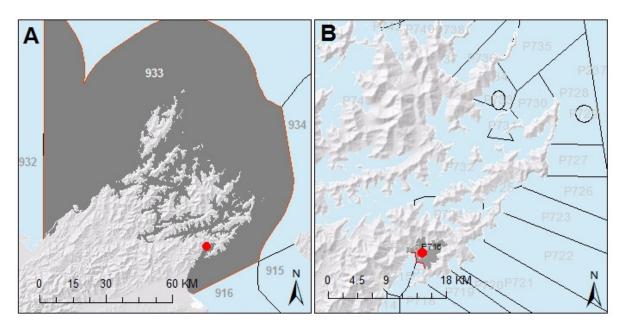
- A Fisheries Management Area (**FMA**) is one of the ten regions that the New Zealand 200nm Exclusive Economic Zone (**EEZ**) is divided into for fisheries management purposes. A Quota Management Area (**QMA**) is an area within which a designated fish stock is managed under the Quota Management System, and is generally based around FMAs. As noted, this application is in FMA7.
- 2 Fisheries reporting historically occurred by general statistical area. There are 120 of these areas in New Zealand's EEZ and this provides for more fine scale data to be collected than at an FMA scale. As noted, this application is in general statistical area 017 (Map 1).



Map 1: General statistical area SA017. The green circle marks the approximate location of coastal permit area U170287.

3 Scallops, oysters, rock lobster and paua are reported by species-specific statistical areas rather than by general statistical area. The area of coastal permit U170287 falls within rock lobster statistical area 933, paua statistical area P716, (Maps 2A, 2B).

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



Map 2: Species-specific statistical areas that encompass the area of coastal permit U170287 (approximate location as red circle). A – Rock lobster statistical area 933 and B - Paua statistical area P716

# Commercial fishing reporting and analysis

- Reporting by statistical area only provides coarse-scale information about where commercial fishing occurs. However, since 2007/08 vessels over 6 m long that have used trawl or line fishing methods have reported the start position of each fishing event by latitude and longitude to within 1 minute, which equates to around 1 nautical mile (nm). Since 2006/07, start positions for netting methods have reported to within 2 nm. 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.<sup>2</sup> This detail can be commercially sensitive and cannot be publically released
- 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. Knowledge about species and information from commercial fishers and fishing companies, and Fishery Officers can also help to determine whether specific types of fishing are likely to occur in an area.
- Maps of fishing intensity (effort per ha) for each fishing sector were used to calculate the average annual amounts of fishing effort that is likely to be displaced from the exclusion zone/s of the coastal permit area.<sup>3</sup> 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
- Fishing effort that is only reported by statistical area was apportioned evenly across the area available for fishing although some areas are likely to include more productive habitats than others. The parts of the statistical area available for fishing for each type of fishing method are defined by using all available information (including regulated closures,

<sup>&</sup>lt;sup>2</sup> MPI developed the Catchmapper tool to model the estimated catch from landing data, and uses the best information available from fisheries statistics. This informs our assessment, and particularly, Table 3.

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

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.

8 The amount of fishing was averaged over October fishing years 2007/08 to 2014/15. Eight years is long enough to take into account natural variation in the abundance and distribution of fish stocks and fishing effort so that likely average future fishing is fairly represented.