



28 May 2019

AQUACULTURE DECISION REPORT — GULF MUSSEL FARMS LIMITED, COASTAL PERMIT WRC139018, WEST COAST WAIKATO REGION.

PURPOSE

1 This report sets out my aquaculture decision (as the relevant decision maker¹) for an aquaculture decision request made under section 114(4)(c)(ii) of the *Resource Management Act 1991* (RMA). The aquaculture decision request is described below. My aquaculture decision is made under section 186E of the *Fisheries Act 1996* (Fisheries Act).

SUMMARY

2 I am satisfied the aquaculture activities proposed within the area of coastal permit WRC139018 will not have an undue adverse effect on the following fishing sectors:

- *recreational* - for the reasons set out in this report and summarised in paragraph 16;
- *customary* - for the reasons set out in this report and summarised in paragraph 16;
- *commercial* - for the reasons set out in this report and summarised in paragraph 38.

AQUACULTURE DECISION REQUEST DETAILS

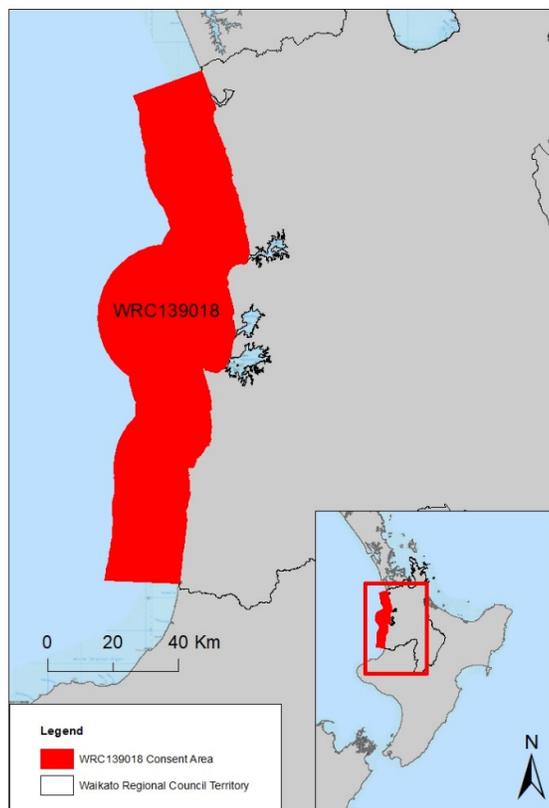
Regional Council:	Waikato Regional Council (WRC)
Date of Request:	4 September 2018
Coastal Permit Applicant:	Gulf Mussel Farms Ltd
Location of marine farm site:	West Coast Waikato Region excluding harbours
Size of farm:	Enough space for 6 longlines of 50m length and up to 20 spat monitoring buoys spread throughout an area of 418,000 ha being the entire marine areas of the Waikato region on the west coast out to 12 nautical miles from shore.
Species listed on consent:	Mussel spat
Farm structures:	Short marine farm longlines (50m long) with anchors and droppers of spat catching rope and anchored buoys with sample lengths of spat catching rope.

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

Location and structures

3 Coastal permit WRC139018 for experimental mussel spat catching applies to the whole marine area of the Waikato region on the west coast of New Zealand excluding the harbours and harbour entrances (coastal permit area)(Map 1). At any one time, the proposed structures will occupy up to about 5 ha of space with 6 fixed longlines and negligible additional space with up to 20 anchored buoys. The structures will be spread throughout the total coastal permit area of about 418,000 ha.

4 The coastal permit term is 5 years and extends a previous 5-year permit. There are no other marine farming consents along this stretch of coast.



Map 12: Location of the area authorised by coastal permit WRC139018 which is the entire marine are of the Waikato Region on the west coast out to 12 nautical miles from shore (MPI, 2019).

5 Coastal permit WRC139018 renews the previous consent for 8 year-round, and 12 seasonal spat monitoring buoys and extends the previous permit to include 6 permanently fixed

² Disclaimer: Maps 1-3 and all accompanying information accompanying (the “Maps”) is intended to be used as a guide only, with other data sources and methods, and should only be used for the purpose for which it was developed. The information shown in the Maps is based on a summary of data obtained from various sources. While all reasonable measures have been taken to ensure the accuracy of the Maps, MPI: (a) gives no warranty or representation in relation to the accuracy, completeness, reliability or fitness for purpose of the Maps; and (b) accepts no liability whatsoever in relation to any loss, damage or other costs relating to any person’s use of the Maps, including but not limited to any compilations, derivative works or modifications of the Maps. Crown copyright ©. The maps are subject to Crown copyright administered by Ministry for Primary Industries (MPI). Data Attribution: This map uses data sourced from LINZ under CC-BY. <http://creativecommons.org/licenses/by/3.0/nz/>

longlines. The longlines are similar to standard 100-150 m mussel farming longlines but only 50m long. A plan of structures can be found in Appendix A.

Environment

6 The environment of the coastal permit area that would be affected by the proposed spat catching activities has not been described by the applicant or the Council. The general area is open and exposed oceanic environment. The original proposal was to locate the spat monitoring structures about 1 km offshore in about 25 m water depth. Given the very low density of structures and the open exposed sea environment it is unlikely there would be any detectable effect on the benthic habitat of fisheries.

Input from stakeholders

7 Fisheries New Zealand did not seek any information from the public on this application because it largely involves the renewal of an existing resource consent. Subscribers to MPI's web site notifications for aquaculture decisions were notified of this request on 2 December 2018 and given until 24 December 2018 to supply any information on the effects of the proposed activities on fishing. No submissions were received.

STATUTORY CONTEXT

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

9 A '*determination*' is a decision that I am satisfied that the aquaculture activities authorised by the coastal permit will not have an undue adverse effect on customary, recreational, or commercial fishing³. A '*reservation*' is a decision that I am not satisfied that the aquaculture activities authorised by the coastal permit will not have an undue adverse effect on fishing.

10 If I make a reservation, I am required to specify whether the reservation relates to customary, recreational or commercial fishing or a combination of them. If the reservation relates to commercial fishing, I must specify the stocks and area concerned—section 186H(4).

11 Section 186GB(1) of the Fisheries Act specifies the only matters I must have regard to when making an aquaculture decision. These matters are as follows:

- (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;

³ Section 186C of the Fisheries Act defines "adverse effect," in relation to fishing, as restricting access for fishing or displacing fishing. An "undue adverse effect" is not defined. However, the ordinary meaning of "undue" is an effect that is unjustified or unwarranted in the circumstances. For the purpose of my decision under section 186E, an undue adverse effect will mean the significance of the effect on restricting access for fishing, displacing fishing or increasing the cost of fishing is unjustified or unwarranted in the circumstances.

- (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.

12 For the purpose of my assessment, customary fishing differs from recreational fishing if it is undertaken outside of the recreational limits provided in the *Fisheries (Amateur Fishing) Regulations 2013 (Amateur Regulations)* and is instead authorised by a customary authorisation.

13 Appendices B and C have further information on statutory context and customary fishing respectively.

ASSESSMENT

14 The following is an assessment, within the statutory context, of the effects of the proposed aquaculture activities on recreational, customary and commercial fishing. It is based on all the relevant information available to me.

15 This assessment relates to the 418,000 ha of space authorised by coastal permit WRC139018 for the installation of spat catching structures but also takes account of the fact that only 6 longlines and 20 anchored buoys will be installed throughout the space.

Recreational and customary fishing

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

- the area to be occupied by the proposed structures is small and unlikely to be special or unique to recreational or customary fishers;
- most recreational or customary fishing methods would not be excluded from the coastal permit area;
- there are other recreational and customary fishing areas available along this open stretch of coast;
- occupation of the proposed site will result in a minimal, if any, increase in the cost of recreational or customary fishing;
- overall the likely effect of occupation of the proposed site on recreational and customary fishing is considered to be very 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.

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

Location of the coastal permit area relative to fishing areas

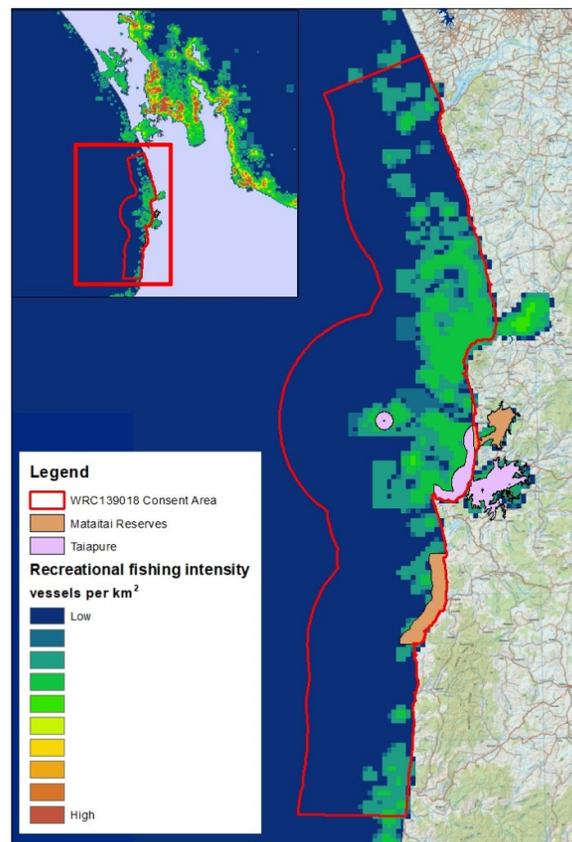
18 The coastal permit area lies wholly within a marine mammal sanctuary where marine mammals are to be protected from harmful human impacts. Accordingly, set netting is prohibited in most of the coastal permit area. There are also four fisheries reserves recognising areas of particular importance to Iwi. At this stage, the reserves do not affect access to, or rules for customary and recreational fishing.

19 The location of the coastal permit area relative to fishing areas for recreational and customary⁴ sectors are considered separately below.

Recreational Fishing

20 I consider the area of the proposed site is located where recreational fishing occurs as shown in Map 2. Methods likely to be used include mobile and stationary rod/line fishing from a boat, and surfcasting and longlining from shore. Species which may be caught include snapper, kahawai, gurnard, kingfish, trevally, blue cod, terakihi, and hapuku.

21 A survey of recreational fishing on the West Coast of the North Island using aerial mapping of fishing locations was conducted over 12 months from Oct 2006 to Sep 2007 (Hartill et al., 2011). The survey showed the area of the coastal permit is frequently used for recreational fishing especially close to Raglan and Kawhia harbours (Map 2).



Map 2. Customary fishing areas and estimated annual intensity of recreational fishing (Hartill et al., 2011).

22 Set netting is prohibited within 7 nautical miles (nm) of the shore along this stretch of coast to protect Hector's and Maui dolphins. Most recreational fishing occurs within 7 nm of

⁴ 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.

the coast and aerial survey and amateur charter vessel (ACV) data suggest set netting is not used even beyond 7 nm.

23 Table 1 summarises my assessment of the main methods used and species likely to be caught by recreational fishers within the coastal permit area based on the recreational fishing survey of Hartill et al. (2011), and ACV data.

Table 1: Recreational fishing methods used and species likely to be caught and targeted at the area of coastal permit WRC139018 based on the available information.

	Hartill et al 2011 aerial survey	ACV data for coastal permit site	Other information	My assessment
Methods used	Private and charter boats leave harbours on calm days for rod fishing and some trolling (~75% of fishers). Surfcasting along sandy beaches or around the river mouths (~25% of fishers), and possibly shore based longlines (<2%).	Rod/line fishing, trolling, diving, small amount of longlining	Set netting is prohibited out to 7 nm from shore.	Stationary and mobile rod/line methods from a private or chartered boats are likely the main methods used within the coastal permit area. These methods can easily avoid the proposed sparsely distributed structures. Surfcasting around river mouths is common and is unlikely to be near the proposed structures due to surf and low salinity not being conducive to spat catching. Unlikely that small amounts of diving, hand gathering and longlining would be displaced. There is unlikely to be dredging or seining that might be displaced by the structures
Species caught	Snapper, kahawai Gurnard are the main species. Also Albacore, trevally, shark, terakihi and possibly blue cod	Snapper, kahawai, Gurnard, kingfish, trevally, terakihi, hapuku, blue cod, crayfish, striped marlin		The species caught in this area are ubiquitous along the whole west coast of the north island.

Customary Fishing

24 I consider it is likely there is some customary fishing within the coastal permit area. In fact, three customary fisheries reserves and 13 gazetted rohe moana (customary fisheries management areas) in the area indicate parts of the coastal permit area are highly significant fishing areas to Iwi.

25 Hand gathering for shellfish along the shore and rod/line fishing from a boat or from shore, and perhaps some shore-based longlining are likely methods used in this location. The main species targeted in this area are likely to be snapper, kahawai and gurnard by line and mussels, and kina and perhaps crayfish by hand gathering.

26 There are two established and one proposed Mātaitai reserve(s) and a taipure within the coastal permit area indicating there is significant customary fishing values in at least the reserve areas shown in Map 2. Further details on customary fishing information can be found in Appendix C.

27 Qualitative information on how much and what type of customary fishing occurs in the locality is available from issued customary authorisations.⁵ About 975 authorisations were issued for the general region of the coastal permit area from 2003 to 2018 which indicates a substantial amount of customary fishing activity.

28 I have assessed likely customary fishing in the coastal permit area in Table 2 below.

⁵ 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.

Table 2: Customary fishing methods used and species caught or targeted at the area of coastal permit WRC139018

				Source of information		
		Customary authorisations for SA 041 and 042	Other information	My assessment		
Methods used		Methods not specified but likely to be mostly hand gathering and rod/line fishing from shore or boats	Two Mātaitai reserves and one taiapure reserve occur within the coastal permit area. Recreational fishers commonly use stationary and mobile rod/line methods, and possibly some longlining and diving. Customary fishers may also use these methods.	Stationary and mobile rod/line methods from boats can easily avoid the proposed sparsely distributed structures. Surfcasting around river mouths is unlikely to be near the proposed structures due to surf and low salinity not being conducive to spat catching. Unlikely that small amounts of diving, hand gathering and longlining would be displaced. There is unlikely to be dredging or seining that might be displaced by the structures		
Species caught or targeted		Cockles, mussels, oysters, pipi, toheroa, kina, catseye, scallops and crayfish are all taken with customary authorisations Finfish species include flatfish, rig and grey mullet, snapper, terakihi, gurnard, kahawai and shark.	Shellfish species and flatfish, rig and grey mullet are probably mostly taken inside the harbours.	Snapper, gurnard and kahawai are likely the species most commonly caught in the coastal permit area.		

Exclusion of fishing

29 I consider that, of the recreational and customary fishing occurring in the area, only longlining and drift line fishing from boats might be excluded from the area occupied by the proposed structures because of the risk of entanglement⁶.

30 Diving, hand gathering and rod/line fishing from shore are unlikely to be displaced by the proposed structures which are likely to be sited further offshore. I consider that rod/line fishing from anchored boats could continue around the proposed structures, as anecdotal information suggests fishers commonly fish by rod/line within mussel farms.

Availability of other areas

31 I consider alternative areas within the coastal permit area and elsewhere in SA 041 and 042 could absorb any recreational fishing displaced from around the proposed structures.

32 The cumulative effects of existing aquaculture is considered further below, however, there is no recreational fishing affected by other authorised aquaculture within SA 041 and SA 042.

33 There are no restrictions on recreational or customary fishing within SA 041 and 042 other than the set netting prohibition already mentioned. There is a large area available for recreational and customary fishing by rod/line in relation to the small area that would be occupied by the proposed structures.

Increased cost of fishing

34 I consider that the proposed aquaculture activities will have no effect on the cost of recreational and customary fishing.

Likely effect on fishing

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

- most recreational or customary fishing methods would not be excluded from the coastal permit area;
- the area to be occupied by the proposed structures is small and unlikely to be special or unique to recreational or customary fishers;
- alternative areas along the coast could absorb any recreational and customary fishing displaced from the proposed site.

Cumulative effects

36 I consider there has been a cumulative effect of existing aquaculture on recreational and customary fishing within the harbours of FMAs 8 and 9. There is about 304 ha of authorised aquaculture space in FMAs 8 and 9 all within the sheltered harbours. Coastal permit WRC139018 is the only aquaculture along the open west coast of the North Island.

⁶ Anecdotal information from recreational fishers in the Marlborough Sounds suggests that spaces between longlines of mussel farms 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.

37 I consider the cumulative effects on recreational and customary fishing, including the additional proposed aquaculture activities in the coastal permit area, will not be undue because:

- some recreational and customary fishing (eg, anchored rod/line fishing) can still occur within marine farms; and
- the area of the proposed site is minimal with regard to all of the space available for recreational and customary fishing along the open west coast.

Commercial fishing

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

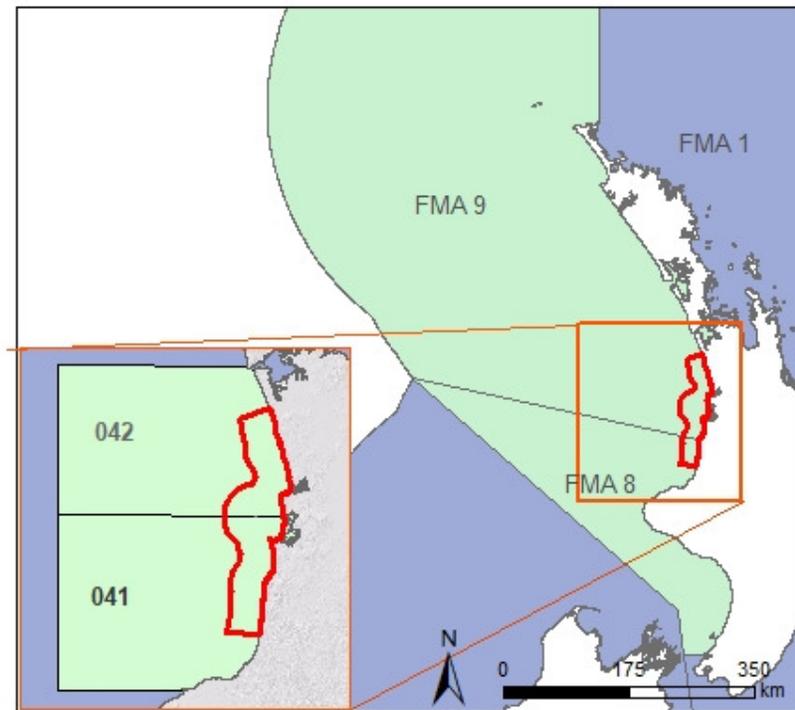
- Although commercial fishing occurs in the coastal permit area, the expected location of the structures is likely to be where most commercial fishing is prohibited;
- the proposed structures will be sparsely distributed over a very large area and commercial fishing could avoid them;
- there are alternate fishing grounds within SA 041 and SA042 and FMAs 8 and 9 for any commercial fishing that might get displaced;
- occupation of the proposed site will result in no increase in the cost of commercial fishing;
- in the worst case, that the structures are installed beyond 2 nautical miles from shore where trawling and Danish seining is permitted, no more than 150 kg of annual catch would be displaced; and
- the cumulative effect of all aquaculture on any fishstock occurring within the coastal permit area is less than 1% and not considered undue.

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

Location of the coastal permit area relative to fishing areas

40 I consider there is a lot of commercial fishing in the area that Coastal permit WRC139018 applies to. The main fisheries located there are trawling for trevally, snapper and gurnard, Danish seining for mixed species, purse seining for skipjack tuna, longlining for shark and hapuku, set netting for shark, rig and warehou, and trolling for albacore.

41 The west coast waters of Waikato region straddle Fisheries Management Areas 8 and 9 (FMA8, FMA9) (Map 3). Historically, most commercial fishing has been reported by statistical area. The marine area of Waikato region on the west coast straddles general statistical areas 041 and 042 (SA 041, SA042) (Map 3). Further detail on fisheries management and statistical areas is available in Appendix D.



42 **Map 3. Fisheries Management Areas 8 & 9 (FMA8, FMA9). Insert shows location of the coastal permit area within statistical areas 041 and 042 (red outline).**

43 Fisheries New Zealand has assessed the main fisheries, bathymetry and habitat known to occur in SA 041 and SA 042 and the relative amounts of fishing that report by start position. Fisheries New Zealand has used this, along with institutional information, to inform Table 3 and the commercial fishing assessment below. Further detail on how Fisheries New Zealand analyses commercial fishing can be found in Appendix D.

44 Set netting occurs in SA 041 and 042 but mainly with the shallow sheltered harbours that are excluded from the coastal permit area. Outside the harbours, set netting is prohibited within 7 nm of the coast in order to protect the rare and threatened Maui Dolphins. The coastal permit area extends 12 nm offshore but the applicant indicated that the structures will mostly be set around 1 km (0.54 nm) from shore and therefore not in an area used for set netting.

45 Trawling occurs in SA 041 and 042 but is prohibited out to 2 nm from shore within the coastal permit area and out to 4 nm from shore in part of the coastal permit area, in order to protect Maui Dolphins. Fisheries New Zealand considers it is unlikely that structures would be placed beyond 2 nm from shore and therefore trawling is unlikely to be affected by the presence of the structures, although it cannot be ruled out.

46 Danish seining occurs in SA 041 and 042 but is prohibited out to 1 nm from shore within the coastal permit area. Fisheries New Zealand considers it is unlikely that structures would be placed beyond 1 nm from shore and therefore Danish seining is unlikely to be affected by the presence of the structures, although it cannot be ruled out.

47 Fisheries New Zealand considers other fisheries occurring in SA 041 and 042 are not likely to overlap with the location of the proposed structures for reasons summarised in Table 3.

Table 3: Fisheries reporting catch in relevant statistical areas and assessment of whether affected.

Fishery segment (main fishstock and main fishing method) ⁷	Statistical area	% high spatial resolution	Average annual no. fishing days ⁸	% of main fishstock caught by this method and in this statistical area	Potentially affected by coastal permits?	Rationale for excluding fishery from proposed farm assessment
Gurnard trawl	041 & 042	99	313	13% GUR8	Yes	prohibited within 2 nm of shore but might overlap with location of structures
Other species trawl	040 & 041	100	307	-	Yes	prohibited within 2 nm of shore but might overlap with location of structures
Snapper trawl	040 & 041	99	149	12% SNA8	Yes	prohibited within 2 nm of shore but might overlap with location of structures
Trevally trawl	040 & 041	100	80	14% TRE7	Yes	prohibited within 2 nm of shore but might overlap with location of structures
Other species Danish seine	040 & 041	7	29	-	yes	prohibited within 1 nm of shore but might overlap with location of structures
Albacore troll	040 & 041	0	450	4 % ALB1	No	might occur within permit area but can avoid sparse structures
Flatfish set net	040 & 041	0	417	4 % FLA1	No	Set netting prohibited within 7nm of coast
Jack mackerel trawl	040 & 041	100	313	40% JMA7	No	fishery occurs beyond 20 nm from coast
Grey mullet set net	040 & 041	0	216	5% GMU1	No	Set netting prohibited within 7nm of coast
School shark set net	040 & 041	99	179	14% SCH 1 & 8	No	Set netting prohibited within 7nm of coast
Kahawai set net	040 & 041	5	133	5% KAH8	No	Set netting prohibited within 7nm of coast
Other species set net	040 & 041	64	124	-	No	Set netting prohibited within 7nm of coast
Grey mullet ring net	040 & 041	0	119	4% GMU1	No	occurs only inside harbours
Rig set net	040 & 041	45	96	4-6% SPO 1 & 8	No	Set netting prohibited within 7nm of coast
Warehou set net	040 & 041	100	88	40-44% WAR 1 & 8	No	Set netting prohibited within 7nm of coast
Tarakihi trawl	040 & 041	99	85	35% TAR8	No	fishery mostly occurs beyond 20 nm from coast
Baracouta trawl	040 & 041	100	74	4% BAR7	No	fishery mostly occurs beyond 20 nm from coast
Other species longline	040 & 041	92	65	-	No	fishery mostly occurs beyond 20 nm from coast

⁷ 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 2016/17.

⁸ Excludes fisheries with less than 10 days fishing per year.

Table 3 continued.

Fishery segment (main fishstock and main fishing method)	Statistical area	% high spatial resolution	Average annual no. fishing days	% of main fishstock caught by this method and in this statistical area	Potentially affected by coastal permits?	Rationale for excluding fishery from proposed farm assessment
School shark longline	040 & 041	97	51.2	5% SCH8	No	might occur close to shore but can avoid sparse structures
Skipjack tuna purse seine	040 & 041	55	49.4	24% SKJ1	No	mostly occurs more than 7nm offshore
Other species midwater trawl	040 & 041	100	46	-	No	fishery occurs beyond 20 nm from coast
Ling longline	040 & 041	100	43.7	8% LIN1	No	fishery occurs beyond 20 nm from coast
Other species pot	040 & 041 & 937	0	33.4	-	No	might occur within permit area but can avoid sparse structures
Trevally set net	040 & 041	53	31.6	0.3% TRE1	No	Set netting prohibited within 7nm of coast
Rock lobster pot	937 & 938	0	28.8	2% CRA9	No	occurs within permit area but can avoid sparse structures
Hapuku bass longline	040 & 041	80	28.5	6% HPB8	No	might occur close to shore but can avoid sparse structures
Bluenose longline	040 & 041	99	27.4	26% (BNS8)	No	fishery occurs beyond 20 nm from coast
Snapper longline	040 & 041	89	26.2	0.6% SNA8	No	Occurs south of the permit area
Tuna longline	040 & 041	100	25.7	-	No	fishery occurs beyond 20 nm from coast
Other species ringnet	040 & 041	0	23	-	No	occurs only inside harbours
Snapper hand line	040 & 041	0	21.7	>0.1 % SNA8	No	usually recreational fishing on commercial vessels
Hagfish pot	040 & 041	0	13.4	100% HAG9	No	fishery occurs beyond 20 nm from coast

Exclusion of fishing

48 I consider that negligible if any commercial fishing would be excluded from the coastal permit area. The proposed structures are mostly small and will be very sparsely distributed and any nearby fishing could easily avoid them. The 6 longlines could occupy about 5 ha of space in total. Applying a 500m buffer within which trawling and Danish seining would likely be excluded gives an affected area of up to about 120 ha. This calculation assumes the worst case scenario where the 6 longlines are installed beyond 2 nm from shore where trawling and Danish seine are permitted.

Availability of other fishing areas

49 I consider alternative areas within the coastal permit area and elsewhere in SA 041 and 042 could absorb any commercial fishing displaced from around the proposed structures.

50 The cumulative effects of existing aquaculture is considered further below, however, there is no commercial fishing affected by other authorised aquaculture within SA 041 and SA 042.

Increased cost of fishing

51 I consider that the aquaculture activities within the coastal permit area will not increase the cost of commercial fishing. This is because the proposed structures will only shift commercial fishing by a small amount if at all, and there are equally productive fishing grounds available nearby.

Likely effect on fishing

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

53 Using CatchMapper and other commercial fishing analysis tools detailed in Appendix D, Fisheries New Zealand estimates the annual amount of commercial fishing that could occur within the coastal permit area averages 500 tonne over the 418,000 ha. At the rate of less than 1.2 kg per ha, the proposed structures wherever they occur are unlikely to affect more than 150 kg of catch for all species included in the assessment, as indicated in Table 3. If the proposed structures are installed within 1 nautical mile of the coast they would not affect any commercial fishing.

Cumulative effects

54 I consider there has been a small cumulative effect of existing aquaculture on fishing in FMAs 8 and 9. There is about 304 ha of other authorised aquaculture space in FMAs 8 and 9 all within the sheltered harbours. Coastal permit WRC139018 is the only aquaculture along the open west coast of the North Island

55 I consider the cumulative effects on commercial fishing, including the additional proposed aquaculture activities in the coastal permit area, will not be undue because:

- Fisheries New Zealand estimates less than 150 kg of average annual catch will be displaced in the coastal permit area wherever the structures might be located; and
- the cumulative effect of all authorised aquaculture activities on the fisheries potentially affected by this coastal permit has been assessed as less than 1% of any fishstock, and not undue;

AQUACULTURE DECISION

56 I am satisfied – based on all relevant information available to me – the activities proposed for coastal permit area WRC139018 will not have an undue adverse effect on:

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

57 Accordingly, my decision is a determination for coastal permit WRC139018 with regard to:

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

58 The area of the determination on recreational, customary and commercial fishing applies to an amount of space up to 5 ha in total occurring anywhere between the shore and 12 nm offshore and lying between the following coordinates (NZTM2000):

Southern Part

<u>Point</u>	<u>Easting</u>	<u>Northing</u>
1	1747069.74	5871374.82
2	1726241.09	5863854.02
3	1717513.32	5715452.83
4	1740384.62	5714617.82

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



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

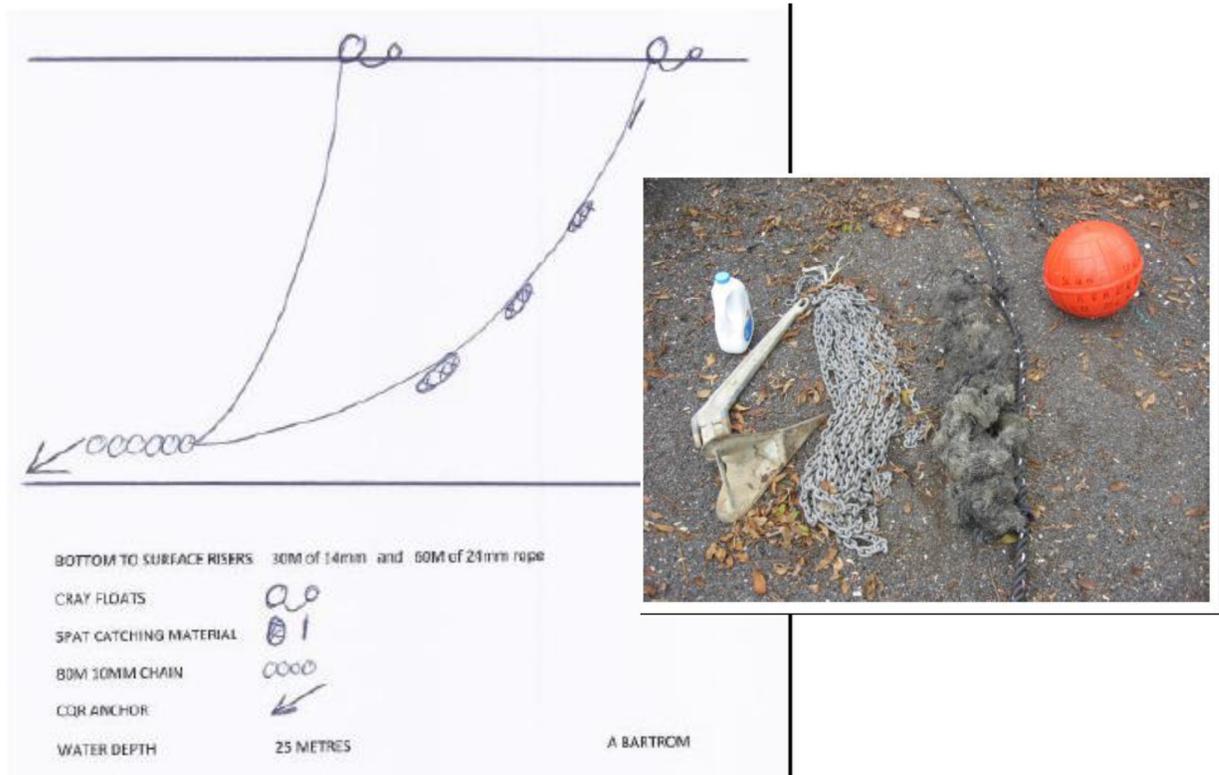
Dated 7 June 2019

References

Hartill, B.; Vaughan, M.; Rush, N. (2011). Recreational harvest estimates for SNA 8 in 2006–07. New Zealand Fisheries Assessment Report 2011/51.

APPENDIX A: STRUCTURES DIAGRAMS

A.



B.

Waikato West Coast Mussel Spat Catching Apparatus Rev 2

The intention of this apparatus is to continue monitoring the juvenile mussel spat settlement as well as testing the retention and relocation on a test scale that is adaptable to a commercial application.

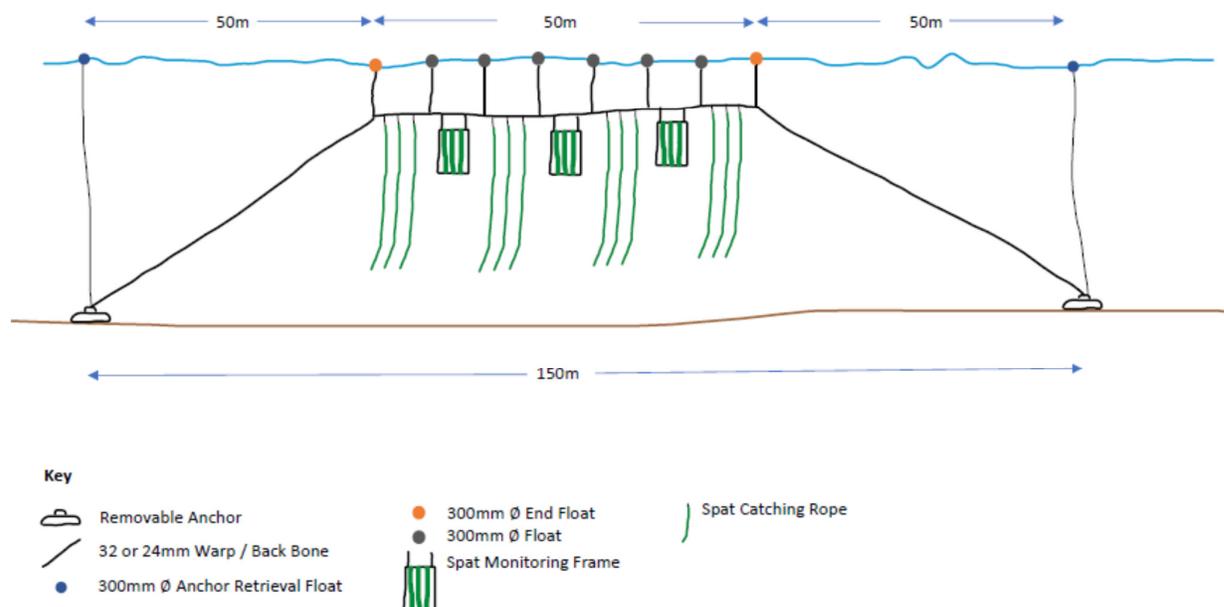


Figure 1. Diagrams of proposed structures. A Spat monitoring buoys. B. Spat catching longlines

APPENDIX B: ADDITIONAL STATUTORY CONTEXT

1 Section 186E(3) of the Fisheries Act ⁹ requires me, in making an aquaculture decision, to have regard to any:

- (a) information held by the Ministry for Primary Industries; and
- (b) information supplied, or submissions made, to the Director-General under section 186D(1) or (3) by:
 - i. an applicant for or holder of the coastal permit;
 - ii. any fisher whose interests may be affected;
 - iii. persons or organisations that the Director-General considers represent the classes of persons who have customary, commercial or recreational fishing interests that may be affected by the granting of the coastal permit or change to, or cancellation of, the conditions of the coastal permit; and
- (c) information that is forwarded by the regional council; and
- (d) any other information that the Director-General has requested and obtained.

2 Section 186F of the Fisheries Act specifies an order of processing that must be followed in making aquaculture decisions. But section 186F(5) allows aquaculture decisions to be made in a different order from that specified if I am satisfied that in making an aquaculture decision out of order it will not have an adverse effect on any other aquaculture decision that has been requested. I am so satisfied in this case.

3 Section 186GB(2) of the Fisheries Act says that if a pre-request aquaculture agreement has been registered under section 186ZH in relation to the areas that the coastal permit relates to, I must not have regard to the undue adverse effects on commercial fishing in respect of any stocks covered by the pre-request aquaculture agreement when having regard to the matters specified in section 186GB(1). No pre-request aquaculture agreements have been registered in relation to coastal permit WRC139018.

4 Section 186GB(1)(b) requires an assessment of the likely effects of the aquaculture activities on fishing of any fishery including the proportion of any fishery likely to be affected. “Fishery” is not defined either in section 186 or elsewhere in the Fisheries Act. However, “stock” is defined in section 2 to mean any fish, aquatic life, or seaweed of one or more species that are treated as a unit for the purposes of fisheries management. Parts (3) and (4) of the Fisheries Act focus on “stocks” for the purpose of setting and allocating Total Allowable Catches and managing species within the quota management system (QMS). Sections 186GB(1)(f) and (2) also refer to “stock” with specific regard to adverse effects on commercial fishing. So for the purpose of my decision under section 186E, I consider a commercial fishery is a fish stock delineated by a fisheries management area (FMA) or quota management area (QMA).

5 I consider the relevant recreational and customary fishery are as I have described in the assessment above in “*Location of the coastal areas relative to fishing area.*”

⁹ 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.

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

7 The *Fisheries (South Island Customary Fishing) Regulations 1999* (**the South Island Regulations**) define customary food gathering as the traditional rights confirmed by the Treaty of Waitangi and the *Treaty of Waitangi (Fisheries Claims) Settlement Act 1992*, being the taking of fish, aquatic life, or seaweed or managing of fisheries resources, for a purpose authorised by Tangata Tiaki/Kaitiaki, including koha, to the extent that such purpose is consistent with tikanga Māori and is neither commercial in any way nor for pecuniary gain or trade.

8 The South Island Regulations and regulation 50 and 51 of the Amateur Regulations provide for Tangata Tiaki/Kaitiaki to determine the customary purpose for which fish, aquatic life, or seaweed may be taken, methods used, seasons fished, size and quantity taken etc. The South Island Regulations and regulations 50 and 51 do not contemplate restrictions under the Fisheries Act on the quantity of fish taken or the methods used to take fish. Should tangata whenua fish without customary authorisations, all the recreational limits under the Amateur Regulations apply.

APPENDIX C: CUSTOMARY FISHING

- 1 Two Iwi have customary fishing interests in the coastal permit area, Waikato and Maniapoto. Te Whakakitenga o Waikato Incorporated is the iwi organisation mandated to represent Waikato Iwi under the Māori Fisheries Act 2004. Maniapoto Māori Trust Board is the iwi organisation mandated to represent Maniapoto Iwi under the Māori Fisheries Act 2004
- 2 There are 13 gazetted rohe moana (customary fishing areas) defined along this stretch of coast each with Kaitiaki responsible for managing customary food gathering.
- 3 There are three legislated customary management areas within the coastal permit area and a fourth that is proposed:
 - a. Kawhia Aotea Taiapure is a local fishery area of 16,200 ha enacted in June 2000. All types of fishing are allowed and there are no local bylaws enacted
 - b. Aotea Harbour Mātaitai is an 82 ha customary reserve enacted in April 2008. Commercial fishing is prohibited and there are no local bylaws enacted for recreational fishing.
 - c. Marokopa Mātaitai is a 53 ha customary reserve enacted in January 2011. Commercial fishing is prohibited and there are no local bylaws enacted for recreational fishing.
 - d. Waikaretu - coastal Mātaitai is a proposal for a 29 ha customary reserve.

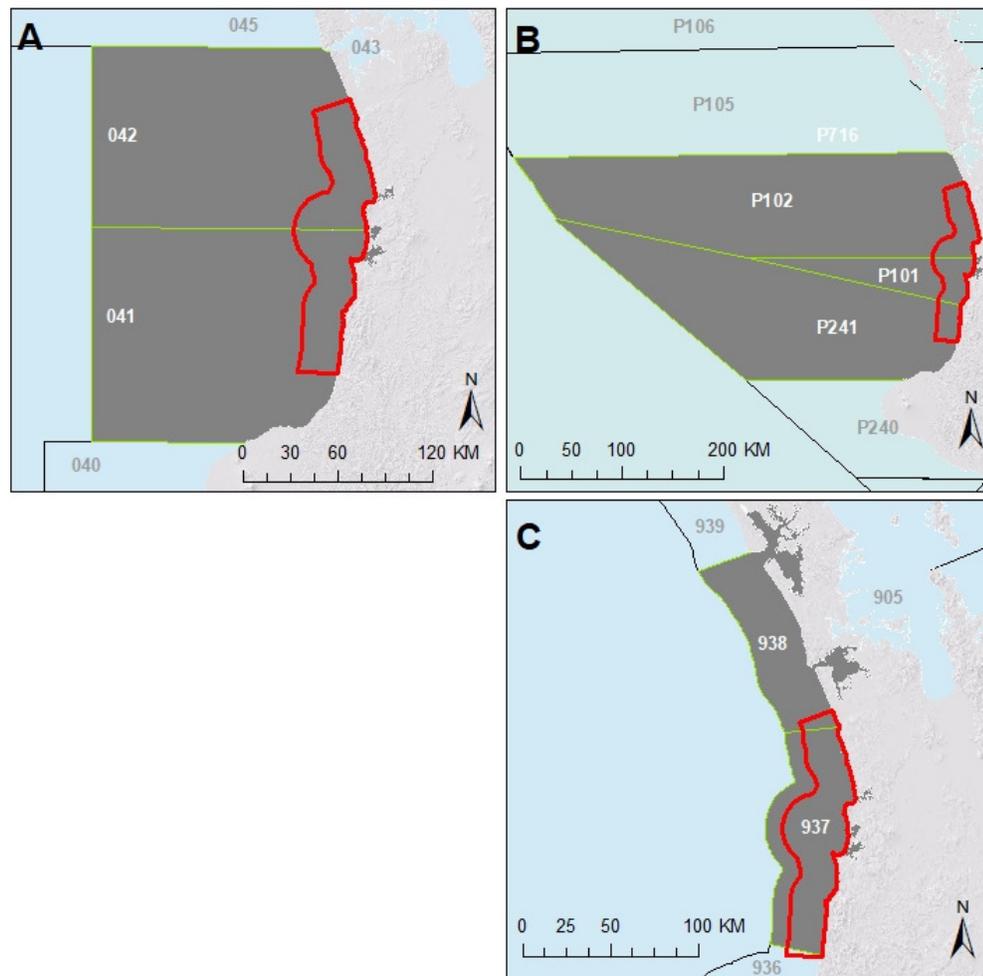
APPENDIX D: COMMERCIAL FISHING

Fisheries boundaries

1 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 straddles FMAs 8 & 9.

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 straddles general statistical areas 041 and 042 (Map 1A).

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 WRC139018 falls mostly within rock lobster statistical area 937 and paua statistical areas P101, P102 and P241 (Maps 1B-C).



Map D1: Species-specific statistical areas that encompass the area of coastal permit WRC139018 (red outline). A General Statistical Areas 041 and 042, B - Paua statistical areas P101, P102 and P241, C –Rock lobster statistical area 937.

Commercial fishing reporting and analysis

4 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, Fisheries New Zealand has modelled and mapped fishing intensity for different segments of fishing, characterised by a type of fishing gear and the main species caught.¹ This detail can be commercially sensitive and cannot be publically released

5 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, Fisheries New Zealand has mapped long lining, bottom trawling and set netting by vessels less than 6 m as being within enclosed bays and within 3 nm of open coasts. Knowledge about species and information from commercial fishers and fishing companies, and Fishery Officers can also help to determine whether specific types of fishing are likely to occur in an area.

6 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.² 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

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

8 The amount of fishing was averaged over October fishing years 2007/08 to 2016/17. Ten 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.

¹ 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.

² 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.