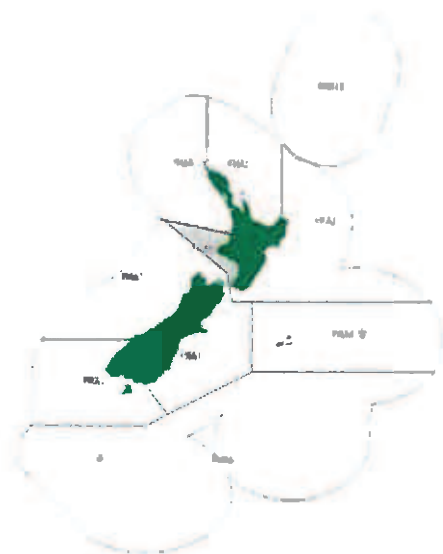


Surf Clams (QMA 8): Total Allowable Catch Review Final Advice

Figure 1. Quota Management Area 8 (QMA8) for Surf Clams



Summary

- 1 The New Zealand surf clam fishery comprises seven shellfish species found within the surf zone of many beaches. These species were brought into the Quota Management System (QMS) in 2004 and are considered to have commercial development potential.
- 2 The Ministry for Primary Industries (MPI) has new information about surf clam biomasses and distributions in Quota Management Area (QMA) 8. The information from a 2012 biomass survey shows substantial surf clam abundance for four species that could support the development of a sub-tidal surf clam fishery. Information supplied by the surf clam industry indicates that up to \$20M of export returns could potentially be realised from the fishery.
- 3 MPI recommends that you increase the Total Allowable Catch (TAC), allowances, and Total Allowable Commercial Catch (TACC), for four surf clam stocks in QMA 8 as shown in Table 1.

Table 1. Final proposals - TACs, allowances and TACCs for four surf clam stocks in QMA 8

Stock	TAC (t)	Customary Allowance (t)	Recreational Allowance (t)	Other sources of fishing – related mortality (t)	TACC (t)
PDO¹ 8					
Option 1 (<i>status quo</i>)	19	9	9	0	1
Option 2 (MPI preferred)	296	10	9	15	262
SAE² 8					
Option 1 (<i>status quo</i>)	8	-	-	0	8
Option 2 (MPI preferred)	1821	10	-	91	1720
MMI³ 8					
Option 1 (<i>status quo</i>)	25	-	-	0	25
Option 2 (MPI preferred)	631	10	-	32	589
DAN⁴ 8					
Option 1 (<i>status quo</i>)	33	-	-	0	33
Option 2 (MPI preferred)	236	10	-	12	214

- 4 No changes to any other management settings for these surf clam stocks in QMA 8 are proposed.
- 5 Option 1 represents the current TAC and sector allowances as set when these species entered the QMS. MPI considers the fishery to be in an unfished state. Option 2 represents TACs derived from a 2012 biomass survey, and revised TACCs, sector allowances, and provide for other sources of fishing-related mortality based on an increase in harvest potential. An increase in the TACs for QMA 8 surf clams would enable the development of a new fishery with attendant economic benefits. The proposed increases are considered to carry a low sustainability risk.
- 6 Two submissions were received on the Initial Position Paper (IPP). Both support an increase in the TAC but requested a change to how the TAC was allocated (represented in Option 2).
- 7 Having considered all submissions, MPI recommends you increase the TACs and TACCs for surf clam stocks as set out in Table 1 (MPI preferred options) because:

¹ *Paphies donacina*

² *Crassula aequilatera*. This species was previously known as *Spisula aequilatera* but is now known as *Crassula aequilatera* as a correction to the classification. Powell, A.W.B. 1979: New Zealand Mollusca: Marine, Land and Freshwater Shells. Collins, Auckland 500p (p.414)

³ *Mactra murchisoni*

⁴ *Dosinia anus*

- Best available information suggests the these surf clam stocks are effectively in a virgin state, and the current biomasses would support an increase in harvestable yield;
- Increased TACs for these surf clam stocks would not have an adverse impact on the sustainability of the surf clam stocks in QMA 8 in the short to medium-term;
- Increased TACs would not have an adverse impact on customary and recreational utilisation opportunities;
- The recommended TACCs would provide the industry with more utilisation opportunities from the fishery to derive greater economic return, and reflect the developing nature of the fishery.

KEY CONSIDERATIONS

Need to Act

- 8 MPI's management approach for developing fisheries, such as surf clams, involves enabling annual yield from the fishery to be maximised while maintaining the stock size at or above the level required to ensure sustainability and the spawning stock biomass⁵.
- 9 Through a process agreed during MPI's 2012 planning round, quota holders commissioned a biomass survey⁶ of surf clam biomasses and distributions in QMA 8.
- 10 The survey shows substantial surf clam abundance that could support the development of a significant sub-tidal surf clam fishery.

Stock status

- 11 Because of the lack of exploitation of each species, it is likely that all surf clam stocks in QMA 8 are still effectively in an un-fished state. However, because recruitment of surf clams is variable and natural mortality may be high, biomass can be highly variable both spatially and temporally.

New Information

- 12 The biomass survey was conducted in October–November 2012 on the Manawatu coast covering about 23 kilometres either side of the Manawatu River. The survey has been reviewed by the MPI Shellfish Working Group and biomass estimates have been accepted, including potential maximum constant yield (MCY⁷) values.

⁵ National Fisheries Plan for Shellfish Fisheries (www.fish.govt.nz/en-nz/Fisheries+Planning)

⁶ White, W.L., Millar, R.B., Breen, B., and Farrington, G. 2012. *Survey of Sub-tidal surf clams from the Manawatu Coast (FMA 8)*, October – November 2012.

⁷ $MCY = 0.25 * F_{0.1} * B_0$. $F_{0.1}$ is the fishing mortality rate at which the increase in equilibrium yield per recruit in weight per unit of effort is 10% of the yield per recruit produced by the first unit of effort on the unexploited stock. B_0 is an estimate of the virgin recruited biomass.

- 13 The biomass survey estimates the current combined biomass of the four species of surf clams at 18 384 tonnes.
- 14 MCY estimates have been calculated for each of the four main species (Table 2) under varying estimates of fishing mortality ($F_{0.1}$). MCY is considered the maximum constant catch that can be caught each year that is estimated to be sustainable at all probable future levels of species biomass. Estimates of fishing mortality were calculated using growth data from the Wellington west coast for SAE, MMI and DAN, while values for PDO were taken from Cloudy Bay in the South Island.

Table 2. Mean values and 95% confidence intervals of MCY (t) of four surf clam species in QMA 8 based on variable estimates of $F_{0.1}$ ⁸

Species	Biomass (t)	Value of $F_{0.1}$	Mean MCY (t)	95% Confidence Intervals	
				Lower	Higher
PDO	3289.5	0.36	296.1	199.5	392.6
		0.52	427.6	288.2	567.1
SAE	7992.9	1.12	2238.0	1820.7	2655.3
		1.56	3117.2	2536.0	3698.4
MMI	3603.2	0.7	630.6	512.6	748.5
		0.89	801.7	651.8	951.7
DAN	3498.1	0.27	236.1	192.5	279.7
		0.54	472.2	385.1	559.4

Areas of uncertainty

- 15 MPI notes that there is uncertainty around natural mortality (M) and the fishing mortality ($F_{0.1}$) estimates used, as:
- Mortality and recruitment of surf clams are known to be highly variable;
 - Natural mortality was estimated from growth rings that were assumed to be annual and subsequently used to calculate fishing mortality. However, this assumption is unverified;
 - Fishing mortality values used are assumed to be similar to those from previous work on the Wellington west coast;
 - There is no data on dredge mortality, which could affect the estimate of fishing mortality;
 - The range of natural mortality estimates used to determine fishing mortality may be too small;
 - There are no current biomass trends for the surf clam fisheries in QMA 8 and;
 - Fishing mortality values for SAE appear concerningly high and, therefore, MCY estimates for SAE should be interpreted with caution.

⁸ Estimates of $F_{0.1}$ were calculated based on natural mortality rates from the Wellington west coast and Cloudy Bay. Cranfield, H.J., Michael, K.P., and D.R. Stotter. 1993. *Estimates of growth, mortality, and yield per recruit for New Zealand surf clams*. New Zealand Fisheries Assessment Research Document 93/20.

- 16 On the other hand, the estimates of biomass found in these studies are considered conservative because:
- Surf clams are known to exist in the rest of QMA 8 outside the surveyed sites and;
 - The analysis was undertaken assuming a dredge efficiency of 100%, which is acknowledged by the Shellfish Working Group to be an over estimate, which reduces the estimate of fishing mortality.
- 17 These factors have been taken into account in the recommendations of this paper.

Relevant Fishery Information

- 18 Although surf clam stocks overseas support major fisheries, the New Zealand surf clam stocks have only recently become the focus of commercial development. Prior to being put in the QMS, only a few commercial fishers held the required permits to target surf clams and there were also difficulties in adapting overseas dredge design to suit New Zealand conditions.
- 19 In addition, the cost of entry to surf clam fisheries is relatively high because of the required shellfish sanitation surveys⁹. Before harvesting can begin, each harvest area must meet specific shellfish sanitation requirements overseen by MPI Verification and Services. Applications require ongoing monthly and annual testing, and annual reporting. In QMA 8 there are currently no harvesting areas that have shellfish sanitation clearance for the extraction of surf clams.

CONSULTATION

- 20 The Ministry released an Initial Position Paper (IPP) on 14 December 2012, with submissions closing on 8 February 2013. The IPP was published on the consultation section of the Ministry's website and posted and emailed to persons and organisations with an interest in surf clams in QMA 8.
- 21 The options presented in the IPP and consulted on vary slightly from the final proposals presented in this paper.
- 22 The options released for consultation purposes are shown in Table 3 below.

⁹ New Zealand Legislation: Animal Products (Regulated Control Scheme - Bivalve Molluscan Shellfish) Regulations 2006

Table 3. Options (tonnes) consulted on for setting TACs, sector allowances and TACCs for surf clam stocks in QMA 8

Stock	TAC (t)	Customary Allowance (t)	Recreational Allowance (t)	Other sources of fishing – related mortality (t)	TACC (t)
PDO 8					
Option 1 (<i>status quo</i>)	19	9	9	0	1
Option 2	296	9	9	15	263
SAE 8					
Option 1 (<i>status quo</i>)	8	-	-	0	8
Option 2	1821	-	-	91	1730
MMI 8					
Option 1 (<i>status quo</i>)	25	-	-	0	25
Option 2	631	-	-	32	599
DAN 8					
Option 1 (<i>status quo</i>)	33	-	-	0	33
Option 2	236	-	-	12	224

Submissions

- 23 Two submissions were received from tangata whenua and stakeholders that relate to proposed measures released in the QMA 8 surf clam TAC review IPP:
- Te Ohu Kaimoana Trustee Ltd (Te Ohu)
 - Rangitaane North Island (RNI)
- 24 Both submissions support Option 2: to increase the TAC, TACC and allowances. However, both also request a re-adjustment in the TACC and allowances to reflect anticipated expected Maori customary harvest within each of the four surf clam TACs. Te Ohu also submit they recommend a review of the allowances made for Maori customary fishing in two years time to ensure they are adequate.
- 25 Te Ohu indicate you should anticipate a level of 10 t Maori customary harvest for each species.
- 26 RNI submit that the area of coast that is intended to be fished for surf clams covers the entire shore of Rangitaane o Manawatu's rohe moana (from the mouth of the Manawatu River north to the Rangitikei River at Tangimoana) and,

as such, they have a significant stake in the management of the fishery and the environment. MPI acknowledges the relationship between Rangitaane o Manawatu and the fishery and area of the fishery.

Other Issues

- 27 RNI submit that they anticipate a bycatch of paddle crab and would like to establish a Maori customary allowance to the paddle crab fishery. This issue is beyond the scope of this paper.

FINAL PROPOSALS

Option 1

- 28 Option 1 is the *status quo* (see Table 1). The current TACs were established in 2004 when surf clams entered the quota management system. They were based on limited and uncertain information regarding yield estimates across entire QMAs and are consequently conservative. TACCs were based on historic commercial landings, however, the surf clam fishery is a newly developing fishery and these settings are no longer appropriate for development of the fishery or reflective of the recent biomass survey.

Option 2 – (MPI preferred Option)

- 29 The TAC values presented in Option 2 are based on the MCY estimates from the recent biomass survey while taking into account the uncertainties associated with the survey. The surf clam TACs are proposed to be set at the lower mean MCY estimate (Table 2) for PDO 8, MMI 8, and DAN 8.; and, for SAE 8, given uncertainty associated with the fishing mortality values for this stock, set at the lower 95% confidence interval bound of the lower fishing mortality value.
- 30 Increasing the TACs for these selected stocks will enable industry to develop these surf clam fisheries and increase the utilisation derived from these stocks.
- 31 The TACs are being set for the whole of QMA 8 based on the limited biomass survey area, but the fishery will be constrained to those parts where approved sanitation areas are established. MPI is also aware that calculation of the estimates assumes 100% dredge efficiency which will make estimates more cautious.
- 32 While Option 2 poses a greater sustainability risk than Option 1, this risk is considered to be low. Under Option 2 there will be greater fishing impacts on the benthic environment (see Environment Impacts section) that have been given sanitation clearance. The level of risk is dependent on the size of the sanitation areas where harvesting can occur and the amount of surf clams that are extracted from these areas. The environmental impact of surf clam harvesting is considered to be low.

Maori Customary and Recreational Allowances

- 33 Under Option 1 existing Maori customary allowances and recreational allowances for the reviewed surf clam stocks in QMA 8 would be retained. Based on submissions received, MPI has amended Option 2 to increase the proposed Maori customary allowance.
- 34 The sub-tidal surf clam species included in this review are usually inaccessible to both customary and recreational fishers as the clams are located offshore. MPI notes the possible exception of the deepwater tuatua (*P. Donacina*) which may be accessible in shallow water at low spring tides.
- 35 Sub-tidal surf clams may occasionally be harvested by customary or recreational fishers when stranded ashore in high tides after storms. This is considered to be natural mortality as the majority of stranded shellfish die, regardless.
- 36 MPI notes there is no information on customary harvest because the fishery has not been widely accessible to customary fishers. Customary fishers have reached an arrangement with the industry to use commercial vessels to obtain customary harvest of these species. MPI agrees that based on submissions from iwi, a 10 tonne allowance represents a reasonable indication of Maori customary catch from the coming fishing year.

Other sources of fishing-related mortality

- 37 When the original TACs for surf clam stocks were set, MPI did not make an allowance for other sources of fishing-related mortality for surf clam stocks. The level of mortality from this source was estimated to be low given the size of the proposed TACs. Today, the quantity of surf clam mortality as a result of interaction with commercial dredges (but not being caught) is still considered low. The proportions of damaged surf clams in earlier gear trials (pre-1990) ranged between 0 – 21%¹⁰ depending on species and dredge design, but advances in technology and hydraulics have likely reduced this level of fishing-related mortality.
- 38 In the absence of specific research results, MPI is proposing an allowance for other sources of fishing-related mortality that is equivalent to approximately 5% of the proposed TAC for each surf clam stock.

Total Allowable Commercial Catch (TACC)

- 39 Under Option 2, MPI is proposing that the TACCs for PDO 8, SAE 8, MMI 8, and DAN 8 be increased.
- 40 The proposed TACCs will provide industry with the opportunity to develop the surf clam fisheries in QMA 8. This will provide additional return to the local

¹⁰ Beentjes, M.P., and S.J. Baird. 2004. *Review of dredge fishing technologies and practice for application in New Zealand*. New Zealand Fisheries Assessment Report 2004/37.

fishing sectors through increased employment of crew, processing of landed surf clams, and other benefits to the economy.

- 41 Information supplied by the surf clam industry indicates that export returns of up to \$8.00 a kilogram could be achieved. Based on the TACCs in Option 2, export returns of \$20M could be realised. Further, operation and processing, when the fishery is fully developed, would require employment of 15 to 20 people.

Environmental Impacts

- 42 Previous research¹¹ has concluded that use of hydraulic dredges in the surf clam fishery has little adverse effect on the surf zone substrate where surf clams are found. There is little evidence of dredge tracks on the substrate within 20 minutes of use and no evidence within 24 hours. These shallow water environments are subject to frequent natural disturbance and tend to recover faster from the effects of mobile fishing compared to those in deeper water. Similarly, the species that live in these systems must adapt to turbulence and shifting sand.
- 43 MPI notes that surf clams will play a role in the coastal marine food webs; however, there is very limited information on this matter.

ADDITIONAL MANAGEMENT CONTROLS

- 44 MPI does not propose changes to other management controls.

ASSESSMENT AGAINST STATUTORY OBLIGATIONS

- 45 The Ministry considers that both options satisfy the statutory requirements under section 8 of the Act in that they provide for utilisation in the QMA 8 surf clam fishery while ensuring sustainability. However, Option 2 significantly improves utilisation while still ensuring a low sustainability risk.

TAC

- 46 The TAC for surf clam stocks is set under section 13 of the Fisheries Act 1996 (the Act). Section 13(2) requires you, as the Minister for Primary Industries, to set a TAC that enables the stock to be maintained at, or moved towards or above, a level that will produce the maximum sustainable yield (B_{MSY}) having regard to the interdependence of stocks.
- 47 Section 13(2) of the Act requires an assessment of current biomass and B_{MSY} . Estimates of current biomass are available for part of the QMA 8 coastline from the biomass survey, B_{MSY} ; the biomass that would produce the maximum sustainable yield has not been established.
- 48 Where an estimate of is not available, s 13(2A) of the Act provides for you to use the best available information to set a TAC that is not inconsistent with the

¹¹ Ibid, no. 6.

objective of maintaining the stock at or above B_{MSY} , or moving the stock towards or above, B_{MSY} having regard to the interdependence of stocks.

- 49 The best available information is the maximum constant yield (MCY) estimates derived from the 2012 biomass survey. These provide a guide to the sustainable yield for the surf clam fishery and can be used as a proxy for B_{MSY} .

TACCs and Allowances

- 50 When setting a Total Allowable Commercial Catch (TACC), s 21 of the Act requires that you take account of the TAC and make allowances for Maori customary non-commercial interests, recreational fishing interests, and for any other sources of fishing-related mortality, before setting the TACC.
- 51 The Act does not provide an explicit statutory mechanism to apportion available catch between sector groups. Accordingly, you have the discretion to make allowances for various sectors based on the best available information.

Section 5-International Obligations and Treaty of Waitangi (Fisheries Claims Settlement Act 1991

- 52 In setting or varying sustainability measures, you must act in a manner consistent with New Zealand's international obligations relating to fishing and the provisions of the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992.
- 53 A wide range of international obligations relate to fishing, including use and sustainability of fishstocks; and maintaining biodiversity (s 5(a)). The Ministry considers that the management options for the QMA 8 surf clam fishery are consistent with these international obligations.
- 54 The Ministry also considers the proposed management options to be consistent with the provisions of the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992 (s 5 (b)). Ongoing work is being done within the area covered by the QMA 8 surf clam fishery to promote policies that help to recognise customary use and management practices.

Section 8-Purpose of the Act

- 55 The purpose of the Act is to provide for utilisation of fisheries resources while ensuring sustainability. The Ministry considers that all options presented in this paper do this.
- 56 Option 1 is cautious but will limit utilisation opportunities. In contrast, increasing the TACC to 2 984 t under Option 2 (the Ministry recommended option), will allow for development of the fishery and therefore increased utilisation.

Section 9-Environmental principles

- 57 Section 9 requires you to take into account three environmental principles: that associated or dependent species be maintained at or above a level that ensures their long-term viability; that the biological diversity of the aquatic environment

should be maintained; and habitat of particular significance for fisheries management should be protected.

- 58 Key environmental issues associated with the QMA 8 surf clam fishery and how they will be affected by an increase in the TAC are discussed in the body of this paper.

Section 10-Information principles

- 59 Under section 10 you must take into account the following information principles:

- (a) decisions should be based on best available information;
- (b) decision makers should take into account any uncertainty in the available information;
- (c) decision makers should be cautious when information is uncertain, unreliable or inadequate, and;
- (d) the absence of, or any uncertainty in, any information should not be used as a reason for postponing or failing to take any measure to achieve the purpose of the Act.

- 60 Currently known information about surf clams, including any uncertainties in that information is set out in the body of this paper:

Section 11-Sustainability measures

- 61 In making your decision on sustainability measures for the QMA 8 surf clam fishery you must also have regard to the requirements of section 11 of the Act as follows:

- Section 11(1)(a): Before setting or varying any sustainability measure for any stock, you must take into account any effects of fishing on any stock and the aquatic environment. All of the QMA 8 surf clam fishery is taken by hydraulic dredge. Bycatch is minimal however; crabs, echinoderms, flatfish, marine worms and some other species of shellfish can be taken from time to time. It is not anticipated that the proposed TAC (and TACC) options would result in a significant impact to these species. Therefore, it is not anticipated there will be an increase on the harvest of other stocks.
- Section 11(1)(b): Before setting or varying any sustainability measure for any deepwater stock, you must take into account any existing controls under the Act that apply to the stock or area concerned. Standard management controls apply to the QMA 8 surf clam fishery, for example deemed values, recreational bag limits. The proposed changes to the TAC do not affect these measures.
- Section 11(1)(c): Before setting or varying any sustainability measure for this stock, you must take into account the natural variability of the stock. This has been discussed previously in relation to the biological characteristics of the QMA 8 surf clam fishery.

- Sections 11(2)(a) and (b): Before setting or varying any sustainability measure for any stock, you must have regard to any provisions of any regional policy statement, regional plan, or proposed regional plan under the Resource Management Act 1991 and any management strategy or management plan under the Conservation Act 1987 that apply to the coastal marine area and you consider relevant. The Ministry is not aware of any such policy statements, plans or strategies that should be taken into account for the QMA 8 surf clam fishery stock.
- Section 11(2)(c): Before setting or varying any sustainability measure for any deepwater stock, you must have regard to sections 7 and 8 of the Hauraki Gulf Marine Park Act 2000 that apply to the coastal marine area and you consider relevant. The boundaries of the quota management area for these stocks do not intersect with the Park boundaries.
- Section 11(2A)(b): Before setting or varying any sustainability measure for any stock, you must take account of any relevant and approved fisheries plans. There is no approved fisheries plan in place for any inshore stock at this time. A draft national inshore shellfish plan has been released. Management objectives for developing fisheries, such as surf clams, involve enabling annual yield from the fishery to be maximised while maintaining the stock size at or above the level required to ensure sustainability and the spawning stock biomass.
- Sections 11(2A)(a) and (c): Before setting or varying any sustainability measure for any stock, you must take into account any conservation or fisheries services, or any decision not to require such services. The Ministry does not consider that existing or proposed services materially affect the proposals for this stock. No decision has been made to not require a service in this fishery at this time.
- Section 11(2)(d): Before setting or varying any sustainability measure for any stock, you must take account of any planning document lodged by a customary marine title group under section 91 of the Marine and Coastal Area (Takutai Moana) Act 2011. The Ministry is not aware of any documents that apply to the QMA 8 surf clam fishery

Section 12-Consultation

- 62 There is an obligation to provide for input and participation of tangata whenua and have particular regard to kaitiakitanga (under s 12).
- 63 On the 29th of August MPI meet with Te Tai Hauauru Fisheries Forum in Wanganui to discuss aspects of the upcoming Annual Review Report which is a stage in the National Inshore Fisheries Planning process. At this meeting TOKM and Cloudy Bay Clams gave a presentation of the proposed stock assessment survey they were planning for Foxton Beach. There was a positive response from the forum to this proposal and MPI discussed the way any information from the stock assessment would be processed. On 7th November a further meeting was held at Pungarehu Marae with the Forum. At this meeting an update was given to the Forum on the status of the stock survey, and all members of the

forum were invited to attend the Shellfish working group meeting that was held on 13th November to discuss the results of the survey.

CONCLUSIONS

- 64 MPI's preference is to increase the TAC and TACC for surf clams in QMA 8 to the levels shown in the following table.

Table 5. Proposed TACs, sector and other fishing-related mortality allowances and TACCs (tonnes) for surf clam stocks in QMA 8.

Stock	TAC (t)	Customary Allowance (t)	Recreational Allowance (t)	Other sources of fishing related mortality (t)	TACC (t)
PDO 8	296	10	9	15	262
SAE 8	1821	10	-	91	1720
MMI 8	631	10	-	32	589
DAN 8	236	10	-	12	214

- 65 MPI considers the proposed TACs will not have an adverse impact on the sustainability of the surf clam stocks in QMA 8 in the short to medium-term, or on customary and recreational use opportunities. The proposed TACs will allow greater economic return, and reflect the developing nature of the fishery.

SUMMARY OF RECOMMENDATIONS

66 The Ministry recommends that for the PDO 8 fishery you either:

Option 1

- a. **Agree** to retain the TAC for PDO 8 at 19 t and within the TAC:
 - i. **Retain** an allowance for customary fishing of 9 t
 - ii. **Retain** an allowance for recreational fishing of 9 t
 - iii. **Retain** an allowance for other sources of fishing related mortality of 0 t
 - iv. **Retain** the TACC at 1 t

Agree / Not Agreed

OR

Option 2 (MPI preferred Option)

- b. **Agree** to increase the TAC from 19 t to 296t and within this:
 - i. **Increase** the allowance for customary fishing to 10t
 - ii. **Retain** an allowance for recreational fishing of 9 t
 - iii. **Increase** an allowance for other sources of fishing related mortality to 15 t
 - iv. **Increase** the TACC from 1 t to 262 t

Agree / Not Agreed

67 The Ministry recommends that for the SAE 8 fishery you either:

Option 1

- c. **Agree** to retain the TAC for SAE 8 at 8 t and within the TAC:
 - i. **Retain** an allowance for customary fishing of 0t
 - ii. **Retain** an allowance for recreational fishing of 0 t
 - iii. **Retain** an allowance for other sources of fishing related mortality of 0t
 - iv. **Retain** the TACC at 8 t

Agree / Not Agreed

OR

Option 2 (MPI preferred Option)

- d. **Agree** to increase the TAC from 8 t to 1821 t and within this:
 - i. **Set** an allowance for customary fishing of 10 t
 - ii. **Retain** an allowance for recreational fishing of 0 t
 - iii. **Increase** an allowance for other sources of fishing related mortality to 91 t
 - iv. **Increase** the TACC from 8 t to 1720 t

Agree / Not Agreed

68 The Ministry recommends that for the MMI 8 fishery you either:

Option 1

- e. **Agree** to retain the TAC for MMI 8 at 25 t and within the TAC:
 - i. **Retain** an allowance for customary fishing of 0 t
 - ii. **Retain** an allowance for recreational fishing of 0 t
 - iii. **Retain** an allowance for other sources of fishing related mortality of 0 t
 - iv. **Retain** the TACC at 25 t

Agree / Not Agreed

OR

Option 2 (MPI preferred Option)

- f. **Agree** to increase the TAC from 25 t to 631 t and within this:
 - i. **Set** an allowance for customary fishing of 10 t
 - ii. **Retain** an allowance for recreational fishing of 0 t
 - iii. **Increase** an allowance for other sources of fishing related mortality to 32 t
 - iv. **Increase** the TACC from 25 t to 589 t

Agree / Not Agreed

69 The Ministry recommends that for the DAN 8 fishery you either:

Option 1

- g. **Agree** to retain the TAC for DAN 8 at 33 t and within the TAC:
 - i. **Retain** an allowance for customary fishing of 0 t
 - ii. **Retain** an allowance for recreational fishing of 0 t
 - iii. **Retain** an allowance for other sources of fishing related mortality of 0 t
 - iv. **Retain** the TACC at 33 t

Agree / Not Agreed

OR

Option 2 (MPI preferred Option)

- h. **Agree** to increase the TAC from 33 t to 236 t and within this:
 - i. **Set** an allowance for customary fishing of 10 t
 - ii. **Retain** an allowance for recreational fishing of 0 t
 - iii. **Increase** an allowance for other sources of fishing related mortality to 12 t
 - iv. **Increase** the TACC from 33 t to 214 t

Agree / Not Agreed



Steve Halley
Acting Manager, Inshore Fisheries
Resource Management and Programmes



Hon Nathan Guy
Minister for Primary Industries

21/3 / 2013

Appendix One:

Copy of submissions



Te Mauri O Rangitāne O Manawatu (Council of Elders)
Tanenuiarangi Manawatu Incorporated (Mandated Iwi Authority)
Phone: (06) 353 1881 Fax: (06) 353 1880 Email: TMI@rangitane.iwi.nz Website: www.tmi.maori.nz

Best Care (Whakapai Hanora)
Charitable Trust
(Health/Social/Education Services)
Ph: (06) 353 6385
Fax: (06) 353 1883
Email: BCWH@rangitane.iwi.nz
Website: www.whakapaihauora.maori.nz

Piki Kotuku
Te Awhi Hinengaro
Ph: (06) 353 1884
Fax: (06) 353 1885
Email: BCWH@rangitane.iwi.nz

Kia Ora FM 89.8
(Radio Station)
Ph: (06) 353 1881
Fax: (06) 353 1880
Studio: Ph (06) 353 1882
Email: kfmstudio@rangitane.iwi.nz
Website: www.kiaorafm898.maori.nz

Tūruru Pūmau
Te Hotu Manawa O Rangitāne O Manawatu Marae
140-148 Maxwells Lane, PO Box 1341, Palmerston North

11 January 2013

Ministry for Primary Industries
Inshore Fisheries
Private Bag 1926
Dunedin 9054

Attn: Allen Frazer
MPI Inshore Shellfish Working Group.

Cc:
Alan Riwaka
Senior Fisheries Management Advisor
Te Ohu Kaimoana Trustee Ltd
P.O Box 3277
Wellington

**SUBMISSION ON BEHALF OF RANGITANE NORTH ISLAND TO THE MINISTRY FOR
PRIMARY INDUSTRIES ON THE TAC SETTING FOR THE PROPOSED FMA8 SURF
CLAM FISHERY 2013**

Tena koe

Nga mihi nui ki a koe i roto i nga tini ahuatanga o te wa nei.

1. Tanenuiarangi Manawatu Incorporated (TMI), the mandated iwi authority for Rangitane O Manawatu (ROM) wish to offer comments and expectations for the Ministry for Primary Industry's (The Ministry, MPI) regarding the current commercialisation and customary allowance management process for the proposed surf clam shellfish fishery off the Manawatu coast. Our comments relate to the development of this fishery within FMA 8, but specifically for the USE and ENVIRONMENTAL outcomes for the portion between the mouths of the Manawatu and Rangitikei Rivers.
2. Our input to the proposed surf clam fishery in FMA 8 covers 3 topics, which we would like considered when The Ministry sets the TAC;
 - a. Use outcome
 - i. Commercial

Ka kabutia i te korowai, Te Rangimarie, Te Aroha, Te Whakaiti, Ka Whakapuawai he iwi bumanarie
Spread the cloak of Peace and Love, so shall blossom the people of humility



ii. Customary allocation and pataka moana

iii. Managing by-catch

b. Environmental outcome

i. Managing fishing activity impacts on wider environment and ROM traditional fishing grounds.

3. Introduction

In relation to the customary representation and allocation for the inshore fisheries assets on the western coast of the North Island, Rangitaane has a significant claim spanning upwards of 800 years. The rights and responsibilities developed over time ensure our place in the on-going management of this fishery. In terms of this process the most recent developments are the (2009) Rangitaane o Manawatu notification of its fisheries tiaki tangata (kaitiaki) under the Ministry for Primary Industries (MPI) Kaimoana regulation framework (1996) for both its rohe moana (marine) and rohe wai whenua (freshwater) for the western coast. And, in 2012 alongside the Te Taihauauru Iwi Fisheries Forum, the constituent runanga of Rangitaane North Island (RNI) bought into effect the Te Taihauauru, and RNI Iwi Fisheries Plans, both giving greater recognition to rights of Rangitaane to manage, protect, and enhance its fishing assets across the RNI Talao in accordance with The Ministry's Fisheries 2030 strategy.

4. The Fishery

In 2012 the clam fishery off the Manawatu coast was investigated for stock and sanitation purposes with the view of opening the clam fishery for commercial harvest in an area between Kapiti Island and the Rangitikei River mouth to a distance of 1 km off shore. We had been involved in a drive to commercialise this fishery over a number of years. This recent notification resulted in an advancement of the commercialisation process and notification of current quota holdings in FMA8, and the indication of TAC discussions.

5. Commercial Harvest

As with all fisheries harvest assessments, the TAC assessment for establishing this new fishery will be for the whole FMA 8 management area. We understand Cloudy Bay Clams Ltd, who are based in Marlborough, have undertaken a sanitation and stock assessment of the coastal fishery. If this fishery is progressed to a point where harvesting occurs, we are concerned that at least half of the commercial fishing effort will occur in a zone, which overlays the entire Rangitaane o Manawatu coastline from the mouth of the Manawatu River at Foxton north to the Rangitikei River and Tangimoana. Hence, we are presenting our expectations on recognition, management and mitigation accordingly in regard to the likely commercial impacts derived from the entire group of stakeholders within the shellfish industry, and the wider FMA 8 iwi who hold quota that will be fished from our traditional fishing grounds.

6. Commercial/Customary Specific Considerations

We support the establishment of this fishery, with the expectation that Rangitaane will receive the standard commercial return under the MPI treaty protocol. Given fishing

effort is targeted in our rohe moana, our tiaki be included at the forefront of management discussion going forward. In addition, we will require an annual customary pataka kaimoana allocation made up of target and non-target species. Primarily we will require an annual allocation of a combination of all species to be fished of up to, but not limited to 100kg of shellfish per Rangitaane o Manawatu beneficiary registered with TMI included in the TAC allocation. We also require an allocation of 7-10,000kg annually for Marae functions, kaumatua hakinakina, Rangitaane Ahurei, Rangitaane mau rakau wananga, Waitangi, Matariki which are part of the annual Marae celebratory and activity cycle of Te Hotu Manawa, and TMI.

7. Customary General Points

In accordance with our Iwi Fish Plan (IFP) we now switch our focus to a wider consideration of the proposed fishing strategy typical of shellfish dredging and marine fisheries management practices. We expect a number of non-target species to be caught as by-catch in the proposed harvest. Typically, these would be returned under conditions to the sea prior to landing the target catch. We understand that landing by-catch has an effect and financial penalty on the fisherperson. However, we wish to exercise our right to implement Rangitaanenuirawa over the management practice for the entire marine fishery by adopting a holistic approach to our fishing assets, by limiting fishing related impacts as per the Governance conditions of the Fisheries 2030 and Inshore Shellfish Plan.

8. At this time the commercialisation proposal identifies 1 fishing agent based locally to fish for Cloudy Bay Clam Ltd, the significant quota holder in our area. We see this as beneficial to our propose, in that TMI as tiaki tangata for half the targeted area, and MPI have 1 fishing entity to monitor. We already have a relationship with the fisher through our earlier involvement in the development of this fishery, and the fisher is related by whakapapa to the area to be fished. Further on consideration of the non-commercial by-catch off our coast we see an additional benefit by having our expected customary take allowance fished by one fishing agent giving us the ability to mitigate some of the fishing activity related impacts to our customary fishing grounds.

9. Environmental outcome – impacts of fishing activity

Given recent perturbation to the predator prey relationship of snapper to pebble crabs off our coast by illicit commercial snapper trawling. A situation has arisen whereby an overabundance of paddle crabs has manifested, we see an opportunity to reinstate some semblance of the former balance by removing some of the excess crabs. To this end we require a management provision in the harvesting strategy for an annual customary paddle crab allocation which is expected as by-catch of the clam harvesting process. We want a customary take allocation of 10 crabs per Rangitaane o Manawatu beneficiary under a standing permit with the local fisher. The reason for this is that there is likely to be only one commercial fisher operating in our waters, fishing under current best practice methodologies, and regulated by MPI regulations and standards.

Conclusion

As outlined TMI have a concern around the on-going management of this fishery, as your all aware we now have in effect the Te Taihauauru and RNI Fish Plans both requiring greater engagement within the stakeholder groups, and heightened recognition of customary needs and values in considering allocations, and for me I need to be satisfied that outside iwi quota holders and commercial interests don't adversely affect a significant ROM fishery again as they have in the Rangitaane experience with allocation and fishing effort in paua 2 QMA.

Given half of the area targeted for this fishery overlay the beach frontage of the ROM rohe moana (notified to MPI K reg's in 2009, and reinforced in the RNI IFP 2012-2017). None of the submissions or discussion paper I've been privy to indicate how, or in what manner, ROM will be compensated or recognised for the potential depletion of;

- their shellfish resources,
- their Rangitaanenuirawa over this resource, *or*
- their Tino Rangatiratanga and ultimately their Mana.

All of which are guaranteed under both the MPI IFFP (MO; 3, 4, and 5) and RNI IFP's (MO; 1, 2, 3, 4, 5) currently active for this coastline. No one from MPI or Te Ohu has yet presented a management model giving effect to managing Use, Environmental, and effects from fishing, on our fishing grounds as proposed the Fisheries 2030 and MPI Inshore Shellfish Plans, other than the stock and sanitation report presented by Cloudy Bay Clams Ltd.

Thank you for the opportunity to present our expectations on the TAC allocations if you require any further information to discuss any of the above please do not hesitate to contact the undersigned.

Heoi ano,



Paul Horton
Te Ao Turoa Enviro-Centre
Tanenuiarangi o Manawatu Inc.
PO Box 1341, 140-148 Maxwell's Line
Palmerston North 4412
Phone 06 353 1881 opt 2
Cell 0211805197
Email paul@rangitaane.iwi.nz



5 February 2013

Ref AR/2013

Surf Clam Submissions
Fisheries Management - Inshore Fisheries
Ministry for Primary Industries
Private Bag 1926
DUNEDIN 9054
Email: FMSubmissions@mpi.govt.nz

Tena koe,

**Total Allowable Catch Review of Surf Clam Stock in Fisheries Management Area 8
for 1 April 2013**

Introduction

Te Ohu Kaimoana Trustee Limited (Te Ohu) welcomes the opportunity to submit on the Ministry for Primary Industries' (MPIs) Initial Position Paper (IPP) on Surf Clam Stocks, dated December 2012. The purpose of Te Ohu is to advance the interests of iwi individually and collectively, primarily in the development of fisheries, fishing and fisheries-related activities. Amongst other things, this purpose is intended to:

- a) ultimately benefit the members of iwi and Maori generally
- b) assist the Crown to discharge its obligations under the 1992 Fisheries Deed of Settlement and the Treaty of Waitangi and
- c) contribute to the achievement of an enduring settlement of the claims and grievances referred to in the 1992 Fisheries Deed of Settlement.

Te Ohu has prepared this submission in dialogue with iwi that have commercial and non- commercial interests in the FMA8 surf clam fishery. However this submission is not intended to override any submissions these iwi may make in their own right.

The Proposal

The Ministry for Primary Industries (MPI) is seeking tangata whenua and stakeholder information and views on a review of the total allowable catch (TAC), total allowable

commercial catch (TACC) and allowances for the FMA8 surf clam fishery. There are 2 options contained in the IPP – (see Figure 1).

Figure 1: Proposed TACs, TACCs and allowances

Option 1	Retain the existing TACs and sector allowances for these surf clam stocks in FMA 8.
Option 2	Increase the TACs, retain the existing customary and recreational allowances, provide for other sources of fishing-related mortality, and increase the TACCs for these surf clam stocks in FMA 8 as set out in Table 1.

MPI's Initial Position

MPI's initial view is to recommend Option 2 to the Minister of Primary Industries. Option 2 will provide an additional 2 984 tonnes (t) of TAC across the four surf clam stocks. The options for each species are set out in Table 1 below.

Table 1 – Options (t) for setting TACs, sector allowances and TACCs for surf clam stocks

Stock	TAC (t)	Customary	Recreation	TACC	Other Sources
PD08					
Option 1(status 1)	19	9	9	1	0
Option 2	296	9	9	263	15
SAE 8					
Option 1	8	-	-	8	0
Option 2	1821	-	-	1730	91
MM18					
Option 1	25	-	-	25	0
Option 2	631	-	-	599	32
DAN8					
Option 1	33	-	-	33	0
Option 2	236	-	-	236	12

Te Ohu's Preferred Options

Te Ohu supports option 2 but after the TACC has been adjusted upwards to allow for a customary allowance of 10t for each of the 4 surf clam species.

Te Ohu also recommends a review of the customary allowances in two years' time to ensure they are adequate.

Te Ohu has taken the following matters into account in making this submission.

1. The most recent survey of the FMA 8 surf clam beds, covering 23 kilometers either side of the Manawatu River, indicates the four species of surf clams have a combined biomass of 18,384t. The proposed combined TAC under option 2 is 2984t or 16.2% of the biomass. We have no concerns with this level of

exploitation on the sustainability of the resource. We note that surf clam beds are known to exist outside of the area surveyed.

2. We understand that industry intends implementing active management strategies. We expect this initiative to mitigate any risks to sustainability.
3. Development of this fishery is consistent with MPI's National Fisheries Plan which aims to enable annual yield from the fishery to be maximized while maintaining the stock size at or above the level required to ensure sustainability and the spawning stock biomass. The fishery is virtually undeveloped and has significant commercial potential.
4. Development of the fishery is consistent with the Te Tai Hauauru Forum Plan which covers the area between Waikanae River in the south, and Mokau River in the north. We note that the surf clam fishery has been prioritized in the forum plan for 2013, reflecting iwi support to develop the fishery consistent with their guiding principles.
5. Cloudy Bay Clams have consulted iwi about their proposal to develop the QMA8 surf clam fishery, and there is a high level of support. We note that iwi have also recently been involved in the Shellfish Working Group processes associated with assessing surf clam stocks.
6. Local and regional iwi have expressed a desire to be involved with other industry players in developing the fishery. They want to create employment opportunities and realize some of the commercial value from the fishery.
7. Iwi, hapu, whanau and marae are anticipated to benefit from the development through the opportunity to source product off the commercial vessel that is likely to operate in the area. Iwi and industry support customary allowances being increased to 10t across each species, and to review the situation in two years' time.

General Comments

We would like to acknowledge the Piper family for persevering with the development of the surf clam fishery. Te Ohu has had the opportunity to work closely with the Pipers over the years and we have seen first-hand their commitment and passion in developing the fishery. They have also demonstrated their desire to support local communities and their involvement in the surf clam fishery.

We would also like to acknowledge Surfco and those iwi around Foxton, including the Packer whanau, for their efforts, past and present, in helping to develop this fishery.

If you would like to discuss this submission please do not hesitate to contact me on 049319512 or 0212275289.

Noho ora mai


Alan Riwaka
Senior Fisheries Management Advisor