

Te Ohu Kaimoana's Response to the Review of Sustainability Measures for 1 October 2020



Contents

This is our response to this year's :	sustainability review	4
We are Te Ohu Kaimoana 4		
Te Ohu Kaimoana's role 5		
The significance of Tangaroa to Te	Ao Māori 5	
We base our advice on Te Hā o Tan	garoa kia ora ai tāua 6	
Leading the recovery of seafood se	ctor in a post-Covid environment	5
Fisheries management settings m	ust be consistent with the Deed of Settlement	7
We seek constructive working rela	tionships 7	
Changes to the TAC should not und	dermine the Māori Fisheries Settlement 9	
The effect of "28N Rights" on the N	Māori Fisheries Settlement must be addressed 11	
The Fisheries Act enables a flexible	approach to managing catch 13	
Deemed Values aim to encourage	reporting and discourage harvesting without ACE 15	
Our preferred approach to managi	ng the fish stocks under review18	3
Deepwater Stocks	10	3
Black cardinalfish – akiwa (CDL5)	18	
Frostfish – para, taharangi, hikau (FRO3 & 4; FRO7, 8 & 9) 20	
Orange roughy (ORH3B) 21		
Rubyfish (RBY4) 23		
Scampi – kourarangi (SCI1)	24	
Silver warehou (SWA3 and 4)	25	
Inshore Stocks	2`	7
Area 3 mixed trawl fishery 29		
Blue cod - rāwaru (BCO5) 31		
Gemfish – maka-tikati (SKI1 & 2)	33	
Geoduck – pupu (PZL7) 36		
Kingfish – haku, warehanga (KIN2;	KIN3; KIN7 & 8) 38	
Põrae (POR1) 42		
Sea perch – puhiakaroa (SPE9)	44	

Snapper – tāmure (SNA7) and red gurnard - kumukumu (GUR7) 45

Stargazer -puwhara (STA7) 49

Rig-pioke, makoo (SPO2) 50

Overview 52

Arrow squid – wheketere (SQU1J; SQU1T; SQU6T) 54

Bluenose - matiri (BNS3) 56

Gemfish - maka-tikati 57

Pilchard - mohimohi (PIL7; PIL8) 61

Redbait (RBT3) 61

Trevally - araara (TRE2) 62

This is our response to this year's sustainability review

- 1. This paper contains our response to Fisheries New Zealand's proposals on the review of sustainability measures for the 2020/21 fishing year beginning on 1 October 2020. An Initial Position Paper was released on 25 May 2020 and consultation under S12 of the Fisheries Act 1996 closes on 1 July 2020.
- 2. Our response is structured as follows:
 - First, we set out who we are and the reasons for our interest in the Initial Position Paper.
 - Second, we describe Te Hā o Tangaroa kia ora ai tāua as the principle foundation of our fisheries management advice.
 - Third, we identify how fisheries management should be consistent with the Māori Fisheries Deed of Settlement¹.
 - Fourth, based on the above, we set out our preferred approach to managing the fish stocks under review.
- 3. We do not intend our response to conflict with or override any response provided independently by Iwi, through their Mandated Iwi Organisations (MIOs) and/or Asset Holding Companies (AHCs).
- 4. In developing our response, we sought input from MIOs and AHCs. We also collaborate with the Māori owned fishing entities Sealord, Moana and the lwi Collective Partnership. Further our draft advice is made available the SRE groups Deepwater Group and Fisheries Inshore New Zealand.

We are Te Ohu Kaimoana

- 5. Te Ohu Kai Moana Trustee Ltd (Te Ohu Kaimoana) was established to protect and enhance the Deed of Settlement. The Deed of Settlement and the Maori Fisheries Act 2004 are expressions of the Crown's legal obligation to uphold Te Tiriti o Waitangi, particularly the guarantee that Māori would maintain tino rangatiratanga over their fisheries resources.
- 6. Our purpose, set out in section 32 of the Maori Fisheries Act, is to "advance the interests of Iwi, individually and collectively, primarily in the development of fisheries, fishing and fisheries-related activities, in order to:
 - a) ultimately benefit the members of lwi and Maori generally
 - b) further the agreements made in the Deed of Settlement
 - c) assist the Crown to discharge its obligations under the Deed of Settlement and the Treaty of Waitangi
 - d) contribute to the achievement of an enduring settlement of the claims and grievances referred to in the Deed of Settlement."

¹ Māori Fisheries Deed of Settlement 1992. The Deed is given effect to by the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992.

- 7. We work on behalf of 58 MIOs² who represent Iwi throughout Aotearoa. AHCs hold Fisheries Settlement Assets on behalf of their MIOs. Those assets include Individual Transferable Quota (ITQ) and shares in Aotearoa Fisheries Limited (trading as Moana New Zealand) which, in turn, owns 50% of the Sealord Group.
- 8. MIOs have approved our Māori Fisheries Strategy and three-year strategic plan, which has as its goal "that MIOs collectively lead the development of Aotearoa's marine and environmental policy affecting fisheries management through Te Ohu Kaimoana as their mandated agent". We play a key role in assisting MIOs to achieve that goal.

Te Ohu Kaimoana's role

- 9. Our role in this review process arises from our responsibility to protect the rights and interests of lwi in the Deed of Settlement and assist the Crown to discharge its obligations under the Deed and Te Tiriti o Waitangi.
- 10. Te Tiriti o Waitangi guaranteed Māori tino rangatiratanga over their taonga, including fisheries. Tino rangatiratanga is about Māori acting with authority and independence over their own affairs. It is practiced through living according to tikanga and mātauranga Māori, and striving wherever possible to ensure that the homes, land, and resources (including fisheries) guaranteed to Māori under Te Tiriti o Waitangi are protected for the use and enjoyment of future generations. This view endures today and is embodied within our framework Te Hā o Tangaroa kia ora ai tāua (the breath of Tangaroa sustains us).
- 11. The obligations under Te Tiriti o Waitangi apply to the Crown generally, whether there is an explicit reference to the Treaty in the governing statute, in this case the Fisheries Act 1996. Of particular note are the comments in *Barton-Prescott*, that "since the Treaty of Waitangi was designed to have general application, that general application must colour all matters to which it has relevance, whether public or private and...whether or not there is a reference to the treaty in the statute."³

The significance of Tangaroa to Te Ao Māori

12. The reciprocal relationship that Māori have with Tangaroa is underpinned by whakapapa.. Tangaroa is the son of Papatūānuku, the earth mother, and Ranginui, the sky father. When Papatūānuku and Ranginui were separated, Tangaroa went to live in the world that was created and has existed as a tipuna Ranginui were separated.

² MIO as referred to in The Maori Fisheries Act 2004: in relation to an iwi, means an organisation recognised by Te Ohu Kai Moana Trustee Limited under section 13(1) as the representative organisation of that iwi under this Act, and a reference to a mandated iwi organisation includes a reference to a recognised iwi organisation to the extent provided for by section 27.

³ Barton-Prescott v Director-General of Social Welfare [1997] 3 NZLR 179, 184.

⁴ Waitangi Tribunal. "Ko Aotearoa tēnei: A report into claims concerning New Zealand law and policy affecting Māori culture and identity." Te taumata tuatahi (2011).

reciprocal relationship with Tangaroa is an inherent part of the Deed of Settlement – it's an important and relevant part of contemporary fisheries management for Aotearoa.

We base our advice on Te Hā o Tangaroa kia ora ai tāua

- 13. Te Hā o Tangaroa kia ora ai tāua is an expression of the unique and lasting connection Māori have with the environment. It contains the principles we use to analyse and develop modern fisheries policy, and other policies that may affect the rights of lwi under the Deed of Settlement. In essence, Te Hā o Tangaroa kia ora ai tāua highlights the importance of humanity's interdependent relationship with Tangaroa to ensure our mutual health and wellbeing.
- 14. Māori rights in fisheries can be expressed as a share of the productive potential of all aquatic life in Aotearoa's waters. They are not just a right to harvest, but also to use the resource in a way that provides for social, cultural and economic wellbeing.
- 15. Te Hā o Tangaroa kia ora ai tāua does not mean that Māori have a right to use fisheries resources to the detriment of other children of Tangaroa: rights are an extension of responsibility. It speaks to striking an appropriate balance between people and those we share the environment with.
- 16. In accordance with this view, "conservation" is part of "sustainable use", that is, it is carried out in order to sustainably use resources for the benefit of current and future generations. The Fisheries Act's purpose is "to provide for the utilisation of fisheries resources while ensuring sustainability." The purpose and principles of the Act echo Te Hā o Tangaroa kia ora ai tāua.

Leading the recovery of seafood sector in a post-Covid environment

- 17. The Covid-19 pandemic has showcased the leadership of lwi/Māori and their commitment to ensuring the health and well-being of their communities. Iwi across the country mobilised to stop the spread of Covid-19 in their rohe and protect their most vulnerable. This was achieved through the provision of financial support, kai and health and social services to their whānau and hapū and although we are now in Alert Level One, a lot of this support is continuing.
- 18. Māori food sovereignty has been a topic of debate in discussions about Covid-19 impacts. Ensuring continued access to kaimoana is a core concern for lwi/Māori. The establishment of pātaka kai nation-wide was floated during Alert Level Four, as lwi/Māori were faced with the reality of not being able to carry out customary non-commercial harvests. Pātaka kai are one step towards addressing food security challenges, as the pātaka

system enables commercial fishing vessels and processing companies to catch and store fish in a customary capacity for direct supply to lwi. This system greatly increases the ability for lwi to distribute kaimoana to whānau/hapū when needed. We continue to seek out other opportunities for lwi/Māori to provide kai to their hapū and whānau through customary arrangements (commercial and non-commercial) and the need to do so informs our response.

19. Maintaining seafood supplies throughout Aotearoa and worldwide is essential to food security and will be an important contributor to our economic recovery. The restrictions resulting from Covid-19 have placed increased attention on the food sector, and the seafood sector in particular. Aotearoa is well placed to provide global leadership in developing policies to recover and maintain seafood systems by applying the experience drawn from the 30 plus years of operating the Quota Management System (QMS). This period has been characterised by ongoing innovation in the way seafood is collected from the marine environment and is evidenced by the reduction in both the number of vessels and the size of industry's environmental footprint. This innovation is set to continue with vastly improved information gathering systems playing a key part.

Fisheries management settings must be consistent with the Deed of Settlement

- 20. The Fisheries Act 1996 obliges those performing functions under it to act consistently with the Māori Fisheries Settlement, which is the settlement of Māori claims to fisheries⁵. This means whenever a Minister makes a decision to implement a sustainability measure and/or to provide for utilisation, they must ensure their decision is consistent with, and does not undermine, the Māori Fisheries Settlement. Our assessment of the stocks being reviewed raises concerns over the following broad themes:
 - constructive working relationships
 - allocation of the TAC
 - resolution of 28N rights
 - application of sustainability measures
 - · application of deemed values.

We seek constructive working relationships

21. We seek a constructive working relationship with Fisheries New Zealand and through our Board with the Minister of Fisheries. This is an important requirement for a meaningful Treaty-based partnership. The

⁵ Specifically, section 5 (b) of the Fisheries Act 1996 obliges "all persons exercising or performing functions, duties, or powers conferred or imposed by or under it" to "act in a manner consistent with the provisions of the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992 (TOW(FC)SA)".

Once an allocation formula was agreed the TOW(FC)SA was essentially replaced by the Māori Fisheries Act 2004. Together, these acts give effect to the legal aspects arising from the Māori Fisheries Settlement.

- sustainability round is just one contribution to fisheries management, but it is important because it leads to management settings that have a considerable influence on our incentive-based fisheries management system.
- 22. A review of the sustainability round process was initiated by Fisheries New Zealand last year,⁶ and Te Ohu Kaimoana were invited to participate. Our feedback to the reviewer was that we expected more meaningful engagement on behalf of the Treaty Partner through co-development of proposals and greater transparency in process. We are confident that a genuine investment in partnership will produce positive benefits for the sustainable utilisation of Aoteraoa's fisheries.
- 23. An example of the influence that Te Ohu Kaimoana can have on the development of positive fisheries management initiatives that can be given effect through sustainability round decisions concerns the east coast tarakihi fishery. In this instance MIOs, Te Ohu Kaimoana and industry worked to develop the East Coast Tarakihi Rebuild Plan and bring it through to the sustainability round for consideration. For Te Ohu Kaimoana, ensuring the long-term sustainability of the East Coast Tarakihi stock and fishing community required more than simply the Minister's TAC reduction decision in the sustainability round; it required ongoing, responsive and active management actions by the quota holders and fishers themselves. Ultimately the Minister placed considerable weight on the plan in making his decisions for the current fishing year. We acknowledge that this matter is now under consideration via a judicial review, but we see the potential for this approach to be strengthened on the assumption that the court will view it favourably.
- 24. We contrast the uptake of East Coast Tarakihi Rebuild Plan with the lack of support for the jointly developed response to the decline in hoki availability to the fishing fleet. As part of last year's TAC/TACC review of management settings in the hoki fishery, MIOs/Te Ohu Kaimoana and the wider fishing industry collectively worked through the Deepwater Group to continue to shelve (35,000 tonne) of ACE while unresolved issues with the stock assessment were addressed. Further this shelving would target the western part of the fishery where the sustainability concern was most acute and would be supplemented by both juvenile and spawning area closures. This level of fine-scale management is only available to the participants in the fishery and is in keeping with our incentive-based system. Despite this high level of commitment, the options provided by Fisheries New Zealand were to cut the TACC by 20,000 or 30,000 tonnes through a top down approach. The final decision made by the Minister mirrored the arrangements put in place through the Deepwater Group (a 35,000-tonne reduction) but was achieved through a TAC/TACC reduction rather than investing in the industry who had already set up shelving of ACE. The irony of this was that the industry had acted 12 months earlier than the Minister, demonstrating that real time management is available to those who have investments in the fishery who do not need to wait until a sustainability round gets underway.

⁶Fisheries New Zealand review of sustainability measures: Overview of legislative requirements and other considerations in relation to sustainability measures – Fisheries New Zealand 2020

Section one: Changes to the TAC should not undermine the Māori Fisheries Settlement

- 25. When settling their fisheries claims, Māori expected the value and integrity of their Settlement to be retained. Any action the Crown takes should not undermine the value of Māori Fisheries Settlement assets or customary non-commercial needs. Consequently, the Minister must ensure the integrity of Māori fishing rights is maintained when adjusting and allocating the TAC. This means three things:
 - 1. Priority should be given to the customary allowance for stocks that Iwi and hapū require to meet their customary non-commercial needs.
 - 2. Any reallocation to the recreational sector has the effect of reducing the overall value of Māori Fisheries Settlement quota.
 - 3. Settlement quota, as a proportion of the TACC, should not be reduced under any circumstances.
- 26. Specifically, in the absence of full cross-sector agreement, we cannot support increases in the recreational allowance at the expense of the TACC. The recreational sector has minimal (if any) incentives to fish within an allowance once set and if the management response to overfishing the allowance is to increase it then such decisions serve to undermine both our incentive-based management framework and kaitiakitanga. Further, the Fisheries Deed of Settlement was a recognition of the Crown's mismanagement of our marine resources and from that point in time lwi understood incentives to "race for fish" would cease. As such the Crown invested in management arrangements that incentivise stewardship of marine resources. It is in this light that such reallocation decisions affect the rights of settlement quota holders and reduces the incentives on the commercial sector to take responsibility and invest in good management.
- 27. To protect Māori Fisheries Settlement rights, the following approach should be taken to adjust the TAC.
 - The customary allowance is based on customary needs and is managed through kaitiaki. In some
 instances, customary needs may not be fully identified and there may be insufficient capacity to harvest
 what is needed. Therefore, increases to the customary allowance can be expected over time as both
 needs are better identified and capacity to harvest is realised.
 - In situations where the abundance of a stock drops, kaitiaki will respond appropriately.
 - In the absence of an agreement between mandated bodies, the recreational allowance should not be increased above the level it was first set by the Minister when the TAC was set for any particular stock.
 - If, in order to ensure sustainability, the TAC, TACC and the recreational allowance is reduced, the allowance should only be increased back to its initial level when the stock rebuilds.
 - Otherwise, all increases to a TAC should be allocated to the TACC after providing for non-commercial customary fishing and other fisheries-related sources of mortality.
- 28. In our view, this approach should be adopted as the default. It should apply whether the stock is at, above or below any target stock level at the time the TAC is set. Variations on this approach should only be considered by the Minister if all extractive interests reach agreement on an alternative approach. Our rationale for this approach is set out below.

Māori accepted a specific share of all commercial fish-stocks as part of a full and final Settlement

- 29. The Crown undertook to provide M\u00e4ori with 10% of the quota for all stocks in the QMS when the Interim Fisheries Settlement was agreed in 1988. When the Deed of Settlement was finalised in 1992, they agreed that all stocks introduced to the QMS from that time would generate a 20% share. As part of this agreement, M\u00e4ori endorsed the QMS as an appropriate regime for managing commercial fisheries. At the time of the M\u00e4ori Fisheries Settlement the only proportional interests were held by quota owners, who owned a share of the TACC. Allowances for customary and recreational interests were for a fixed amount.
- 30. This rights-based system formed the basis for the commercial part of the Māori Fisheries Settlement. The system underpins sound management of fishing, in which rights holders take responsibility for managing their share of the TAC. The benefits of good stock management are expected to accrue to those who have a proportionate interest in the fishery, taking into account the priority right held by customary interests in the event that customary needs increase.
- 31. The Crown and Māori also agreed that the Minister would develop policies to help recognise use and management practices of Māori in the exercise of non-commercial fishing rights. As part of this agreement, the Minister recommends regulations to recognise and provide for customary food gathering. The regulations should also include the special relationship between tangata whenua and those places which are of customary food gathering importance to the extent such food gathering is neither commercial in any way nor for pecuniary gain or trade. These "customary" regulations enable kaitiaki to take responsibility for managing customary fishing, including issuing authorisations and reporting catch.

Recreational fishing is a privilege

- 32. In recent times the recreational sector has come to expect that fishing beyond the allocation will be rewarded with an increased allowance. This situation provides little incentive for the recreational sector to constrain catch within the recreational limit. Similarly, it provides little incentive for the commercial sector to work collaboratively to increase stock abundance given the likelihood that any benefits of a rebuild will be allocated to the recreational sector. We acknowledge there are input controls such as bag limits; however, there is no effective constraint on total recreational catch.
- 33. To be consistent with the Māori Fisheries Settlement, the recreational share of each fishery should reflect the catch taken in 1992, when the Deed of Settlement was signed. However recreational allowances did not become part of the TAC until the Fisheries Act 1996 came into effect. Since then general practice has involved setting allowances when TACCs are varied and TACs are set, or when stocks are introduced into the QMS. We are aware the courts have ruled that the Minister has discretion to set the allowance when initially allocating a TAC up to the level of estimated catch, based on best available information. However, in the absence of an agreement, we do not accept any subsequent increases in the allowance. From a fisheries management perspective, such decisions encourage a "race for fish". Responsible fisheries management aims to avoid this kind of behaviour.

34. If the recreational sector wish to see a system that provides greater potential for the allowance to be increased above its initial allocation, a full review of the framework for managing the recreational sector is required. This would involve further consideration of options to more tightly manage recreational catch to ensure it stays within the recreational allowance once set. A system that allows for the recreational sector to increase catches would need to be carefully designed and take explicit account of obligations arising from the Deed of Settlement.

Customary allowance

- 35. When allocating the TAC, The Minister of Fisheries must make an allowance for customary fishing. We acknowledge that this may be difficult to do when the information on the level of customary catch may not be easily available to the Minister. We support the investment in reporting systems, such as Ikanet. This means that the setting of the customary allowance is usually retrospective in that the true level of customary catch demand may not be known at a point in time.
- 36. This situation may become more prevalent with the development of pātaka whereby more species are likely to be made available to meet customary needs. Our position is that we look to utilise actual data on customary catch as it becomes available rather than speculate on what an allowance could be. For this reason, Te Ohu Kaimoana is not recommending customary allowances for the deepwater stocks under review at this point in time. We take this position with the knowledge that it is kaitiaki who determine the level of customary catch required and so the Minister's decision can be seen as more of an accounting exercise and does not need to be an estimate of demand.

Section two: The effect of "28N Rights" on the Māori Fisheries Settlement must be addressed

- 37. When the QMS was first introduced, Individual Fishing Quota (ITQ) for each stock was based on a set tonnage. It soon became apparent that provisional catch histories (and subsequent TACCs) in some fisheries were too high and the Crown acted to reduce the catch.
- 38. The regime at that time required the Crown to buy back quota and retire it. The Government chose to change the law to provide eligible parties with the choice of putting a specific amount of their provisional catch history or quota "on hold", to be released if the TACC was subsequently increased. If the fishery recovered, the 'on hold' entitlements had first access to the increase under the Fisheries Act. Once 'refunded' in this way, the quota is normalised and holds the same rights as remaining quota. This preferential quota and the associated rights and processes were initially provided for under Section 28N of the Fisheries Act 1983. They became known as "28N Rights".

- 39. Many quota owners chose to have their affected quota declared subject to 28N conditions. However, following the establishment of 28N rights, the Crown changed the basis of quota from a fixed volume to a proportional share of the TACC. Consequently, when a TACC is increased for fisheries where quota owners hold 28N rights, the increase transfers to those quota owners until the combined 28N rights for that fishery are exhausted. Because there is a fixed number of shares in the fishery, this can only be achieved by increasing the number of shares held by the 28N rights holder and decreasing the shares held by other quota owners, including Māori Fisheries Settlement quota owners.
- 40. In 1996, 28N rights were carried through into Section 23 of the Fisheries Act 1996 from the Fisheries Act 1983. We argue that the application of 28N rights is inconsistent the provisions of the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992. Given the application of the Fisheries Act 1996 ensures that:
 - *all persons exercisi*ng or performing functions, duties, or powers conferred or imposed by or under it shall act, in a manner consistent with—
 - (a) New Zealand's international obligations relating to fishing; and
 - (b) the provisions of the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992.

It would be a breach of the Settlement to reduce the proportion of settlement quota shares

- 41. Where 28N rights are invoked, the share of quota that Iwi hold will be reduced. This undermines the agreement that Māori receive 10% of all stocks in the QMS at the time of the Interim Fisheries Settlement (1989). Since 1996, Iwi settlement quota shareholdings have reduced by approximately \$14 million as a result of 28N rights being discharged.
- 42. Te Ohu Kaimoana has been actively involved in developing solutions to the 28N Rights issue. Our advice has been provided to the Minister of fisheries and we look forward to an agreement being reached that removes an obstacle to progressing fisheries management. In the meantime, these issues associated with 28N Rights need to be addressed each and every time a stock with latent 28N rights is reviewed as part of the sustainability round.
- 43. In light of the Settlement, the Minister must act in accordance to his duties, rights and powers under the Fisheries Act 1996. ⁷ This should include consideration for any potential dilution of the lwi share of the TACC, when making decisions to change TACC. There is a risk FNZ will undermine the Deed of Settlement if they fail to follow this approach where 28N rights exist in fisheries being reviewed this year. In this response we identify where 28N rights may breach the Settlement. In each case we request that remedial steps are taken to prevent a proportionate reduction in settlement quota.

⁷ Refer to Section 5 (b) of the Fisheries Act 1996. As noted, the TOW(FC)SA 1992 has largely been superceded by the Māori Fisheries Act 2004.

- 44. In the 2018 and 2019 decision letters for the review of sustainability measures, the Minister expressed intent to resolve the 28N right issue. Te Ohu Kaimoana has remained dedicated to and actively engaged in this matter. Despite proactive agreements between Te Ohu Kaimoana and some holders of 28N rights, the resolution of this issue has yet to be realised.
- 45. In situations where Settlement quota as a proportion of the TACC is diluted, Te Ohu Kaimoana, as a matter of principle, is required to legally challenge the decision. There are currently proceedings before the Court in relation to both PAU5B and SKI7.

Section three: The Fisheries Act enables a flexible approach to managing catch

46. It is often assumed that changes in TACs and TACCs are the best way to respond to stock assessments that show a stock has declined. This approach is very limited as the Fisheries Act 1996 enables a variety of approaches to ensure sustainability⁸. The Minister should only consider setting or varying a TACC where it is the most appropriate option.

ACE shelving is an appropriate option

47. Shelving of ACE is a viable way of reducing commercial catch. The Minister is obliged to take such shelving arrangements into account in accordance with section 11(1)(a) of the Fisheries Act. If the Minister is satisfied that the arrangements will adequately mitigate a risk to sustainability, there is no legislative obligation to choose from the list of statutory sustainability measures set out in section 11(3) of the Fisheries Act. In such cases, the Minister would not be directed to either section 13 or section 14 in order to vary a TAC for one or more stocks.

There is no "one size fits all" approach to setting target stock levels and rebuild rates

48. If the Minister decides to set or vary a catch limit⁹, he must consider those matters relevant to a stock managed under the QMS¹⁰. Under s13 of the Fisheries Act, a stock should have a TAC that maintains the stock at or above a level that can produce the maximum sustainable yield (often summarised as B_{MSY}), having regard to the interdependence of stocks. The Fisheries Act enables discretion over the way and rate the stock rebuilds or is fished down to the level of B_{MSY}. Importantly, as noted above, the Fisheries Act¹¹ provides a range of tools - in addition to TACs - to assist with any necessary rebuild process.

⁸ Note that section 11(3) of the Fisheries Act 1996 sets out a range of options that are available to the Minister to ensure sustainability

⁹ See section 11(4) of the Fisheries Act 1996

¹⁰ Sections 13 and 14 of the Fisheries Act 1996 set out the considerations that apply to a stock managed under the QMS

¹¹ See section 11 (3) of the Fisheries Act 1996

Default targets and timeframes do not mirror the full purpose of the Fisheries Act

- 49. The majority of stocks in this year's sustainability round have had their default target and relative limits prescribed by the default settings in the Harvest Strategy Standard (HSS). Rather than a holistic approach that includes socio-economic and cultural factors, in recent years the science-based HSS has been over used in fisheries management advice provided to the Minister. Te Ohu Kaimoana considers that a greater emphasis needs to be placed on providing advice to the Minister that aligns with the requirements of the Fisheries Act 1996.
- 50. The HSS sets out default management targets for stocks as well as both "soft" and "hard" Limits. Where the best available information suggests a stock has fallen below the soft limit of 20% B₀, the HSS prescribes a time-bound rebuild. The purpose of the Fisheries Act 1996 sets out an obligation to provide for utilisation, with a focus on enabling people to provide for their own social, cultural and economic wellbeing within limits that ensure sustainability. When the Minister is implementing measures to return the stock toward a sustainable biomass, they must take into account socio-economic considerations. Employing default target levels and timeframes that do not properly account for the socio-economic characteristics specific to the stock has real potential to undermine the purpose of the Fisheries Act.
- 51. The HSS is a policy guideline and the Minister has multiple other factors to account for in making their decisions under the Act. This position is consistent with affidavits provided to the High Court review of the East Coast tarakihi sustainability decisions. The evidence provided seems to expressly concede that the HSS does not give attention to the range of social, cultural and economic factors that the Minister is required to consider when making decisions. The outcome of this case will provide clearer lines between the role of the HSS and the Minister's obligations under the Act.

Collective action will better achieve the purpose of the Fisheries Act

- 52. We need to do more to encourage collective action. Where quota owners are incentivised to act collectively, the evidence suggests they will adopt strategies to promote the management of stocks at levels above the requirements of section 13. Collective action is particularly necessary in shared fisheries, where there are many examples of the recreational sector being rewarded (through an increased allowance) for fishing beyond the allowance set by the Minister. As noted, this practice also offends Māori Fisheries Settlement (we refer to our comments on the role of s 5b of the Fisheries Act).
- 53. Te Ohu Kaimoana has published an international review of the effectiveness of fisheries management systems in achieving conservation objectives. This study has concluded that top-down approaches (of which the HSS guidelines are an example) are inconsistent with modern incentive-based systems. In contrast, the most effective fishery/ecological management systems are bottom up.¹²

¹² See Libecap, G, Arbuckle, M, and Lindley, C.. An analysis of the impact on Māori Property Rights in Fisheries of Marine Protected Areas and Fishing Outside the Quota Management System. The link to teh report can be found here, as can a seminar discussing the findings of the study can be viewed here.

- 54. Fisheries Plans approved under s11A of the Fisheries Act are one of the key tools available to support collective action. At various times during the last decade Fisheries New Zealand have sought the Minister's approval of fisheries plans that they have developed with a varying degree of buy in from the rights-holders in the fisheries they cover. Most recently, a draft Inshore Fisheries Plan has been consulted on, the IPP seems to assume that this draft plan will provide some management direction for the vast array of fisheries that fall under its potential umbrella.
- 55. However, Te Ohu Kaimoana does not support the draft plan for a variety of reasons. In discussions with our Board, the Minister has confirmed he is mindful of our reservations and has yet to approve the draft plan. Given the draft plan has not been approved, we consider that it is quite inappropriate for the IPP to be placing weight on its content or taking any direction from it.

Section four: Deemed Values aim to encourage reporting and discourage harvesting without ACE

56. The IPP continues to reference deemed values as a means to discourage commercial catch or constrain catch within the TACC. We disagree with this view as it is contrary to the Deemed Values Working Group Final Report¹³ and the consequential Deemed Value Guidelines¹⁴. Both have been endorsed by the Minister of Fisheries and we are therefore surprised that the approach taken to the review of deemed values as part of the current sustainability round process is not in accordance with either the final report nor the guidelines.

Review of a stocks TAC and TACC should include a review of deemed values

- 57. We note the IPP is inconsistent with the rationale for proposing changes to the deemed values. The IPP states "deemed values function within the context of the other management settings associated with the stock." ¹⁵ We acknowledge that some stocks which require TAC adjustments may not require deemed value adjustment, however, we would like to see that appropriate thought has been put into these process to come to such conclusions.
- 58. The deemed value system is designed to provide incentives to balance catch against ACE. It is not a mechanism for enforcing hard TACCs set without recourse to biological information about status of the stocks. It is our view that increased deemed value payments signal the need for a management response, rather than a doubling down of regulatory action.

15

¹³ See Deemed Values Working Group Final Report <u>here</u>

¹⁴ See Deemed Value guidelines here

¹⁵ Review of Sustainability Measures for Snapper (SNA 7) and Red Gurnard (GUR 7) for 2020/21. P16. https://www.fisheries.govt.nz/dmsdocument/40565-sna-7-and-gur-7-final-october-2020-consultation-document

59. The Deemed Values Working Group was convened in April 2019 with the objective to review the information basis and applied process for setting deemed value rates. In its report, the Working Group recommended that the statement of purpose for the deemed values regime was in need of review and recommended that it revised as follows:

"The primary purpose of the deemed values regime is to provide incentives for individual fishers to acquire or maintain sufficient ACE to cover catch taken in the course of the year, while:

- i) Allowing flexibility in the timing of balancing;
- ii) Promoting efficiency; and
- iii) Encouraging accurate catch reporting".
- 60. Once implemented, this will restore the deemed values regime to its intended role within the QMS to provide for utilisation flexibility and establish incentives to use this flexibility responsibly at the level of the individual harvester.
- 61. The Working Group also recognised that individual incentives could never generate precise aggregate levels of catch. Deemed values are not a substitute for TACC setting and attempts to use the deemed value regime to 'defend' an inappropriate TACC generated perverse incentives such as discouragement of accurate catch reporting.
- 62. A modest outcome of the Working Group was the establishment of the Deemed Value Forum. The Forum is designed to assist MPI annually to take a more integrated approach to TACC and deemed value setting, as well as to identify particular stocks where such integrated examination of fisheries management settings requires priority attention.

It is important to avoid any disincentive to record catch

63. The deemed value for a particular stock can be set at or scaled up to a level that removes any profit after harvesting costs are deducted. These conditions create an incentive for fishers to cover their catch with ACE. If they are unable to do so, then there is no disincentive to report the catch and land it. This approach is consistent with the Fisheries Act and the Māori Fisheries Settlement and has the real potential to increase the quality of information available to support decision-making if it is administered that way.

There is a balance to be struck between incentives to fish with ACE and accurate reporting of catch

64. Discouraging catch in excess of ACE holdings is achieved by ensuring deemed values are set above the ACE price. ¹⁶ The requirement to ensure that the deemed value system does not encourage the discarding of fish at sea is achieved by ensuring the deemed value rate does not exceed the market value of the stock (see figure 3).

¹⁶ However, it is recognised that the ACE price can be distorted by deemed value prices that are set to high.

This implies that deemed values should always be set within the range of the market price of fish and the undistorted price of ACE for that stock. In general, where there is unlikely to be a sustainability risk the deemed value should be set closer to the ACE price, whereas if sustainability is at risk it should be closer to the port price.

65. Accurate reporting is vital if we are to understand whether TACCs have been set appropriately. If TACCs are set incorrectly, varying levels of deemed value payments can show there is a need to review the TACC. TACCs themselves are not always set right and need to be regularly reviewed, based on the best available information. This was the basis for deemed values being introduced.

Payment of deemed values can indicate there is a fisheries management issue to be addressed

- **66.** Deemed values can be used as a tool to identify problems that need to be addressed in a fishery. Deemed values should not be set arbitrarily. There are many potential causes for catches being greater than the TACC all of which generate different responses, for example:
 - The TACC is too low optimum response is to increase the TACC
 - Deliberate over catch by one or two parties respond by setting an overfishing threshold
 - The deemed value is too low respond by increasing the deemed value
 - A recruitment pulse with a consequential (perhaps temporary) increase in biomass ensure the incentive to balance catch with ACE is maintained while not creating a disincentive to report.
- 67. We acknowledge that the information available to set deemed values appropriately is imperfect. The key inputs of market price of fish and the ACE price are all confounded by the way that quota ownership is structured. Hence the setting of deemed values becomes a pragmatic exercise. It needs to find the balance between incentivising catching with the available ACE and accurately reporting all catch, irrespective of what can be balanced with ACE.

Our preferred approach to managing the fish stocks under review

Deepwater Stocks

Overview

68. The IPP reviews the TAC/TACCs for the following deepwater fisheries:

- Black cardinalfish akiwa (CDL5)
- Frostfish para, taharangi, hikau (FRO3 & 4; FRO7, 8 & 9)
- Orange roughy (ORH3B)
- Rubyfish (RBY4)
- Scampi kourarangi (SCI1)
- Silver warehou (SWA3 & 4)

Black cardinalfish – akiwa (CDL5)

Our view

- We do not support the options proposed.
- We support an alternative option, a TAC of 61 tonnes, a TACC of 60 tonnes and the allowance for all other mortality caused by fishing to remain at 1 tonne.

Proposed options

Stock		Allowable		Allowances		
	Option		Allowable Commercial	Customary Māori	Recreational	All other mortality to the stock caused by fishing
CDL 5	Option 1 (modified status quo)	23	22	0	0	1
CDL 5	Option 2	34 1 (55%)	33 🛧 (50%)	0	0	1

Our approach

There is a case for a higher increase to the TAC and TACC than proposed

69. The available catch information suggests there is the potential for greater utilisation of black cardinalfish. However, the options proposed do not allow for the current levels of catch. CDL5 is caught as non-target catch in fisheries such as ling and white warehou. The utilisation opportunity from the increased TACC of LIN5 (2018/19) is hampered by the constraints of unavoidable CDL5 catch. The catch for the 2018/19 fishing year was just below 90 tonnes resulting primarily from a single tow targeting ling, which is almost three times the proposed increased TACC (see figure 1). These spikes in annual catch could be a reflection of several factors: an increase in abundance, an increase in recruitment to the fishery or the increased effort in the LIN5 fishery. Increasing the TAC to 61 tonnes and the TACC to 60 tonnes would allow for more of the likely catch to be balanced against ACE, without placing sustainability at risk.

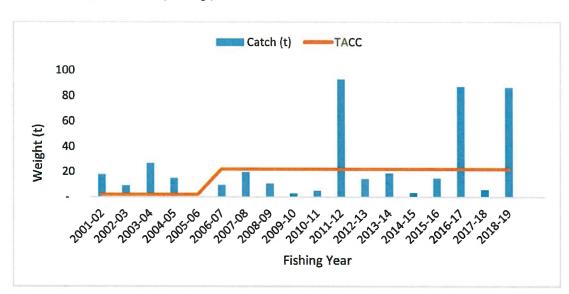


Figure 1: CDL5 catch in tonnes by fishing year

An increase to cardinalfish does not pose a sustainability risk

70. Catches of CDL5 are sporadic but can occasionally occur in very large quantities, sometimes exceeding the catch limits in a single fishing event. CDL5 is a low knowledge stock, meaning there is limited monitoring data and no information on stock status. However, it is a non-target species and hence an increase to the TACC is unlikely to result in any change in fishing pressure while allowing more of the catch to be balanced with ACE.

Stocks undergoing review of management settings should also have deemed values reviewed

71. The IPP does not propose any changes to the deemed values for CDL5, nor does it provide rationale for the current settings. A consultation document should provide all necessary information for the reader to provide meaningful feedback. We cannot provide a specific setting recommendation without the necessary information on ACE price and port price. As there is no sustainability concern in this fishery, an appropriate setting for deemed values would be closer to the ACE price than the market price.

Frostfish – para, taharangi, hikau (FRO3 & FRO4; FRO7, FRO8 & FRO9)

Our view

- We support status quo for FRO3 and FRO7 retaining the current TAC and TACC
- We support Option 1 for FR04, FR08 and FR09 providing for an increase to the TAC, TACC and the allowance for all other mortality caused by fishing.

Proposed Options

			Tetal		Allowances	
Option	Stock	Total Allowable Catch	Total Allowable Commercial Catch	Allowable Commercial Customary Recreational	All other mortality to the stock caused by fishing	
Chatham Rise f	rostfish stock	3				
Status quo	FRO 3	176	176	0	0	N/A
	FRO 4	28	28	0	0	N/A
Option 1	FRO 3	82 🗸 (53%)	80 🔱 (55%)	0	0	2
	FRO 4	126 1 (450%)	124 🛧 (443%)	0	0	2
West Coast Sou	ith Island / No	rth Island frostfis	h stocks	***************************************		
Status quo	FRO 7	2,625	2,623	1	1	N/A
	FRO 8	649	649	0	0	N/A
	FRO 9	140	138	1	1	N/A
Option 1	FRO 7	2,154 🔱 (18%)	2,110 🔱 (20%)	1	1	42
	FRO 8	918 1 (141%)	900 1 (139%)	0	0	18
	FRO 9	410 1 (293%)	400 1 (290%)	1	1	8

Our approach

Reallocation across QMAs impacts on quota holders' rights

72. We do not support decreases to the TAC and TACC in FRO3 and FRO7. There is no sustainability concern in these fisheries, therefore any reductions to their current management settings are unnecessary. Reallocating catch across QMAs does not address the problem identified in the FRO fisheries, which is the current TACC settings are unnecessarily constraining catch in some QMAs but not others. Unprincipled reallocation of catch limits across QMAs unreasonably infringes on property rights.

There is no sustainability concern associated with FRO3 or FRO7

73. In FRO3 there has been a reduction in CPUE, however this is associated with movement of vessels out of this area rather than a reduction in abundance. We consider retaining the current TAC and TACC settings will allow for future fishing to return to this QMA without unnecessarily constraining the TAC and TACC. There has been increased CPUE in FRO7 as vessels have moved back into this area targeting other species. Retaining the current settings in both FRO3 and FRO7 allows for future utilisation, which are already being seen in FRO7 with increases in catch.

Increasing the TACC for FRO4, FRO8 and FRO9 will provide a utilisation opportunity

74. As there is no apparent sustainability concern, we support TAC and TACC increases. Increases proposed under Option 1 are set slightly higher than the highest recorded catch in each QMA.

Stocks undergoing review of management settings should also have deemed values reviewed

75. The IPP does not propose any changes to the deemed values for FRO, nor does it provide rationale for the current settings. A consultation document should provide all necessary information for the reader to provide meaningful feedback. We cannot provide a specific setting recommendation without the necessary information on ACE price and port price. As there is no sustainability concern in this fishery, an appropriate setting for deemed values would be closer to the ACE price than the market price.

Orange roughy (ORH3B)

Our view

- We note the acknowledged arithmetic error made in the three stage increase options where the catch limit for the East and South Chatham Rise sub-QMA should be 5,970 tonnes
- We support correcting the arithmetic error and setting a TAC of 8355 tonnes, a TACC of 7967 tonnes and an East and South Chatham Rise sub-QMA limit of 5,970 tonnes

Proposed Options

	Current TAC, TACCs, allowances and catch limits	Option 1	Option 2
TAC	7,116	↑ 8,055	↑ 8,767
TACC (for all sub-QMAs)	6,772	↑ 7,667	↑ 8,345
Allowance for other mortality caused by fishing	339	↑ 383	↑ 417
Customary Māori allowance	5	5	5
Northwest Chatham Rise	1,150	1,150	1,150
East and South Chatham Rise	4,775	↑ 5,670	↑ 6,348
Puysegur	347	347	347
Arrow Plateau	0	0	0
Sub-Antarctic	500	500	500

Our approach

The effect of the first two staged increase is not yet known

76. Due to the impacts of COVID-19, the scheduled 2020 trawl survey has been cancelled. The trawl survey would have measured the impact of the two previous TAC and TACC increases on the biomass. On the water observations of orange roughy fishing outside of the spawn are signalling that there is less confidence in accepting the higher increase until there is more information to support it. Due to this uncertainty we support the continuation of the three-year staged increase agreed to by the Minister in 2018/19 with an adjustment to correct what we understand to be an arithmetic error. As orange roughy is a long-lived fish that undergoes regular updates for management we consider it is appropriate to keep this extra biomass with Tangaroa at least until we have updated information.

Non-target catch may also increase

77. Capture of non-target species in this fishery should be monitored to determine if a management setting adjustment is necessary. Under Option 1, there would be an estimated increase of 13 tonnes of black oreo and 66 tonnes of smooth oreo catch, should the TACC be fully caught. These oreo species are caught as part of OEO4, which is fully caught most years. This highlights yet another area of inconsistency within the IPP over the desirability of multi-stock management. In our view the TAC/TACCs for OEO4 should be reviewed in association with ORH3A.

Stocks undergoing review of management settings should also have deemed values reviewed

78. The IPP does not propose any changes to the deemed values for ORH3A, nor does it provide rationale for the current settings. A consultation document should provide all necessary information for the reader to provide meaningful feedback. We cannot provide a specific setting recommendation without the necessary information on ACE price and port price. As there is no sustainability concern in this fishery, an appropriate setting for deemed values would be closer to the ACE price than the market price.

Rubyfish (RBY4)

Our view

- We do not support the options proposed.
- We support an alternative option, a TAC of 51 tonnes, a TACC of 50 tonnes and the allowance for all other mortality caused by fishing to remain at 1 tonne.

Proposed Options

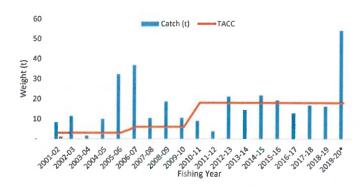
			Total	Allowances		
Stock	Option	Total Allowable Catch	Total Allowable Commercial Catch	Customary Māori	* Recreational	All other mortality to the stock caused by fishing
RBY 4	Status quo	19	18	0	0	1
RBY 4	Option 1	25 🛧 (32%)	24 🛧 (33%)	0	0	1

Our approach

Utilisation opportunity for RBY4

- 79. RBY4 on Chatham Rise is taken as non-target catch by trawl vessels. Catches of RBY4 can occasionally occur in clumps, sometimes exceeding the catch limit in a single fishing event. RBY4 is a low knowledge stock, meaning there is currently no information on stock status. However, there is no known sustainability concern for this stock and given that it is a non-target species an increase to the TACC is unlikely to result in any change in fishing pressure. But it will enable sustainably available catch to be covered by ACE.
- 80. The catch for the current fishing year (2019/2020) is above 50 tonnes, which is over double the proposed increased TACC (see figure 2). There could be several reasons for this increased catch including an increase in an abundance or an increase in recruitment to the fishery. Continued monitoring of the fishery is appropriate to determine whether future catch patterns should warrant further management adjustments. However, as an interim step the TAC/TACC should be increased to the level of recent catch.

Figure 2. RBY4 catch in tonnes by fishing year, note the 2019/20 fishing year is incomplete.



Stocks undergoing review of management settings should also have deemed values reviewed

81. The IPP does not propose any changes to the deemed values for RBY4, nor does it provide rationale for the current settings. A consultation document should provide all necessary information for the reader to provide meaningful feedback. We cannot provide a specific setting recommendation without the necessary information on ACE price and port price. As there is no sustainability concern in this fishery, an appropriate setting for deemed values would be closer to the ACE price than the market price.

Scampi - kourarangi (SCI1)

Our view

- We support Option 1, an increase to the TAC, TACC and all other mortality caused by fishing.
- We acknowledge a range of positions are held by lwi and industry on SCI1

Proposed options

Stock Option				Allowances			
	Option	Total Allowable Catch	Total Allowable Commercial Catch	Customary Māori	Recreational	All other mortality to the stock caused by fishing	
	Current Setting (status quo)	126	120	0	0	6	
SCI 1	Option 1	139 🏠 (10%)	132 🥎 (10%)	0	0	7 🛧	
	Option 2	151 🥎 (20%)	144 🥎 (20%)	0	0	7 🛧	

Our approach

There is a utilisation opportunity in SCI1

82. Since its introduction to the QMS in 2004 the TAC and TACC for SCI1 has remained unchanged and has been fully caught in most years. The 2019 stock assessment indicates that the biomass of SCI1 is between 72-76% B_{O} , confirming the stock is in a healthy state. We see value in maintaining a higher biomass and to therefore have proportionately more of the larger scampi in the population – and the market pays a premium on larger scampi. It would make sense for the industry to invest in economic modelling to provide a sense of how far the biomass could be fished down towards B_{MSY} before this premium is lost.

While there is a utilisation opportunity, we acknowledge the preference of some parties to retain status quo and of others to support Option 2. Our preferred position sits in the middle of this range and hence we support a 10% increase.

The goal should be to achieve further reductions in bycatch

83. Scampi is a deepwater bottom contact trawl fishery which catches a proportionally high level of non-target QMS and non-QMS species. We are mindful of the bycatch in this fishery and would like to see a cautious approach towards a fish-down for these reasons too. We would support investigations into finfish escapement devices as a means of reducing non target catch.

Stocks undergoing review of management settings should also have deemed values reviewed

84. The IPP does not propose any changes to the deemed values for SCI1, nor does it provide rationale for the current settings. A consultation document should provide all necessary information for the reader to provide meaningful feedback. We cannot provide a specific setting recommendation without the necessary information on ACE price and port price. As there is no sustainability concern in this fishery, an appropriate setting for deemed values would be closer to the ACE price than the market price.

Silver warehou (SWA3 and SWA4)

Our view

- We do not support the options proposed.
- We support an alternative option for SWA3, a TAC of 3975 tonnes, a TACC of 3936 tonnes and the allowance for all other mortality caused by fishing to 39 tonnes.
- We support an alternative option for SWA4, a TAC of 4957 tonnes, a TACC of 4908 tonnes and the allowance for all other mortality caused by fishing to 49 tonnes.

Proposed Options

		Total Allowable Catch	Total - Allowable Commercial Catch	Allowances			
Stock	Option			Customary Māori	Recreational	All other mortality to the stock caused by fishing	
SWA 3	Option 1 (modified status quo)	3,313	3,280	0	0	33	
SWA 3	Option 2	3,646	3,610 10%)	0	0	36	
SWA 4	Option 1 (modified status quo)	4,131	4,090	0	0	41	
SWA 4	Option 2	4,545	4,500 10%)	0	0	45	

Our approach

85. Utilisation opportunity for SWA3 and 4

Silver warehou is caught as both a target and non-target stock in deepwater trawl fisheries. The total landings have exceeded the TACC on six occasions since the 2010/11 fishing year for SWA3 and on five occasions for SWA4. The participants in this fishery have been seeking increased utilisation for a number of years but the science has lagged behind. We note that there are still unresolved issues impacting the reliability of the stock assessment model regarding the estimation of abundance, however the information from the fishery strongly supports an increase above the current management settings. We note that there are still unresolved issues impacting the reliability of the stock assessment model regarding the estimation of abundance. However, the information from the fishery strongly supports an increase above the current management settings, the proposed 10% increases do not even account for current catch. We therefore support a TACC increase of 20% above current settings for both SWA3 and SWA4.

86. Stock assessment model needs refinement.

Due to the nature of the fishery, silver warehou has been unable to be assessed reliably, which is constraining the fishery from its optimal potential. This is despite multiple efforts and large expenditure on analysis. A 20% increase is justified and will enable funds to be redirected away from deemed value payments and into areas that will benefit fisheries management. We consider that a higher TACC for SWA3 and SWA4 is sustainable and support the need for better calibration between FNZ and industry for a new management approach that is more appropriate to the nature of the silver warehou fishery.

87. Choke species impacting other QMS species

The high abundance of silver warehou, combined with its constrained TACC, has had the effect of hindering the utilisation of BAR4. High catch rates of silver warehou during the current fishing year have incurred unnecessary deemed value payments, consequently this impacts the ability for deepwater vessels to catch BAR4. Over the past five years alone fishers in SWA3 and SWA4 have paid over \$1.3m and \$2m respectively in deemed values.

There is a utilisation opportunity being missed in BAR4 caused through the constraining SWA3 and SWA4 management settings.

Stocks undergoing review of management settings should also have deemed values reviewed

88. .The IPP does not propose any changes to the deemed values for SWA, nor does it provide rationale for the current settings. A consultation document should provide all necessary information for the reader to provide meaningful feedback. We cannot provide a specific setting recommendation without the necessary information on ACE price and port price. As there is no sustainability concern in this fishery, an appropriate setting for deemed values would be closer to the ACE price than the market price.

Inshore Stocks

Overview

- 89. Fisheries New Zealand is reviewing the TAC/TACCs for the following inshore fisheries:
 - Area 3 mixed trawl fishery:
 - i. Leatherjacket kokiri (LEA3)
 - ii. Blue moki (MOK3)
 - iii. Red gurnard kumukumu (GUR3)
 - iv. Rig makō (SPO3)
 - Blue cod rāwaru (BCO5)
 - Gemfish maka-tikati (SKI1 & 2)
 - Geoduck pupu (PZL7)
 - Kingfish haku, warehanga (KIN2; KIN3; KIN7 & 8)
 - Põrae (POR1)
 - Sea perch puhuiakaroa (SPE9)
 - Snapper- tāmure (SNA7) and red gurnard kumukumu (GUR7)
 - Stargazer puwhara (STA7)
 - Rig makō (SPO2)

There is no inshore fisheries plan

90. We note reference to a Draft National Inshore Finfish Fisheries Plan in the IPPs for inshore stocks. In our view, Fisheries Plans were intended to be an empowering tool for rights-holders to use in association with agencies responsible for administering legislation. Assuming that a proposed plan developed without the involvement of key interests and has yet to be approved is indicative of a top down approach to fisheries management that is inconsistent with our incentive-based system.

91. Te Ohu Kaimoana is committed to improving Aotearoa's fisheries management and we seek to do so through collaboration with all Iwi (reflecting both their commercial and non-commercial interests), other commercial rights holders, recreational fishers and organisations, environmental groups and government agencies. If management measures are to be implemented effectively, our experience suggests all key participants in the relevant fishery need incentives to work together. Our response to the Draft Inshore Finfish Fisheries Plan can be found here.

Area 3 mixed trawl fishery

Our view

- We support Option 2 for LEA3, an increase to the TAC, TACC and allowance for other mortality caused by fishing
- We support Option 2 for GUR3, an increase to the TAC, TACC and allowance for other mortality caused by fishing.
- We do not support the options proposed for MOK3 or SP03.
- We support an alternative option for MOK3, set out in Table 1
- We support an alternative option for SPO3, set out in Table 1, only if it is executed in such a way that it does not diminish Settlement quota as a proportion of the TACC
- We do not support a management decision that will result in a proportional reduction of lwi ownership.
 Increasing the TACC in SPO3 will result in 28N rights being discharged and if it is administered in accordance with s23 of the Fisheries Act 1996 then there will be a breach of the Fisheries Settlement. This will come about through a reduction the quota shares as a proportion of the TAC Our full position on 28N rights is set out in Section two.

Table 1: Te Ohu Kaimoana's preferred options for MOK3 and SPO3 in tonnes

		Tatal Allawahla		Allowances	
Stock	Total Allowable Catch	Total Allowable Commercial Catch	Customary	Recreational	All other mortality caused by fishing
МОКЗ	214.6↑	176↑	1	20	17.6↑
SP03	766↑	660↑	20	20↓	66↑

Proposed options

		Total			Allowances	
Stock Option	Allowable	Total Allowable Commercial Catch (tonnes)	Customary Māori (tonnes)	Recreational (tonnes)	All other mortality caused by fishing (tonnes)	
MOK 3	Option 1 (Status quo)	197	160	1	20	16
	Option 2	216.6 🛧	176 🋧 (10%)	1	22 🛧	17.64
	Option 3	234.2 🔨	192 1 (20%)	1	22 🛧	19.24
LEA 3	Option 1 (Status quo)	140	130	1	2	7
	Option 2	160.3 🛧	143 🋧 (10%)	1	2	14.31
GUR 3	Option 1 (Status quo)	1,593	1,320	3	6	264
	Option 2	1,606.2 1	1,452 1 (10%)	3	6	145.2₩
SPO 3	Option 1 (Status quo)	710	600	20	60	30
	Option 2	806↑	660 10%)	20	60	66 🛧

- 92. These stocks have been grouped together as they are generally caught together. Each stock is specifically targeted at times but can also be caught when other stocks are targeted. For example:
 - an increase in the TACC for MOK3 and LEA3 may result in an increase in catch of GUR3.
 - an increase in the TACC of SPO3 is likely to result in an increase in catch of LEA3 which in turn may influence the catch of GUR3

Our approach

Stocks that are fished together should be managed together

93. The Aotearoa QMS has grown from managing 26 species or mixed species for commercial use to managing the sustainable use of the aquatic environment for the economic, cultural and social wellbeing. This progress has meant that the traditional approach of single stock assessments and waiting for those stocks to find a place within the sustainability round queue before settings can be updated needs an urgent overhaul. The approach of considering stocks caught together (but not necessarily indicative of inter-dependencies) is long overdue. We agree that a range of factors such as stock productivity, distribution (especially as global warming effects are seen), abundance, and fishery interactions should be considered when management decisions are made. We support an approach that manages stocks in mixed fisheries being managed together. This is consistent with the Fisheries Act 1996 which sets out an ecosystem-based approach to fisheries management.

The existence of 28N rights in SPO3 requires careful administration

94. A TACC increase of one tonne is required for all 28N rights to be discharged. This needs to be done in such a way that Settlement quota as a proportion of the TACC is not reduced.

MOK3, LEA3, GUR3 and SPO3 are all caught together but differ in biology

- 95. Following the latest biennial independent East Coast South Island inshore trawl survey, these four stocks have been assessed as being at or above sustainable levels to varying degrees.
- 96. The biological characteristics of these stocks suit different management approaches. For example, species with relatively high productivity (such as GUR3 and LEA3) take less time to rebuild than those with low productivity, and management approaches can be responsive to fluctuations in biomass. GUR3 is a high productivity stock and has the highest TAC/TACC of all three stocks. It is likely to be able to sustain an increase in the TACC of 10% over the next few years.
- 97. Due to its low growth rate and longevity moki is a low-medium productivity. For species with low productivity, a more appropriate TAC would be one that reflects longer term stability. Taking these factors into account, we support a TACC increase of 10% for MOK3 matched with a TACC increase of 10% for GUR3, LEA3 and SPO3. We would be comfortable with greater increases in the TACC for MOK3 as proposed under Option 3– but in the context of a management strategy that sets out how fine scale monitoring would mitigate against any risk to sustainability.

Recreational allowance should not exceed estimated catch

- 98. We do not support a fisheries management system that provides for increased utilisation by the recreational sector beyond what they are assessed to be catching. The current estimate of MOK3 recreational catch is 16.4 tonnes. We do not see the rationale for increasing the recreational allowance given this is the best available information. We therefore do not support an increase to the recreational allowances for MOK3.
- 99. The current estimate of recreational SPO3 catch is 15.7 tonnes, far below the current allowance of 60 tonnes. We consider it is appropriate to decrease the recreational allowance to 20 tonnes, which is at a level closer to estimated recreational catch according to the 17/18 National Panel Survey. We support removal of the excess 40 tonnes from the TAC and returning it back to Tangaroa on the basis it is not needed to cover catch. Our full position on the allocation of the TAC can be read in Section one.

Stocks undergoing review of management settings should also have deemed values reviewed

100. The IPP does not propose any changes to the deemed values for these stocks, nor does it provide rationale for the current settings. A consultation document should provide all necessary information for the reader to provide meaningful feedback. We cannot provide a specific setting recommendation without the necessary information on ACE price and port price. As there is no sustainability concern in this fishery, an appropriate setting for deemed values would be closer to the ACE price than the market price.

Blue cod - rāwaru (BCO5)

Our view

- We support Option 2, a decrease to TAC, TACC and the allowance for recreational catch
- We support an increase to the customary allowance
- We support a bag limit of two blue cod in BCO5

Proposed Options

			Total	Allowances			
Stock Option	Option	tion Total Allowable Catch	Total Allowable Commercial Catch	Customary Māori	Recreational	All other mortality to the stock caused by fishing	
BCO 5	Option 1 (Status quo)	1,452	1,239	2	191	20	
BCO 5	Option 2	999 🗸 (31%)	874 129%)	201 (N/A)	85 🗸 (55%)	20	
BCO 5	Option 3	825 4 (43%)	700 🔱 (44%)	201 (N/A)	85 🗸 (55%)	20	

Our approach

Blue cod is a taonga species, highly valued by Iwi/Māori

101. We support the setting of a customary allowance of 20 tonnes in BCO5 on the basis that it is more likely to reflect current catch than the current allowance of two tonnes. Setting a customary allowance that reflects actual demand enables lwi to exercise their right as kaitiaki over their fisheries and for that to be reflected within the TAC. BCO5 lies within Kāi Tahu's rohe moana and we encourage the Crown to uphold a meaningful partnership with Kāi Tahu in the management of this fishery.

Industry has shown leadership in the management of this fishery

102. Industry has shown leadership in the management of this fishery through ACE shelving for the past four fishing years (including the current fishing year) and increasing the mesh size used on commercial pots in 2017. Quota holders are now requesting the approval of a management procedure to be implemented in the BCO5 fishery. Management procedures are simulation-tested decision rules, which use inputs such as CPUE to trigger an output of a suggested TACC adjustment. This allows for considered adjustments to be made to catch levels in a fishery in the absence of a stock assessment. The use of management procedures in some rock lobster fisheries have provided a successful approach to managing these fisheries. It is important for management procedures to be subject to rigorous scientific approval and have input from lwi.

Lowering the TAC will rebuild the stock

103. We support Option 2, a decrease to the TAC, TACC and allowance for recreational catch. We support a decrease of both the recreational and commercial catch in the BCO5 fishery to address sustainability concerns. Option 2 is based on catch rates of 80% of the current catch which predict there is a 50% chance the fishery will rebuild to

be at or above a nominal target within five years. The IPP notes that the stock assessment did not consider changes to pot mesh dimensions or in fisher behaviour. Input into the management procedure of data made available through electronic reporting will enable more agile data analysis to identify potential risks and address them. A management procedure will provide more certainty and a more responsive path to recovery. However, complications from the lack of reporting from recreational fishers continues to hinder management.

Management of recreational fisheries is important

- 104. The proposed changes to the recreational allowances are essentially administrative in that they reflect the best estimate of recreational catch. To make a meaningful contribution to rebuild the fishery, recreational extractions need to be managed through reductions to daily limits and the active monitoring of the catch.
 - 105. At the time the National Blue Cod Strategy measures were consulted on the sustainability concern for the BCO5 fishery was not recognised. Therefore, the bag limits for the recreational sector were incorrectly assessed against the traffic light system. Currently the daily limit is set at either 15 or 10 blue cod. The traffic light system provides a daily limit of two for stocks that are "in trouble". Considering the recreational effort in BCO5 is estimated to be increasing, we support amending the bag limit as soon as practicable to reflect the status of the stock. We support a bag limit of two blue cod until the stock has sufficiently recovered. We are supportive of using accumulation limits to ensure recreational catch is kept to an appropriate level.

Stocks undergoing review of management settings should also have deemed values reviewed

106. The IPP does not propose any changes to the deemed values for BCO5, nor does it provide rationale for the current settings approach. A consultation document should provide all necessary information for the reader to provide meaningful feedback. We cannot provide a specific setting recommendation without the necessary information on ACE price and port price. As there is a sustainability concern in this fishery, an appropriate setting for deemed values would be closer to the market price then the price of ACE.

Gemfish - maka-tikati (SKI1 & SKI2)

Our view

- We do not support the options proposed for SKI1 or SKI2.
- We support an alternative option for SKI1, a TAC of 408 tonnes, TACC of 360 tonnes and the allowance for all other mortality caused by fishing of 18 tonnes.
- We support an alternative option for SKI2, a TAC of 355 tonnes, a TACC of 330 tonnes and the allowance for all
 other mortality caused by fishing of 17 tonnes, only if it is executed in such a way that it does not diminish
 Settlement quota as a proportion of the TACC.
- We do not support a management decision that will result in a proportional reduction of Settlement quota as a proportion of the TACC.

Increasing the TACC in SKI2 will result in 28N rights being discharged and if it is administered in accordance with s23 of the Fisheries Act 1996 then there will be a breach of the Fisheries Settlement. This will come about through a reduction the quota shares as a proportion of the TACC. Our full position on 28N rights is set out in Section two.

 We support the improved management of recreational catch through the introduction of a bag limit and minimum legal size

Proposed Options

		Total ion Allowable Catch	Total Allowable Commercial Catch	Allowances			
Stock	Option			Customary Māori	Recreational	All other mortality to the stock caused by fishing	
SKI 1	Option 1 (Status quo)	218	210	3	5	0	
SKI 1	Option 2	284 🔨 (30%)	231 🛧 (10%)	3	27 🛧	23 🛧	
SKI 1	Option 3	307 🛧 (41%)	252 1 (20%)	3	27 🛧	25 ↑	
SKI 2	Option 1 (Status quo)	248	240	3	5	0	
SKI 2	Option 2	298 🛧 (20%)	264 10%)	3	5	26 🛧	
SKI 2	Option 3	325 🛧 (31%)	288 1 (20%)	3	5	29 🛧	

Our approach

There is evidence supporting the increased utilisation of gemfish

107. Gemfish is predominantly caught as a non-target stock in trawl fisheries. The most recent quantitative stock assessment was 12 years ago and estimated the biomass of the combined SKI1 and SKI2 stock to be at 32% B0 or 26% B0, and in 2007 to be at 22% B0. The CPUE analysis for SKI1 and SKI2 in May 2020 indicates that abundance has increased more than threefold since 2007 and is likely to increase further over the next five years. Given this, landings will be expected to increase over the same period. The 2008 assessment explored potential yield estimates for the combined SKI1 and SKI2 stocks in 2007 and produced Maximum Constant Yield estimates of 995, 865, and 816 tonnes. This analysis provides a strong case for supporting TAC options higher that proposed in the IPP.

Responsive and agile management systems mitigate potential sustainability risks

108. While we consider there is a low risk to sustainability for SKI1 and SKI2, any potential sustainability risk associated with a larger increase to the TACC can be mitigated through regular update of the CPUE analyses. Electronic reporting enables more agile management including the early identification of risk and mitigation options.

We support increasing the TACC for SKI1 to provide for increased utilisation.

109. The total landings in SKI1 were 277 tonnes and 354 tonnes for 2017 and 2018 respectively. For the 2019/20 fishing year to date, SKI1 is already 104% caught with four months of catch left in the year. Despite the potential for greater utilisation of gemfish, the breadth of the options proposed do not allow for the current levels of catch nor for the expected increase in abundance. We support a higher increase than the proposed options that better reflects the improving stock status. We recommend a TAC of 408 tonnes, and a TACC of 360 tonnes.

We support increasing the TACC for SKI2 to provide for increased utilisation

110. The total landings of SKI2 were 286 and 328 tonnes for 2017 and 2018 respectively. For the 2019/20 fishing year to date, SKI1 is 88% caught with four months of catch left in the year. Despite the potential for greater utilisation of gemfish, the breadth of the options proposed do not allow for the current levels of catch nor for the expected increase in abundance. We support a higher increase than the proposed options that would better reflect the increasing stock status. We recommend a TAC of 355 tonnes, and a TACC of 330 tonnes. Our proposed SKI1 and SKI2 TACs combine to 763 tonnes which is below the lowest yield estimate from the 2008 assessment. We consider these catch levels to be sustainable, and any risk can be monitored through regular updates of the CPUE indices.

The existence of 28N rights in SKI2 requires careful administration of an increase to the TACC

111. The effect of enacting all 28N rights in SKI2 would reduce the Iwi Settlement quota as a proportion of the TACC from 9.99% to 8.36%. A TACC increase of 20% is required, in order for all 28N rights to be discharged. There is a genuine utilisation opportunity in SKI2 and deemed values have accrued due to unavoidable catch when targeting other species. This conflict between administering the increase in accordance with s23 of the Act and remaining consistent with the Settlement means that careful administration of any increase in the TACC is required to prevent a breach of the Settlement.

We support increasing the TACC to remedy the deemed value payments accrued in SKI1 and SKI2.

112. While we support the review of deemed values for all stocks undergoing review of their sustainability measures, we do not support an increase in the rates for SKI1. Current TACC settings generate high deemed value payments in SKI1 and SKI2. Deemed values for SKI1 and SKI2 were \$288,677 and \$233,047 respectively for the 2018/19 fishing year. We do not support the proposed increase to the deemed values for SKI1 in order to provide "sufficient incentive for fishers to avoid catching in excess of SKI1 ACE". The conjunction of the proposed options for TACCs and deemed values will not provide for a meaningful utilisation opportunity. Fishers will still be restricted by this non-target species and financially penalised through higher deemed values. We do not agree with the rationale provided in the IPP for this increase and the approach taken to apply deemed values. Our full position on deemed values can be read in Section two.

We support the introduction of a bag limit and minimum legal size (MLS) for gemfish.

113. There are currently no management of the recreational catch of SKI1 and SKI2. We consider this inappropriate for the sustainable management of Aotearoa's fisheries. There needs to be corresponding limits for recreational catch in order for the recreational allowance to be meaningful. In our view, the review of sustainability measures should encompass all sustainability measures not just TAC changes. We therefore do not support setting a recreational allowance based on catch in a fishery with no limiting measures. We support including gemfish in the combined finfish bag limit of 20 and creating a recreational MLS that represents length at age of 50% sexual maturity. Further, once set, we do not support increases to the recreational allowances without full agreement of extractive interests through their mandated representatives. Our full position on the allocation of the TAC can be read in Section one.

Gemfish fishery characteristics support deviation from the default 10% setting for other sources of fishing related mortality

114. The allowance for other sources of fishing related mortality includes the potential mortality of sub-MLS fish returned to sea. There is no MLS for commercially caught gemfish and therefore all catch must be landed. Considering the returns to sea portion of the allowance is not a factor in this fishery we consider the default setting of 10% is not representative for this fishery. We support a setting of 5% of the TACC.

Geoduck - pupu (PZL7)

Our view

- We support maintaining the current TAC and TACC for PZL7.
- We encourage appropriate pre-consultation workshops between the Industry and Iwi are held prior to any review of PZL7.
- We also recommend that industry works with Iwi and other stakeholders to co-develop a management strategy for PZL7.

Proposed Options

				Allowances		
Option	Total Allowable Catch (tonnes)	Total Allowable Commercial Catch (tonnes) Māori (tonnes)		Recreational (tonnes)	All other mortality to the stock caused by fishing (tonnes)	
Option 1 (Status quo)	30	23.1	-	+	6.9	
Option 2	65 🛧 (117%)	48 1 (108%)	1	1	15 🛧	
Option 3	130 🛧 (433%)	99 🛧 (329%)	1	1	29 ↑	

Our approach

Geoduck is a taonga species that holds significant value to Iwi in Te Waka a Māui

115. We acknowledge that pupu are identified as a taonga species by lwi. The PZL7 Settlement quota is allocated to 9 lwi in Te Waka a Māui. Iwi are significant owners in the commercial fishery with collective interests (including lwi and Moana) owning 36% of the quota in PZL7.

Collaboration between Industry and Iwi needed for PZL7

116. Greater collaboration between industry, Iwi and FNZ needs to occur PZL7's TAC and TACC are reviewed. We encourage the industry work with Iwi to co-develop a management strategy on the future of the PZL7 fishery.

Uncertainty on the adverse impacts on the environment

117. Iwi have expressed concerns over increasing the TACC due to potential adverse impacts on the environment¹⁷. Due to the developing nature of this fishery there is uncertainty in how the stock will respond to increased fishing effort, and the extent and nature of the wider environmental impacts of the fishing method which is a handheld water jet that liquefies the substrate.

Fine scale management could provide a utilisation opportunity

118. PZL7 is a fishery with high value potential. Biomass surveys indicate the fishery could sustain an increase in TACC. There is potential for Iwi and industry along with others who have interests in the fishery to develop a management strategy to support and enable fishers to actively manage the fishery in a way that is consistent with Māori values and Iwi aspirations for the management of the marine environment. We cannot support this proposal until such time that a management strategy is co-developed by Iwi and industry.

¹⁷ Fisheries New Zealand, May 2020, Review of Sustainability Measures for Deepwater (King) Clam (PZL 7) for 2020/21, Fisheries New Zealand Discussion Paper No: 2020/13

Our view

- Setting a TACC in order to constrain fishers to "unavoidable catch" is inconsistent with both the purpose of the Act and the Fisheries Settlement.
- There is no basis under the Act for maintaining proportionality of the TAC.
- We consider that the options proposed in the IPP lack consistent application of fisheries management principles.
- We support a TAC of 189 tonnes, a customary allowance of 21 tonnes, and a TACC of 70 tonnes for KIN2.
- We support Option 2 for KIN3.
- We support a TAC of 116 tonnes, a customary allowance of 4 tonnes, and a TACC of 72 tonnes for KIN7
- We support a TAC of 192 tonnes, a customary allowance of 17 tonnes and a TACC of 103 tonnes for KIN8
- We support setting the allowance for other sources of fishing related mortality at 10% of the combined TACC and recreational allowance rather than 10% of the TAC
- We consider the recreational allowances should be maintained at current levels and do not support setting a recreational allowance above the best estimates of recreational catch
- · The deemed value rates for kingfish stocks are set too high and need to be significantly reduced

Proposed Options

				Allowances			
Stock Op	Option	Total Allowable Catch	Total Allowable Commercial Catch	Customary Māori	Recreational	Other sources of mortality to the stock caused by fishing	
KIN 2	Option 1	189 1 (11%)	70 个 (11%)	21 1 (17%)	79 1 (22%)	19 🔱 (21%)	
KIN 3	Option 1	21 1 (24%)	9 1 (50%)	4	6	2 1 (100%)	
KIN 3	Option 2	23 1 (35%)	11 1 (83%)	4	6	2 1 (100%)	
KIN 7	Option 1	82 1 (100%)	30 1 (100%)	4 1 (100%)	40 100%)	8 1 (100%)	
KIN 7	Option 2	122 1 (198%)	44 1 (193%)	6 1 (200%)	60 1 (200%)	12 1 (200%)	
KIN 8	Option 1	167 1 (77%)	80 1 (77%)	17 1 (89%)	55 1 (77%)	16 1 (129%)	

Our approach

There is evidence of increased abundance in KIN7 and KIN8 that supports an opportunity for greater utilisation

119. The CPUE index shows a considerable increase in the CPUE between 2006/07 and 2016/17, followed by a period of stabilisation. This trend was apparent in all areas where the midwater trawl fleet was active, therefore it was concluded that an increase in biomass driven by high recruitment was the only biologically plausible explanation for this increase. The FNZ Inshore Fisheries Working Group further anticipates that biomass will

increase at current catch levels due to the high juvenile abundance seen in the last two years. This evidence provides a strong case for TAC options higher that proposed for KIN7 and KIN8 in the IPP.

The Act provides for sustainable utilisation of fisheries resources

120. We do not consider the options and associated rationale proposed in the IPP to be consistent with the purpose of the Act. There is a sustainable utilisation opportunity for kingfish and immense financial penalties occurring for current catch. While the biomass is expected to increase under current catch levels the options do not even provide for the current commercial catch. In our view this does not enable sustainable utilisation of fisheries to the extent that fisheries resources are providing for people's social, economic and cultural wellbeing. The rationale given in the IPP is that the management settings would constrain the commercial sector to unavoidable catch. We do not agree that this is the appropriate position to take for a fishery with a genuine utilisation opportunity.

Maintaining proportionality of the TAC over enabling sustainable utilisation is contrary to the Act

121. Since its introduction to the QMS in 2003, the management approach guiding the setting of TACs for kingfish appears to have been to maintain the proportionality between sectors. The IPP states that the proposed options are consistent with this approach, however, being consistent with the historical management approach is not itself a reason for support. If we maintained this attitude, there would be no progress or improvement of management. We do not consider that this approach best reflects the current state of the fishery and it is time to set the TAC based on enabling utilisation.

Industry are doing all they can to avoid kingfish catch

122. Despite the potential for sustainable utilisation, industry operators are applying multiple measures to avoid landing kingfish. This includes the release of live fish through The Sixth Schedule; feedback from observers is positive toward to the efforts made by fishers to release these fish as soon as practicable and only land dead fish. Further industry participants are working to develop a kingfish catch reduction device. Even with these efforts in place, reducing catch is still difficult as it makes up a very small proportion of the target catch (1% of the JMA7 fishery).

The value the recreational sector holds for kingfish should not undermine the values of the commercial sector

123. We acknowledge the status of kingfish as a shared fishery and in our view, it should be just that, shared. Currently the management settings do not allow for such sharing and the options indicate that it is only acceptable for the commercial sector to catch what they can't avoid. The commercial sector should not be unnecessarily constrained from benefitting from this species and providing catch to the New Zealanders who purchase the fish they consume. To take that approach is contrary to the Fisheries Deed of Settlement which guaranteed lwi a share in the productive capacity of the marine ecosystem. Recreational fishing is not covered by the Deed and sits outside it as a privilege available to all people who visit Aotearoa. We view the approach presented in the IPPs, as proposing social measures that are inconsistent with the Deed rather than applying fisheries management principles.

The proposed options are inconsistent in approach

124. We note that the options provided in the IPP lack a cohesive management approach and each QMA has been approached differently. We view the approach taken to develop the options are not based on characteristics such as CPUE, estimated biomass or other sustainability factors usually considered in reviewing management settings. Rather, it appears that have been set with a focus on providing priority to the recreational sector. For example, options for KIN2 increase the recreational allowance by 22% and the TACC by 11% which covers current catch for both sectors. Whereas options for KIN8 propose an increase of 77% for both sectors; this maintains proportionality of the TAC but does not provide for the current commercial catch. For KIN7, a proposed option sets the recreational allowance 33 tonnes above the current estimate of catch, while the TACC remains 20 tonnes below current catch. We are bemused by this approach and consider this lacks consistent application of fisheries management principles.

The proposed options for KIN8 to do provide for utilisation of current landings

125. There were 93 tonnes of KIN8 landed in 2018 and a further >100 tonnes returned to sea in accordance with the Sixth Schedule. Despite the potential for greater utilisation benefits from the harvesting of kingfish the breadth of the options proposed do not allow for the current levels of commercial catch, let alone an expected increase in abundance. Based on current landed catch, the KIN8 fishery would be expected to incur \$115k of deemed value payments under the proposed TACC option. There has been no scientific rationale provided to defend the proposal to not provide ACE for current kingfish landings. We would support a higher increase to the TACC that would provide for improved utilisation of kingfish and better reflect the increased abundance. We recommend a TAC of 192 and TACC of 103 for KIN8. These settings do not provide much excess (10 tonnes) beyond current catch and therefore the stock would be likely to continue to increase. This buffer of 10 tonnes provides for current catch as well as for the expected increase.

The proposed options for KIN7 are restrictive and possibly ultra vires.

126. There were 62 tonnes of KIN7 landed in 2018 and an additional >100 tonnes returned to sea in accordance with the Sixth Schedule. The proposed options to increase the TAC do not provide for this level of catch. Further, the IPP provides an option for the recreational allowance to a level greater than the estimated catch. The recreational fishery in KIN7 is currently estimated to take 27 tonnes. The IPP sets out the case for options being an attempt to retain proportionality in the allocation of the TAC. This approach provides a vast excess to the recreational allowance but does not provide for current commercial catch. The proposed options to are contradictory to the framework provided by the Act and examples of case law¹⁸. We recommend a TAC of 118 tonnes and TACC of 67 tonnes for KIN7. These settings do not provide much excess (10 tonnes) beyond current catch and therefore the stock would be likely to continue to increase. This buffer of 10 tonnes provides for current catch as well as for the expected increase.

¹⁸ Overview of legal requirements relating to sustainability measures – Fisheries New Zealand 2020 para 30-31

Recreational fisheries should be managed within the existing allowance through supporting regulatory measures.

127. We do not support a fisheries management system that provides for increased utilisation for the recreational sector with no visible upper limit. Our view is that the recreational allowance, once set, should be retained until such time as a cross sector agreement is reached to increase it. Continuous provision for the recreational sector based on increasing catch has the ongoing effect of undermining the Fisheries Settlement and destabilising fisheries management. Catch should be managed within any limit set through supporting regulatory measures. We therefore do not support an increase to the recreational allowances for any of the proposed KIN stocks. Our full position on the allocation of the TAC can be read in Section one.

The approach taken in the IPP jeopardises shared fisheries management

128. The rationale provided for the setting of the TACCs for KIN have been based around retaining current proportions within the TAC and avoiding a target fishery. The fisheries assessment suggests that the non-targeted kingfish catch is sustainable and predicted to increase at current catch levels. We see no rationale for not providing sufficient ACE to balance current catch. Proposing options that unnecessarily constrain the commercial sector jeopardises the management of shared fisheries. There are social consequences that result from denying the commercial sector access to sustainably available non-targeted catch. We consider that shared fisheries should be managed with the engagement of all sectors to reach common aspirations for healthy fisheries. By attempting to constrain commercial operations to unavoidable catch, this would drive a further wedge between the commercial and recreational sectors. We view this as unnecessary and contradictory to building good shared fisheries management systems. We consider that the options we have proposed better provide the sustainable utilisation of kingfish across the different sectors.

The proposal to set the allowance for other sources of fishing related mortality at 10% of the TAC is mathematically flawed

129. We support the inclusion of recreational effort in the calculation of the allowance for other sources of mortality. However, 10% of the combined recreational allowance and TACC is not equal to 10% of the TAC. Due to the commercial returns of kingfish under the Sixth Schedule and the high proportion of recreational catch released alive, we support that the allowance for other sources of fishing related mortality be 10% of the combined TACC and recreational allowance for all KIN stocks. However, catch and release would not be a common occurrence in customary harvest, so we recommend this is not included in the calculation of the allowance for other sources of fishing related mortality. The different approaches to OSFM are set out below using KIN2 as an example. We support the allowance for other sources of mortality should be 10% of the combined recreational allowance and TACC for all KIN stocks.

			Total Allowable Commercial Catch	Allowances			
Stock	Option	Total Allowable Catch		Customary Māori	Recreational	Other sources of mortality to the stock caused by fishing	
KIN 2	Option 1	189 111%)	70 11%)	21 1 (17%)	79 1 (22%)	19 ↓ (21%)	

Approach	Calculation
FNZ	10% of the TAC = 10% of 70 + 21 + 79 + 19 = 19 tonnes
Te Ohu Kaimoana	10% of the TAC + Rec Allowance = 10% of 70+79 = 15 tonnes

Kingfish is unnecessarily constraining fishing operations through ramped deemed values.

- 130. Almost \$1.5million in deemed values have been paid for KIN7 and KIN8 in the 2018/19 fishing year. This was mostly accrued through unavoidable catch in the jack mackerel target trawl fishery. We consider the deemed values for kingfish are in need of review to provide the right incentives for accurate reporting and balancing catch with ACE. There are differing market prices between kingfish caught inshore and landed fresh and kingfish caught in deepwater and landed frozen. Further, the continuous occurrence of deemed values drives ACE price up skewing the setting of deemed values for kingfish stocks. Average ACE prices are now above the annual deemed value rate purely because the ramping of deemed values has created a "false" ACE value. Current annual deemed values are almost twice the estimated port price (Table 2) meaning that any catch beyond the TACC is unnecessarily punitive and negatively economic.
- 131. The IPP states there is uncertainty around how lower deemed value rates would incentivise commercial fishers to avoid kingfish. We hold the position that fishers should not be constrained to avoid sustainably available catch. However, we refer to the concerted efforts of fishers mentioned above and consider an alleviation of the extremely punitive current deemed values would not generate a target fishery for kingfish.

Table 2. Current deemed value rates and port price for KIN stocks

Stock	Annual deemed value rate (\$/kg)	Deemed value rate at maximum excess (\$/kg)	2018/19 Port price (\$/kg)
KIN 2	\$8.90	\$17.80	\$4.82
KIN 3	\$4.45	\$8.90	\$4.13
KIN 7	\$8.90	\$17.80	\$1.82
KIN 8	\$8.90	\$17.80	\$2.93

Porae (POR1)

Our view

- We support an increase to the TAC, TACC and the allowance for other sources of fishing related mortality.
- We do not support an increase to the recreational allowance.
- We support a review of the management approach for POR1 and POR2.

Proposed Options

			T-4-1		Allowances	
Option	Stock	Total Allowable Catch (tonnes)	Total Allowable Commercial Catch (tonnes)	Customary Māori (tonnes)	Recreational (tonnes)	All other mortality to the stock caused by fishing (tonnes)
Option 1 (Status quo)	POR 1	75	62	3	6	4
Option 2	POR 1	88 1 (17%)	70 1 (13%)	3	8 1 (33%)	7 1 (75%)

Our approach

An increase to the TACC provides a utilisation opportunity for POR1

132. Pōrae is primarily commercially caught in the snapper, trevally and tarakihi target fisheries. It is an integral part of inshore trawl, bottom long line and set net fisheries, particularly in the northern North Island. Commercial catch in POR1 has exceeded the TACC three times in the last sixteen years. Recent years have seen a stabilising of catch just below the TACC, with the exception of the 2016/17 fishing year in which catch was above the TACC, and 2017/18 in which it was well below, (with the causes unknown but linked to changes in fishing practice). The modest TACC increase proposed provides a utilisation opportunity and is not considered to be inconsistent with maintaining the stock at a level that will produce maximum sustainable yield.

Potential sustainability risks can be mitigated through responsive and agile management

133. We understand that Iwi in the far north have expressed concern where POR1 catch dropped (2016/17 – current) and have suggested a precautionary reduction in the TAC/TACC is appropriate given that better information was needed before an increase should be considered. However, we note that the potential of a sustainability risk associated with a larger increase to the TACC can be mitigated through improved catch data availability enabling a rapid response. Electronic reporting enables more agile data analysis to identify potential risks and address them.

We do not support an increase to the recreational allowance.

134.Option 2 includes a proposal to increase the recreational allowance by 2 tonnes (33%) based on the high recreational catch reported in the 2011/12 National Panel Survey (15.4 tonnes) although estimated catch declined significantly in the 2017/2018 Survey (6.7 tonnes). We see no valid reason to allocate excess catch to the recreational allowance, particularly as this is not based on the most recent and best available information. Specifically, in the absence of full cross-sector agreement, we cannot support increases in the recreational allowance at the expense of the TACC. We support removal of the excess two tonnes from the TAC and for it to be given back to Tangaroa in the absence of a rationale for allocating it elsewhere. Our full position on the allocation of the TAC can be read in Section one.

Management of POR1 and POR2 should be approached with both stocks in mind

135. The majority of POR1 and POR2 are caught up and around the North Cape across statistical areas 002 and 047 (boundary of POR1 and POR2) and considered to be the same biological unit. As noted in the IPP, it is unknown whether pōrae is a single biological unit, or whether there are multiple units. POR2 has a TACC of 18 tonnes and since 2014/15 there has only been one occasion where the TACC has been overcaught. We consider that there are more cost-effective answers to the management associated with stocks that could be drawn from a single biological unit. This is the type of situation faced by the East Coast North Island tarakihi fishery and is addressed by fine tuning each TAC/TACC in the context of a management strategy. The alternative measure would be to amalgamate the QMAs, however this is a costly level of intervention that has only once happened under the Fisheries Act (white warehou). We do not consider there is a sufficiently strong case for the amalgamation of QMAs for pōrae.

Stocks undergoing review of management settings should also have deemed values reviewed

136. The IPP does not propose any changes to the deemed values for POR, nor does it provide rationale for the current settings. A consultation document should provide all necessary information for the reader to provide meaningful feedback. We cannot provide a specific setting recommendation without the necessary information on ACE price and port price. As there is no sustainability concern in this fishery, an appropriate setting for deemed values would be closer to the ACE price than the market price.

Sea perch – puhiakaroa (SPE9)

Our view

- We support an increase to the TAC, TACC and the allowance for other mortality caused by fishing.
- We do not support an increase to the recreational allowance.

Proposed Options

		Total Allowable Commercial Catch (t)	Allowances			
Option	Total Allowable Catch (t)		Customary Māori (t)	Recreational (t)	All other mortality to the stock caused by fishing (t)	
Option 1 (Status quo)	8	6	1	1	0	
Option 2	14 1 (75%)	10 🛧 (67%)	1	2 1 (100%)	1 🛧	

Our approach

Utilisation opportunity in SPE9

137. For the past five fishing years SPE9 has been overcaught. This has resulted in payment of deemed values and the available information suggests that this catch is sustainable. An increase to the TACC provides for improved utilisation of this fishery.

We do not support increasing the recreational allowance

138. We note that an allowance for recreational catch has previously been set for this fishery. Our view is that this should be retained until such time as a cross sector agreement is reached to increase it. This will require the recreational sector to establish a mandated voice and to engage with the commercial and customary non-commercial entities so they can work together to improve fisheries performance. Our full position on the allocation of the TAC can read in Section one. We would support the additional one tonne increase currently proposed for the recreational allowance to be given back to Tangaroa.

Deemed values payment can indicate a fisheries management issue

139. The IPP does not propose any changes to the deemed values for CDL5, nor does it provide rationale for the current settings. A consultation document should provide all necessary information for the reader to provide meaningful feedback. We cannot provide a specific setting recommendation without the necessary information on ACE price and port price. As there is no sustainability concern in this fishery, an appropriate setting for deemed values would be closer to the ACE price than the market price.

Snapper - tāmure (SNA7) and red gurnard - kumukumu (GUR7)

Our view

- We support a multi-stock approach to management.
- We do not support the options provided in the IPP for SNA7
- Our preferred approach for SNA7 is to address the error made in setting the TAC in 2016 and restore the recreational allowance to 90 tonnes and that additional tonnage be allocated to customary if needed and then the balance to the TACC
- We support the approach set out in table 2 on the basis that industry work with Iwi and other sectors to develop a strategy for the future of this fishery
- We support Option 2 for GUR7
- We acknowledge that the red gurnard fishery is closely associated with the snapper fishery within FMA7
 Hence it makes sense to adjust the TAC/TACC in line with an increase in the TAC/TACC for SNA7.

Table 2: Te Ohu Kaimoana's preferred option for the SNA7 in tonnes

Allowances

Option preference	Total Allowable Catch	Total Allowable Commercial Catch	Customary	Recreational	All other mortality caused by fishing
Preferred	545	410↑	20	90↓	25

Proposed Options

		Total			Allowances	
Stock	Option	I AMI A HAWADIA		Gustomary Māori	Recreational	All other mortality caused by fishing
SNA 7	Option 1 (Status quo)	545	250	20	250	25
	Option 2	545	3001 (20%)	20	200 1 (20%)	25
	Option 3 (working group preferred)	645 ↑	350 1 (40%)	20	250	25
GUR 7	Option 1 (Status quo)	1,176	1,073	15	38	50
	Option 2	1,283 🛧	1,180 1 (10%)	15	38	50

Our approach

Correcting the historical error as the first step

- 140. In 2016, the TAC for SNA7 was increased from 306 tonnes to 545 tonnes, with 160 tonnes of that increase being allocated to the recreational sector (around 160% increase). Only fifty tonnes was allocated to the commercial sector (25% increase) despite the TACC constraining sustainable utilisation. Te Ohu Kaimoana has provided the current Minister with a legal opinion that suggested there was an obligation to review the allocation of the TAC for SNA7 now that it had been confirmed that the previous Minister had been provided with inaccurate advice. Following this, the industry proposed that the review be done in association with an updated stock assessment for SNA7 that they were willing to fund. This assessment has now been completed and accepted by the fisheries assessment plenary. However, the plenary stopped short of supporting projections that the fishery would continue to increase due to the presence of a strong year class that is expected to recruit to the fishery later in the current year.
- 141. The first step forward for this fishery is to revisit the allocation of the TAC in light of revised catch estimates for the recreational sector, while considering a modest increase of the TAC to reflect the recent increase of abundance. Now is the time to do that as the fishery seems to be on the verge of a pulse of new recruits and if they are managed into the fishery there seems a strong likelihood of increased utilisation opportunities in this iconic fishery.

142. Our preferred option for SNA7 is to address the error made in setting the TAC in 2016 and restore the recreational allowance to 90 tonnes. We do not agree that the allowance should go above the estimated catch and our view is that catch should be the one estimated at the time of setting the TAC. Under this approach the settings in the fishery would be reset to reflect our preferred allocation policy. From that baseline the different interests could come together and familiarise with the updated stock assessment information that is due over the next few years. It seems quite likely that the stock size will continue to increase through that time (the extent largely depending on the strength of the 2017-year class). A collaborative group would be well placed to capitalise on the benefits of the rebuild and agree on some novel approaches to sharing any benefits.

Proposed options for SNA7 need to be consistent with the best available information and legal requirements

143. The proposed options do not address the issue of the over allocation to the recreational allowance and instead propose to provide excess to the recreational allowance beyond estimated catch. The recreational sector in SNA7 is currently estimated to catch 147 tonnes. We understand the basis for the lowest option being to allow for 200 t of recreational catch is that the estimated catch can be expected to increase as abundance increases. However, the Fisheries Act does not provide for an allowance that is greater than the actual level of catch and the catch for 2019/20 will be much lower due to the COVID-19 lock down. In this instance after ensuring the customary allowance is sufficient to meet actual demand, we recommend the excess tonnage beyond recreational catch be provided to the TACC. Allocating the TAC in this manner allows for full utilisation of the TAC.

Recreational fisheries should be managed within the allowance set

- 144. Notwithstanding that need to be consistent with the Fisheries Act, providing over 90 tonnes to a sector that does not have any robust monitoring and regulatory frameworks is inconsistent with incentive-based management. We do not support a fisheries management system that provides for increased utilisation with no visible upper limit and no reliable measures. Continuous provision for the recreational sector based on increasing catch has the ongoing effect of undermining the Deed of Settlement. Therefore, the recreational allowance within the SNA7 fishery should be returned to its former setting at 90 tonnes and management measures should be put in place to hold recreational catch to that level. Our full position on the allocation of the TAC can read in Section one.
- 145. We consider that in addition to returning the allowance made for recreational fishing back to 90 tonnes, additional steps will need to be taken to ensure the recreational catch is constrained by the allowance made. The most accessible tool currently available to do this is to adjust the daily catch limit downwards from its current setting of 10. Given the average size of snapper caught is considerably larger than other fisheries, the reduction will not impact on the quality of recreational fishing. The daily limit for the Marlborough Sounds section of the fishery is set at three at the explicit request of the recreational sector and so there has already a considerable level of responsibility been shown by leaders within the sector.

- 146. While we consider that maintaining the integrity of the TAC, with any overcatch managed through the deemed value framework (correctly applied) is the appropriate way to manage fisheries, we see it as even more inappropriate to be contemplating an allowance for the recreational sector that goes beyond estimated catch. If the Minister was to determine that the most recent estimate of recreational catch should be the basis for setting the recreational allowance, we would expect the balance of the existing allowance to be allocated to the customary allowance and TACC. This would be a second, but less preferred, option for Te Ohu Kaimoana.
- 147. Once the TAC has been reallocated as part of this review, we would support a more considered and principled engagement involving all extractive interests to determine future management arrangements.

The IPP is deficient on several fronts

148. In relation to the current IPP, we hold particular concerns over the lack of engagement with Te Ohu Kaimoana over the development of the proposed settings for SNA7. The IPP claims that agreement was reached on the allocation of the TAC between interests (noted as the "preferred working group option"). Te Ohu Kaimoana were a member of the working group and our records confirm that the working group did not reach a consensus. We also note that options seem biased towards the claims of the recreational sector and generally unsuitable to support an informed discussion on the management settings in this fishery. Further, the history of this fishery is incorrectly summarised in the IPP.

Collaborative fisheries management ensures healthy fisheries

149. We agree that shared fisheries should be managed with the engagement of all sectors to reach common aspirations for healthy fisheries within the context of the Fisheries Act. The review of SNA7 was deliberately delayed by a year to enable this kind of engagement, however the options developed seek to favour the recreational sector. This sends a signal that commercially caught snapper and the fishers who catch it are not as valuable to Aotearoa. We view this as unsound and contradictory to building good shared fisheries management systems. The proposal we have set out is provided is on the basis that industry work with Iwi and other sectors to develop a strategy for the future of this fishery.

Red gurnard is an important component of the mixed fishery

150. We acknowledge that the red gurnard fishery is closely associated with the snapper fishery within FMA7 Hence it makes sense to adjust the TAC/TACC in line with an increase in the TAC/TACC for SNA7. We support option 2 for GUR7.

Deemed values are unnecessarily constraining snapper fishing

151. In the 2018/19 fishing year \$38,000 in deemed values have been paid for SNA7. This was mostly accrued when targeting other stocks in the top of the south trawl fishery. However, our discussions with fishers have revealed that their fishing patterns have been dramatically altered in order to stay away from snapper and so the current settings have a distortionary effect. This is because fishers are required to pay more for landing snapper that they could not cover with ACE than they receive for their catch, and so they have been forced to

fish elsewhere even though the catch in excess of the TACC is sustainable We are thankful for the actions of these fishers as it is often claimed that fishers faced with this conundrum resort to discarding their catch at

Stocks undergoing review of management settings should also have deemed values reviewed

152. The IPP does not propose any changes to the deemed values for SNA7 of GUR7, nor does it provide rationale for the current settings. A consultation document should provide all necessary information for the reader to provide meaningful feedback. We cannot provide a specific setting recommendation without the necessary information on ACE price and port price. As there is no sustainability concern in this fishery, an appropriate setting for deemed values would be closer to the ACE price than the market price.

Stargazer -puwhara (STA7)

Our view

We support Option 2, an increase to the TAC, TACC and allowance for other mortality caused by fishing

Proposed Options

		**	Total Allowable Commercial Catch (t)	Allowances			
Stock	Option	Total Option Allowable Catch (t)		Customary Māori (t)	Recreational (t)	All other mortality caused by fishing (t)	
STA 7	Option 1 (Status quo)	1, <mark>181</mark>	1,122	1	4	54	
	Option 2	1,271 🛧	1,178 (5%)	1	4	881 (63%)	

Our approach

There is a utilisation opportunity for STA7

153. The STA7 TACC has been overcaught for the past 18 fishing years, with the exception of four years. The best available information suggests the biomass for stargazer is likely to be at or above the management target. The 2019 West Coast South Island trawl survey recorded the second highest biomass estimate since 2013. Given this information, there appears to be an increased utilisation opportunity for STA7. Further, an increase to the TAC would alleviate unnecessary deemed value payments.

Other mortality caused by fishing allowance is inconsistent

154. In 2019, the Minister indicated a desire for all inshore trawl fish stocks allowance for other mortality caused by fishing to be set at 10% of their respective TACCs, unless there is evidence to suggest otherwise. The proposed option increases the allowance for other mortality caused by fishing to 7.5% of the TACC. No rationale has been

provided for the 7.5% figure. We note that other area 7 stocks are being set at 5% after evidence for a reduction of this type of mortality has been put forward. We consider that given this and the robust physiological nature of stargazer that the allowance for other sources of fishing related mortality remains at 5%.

Stocks undergoing review of management settings should also have deemed values reviewed

155. The IPP does not propose any changes to the deemed values for STA7, nor does it provide rationale for the current settings. A consultation document should provide all necessary information for the reader to provide meaningful feedback. We cannot provide a specific setting recommendation without the necessary information on ACE price and port price. As there is no sustainability concern in this fishery, an appropriate setting for deemed values would be closer to the ACE price than the market price.

Rig-pioke, makoo (SPO2)

Our view

We support Option 3, an increase to the TAC, TACC and allowance for other mortality caused by fishing

Proposed Options

Option		_	Allowances			
	Total Allowable Catch	Total Allowable Commercial Catch	Customary Māori	Recreational	All other mortality to the stock caused by fishing	
Option 1 (Status quo)	130	108	5	10	7	
Option 2	139 🛧	113 🛧 (5%)	5	10	11↑	
Option 3	146 🔨	119 🛧 (10%)	5	10	12 1	

Our approach

There is a utilisation opportunity for SPO2

- 156. The best available information suggests the biomass in SPO2 is likely to be at or above a default management target. This conclusion is derived from the most recent SPO2 bottom-trawl analysis conducted in 2019.
- 157. Over the last four years, commercial catch in SPO2 has been below the TACC by an average of 13%. This is because it is largely taken in fisheries targeting other species where there has been a reduction in effort (particularly in relation to TAR2). So, the catch of SPO2 has fallen in proportion. To partially offset this commercial

catch and effort data indicate an increase in the proportion of rig being targeted in SPO2 over the last three fishing years (10% in 2016/17 versus 21% in 2018/19 of total rig target catch reported), whereas the proportion of rig caught while targeting tarakihi and flatfish has decreased over the same time period. This signals an increase in the potential for rig as a target species. Given this information, there appears to be an increased utilisation opportunity for SPO2 and increasing the supply of ACE is likely to enable this to happen.

Increase in abundance consistent with water observations

158. Fisher observations suggest SPO2 returned to sea under the Sixth Schedule could contribute to the TACC not being caught. Fishers may choose to return rig to the sea provided they are likely to survive and the return takes place as soon as practicable after the rig is taken and this option may be preferred to individual fishers that do not hold sufficient ACE.

Stocks undergoing review of management settings should also have deemed values reviewed

159. The IPP does not propose any changes to the deemed values for SPO2, nor does it provide rationale for the current settings. A consultation document should provide all necessary information for the reader to provide meaningful feedback. We cannot provide a specific setting recommendation without the necessary information on ACE price and port price. As there is no sustainability concern in this fishery, an appropriate setting for deemed values would be closer to the ACE price than the market price.

Deemed Values

Overview

Deemed values need to be set at an appropriate level

160. Deemed values that are set too high may not provide an incentive to land some stocks. If the deemed value is set too low, fishers may be incentivised to land fish without balancing with ACE. Deemed values should be set with the best available information between the market value of fish and the price of ACE. Port price has been used as a proxy for market value (see figure 3) but we recognise that it can be impacted by how Licensed Fish Receivers are integrated into the value chain.

Deemed values are not intended to always defend the TACC

161. Deemed values are not designed to be a mechanism for ensuring the commercial catch does not exceed the TACC. We support an approach that has an overriding purpose of encouraging the accurate reporting of catch, while discouraging the catch of stocks that individual fishers cannot cover with ACE¹⁹. We recognise that where there are identified sustainability concerns the deemed value may play a role in defending the TACC. So, the correct setting of deemed values requires a rich understanding of the economics of fishing.

Commercial Catch Balancing Forum work is supported

- 162. The Commercial Catch Balancing Forum was established during the 2019 review of the deemed values regime. The purpose of the Forum is to discuss stocks where catch balancing issues are of concern and provide information and input into decision making on what the appropriate management response may be. We are supportive of the Commercial Catch Balancing Forum but it is most unclear to us as to how the stocks proposed by the Commercial Catch Balancing Forum for deemed values reviews have been included and prioritised by FNZ in this year's review.
- 163. The application of deemed values require a sound understanding of the metrics of a fishery and the participants within it. We have previously reiterated that it is much more than simply defending the TACC, and it is inappropriate to use the system for allocative purposes such as is evidenced for kingfish (see below). Figure 3 sets out a stylised view of where deemed values work in the context of the commercial value chain, linking the "price of fish" to the deemed value framework.

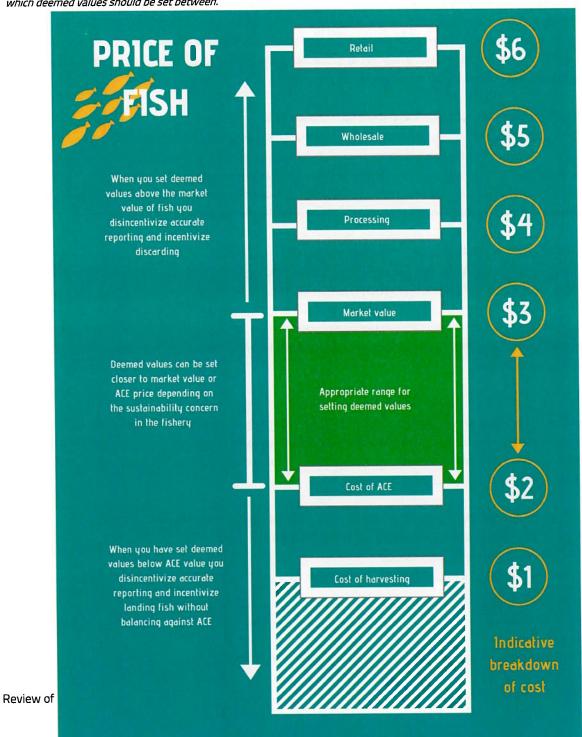
164. Fisheries New Zealand is specifically reviewing the deemed values for the following stocks:

- Arrow squid wheketere (SQU1J; SQU1T; SQU6T)
- Bluenose matiri (BNS3)
- Gemfish maka-tikati (SKI1; SKI2; SKI7)
- Pilchard mohimohi (PIL7; PIL8)

¹⁹ For Te Ohu Kaimoana's approach on deemed values please refer to 3.6.

- Redbait (RBT3)
- Trevally araara (TRE2)

Figure 3: A value chain depicting the breakdown of the price of fish. The different steps in the value chain help to inform a range which deemed values should be set between.



Arrow squid – wheketere (SQU1J; SQU1T; SQU6T)

Our view

- We do not support an increase to the SQU1J, 1T and 6T fisheries deemed values
- We suggest that the deemed values should be set closer to the price of ACE than to the port price
- We do not support the proposed ramping of deemed values in the differential rates for all of SQU1J, 1T and 6T

Proposed options

Stock	Outlan	luda elea	Interim Annual 100-120%	Differential rates (\$/kg) for excess catch (% of ACE)					
	Option	interim		120-140%	140-160%	160-180%	180-200%	>200%	
SQU 1J, 1T & 6T	Current	0.79	0.88	1.06	1.23	1.41	1.58	1.76	
	Danuard	Proposed 1.08 -	Annual 1	100-105%	105-	130%	>130	0%	
	Proposed		1.	20	1.	60	2.4	10	

Our approach

Deemed values for SQU fisheries should be set close to the ACE price

165. The consultation document is proposing to increase the SQU fisheries deemed values on the basis of the port price increasing from \$0.80kg in 2008/09 to \$1.20/kg in 2019/20. However the port price provided in the IPP does not into consideration the impact of COVID-19 on the food service market that squid is sold into. The reality is that the port price has decreased and squid is now being stored in anticipation of market conditions improving at a later date. Further, the current fishery has seen a strong appearance of smaller squid which may indicate a strong recruitment that could flow into the mature squid fishery next year. The smaller squid attract a much lower price. As there are no sustainability concerns for this fishery, we believe deemed values should be set close to the ACE price. ACE price for the SQU1T and 6T stated in the consultation document is 0.07/kg and 0.09/kg respectively.

We do not support the ramping up of deemed values proposed in the special annual differential rates

166. The proposed differential rates greatly exceed the most recent port price and are therefore are likely to be above the market price of fish. Further, the ramping of deemed values is not supported by Te Ohu Kaimoana due to the distortionary effects on the economics of fishing.

We question the validity of including SQU1J, 1T and 6T for increases

167. Both SQU1T and 6T have high TACCs (44,741 t and 32,369 t respectively), which haven't been fully caught in several years. Squid are a short-lived species with high abundance variability year to year. Due to the variability in squid availability, all squid stocks are listed on the Third Schedule of the Act which allows for in-season increases to the TAC and TACC should this be necessary. The last time this provision was utilised was in SQU1T during the 2005/06 fishing year. This raises the question of why an increase in deemed values was prioritised

for review in this year's sustainability round. There has been changes to the economic characteristics in this fishery, evident in the temporarily increased port price. However, given that it has been reviewed, the response should be a decrease in deemed values to reflect market conditions in the absence of a sustainability concern.

Bluenose – matiri (BNS3)

Our view

- We support reducing the deemed values of BNS3
- We support the proposed interim and annual deemed values for for BNS3 landed to licenced fish receivers located on the Chatham Islands
- We do not support the proposed ramping of deemed values in the differential rates for all of BNS3

Proposed options

Deemed values for BNS3:

Stock	Option	Interim	Annual	Differential rates (\$/kg) for excess catch (% of A				ch (% of ACI	E)
		deemed value rate	100- 110%	110- 120%	120- 130%	130- 140%	140- 150%	150- 160%	>160% 10.00
BNS 3	Current	3.60	4.00	5.00	6.00	7.00	8.00	9.00	10.00
	Proposed	2.70	3.00	3.75	4.50	5.25	6.00	6.75	7.50

Deemed values for BNS3 landed to licenced fish receivers located on the Chatham Islands:

Stock	Option		Annual	Diff	ferential rates	(\$/kg	g) for excess o	atch (% of AC	E)	
		Interim	100- 120%	120- 130%	130- 140%	140-		160- 220%	>220% 10.00 >160%	
BNS 3	Current	1.26	1.40	4.00	6.00	7.00	8.00	9.00	10.00	
	Proposed	Proposed 1.26	1.26	Annual 100-120%	120-130%	130-140%		140-150%	150-160%	>160%
			1.40	1.68	1.96		2.24	2.52	2.80	

Our approach

Deemed values should be set correctly to incentivise accurate reporting

We support deemed values being primarily used as a utilisation tool and therefore they should not usually be set higher than the market value of fish. Due to sustainability concerns in this fishery it is reasonable to set the deemed values at the higher end of the scale within the bounds of market value of fish and the ACE price. The consultation document has stated the price of ACE to be an average of \$0.84/kg and port price to be \$3.13/kg. We agree that the circumstances of this fishery are such that the deemed value should be slightly below (and not above) the stated pot price to ensure that fishers are incentivised to land all catch.

Deemed values for BNS3 landed in the Chatham Islands should be lower

168. Fish landed and processed on the Chatham Islands should have a lower deemed value setting because port price is lower due to the cost of transporting to fish market. Currently the annual deemed values of BNS in the Chatham Islands is set at 35% of the annual deemed values for everywhere else in BNS3. We support retaining a lower deemed value in the Chatham Islands for BNS3. The issue becomes ensuring that the fish landed on the Chatham Islands are indeed processed there.

We do not support the ramping up of deemed values proposed in the special annual differential rates

169. The proposed differential rates greatly exceed the most recent port price and are therefore are likely to be above the market price of fish. Ramping of deemed values can disincentivise accurate reporting.

Gemfish - maka-tikati

SKI1

Our view

- We do not support increases to the deemed values for SKI1
- We do not support the proposed ramping of deemed values in the differential rates for SKI1

Proposed options

Stock			Annual	Differential rates (\$/kg) for excess catch		s catch (% of A	h (% of ACE)	
	Option	Interim	100-120%	120-140%	140-160%	160-180%	180-200%	>200%
A STATE OF THE PARTY OF THE PAR	Current	1.35	1.50	1.80	2.10	2.40	2.70	3.00
SKI 1	Proposed	1.80	2.00	2.40	2.80	3.20	3.60	4.00

Our approach

Deemed values should be set correctly to incentivise accurate reporting

170. We support deemed values being primarily used as a utilisation tool and therefore they should not usually be set higher than the market value of fish. The deemed values should be set close to the ACE price (\$1.08/kg), in situations where TACC is being over caught and there are no sustainability concerns. SKI1 is predominantly a non-target fishery, an increase in the TACC this year will result in most of the catch being balanced against ACE.

We do not support the ramping up of deemed values proposed in the special annual differential rates

171. The proposed differential rates exceed the most recent port price (\$1.98/kg in 2019/20) and are therefore are likely to be above the market price of fish. We do not support ramping of deemed values.

Deemed values are a diagnostic tool that could help to inform the setting of a TAC and TACC

172. The level of deemed value payments provides a signal of the state of a fishery. But there are many potential causes for catches being greater than the TACC, which each generate different management responses. The proposed TAC and TACC changes for SKI1 in this year's sustainability round options do not allow for the current levels of catch nor for the expected increase in abundance (see paragraph 113 for our detailed position on SKI1). Increasing the deemed value would only further hampers a utilisation opportunity. We recommend close analysis of catch reporting throughout the fishing year to detect the cause of exceeding the TACC. Analysis of this data will provide an insight into the most appropriate management response.

SKI2

Our view

- We support a greater reduction to the deemed value in SKI2 until the issue of 28N rights is resolved
- We do not support the use of differential deemed values in SKI2.

Proposed options

Stock	Option	totalia.	Annual	Differential rates (\$/kg) for excess catch (%				ACE)
		Interim	100-120%	120-140%	140-	160%	160-180%	>180%
SKI 2	Current	1.35	1.50	3.60	4.	20	4.80	5.40
	Proposed	400	Annual 100-120%	120-140%	140-160%	160-180%	180-200%	>200%
			1.50	1.80	2.10	2.40	2.70	

Our approach

Deemed values should be set correctly to incentivise accurate reporting

173. We support deemed values being primarily used as a utilisation tool and therefore they should not usually be set higher than the market value of fish. The deemed values should be set close to the ACE price (in this case \$1.03/kg), in situations where the TACC is being overcaught and there are no sustainability concerns. SKI2 is predominantly a non-target fishery, and an increase in the ACE is not predicted to increase the effort directed towards it as a target stock. Given the constraints of 28N rights being present in this fishery we would encourage a low deemed value rate until the TACC can be increased in such a way that it would not diminish the proportional holdings of lwi Settlement quota. See Section two for our position on fisheries impacted by 28N rights.

We do not support the ramping up of deemed values proposed in the special annual differential rates

174. The proposed differential rates exceed the most recent port price (\$2.10/kg in 2019/20) and are therefore likely to be above the market price of fish. Ramping of deemed values can disincentivise accurate reporting.

SKI7

Our view

- We support a greater reduction to the deemed value rates of SKI7 until the issue of 28N rights is resolved
- We do not support the use of differential deemed values in SKI7.

Proposed options

Stock	Option	Interim	Annual	Diffe	Differential rates (\$/kg) for excess catch (% of			
SIUCK		interim	100-120%	120-140%	140-160%	160-180%	180-200%	>200%
SKI 7	Current	0.65	0.72	0.86	1.01	1.15	1.30	1.44
	Proposed	roposed 0.65	Annual 100-220%	220-240%	240-260%	260-280%	280-300%	>300%
			0.72	0.86	1.01	1.15	1.30	1.44

Deemed values should be set correctly to incentivise accurate reporting

175. We support deemed values being primarily used as a utilisation tool and therefore they should not usually be set higher than the market value of fish. The deemed values should be set close to the ACE price (in this case \$0.49/kg), in situations where TACC is being over caught and there are no sustainability concerns. SKI7 is predominantly a non-target fishery and an increase in ACE is not predicted to increase effort for this stock. Given the constraints of 28N rights being present in this fishery we would encourage a lower deemed value rate until the TACC can be increased in such a way that it would not diminish the proportional holdings of Iwi Settlement quota.

We do not support the ramping up of deemed values proposed in the special annual differential rates

176. The proposed differential rates exceed the most recent port price (\$1.37/kg in 2019/20) and are therefore are likely to be above the market price of fish. Ramping of deemed values can disincentivise accurate reporting

We oppose measures that have the potential to reduce settlement quota as a proportion of the TACC while acknowledging there is a utilisation opportunity present in SKI7

177.If 28N rights are given effect to in SKI7 through a TACC increase Māori settlement quota will be diminished. The increase proposed in the 2019 sustainability round would have diminished the settlement quota to6.64 percent. As a result, Te Ohu Kaimoana has now take legal action to protect the integrity of the Deed of Settlement.

- 178. However, while the legitimacy over the way the Crown intended to give effect to the TACC Increase is being considered by the courts, it is clear that there is sustainably available SKI7 catch that is in excess of the current TACC. We can see that the deemed value regime needs to be adjusted to reflect the absence of risk to sustainability. Our view us that this means deemed values should be set close to the price of ACE.
- 179. As a specific step, we consider the circumstances of this fishery indicate that deemed value payments are being made to the Crown but the overcatch of the TACC is demonstrably sustainable. In this case we consider that the revenue generated from deemed values in this fishery should go back into fisheries management and not into the consolidated fund.

Pilchard – mohimohi (PIL7; PIL8)

Our view

• We support decreasing the interim and annual deem values for PIL7 and 8.

Proposed options

Stock	Option	Interim	Annual >100%
DU 700	Current	0.41	0.45
PIL 7 & 8	Proposed	0.18	0.20

Our approach

We support the deemed values for PIL7 and 8 being set close to ACE price.

180. Deemed values should be set with the best available information between the market value of fish and the price of ACE. The consultation document has stated the price of ACE to be \$0.12/kg and port price to be \$0.83/kg for both stocks. However, there is clear evidence that the price of ACE is being influenced by the deemed value that is in play. The management approach and the use of pilchard is the same as anchovy. The deemed value for anchovy has been set at \$0.06, therefore, based on the deemed values guidelines, the deemed values of pilchard should be set in alignment with anchovy.

We acknowledge the nature of the pilchard fishery in determining our position

181. While there is a potential utilisation opportunity for pilchards, the importance of pilchards as a food source in the marine ecosystem has deterred industry from establishing a target fishery for this stock. This fishery is predominantly caught incidentally in trawls targeting other stocks and the catch goes into fish =meal (as does anchovy). Therefore, a deemed value close to the true ACE price with no ramping is the most appropriate response.

Redbait (RBT3)

Our view

- We do not support the current setting of the interim and annual deemed values.
- We do not support the use of differntial rates in RBT3.

Propose options

Stock	Option		Diffe	ferential rates (\$/kg) for excess catch (% of ACE)				
		Interim	100-120%	120-140%	140-160%	160-180%	180-200%	>200%
RBT 3	Current	0.45	0.50	0.60	0.70	0.80	0.90	1.00
	Proposed	Annual 100-105%	100-105%	105-150%		>150%		
		0.45	0.	50	0 0.60		0.70	

Our approach

Deemed values should be set correctly to incentivise accurate reporting

182. We acknowledge that the port price information is uncertain, however, the proposed deemed values for RBT3 are much greater than the estimated port price of \$0.10/kg in 2019/20. We support deemed values being primarily used as a utilisation tool and therefore they should not normally be set higher than the market value of fish. The deemed values should be set close to the ACE price (\$0.20/kg), in situations where TACC is being overcaught and there are no sustainability concerns. RBT3 is predominantly a non-target fishery with no known sustainability concerns.

Deemed values are not intended to defend the TACC

183. Deemed values are not designed to be the primary mechanism for ensuring the commercial catch does not exceed the TACC. The consultation document is proposing a differential rate greater than the port price of RBT3 to be sufficient to prevent deliberate overfishing. There are many potential causes for catches being greater than the TACC and each requires a tailored management response.

We do not support the ramping up of deemed values proposed in the special annual differential rates

184. The proposed differential rates exceed the most recent port price (\$0.10/kg in 2019/20) and are therefore are likely to be above the market price of fish. Ramping of deemed values can disincentivise accurate reporting.

Trevally - araara (TRE2)

Our view

• We do not support the use of differential rates in TRE2.

Proposed options

Stock	Option	luda alaa	Annua	al	Differential rates (\$/kg) for excess catch (% of A			
		Interim	100-110)%	110-120%		>120%	>200%
TRE 2	Current	1.13	1.25		3.50		5.00	
	Proposed	1.13	Annual 100-120%	120-140%	140-160%	160-180%	180-200%	>200%
			1.25	1.50	1.50 1.75 2.00	2.25	2.50	

Our approach

We do not support the ramping up of deemed values proposed in the special annual differential rates

185. The proposed differential rates exceed the most recent port price (\$1.99/kg in 2019/20) and therefore are likely to be above the market price of fish. Ramping of deemed values can disincentivise accurate reporting.

Deemed values are a diagnostic tool that could help to inform the setting of a TAC and TACC

186. The TACC for TRE2 has been unchanged since 1992 and is regularly overcaught by between 5-20%. The payment of deemed values provide signals of the state of a fishery, there are many potential causes for catches being greater than the TACC, with each requiring a tailored management response. Due to the ongoing increase in CPUE and the magnitude of deemed value payments, industry requested that this stock be included for sustainability review for 2020. A review of deemed values for a fish stock does not substitute a review of the fishery.

IN THE MATTER OF:

REVIEW OF SUSTAINABILITY MEASURES FOR 2020/2021: KIN 2, 3, 7 & 8



SUBMISSION OF SPEARFISHING NEW ZEALAND

1 JULY 2020

The Submitters

- 1. Spearfishing New Zealand Incorporated (SNZ) represent the interests of freedive spearfishers in New Zealand. We are a distinct sub-group of the recreational fishing sector.
- 2. The SNZ Committee is empowered by our constitution to liaise with government to ensure the interests and views of spearfishers in New Zealand are represented.
- SNZ reports directly to approximately 7,277 divers nationwide. The wider freedive spearfishing community is approximated by the 16,590 members of the most active (NZ) social media pages in our sport.
- 4. As noted in the consultation document (para 60), most spearfishers target kingfish. This is a taonga species for us. Whilst we make up a small component of the recreational catch, it is extremely important to us as a food source for subsistence fishers, and for sporting enjoyment. The possibility, physical challenge, and excitement of spearing kingfish of all sizes is New Zealand is unique. We have the largest kingfish in the world and there are several places where locals, and international spearfishing tourists, can go to potentially land a new world record, or at least a kingfish of a lifetime.
- 5. Our members are active around the entirety of the KIN 2 area. After KIN1, KIN 2 is the most substantial Kingfish fishery for spearfishers by volume. KIN 7 and KIN8 are also very important fisheries for us.

Stock Structure & HSS Target

- 6. Stock structure is more important to the recreational sector than the commercial sector. It is trite fisheries science to point out that average fish size diminishes as fisheries exploitation rates increase. We are not interested in catching several small 65 cm fish we want to catch a 1.5 metre long fish, and have a chance to catch a 2-metre fish weighing 50 kg! Our chance of landing a really big fish is diminished as stock exploitation increases. Managing stocks at levels desirable from commercial viewpoints will decimate the large kingfish population and severely damage our enjoyment of the fishery.
- 7. The assumed target of 40% Bo is a broad-brush target applied to numerous species however we suspect that is quite an ambitious target for most non-virgin species fished for decades in multi-species management areas. We consider it a good sensible target for reasons set out in the national Harvest Strategy Standard.
- 8. We understand the short-term decision making of industrial fishing interests will always apply pressure to fish stocks down to a lower level, however we consider that Kingfish, one of our most important species, needs to be managed at a level of at least 40%B₀.

9. An objective inspection of the CPUE data indicates there was briefly an increase in the KIN 2 stock, but for whatever reason, it is now falling rapidly. Further, all KIN 2 stock advances since 2004 have now been lost. We highlight this in green below:

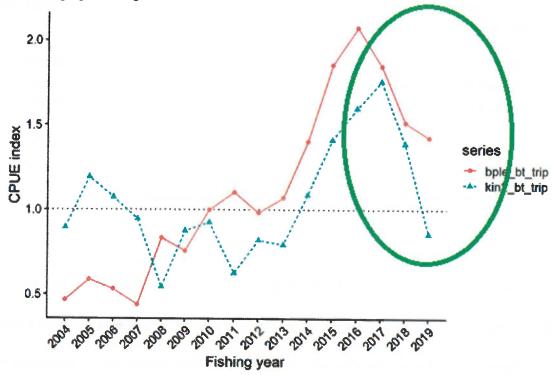


Figure 5: CPUE indices for juvenile kingfish in KIN 2 (blue) and the Bay of Plenty (red).

- 10. The KIN 2 index has been falling rapidly over two years (as BOP has fallen for 3 years). It is KIN 2 that is now being reviewed. The collapse now occurring in CPUE in KIN 1 (BOP) and KIN 2 gives us cause for serious alarm catch *reductions*, rather than the proposed TAC increase, seem necessary. The KIN 2 CPUE index has plainly fallen over 20 years in nominal terms in the above chart. If the trajectory of the last two years continues, this stock may be heading for collapse.
- 11. An acknowledged failure of single-species management systems like the QMS is the inability to reflect the influences of foodsource depletion, global warming, and stock movement south (evident in all southern fisheries). The chart above suggests we could even just be watching a single year class move through the data, which is now gone, so why would we adjust catches after the event? It doesn't matter which of these or other influences are causing the current rate of decline, three years of declines across the whole eastern side of the North Island should be enough to signal 'all is not well' and the previous increase is now a decline of concerning proportions. We implore the minister to consider that a Precautionary Approach requires reference to observing present trends and recognising the obvious risk that the recent trend will continue in the foreseeable future that would be disaster for this fishery.

- 12. Fisheries NZ report (at para 45 of the consultation document) that the east coast stock can be subdivided into Northeast (i.e. KIN 1) and Hawkes Bay (KIN 2), but later say that it is unknown if there are two stocks or one. It is curious therefore that the CPUE for Bay of Plenty (KIN 1) has been included in the consultation document. Firstly that is not the stock being considered here (if may be spatially distinct), and secondly it makes the chart *look* like stocks are increasing overall when in fact KIN 2 CPUE (the stock under review) is now below 2004 levels. This conflation of two stocks seems to risk misleading readers into making a decision on KIN 2 based on data from KIN 1.
- 13. We observe that both indices rose to a similarly timed peak, and are now falling sharply in tandem, which indicates that the rapid depletion evidenced by CPUE indices is not a statistical aberration or reflective of localised effects. A current continued plunge in stocks is indicated across the entire eastern North Island.
- 14. It appears inconsistent to us that a precipitous two-year fall in CPUE for KIN2 is ignored by Fisheries NZ, and yet a two-year uptick in CPUE is used to justify an increased TAC in KIN 8¹. The Ministry should not recommend an increased TAC for stocks that are both falling and rising. Either the last two years' CPUE are indicative of stock level trends, or they are not.
- 15. We reject the statement at para 95 of the consultation document that 'there is no information that indicates that an increase in the KIN TAC as proposed would pose a risk to the sustainability of the stock.'

 The last three years' CPUE data are sufficient to indicate a risk to the sustainability of the stock.
- 16. In the context of the above observations, we consider it irresponsible to propose an increase in the TAC.
- 17. From the point of view of the commercial sector, KIN2 is an unavoidable by-catch. From our perspective, we can only imagine how healthy this fishstock would be if the industrial boats didn't 'accidentally' catch as much as we did, but left it to grow and replenish. If it is hard to avoid catching these precious taonga, then we would say the industrial fleet can try elsewhere and work out a way they can avoid catching kingfish.
- 18. Regarding allocations between sectors, we acknowledge it is logical to adjust for better data on Other Mortality and to assess the Recreational Allowance at the current level of catch. We note the increases proposed for Customary Maori and Recreational combine to a change of +17 t, whilst the proposed change to Other Mortality is -19 t. These roughly balance out without requiring a substantial change to the TAC.
- 19. We Oppose Option 1 for KIN 2. We propose the following allocation instead:

KIN 2	TAC	TACC	Customary Maori	Recreational	Other Mortality
	168 (-1%)	61 (-3%)	21 (+17%)	79(+22%)	19 (-21%)

 $^{^{1}}$ Para 162 of Consultation document notes the KIN 8 CPUE fluctuated without trend until to 2015 and only experienced a strong increase in the 2018-2019 fishing years.

KIN₃

20. We support Option 2.

- 21. Even the more aggressive catches set in Option 2 (23 t) are is an infinitesimal catch over a very large area, and there is essentially no *existing* stock level to protect.
- 22. We are sceptical that the recreational sector will be impacted to any great degree at the catch levels envisaged by Option 2.
- 23. We suspect that this stock will be more affected by range expansion in a warming climate than the amount caught as by-catch.

24. KIN 7 & 8

- 25. KIN 7 & 8 include some prime areas for our group targeting kingfish Kapiti Island, Marlborough Sounds, Cape Maria van Diemen, and the Three Kings Islands.
- 26. It is not at all appropriate, in our view, to allow harvest of ~250 t a year from these areas as an unavoidable accident in a low-cost fishery. Most of the kingfish in KIN 7 and 40% from KIN 8 are caught as by-catch in the low-value bulk fishery for Jack Mackerel, and that by-catch then also becomes low-value product.
- 27. Commercial catches in these fisheries have exceeded the ACE by such an extent it makes a mockery of the QMS.
- 28. For KIN 7, we support Option 1. This is the more conservative option.
- 29. For KIN 8, we note the CPUE index was basically stable, at or around 1.0 for the period 2004-2017. As noted at para 162, it 'fluctuated without trend' in 2004 CPUE was 1.0 and in 2017 it was again at no more than 1.2.

30. It is only the last two years that has been an uptick in stocks, as shown below:

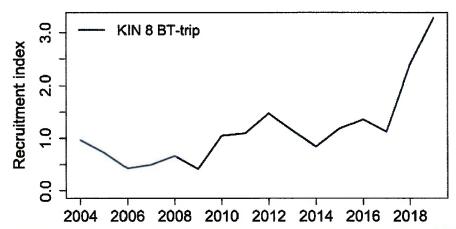


Figure 11: CPUE index of juvenile kingfish in KIN 8 between the 2004/04 and 2018/19 fishing years.

- 31. It seems inconsistent to us that Fisheries NZ recommends an increase in TAC for KIN 8 based on the last 2 years' increase in CPUE, and yet a similar magnitude collapse in the KIN 2 CPUE is ignored. Either the last two years' CPUE is relevant, or it is not.
- 32. Reference to the comparable CPUE stats for KIN 2 and BOP (page 12 of discussion document) shows the risks of making a decision on a two-year uptick. It may be a temporary increase that is acted on, and within another two years stocks are plummeting again.
- 33. We oppose the increased TACC in Option 1. It is not at all appropriate, in our view, to allow harvest of ~250 t a year as an unavoidable accident in a low-cost fishery. Most of the kingfish in KIN 7 and 40% from KIN 8 are caught as by-catch in the low-value bulk fishery for Jack Mackerel, and that by-catch then also becomes low-value product. If it is hard to avoid catching these precious taonga, then we would say the industrial fleet can try elsewhere and work out a way they can avoid catching kingfish.
- 34. If the recreational & customary catch has increased due to increased abundance, that is a sign of a recovering fishery and it should be allocated to the recreational & customary sectors as a matter of priority. That priority is in our view deserved by the much higher value placed on the fishery by the recreational sector (it is taonga to us) being well in excess that of the commercial sector (it is unavoidable junk fish in their eyes, which we consider is wasteful and needless harvest).
- 35. Ongoing deemed value payments for over-catch should be charged to the industrial fleet are a bare minimum to continue discouraging the fleet from catch methods that capture kingfish. Whilst we do not know the relative value for the economics involved, increased Deemed values may be necessary to further discourage taking these fish.

36. We support the following <u>adjusted settings</u> in <u>KIN 8</u>.

KIN 8	TAC	TACC	Customary Maori	Recreational	Other Mortality
	133 (+44%)	45(0%)	17 (+89%)	55(+77%)	16 (-129%)

SNZ thanks MPI for the opportunity to submit on this important issue, and look forward to assisting MPI in future decision making that affects our members.

Kind Regards,

Reid Quinlan Secretary Spearfishing New Zealand Incorporated



Submission Form

Review of sustainability measures for 1 October 2020

Once you have completed this form

Email to: FMsubmissions@mpi.govt.nz

While we prefer email, you can also post your submission to:

2020 Sustainability Review, Fisheries Management, Fisheries New Zealand, PO Box 2526, Wellington 6140, New Zealand.

Submissions must be received no later than 5pm on Wednesday 1 July 2020.

Anyone may make a submission, either as an individual or on behalf of an organisation. Please ensure all sections of this form are completed. You may either use this form or prepare your own but if preparing your own please use the same headings as used in this form.

Submitter details:

Name of submitter or contact person: Jeremy Turner	
Organisation (if applicable):	HellFire Fishing Ltd
Email:	
Fishstock this submission refers to:	Blue cod
Your preferred option as detailed in the discussion paper (write "other" if you do not agree with any of the options presented):	Option 1: The status quo

Official Information Act 1982

Note, that your submission is public information. Submissions may be the subject of requests for information under the Official Information Act 1982 (OIA). The OIA specifies that information is to be made available to requesters unless there are sufficient grounds for withholding it, as set out in the OIA. Submitters may wish to indicate grounds for withholding specific information contained in their submission, such as the information is commercially sensitive or they wish personal information to be withheld. Any decision to withhold information requested under the OIA is reviewable by the Ombudsman.

Submission:1

¹ Further information can be appended to your submission. If you are sending this submission electronically we accept the following formats – Microsoft Word, Text, PDF and JPG.



Details supporting your views:

As a small blue cod fishing operator, I believe that cutting the quota will have a significant impact on mine and my crew's income. Because we only catch a small amount of quota if this is reduced, it would mean significantly less income from fish sales to LFR's. For larger companies that hold alot of quota and do not currently catch all of it anyway there will be no change to their income, they will not miss the reduction as it is not being caught anyway. However this is huge for us little operators, this flow on effect to smaller operators may put us out of business, this may also drive the price of blue cod up and out of the reach of every day New Zealander's.

There have already been active measure to help the industry such as pot mesh size increase, which I believe is now showing the benefits of having more quality fish.

One alternative measure could be to limit the amount of pots that can be used at one time ie 8-10 pots per boat. We have been getting fish in good quality condition in sustainable numbers. I believe there is no need to bombard the ocean with 20 odd pots and catch large numbers of cod at one time, catching small numbers on a regular basis is more sustainable for the species for years to come.

Another measure that would help sustain the cod numbers would be to reduce the recreational catch number per day and require them to have a fishing licence for this, It would be of benefit to obtain data on the number of cod taken via recreational fishing, I believe this have a significant impact on fish stocks.

Please continue on a separate sheet if required.



Submission Form

Review of sustainability measures for 1 October 2020

Once you have completed this form

Email to: FMsubmissions@mpi.govt.nz

While we prefer email, you can also post your submission to:

2020 Sustainability Review, Fisheries Management, Fisheries New Zealand, PO Box 2526, Wellington 6140, New Zealand.

Submissions must be received no later than 5pm on Wednesday 1 July 2020.

Anyone may make a submission, either as an individual or on behalf of an organisation. Please ensure all sections of this form are completed. You may either use this form or prepare your own but if preparing your own please use the same headings as used in this form.

Submitter details: Name of submitter John McKie or contact person: Organisation (if applicable): Email: Fishstock this submission refers to: SNArea 7 + GUR 7 Your preferred option as detailed in the discussion paper (write "other" if you do not agree with any of the options presented):

Official Information Act 1982

Note, that your submission is public information. Submissions may be the subject of requests for information under the Official Information Act 1982 (OIA). The OIA specifies that information is to be made available to requesters unless there are sufficient grounds for withholding it, as set out in the OIA. Submitters may wish to indicate grounds for withholding specific information contained in their submission, such as the information is commercially sensitive or they wish personal information to be withheld. Any decision to withhold information requested under the OIA is reviewable by the Ombudsman.



_	-	-	-	
S.	ıhm	vie.	cia	. m = 1

Details supporting your views:

¹ Further information can be appended to your submission. If you are sending this submission electronically we accept the following formats – Microsoft Word, Text, PDF and JPG.



Option 1 to maintain the status quo. This should be considered at the very least for the next few years, to see if the increase in stock size is a trend or not.

I believe that all three of these options represent an outdated approach to fisheries management. Much work has been done by the government funded Sustainable Seas National Science Challenge to develop better ways to manage our seas in a more holistic manner.

I strongly recommend using the precautionary approach and keep the quota at status quo for now. I also recommend the commencement of an on-the-ground Ecosystem Based Management process, considering all of the species and habitat involved in this fishery. Keep the status quo to allow fishers to continue to earn a living and allow the stocks to rebuild, investing in a transition to less destructive, more selective, higher value fishing methods such as long lining. Support an Iwi lead and science driven integrated spatial management plan, that allows for fishing in a less destructive way, protecting breeding habitats, fragile seabeds, reef systems, juvenile areas. Invest in sub-tidal restoration and promote habitat protection, allowing the ecosystem services inherent with thriving fish stocks to provide resilience.



Please continue on a separate sheet if required.



Fisheries Management, Fisheries New Zealand FMSubmissions@mpi.govt.nz

Review of Sustainability Measures for Blue Cod (BCO 5) for 2020/21

Introduction

Fish Mainland is a recently incorporated not-for-profit organisation designed by a Working Group comprising South Island and Stewart Island recreational fishers. They designed it to be a fully functioning professional organisation that coordinates, represents and promotes the diverse interests of the 100,000+ fishers who fish in the marine environment, and works to restore and sustain fisheries resources to maximise fishers' experiences and opportunities.

Fish Mainland is a Member-based organisation. The Members have democratic control over the organisation through the power to nominate, elect and remove five Regional Directors of the Board. Also, the South Island Mandated Iwi Organisations can appoint and remove two other Directors. The Board appoints two more Directors and an independent Chair of the Board.

Elected and appointed Directors of the Board demonstrate Fish Mainland's mandate to represent recreational fishers in the South Island and Stewart Island. The election and appointments of Directors will occur soon.

Accordingly, this submission is made without any mandate to represent. However, it does reflect what the Working Group, as acting Directors, considers is aligned with the views of the majority of South Island and Stewart Island fishers. It is also aligned with the views of the **Fiordland Marine Guardians.**

Submission

Fish Mainland supports Option 3 that sets the TAC at 825 tonnes, TACC at 700 tonnes, customary allowance at 20 tonnes, recreational allowance at 85 tonnes and allowance for other sources of fishing related mortality unchanged at 20 tonnes.

We consider this more cautious option best addresses the downward trend in the commercial fishery (e.g. catch rate below the TACC) and considers changes in fishing patterns not captured in the stock assessment.

Fish Mainland also supports examining a rebuild rule to improve management responsiveness. Like the Fiordland Guardians, we acknowledge the shared nature of this important and iconic fishery, and recreational fishers' recent contributions to rebuilding it (e.g. daily bag limit reductions). It follows that all fishing sectors should collaborate in examining other efforts for rebuilding the fishery, including a more adaptive approach to setting the TAC.

Yours sincerely,

James Crossland Acting Chair of the Board



Fisheries Management, Fisheries New Zealand FMSubmissions@mpi.govt.nz

Review of Sustainability Measures for Snapper (SNA7) and Red Gurnard (GUR7) for 2020/21

Introduction

Fish Mainland is a recently incorporated not-for-profit organisation designed by a Working Group comprising South Island and Stewart Island recreational fishers. They designed it to be a fully functioning professional organisation that coordinates, represents and promotes the diverse interests of the 100,000+ fishers who fish in the marine environment, and works to restore and sustain fisheries resources to maximise fishers' experiences and opportunities.

Fish Mainland is a Member-based organisation. The Members have democratic control over the organisation through the power to nominate, elect and remove five Regional Directors of the Board. Also, the South Island Mandated Iwi Organisations can appoint and remove two other Directors. The Board appoints two more Directors and an independent Chair of the Board.

Elected and appointed Directors of the Board demonstrate Fish Mainland's mandate to represent recreational fishers in the South Island and Stewart Island. The election and appointments of Directors will occur soon.

Accordingly, this submission is made without any mandate to represent. However, it does reflect what the Working Group, as acting Directors, considers is aligned with the views of the majority of South Island and Stewart Island fishers. It is also aligned with the views of the Tasman and Sounds Recreational Fishers' Association Inc and the Mapua Boat Club.

Submission

Fish Mainland supports Option 3 for SUR7 that increases the TAC and TACC by 100 tonnes and keeps the allowances unchanged. This support is based on the expectation that a 100 tonne increase is within the yield estimates that will maintain the stock at or above the target biomass.

Fish Mainland does not support Option 2, as it would constitute a 50 tonne reallocation from the recreational allowance to the TACC, while the recreational catch rate has likely increased recently and will likely continue to do so.

Fish Mainland supports Option 1 (status quo) for GUR7 since the recreational allowance is inadequate and should be increased to account for the current and future level of recreational effort. Any future increase in the recreational allowance would be more difficult to obtain if the TACC is increased (Option 2).

Yours sincerely,

James	Cross	lan	d		
Acting	Chair	of	the	Boar	d



DSCC SUBMISSION

Fisheries New Zealand: Review of sustainability measures for 1 October 2020

1 July 2020

The Deep Sea Conservation Coalition (DSCC) is an alliance of over 80 international organisations working to promote the conservation of biodiversity on the high seas. Deep Sea Conservation Coalition, Inc. works with a number of organisations in New Zealand which are also concerned about bottom trawling, including Greenpeace Aotearoa New Zealand, WWF-NZ, Forest and Bird, Legasea, Our Seas Our Future and Environment and Conservation Organisations of Aotearoa New Zealand (ECO), itself an umbrella organisation of about 45 groups. These groups are seeking an end to deep sea bottom trawling on seamounts and similar deep-sea features by the New Zealand fishing industry, and since May 2019 over 50,000 people have supported our petitions against this devastating and out-dated form of fishing.

The ancient coral forests found on seamounts and similar deep-sea features are the kauri of our ocean. Living to hundreds of years old, these fragile forests can be wiped out by bottom trawling, and recent studies show that they take decades to even begin to recover.

The claim that "environmental impacts are avoided or mitigated by existing regulatory and non-regulatory arrangements" is untrue and exposed by recent studies. No evidence is presented by MPI of how the destruction of deep sea ecosystems is supposedly being avoided or mitigated by the arrangements in place.

• Which option(s) do you support for revising the TACs and allowances?

The DSCC does not support either of the proposals to increase the TAC and TACC for orange roughy, and is disappointed that this consultation paper gives no option that is in line with our international obligations to protect deep-sea biodiversity, including to ensure that orange roughy catches are sustainable, bycatch is minimise and vulnerable marine ecosystems are protected.

• If you do not support any of the options listed, what alternative(s) should be considered?

The DSCC calls on the New Zealand Government to protect all seamounts in New Zealand's exclusive economic zone (EEZ), and to stop issuing high seas permits to bottom trawl vessels fishing on seamounts and similar deep-sea features, which almost exclusively target seamounts and similar deep-sea features when they fish in international waters of the South Pacific and Tasman Sea regulated by the South Pacific Regional Fisheries Management Organisation (SPRFMO).

The trawl area must not increase any further

NIWA scientists have just this year found little evidence of benthic community resilience to bottom trawling after 15 years, and that the nature of recovery in biotic communities after disturbance is uncertain (Clark *et al.* 2019). This confirmed an earlier paper (Williams *et al.* 2010) which showed no change in the megafaunal assemblage consistent with recovery over a 5 to 10 year timeframe on

seamounts where trawling had ceased. This demonstrates the fundamental need to stop <u>any</u> increase in the trawl footprint of New Zealand's fishing industry. Furthermore, recent findings by US scientists have revealed that - despite the painfully slow recovery process - deep sea corals do gradually begin to recover once trawling is ceased. Their study "<u>amid fields of rubble, scars, and lost gear, signs of recovery observed on seamounts on 30- to 40-year time scales</u>" (Baco, Roark and Morgan 2019) indicates just how great the damage is, yet why those protections must remain in place long-term.

The MPI ORH 3B proposal states:

"66. The trawl footprint in ORH 3B is estimated to have contacted 11% (5,298 km2) of the seabed in the ESCR sub-QMA, between 800-1600m depths from 2008-2018. Most fishing occurs within areas that have been fished for a number of years, and it is estimated that there is very little 'new' area trawled each year. Therefore, increasing the TAC and TACC under either of the proposed options is unlikely to increase the trawl footprint significantly."

No account is taken of the importance of all coral, including rubble, to the ecosystem, and no evidence is given that trawls will stay within previous trawl tracks. No specifics are given as to the scale of the new trawling footprint in recent years (despite the following paragraph¹ indicating that such data is being collected) nor how much further the trawl area would be expected to increase with a 13% or 23% increase in TACC, as proposed by MPI. We wish to know what the area of increase on a year-by-year basis, as well as the area of completely new trawl activity. We strongly urge that NO increase in trawl area (either overall or into previously un-trawled areas) is allowed, to avoid expanding the devastating impacts of trawling which can impact the benthos as soon as trawling begins.

Seamount protection cannot be "outsourced" to other areas

We strongly reject the argument that, having protected some seamounts (including through seamount closures and the so-called benthic protected areas), it is acceptable to continue to destroy other seamount ecosystems with bottom trawl fishing. This is central to the justifications set out by Fisheries New Zealand in its proposed "sustainability" measures, which are anything but sustainable.

"Bottom trawling interacts with the seabed and benthic environment. Management measures have focused on avoiding these effects through closing areas to bottom trawling, starting with 17 seamount closures in 2001. Five of the seamount closures are within the ESCR and NWCR ORH 3B subareas — Pinnie, the Morgue and Pyre/Gothic group, Diamond Head and Seamount 328. In addition, the implementation of Benthic Protection Areas (BPAs) in 2007 effectively closed approximately 30% of the New Zealand EEZ to bottom trawling. Three of the BPAs are within the ESCR and NWCR ORH 3B subareas — Mid Chatham Rise, East Chatham Rise and Blink." (MPI ORH 3B proposal)

This statement suggests that the biodiversity loss that bottom trawling entails – destruction of deepwater corals, sponges and other deep-sea life – can somehow be justified by the existence of the

¹ "67. The trawl footprint of the orange roughy fishery will continue to be mapped and monitored annually to assess if new areas are being impacted and consider possible management responses. The environmental impacts of fishing are summarised annually by Fisheries New Zealand in the Annual Review Report for Deepwater Fisheries as well as the Aquatic Environment and Biodiversity Annual Review 2018." - MPI ORH 3B proposal

Benthic Protection Areas (BPAs) or closure of seamounts in other areas. This is akin to arguing that any number of kauri trees can be felled since there are already some kauri in national parks. This is entirely without scientific basis. It suggests that by protecting 30% of the EEZ (and leaving aside the invalidity of the 2001 closures discussed below) the other 70% can be destroyed, even without prior impact assessments to establish what is down there, so species can be driven to extinction before they are even discovered.

The Minister of Conservation, Eugenie Sage, last year <u>confirmed</u> that the BPAs do not count as marine protected areas. Indeed they must not be. The BPAs were not scientifically derived or developed through proper process, but were instead selected by the fishing industry and presented as a 'done deal' with only perfunctory public consultation after they were announced. Data analysis by scientist John Leathwick, showed that the BPAs were especially poor at protecting biodiversity, particularly endemic species (Leathwick *et al* 2008). The use of BPAs to justify destroying marine life elsewhere is completely unacceptable.

New Zealand EEZ lacks equivalent measures to those agreed under SPRFMO

The South Pacific RFMO Convention in Article 4 requires that national measures be compatible with high seas measures, asw does the UN Fish Stocks Agreement in Article 7. There is no consideration of this requirement in the discussion paper. Relevant measures that should be reflected here include the SPRFMO encounter protocol and move-on rule, which require vessels to stop fishing in an area when the bycatch of certain vulnerable deep-sea species groups exceeds relevant limits.

Science tells us that a single trawl is capable of doing long-term damage to such ancient ecosystems, and proactive scientific investigation can identify where those deep sea features occur in order to protect them before such damage is done. The government must combine and strengthen these approaches to ensure that any areas known to contain seamounts or found to harbour deep water coral and sponge communities are immediately and fully protected from bottom trawling and other seabed damage.

Earlier this year, SPRFMO strengthened its bottom fishing rules somewhat, including reducing the encounter limit for stony corals from 250 kg per tow to 80 kg per tow.² However, other limits remained unchanged, cumulative damage can still be done across multiple species, and studies have shown that the damage done on the seabed is substantially greater than the 'evidence' that comes up in the net. A 2019 study (Pitcher, Williams and Georgeson 2019) found that what comes up in trawl nets is only a fraction of what those nets destroy on the seabed. For every tonne of coral in the net, up to 340 tonnes are destroyed below. The bottom fishing measure is under review, which will be concluded in January 2021.

The New Zealand government must strengthen the encounter protocol and move-on rule adopted by SPRFMO, and apply them within NZ waters, to ensure that they protect deep sea coral forests from further damage. Deep sea coral forests are biodiversity hotspots, and only a small fraction of what is destroyed on the seabed comes up in the net. It must then apply stronger protection measures to all

² These thresholds are set out in Annex 6A of the <u>SPRFMO bottom fishing measure</u>. Different weight limits apply to different taxonomic groups or combinations of taxa, and it is important to note that significantly more damage occurs on the seabed than what comes up in the net.

bottom fisheries in the New Zealand EEZ, in combination with the proactive closure of all known seamounts and similar seabed features to bottom fishing and seabed mining.

We are facing an extinction crisis

The recent IPBES <u>Summary for Policy-Makers</u> sounded the alarm about the existential threat to biodiversity in its 2019 report. In marine ecosystems, fishing has had the largest relative impact, having had a large and widespread impact on the world's oceans. IPBES warned that around one million species face extinction, many within decades, unless action is taken to reduce the intensity of drivers of biodiversity loss. "Without such action there will be a further acceleration in the global rate of species extinction, which is already at least tens to hundreds of times higher than it has averaged over the past 10 million years," warned the authors.

The lack of recovery, together with the need to exercise the precautionary principle and use an ecosystem approach, means that it is time to stop bottom trawling on seamounts, as Watling and Auster found that "Mounting evidence of the effects of fishing in the deep sea, such as the destruction of deep sea coral communities at sites around the globe, and the slow growth, time to maturity and tremendous age reached by some species of deep sea fish, caused many to consider the sustainability of common fishing practices."

The authors noted that "all seamounts that have so far been surveyed by cameras, either towed or mounted on maneuverable submersible vehicles, have been found to have abundant VME [vulnerable marine ecosystem] indicator species (including xenophyophores on sandy areas) distributed on their sides and summits" and the distribution of VME indicator species is far more extensive than fishery bycatch data would suggest. (Watling and Auster 2017)

In 2010 a global study (Bradshaw *et al.* 2010) found that New Zealand has the highest proportion of threatened indigenous species in the world, and this year the New Zealand Ministry for the Environment's report *Environment Aotearoa* warned that the extinction risk has worsened overall in the last 10-15 years.

The Environment Aotearoa report noted "Trawling the sea floor with large nets or dredges to catch fish and species like scallops and oysters are the most destructive fishing methods and cause damage to the seabed. The area trawled and the number of tows have decreased over the past 15 to 20 years, but still cover a large area, and some areas have been trawled every year for the past 27 years. Between 1990 and 2016 trawling occurred over approximately 28 percent of the seabed where the water depth was less than 200 meters, and 40 percent where depth was 200–400 meters. Why is it like this? Fishing vessels are now larger and more powerful, and use wider trawls and longer lines than when trawling first started more than 100 years ago. A small number of boats today can have the same impact as a larger fleet would have had in previous decades."

Finally, the United Nations 1st World Ocean Assessment in 2016 stated that: "Deep-sea ecosystems associated with seamounts, ridges, and other topographic features are now and will increasingly be subjected to multiple stressors from habitat disturbance, pollutants, climate change, acidification and deoxygenation. The scientific understanding of how these stressors may interact to affect marine

ecosystems remains particularly poorly developed. For example, the widespread destruction of deep-water benthic communities due to trawling has presumably reduced their ecological and evolutionary resilience as a result of reduced reproductive potential and loss of genetic diversity and ecological connectivity." The WOA went on to conclude that "The extent of benthic impacts has been described for local fishing grounds but has not been assessed globally; however, if the impacts of these regional studies are generalized, we can extrapolate that fishing, and in particular deepwater trawling, has caused severe, widespread, long-term destruction of these [seamount] environments globally."

New Zealand is failing to meet UN commitments to protect vulnerable marine ecosystems

Since the United Nations General Assembly (UNGA) adopted resolution 61/105 in December 2006, nations that authorise their vessels to engage in bottom fisheries on the high seas have been committed to protect deep sea fish stocks and vulnerable marine ecosystems (VMEs) by:

- Undertaking environmental impact assessments of each high seas bottom trawl fishery or prohibiting fishing in the absence of such an assessment,
- closing areas of the high seas to bottom fishing where VMEs are known or likely to occur unless significant adverse impacts on VMEs can be prevented,
- requiring bottom fishing vessels to move out of an area of the high seas where encounters with VMEs occur, and
- ensuring the long-term sustainability of deep-sea fish stocks.

In the 14 years since the resolution was unanimously agreed, New Zealand has neither conducted environmental impact assessments (EIAs) for each of the fisheries, nor prohibited its vessels from high seas fishing where EIAs have not been undertaken.

Furthermore, rather than preventing significant adverse impacts on VMEs, New Zealand has attempted to re-interpret the UNGA resolution to introduce the idea of acceptable levels of impact and threat which are inconsistent with the resolutions. UNGA resolution 61/105, later strengthened in resolution 64/72 and later resolutions, are far from being properly implemented and New Zealand is among the small number of countries still bottom trawling on seamounts in international waters, impeding its implementation. These resolutions must be urgently and fully implemented to prevent further damage to VMEs and start to tackle the extinction crisis we are facing.

Negotiations are currently nearing conclusion for a new international agreement for the conservation and sustainable use of marine biological diversity in areas beyond national jurisdiction, underlining international concern at the many threats to marine biological diversity. It is entirely unacceptable for New Zealand to be destroying marine biological diversity in its EEZ and on the high seas through bottom trawling on seamounts, at the same time as recognising the need to protect it internationally.

New Zealand is dragging the chain globally

It is a sad environmental legacy that New Zealand was at the forefront of expanding destructive bottom trawl fishing into deeper and distant waters and targeting seamounts and other biodiversity hotspots with this devastating fishing method.

Now, New Zealand remains one of a small number of countries globally that still allow their industrial fishing fleets to drag bottom trawl nets across seamounts on the high seas (Japan, the Republic of Korea, Spain, Australia the Cook Islands and the Faroe Islands being the others). It is the equivalent of clearfelling kauri forest - something that sadly happened on a wide scale in New Zealand, but is now quite rightly banned.

But what is banned on land remains out of sight and out of mind in the ocean, and deep sea coral and sponge communities continue to be destroyed by bottom trawling. Only two countries still fish in this way in the South Pacific, and having led the charge in, New Zealand must now take the lead in ending this practice once and for all. Bottom trawling on seamounts is not fishing, it is extinction.

In summary, the Deep Sea Conservation Coalition, its New Zealand members organisations and the 50,000 people that have signed our petitions collectively call on the New Zealand Government to do much better than what is proposed in the "Sustainability Measures for 1 October 2020".

We call for the government to:

- End bottom trawl fishing on seamounts and similar deep sea benthic features wherever they are known to occur,
- fully protect all known seamounts and similar features and close any areas where deep sea coral
 and sponge species are found, and undertake prior impact assessments before any bottom
 trawling to identify any such areas; and
- stop issuing high seas fishing permits to New Zealand bottom trawl vessels that fish on seamounts and similar features in international waters.

In relation to the proposed increases in orange roughy catch limits, the DSCC opposes both options to increase the TAC and TACC. There should be no increase in catch limits until comprehensive measures are in place to protect all habitats of significance to fisheries management including seamounts and similar features.

A shamefully inadequate response to illegal fishing

In addition to the above, we wish to express our deep concern at the New Zealand Government's continued lax response to IUU fishing in a closed area of international waters by the *Amaltal Apollo*, a bottom trawl fishing vessel owned by Nelson-based Talley's Group and operated by Amaltal Fishing Company. In particular we are concerned that:

- New Zealand officials advocated for the vessel not to be placed on the SPRFMO IUU blacklist, undermining important precedents such as the SPRFMO blacklisting of the *Vladivostok 2000* (formerly *Lafayette* and *Damanzaihao*) in addition to its national-level prosecution.
- A New Zealand Cabinet Minister publicly dismissed the case as "a mere technical issue" even before the court case got underway, prejudicing its outcome and undermining the claim that New Zealand was taking the matter seriously.

- The court case has been repeatedly delayed, meanwhile the vessel continues to fish for a third fishing season since the IUU incident (which occurred in the first month of the 2018 high seas fishing season), without justice being done.
- It has subsequently been revealed that a sister ship of this vessel, Amaltal Mariner, was also engaged in illegal fishing in Hikurangi Marine Reserve, off the Kaikōura coast in 2018. Despite the Ministry being aware of this incident since 2018, the vessel was issued a high seas permit in 2019 and again this year.
- The company made potentially false claims in its applications for high seas fishing permits in the 2019/20 season (and possibly for the current season) answering "no" to two questions relating to whether the vessel owner, operator or master, or the vessel itself had "breached the fisheries law in any jurisdiction, including the high seas, in the last 10 years".
- Despite knowledge of the pending IUU case against two Talley's Group / Amaltal Fishing
 Company vessels, and clear provision under the Fisheries Act (Section 113H) to consider the
 offending history of a vessel's owner and operators, Fisheries New Zealand has issued a high
 seas fishing permits to two other vessels in the fleet (Amaltal Mariner and Amaltal Explorer) and
 has allowed the Amaltal Apollo to continue fishing in New Zealand waters.
- No monetary bond changed hands in return for the privilege of continuing to fish despite the
 vessels' illegal/potentially illegally operations, and no additional requirements (such as observer
 coverage or installation of a camera on board the company's vessels) were put in place, despite
 one of the cases having being withdrawn initially due to a lack of evidence that an observer or
 camera would have provided.

We ask that the above issues be addressed as a matter of urgency.

Yours sincerely,

Karti Thomas

Karli Thomas

On behalf of the Deep Sea Conservation Coalition

References

Baco, A. R, Roark, E. B. and Morgan, N. B. (2019) Amid fields of rubble, scars, and lost gear, signs of recovery observed on seamounts on 30- to 40-year time scales. Science Advances. 7 Aug 2019: Vol. 5, no. 8. https://advances.sciencemag.org/content/5/8/eaaw4513

Bradshaw, C. J. A.; Giam, X. and Sodhi, N. S. (2010) Evaluating the Relative Environmental Impact of Countries. PLoS ONE 5(5): e10440. https://doi.org/10.1371/journal.pone.0010440
New Zealand Ministry for the Environment (2019) Environment Aotearoa 2019 Summary.
www.mfe.govt.nz/environment-aotearoa-2019-summary

Clark, M. R.; Bowden, D. A.; Rowden, A. A. and Stewart, R. (2019) Little Evidence of Benthic Community Resilience to Bottom Trawling on Seamounts After 15 Years. Frontiers in Marine Science. 26 February 2019 www.frontiersin.org/articles/10.3389/fmars.2019.00063/full

Diaz, S. et al (2019) Summary for policymakers of the global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) May 2019. www.ipbes.net/news/ipbes-global-assessment-summary-policymakers-pdf

First Global Integrated Marine Assessment (First World Ocean Assessment), United Nations (2016). Chapter 51 - Biological Communities on Seamounts and Other Submarine Features Potentially Threatened by Disturbance. https://www.un.org/Depts/los/global_reporting/WOA_RegProcess.htm

Leathwick, J.R., Moilanen, A., Francis, M., Elith, J., Taylor, P., Julian, K., Hastie, T., Duffy, C. (2008). Novel methods for the design and evaluation of marine protected areas in offshore waters. Conservation Letters 1: 91–102. https://onlinelibrary.wiley.com/doi/full/10.1111/j.1755-263X.2008.00012.x

New Zealand (2018) A proposal for a revised Bottom Fishing Conservation and Management Measure for SPRFMO. COMM 7 – Prop 03.1. Submission of New Zealand, 7th Meeting of the Commission of the South Pacific Regional Fisheries Management Organisation, The Hague, The Netherlands, 23 to 27 January 2019.

 $\frac{https:/www.sprfmo.int/assets/0-2019-Annual-Meeting/COMM-7/Prop/COMM7-Prop03.1-Background-paper-to-COMM7-Prop03-NZ.pdf$

Pitcher, R. Williams, A. and Georgeson, L. (2019) Progress with investigating uncertainty in the habitat suitability model predictions and VME indicator taxa thresholds underpinning CMM 03-2019. Paper for SPRFMO SC7, SC7-DW21_rev1.

 $\frac{https://www.sprfmo.int/assets/2019-SC7/Meeting-Docs/SC7-DW21-rev1-Uncertainty-in-model-predictions-and-VME-thresholds-for-CMM-03-2019.pdf$

Vance, A (2019) Conservationists win battle over Government's 'fishing whoppers'. Stuff, 4 April 2019. www.stuff.co.nz/national/politics/111766497/conservationists-win-battle-over-governments-fishing-whoppers

Watling, L. and Auster, P. J. (2017) Seamounts on the High Seas Should Be Managed as Vulnerable Marine Ecosystems. Frontiers in Marine Science. 25 January 2017. www.frontiersin.org/articles/10.3389/fmars.2017.00014/full

Williams, A. et al. (2010) Seamount megabenthic assemblages fail to recover from trawling impacts. Mar. Ecol. 31, 183–199. https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1439-0485.2010.00385.x

Bob Gutsell	
President	
NZ Sport Fishing Council	





Sustainability Review 2019
Fisheries Management
Fisheries New Zealand
PO Box 2526
Wellington 6140.
FMSubmissions@mpi.govt.nz

1 July 2020

Submission: Review the TAC for Blue Cod in BCO 5

Recommendations

- 1. That the Minister agrees to option 3 with an increase in allowance for other sources of fishing mortality which reduces the TAC by 38% to 894 tonnes with a review in 3 years time.
 - a) The TACC is reduced to 700 tonnes.
 - b) The recreational allowance is reduced to 85 tonnes in-line with the latest survey estimate plus section 111 landings.
 - c) The allowance for customary catch increases to 20 t, with the ability to review as required.
 - d) The allowance for other sources of fishing related mortality is set at 89 tonnes, 10% of the TAC.
- That the Minister instructs Fisheries New Zealand to apply the environment principles of the Fisheries Act 1996 and remove bottom contact fishing methods like trawling and dredging from habitats of particular significance to blue cod and the long-term productivity of this stock.
- The Minister orders a review of the interpretation of the National Blue Cod Strategy placing unwarranted new restrictions on fishing outside the traffic light areas (outside the 12 nmile limit) and returning to shore.

The submitters

- The New Zealand Sport Fishing Council (NZSFC) appreciates the opportunity to submit on the proposals to review the TAC for blue cod in BCO 3, with submissions due 1 July 2020.
- 5. The New Zealand Sport Fishing Council is a recognised national sports organisation with over 36,200 affiliated members from 55 clubs nationwide. The Council has initiated LegaSea to generate widespread awareness and support for the need to restore abundance in our inshore marine environment. Also, to broaden NZSFC involvement in marine management advocacy,

- research, education and alignment on behalf of our members and LegaSea supporters. www.legasea.co.nz. Together we are 'the submitters'.
- 6. The submitters are committed to ensuring that sustainability measures and environmental management controls are designed and implemented to achieve the Purpose and Principles of the Fisheries Act 1996, including "maintaining the potential of fisheries resources to meet the reasonably foreseeable needs of future generations..." [s8(2)(a) Fisheries Act 1996].
- 7. The submitters note the consultation time frame of 26 working days for this process. This time frame has allowed some consultation with local recreational interests, our affected clubs and other representative organisations including the New Zealand Angling and Casting Association. This year the sustainability round includes 12 inshore species in 15 QMAs which has stretched our resources.
- Our representatives are available to discuss this submission in more detail if required. We look forward to positive outcomes from this review and would like to be kept informed of future developments. Our contact is Helen Pastor, |

The proposal

- 9. Fisheries New Zealand is proposing to review the sustainability measures for blue cod in Quota Management Area 5 (BCO 5) for the 1 October 2020 fishing year. Concerns about the BCO 5 fishery led to the total allowable catch (TAC) being reviewed in 2011 with the total allowable commercial catch (TACC) reduced by 20% and the recreational daily bag limit reduced from 30 to 20. Despite these reductions, continued concerns resulted in voluntary shelving being introduced by quota holders, and the regulated mesh size used on commercial cod pots being increased in 2017.
- 10. A new stock assessment undertaken in 2019 concluded BCO 5 is about 35% of the unfished biomass and that at the current catch levels (which is lower than the TACC) the stock is likely to be overfished. However, there are a number of uncertainties in the model inputs and model structure.
- 11. Fisheries New Zealand have proposed three TAC options option 1 is the status quo, options 2 and 3 are decreases and are thought to be within the range of yield estimates that should move the stock towards the target biomass (Table 4).

Table 4: Options for varying TAC, TACC and allowances (all in tonnes) for BCO 5

			Total		Allowances	
Stock	Option	Total Allowable Catch	Allowable Commercial Catch	Customary Māori	Recreational	All other mortality to the stock caused by fishing
BCO 5	Option 1 (Status quo)	1,452	1,239	2	191	20
BCO 5	Option 2	999 🔱 (31%)	8744 (29%)	20 ↑ (N/A)	85 4 (55%)	20
BCO 5	Option 3	825 (43%)	700 🔱 (44%)	20 1 (N/A)	85 🗸 (55%)	20

The Submission

- 12. Th blue cod stock in BCO 5 has supported a large commercial fishery for 30 years, but now is in decline. A reduction in the TACC in 2011 and recent shelving of ACE by commercial fishers does not appear to have halted that decline. This highlights the problem of using a single output control on catch as the primary management tool over a large quota management area.
- 13. Tagged blue cod have mostly been recaptured close to their release sites and populations can be localised and habitat specific. They also respond readily to bait, whether on a hook or in a pot. Site specific abundance and high catchability make blue cod susceptible to local depletion and serial depletion. Typically, areas close to port are fished down first and the fishery has to move further and further out to maintain catch rates. Any sign of recovery in accessible areas is soon mopped up. Long distance fishing continues until the boundary is reached and the fishery can no longer be sustained.
- 14. When stocks are fished down fishing gear is moved more often to maintain catch rates despite low overall abundance. A multi-layered approach of method restrictions, spatial management and catch limits is needed, even in areas that once had some of the highest blue cod catch and catch rates in the country. Fishers themselves may be best placed to develop a management plan for the fishery but the QMS does not solve the race for space.
- 15. Blue cod have a complex life history with individuals over a large length range changing sex from female to male and southland they are 4 or 5 years old before they mature. Stock productivity is reduced when fishing pressure is high. There is also evidence that abundance and productivity can be adversely affected by disturbance of benthic habitat by bottom contact fishing methods.
- 16. There are some compounding problems with the stock assessment model inputs and model structure, particularly modelling three statistical areas separately, a move to an age-based model when catch-at-age data was lacking, and the relationship between abundance, growth and sex change dynamics. There have also been changes in pot design and mesh size as well as changes in fisher behaviour which makes CPUE hard to interpret.
- 17. Given the uncertainties with current status and future projection the submitters support option 3 with a review in 3 years time plus a revised allowance for other sources of fishing mortality.
- 18. We have seen that even in fisheries with long catch histories and reasonable stable stock assessment models that management procedures based on CPUE can fail to halt the decline in a stock. In our view, developing a management procedure at this time it is putting unjustified faith in the current stock assessment model and in the reliability of previous commercial potting CPUE. In addition, fishers are currently changing to electronic commercial catch and effort reporting. It is extremely likely that CPUE derived from electronic reporting will not be comparable to the paper-based reporting used in the stock assessment and in the evaluation of candidate management procedures.
- 19. The submitters support the reduction of the allowance for recreational fishing interests to 85 t based on the latest survey estimate of 67 tonnes plus 18 tonnes of catch retained for personal use on commercial vessels under section 111 provisions.
- 20. The submitters want to see the annual reported landings of blue cod taken for private use from commercial vessels in the advice paper to the Minister. They represent a significant portion of the allowance for recreational fishers at a time when recreational bag limits have been cut, quota holders are shelving catch, and the stock is in decline.

- 21. The submitters support the increase in the customary allowance to 20 t based on the stated requirement for hakari and manaakitanga for occasional significant events.
- 22. The allowance for other sources of fishing mortality, currently at less than 3% is inadequate, especially considering the assumed release mortality used in the BCO 5 stock assessment was 13% for line fisheries and 100% for pot fisheries. The proportion of catch discarded is not stated. The submitters support an allowance for other sources of fishing mortality of 10% of the TAC.
- 23. The submitters recommend that Minister instructs Fisheries New Zealand to apply the environment principles of the Fisheries Act 1996 and remove bottom contact fishing methods, like trawling and dredging, from habitats of particular significance to blue cod and the long-term productivity of this stock.
- 24. There is growing frustration at some of the provisions of the National Blue Cod Strategy. Following extensive and well publicised consultation the strategy has come back with unexpected restrictions on fishing outside the traffic light areas (outside the 12 nmile limit) as follows:
 - FNZ FAQ "What if my blue cod spot is out past 12 nautical miles and therefore outside of the blue cod management areas?
 - "Even though you are outside the blue cod management areas you will have to transit through one of these areas on the way back to where you launched your boat from. Whatever area you transit through to get to back to the boat ramp or launch area will be the limit you will be restricted to even if the blue cod was taken outside of that management area."
- 25. This is not an insignificant issue and it will not go away. NZSFC and member clubs raise it now to go on record as opposing this interpretation of the regulations, which is different to the assurances given during the consultation process.

Bob Gutsell	
President	
NZ Sport Fishing Council	





Sustainability Review 2019
Fisheries Management
Fisheries New Zealand
PO Box 2526
Wellington 6140.
FMSubmissions@mpi.govt.nz

1 July 2020

Submission: Review of TACs for kingfish in KIN 2, 3, 7 & 8

Submission summary

- The New Zealand Sport Fishing Council's yellowtail kingfish policy (attached) is based on maintaining abundance at high levels to provide ecosystem services and high quality recreational fishing. We have promoted best practice fishing and handling through the LegaSea <u>FishCare</u> programme and a high proportion of catch by recreational and charter fishers is released.
- 2. The value to New Zealand of a world class sport fishery for kingfish far outweighs value that could be attained by fishing the stock down to 40% of the unfished biomass. There are no quantitative stock assessments for kingfish and while some CPUE analyses may track trends in availability or abundance, problems with historic under reporting and high proportions of immature fish in the catch remain. There is evidence of good recruitment to commercial and recreational fisheries in some areas including the South Island in response to favourable environmental conditions. The New Zealand Sport Fishing Council will support TAC reviews where appropriate and insist on continued use of live releases under schedule 6 provisions.

Recommendations

That the Minister decides the following:

- 3. Kingfish 2
 - a) Increase the Total Allowable Catch (TAC) from 170 to 181
 - b) The TACC remains at 63 t to retain incentives to release kingfish alive.
 - c) The recreational allowance is increased to 79 t in-line with the latest survey estimate of 79.2 t to provide for high value recreational fisheries.
 - d) The allowance for customary catch be set at 21 t, with the ability to review as required.
 - e) The allowance for other sources of fishing related mortality be set at 18 t which is 10% of the TAC.

4. Kingfish 3-

- a) To support option 1 to increase the TAC to 21 t.
- b) The TACC increases to 9 t to retain incentives to release kingfish alive.
- c) The recreational allowance remains at 6 t in-line with the latest survey estimate of 5.8 t to provide for high value recreational fisheries.
- d) The allowance for customary catch remains at 4 t, with the ability to review as required.
- e) The allowance for other sources of fishing related mortality be increased to 2 t which is 10% of the TAC.

5. Kingfish 7-

- a) Increase the Total Allowable Catch (TAC) from 41 t to 98 t as there is no need for proportional over-allocation of allowances.
- b) The TACC increases to 44 t which is 70% of the 2018-19 landed commercial catch and will retain incentives to release kingfish alive.
- c) The recreational allowance increases to 40 t.
- d) The allowance for customary catch increases by 100% to 4 t, with the ability to review as required.
- e) The allowance for other sources of fishing related mortality be increased to 10 t which is 10% of the TAC.

Kingfish 8-

- a) Increase the Total Allowable Catch (TAC) from 92 t to 169 t.
- b) The TACC increases to 80 t which is 85 % of the 2018-19 landed commercial catch and will retain incentives to release kingfish alive.
- c) The recreational allowance increases to 55 t in-line with the latest survey estimate of 55 t to provide for high value recreational fisheries.
- d) The allowance for customary catch increases to 17 t, with the ability to review as required.
- e) The allowance for other sources of fishing related mortality be increased to 17 t which is 10% of the TAC.

The submitters

- 7. The New Zealand Sport Fishing Council (NZSFC) appreciates the opportunity to submit on the proposals to review Total Allowable Catch (TAC), allowances and the Total Allowable Commercial Catch (TACC) for snapper and red gurnard in Fisheries Management Area 7, with submissions due 1 July 2020.
- 8. The New Zealand Sport Fishing Council is a recognised national sports organisation with over 36,200 affiliated members from 55 clubs nationwide. The Council has initiated LegaSea to generate widespread awareness and support for the need to restore abundance in our inshore marine environment. Also, to broaden NZSFC involvement in marine management advocacy, research, education and alignment on behalf of our members and LegaSea supporters. www.legasea.co.nz. Together we are 'the submitters'.
- 9. The submitters are committed to ensuring that sustainability measures and environmental management controls are designed and implemented to achieve the Purpose and Principles of the Fisheries Act 1996, including "maintaining the potential of fisheries resources to meet the reasonably foreseeable needs of future generations..." [s8(2)(a) Fisheries Act 1996].
- The submitters note the consultation time frame of 26 working days for this process. This time
 frame has allowed some consultation with local recreational interests, our affected clubs and

other representative organisations including the New Zealand Angling and Casting Association. This year the sustainability round includes 12 inshore species in 15 QMAs which has stretched our resources.

11.	Our representatives are available to discuss this submission in more detail if required. We look
	forward to positive outcomes from this review and would like to be kept informed of future
	developments. Our contact is Helen Pastor,

The proposals

- 12. Fisheries New Zealand is proposing to increase the TACs for yellowtail kingfish in four quota management areas (Table 1), following two years of analysis of available data from commercial and recreational fisheries.
- 13. Fisheries New Zealand state "due to the value of kingfish to non-commercial fishers the goal of the overall management framework is to manage commercial catch to unavoidable bycatch levels only. This is achieved through a combination of low TACCs and high deemed value rates". In addition commercial fishers are allowed to release live kingfish of legal size.
- 14. Commercial landings of kingfish from KIN 2, 3, 7 & 8 have regularly exceeded the available ACE during recent years, particularly in the jack mackerel mid water trawl fishery centred off the southwest coast of the North Island (KIN 8).
- 15. There is evidence that the abundance of kingfish has increased in all areas around New Zealand, with the largest increases on the west coast with commercial catch rising from a relatively low base. The proposals would set the kingfish TACCs around, or below current commercial catch levels. FNZ consider the options are unlikely to result in either an increase in commercial targeting kingfish, or an increase in the amount of commercial fishing effort targeting other species.
- 16. Fisheries New Zealand is also "seeking the views of tangata whenua and stakeholders regarding the [sic] management target, and what alternative reference points should be used to guide the management of kingfish in KIN 2, 3, 7 & 8."

Table 1: Proposed TACs, TACCs, and allowances for KIN 2, 3, 7 and 8. All figures in tonnes, with percentage changes from current settings provided in brackets.

					Allowan	ices
Stock	Option	Total Allowable Catch	Total Allowab <mark>le</mark> Commercial Catch	Customary Māori	Recreational	Other sources of mortality to the stock caused by fishing
KIN 2	Option 1	189 1 (11%)	70 1 (11%)	21 1 (17%)	79 1 (22%)	19 ↓ (2 <mark>1</mark> %)
	Option 1	21 1 (24%)	9 1 (50%)	4	6	2 100%)
KIN 3	Option 2	23 1 (35%)	11 🛧 (83%)	4	6	2 1 (100%)
	Option 1	82 1 (100%)	30 1 (100%)	4 100%)	40 1 (100%)	8 1 (100%)
KIN 7	Option 2	122 1 (198%)	44 🔨 (193%)	6 1 (200%)	60 1 (200%)	12 1 (200%)
KIN 8	Option 1	167 1 (77%)	80 1 (77%)	17 1 (89%)	55 1 (77%)	16 1 (129%)

Background

- 17. There is evidence from the 2015 yellowtail kingfish aging study in KIN 1 of strong year classes of 5 and 6 year olds in East Northland and Bay of Plenty. On the west coast there was strong recruitment to the commercial fishery in 2017 and 2018, probably as 4 and 5 year olds, and these young fish turned up in the catch with the offshore jack mackerel schools (Figure 7).
- 18. There is also evidence of range expansion with kingfish numbers increasing all around the South Island. This was happening to some extent over the last 10 years but was probably accelerated by the warming of the Tasman Sea around 2016 and 2017. Figure 8 shows the change in kingfish catch rates by midwater trawl vessels over 8 years. The CPUE analysis only used data from trips with an MPI fisheries observer aboard (about 80% of all trips) on the large Ukrainian trawlers targeting Jack mackerel and hoki. The combined data from KIN 7 and 8 showed a marked increase in catch rates of kingfish since 2014. There are significant increases in the TACs proposed in KIN 7 and 8 this year. Live kingfish will continue to be released and commercial fishers have provided fish tags to fisheries observers to tag kingfish on release to look at movement, growth and possibly an indication of survival rate.

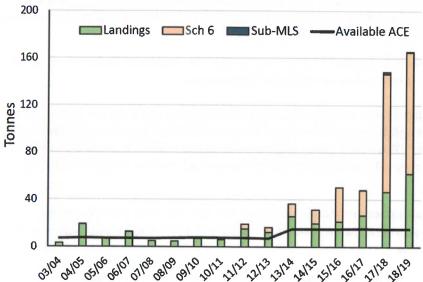


Figure 7: KIN 7 commercial catches since introduction to the QMS. Note that data on sub-MLS kingfish is only available post 2017/18.

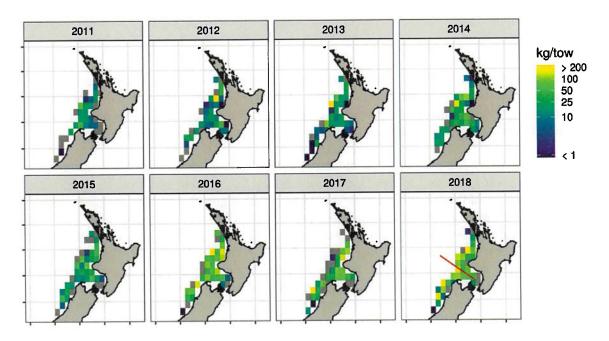


Figure 8: Catch rate for kingfish from mid water trawl vessels in kilos per tow averaged by year and area while targeting jack mackerel or hoki. Grey squares where there were too few tows to report. The red line in 2018 is the boundary between KIN 7 (south) and KIN 8 (north).

- 19. This discussion document is unusual in that only options for increased TACs are presented. Usually the status-quo is retained as an option for the Minister.
- 20. FNZ say "Kingfish landed fresh is a moderately high value species, and is usually sold as fillet or whole chilled. Frozen kingfish processed on board factory vessels is of a considerably lower value than that landed fresh." This keeps the average port price low in KIN 7 and KIN 8 and the high deemed value means they will pay more for ACE to reduce their deemed value bill (Table 2).

Table 2: Average kingfish port price and ACE price for the last year (to June) and the current kingfish deemed value rates. The actual or estimated annual deemed value paid as quoted in the discussion document is below.

	KIN1	KIN2	KIN3	KIN7	KIN8
Average Port Price	\$ 5.19	\$ 4.82	\$ 4.13	\$ 1.82	\$ 2.93
Average ACE Price	\$ 2.74	\$ 2.59	\$ 5.58	\$ 11.15	\$ 10.26
KIN deemed value +20% over ACE	\$ 8.90	\$ 8.90	\$ 4.45	\$ 8.90	\$ 8.90
KIN deemed value >100% over ACE	\$ 17.80	\$ 17.80	\$ 8.90	\$ 17.80	\$ 17.80

21. Kingfish length at 50% maturity is 97 cm in females and 83 cm in males, so half of the fish are larger than this when they first mature. Most trawl caught kingfish are therefore immature and trawl CPUE is not a good indicator of trends in the spawning stock biomass. The west coast jack mackerel trawlers do catch some large kingfish based on data collected by fisheries observers.

The submission

- 22. The submitters have been concerned about the decline in yellowtail kingfish stocks for many years and are wary of increases in commercial utilisation as stocks rebuild. Kingfish are a popular and challenging target species for many recreational fishers. They form a valuable component of the charter boat business with clients coming from New Zealand, and until recently, from around the world to test their angling skills against these hard fighting fish. A structural change in the recreational charter boat fleet has seen far fewer large launches and many people chartering trailer boats. Kingfish is a major target species for these new operators. There is also growing demand for guided fly-fishing trips targeting kingfish in shallow water.
- 23. In 2014-15 recreational fishers paid for an economic survey of saltwater fishing through a New Zealand Marine Research Foundation project. The lead researcher was Southwick Associates from Florida, who estimated recreational fishing's contribution to the New Zealand economy and was able to split out the recreational kingfish fishery. While acknowledging the sample sizes were limited for species by species break downs, Southwick estimated total economic activity from kingfish related spending by recreational fishers was about \$134 million, GDP \$50 million and employment of 630 fulltime equivalents.
- 24. NZSFC has a yellowtail kingfish policy with a goal of maintaining New Zealand's world class recreational fishery for kingfish. The policy document adopted at the NZSFC AGM in 2015 is attached to this submission.
- 25. There is now general acceptance that kingfish stocks have increased, and schools have moved further south than usual. Data from various sources shows several periods of good recruitment over recent years.
- 26. The initial TACCs set for KIN 3, KIN 7 & KIN 8 were low and while the increases proposed look large, they are unlikely to affect abundance or the availability in areas popular with recreational fishers. In part this is because the proposals only cover current levels of landed catch.
- 27. The Submitters do not support the use of a proportional allocation model for increases to the TACC and allowances in KIN 2, KIN 7, and KIN 8. While the courts have confirmed that proportional allocation between fishing sectors is option for the Minister, he or she also has wide discretion when setting a TACC and allowances.
- 28. In the snapper 1 Appeal Court judgement Justice Tipping wrote: "Having set the TAC the Minister in effect apportions it between the relevant interests. He must make such allowance as he thinks appropriate for the other interests before he fixes the TACC. That is how the legislation is structured. We do not consider it implicit in the relevant section or in the scheme of the Act as a whole that once the ratio of recreational tonnage to commercial tonnage is fixed there can be no change in that ratio except on an increased biomass. The imprecision of the actual recreational catch is one good reason why strict proportionality would be near impossible to achieve. That makes it difficult to imply an obligation to achieve it."
- 29. FNZ is wrong to assert that "There is no available information on the spatial distribution of recreational kingfish catches within QMAs" or that because fishing effort is concentrated inshore that is where most kingfish are caught. Adult kingfish often school near offshore structures where there is good current flow, like Ranfurly Bank (KIN 2), D'Urville Island (KIN 7), Kapiti and Three Kings Islands (FMA 8). There are target fisheries offshore where large kingfish are caught, many of which are released. The amateur fishing charter vessel database has recorded over 150,000 kingfish caught since 2010-11, mostly with latitude and longitude. There is also general

- spatial data collected from private fishers in the National Panel Surveys and the concurrent ramp surveys that collect fish size information.
- 30. NZSFC could support increases in these areas within the objectives and strategies of the kingfish policy, such as by-catch only fishing, no proportional allocation, describing the economic contribution of the recreational fishery, and no increase in the jack mackerel TACC.
- 31. We would not support the alterative to TACC increases mentioned in the Discussion Document, which was to reduce the deemed value, as they did in KIN 3 a few years ago.
- 32. The case for an increase in KIN 2 is weak. It seems that FNZ suggest increasing the allowance for recreational fishers and have tacked on a TACC increase based on a proportional allocation of the TAC. The submitters strongly oppose the proposed TACC increase in KIN 2 and the use of proportional allocation in this way.
- 33. The proportion of kingfish released alive in KIN 2 is much smaller than in other commercial trawl fisheries. It looks like less than 10% in most years (Figure 4). The best option to avoid exceeding the TACC or paying deemed values is to release more immature kingfish alive during the year.

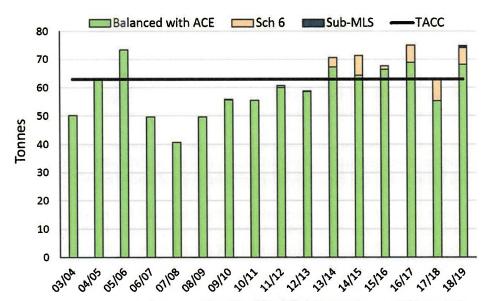


Figure 4: KIN 2 commercial catch since introduction to the QMS. Note that data on sub-MLS kingfish is only available post 2017/18.

- 34. The catch-at-age studies in 2014-15 did include FMA 2 kingfish from Ranfurly Bank with fish from other offshore locations in the Bay of Plenty. These provided indicators of the total mortality of the mature spawning fish which were reasonably encouraging. However, the KIN 2 commercial fisheries catch mainly small kingfish and abundance is determined by recruitment. The trawl catch rate was above average a few years ago but was lower in 2017-18 and 2018-19 (light blue line Figure 9). This is the opposite of the trend in the KIN 1 and KIN 8 trawl fisheries, but similar to the Bay of Plenty trawl CPUE.
- 35. The discussion document does not give a clear rationale for the increase in the allowance for customary catch. We assume that commercial fishers would have to label and report bins of fish for pataka kai customary use. If not, then this is a gap in the electronic reporting system. If tonnes of kingfish are landed by commercial fishers for Iwi customary use then this will also help commercial catch remain below the current TACC.

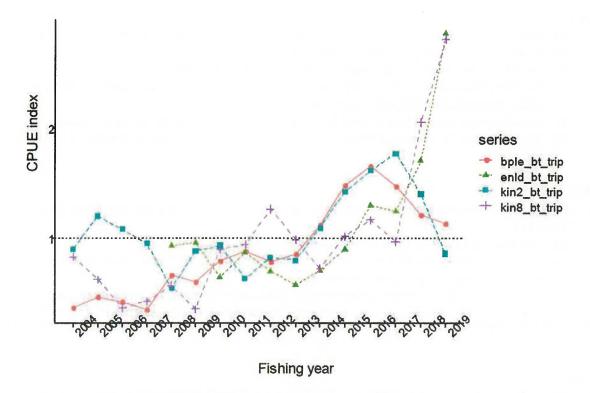


Figure 9: CPUE indices for immature kingfish from bottom trawl fisheries

- 36. The most robust information on kingfish catch rates, release rates and size frequency comes from the "midwater trawl" fleet fishing in KIN 7 and KIN 8. The same large Ukrainian trawlers (now New Zealand flagged) have fished in the same way in the same areas for many years and since 2004 there has been a high level of coverage by fisheries observers. The modelling of catch rates from observed trips only shows a large increase in CPUE and catch over the last 6 or 7 years. The length frequency data shows a strong year class of 50 cm to 60 cm kingfish being caught in 2014-15. These data also show that since then there have been very few small fish recorded in the catch. FNZ need to consider that the recent high level of recruitment may not continue.
- 37. There is also evidence that the catch rate of Jack mackerel in JMA 7 (FMA 7 & 8) has increased in recent years. While it is encouraging that the stocks are doing well the submitters would not support an increase in the JMA 7 TACC from the current level of 32,500 t. This is already the largest TACC for an "inshore" species and Jack mackerel are important forage species for birds, marine mammals and fish, including kingfish.
- 38. As set out in the NZSFC kingfish policy (below) the submitters support maintaining abundance at high levels to provide ecosystem services and high quality recreational fishing. This means that there are large (20 kg plus) kingfish available in a range of habitats, not just the most remote offshore locations. The value to New Zealand of a world class sport fishery for kingfish far outweighs value that could be attained by fishing the stock down to 40% of the unfished biomass. There are no quantitative stock assessments for kingfish, and the chance of developing a reliable stock assessment model without an abundance index of the spawning stock biomass are extremely slim. Some CPUE analyses may track trends in abundance over recent years but problems with under reporting and gear selectivity remain, especially when assumptions are made about periods with low CPUE (and reporting) being some sort of reference point.

KIN 2

- 39. The submitters ask the Minister to increase the TAC to 181 in KIN 2 and make a technical adjustment to the allowances to better reflect current utility:
 - a) The TACC remains at 63 t to retain incentives to release kingfish alive.
 - b) The recreational allowance is increased to 79 t in-line with the latest survey estimate of 79.2 t to provide for high value recreational fisheries.
 - c) The allowance for customary catch be set at 21 t, with the ability to review as required.
 - d) The allowance for other sources of fishing related mortality be set at 18 t which is 10% of the TAC.

KIN 3

- 40. The submitters support option 1 to make allowance for current utilisation in KIN 3 and set the TAC at 21 t.
 - a) The TACC increases to 9 t to retain incentives to release kingfish alive.
 - b) The recreational allowance remains at 6 t in-line with the latest survey estimate of 5.8 t to provide for high value recreational fisheries.
 - c) The allowance for customary catch remains at 4 t, with the ability to review as required.
 - d) The allowance for other sources of fishing related mortality be increased to 2 t which is 10% of the TAC.

KIN 7

- 41. The submitters support a mix of option 1 and option 2 proposals to increase allowances close to current utilisation in KIN 7 with a TAC of 98 t. There is no need for proportional over-allocation of allowances.
 - a) The TACC increases to 44 t which is 70% of the 2018-19 landed commercial catch and will retain incentives to release kingfish alive.
 - b) The recreational allowance increases to 40 t.
 - c) The allowance for customary catch increases by 100% to 4 t, with the ability to review as required.
 - d) The allowance for other sources of fishing related mortality be increased to 10 t which is close to 10% of the TAC.

KIN 8

- 42. The submitters support increases in the TACC allowances close to current utilisation in KIN 8 with a TAC of 170 t. There is no need for proportional over-allocation of allowances.
 - a) The TACC increases to 80 t which is 85 % of the 2018-19 landed commercial catch and will retain incentives to release kingfish alive.
 - b) The recreational allowance increases to 55 t in-line with the latest survey estimate of 55 t to provide for high value recreational fisheries.
 - c) The allowance for customary catch increases to 18 t, with the ability to review as required.
 - d) The allowance for other sources of fishing related mortality be increased to 17 t which is close to 10% of the TAC.

National Yellowtail Kingfish Policy

New Zealand Sport Fishing Council

July 2015



Goal

To maintain the world class recreational fishery for kingfish in New Zealand.

Objectives

- 1. Ensure there is an abundance of large kingfish around New Zealand to provide ecosystem services and high quality recreational fishing.
- 2. Total fishing mortality is maintained at sustainable levels, such that the fishing mortality rate is maintained below the natural mortality rate as estimated by catch curve analysis.
- 3. The economic, social and cultural importance of non-commercial fisheries for kingfish is described and recognised.

Strategy

- 1. Promote the intrinsic value of large kingfish as part of a healthy marine ecosystem.
- 2. Promote a high value sport fishery for kingfish as a priority for fisheries managers and decision makers.
- 3. Promote conservative fishing methods including catch and release by recreational fishers and charter operators.
- 4. Reduce release mortality by using best practice fishing methods, including the use of circle hooks when targeting kingfish with bait.
- 5. Kingfish are an important species in fishing tournaments. Measure and release should be encouraged.
- 6. Tagged kingfish should be measured, nose to tail fork, on release and recapture and capture location accurately recorded.
- 7. Promote a bycatch-only allowance for commercial fishing and the use of Schedule 6 live release to remain within the TACC.
- 8. Promote a ban on set nets on deep reefs and offshore pinnacles, regardless of fisher's stated target species.
- 9. The Ministry for Primary Industries must closely monitor and report annually kingfish catch by trawlers and purse seine vessels in the jack mackerel fisheries. Hot spots of kingfish catch need to be identified and protected by ensuring those vessels avoid these areas with the use of time/area closures, if necessary.

Bob Gutsell	
President	
NZ Sport Fishing Council	





Sustainability Review 2019
Fisheries Management
Fisheries New Zealand
PO Box 2526
Wellington 6140.
FMSubmissions@mpi.govt.nz

1 July 2020

Submission: Review of the porae TAC in POR 1

Submission summary

- 1. The submitters support option 1 retaining the status quo.
- 2. The case for increasing the TAC in POR 1 is very weak.
 - a) There is no clear rationale for the 8 t TACC increase in POR 1 as commercial catch has been stable or declining.
 - b) The recent recreational harvest estimate was 6.7 t with a coefficient of variation (CV) of 36%, so no different to the current allowance of 6 t.
 - c) There is no rationale in the discussion document for the increase in the customary allowance.

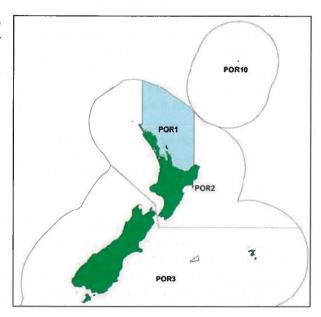
The submitters

- The New Zealand Sport Fishing Council (NZSFC) appreciates the opportunity to submit on the proposals to review Total Allowable Catch (TAC), allowances and the Total Allowable Commercial Catch (TACC) for porae in Fisheries Management Area 1, with submissions due 1 July 2020.
- 4. The New Zealand Sport Fishing Council is a recognised national sports organisation with over 36,200 affiliated members from 55 clubs nationwide. The Council has initiated LegaSea to generate widespread awareness and support for the need to restore abundance in our inshore marine environment. Also, to broaden NZSFC involvement in marine management advocacy, research, education and alignment on behalf of our members and LegaSea supporters. www.legasea.co.nz. Together we are 'the submitters'.
- 5. The submitters are committed to ensuring that sustainability measures and environmental management controls are designed and implemented to achieve the Purpose and Principles of the Fisheries Act 1996, including "maintaining the potential of fisheries resources to meet the reasonably foreseeable needs of future generations..." [s8(2)(a) Fisheries Act 1996].
- 6. The submitters note the consultation time frame of 26 working days for this process. This time frame has allowed some consultation with local recreational interests, our affected clubs and

other representatives organisations including the New Zealand Angling and Casting Association. This year the sustainability round includes 12 inshore species in 15 QMAs which has stretched our resources.

The Proposal

- Fisheries New Zealand is proposing to review the sustainability measures for porae in Quota Management Area (QMA) porae 1 (POR 1) for the 1 October 2020 fishing year.
- The majority of commercial catch is taken by set net from east Northland in POR 1, with the fishery extending into POR 2 around the northern stock boundary at the top of the North Island.
- 10. Pōrae is a shared fishery, although its importance to recreational fishers is usually as a welcome bycatch rather than a target species. Pōrae is also listed as a taonga species for some North Island Iwi in their respective Iwi Fisheries Forum fisheries plans.



- 11. Industry has requested a review of management settings for both POR 1 and POR 2, including considering adjustments to the TACCs, and consideration of the stock boundaries.
- 12. FNZ are proposing to increase the TAC from 75 tonnes to 88 tonnes, which is an approximately 17% increase as part of this review (Table 3). Catch limits and allowances for POR 1 have not been reviewed since porae was introduced into the quota management system (QMS) in 2004.

Table 3: Options for varying TAC, TACC and allowances in tonnes for POR 1 from 1 October 2020.

			Total		Allowances	
Option	Stock	Total Allowable Catch (tonnes)	Total Allowable Commercial Catch (tonnes)	Customary Māori (tonnes)	Recreational (tonnes)	All other mortality to the stock caused by fishing (tonnes)
Option 1 (Status quo)	POR 1	75	62	3	6	4
Option 2	POR 1	88 1 (17%)	70 1 (13%)	3	8 1 (33%)	7 1 (75%)

The Submission

- 13. FNZ is basing the increase to the TAC/TACC, "in line with the upper level of commercial catch since 2001. The proposed increase is modest to reflect the low level of information available, and lack of knowledge as to whether an increase may pose a risk to sustainability."
- 14. Pōrae falls into group 3 of FNZ Draft National Inshore Finfish Fisheries Plan, "which recognises that pōrae is subject to less fishing pressure than some other stocks, and that less comprehensive information for management is required. The general approach is to minimise management costs by using catch trends as the key monitoring tool."
- 15. There is no record in the POR 1 commercial catch history, or in the graph below, being 8 t above the current TACC of 62 t since 2001. In fact, the most recent fishing year reported catch was 43t, just 64% of available ACE. The highest catch since porae was introduced to the QMS was 65.9 t in 2016-17 which was 98% of available ACE. What is more the annual deemed value rate starts at \$1.50 per kilo while the average port price in 2018-19 increased to \$3.95 in POR 1.
- 16. The submitters do not support the use of maximum commercial catch as the bench mark for TACC increases in any stocks. The quota management system is failing if there is little incentive to limit commercial catch to the TACC, but a strong incentive to over catch and ask the Minister for more quota.
- 17. FNZ has to acknowledge that there are natural cycles of abundance and availability of fish populations as well as cycles in fishing activity and market demand for particular species. It is also clear from Figure 2 in the discussion document that there has been no trend in commercial catch history since the late 1990s. Catch on its own is a poor measure of stock abundance but under FNZ group 3 criteria no catch trend should mean no need for change.

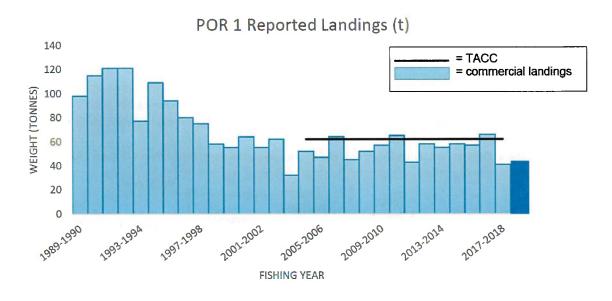


Figure 2: Commercial landings and TACC for POR 1

- 18. The higher catch in the early 1990s was caused by a surge in set net fishing on reefs for species not included in the quota management system. The concerns raised in the Set Net Review about the removal of long lived resident reef species and ghost fishing by lost nets remain. There are spawning aggregations of porae in late summer that are targeted by some set net fishers and increasing the TACC may increase this activity.
- 19. What is needed is a detailed characterisation of all porae fisheries. There may be some core areas of catch and effort where CPUE would be worth examining. The current cost recovery model is a disaster for the majority of species currently deemed to be "low information stocks". Regular monitoring and periodic analysis is deemed to be too expensive for the size of the fishery. Trawl surveys can provide fishery independent information on distribution and abundance of the main species, but these were discontinued in the North Island due to cost cutting.
- 20. The case for increasing the TAC in POR 1 is very weak. There is no clear rationale for the 8 t TACC increase in this QMA. The recent recreational harvest estimate was 6.7 t with a cv of 36%, so no different to the current allowance of 6 t. There is no rationale in the discussion document for the increase in the customary allowance. There is evidence that the recreational catch has declined between National Panel Surveys and that commercial catch reached the lowest level in the last two years since it became a quota species.
- 21. If the plan is to merge POR 1 and POR 2 so the commercial trawlers can shift ACE from the depleted northeast coast on to the northwest coast then FNZ need to produce a detailed characterisation of all porae fisheries and provide a clear management strategy and justification.
- 22. The submitters support option 1 retaining the status quo.

Bob Gutsell	
President	
NZ Sport Fishing Council	





Sustainability Review 2019
Fisheries Management
Fisheries New Zealand
PO Box 2526
Wellington 6140.
FMSubmissions@mpi.govt.nz

1 July 2020

Submission: Review of Blue Moki, Leather Jacket, Red Gurnard and Rig TACs in South Eastern New Zealand

Recommendations

- 1. The Minister maintains the status quo (option 1) for Blue moki 3 (MOK 3).
- 2. The Minister apply the Information Principles in the Fisheries Act that require that caution be applied when making decisions, especially for vulnerable low information stocks. MOK 3 is one of the stocks requiring a precautionary approach.
- 3. The Minister give particular regard to the views of Iwi, particularly Ngāti Porou and Te Whānau ā Apanui, on current abundance given the taonga status of Blue moki.
- 4. The Minister rejects the proposed Total Allowable Catch (TAC) and Total Allowable Commercial Catch (TACC) increases for Leatherjacket 3, Gurnard 3 and Rig 3, on the basis that a precautionary approach is required and the increases are unnecessary.

Submission summary

- 5. Blue Moki is a long-lived low productivity species that migrates between the North and South Islands and across quota management areas.
- 6. Moki is a very important taonga for Maori, particularly Ngāti Porou and Te Whānau ā Apanui.
- It is the target set net fishery in MOK 3 that takes the majority of catch and is responsible for any catch overrun of the Total Allowable Commercial Catch (TACC), not trawl bycatch. Increasing the TACC will not change this.

- 8. Trends in set net catch rates (CPUE) are not generally considered to provide a reliable index of abundance. In MOK 3 the timing and location of migrating fish and set net fishing effort drives CPUE.
- 9. There is conflict between trends in the set net CPUE and FMA 2 trawl CPUE that is unresolved.
- 10. There are serious flaws in the catch-at-age study which:
 - a. is 14 years old;
 - b. it only collected samples from MOK 1;
 - c. it had poor coverage in samples it collected;
 - d. age data was pooled over two years; and
 - e. the study delivered implausible results.
- 11. There is no new information to support a TACC increase. An average 2% catch overrun of the TACC over 4 years means nothing.
- 12. There is little incentive to stay below the TACC when the annual deemed value rate starts at \$0.88 and the average port price is \$1.43 in MOK 3.
- 13. The case for a TAC increase for MOK 3 is weak.
- 14. The submitters oppose the TAC increase for MOK 3 and urge the Minister to give effect to the Information Principles in the Fisheries Act that require caution be applied when making decisions, especially for vulnerable low information stocks.
- 15. There is little new information on the abundance of leather jacket, red gurnard and rig in Area 3. The trawl survey results show the stocks are stable or slightly declining. The TACCs appear to be limiting catch, but that is how the quota management system is supposed to work. Rewarding quota owners and fishers with regular TACC increases is providing clear incentives to exceed the TACC, then ask for more.
- 16. The Threat Management Plan for Hector's Dolphin (TMP) and new set net closures from 1 October 2020 may reduce the catch of gurnard and leatherjacket and will significantly reduce the SPO 3 catch. The submitters oppose the TACC increases as they are unwarranted and unnecessary.
- 17. The submitters recommend a shift away from trawling in inshore waters to protect benthic habitat, to reduce resuspension of fine sediments and reduce the risk of catching Hectors dolphin, and to use fishing methods that increase the quality and value of fish landed.

The submitters

- 18. The New Zealand Sport Fishing Council (NZSFC) appreciates the opportunity to submit on the proposals to review Total Allowable Catch (TAC), allowances and the Total Allowable Commercial Catch (TACC) for Blue Moki, Leather Jacket, Red Gurnard and Rig in Fisheries Management Area 3, with submissions due 1 July 2020.
- 19. The New Zealand Sport Fishing Council is a recognised national sports organisation with over 36,200 affiliated members from 55 clubs nationwide. The Council has initiated LegaSea to generate widespread awareness and support for the need to restore abundance in our inshore marine environment. Also, to broaden NZSFC involvement in marine management

- advocacy, research, education and alignment on behalf of our members and LegaSea supporters. www.legasea.co.nz. Together we are 'the submitters'.
- 20. The submitters are committed to ensuring that sustainability measures and environmental management controls are designed and implemented to achieve the Purpose and Principles of the Fisheries Act 1996, including "maintaining the potential of fisheries resources to meet the reasonably foreseeable needs of future generations..." [s8(2)(a) Fisheries Act 1996].
- 21. The submitters note the consultation timeframe of about 26 working days for this process. This time frame has allowed some consultation with local recreational interests, our affected clubs and other representative organisations including the New Zealand Angling and Casting Association. This year the sustainability round includes 12 inshore species in 15 QMAs which has stretched our resources.
- 22. Our representatives are available to discuss this submission in more detail if required. We look forward to positive outcomes from this review and would like to be kept informed of future developments. Our contact is Helen Pastor,

The proposals

- 23. Fisheries New Zealand (FNZ) is proposing to move towards a multi-stock management approach. This includes more explicit consideration of interactions within a fisheries complex. To test the impacts of the proposed TAC and TACC options across the multiple stocks in the east coast South Island trawl fishery, Fisheries New Zealand has analysed the following:
 - catch proportions across the four stocks
 - percentage of TACC caught per fishing year for each stock
 - the target and bycatch relationship between the four stocks over the last four years
 - biological information
 - stock status and when it was last assessed.
- 24. FNZ state that the inshore bottom trawl fishery operating within MOK 3 as primarily targeting species such as red cod and flatfish that live close to the seafloor. Being a mixed-species fishery there is inevitable bycatch of co-habiting species such as blue moki.
- 25. A summary of the proposed increases to TACCs from the discussion document are in Table 7.
- 26. While the submitters are interested in developing a more multi-species approach to fisheries management, this approach is only valid if it is part of an ecosystem based approach aimed at protecting vulnerable habitats and less resilient species. Blue moki is one of the less resilient species. The current FNZ proposal appears to have more in common with the failed Adaptive Management Programme than an ecosystem based management approach.
- 27. To achieve effective multi-species management the submitters have developed the Rescue Fish policy. Rescue Fish is a viable alternative to the Quota Management System. It is based on strong principles and seeks to address fish depletion and biodiversity loss in our marine environment. The submitters do not consider the FNZ options presented in Table 7 above meet the need for the Minister to act in a precautionary manner due to uncertain, unreliable or incomplete information.

Table 7: Current and proposed TACs, TACCs and allowances for blue moki, leatherjacket, red gurnard and rig

		Total		Allowances			
Stock	Option	Allowable Catch (tonnes)	Total Allowable Commercial Catch (tonnes)	Customary Māori (tonnes)	Recreational (tonnes)	All other mortality caused by fishing (tonnes)	
MOK 3	Option 1 (Status quo)	197	160	1	20	16	
	Option 2	216.6 🔨	176 🛧 (10%)	1	22 🛧	17.6↑	
	Option 3	234.2 🔨	192 🛧 (20%)	1	22 🛧	19.2↑	
LEA 3	Option 1 (Status quo)	140	130	1	2	7	
	Option 2	160.3 🛧	143 🛧 (10%)	1	2	14.3↑	
GUR 3	Option 1 (Status quo)	1,593	1,320	3	6	264	
	Option 2	1,606.2 🔨	1,452 🛧 (10%)	3	6	145.2✓	
SPO 3	Option 1 (Status quo)	710	600	20	60	30	
	Option 2	806↑	660 1 (10%)	20	60	66 🛧	

Blue moki 3 (MOK 3)

- 28. The case for a TAC increase for MOK 3 is weak.
- 29. MOK are a long-lived low productivity stock with complex migratory behaviours and limited information on stock status as a whole. There is no new information to support a TACC increase, other than a 2% over catch of the TACC in the last 4 years. In 2018-19 ACE was undercaught by 16.6 t (10%) and 15 t of ACE under-catch was carried over to 2019-20. Moreover, the annual deemed value rate starts at \$0.88 while the average port price is \$1.43 in MOK 3.
- 30. The spawning migrations of blue moki from the south to the north and back are well documented and increased catch in MOK 3 will affect abundance in MOK 1, around the North Island. This species is a very important taonga for Māori, particularly Ngāti Porou and Te Whānau ā Apanui and FNZ must present the views of these lwi on current abundance of blue moki in the final advice paper to the Minister.
- 31. Of the four species under review blue moki is the species requiring the most caution and the clearest rationale when increasing exploitation. Yet the proposed percentage TAC increases are the same or higher for blue moki than the three more productive species in Table 7 above.
- 32. We submit the quota management system is failing if there is little incentive to limit commercial catch to the TACC while there is a strong incentive to over-catch and ask the Minister for more quota.
- 33. There needs to be a detailed breakdown of catch by method in the advice to the Minster highlighting the proportion of catch taken by set net vs trawl in MOK 3.
- 34. TACC increases are allocated in proportion to quota owned. Most quota or ACE will go to the set net Moki target fishery which used to take about 85% of MOK 3 catch. Any catch in excess of the TACC will be driven by the larger set net target fishery in May-June and October (Figure 1), not the trawl bycatch. This is not acknowledged or discussed in the FNZ document.
- 35. Very little ACE may end up with the trawl fleet in MOK 3 which lands most catch from January

to March when total catch is less than 15 t per month (Figure 1). The submitters find that the basic premise for the increase in MOK 3 TACC to cover mixed trawl bycatch is flawed.

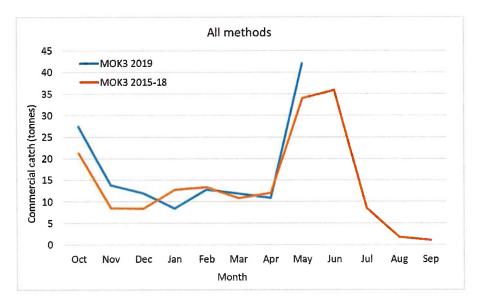


Figure 1: MOK 3 catch by month showing average for 2015-16 to 2018-19 and catch to date in 2019-20 (blue) for all commercial fishing methods.

- 36. A closer look at the available stock abundance information also casts significant doubt over the assumption in the FNZ proposal document that "the stock is relatively lightly exploited, and that an opportunity may exist to increase harvest at this time."
- 37. We know that trends in set net catch rates (CPUE) can be affected by changes in fisher behaviour and efficiency, not just changes in abundance. Most of the commercial catch in MOK 3 is taken by set net off Kaikoura as adult fish migrate past. Therefore, the timing and location of fishing effort affect catch and catch rates
- 38. The MOK 3 set net CPUE shows a significant increase in the period from 2004-05 to 2008-09 while the FMA 2 Trawl CPUE is at its lowest for the whole series (Figure 3). The conclusions of the Southern Inshore Working Group (SINSWG) do not instil confidence in the set net CPUE:
 - "The SINSWG rejected the set net-MOK1 and set net-MOK3 CPUE indices as monitoring tools which could be used to determine stock status against Harvest Standard reference points, for the following reasons:
 - 1. High inter-annual variation in the CPUE indices due to the low precision of CPUE indices derived from limited catch-effort data sets from these small fisheries and/or inter-annual variation in the catchability (availability) of migrating fish.
 - 2. Possible hyperstability as a result of fishing directed at dense schools of migrating fish."
- 39. The working group nevertheless agreed that "the set net-MOK1 and set net-MOK3 CPUE indices were likely to be broadly indicative of trends in abundance."
- 40. The submitters do not believe that the conflict between trawl and set net CPUE has been adequately explained or taken into account by Fisheries New Zealand. There is an extensive area of trawl catch data from Cook Strait to Cape Runaway (Figure 2), which shows a much different trend in CPUE to the set net fishery (Figure 3).

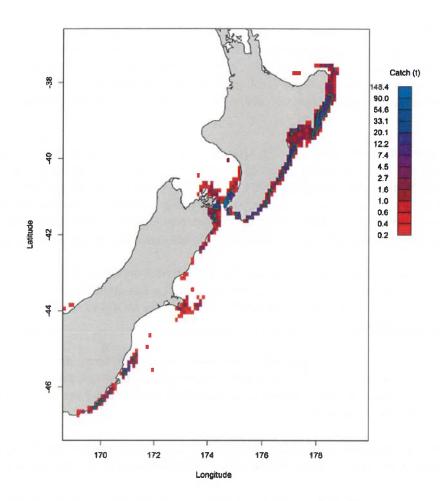


Figure 2: Blue moki catch by trawl aggregated from 2007-08 to 2015-16.

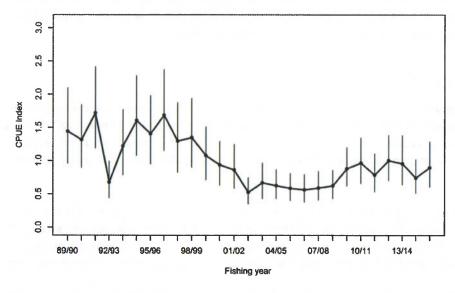


Figure 3: Blue moki CPUE from the TAR 2 bottom trawl fishery with 95% confident intervals (vertical bars).

41. Fisheries New Zealand rely on another study to support the MOK 3 increase. That study is based on catch-at-age data from samples of the commercial trawl and set net fisheries. It is hard to put much weight on the results of this study because all the samples were collected

from the North Island MOK 1 fishery 14 or 15 years ago. There were also significant concerns that the sampling was not representative of the commercial catch, let alone the population as a whole. In the first year most of the samples came from the Gisborne set net fishery while in the second year most came from the Wellington set net fishery and none from Gisborne. In the end, the data was pooled across two years, which never happens if the sampling is well executed.

- 42. Moreover, the results don't seem realistic. Using a catch curve analysis of data collected during 2004–05 and 2005–06 the estimates of Total mortality (Natural mortality plus Fishing mortality) for MOK 1 ranged from 0.11 to 0.14, but the estimates of Natural mortality range from 0.10 to 0.14 which implies no (or very low) Fishing mortality depending on what numbers were chosen. This is totally unrealistic as the commercial catch of blue moki had been reasonably high for this fishery, at around 500 tonnes a year for the previous 10 years.
- 43. There is no information regarding the discard rate for sub-MLS moki caught by trawl or set net; the two methods that could be expected to have significant catch of blue moki less than 40 cm. A standard allowance of 10% of the TACC is proposed for MOK 3 to account for other mortality caused by fishing.
- 44. Whether this 10% allowance is reasonable or not, given the MLS of 40cm, depends on the discard rates and the survivorship of undersize discarded fish from trawl and set net fisheries. Data on the discard rates of undersize blue moki need to be collected and the allowance for fishing related mortality reviewed.
- 45. The Threat Management Plan for Hector's Dolphin and new set net closures from 1 October 20120 may reduce the MOK 3 catch. FNZ need to assess the impacts of these closures on future catch.
- 46. The submitters oppose the TAC increase for MOK 3 and urge the Minister to apply the Information Principles in the Fisheries Act that require that caution be applied when making decisions, especially for vulnerable low information stocks.

Leather jacket 3 (LEA 3)

- 47. Leather jacket is a widespread species common over reefs and structure as well as clear ground, where schools may be found in mid-water. It is not a target or high value commercial species and is caught mostly by trawl. The east coast South Island winter trawl survey provides some information on vulnerable biomass, with LEA 3 catches highest in the 10 to 30 m depth range.
- 48. The submitters recommend a shift away from trawling in inshore waters to protect benthic habitat, to reduce resuspension of fine sediments and reduce the risk of catching Hectors dolphin, while enabling fishers to land high quality, high value fish. Alternative fishing methods will reduce the catch of leather jacket in LEA 3 and a TACC increase will be unnecessary.
- 49. The submitters support option 1 to retain the status quo on the basis that a precautionary approach is required and the increases are unnecessary.

Red Gurnard 3 (GUR 3)

- 50. Red gurnard is a relatively common species taken by trawling on open ground in FMA 3 and FMA 5, which combine into GUR 3 covering waters from the Clarence River on the east coast of the South Island around to Awarua Point, Fiordland. It is becoming a more common target species for trawl and Danish seine in this area. Indications from the south east trawl survey are that abundance has been stable in recent years.
- 51. The 2014 trawl CPUE analysis is out of date. A report for the Southern Inshore Fisheries Management Company in 2018 provided a good characterisation of the fishery and an updated index of relative abundance. This showed that CPUE had remained high but a change in the analysis was recommended by the science working group and the index was not accepted.
- 52. The submitters recommend a shift away from trawling in inshore waters to protect benthic habitat, to reduce resuspension of fine sediments and reduce the risk of catching Hectors dolphin, and to use fishing methods that land high quality, high value fish. In the interim, the reported increase in trawl cod end mesh size in the south east trawl fishery should reduce the catch of red gurnard in GUR 3 and a TACC increase will be unnecessary.
- 53. The submitters support option 1 to retain the status quo on the basis that a precautionary approach is required and the increases are unnecessary.

Rig 3 (SPO 3)

- 54. Indications from trawl CPUE are that the SPO 3 stock (FMA 3 and FMA 5) has increased in recent years and the south east trawl survey shows that abundance in FMA 3 has been stable since 2012, although there is a decline in deeper strata in 2018 (Figure 4).
- 55. Overall, the commercial catch is close to available ACE and the rig population seems stable. However, rig give birth to live pups, so the population size is closely linked to the female biomass. Care is needed to avoid targeting areas where pregnant females school.

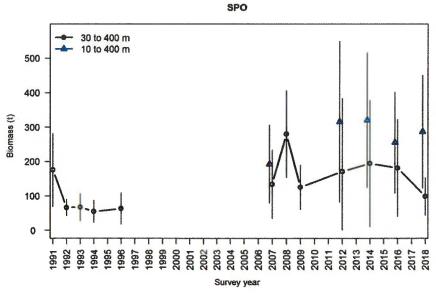


Figure 4: Trawl survey biomass estimates of rig in SPO 3.

- 56. The Threat Management Plan for Hector's Dolphin and new set net closures from 1 October 2020 will significantly reduce the SPO 3 catch. We submit the TACC increases are therefore unnecessary.
- 57. The submitters recommend a shift away from trawling in inshore waters to protect benthic habitat, to reduce resuspension of fine sediments and reduce the risk of catching Hectors dolphin, and to use fishing methods that land high quality, high value fish.
- 58. The submitters support option 1 to retain the status quo on the basis that a precautionary approach is required and the increases are unnecessary.

Bob Gutsell	
President	
NZ Sport Fishing Council	





Sustainability Review 2019
Fisheries Management
Fisheries New Zealand
PO Box 2526
Wellington 6140.
FMSubmissions@mpi.govt.nz

1 July 2020

Submission: Review of snapper and red gurnard TACs in FMA 7

Recommendations

That the Minister decides the following:

1. Snapper 7 -

- a. Increase the Total Allowable Catch (TAC) by 20%, from 545 to 655 tonnes (t).
- b. Retain the existing allowance set aside to allow for recreational fishing interests, at 250 t.
- c. Retain the existing allowance set aside to allow for Māori customary fishing interests, at 20 t.
- d. Take a precautionary approach and increase the allowance for other fishing related mortality from 25 t to 35 t which is 10% of the TACC.
- e. Increase the Total Allowable Commercial Catch (TACC) to 350 t.

2. Gurnard 7 -

- a. Increase the Total Allowable Catch (TAC) by 5%, from 1176 to 1233 tonnes (t).
- b. Retain the existing allowance set aside to allow for recreational fishing interests, at 38 t.
- c. Retain the existing allowance set aside to allow for M \bar{a} ori customary fishing interests, at 15 t.
- d. Take a precautionary approach and increase the allowance for other fishing related mortality from 50 to 107 t which is 10% of the TACC.
- e. Take a precautionary approach and retain the Total Allowable Commercial Catch (TACC) at 1073 t.
- f. Acknowledge that GUR 7 is a low information stock that needs precautionary management so a TACC review will occur only when the next trawl survey results are available.

The submitters

- The New Zealand Sport Fishing Council (NZSFC) appreciates the opportunity to submit on the proposals to review Total Allowable Catch (TAC), allowances and the Total Allowable Commercial Catch (TACC) for snapper and red gurnard in Fisheries Management Area 7, with submissions due 1 July 2020.
- 4. The New Zealand Sport Fishing Council is a recognised national sports organisation with over 36,200 affiliated members from 55 clubs nationwide. The Council has initiated LegaSea to generate widespread awareness and support for the need to restore abundance in our inshore marine environment. Also, to broaden NZSFC involvement in marine management advocacy, research, education and alignment on behalf of our members and LegaSea supporters. www.legasea.co.nz. Together we are 'the submitters'.
- 5. The submitters are committed to ensuring that sustainability measures and environmental management controls are designed and implemented to achieve the Purpose and Principles of the Fisheries Act 1996, including "maintaining the potential of fisheries resources to meet the reasonably foreseeable needs of future generations..." [s8(2)(a) Fisheries Act 1996].
- 6. The submitters note the consultation time frame of 26 working days for this process. This time frame has allowed some consultation with local recreational interests, our affected clubs and other representative organisations including the New Zealand Angling and Casting Association. This year the sustainability round includes 12 inshore species in 15 QMAs which has stretched our resources.

7.	Our representatives are available to discuss this submission in more detail if required. We look
	forward to positive outcomes from this review and would like to be kept informed of future
	developments. Our contact is Helen Pastor,

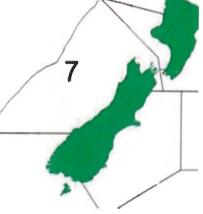
Background

- 8. Snapper occupy a wide range of habitats, including rocky reefs and areas of mud and sandy bottom. They are serial spawners, releasing many batches of eggs during spring and summer. Snapper first reach maturity from 20 to 28 cm fork length at 3-4 years of age. Water temperature appears to play an important part in spawning success and subsequent recruitment of legal size fish. Generally, strong year classes correspond to warm years and weak classes correspond to cold years. The snapper from Tasman Bay/Golden Bay (and the west coast North Island) grow faster and reach a larger average size than elsewhere.
- 9. There is an updated stock assessment for SNA 7 showing a significant and sustained increase in biomass following some particularly good years of recruitment (young fish entering the fishery). Data from a long running trawl survey in FMA 7 also shows a large increase in the snapper stock about 2011, when massive recruitment from the 2007 spawning season showed up in the catch.
- 10. A management review in 2016 increased the TACC by 50 tonnes (t), recreational allowance by 160 t and customary allowance by 4 t. The large increase in recreational allowance was based on the first few months of a NIWA harvest survey which over estimated catch significantly. The National Panel Survey estimates made by NRB were 89 t in 2011-12 and 147 t in 2017-18. There was no significant difference in the number of recreational fishers reporting snapper catch or the number of snapper kept. Almost all the increase in harvest weight was driven by the boat ramp survey estimates of snapper average weight, which rose from 0.8 kg to 1.5 kg per fish.

11. Red gurnard have a fast growth rate and relatively short lifespan, and fluctuations in recruitment may result in large fluctuations in stock biomass. The Fisheries Plenary concluded that the trawl survey data since 1992 was a better index of trends in abundance than the commercial CPUE time series, however no new trawl survey data is available this year.



- In 2015 the TAC was increased from 855 to 919 tonnes and the TACC was increased from 785 to 845 tonnes.
- In 2017 the TAC was increased to 1065 tonnes and the TACC to 975 tonnes.
- In 2019 the TAC was increased to 1176 tonnes and the TACC to 1073 tonnes and the recreational allowance increased to 38 t.



Proposals

13. Fisheries New Zealand propose the following options for the total allowable catch (TAC), total allowable commercial catch (TACC) and associated allowances for snapper in SNA 7 and red gurnard in GUR 7 (Table 1). These include proposing TACC increases of 50 or 100 t for snapper and 107 t for gurnard. No increases are proposed for the recreational or customary allowances. Submissions are due on 1 July. The discussion document is Here

Table 1: Current and proposed TACs, TACCs and allowances (tonnes) for snapper 7 and red gurnard 7.

		Total			Allowances	
Stock	Option	Allowable Catch	Total Allowable Commercial Catch	Customary Māori	Recreational	All other mortality caused by fishing
SNA 7	Option 1 (Status quo)	545	250	20	250	25
	Option 2	545	300 ↑ (20%)	20	200 1 (20%)	25
	Option 3 (working group preferred)	645 🛧	350 1 (40%)	20	250	25
GUR 7	Option 1 (Status quo)	1,176	1,073	15	38	50
	Option 2	1,283 🛧	1,180 1 (10%)	15	38	50

Status of the SNA 7 stock

14. The submitters have had a representative at the inshore working group meetings reviewing the data inputs and results for the SNA 7 stock assessment. The assessment shows the stock was severely over fished in the late 1970s and failed to recover for 25 years. Between the mid 1980s and 2010 the stock was below the hard limit and a rebuild plan needed to be put in place. The TAC was reduced in 1989 but since then there was an increase in TAC in 1997 and the stock continued to decline until the early 2000s (Figure 1).

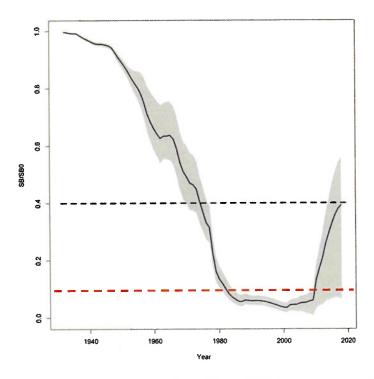


Figure 1: The spawning stock biomass (SB) estimated in the SNA 7 stock assessment model to 2019 plotted as a proportion of the unfished biomass in 1930. The shaded area represents the 90% confidence interval. The horizontal line represents the default target biomass level at 40% of the unfished level and the red dashed line represents the hard limit.

15. The rapid increase in abundance started when the 2007 year class entered the fishery in a big way in 2011. This has been followed by several other strong year classes observed in catch at age projects. The submitters accept the results of the SNA 7 stock assessment as the best available information, though some uncertainty remains about the strength of recent recruitment. On balance it seems likely that the stock will be at or above the interim target of 40% of the unfished biomass in 2020-21.

Submission SNA 7

- 16. Stocks that are below the hard limit must be closed and a time constrained rebuild plan implemented. This fishery was allowed to muddle on until nature produced a massive pulse of recruitment in the early 2000. In previous submissions NZSFC was concerned that the recruitment cycle may end. FNZ still need to consider this possibility.
- 17. Now that the interim target has been reached a TAC increase can be justified however, the submitters support harvest level that would continue to broaden the age structure and allow the stock to build resilience. The submitters support a management target of 50% of unfished biomass which is considered by many international experts to be the minimum to ensure a resilient population and to restore ecosystem function.
- 18. In most of our recent submissions we have preferred to support gradual increases in exploitation of rebuilding stocks with ongoing monitoring to ensure that the fisheries to not overshoot the sustainable yield. We have also agreed with most but not all options to set the recreational allowance close to current harvest estimates from the National Panel Survey. Often that has meant picking and mixing from the range of options available.

- 19. The recreational allowance was set at a time when there had been a sharp increase in abundance and availably in recreational snapper fishery and survey data from a few moths was extrapolated to give a harvest estimate that was too high. The submitters note that the National Panel Survey estimates of harvest increased significantly between 2011-12 and 2017-18, with almost all of this due to the increase in average size of snapper measured at boat ramps in targeted NIWA surveys.
- 20. Anecdotal reports of good catches of large snapper if fishers know where to go, and small snapper in some areas indicate recreational fishers are being more selective about where they fish and what the keep. The ongoing boat ramp surveys at Waikawa and Nelson will help track trends in boat traffic, catch rates and fish size.
- 21. The National Panel Survey estimated the landed recreational catch of 147 t plus or minus 16%. This gives a range of 123 t to 171 t. Almost all the increase in recreational harvest of snapper has been in Tasman and Golden Bays. The expansion of mussel farms is providing shelter and a ready food source for snapper, as well as new recreational fishing opportunities. The large recreational fishery in Marlborough Sounds has seen limited increase in snapper harvest so far. Snapper catch has also increasing along the West Coast.
- 22. There is a case for retaining head room in the SNA 7 recreational allowance. A negotiated position has been reached in the SNA 7 working group to retain the 250 t recreational allowance with the trade-off to facilitate a 100 t (40%) TACC increase rather than a more conservative 50 t (20%) TACC increase.
- 23. The submitters will support the working group preferred option of option 3 and ask the Minister and FNZ to support negotiations over protection of benthic habitats and snapper breeding areas by excluding trawling and dredging from inshore areas in SNA 7.
- 24. The submitters are deeply concerned about the effects of trawling on inshore biodiversity and productivity. If an increase in SNA 7 TACC is granted then the opportunity is there to try alternative fishing methods that protect benthic habitat, reduce resuspension of fine sediments, reduce the risk of catching Hectors dolphin and land high quality, high value fish.
- 25. The quota management system limits the ability of the Minister to prescribe fishing methods so spatial separation of methods in Tasman and Golden Bays would be required to provide a true test of alternative methods without disturbance from trawl gear.
- 26. This spatial separation may be particularly relevant as the Threat Management Plan for Hector's Dolphin introduces new set net closures from 1 October 2020 and some set net fishers may choose to switch to line fishing methods.
- 27. The submitters do support an increase in the allowance for other sources of fishing mortality (OSFRM) to 10% of the TACC for SNA 7. In 2019, the Minister indicated a preference for Fisheries New Zealand to move toward standardising OSFRM for inshore trawl fish stocks to 10% of their respective TACCs.
- 28. The submitters note that 80% of quota in GUR 7 is owned by four companies. Aggregation of quota is a serious flaw of current management that cannot be addressed while the quota management system exists. Aggregation is one of the contributing factors that led the submitters to develop the Rescue Fish policy as a viable alternative to the QMS.

Submission GUR 7

- 29. The catch limits for red gurnard in GUR 7 have already been reviewed three times in the last 5 years. This has increased the TAC by 38% with 90% of that as TACC increases. In 2019 the TAC was increased to 1176 tonnes and the TACC to 1073 tonnes. NZSFC opposed that increase based on the results of the 2019 trawl survey.
- 30. The submitters support the use of data from fishery independent surveys like the West Coast and top of the South Island trawl survey and believes they will become increasingly important as fishing gear and technology changes. The data shows that the trawl survey index from 2015 to 2019 is effectively at the same level if not slightly declining.
- 31. It is common that fish stocks like gurnard have natural cycles in abundance. A fundamental property of cycles is that they don't last. Significant increases in catch allowances when abundance is at a peak may exacerbate the decline when it comes. As abundance declines trawl effort can be targeted more effectively to catch the TACC.
- 32. There is no new independent survey data since 2019. At working group meetings on SNA 7 and FLA 7, commercial fishers said they have changed fishing gear and areas to avoid snapper and target gurnard. FNZ should absolutely expect gurnard catch and even CPUE to increase. Allowing increases in TAC each time the TACC is exceeded is a clear incentive to overfish stocks.
- 33. There was absolutely no incentive or need for commercial fishers to catch less that the TACC in 2018-19 because they under caught the TACC by 93 t in the previous year. This meant that they were able to carry forward 85 t of ACE, which more than covered the 22 t that they took on top of the TACC in 2018-19. In fact, commercial fishers carried forward a further 54 t into the 2019-20 fishing year.
- 34. There is no need or justification for a change to the GUR 7 TACC until after the next trawl survey results are available. The submitters oppose the TAC increase for GUR 7 and urge FNZ to apply the Information Principles in the Fisheries Act that require that caution be applied when making decisions, especially for low information stocks.
- 35. There also is no pressing need to change the allowance for recreational fishing interests as the allowance is 38 t and the recent National Panel Survey estimate is 38 t plus or minus 7 t.
- 36. The submitters do support an increase in the allowance for other sources of fishing mortality (OSFRM) to 10% of the TACC for GUR 7. In 2019, the Minister indicated a preference for Fisheries New Zealand to move toward standardising OSFRM for inshore trawl fish stocks to 10% of their respective TACCs. Fisheries NZ are well aware that there is no size limit for gurnard in the Fisheries (Commercial Fishing) Regulations and the long-standing practice on commercial boats of illegally discarding small gurnard which have a low market value.
- 37. The submitters note that 82% of quota in GUR 7 is owned by four companies. Aggregation of quota is a serious flaw of current management that cannot be addressed while the quota management system exists. Aggregation is one of the contributing factors that led the submitters to develop the Rescue Fish policy as a viable alternative to the QMS.



Submission Form

Review of sustainability measures for 1 October 2020

Once you have completed this form

Email to: FMsubmissions@mpi.govt.nz

While we prefer email, you can also post your submission to:

2020 Sustainability Review, Fisheries Management, Fisheries New Zealand, PO Box 2526, Wellington 6140, New Zealand.

Submissions must be received no later than 5pm on Wednesday 1 July 2020.

Anyone may make a submission, either as an individual or on behalf of an organisation. Please ensure all sections of this form are completed. You may either use this form or prepare your own but if preparing your own please use the same headings as used in this form.

Submitter details:

Name of submitter or contact person: Alec Woods	
Organisation (if applicable):	Pacific Networks Limited
Email:	
Fishstock this submission refers to:	SNA 7 and GUR 7
Your preferred option as detailed in the discussion paper (write "other" if you do not agree with any of the options presented):	SNA 7 - I support Option 3 GUR 7 - I support Option 2

Official Information Act 1982

Note, that your submission is public information. Submissions may be the subject of requests for information under the Official Information Act 1982 (OIA). The OIA specifies that information is to be made available to requesters unless there are sufficient grounds for withholding it, as set out in the OIA. Submitters may wish to indicate grounds for withholding specific information contained in their submission, such as the information is commercially sensitive or they wish personal information to be withheld. Any decision to withhold information requested under the OIA is reviewable by the Ombudsman.



Si	٠.		:_	_ :			-1
SI	ın	m	16	91	IN	n	• 1

Details supporting your views:

¹ Further information can be appended to your submission. If you are sending this submission electronically we accept the following formats – Microsoft Word, Text, PDF and JPG.



I am owner/director of Pacific Networks Limited, a fisheries training, advice and consultancy company based in Nelson, NZ.

My interest in the SNA 7 and GUR 7 fisheries started in the mid-1970s when I spent time working on a pair trawler based in Nelson. Much of our summer fishery targeted snapper stocks in Tasman Bay. In 1977 we built a pelagic trawl for towing in shallow water. Headline floats would be visible while towing and a chainsaw was needed to help us quickly remove tangled pine trees eg. off Rabbit Island. I therefore feel a certain amount of responsibility for the collapse of the Tasman Bay snapper fisheries in the late 1970s.

I have been in and out of the fishing industry since then, mainly working in the deep water fisheries in a variety of roles, both vessel and shore-based. Because I have been based in Nelson and enjoy sailing and recreational fishing I have always kept a close eye on the health of snapper and gurnard stocks.

The current review of snapper and red gurnard sustainability measures is timely as both fisheries show signs that they are rebuilding, indications of which have been apparent for a number of years. However there does need to be a process developed whereby this fishery can be monitored in a more timely and (hopefully) cost effective way. GPR should allow a better picture of where the effort is going in and electronic reporting will give managers a more up-to-date idea of the health of the fishery.

I took an active interest in many of the discussions prior to the introduction of the Quota Management System (QMS) when it was clear that fisheries management needed to change. I am satisfied that the Fisheries Act 1996 is sound and that we have now is a good process for setting TACs and TACCs — albeit not perfect and perhaps not as responsive as many would like it to be. However the system now has to accommodate the interests of many voices - commercial, recreational and customary fishers and social licence has entered the vocabulary. Sharing the fishing space has become a primary concern. If it is to survive, the QMS has to show that it can respond to these concerns

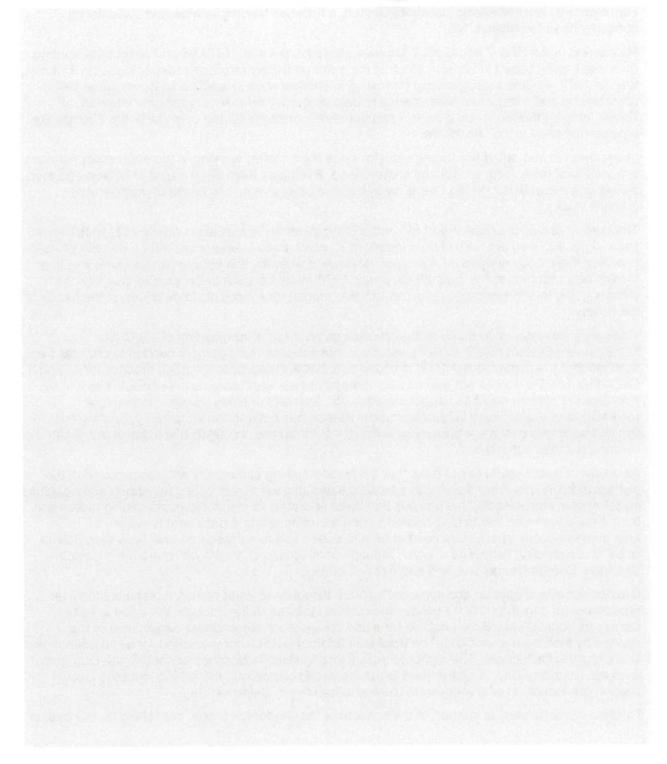
As stocks rebuild I would like to think that the inshore fishing community will also rebound. If the inshore industry can show that it is in a healthy state, this will attract young fishermen and hopefully investment in new vessels. It is obvious that there are more voices in the quota-setting discussion than there used to be and fishing-related issues are often taking a back seat to wider environmental concerns. These need to be addressed and more research and innovation dollars spent on developing fishing gear which reduces benthic impact, trawls which are more selective and ways to optimise fuel use and improve fish quality.

Greater benefits should be accompanied with an obligation to demonstrate a response to wider environmental concerns. I don't believe the current closures go far enough. We need to better identify ecologically significant marine sites and create more areas where disturbance of the seabed by trawling is prohibited. The displaced effort should be compensated for by improvements in the health of fishstocks. The sight of trawlers towing close to beaches and within the confines of bays eg. Delaware Bay, is guaranteed to put the public offside with the fishing industry. I would support the extension of a year-round closure to trawling in Delaware Bay.

Finally, I am absolutely in support of the concept of "fishing for the fridge, not fishing for the freezer"

Alec Woods
Pacific Networks Limited
1 July 2020





Please continue on a separate sheet if required.



Submission on Review of Sustainability Measures and Deemed Values for 1 October 2020

Name of submitter or contact person:	Damon Cooper, submission filed by Chanel Gardner on his behalf
Organisations	Harbour Fish Limited
Email:	

- 1. This submission is provided by Damon Cooper in the capacity as a Director of Harbour Fish Limited. Harbour Fish is a LFR, retail and export business operating out of Dunedin and Bluff. We also have a retail and wholesale operation in Queenstown. We have over 70 staff and in excess of 50 vessels that land to us. We supply fish to much of the lower South Island and export to Australia and beyond. We make this submission as an operator and quota holder.
- 2. The contact for this submission in the first instance is Chanel Gardner.
- 3. We support in its entirety the comments supplied by Southern Inshore Fisheries Management Co. (Southern Inshore) in relation to the Review.
- 4. There is little need to comment beyond the Southern Inshore statements, however, we would like to draw particular attention to MOK3, LEA3, GUR3, SPO3 and KIN3. Harbour Fish would implore decision makers to increase the TACC for all these species. We would seek that the TACC be increased even beyond what Southern Inshore suggests due to the landing information from our fishers and the subsequent and unnecessarily exorbitant deemed values.
- The economic impact on our fishers could be simply mitigated for these abundant fish stocks
 if FNZ exercised a less restrictive management approach in collaboration with industry
 feedback.
- 6. Harbour Fish further queries where the deemed value payments end up and who benefits from what is a substantial pool of funds. We question why the money is not put into fisheries science, technology and initiatives to support fishers. If the fund goes into a government "pool", surely it could be argued that TACC increases would be counterproductive as a revenue gathering exercise. A clear conflict of interest would arise. While we support the

Deemed Value Working Group, we will be interested in some foundational questions from fishers being addressed.



2020 Sustainability Review Fisheries Management, Fisheries New Zealand P O Box 2526 Wellington 6140

By email only: FMSubmissions@mpi.govt.nz

Tēnā koe,

REVIEW OF SUSTAINABILITY MEASURES FOR 1 OCTOBER 2020

1. Introduction

Fisheries New Zealand seeks feedback from tangata whenua and stakeholders on proposed changes to the sustainability measures for various selected fish stocks or stock groupings from 1 October 2020. Submissions close 5pm, 1 July 2020.

The lwi Collective Partnership (ICP) and its iwi membership hold and manage quota and Annual Catch Entitlements (ACE) and iwi fisheries interests in 11 of the stock groupings or 18 individual stocks under review this year. Our collective submission is limited to these 18 individual stocks as listed below.

List of ICP Managed Stocks under Review

- 1. Scampi (SCA 1)
- 2. Orange Roughy (ORH 3B)
- 3. Silver Warehou (SWA 3 and 4)
- 4. Black Cardinalfish (CDL 5)
- 5. Rubyfish (RBY 4)
- 6. Frostfish (FRO 3,4,7,8 and 9)
- 7. Gemfish (SKI 1 and 2)
- 8. Kingfish (KIN 2 and 8)
- 9. Pôrae (POR 1)
- 10. Rig (SPO 2)
- 11. Sea Perch (SPE 9)

2. Iwi Collective Partnership

ICP is a limited partnership of lwi fisheries entities representing mana moana, mana whenua in various rohe throughout Te Ika a Māui. ICP is a collaboration of the Iwi fisheries interests recognised in Te Tiriti o Waitangi and reaffirmed in the Fisheries Treaty Settlement and Deed of Settlement between Iwi Māori and the Crown. ICP is mandated to represent the interests of 20 iwi listed in **Table 1** below.

3. Submission

In this section we set our views on the various stocks under review this year.

ICP lwi	lwi Quota Owning Entity
Ngati Porou	Ngati Porou Seafoods Limited
Te Arawa	Te Arawa Fisheries Holding Company Limited
Ngai Te Rangi	Ngai Te Rangi Fisheries AHC Limited
Ngati Awa	Ngati Awa Asset Holdings Limited
Whakatohea	Whakatohea Fisheries Asset Holding Company Limited
Taranaki lwi	Taranaki lwi Fisheries Limited
Ngati Tuwharetoa	Ngati Tuwharetoa Fisheries Holdings Limited
Ngaitai	Te Kumukumu Limited
Nga Rauru Kiitahi	Te Pataka o Tangaroa Limited
Ngati Ruanui	Ngati Ruanui Fishing Limited
Ngati Whare	Ngati Whare Holdings Limited
Te Rarawa	Te Waka Pupuri Putea Limited
Rangitaane	Rangitane o te Ika a Maui Limited
Ngati Ranginui	Ngati Ranginui Fisheries Holding Company Limited
Rongowhakaata	Rongowhakaata Iwi Asset Holding Company Limited
Te Aitanga a Mahaki	Te Aitanga a Mahaki Trust Asset Holding Company Limited
Ngati Maru (Taranaki)	Ngati Maru (Taranaki) Fishing Company Limited
Ngati Manawa	Ngati Manawa Tokowaru Asset Holding Company Limited
Tapuika	Tapuika Holdings Limited
Whanganui	Whanganui lwi Fisheries Limited

Table 1: ICP Iwi Members & Associates

3.1 Scampi (SCA 1)

The Initial Position Paper (IPP) science demonstrates a healthy fishery with a spawning stock biomass that is highly likely above the 40% management target. The science supports greater utilisation. However, the ICP prefers to support a greater biomass thereby increasing CPUE and providing larger fish size. We are also conscious of the bycatch issue in this fishery. Therefore, we support the more conservative increase promoted under Option 1 being a 10% increase to the TAC and TACC.

3.2 Orange Roughy (ORH 3B)

The IPP science demonstrates a healthy fishery in that the 2017 stock assessment estimated the stock was at 33% B0. In 2020, the stock assessment was updated to incorporate recent catch information & estimated the stock to have increased to 36% B0. We also note the calculation error ESCR catch limit. Therefore, we support Option 2, as corrected, to increase the ORH 3B TACC from 6,772 mt to 7,967 mt by increasing the catch limit for ORH 3B ESCR from 4,775 mt to 5,970 mt.

3.3 Silver Warehou (SWA 3 and 4)

The IPP notes that catches of SWA3 and 4 have been higher than the TACC, and CPUE is at worst flat. The Working Group also concludes that "the abundance of SWA has been increasing over the last 30 years". We are also mindful of the extremely high deemed values. We have contributed to a korero with DeepWater Group and Te Ohu Kaimoana and agree that the 10% TAC and TACC increases proposed by Option 2 are too low. Therefore, we support a TACC of 3,936 mt for SWA3 and a TACC of 4,908 for SWA 4. We fully support the SWA 3 and SWA 4 submission of Te Ohu Kaimoana.

3.4 Black Cardinalfish (CDL 5)

The IPP notes that CDL 5 is bycatch to white warehou and hake. It is not targeted. Catches occasionally occur in large quantities, sometimes exceeding catch limits during a single fishing event. The TAC and TACC is based on average annual catch over previous years. There is no information on stock status but the infrequent occurrences of large catches and the lack of cardinalfish targeted fishing in CDL 5 indicate that there is a low sustainability risk if catch limits are increased.

Deep Water Group has submitted that, as the current TACC has been set at a level that is both nominal and arbitrary, quota owners and Fisheries New Zealand should work together to design and implement a project to monitor this stock and to assess its sustainable yield and that, in the interim, the TACC be increased to 80 mt and the Deemed Value be reduced. We support at the least a TACC of 60 mt.

3.5 Rubyfish (RBY 4)

The IPP notes that RBY 4 is not targeted but is trawl bycatch to alfonsino, silver warehou and hoki. Catches can occasionally occur in large quantities, sometimes exceeding the catch limit in a single fishing event. There is no known sustainability concern for this stock.

We also refer to the submission of Deepwater Group which notes that 50 mt was caught this year to date, which is double the new proposed TACC. We also note that Te Ohu Kaimoana makes a case for a TAC of 51 mt, a TACC of 50 mt and Other Mortality allowance to remain at 1 mt. Therefore, we support the alternative proposal put by Te Ohu Kaimoana.

3.6 Frostfish (FRO 3, 4, 7, 8 and 9)

The IPP has framed the reallocation of TAC & TACC between various Frostfish stocks based on fishing effort & catch history of the individual stocks. We support the proposed TAC and TACC increases to FRO 4, 8 and 9 promoted under Option 1, however, we do not support proposed decreases to FRO 3 and FRO7 TACs and TACCs. For FRO 3 and FRO 7 we support status quo. We fully support and refer to the detailed submission of Te Ohu Kaimoana.

We note that there are no sustainability concerns to any of the stocks, however, there are property right issues in any reallocation of quota interests between QMAs. The proposed reductions to FRO 3 and 7 could potentially have detrimental impacts on iwi quota owners.

3.7 Gemfish (SKI 1 and 2)

The IPP notes that an updated CPUE analysis for SKI 1 and SKI 2 in May 2020 indicates that abundance has increased and is likely to increase further over the next five years, suggesting that an increase to the TAC may be warranted. This is supported by reports of increasing commercial and recreational catch. Commercial catch of Gemfish is mainly bycatch in trawl fisheries. Landings of SKI 1 were 277 mt and 354 mt for 2017 and 2018, respectively. Landings of SKI 2 were 286 and 328 mt for 2017 and 2018, respectively. Given the above, we believe all the proposed options are too conservative and do not allow for sufficient utilisation given the health of the fisheries.

We agree with the submission of Te Ohu Kaimoana, which proposes for SKI 1, a TAC of 408 mt, TACC of 360 mt and Other Mortality allowance of 18 mt. We also support Te Ohu Kaimoana's alternative option for SKI2 being a TAC of 355 mt, TACC of 330 mt and the Other Mortality allowance of 17 mt, but only if it is applied so as not to diminish Settlement quota as a proportion of the TACC. We absolutely do not support a proportional reduction of Settlement quota as a proportion of the TACC.

3.8 Kingfish (KIN 2 and 8)

The IPP notes that kingfish was introduced into the QMS in 2003, both the recreational and commercial catch limits were set 20% lower than pre-QMS catch levels to provide an opportunity for abundance to increase. The KIN 2 TACC has never increased and the KIN 8 TACC was last increased in October 2011.

Kingfish is eligible to be returned to the sea live. 99% of captures in KIN 2 & 8 are bycatch. The best available information indicates that the probability of current catch, or TACC causing overfishing to continue or commence is 'Unlikely'. The current KIN 2 TACC is likely constraining utilisation. For KIN 2, we support a TAC of 189 mt, a TACC for KIN 2 of 70 mt & a customary allowance of 21 mt, however, we do not support the proposed 22% increase to the Recreational allowance. For KIN 8, we propose a TAC of 192 mt, a TACC of 103 mt & a customary allowance of 17 mt.

We support the comprehensive submission of Te Ohu Kaimoana.

We also acknowledge the strong & growing interest of Kingfish for Pataka and agree that the Deemed Values are set too high.

3.9 Põrae (POR 1)

The IPP notes that POR 1 is primarily a bycatch to Snapper & Trevally. It is not targeted. In the early 90s commercial catch was almost doubled. The recent reductions in catch & TACC are likely the result of changing catch preferences as opposed to sustainability factors.

We do not support the proposed 33% increase to the Recreational allowance. We support instead an alternative option whereby 16% (10 mt) is allocated to the TACC lifting it to 72 mt with the Recreational allowance remaining at 6 mt under a TAC of 88 mt.

3.10 Rig (SPO 2)

The IPP notes the SPO 2 biomass is likely to be at or above the default management target from the 2019 bottom-trawl analysis. This suggests that there is potential for greater utilisation. However, over the last four years, commercial catch in SPO 2 has been below the TACC by an average of 13%. This is because it is largely taken as a bycatch to other fisheries where there has been a reduction in effort (particularly in relation to TAR 2). So, the catch of SPO 2 has fallen in proportion. This creates potential for SPO 2 as a target species.

Therefore, we support a TACC of 119 mt, a Recreational allowance of 10 mt, Other Mortality of 12 mt but we support a higher Customary allowance of 7 mt, therefore a higher TAC of 148 mt.

Rig or Dogfish is a traditional customary fish for many iwis. Therefore, we support an increase to the Customary allowance to allow whanau, hapū & Iwi greater access to SPO2 via Pataka & other customary harvest methods. Therefore, a 2 mt increase to the Customary allowance would be appropriate with further review at the next opportunity.

3.11 Sea Perch (SPE 9)

We support a principled approach of matching TACC to catch levels in what is a healthy fishery. Therefore, we support a 67% increase to the TACC under Option 2. We do not support the proposed 1 mt increase to the Recreational allowance.

4. Closing Comments

Thank you for this opportunity to submit. In closing, we wish to provide some ideas on how the consultation process can be improved to encourage greater participation from iwi Māori representatives. Our ICP iwi representatives care greatly about fisheries, the sea and their responsibilities as kaitiaki. However, fisheries management and fisheries science are often technically challenging. We would appreciate an opportunity to korero with Fisheries New Zealand about ideas we have to make future IPPs more interactive and user-friendly for iwi representatives. We look forward to your engagement.

Ngā mihi,

Maru Samuels
General Manager



Submission Form

Review of sustainability measures for 1 October 2020

Once you have completed this form

Email to: FMsubmissions@mpi.govt.nz

While we prefer email, you can also post your submission to:

2020 Sustainability Review, Fisheries Management, Fisheries New Zealand, PO Box 2526, Wellington 6140, New Zealand.

Submissions must be received no later than 5pm on Wednesday 1 July 2020.

Anyone may make a submission, either as an individual or on behalf of an organisation. Please ensure all sections of this form are completed. You may either use this form or prepare your own but if preparing your own please use the same headings as used in this form.

Submitter details:

Name of submitter or contact person:Duan Evans	
Organisation (if applicable):	N/A
Email:	
Fishstock this submission refers to:	SNA 7, GUR 7
Your preferred option as detailed in the discussion paper (write "other" if you do not agree with any of the options presented):	SNA 7 - Option 1 GUR 7 - Option 1

Official Information Act 1982

Note, that your submission is public information. Submissions may be the subject of requests for information under the Official Information Act 1982 (OIA). The OIA specifies that information is to be made available to requesters unless there are sufficient grounds for withholding it, as set out in the OIA. Submitters may wish to indicate grounds for withholding specific information contained in their submission, such as the information is commercially sensitive or they wish personal information to be withheld. Any decision to withhold information requested under the OIA is reviewable by the Ombudsman.

Submission:1

¹ Further information can be appended to your submission. If you are sending this submission electronically we accept the following formats – Microsoft Word, Text, PDF and JPG.



Which option do you support for revising the TAC, TACC and allowances for snapper in SNA 7? Why?

I support Option 1 as the recommended option for SNA 7.

As a Resident of Tasman and passionate consumer of fish I am deeply concerned at any further increase to either the TAC, TACC or recreational increase.

I actually think it is inconceivable to be considering increases in TAC when you look at the history of the stocks of Snapper - where it has previously been to where it is now.

Also - the current report contains enough doubt and concerns in the relatively limited data itself.

"However, there is uncertainty associated with the stock status and forward projections arising from the strength of a potentially-strong 2017 year class".

"this stock is still rebuilding and is far from an equilibrium state"

From an older article but does give context on where the state of the Snapper fisheries were in comparison to now - and where they could be before any increase is considered.

But by the late 1980s the total biomass had declined from an estimated 23,000 t to less than 1600 t.

https://niwa.co.nz/publications/wa/vol11-no1-march-2003/overfishing-leads-to-loss-of-genetic-diversity-in-tasman-bay

Although there are some signs that there may be a small relative increase recently overall stocks are nowhere near where they could and should be.

Any suggestions of an increase to TACC seems to be incredibly short term thinking.

I have friends who are both commercial fisherman and recreational fisherman - and above all of the limited though improve science it is also good to hear anecdotal evidence and that more than ever indicates that yes - there are some days / months that look a bit better or about the same - but we are nowhere **near where we could and should be** not only for Snapper but for all species in this region.

Surely any positive signs we are seeing should be seen as just that and a chance for our precious oceans and Kai Moana a chance to grow back to such a condition that future generations can benefit - both commercial, customary and recreational.



As an analogy it you can imagine this fishing region as a great forest. People came along and cut down trees because there were so abundant - and they took as many trees down as they liked, using methods that didn't allow for the trees to regrow. They took so many they got to the point where there were only a few trees left, almost to the point and killing the forest. They agreed this wasn't good, so limited the number of trees you could cut down, who could take them and slightly changed the methods to allow some trees to regrow. The forest was a tiny fraction of what it once was. However after several years and a few trees started growing back. And the first sight of a few new young trees they decided to loosening the restrictions and once again started cutting down more trees.... What do you think happened to the forest?

New Zealand needs to develop a far more long term, sustainable, and better analysed, monitored and planned process to ensure the long term thriving of our once unmatched bounty of our oceans.

My suggestion would be to introduce clear check-points over the next 5 years, and put in place even greater monitoring and have a plan that the whole community unanimously agrees with.

Which option do you support for revising the TAC, TACC and allowances for snapper in GUR 7? Why?

I support Option 1 as the recommended option for GUR 7.

Again - as with the SNA 7 submission above - there does not seem to be any overwhelming positive evidence that there is a return to the levels of health and stock that there could be.

"we note that the stock status for red gurnard is very likely to be at or above the target

Again there are many areas of doubt and I believe we need to proceed with care, better monitoring and planning and taking the long truly term view.

The very slight short term gains will be radically undone and set back the fishery for both Snapper and Gurnard - where as if we maintain the status quo and work together to ensure true, measurable and sustained replenishment of these fisheries all New Zealands that call this region home and enjoy fish to eat, or as a source of revenue - will benefit.

Long term I think every New Zealander would love to see more fishing boats catching more fish for us to eat, and people being able to catch a couple more fish for their whanau - but right now there needs to be a far better plan to get to this point. Currently only Option 1 for both Snapper and Gurnard remotely allow this to happen.

If any other option should be considered it should **only be a reduction of the TAC** at this stage.



Please continue on a separate sheet if required.

SUBMISSION

FROM: Forest and Bird, Golden Bay Branch

TO: Fisheries New Zealand: Review of SNA7 and GUR7 sustainability measures for 1 October 2020 – DEADLINE 1 July 2020

Fisheries management team: FMSubmissions@mpi.govt.nz

The **Golden Bay branch of Forest and Bird** thank you for the opportunity to submit on the review of SNA 7 and GUR 7 sustainability measures.

The Golden Bay branch have long wanted a marine management plan, and a set net and trawling ban for Golden Bay in order to protect and repair our fragile marine environment. This previously productive ecosystem has been poorly managed by the existing QMA system, and previous harvesting regimes.

Option 1 is our preferred option, and endorse the concept of a mixed stock quota as particularly relevant to Golden Bay. This would enable more sensitive harvesting, more food for other species, including our own resident group of Hectors dolphin, the Little Blue Penguin population that we suspect is declining due to food depletion in their nearby area thus having to forage further out, as well as other bird species relying on a coastal food supply. Loss of local food supplies for these species would increase with increased quota.

Golden Bay is well suited for the establishment and/or extension of the adjacent marine reserves, or at least a Marine Management plan that supports these reserves. Large Marine reserves are more effective at increasing fish stock thus supporting the fishing industry.

The Golden Bay branch of Forest and Bird would like to see a complete ban on trawling and set netting in Golden Bay which would allow the reestablishment of the rich biodiversity we once had in Golden Bay and enhance the tourism and low impact recreational fishing benefitting so many more people in this post covid difficult times.

We endorse the comprehensive submission of Tasman Bay Guardians (see attached,) as we recognise the robust scientific analysis provided which relates intimately to our area.

Celia Butler for Forest and Bird. Golden Bay Branch
<u> </u>

Yours sincerely'



MARLBOROUGH RECREATIONAL FISHERS ASSOCIATION

SUBMISSION ON REVIEW OF SUSTAINABILITY MEASURES FOR SNAPPER (SNA7) AND RED GURNARD (GUR7) FOR 2020/2021.

The Marlborough Recreational Fishers Association is a group of recreational anglers concerned to represent the interests of recreational fishers in the North of the South Island. It is affiliated to a large number of recreational fishing Clubs throughout the region. This submission refers first to the suggested modifications to the TACC for snapper in the region SCA7, and second to those relevant to red gurnard.

1.Snapper

A. Options for TACCs and Allowances

These suggestions arose from a series of public meetings to seek public opinions on possible modifications to the sustainability measures. MRFA was represented at the meeting in Blenheim, and although there was a useful exchange of information it was limited by a single vociferous attendee concerned about a single item. A longer meeting might have offered additional value. Of the three options which resulted from these meetings, MRFA finds that Option 2 (a reduction in the recreational take from 250-200)

tonnes is the least acceptable. It removes 50 tonnes (20%) of the allowed recreational take, from 250 to 200 tonnes, while allowing an increase in commercial take of the same amount, from 250 to 300 tonnes. The MRFA is of the opinion that an more equitable approach would be to apportion any changes in the TACC and so as to adjust allowable catches proportionately to their present levels. By this standard commercial and recreational catches should remain at 250 tonnes each. Similarly, with Option 3 the additional catch of an extra 100 tonnes should be divided equally between commercial and recreational, so that each would be allowed 300 tonnes. MRFA considers that a better option, given the uncertainty and annual variability of snapper stocks, would be to implement an intermediate compromise and limit the increase in the TACC from 545 tonnes to 595 tonnes, adding 50 tonnes each to commercial catch and recreational. Our preferred option would then be TACC -595 tonnes; commercial catch- 300 tonnes; recreational catch 300 tonnes; customary -20 tonnes, and incidental mortality 50 tonnes. MRFA is strongly opposed to the proposal to remove 20% of the recreational catch and to transfer it to the commercial interests.

B. It is a source of continuing irritation to fishers living in Blenheim and fishing mainly in the Marlborough Sounds that the daily allowance for fishers from Nelson should be 10 fish, while they can only take three. Surely, given the calculated increase in snapper stocks, the daily bag limit in the Sounds should be raised perhaps to six fish, or that the Nelson allowance should be decreased to six fish. This makes a consistent six fish across the Top of the South, in effect giving one fish back to the resource. That amount of fish is more than adequate to feed a family. As an aside, MRFA notes in passing that while commercial fishermen find tonnage of fish caught is understandable, recreational fishers, catch a bag limit during a fishing expedition, find it difficult to relate to an amount of fish in tonnes.

C. MRFA has consistently argued that in a limited area, like the Marlborough Sounds, bottom trawling should be disallowed. Not only does it stir up the bottom silt, which is believed to make a significant impact upon the abundance of scallops, but also by destroying the benthic flora and fauna, it destroys the habitat of the younger fish and ultimately decreases the fish population.

2..Red Gurnard.

Red Gurnard have become an increasingly popular catch for recreational fishers, and it appears to be increasingly abundant. Two options are presented for the period 2020-2021: a retention of the present TACC, in which the TACC is 1176 tonnes, made up of Commercial: 1073 tonnes; Customary: 18 tonnes; Recreational; 38 tonnes. Option 2 would increase the TACC to 1388 tonnes, the increase entirely given to commercial interests, who would augment their take by 10%. MRFA considers that the additional 107 tonnes should be divided in such a way as to allow a share of the increase to go to recreational fishers. It should be noted that all of these figures are conceptual (best guess) numbers and in reality may be substantially different. Increasing the recreational catch by 10% (4) would be seen to be both equitable and impartial, as well as making an insignificant increase in the TACC. It has long been a principle of inshore fishing regulations that they be designed so that customary and recreational interests take primacy, ranking above commercial interests.

Submission On Review Of Sustainability Measures For Selected Fishstocks For 1 October 2020

Mike Currie

30 June 2020

My submission on the proposed changes to the sustainability measures for a number of selected fish stocks or stock groupings are as follows:

Scampi SCI 1 (Auckland East)

Scampi are caught using specialised deepwater bottom trawls with fine mesh nets. This has a huge bycatch, up to five times the target catch. This fishery also kills protected marine mammals and threatened seabirds. Also of concern is the impact of bottom trawling on sensitive seabed habitats and associated marine life.

Fisheries New Zealand considers that there is an opportunity to increase utilisation of SCI 1 for the 2020/21 fishing year, whilst maintaining the status of the stock above the management target. It is my contention that due to the aforementioned reasons the catch should not be increased, but banned.

Orange roughy ORH 3B

Orange roughy is a very slow growing and long-lived (120-130 years) deepwater fish, making it highly vulnerable to fishing pressure and overfishing. It does not breed until 23-31 years old and does so once a year in large spawning aggregations, often around deepwater seamounts, pinnacles and canyons around New Zealand. There are nine distinct orange roughy fisheries within the New Zealand EEZ, each managed independently. The East and South Chatham Rise fishery is the largest and oldest orange roughy fishery in the world. New Zealand's orange roughy have suffered from years of over-fishing on the spawning grounds, which has decimated populations. Catch limits were reduced several times during the 1990s and 2000s.

Orange roughy is caught by bottom trawl fishing gear. There are concerns over roughy recruitment and there is a mismatch between model projections and catch effort information. Most populations were reduced to below 20% of their original unfished size with one (Challenger) reduced to just 3%. As well as stock concerns, orange roughy is caught by bottom trawling, which destroys sea floor species assemblages and fragile seamount habitats. It effectively bulldozes the sea floor, demolishing black corals, lace corals, coral trees, colourful sponge fields and long-lived bryozoans — some more than 500 years old. Deepwater sharks and other non-target fish species are also caught, which alters marine food web dynamics. Orange roughy are an important part of the deepwater biomass and a prey species for sperm whales and giant squid, therefore orange roughy depletion has a direct impact on these deepwater species. These deepwater orange roughy fisheries catch about 79 seabirds annually including Salvin's, Chatham Islands and white-capped albatross.

The Minister committed in 2018 to a 3-year staged increase in the TAC and TACC for ORH 3B. Options include the third step in the staged increase and a larger increase indicated by an update to the stock assessment. The new update indicates the orange roughy biomass has continued to increase and a larger TAC and TACC increase than considered previously is likely to be sustainable.

It is my contention that due to the aforementioned reasons the catch should not be increased, but banned.

Silver warehou SWA 3 and 4

Silver warehou are caught by trawlers mainly as bycatch in the hoki, squid, barracouta and jack mackerel fisheries. Concerns about this fishery include the absence of a monitoring survey method and subsequently no quantitative stock assessment, resulting in the unknown sustainability of current catch levels and limits, the lack of current or reference biomass estimates and the uncertainty about stock boundaries. Also of concern is the regular overfishing of current catch limits, and the lack of a management plan. Bottom trawling impacts on seabed habitats and communities is concerning, as is seabird, fur seal, and non-target fish bycatch associated the fisheries in which this species is caught.

The best available information to Fisheries NZ, comprising CPUE and trawl survey information, indicates an increase in abundance for these stocks which may support an increase to TAC and TACCs for these stocks. The Catch Balancing Review Process recommended that the TAC of both stocks should be reviewed if supported by the information available.

It is my contention that due to the aforementioned reasons the catch should not be increased, but banned.

Black cardinalfish CDL 5

Black cardinalfish is a slow growing, long-lived (over 100 years) deepwater species and is the only cardinalfish that reaches a marketable size. It is common off the east coast of the North Island at depths of 300 to 800m and is caught in association with alfonsino around seamounts, and orange roughy. Black cardinal fish has the lowest ecological ranking (worst choice) out of all New Zealand seafood, alongside some orange roughy stocks.

Black cardinalfish is caught by bottom trawling. The concerns of the fishery include the damage done to seamounts and hill features by bottom trawling, the bycatch of protected corals (e.g. black and stony corals) and deepwater sharks. Also of concern are the declining catch rates in the main fishery, the unknown state of many stocks and the unsustainability of East Coast North Island and Chatham Rise fisheries, where stocks have been estimated to be just 12% of the original, unfished population size. About 79 seabirds are estimated to be caught annually in deepwater fisheries (orange roughy, oreos and black cardinal fish) including Salvin's, Chatham Islands and white-capped albatross. No fur seal captures were observed in the deepwater fishery where cardinalfish are caught. The limited research, lack of an operational management plan and the unknown sustainability of the current catch limit or recent catches are also of concern.

Fisheries New Zealand is proposing an increase to the TAC and TACC based on annual catch over the most recent ten years.

It is my contention that due to the aforementioned reasons the catch should not be increased, but banned.

Rubyfish RBY 4

This very long-lived (90 years or more), slow growing fish is found from mid- to deepwater, where they school over the seafloor and off deepwater banks and reefs. Normally a southern ocean species, in New Zealand rubyfish prefer the warmer northern and central waters and are most

common at depths of 200 to 400m. Rubyfish are caught throughout the year, mainly as bycatch in trawl fisheries for alfonsino, gemfish, barracouta, hoki and jack mackerel. There is also a developing target trawl fishery. At least a third of recent annual catches were from targeted midwater trawling fished close to the bottom.

Rubyfish is mainly caught as bycatch in bottom trawl fisheries with some targeted fishing. The concerns over this fishery include the lack of some basic biological information about rubyfish, the absence of directed research, the lack of a quantitative stock assessment and, as a result, the unknown sustainability of recent catch levels. Also of concern is the lack of a management plan. Non-target fish bycatch (including marine mammals and seabirds) and bottom trawl impact on seabed communities which include coral and other bycatch are also of concern.

Fisheries New Zealand is proposing to increase the TAC and TACC based on the most recent 5 years of catch.

It is my contention that due to the aforementioned reasons the catch should not be increased, but banned.

Frostfish FRO 3, 4, 7, 8 and 9

This relatively short-lived species is widely distributed around the world. In New Zealand it is normally found over the outer shelf in waters 200-500m deep. It is mainly caught as bycatch (more than 90%) in trawl fisheries for jack mackerel and hoki, and to a lesser extent in the arrow squid, barracouta and gemfish fisheries. Half are caught off the West Coast of the South Island and Taranaki Bight in mid-water trawl fisheries.

Frostfish are caught by bottom trawling. There are concerns over the benthic impact of bottom trawling. Other concerns include the lack of research (including the absence of some basic biological information), the unknown sustainability of recent catches and the uncertainty about stock structure plus the lack of a management plan. As a bycatch species of other fisheries, marine mammals, non-target fish and seabird bycatch are also serious concerns. It is estimated that 192 fur seals are captured in the hoki trawl fishery (5 year average), one observed nationally critical New Zealand sea lion capture, about 1420 seabirds a year, including cryptic species such as salvins, southern Buller's albatross and white-capped albatross, sooty shearwater, white-chinned petrel, and cape petrel. Other bycatch species include vulnerable deepwater sharks, skates and some other elasmobranchs. In the jack mackerel fishery there is an estimated capture of 25 common dolphins per year (5-year average) and six New Zealand fur seals per year. The fishing area may also overlap with the offshore range of Maui's dolphins, posing a possible risk to this critically endangered species.

Fisheries NZ propose to redistribute the TAC and TACC across the 5 quota management areas to better reflect stock distribution.

It is my contention that due to the aforementioned reasons the catch should be banned

Snapper and Gurnard SNA 7, GUR 7

Snapper are a slow growing, long-lived (up to 60 years) member of the sea bream family, and is one of the largest and most valuable coastal fisheries in New Zealand. It is common around the North

Island and upper South Island and is mainly caught by bottom longlining or trawling operations, generally at depths of 10-100 metres.

All snapper stocks have been historically overfished and some are still being overfished. None of the stocks are at the fishing management target (40% of the unfished biomass). A snapper management plan has been recently released for SNA 1 region (North Island east coast from East Cape to Cape Reinga) but since it was released no management action or restrictions have been put in place to help rebuild the snapper 1 region stocks. Snapper is caught using bottom trawling and longlining. Of concern for bottom trawl is the impacts to the seabed, sediment redistribution, risk of killing critically endangered Maui's dolphins when fishing on the west coast of the North Island outside of restricted areas and other non-target fish bycatch. Of concern for longlining is seabird bycatch: in area 1 this includes the globally threatened black petrel. The longline fishing industry has been focused on taking action to reduce its seabird bycatch.

Gurnard are a relatively short-lived widespread fish. It is a major bycatch of inshore trawl fisheries for red cod, flatfish and jack mackeral and is directly targeted by longline and set net.

On the east coast of the South Island threatened Hector's Dolphins have been caught in the associated trawl fishery.

Fisheries New Zealand invited all sectors to participate and contribute to the development of management options for snapper through a series of workshops, as part of the review of SNA 7 and GUR 7. Workshop participants considered that an increase in the TAC and TACC and maintaining the current recreational allowance (option 3) would provide benefits in terms of the overall value of the fishery.

Gurnard catch continues to track above previous rates as a potential indicator of high abundance. The current stock status of gurnard, very likely (>90% probability) to be at or above target, and increasing catch trends suggest a potential utilisation opportunity for gurnard.

It is my contention that for both species, due to the aforementioned reasons, the catch using bottom trawling should not be increased, but banned. The catch for long-line fishing should only be allowed to continue (without increase) if the longline fishery is shown to have reduced its seabird bycatch.

Gemfish SKI 1 and 2

This relatively long-lived slender fish is found in a wide depth range of between 50 and 550m, but is sometimes found as deep as 800m. They are usually caught from inshore to middle-depth waters by trawling.

Gemfish are caught by bottom trawling. A significant level of habitat and therefore ecological damage is caused by bottom trawling and a range of fish is caught as bycatch. New Zealand fur seal and sea bird bycatch is also associated with fisheries in which gemfish is caught as bycatch. Annual catches and catch rates have declined dramatically since peaking at over 8,000 tonnes in 1985-86, due to over-fishing combined with low recruitment, poor state of the stocks (about 22% of the original, unfished stock size) and annual landings being in the hundreds of tonnes during the last ten years. There is also no management plan for this species.

Fisheries NZ note that between 1997 and 2001 the TAC for both SKI 1 and SKI 2 was reduced by 81% following evidence of low abundance in the fishery. An updated CPUE analysis for both stocks in May

2020 indicates that abundance has increased and is likely to increase further over the next 5 years, suggesting that an increase to the TAC may be warranted. There is currently no recreational bag limit for SKI 1 and SKI 2 and as part of the consultation Fisheries NZ are inviting initial feedback on whether Fisheries New Zealand should investigate introducing one as an additional management control to ensure sustainability in future years.

It is my contention that due to the aforementioned reasons the catch should not be increased, but banned and that a recreational bag limit be imposed.

Kingfish KIN 2 3, 7 & 8

Kingfish is an important predatory fish rarely found south of the Cook Strait. Kingfish can form schools of up to several hundred and are caught using set nets, longlines, some trawl bycatch and angling. Of concern for longlining is seabird bycatch. On the east coast of the South Island threatened Hector's Dolphins have been caught in set nets. On the west coast of the North Island critically endangered Maui's Dolphins have also been caught in set nets.

For all kingfish stocks under review, Fisheries New Zealand considers the current TAC and allowances are likely to unnecessarily constrain use for all sectors and are imposing unnecessary costs on the commercial sector and are proposing an increase in the current TAC and allowances.

It is my contention that due to the aforementioned reasons the catch using set nets should not be increased, but banned. The catch for long-line fishing should only be allowed to continue (without increase) if the longline fishery is shown to have reduced its seabird bycatch.

Blue cod BCO 5

Blue cod is an endemic bottom dwelling species that is relatively common throughout New Zealand but is most abundant south of Cook Strait.

Blue cod is caught using bottom trawls and pots. Potting is the better method than trawling, with less environmental impact such as benthic impact and protected bycatch. Other concerns are the unknown sustainability of current catch limits, which are significantly greater than yield estimates based on past average catches, the combined commercial and recreational catches, plus limited research. There are concerns over the impact of bottom trawling on long-lived, slow-growing fragile corals and sponges. Large and heavily baited pots can also damage seafloor species when dropped on sensitive habitats.

Fisheries NZ notes that a new stock assessment for BCO 5 suggests the stock is below the management target of 40% B0. Options are proposed to reduce the TAC to move the stock towards the management target. The recreational allowance is also adjusted in line with new, more reliable, estimates of recreational catch.

It is my contention that due to the aforementioned reasons the catch using bottom trawls should not be decreased, but banned. The catch for potting should only be allowed to continue (with decreased TAC) if the potting fishery is shown to have reduced damage to seafloor species.

Rig SPO 2

Rig is a relatively long-lived (50+ years) and slow growing shark species that is late to mature. Rig is caught by set net and trawl. Of concern is the use of indiscriminate set nets in coastal waters as they pose a risk to critically endangered Maui's dolphin and threatened Héctor's dolphins and have been known to kill these dolphins. Rig fisheries also kill seabirds and other marine mammals.

Fisheries NZ considers a small increase to the TAC and TACC is appropriate, and 2 options are proposed to reflect the increase in biomass.

It is my contention that due to the aforementioned reasons the catch should not be increased, but banned.

Sea perch SPE 9

Sea perch is a moderately long lived fish caught by trawling as a bycatch in the hoki and red cod fisheries, and by longline. I have already discussed the demerits of both bottom trawling and longline fishing elsewhere in this submission.

Fisheries NZ advise that there may be an opportunity to provide for increased utilisation by making a small increase to the SPE 9 TACC, based on the increasing trend in catch.

It is my contention that due to the aforementioned reasons the catch using bottom trawling should not be increased, but banned. The catch for long-line fishing should only be allowed to continue (without increase) if the longline fishery is shown to have reduced its seabird bycatch.

South east coast multi-species GUR 3, LEA 3, MOK 3, SPO 3

The species concerned are blue moki, leatherjacket, gurnard, and rig. I have already discussed gurnard and rig elsewhere in my submission.

Blue moki is a comparatively long-lived species found in shallow waters. Landings have declined since the mid-1990s when it was introduced to the Quota Management System (QMS). This species spawns between East Cape and Mahia, and is culturally important for East Cape/Cape Runaway iwi (Maori tribes).

Blue moki is caught by set net and bottom trawling. Set nets have a lower benthic impact and fish bycatch than bottom trawling. There are concerns over limited research, lack of a management plan, and the unknown status of stocks and population size. Of concern with trawling is the benthic impact and bycatch of marine mammals and seabirds. Depending on where set nets are used they can also have both seabird and marine mammal bycatch of concern.

Leatherjacket or creamfish is a relatively small coastal species found throughout New Zealand, but largely caught off the South Island. Most of the catch is taken as bycatch in a range of trawl fisheries mainly targeting trevally, red gurnard and snapper but in recent years it has also been caught in some fisheries targeting squid.

Leatherjacket is caught using bottom trawls. Uncertainty about the state of the stocks, the lack of a stock assessment, limited research and no management plan are of concern. Bycatch of sharks and seabirds in associated fisheries is also of concern: inshore trawl fisheries are estimated to capture

4370 seabirds per year, including cryptic mortality. There are impacts on seafloor habitats when caught with bottom trawl gear.

Fisheries NZ note that surveys, along with catch and other information from the fishery, suggest the abundance of blue moki, leatherjacket, gurnard, and rig has increased and that there may be an opportunity for increased utilisation, and propose an increase in the TAC.

All of the species concerned are caught using trawl and/or set net and in the case of gurnard also by longline.

It is my contention that due to the aforementioned reasons the catch using bottom trawling and set net should not be increased, but banned. The catch for long-line fishing (gurnard) should only be allowed to continue (without increase) if the longline fishery is shown to have reduced its seabird bycatch.

Stargazer STA 7

Stargazer or monkfish is actually one of a few species of stargazer in New Zealand. The giant stargazer is widespread in New Zealand coastal waters between 50 and 500m, living on or partially buried in soft sediments on the seabed. It is caught year round, mainly around the South Island where it is most common as bycatch in trawl fisheries targeting red cod, tarakihi, flatfish, barracouta and scampi. It is also caught as bycatch in some deepwater fisheries.

The absence of quantitative stock assessments, uncertainty over stock boundaries, unknown sustainability of some catch levels and limits and the lack of a management plan are of concern. Also of concern is the habitat destruction caused by bottom trawling, bycatch of skates, plus the non-target fish, seabirds and marine mammal bycatch associated with other fisheries in which stargazer is caught.

Fisheries NZ note that the recent (2019) West Coast South Island trawl survey shows biomass indices are close to the highest level in the series, suggesting abundance is high and an opportunity for a modest increase in utilisation and propose an increase in the TAC.

It is my contention that due to the aforementioned reasons the catch should not be increased, but banned.

Organisation: Fisheries New Zealand Email: FMSubmissions@mpi.govt.nz

Date: 01 July 2020.



Submission: Review of sustainability measures for 1 October 2020 - Scampi (SC1), Orange Roughy (ORH3B), Frostfish (FRO 3,4,7,8,9), Black Cardinalfish (CDL 5), Gemfish (SKI 1 &2), Kingfish (KIN 2,3,7 & 8), Porae (POR 1), Sea Perch (SPE 9).

General Introduction

- 1. Our Seas Our Future ("OSOF") is a not-for-profit- organisation that aims to protect New Zealand's coastal and marine ecosystems through advocacy, education, and environmental stewardship, ensuring that they are managed sustainably and protected for future generations.
- 2. OSOF supports the Governments need to review sustainability measures for significant fisheries.
- 3. OSOF welcomes the opportunity to comment on the Fisheries New Zealand submission on the review of sustainability measures (1 October 2020) for 5 Stocks including Scampi, Orange Roughy, Frostfish, Black Cardinalfish, Gemfish, Kingfish, Porae and Sea Perch.
- 4. preferred options are as follows:
 - 1. SC1 none of the options
 - 2. ORH3B none of the options
 - 3. CDL 5 option 1
 - 4. FRO 3,4,7,8,9 Option 1
 - 5. SKI 1 & 2 Option 1
 - 6. KIN 2,3,7 & 8 None of the options
 - 7. POR 1 Option 1

Our Submission

1. SCAMPI (SC1)

Which option do you support for revising the TAC and allowances? Why?

None of the options.

Why? There is currently no customary Māori allowance incorporated into the models that Fisheries New Zealand are proposing for public consultation. Fisheries New Zealand cannot consider that the proposals for SCI 1 to be generally consistent with objectives of these two lwi Fisheries Forum Plans, as stated in the document.

If you do not support any of the options listed, what alternative(s) should be considered? Why?

Given the COVID19 disruption to services the opportunity for input from the Iwi Fisheries Forums has been impacted. Although it is stated that any further input will be included in the final advice and recommendations provided to the Minister, this information needs to be available in the public consultation document.

2. ORANGE ROUGHY (ORH 3B)

Which option(s) do you support for revising the TACs and allowances? Why?

None.

The status quo ought to be maintained and neither of Options 1 or 2 should be adopted.

Before increasing the TACs and allowances it would be better to wait until the current biomass reaches at least 40% B0 given that the management target is 30-50% B0. The 2020 assessment estimated the stock to have increased to 36% B0. This is towards the lower end of the management target of 30 - 50%B0.

The biomass is not estimated to reach the median value of 40% B0 until 2028.

Further, the fact that the acoustic survey for the Chatham Rise orange roughy stocks which was scheduled for winter 2020 has not been able to have been performed reduces the ability to test whether the catch limit increases implemented since 2017 are having a different impact on biomass than projected. This results in increased uncertainty in the projections and ongoing sustainability of any catch limit increases. So it is best to maintain the status quo at least until the acoustic survey results are obtained.

Before increasing the TACs and allowances it would be better to wait until the current biomass reaches at least 40% B0 given that the management target is 30-50% B0.

If you do not support any of the options listed, what alternative(s) should be considered? Why?

Please see the answer to question 1 above.

Are the allowances for other sources of mortality appropriate? Why?

Yes.

Other sources of mortality, such as loss due to ripped nets, are not likely to cause mortality greater than 5% of the TACC.

3. BLACK CARDINALFISH (CDL 5)

Which option(s) do you support for revising the TAC? Why?

Option 1.

It may very well not be sustainable to increase the TAC greater than the planned 1 tonne as per Option 1. This is because CDL 5 is a low knowledge stock, and there is little information with which to reliably estimate stock status. As such, the stock status and sustainability of CDL 5 is unknown. There is no stock assessment for CDL 5.

If you do not support any of the options listed, what alternative(s) should be considered? Why?

N/A

Are the allowances for customary fishing appropriate? Why?

Yes.

There is no reported customary catch in CDL 5, and the current allowances for customary and recreational fishing are appropriately set at zero. As there is no evidence to the contrary, it is appropriate to retain these settings.

Are the allowances for other sources of mortality appropriate? Why?

Yes.

An allowance of 1 tonne for other sources of mortality is appropriate because it is logical that in the course of CDL 5 being caught as bycatch fish may well be lost due to escaping through trawl net

mesh and subsequently dying from injuries, accidental loss from lost or ripped trawl net cod-ends, predation, and illegal take.

4. FROSTFISH (FRO 3,4,7,8,9)

Which option(s) do you support for revising the TACs and allowances? Why?

Option 1.

The rationale for Option 1 is that the original QMAs were created on the basis of administrative units of management: one QMA for each fishery management area. Recent catch suggests that the current TACs are not aligned with the distribution of the stock. The intention of the proposal is to align TACs with the likely level of abundance in each management unit.

In the absence of information indicating ongoing customary Māori and recreational catches of frostfish, it is appropriate to retain all existing customary Māori and recreational allowances.

The proposed changes for the allowances for other mortality caused by fishing are appropriate.

This is because a known issue with frostfish relates to how they are processed. Being a long fish, up to 1.5m in length, they do not fit well in the pans in which fish are packed and frozen. Cutting them to fit in pans has been known to result in some fish not being processed in accordance with the relevant processed state, which effectively results in underreporting of catch.

Under Option 1, the allowance for other sources of mortality would be set at 2% of the TACC for all stocks. This is consistent with the approach taken for other deepwater species that have a longer body shape such as barracouta and ling.

If you do not support either of the options listed, what alternative(s) should be considered? Why?

N/A

Are the allowances for customary fishing appropriate? Why?

Yes.

In the absence of information indicating ongoing customary Māori catches of frostfish, it is appropriate that Fisheries New Zealand proposes to retain all existing customary Māori allowances.

We ask tangata whenua to provide any additional information you may have on customary catch.

Are the allowances for recreational fishing appropriate? Why?

Yes.

In the absence of information indicating ongoing recreational catches of frostfish, it is appropriate that Fisheries New Zealand proposes to retain all existing recreational allowances.

Are the allowances for other sources of mortality appropriate? Why?

Yes. The proposed changes for the allowances for other mortality caused by fishing are appropriate.

This is because a known issue with frostfish relates to how they are processed. Being a long fish, up to 1.5m in length, they do not fit well in the pans in which fish are packed and frozen. Cutting them to fit in pans has been known to result in some fish not being processed in accordance with the relevant processed state, which effectively results in underreporting of catch.

Under Option 1, the allowance for other sources of mortality would be set at 2% of the TACC for all stocks. This is consistent with the approach taken for other deepwater species that have a longer body shape such as barracouta and ling.

5. **GEMFISH (SKI 1 & 2)**

Which option(s) do you support for revising the TACs and allowances? Why?

Option 1.

It would be best to wait until the next fully quantitative stock assessment for the combined SK1 and SK2 stocks is conducted. Then there will be sufficient information upon which to base a decision whether to increase the catch limits. At present there is insufficient information upon which to base such decisions.

It is not known whether the stock has reached or exceeded the target biomass of 40% BO.

The most recent fully quantitative stock assessment for the combined SKI 1 and SKI 2 stocks was conducted in 2008.

No single model was preferred and as a result, the biomass of the combined SKI 1 and SKI 2 stock was estimated in 2006 to be at 32% B0 (2006YCS2000) and 26% B0 (2006YCS2001), and in 2007 to be at 22% B0 (2007YCS2003) based on the three models used.

The fact that the 2020 CPUE analysis of mixed sub-adult/adult gemfish taken by the tarakihi target trawl fishery indicates that relative abundance of young gemfish has increased at least threefold since 2007, and the fact that this is reflected in increases in catch seen in both commercial and recreational fisheries, does not comprise sufficient information upon which to base a decision to increase catch limits. Instead there needs to be a fully quantitative stock assessment for the combined SK1 and SK2.

If you do not support any of the options listed, what alternative(s) should be considered? Why?

N/A

Are the allowances for customary fishing appropriate? Why?

Yes.

Customary catch in SKI 1 and SKI 2 is highly uncertain. Therefore it is appropriate that the customary allowances be retained.

We ask tangata whenua to provide any additional information you may have on customary catch.

Are the allowances for recreational fishing appropriate? Why?

No. The increase in the allowances for recreational fishing for Options 2 and 3 regarding SK1 are not appropriate.

It would be best to wait until the next fully quantitative stock assessment for the combined SK1 and SK2 stocks is conducted. Then there will be sufficient information upon which to base a decision whether to increase the catch limits. At present there is insufficient information upon which to base such decisions.

The fact that there has been increased utilisation from the recreational sector is not sufficient information upon which to base a decision to increase the catch limits.

Do you agree with the proposal to consider introducing a recreational bag limit for SKI 1 & SKI 2? Why?

Yes. A recreational bag limit should be set for SKI 1 and SKI 2.

The proposal to introduce a recreational bag limit aims not to restrict current recreational catch, but rather to allow for the best current estimate of recreational catch while ensuring that gemfish is able to continue to be readily accessed by the recreational sector in future years.

Do you have any suggestions on options that should be considered for the bag limit?

No.

Are the allowances for other sources of mortality appropriate? Why?

No. The increase in the allowances for other sources of mortality for Options 2 and 3 are not appropriate.

It would be best to wait until the next fully quantitative stock assessment for the combined SK1 and SK2 stocks is conducted. Then there will be sufficient information upon which to base a decision whether to increase the catch limits. At present there is insufficient information upon which to base such decisions.

6. KINGFISH (KIN 2, 3, 7 & 8)

What management target do you think should be set for kingfish stocks? Why?

40% BO

The management target for most species of fish is usually set at 30% - 50% BO. 40% BO is the average point of the usual target.

Which option(s) do you support for revising the TACs and allowances? Why?

<u>KIN 1</u>

TAC, TACC, customary Maori allowance, recreational allowance and other sources of mortality

None of the options.

There should be no increase to the catch limits for KIN 2.

This is because the bottom trawl indices showed a decrease from 2016 to 2019. At present the stock is not shown to be increasing in number.

<u>KIN 3</u>

TAC, TACC, customary Maori allowance, recreational allowance and other sources of mortality

None of the options.

There should be no increase to the catch limits for KIN 3.

This is because there is not enough information known about the status of the stock upon which to base increases in the catch limits.

Standardised CPUE indices have not been developed for KIN 3.

Catch data alone is used to monitor the stock and the best available information comes from commercial landing records. As kingfish are principally taken as bycatch by commercial fishers, and catches have been small until recently, there are no accepted reference points to determine the status of KIN 3 in relation to targets, and a level of stock biomass that can support harvest of the maximum sustainable yield (BMSY) is not known.

<u>KIN 7</u>

TAC, TACC, customary Maori allowance, recreational allowance and other sources of mortality

None of the options.

This is because the population of KIN 7 is not sufficiently stable upon which to base the proposed radical increases in catch limits.

Figure 10, the standardised CPUE index for kingfish (KIN 7 & 8) catches by midwater trawl fleet targeting jack mackerel between the 2004/05 and the 2018/19 fishing years, shows that in 2018 the volume of catch was much lower than for the years of 2016, 2017 and 2019.

KIN 8

TAC, TACC, customary Maori allowance, recreational allowance and other sources of mortality

None of the options.

This is because the population of KIN 8 is not sufficiently stable upon which to base the proposed radical increases in catch limits.

Figure 10, the standardised CPUE index for kingfish (KIN 7 & 8) catches by midwater trawl fleet targeting jack mackerel between the 2004/05 and the 2018/19 fishing years, shows that in 2018 the volume of catch was much lower than for the years of 2016, 2017 and 2019.

If you do not support any of the options listed, what alternative(s) should be considered? Why?

KIN 2

Status quo.

See above for reason.

KIN₃

Status quo.

See above for reason.

<u>KIN 7</u>

50% increase only regarding all catch limits.

Based on the data shown by Figure 10, this level of increase would be sustainable. The best available information estimates that the biomass of KIN 7 has increased considerably since the TAC was last reviewed, with biomass anticipated to increase at current catch levels.

KIN 8

30% increase only regarding all catch limits.

Based on the data shown by Figure 10, this level of increase would be sustainable. The best available information estimates that the biomass of KIN 8 has increased considerably since the TAC was last reviewed, with biomass anticipated to increase at current catch levels.

If TACs are increased do you support a proportional increase in allowances? Why?

No. An increase in an allowance does not have to be proportional.

This issue is particularly pertinent in southern regions where estimated recreational catches of kingfish have not increased at the same rate as those of commercial catches. The management approach taken for KIN 3 and KIN 7 upon introduction to the QMS, was that commercial catches should be managed to unavoidable bycatch levels only. Setting the TACC of KIN 7 at the current level of unavoidable bycatch, and retaining the current proportional allocation of the TAC would require increasing the recreational allowance to almost three times the estimated recreational take. Therefore, setting the TACC so as to provide for current levels of unavoidable bycatch, whilst not over providing for the recreational sector would require a redistribution of the TAC.

In addition, increased amounts of kingfish are being taken for customary use on commercial vessels (particularly in KIN 8) which might also indicate that the current proportional allocation is no longer appropriate.

Are the allowances for customary fishing appropriate? Why?

KIN₂

None of the options.

There should be no increase to the customary fishing limit for KIN 2.

This is because the bottom trawl indices showed a decrease from 2016 to 2019. At present the stock is not shown to be increasing in number.

KIN₃

Yes.

This is because the customary fishing allowance is not proposed to increase. The status quo is to remain.

KIN 7

None of the options.

This is because the population of KIN 7 is not sufficiently stable upon which to base the proposed radical increases in catch limits.

Figure 10, the standardised CPUE index for kingfish (KIN 7 & 8) catches by midwater trawl fleet targeting jack mackerel between the 2004/05 and the 2018/19 fishing years, shows that in 2018 the volume of catch was much lower than for the years of 2016, 2017 and 2019.

Instead, there ought to be a 50% increase only regarding the customary fishing limit.

Based on the data shown by Figure 10, this level of increase would be sustainable. The best available information estimates that the biomass of KIN 7 has increased considerably since the TAC was last reviewed, with biomass anticipated to increase at current catch levels.

KIN 8

None of the options.

This is because the population of KIN 8 is not sufficiently stable upon which to base the proposed radical increases in catch limits.

Figure 10, the standardised CPUE index for kingfish (KIN 7 & 8) catches by midwater trawl fleet targeting jack mackerel between the 2004/05 and the 2018/19 fishing years, shows that in 2018 the volume of catch was much lower than for the years of 2016, 2017 and 2019.

Instead, there ought to be a 30% increase only regarding the customary fishing limit.

Based on the data shown by Figure 10, this level of increase would be sustainable. The best available information estimates that the biomass of KIN 8 has increased considerably since the TAC was last reviewed, with biomass anticipated to increase at current catch levels.

We ask tangata whenua to provide any additional information you may have on customary catch.

Are the allowances for recreational fishing appropriate? Why?

KIN₂

None of the options.

There should be no increase to the recreational fishing limit for KIN 2.

This is because the bottom trawl indices showed a decrease from 2016 to 2019. At present the stock is not shown to be increasing in number.

KIN 3

Yes.

This is because the recreational fishing allowance is not proposed to increase. The status quo is to remain.

<u>KIN 7</u>

None of the options.

This is because the population of KIN 7 is not sufficiently stable upon which to base the proposed radical increases in catch limits.

Figure 10, the standardised CPUE index for kingfish (KIN 7 & 8) catches by midwater trawl fleet targeting jack mackerel between the 2004/05 and the 2018/19 fishing years, shows that in 2018 the volume of catch was much lower than for the years of 2016, 2017 and 2019.

Instead, there ought to be a 50% increase only regarding the recreational fishing limit.

Based on the data shown by Figure 10, this level of increase would be sustainable. The best available information estimates that the biomass of KIN 7 has increased considerably since the TAC was last reviewed, with biomass anticipated to increase at current catch levels.

KIN₈

None of the options.

This is because the population of KIN 8 is not sufficiently stable upon which to base the proposed radical increases in catch limits.

Figure 10, the standardised CPUE index for kingfish (KIN 7 & 8) catches by midwater trawl fleet targeting jack mackerel between the 2004/05 and the 2018/19 fishing years, shows that in 2018 the volume of catch was much lower than for the years of 2016, 2017 and 2019.

Instead, there ought to be a 30% increase only regarding the recreational fishing limit.

Based on the data shown by Figure 10, this level of increase would be sustainable. The best available information estimates that the biomass of KIN 8 has increased considerably since the TAC was last reviewed, with biomass anticipated to increase at current catch levels.

Are the allowances for other sources of mortality appropriate? Why?

KIN 2

None of the options.

There should be no increase to the other sources of mortality limit for KIN 2. This is because the bottom trawl indices showed a decrease from 2016 to 2019. At present the stock is not shown to be increasing in number.

KIN 3

None of the options.

There should be no increase to the other sources of mortality limit for KIN 3. This is because there is not enough information known about the status of the stock upon which to base increases in the catch limits.

Standardised CPUE indices have not been developed for KIN 3.

Catch data alone is used to monitor the stock and the best available information comes from commercial landing records. As kingfish are principally taken as bycatch by commercial fishers, and catches have been small until recently, there are no accepted reference points to determine the status of KIN 3 in relation to targets, and a level of stock biomass that can support harvest of the maximum sustainable yield (BMSY) is not known.

KIN₇

None of the options.

This is because the population of KIN 7 is not sufficiently stable upon which to base the proposed radical increases in catch limits.

Figure 10, the standardised CPUE index for kingfish (KIN 7 & 8) catches by midwater trawl fleet targeting jack mackerel between the 2004/05 and the 2018/19 fishing years, shows that in 2018 the volume of catch was much lower than for the years of 2016, 2017 and 2019.

Instead, there ought to be a 50% increase only regarding the other sources of mortality limit.

Based on the data shown by Figure 10, this level of increase would be sustainable. The best available information estimates that the biomass of KIN 7 has increased considerably since the TAC was last reviewed, with biomass anticipated to increase at current catch levels.

KIN 8

None of the options.

This is because the population of KIN 8 is not sufficiently stable upon which to base the proposed radical increases in catch limits.

Figure 10, the standardised CPUE index for kingfish (KIN 7 & 8) catches by midwater trawl fleet targeting jack mackerel between the 2004/05 and the 2018/19 fishing years, shows that in 2018 the volume of catch was much lower than for the years of 2016, 2017 and 2019.

Instead, there ought to be a 30% increase only regarding the other sources of mortality limit.

Based on the data shown by Figure 10, this level of increase would be sustainable. The best available information estimates that the biomass of KIN 8 has increased considerably since the TAC was last reviewed, with biomass anticipated to increase at current catch levels.

7. PORAE (POR 1)

Which option(s) do you support for revising the TACs and allowances? Why?

Option 1.

This is because the low level of information available for POR 1 presents some risk in terms of the ability to monitor the fishery and assess sustainability risks over time.

Pōrae is a low knowledge stock, with limited information available to assess stock status. The only available information is trends in catch. There has been no stock assessment of pōrae to determine the biomass that can support the maximum sustainable yield, and the reference and current biomass are unknown for POR 1. Projections of biomass for POR 1 are currently unknown, given the limited information available on stock status.

There are risks associated with making an additional amount of POR 1 TACC available in that increased fishing effort could lead to localised depletion of pōrae stocks. It is acknowledged that even small risks may be exacerbated by the biological characteristics of pōrae, such as high longevity, limited habitat and resident behavior, which suggests that it may be slow to recover. Given that pōrae is taken primarily as bycatch, catch levels depend largely on activity in other fisheries.

The catch in POR 1 has not exceeded the current TACC to a sufficient degree which would justify increasing catch limits beyond the status quo. Commercial catch in POR 1 has exceeded the TACC three times in the last sixteen years, and catch has fluctuated below the TACC in years where the limit was not exceeded. Recent years have seen a stabilising of catch just below the TACC, with the exception of the 2016/17 fishing year in which catch was above the TACC, and 2017/18 in which it was well below.

If you do not support any of the options listed, what alternative(s) should be considered? Why?

N/A

Are the allowances for customary fishing appropriate? Why?

The Option 1 status quo allowances for customary fishing are appropriate.

This is because while pōrae is believed to be caught by customary fishers, the amount of catch is uncertain and believed to be small. Customary non-commercial fishers are likely to catch small quantities of pōrae when targeting other species such as snapper, tarakihi and trevally, and they may be using recreational bag limits to meet their customary needs. Information held by Fisheries New Zealand on Māori customary fishing does not show any customary authorisations issued or catch for pōrae reported in POR 1.

We ask tangata whenua to provide any additional information you may have on customary catch.

Are the allowances for recreational fishing appropriate? Why?

The Option 1 status quo allowances for recreational fishing are appropriate.

This is because porae is taken in small quantities by recreational fishers in POR 1 and is typically caught when targeting other species. According to the survey, recreational catch in POR 1 more than halved between 2011/2012 and 2017/18.

Are the allowances for other sources of mortality appropriate? Why?

The Option 1 status quo allowances for other sources of mortality are appropriate.

This is because the catch in POR 1 has not exceeded the current TACC to a sufficient degree which would justify increasing the other sources of mortality limit beyond the status quo.

What other management controls should be considered for both recreational and commercial fishers? Why?

8. SEA PERCH (SPE 9)

Which option do you support for revising the TACs and allowances? Why?

Option 1, with the exception of an increase in the allowances for other sources of mortality which are discussed below.

This is because Option 1 reflects a cautious approach to management as well as the uncertainty in information on the status of the stock and therefore carries the least sustainability risk.

The current state of the stock is unknown. The best available information about the state of SPE 9 is from trends in catch. There are no estimates of current and reference biomass available for any SPE stocks in New Zealand. The status of the stock with respect to the biomass that can produce the maximum sustainable yield, is unknown. It is not known if recent catch levels are sustainable. The low level of information available on SPE 9 presents some risk in terms of the ability to monitor the fishery and assess fishery performance. Sea perch are a relatively slow growing species.

If you do not support any of the options listed, what alternative(s) should be considered? Why?

N/A

Are the allowances for customary fishing appropriate? Why?

Yes regarding Option 1.

The current allowances for customary fishing were set based on best available information of customary catch and have remained unchanged since the introduction of SPE 9 to the QMS. Customary catches of sea perch have not been reported in SPE 9 in the last five fishing years, although, reporting of customary catch is not currently mandatory across SPE 9. It is likely that Māori customary fishers utilise the provisions under recreational fishing regulations. The information on Māori customary harvest under the provisions made for customary fishing is limited.

We ask tangata whenua to provide any additional information you may have on customary catch.

Are the allowances for recreational fishing appropriate? Why?

Yes regarding Option 1.

The current allowances for recreational fishing were set based on best available information of recreational catch and have remained unchanged since the introduction of SPE 9 to the QMS. There is no current estimate for recreational catch of SPE 9 available as SPE 9 was not reported in the National Panel Survey of Marine Recreational Fishers 2017/18.

Are the allowances for other sources of mortality appropriate? Why?

No regarding Option 1. The allowances for other sources of mortality ought to be increased to 1 tonne.

This is because the landings have exceeded the TACC each year for the last 5 years, with the average catch over that period being 7.8 tonnes - 1.8 tonnes above the TACC. Therefore other sources of mortality must be taken into account because it is likely that there will have been some loss of fish regarding these landing figures.

In 2018, the Minister of Fisheries made a decision to set an allowance for all other sources of mortality caused by fishing at a minimum of 10% of the TACC for inshore stocks that are taken predominantly by trawl. Where there is no information available to quantify all other mortality to the stock caused by fishing, 10% best reflects the overall level of uncertainty in this information across all stocks in this category.

It would be appropriate regarding Option 1 to set the allowance for all other sources of mortality from fishing at 1 tonne, 10% of the proposed TACC. This would be appropriate in line with the Minister's previous decision, the biological characteristics of the stock and expected mortality of SPE 9 caused by commercial and non-commercial fishing.