

Review of Sustainability Controls for the 2017 Fishing Year

Proposals to Alter Total Allowable Catch, Allowances, Total Allowable Commercial Catch and Deemed Value Rates for Selected Fishstocks

Appendix 2: Summary of Submissions

August 2017

Contents	Page
Ainsley Calcutt	1
Allan Roy Tester	2
Aquaculture New Zealand	6
Barbara Burkhart	10
Bill Hartley – October sustainability round	11
Bill Hartley – Kaikōura section 11 fisheries closure	13
Brian Davies	14
Burkhart Fisheries Ltd	18
Chatham Islands Harvesters Forum	19
Deepwater Group Ltd	22
Denise Lander	30
Elizabeth Keys	33
Fisheries Inshore New Zealand	36
Gerald O'Rourke	47
Gregg Fishing Ltd	48
Hokotehi Moriori Trust	49
Independent Fisheries Ltd	51
Iwi Collective Partnership Jason Burkhart	52 55
Jeremy Phipps	56
John Scheerhoorn	57
Jonathan Blair Allan Tester	59
Kirk Denison	63
Kirk Denison	64
Lester Gregg	71
MacLab (NZ)	72
Marine Farming Association	75
Martina MacDonald	78
Nelson Marlborough Institute of Technology	80
Moana New Zealand	83
N & L Boyd Family Trust	85
New Zealand Sport Fishing Council	89
Ngāti Mutunga O Wharekauri Asset Holding Co Ltd	98
Nicholas Coll	100
Nigel, Janet and Geoff Lang	101
Our Fishing Future	103
Pare Hauraki Kaimoana	104
Pau3 Industry Association Incorporated	105
Paua Industry Council Ltd	116
PauaMac 4 Industry Association Incorporated	120
PauaMac 7 Industry Association	132
Peter Family	137
Phil Russ	138
Rangitāne o Wairau – Kaikōura section 11 fisheries closure	140

i

Rangitāne o Wairau – October Sustainability Round	141
Robbie Denison (Spat Supply Ltd)	143
Robert Ellis	144
Rough Waters Ltd	145
Saavid Diving Ltd	147
Southern Inshore Fisheries Ltd	150
Spearfishing NZ	168
Stephen Young	174
Talley's Group Ltd	176
TASFISH	177
Te Korowai o Te Tai o Marokura	185
Te Ohu Kaimoana	187
Te Rūnanga o Ngāi Tahu	194
Te Runanga o Toa Rangatira	195
Thomas Peter	198
Tidesong Family Trust	199
Tuhoe Te Uru Taumatua	201
Wayne Wiffen	202

From: s 9(2)(a)
To: FMSubmissions

Subject: Paua daily take MO"s for Pau 3 **Date:** Monday, 26 June 2017 7:59:55 p.m.

Hi we have a property in Gore Bay and are regular paua gatherers. We feel that 6 per private gatherer per day is plenty.

The surf does a good job of controlling it. A fishery officer is essential, as the area is becoming more well known.

Ainsley Calcutt

Ainsley Calcutt Sent from my iPhone

Allan Roy Tester Submission to:

MPI Discussion Paper 2017/17

Re: Deemed Value Review Green-Lipped Mussel (GLM9)

I have been a mussel farmer for over 30 years and the spat supply from 90 mile beach is hugely important for the mussel industry.

The industry has been recognised by Government as a priority industry on the Business Growth Agenda for its real potential to help create a more productive and competitive economy with a light touch on the environment and through its Aquaculture Strategy Government has committed to enabling the industry to reach its sustainable potential. Continued unencumbered access to a sustainable harvest of mussel spat from GLM9 is essential for this potential to be realised.

Statement of Submission

I submit that the MPI Discussion Paper 2017/17 has been written in the absence of proper background and understanding of the unique character of the GLM9 fishery or the special context within which it was brought into the QMS $_1$ ¹. I submit that the Deemed Value Guidelines do not properly apply to GLM9 and that there is a case for special consideration by the Minister.

Furthermore | submit that in order to maintain the integrity of the QMS any consideration of deemed value should be made within the terms of the unique agreement and context with which they were written

Background – the Strategic Importance of the GLM9 Fishery for Aquaculture

GLM9 is of strategic importance to the New Zealand mussel industry as it is the source of the majority of the industry's spat and therefore supports the majority of its export earnings. In a number of growing regions mussel farmers are effectively limited to using GLM9 by biosecurity conditions that preclude other major spat sources.

In areas where mussel farmers are able to utilise spat from several regions, accessing GLM9 along with other spat types ensures availability of harvest condition mussels for most of the year. This is because spat sourced from different regions fattens at different times of the year. This in turn enables the industry to support year-round employment in regional New Zealand.

The GLM9 fishery is unique. The availability of spat on beach cast seaweed at 90-Mile Beach arises from the intersection of a variety of biological and physical factors. Because a number of these factors are temporally variable, strandings of GLM9 spat, while they generally occur within a known season, are largely episodic².

¹ Primary Production Committee (2004). *Fisheries Amendment Bill (No 3) 109-1*. Report of the Primary Production Committee

² Alfaro, Andrea (2001). *Ecological Dynamics of the Green-lipped Mussel, Perna canaliculus, at Ninety Mile Beach, Northem New Zealand.* University of Auckland Doctoral Thesis.

Furthermore GLM9 spat can be seeded onto farms and held until needed, before being moved into the final grow out cycle. This provides growers with a natural means of smoothing variability in the availability of spat. As a result, growers need access to GLM9 spat whenever it is available and as such its management within the QMS was not intended to constrain this access.

The New Zealand aquaculture industry has a growth goal of \$1 billion in sales by 2025. Some of this growth is anticipated through innovation, productivity, efficiencies, new products, new markets and new species. However a good proportion of this growth is also anticipated through increasing mussel production and continued access to a proportional increase in spat supply is imperative.

There are no recognised sustainability issues associated with GLM9 as its harvest on beach-cast seaweed has no impact on further recruitment of the adult mussel population. This is because both spat and seaweed originate from south of Ahipara and drift northwards along 90 Mile Beach and then with the prevailing currents around North Cape.

This drift spat does not cycle back into the adult population, south of Ahipara. AQNZ has corresponding research available if MPI does not currently have that to hand.

Background – a Unique Fishery in the QMS

The Ministry of Fisheries brought GLM9 into the QMS in 2004 'despite there being no pressing sustainability concerns with the fishery' in order to 'provide for efficient utilisation and future development'³. Its introduction enabled repeal of one of the few remaining provisions of the Fisheries Act 1983 (the spat catching permit regime) while continuing to provide for the aquaculture industry's future needs.

It was recognised at the time that the fishery was unique and its introduction into the QMS 'required innovation given the particular characteristics of the fishery'. The Minister took the advice of the fishers and the mussel industry regarding the TACC level and recognised that 'those with an interest in the fishery are in the best position to know what catch level will provide for the most efficient use of the resource.' The TACC at that time was set 'to meet the expected demand for juvenile mussels over the next five years' (ie to 2009).

Importantly the fishery was brought into the QMS as a s14, schedule 3 stock, in recognition that the purpose of the Act would be better achieved by setting an alternative TACC rather than to Maximum Sustainable Yield. This was in the context of knowledge and research that sustainability of the fishery was not a concern.

Please refer to the explanatory note when this was listed as a schedule 3 stock that reads (which lists stocks that are managed with an alternative total allowable catch)

Another important innovation at introduction was setting a low deemed value for GLM9 in order to enable 'non-quota owners to gain access to the fishery and provide competition to quota holders. This added competition makes it more difficult for quota holders to artificially inflate the price of juvenile mussels and it would encourage quota holders to act collectively to achieve efficiencies so they remain competitive. A low deemed value helps address the concerns of some mussel farmers that the QMS could lead to quota being aggregated and GLM9 quota holders acting anti-competitively.'

A challenge for the introduction of GLM9 was 'how to measure and report juvenile mussels when they are harvested attached to seaweed'. 'The Ministry overcame this problem by requiring all fishers

³ Workman, Martin (2004); *Moving to Rights Based Management: Green-Lipped Mussel Case Study*. IIFET 2004 Japan Proceedings.

harvesting seaweed on 90 Mile Beach to report their catch using a set ratio for converting the weight of the material landed into the weight of the juvenile mussels and seaweed. This was based on the 'best estimate of the fishers' at the time, at 50%. The back ground to this was over the preceding 10 years the ratio was cyclic and had varied greatly between 10% and 90% it was agreed that from a management perspective the unit of measure be permanently set at 50% this allowed us to progress with the setting and management of the TACC level and deemed value rate. Over the last few years we have been going through a period of low ratios of mussels to seaweed however changing this ratio now will be problematic in the future when we return to a period of high ratios of mussels to seaweed

Request for Review of MPI Discussion Paper 2017/17

I request a withdrawal of section 6.1 of the MPI Discussion Paper 2017/17 as it was written in the absence of the context provided above. A number of assumptions within the GLM9 section are of particular relevance and concern:

'Landings have been variable but in recent years has increased to exceed the TACC with commercial fishers paying deemed values as a result'. This statement does not recognise the principle at introduction of providing a low deemed value to enable non-quota holders to gain access to the fishery in order to ensure secure and consistent supply of spat across the whole of the Greenshell mussel industry. It also does not recognise that fishers were still paying deemed values even when the TACC was not exceeded which further demonstrates the need to enable continued access through low deemed values regardless of the TACC.

- 1. 'However, fishers have chosen to land GLM9 mussels and spat in excess of ACE holdings, suggesting that the current deemed value settings, in relation to the reported port price, do not accurately reflect the value of the fishery to industry'. This statement also does not recognise the unique settings in which GLM9 was introduced to the QMS where MPI were mandated to manage this stock by way of varying the TACC and specifically agreed not to increase the deemed value rate.
- 2. 'No change to the TAC or TACC for GLM 9 is proposed for the 2017/18 fishing year, but ongoing intentional harvest of GLM 9 in excess of the TACC and available ACE could lead to sustainability risks in the long-term'. This statement, and others, are significant in their failure to understand the of the fishery or its introduction into the QMS. As stated above, there are no sustainability issues, risks, vulnerabilities or otherwise that are recognised or sought to be addressed through the QMS and management was never required or intended to constrain access to the Greenshell mussel industry's vital source of spat.

The Discussion Paper makes reference to the MPI Deemed Value Guidelines (2012) which are framed to manage 'most stocks', 'low value stocks' and 'highly vulnerable stocks'. They were not written with the unique GLM9 fishery in mind but do note that there are certain circumstances where it may be appropriate to depart from the principles and that MPI will outline these to the Minister on a case-bycase basis. I submit that GLM9 is such a circumstance and that the proposal should be reviewed in the context of the background provided above.

Summary

In summary | request that MPI;

- 1. Withdraw section 6.1 of the Discussion Paper 2017/17 as it does not adequately reflect the GLM9 fishery in the context of the QMS.
- 2. Reduce the deemed value rate back to the level it set to at introduction to the

QMS

3. Increase the TACC by the 11% that we over fished last year.

This would bring MPI back into line with what they are mandated to do and be a considered and responsible interpretation of the law as it stands.

This would keep the industry on a firm footing now and on into the future with MPI only having to adjust the TACC occasionally.

Yours sincerely,

Allan Tester



Aquaculture New Zealand Submission to:

MPI Discussion Paper 2017/17

Re: Deemed Value Review Green-Lipped Mussel (GLM9)

7 July 2017

Introduction

Aquaculture New Zealand (AQNZ) represents the interests of the aquaculture sector in New Zealand. This sector has significant export earnings in excess of \$400 million (total revenues in excess of \$500m) and a growth strategy with a goal of reaching \$1 billion per year in sales by 2025. The New Zealand Greenshell mussel industry makes up around 70% of that value and AQNZ's responsibilities include representing the specific interests of New Zealand's mussel farmers.

The Greenshell mussel industry directly employs more than 2,000 people primarily in regional communities, and Maori investment makes up a significant proportion of the current industry as well as its future potential, creating both cultural and economic benefits for Aotearoa. The indirect economic benefits to regional New Zealand are numerous.

The industry has been recognised by Government as a priority industry on the Business Growth Agenda for its real potential to help create a more productive and competitive economy with a light touch on the environment. Through its Aquaculture Strategy, Government has committed to enabling the industry to reach its sustainable potential. Continued unencumbered access to a sustainable harvest of mussel spat from GLM9 is essential for this potential to be realised.

This submission is lodged on behalf of the Greenshell mussel industry as the industry that relies on the unencumbered availability of GLM9 spat. It is not intended to be read as a submission from quota holders although some AQNZ shareholders do own quota. It is also not intended to undermine the QMS, rather to ensure the ongoing sustainable utilisation of the fishery for the industry.

Statement of Submission

AQNZ submits that there are no recognised sustainability issues relating to the GLM9 fishery and that the MPI Discussion Paper 2017/17 inaccurately reflects that there are. In fact, instead of being over-fished GLM9 is currently over-reported due to the inaccuracy of the current 50% spat/seaweed ratio.

AQNZ submits that it is more appropriate to:

- Consider the new research on the spat to seaweed ratio and then carry out a consultation on reviewing this ratio as appropriate under s188A
- Consider the TACC in light of the lack of sustainability issues and the ongoing and increasing need for spat to sustain and grow the Greenshell mussel

industry into the future.

• Then, as appropriate, consider the best deemed value.

Background – the Strategic Importance of the GLM9 Fishery for Aquaculture

GLM9 is of strategic importance to the New Zealand Greenshell mussel industry as it is the source of the majority of the industry's spat and therefore supports the majority of its export earnings. In a number of growing regions mussel farmers are effectively limited to using GLM9 spat by biosecurity conditions that preclude other major spat sources.

In areas where mussel farmers are able to utilise spat from several regions, accessing GLM9 along with other spat types ensures availability of harvest-condition mussels for most of the year. This is because spat sourced from different regions fattens at different times of the year. This in turn enables the industry to support year-round employment in regional New Zealand.

The GLM9 fishery is unique. The availability of spat on beach cast seaweed at 90-Mile Beach arises from the intersection of a variety of biological and physical factors. Because a number of these factors are temporally variable, strandings of GLM9 spat, while they generally occur within a known season, are largely episodic¹.

Furthermore, GLM9 spat can be seeded onto farms and held until needed, before being moved into the final grow-out cycle. This provides growers with a natural means of smoothing variability in the availability of spat. As a result, growers need access to GLM9 spat whenever it is available and as such its management within the QMS was not intended to constrain this access.

As outlined above, the New Zealand aquaculture industry has a growth goal of \$1 billion in sales by 2025. Some of this growth is anticipated through innovation, productivity, efficiencies, new products, new markets and new species. However, a good proportion of this growth is also anticipated through increasing mussel production and continued access to a proportional increase in spat supply is imperative.

There are no recognised sustainability issues associated with GLM9 as its harvest on beach-cast seaweed has no impact on further recruitment of the adult mussel population. This is because both spat and seaweed originate from south of Ahipara and drift northwards along 90 Mile Beach and then with the prevailing currents around North Cape. This drift spat does not cycle back into the adult population, south of Ahipara. AQNZ has corresponding research available if MPI does not currently have that to hand.

¹ Alfaro, Andrea (2001). *Ecological Dynamics of the Green-lipped Mussel, Perna canaliculus, at Ninety Mile Beach, Northem New Zealand.* University of Auckland Doctoral Thesis.

Background - No GLM9 Sustainability Issues

The Ministry of Fisheries brought GLM9 into the QMS in 2004 'despite there being no pressing sustainability concerns with the fishery in order to 'provide for efficient utilisation and future development². Importantly it was brought into the QMS as a s14, schedule 3 stock, in recognition that the purpose of the Act would be better achieved by setting an alternative TACC, rather than one solely dedicated to Maximum Sustainable Yield as for most other stocks. This was in the context of knowledge and research that sustainability of the fishery was not a concern. As outlined in the discussion document, for the past two years the TACC has been 'overcaught' (at its current spat/seaweed reporting ratio). There is no rationale to retain the TACC at a level that will limit access to spat for the mussel industry as there are no known sustainability concerns. Therefore, it is appropriate that the TACC be reviewed in this context.

A challenge for the introduction of GLM9 was 'how to measure and report juvenile mussels when they are harvested attached to seaweed'. The Ministry overcame this problem by requiring all fishers harvesting seaweed on 90 Mile Beach to report their catch using a set ratio for converting the weight of the material landed into the weight of the juvenile mussels and seaweed. This was based on the 'best estimate of the fishers' at the time, at 50%. However, AQNZ is aware that subsequent research is now available to MPI which should prompt a review of that ratio, and that the Fisheries Act s188A supports a setting of the ratio in consultation with appropriate bodies and persons. AQNZ submits that that a spat/seaweed review and consultation should be carried out prior to any further consideration of deemed value.

Request for Review of MPI Discussion Paper 2017/17

AQNZ requests a withdrawal of section 6.1 of the MPI Discussion Paper 2017/17 as it was written in the absence of the context provided above. A number of assumptions within the GLM9 section are of particular relevance and concern:

- 1. 'No change to the TAC or TACC for GLM 9 is proposed for the 2017/18 fishing year, but ongoing intentional harvest of GLM 9 in excess of the TACC and available ACE could lead to sustainability risks in the long-term'. This statement, and others, are significant in their failure to understand the context of the fishery or its introduction into the QMS. As stated above, there are no sustainability issues, risks, vulnerabilities or otherwise that are recognised or sought to be addressed through the QMS and management was never required or intended to constrain access to the Greenshell mussel industry's vital source of spat.
- 2. Furthermore, it is premature to make assumptions about the level of catch against the TACC without an appropriate review of the spat ratio. It may be that the total catch is currently only around half of the current TACC, in which case the deemed value would require further review as any test under

² Workman, Martin (2004); *Moving to Rights Based Management: Green-Lipped Mussel Case Study.* IIFET 2004 Japan Proceedings.

8

s75(2)(b)(v) would be quite different. It is logical then in light of new 'best available information' that a s188A spat ratio review be carried out prior to setting any new deemed value.

AQNZ can provide more information and background as necessary to assist MPI in the review.

Summary

In summary AQNZ requests that MPI;

- Withdraw section 6.1 of the Discussion Paper 2017/17 as it is premature to consider the GLM9 deemed value prior to a review of the spat ratio and the TACC
- 2. Conduct a review then consultation of the spat ratio under s188A
- 3. Consider a review of the TACC
- 4. Then reconsider the deemed value as appropriate in this up to date context.

Yours sincerely

Rebecca Clarkson

Environment Manager

3rd July 2017

Review of Earthquake-affected Fisheries 2017 Fisheries Management Ministry for Primary Industries P O Box 2526 Wellington 6011.

To whom it may concern,

Submission RE Review of Earthquake-affected Fisheries 2017.

<u>Proposed further closure for Kaikōura and Cape Campbell earthquake-affected</u> fisheries

Barbara Burkhart agrees with MPI positions upon reviewing the emergency closure within the Kaikoura and Cape Campbell Areas.

Barbara Burkhart supports Option 2 of the management Action plan that being to —

Replace the emergency closure with a closure under section 11 of the Fisheries Act 1996.

Barbara Burkhart also supports MPI using available resources and methods to attempt to enhance the concept of the Social Responsibility Recreational and other stakeholder user's groups could contribute to the long-term sustainability of the Fisheries Assets everyone shares; especially around this area and until the science supports any further changes.

Kind Regards

Barbara	Burkhart
s 9(2)(a)	

Email your feedback on the proposed changes by 5pm on 7 July 2017 to FMSubmissions@mpi.govt.nz

From: s 9(2)
To: FMSubmissions
Subject: Review BNS3

Date: Friday, 23 June 2017 2:19:41 p.m.

We support MPI's opinion that option 3 for TACC allowances & deemed values, is the only choice to keep the rebuild of bluenose on track. Thanks, Bill.

 From:
 s 9(2)

 To:
 FMSubmissions

 Subject:
 Paua 3 & 7

Date: Friday, 23 June 2017 3:18:15 p.m.

We believe that we have to be cautious because there are so many unknowns at the moment.

With all the displaced effort, due to the effects of the quakes, option 2 (or bigger reduction),

is needed. Commercial can be managed by quota, but rec. take needs to be managed by a temporary daily

bag reduction, as lowering the TAC for rec's., does not change what the individual fisher can take.

I know this is a separate issue, & comes under rec. fishing regs., but it needs to be looked at.

Thanks, Bill.

We support the proposed extension of no take of shellfish & seaweed that we have at the moment with one modification. We ask that we have access to beach cast seaweed for our gardens.(i.e.I have to sweep the weed off our slipway, but have had mixed opinions whether I can or can't take it home. One opinion is a flat NO!, the other is, if the weed is above mean highwater, it is no longer a MPI issue, & we can take it.)It would be nice if this was clarified.

Thanks,

Bill.

From: s 9(2)
To: FMSubmissions

Subject: Review of the closure for earthquake-affected fisheries in Kaikoura and Cape Campbell

Date: Wednesday, 5 July 2017 3:24:11 p.m.

Attachments: image001.jpg

Good Morning MPI

I am a Paua 7 quota owner $^{s \ 9(2)(a)}$ and have held shares in the fishery since 1989.

As you can see, I have been involved in the fishery for many years and it saddens me to observe the current status of the fishery and the state of my investment. The recent Kaikoura earthquake and impact on the inter tidal zone has further placed pressure on our fishery.

The Minister has delivered a 66% quota cut over several years to the commercial sector, this followed multiple shelving and other industry lead initiatives.

It is my strong view that the Minister does not clearly understand the term and meaning of a "Shared Fishery".

I agree with the moratorium on the extraction of Paua from Cape Campbell to the Clarence River, however:

- 1. Commensurate with the 66% commercial quota cut
- 2. Both customary & recreational should share the reduction in the spirit of "A shared Fishery"
- 3. The coast line between Cape Campbell & Clarence be sub divided into an area with the scientifically recorded extraction shelved. A working precedent with Paua Area 5A, 5B & 5C

This would clearly remove the effort from the remainder of the Paua 7 fishery and allow quota owners to retain a future interest in their original quota holdings.

I attended the recent PauaMac7 AGM and voted to take measures to secure the future sustainability of our fishery.

I am strongly of the opinion that the Minister and his scientific team need to address some of the following key topics as components of a toolbox to manage our fishery.

- 1. Continue the project of gathering high quality fine scale & timely scientific data to support good decision making
- 2. Continue a project based fisheries compliance strategy with clear

- objectives and outcomes
- 3. Promote education in both the commercial and recreational sectors
- Commensurate with the proposed PAU7 QMS quota reduction, a reduction in the amateur daily bag limit be implemented (See below)
- 5. That the Minister by way of Regulation or a Gazette Notice prohibit the transportation of paua meat across the New Zealand border except when associated with the correct LFR documentation. (See below)
- 6. When the Minister approves Marine Reserves, MPA's or IWI Reserves, the quota yielded from this coastline shall be purchased from the open market and retired. (See note below)
- 7. Work with Regional Councils and the Minister for the Environment to better manage the impact of land use on our fishery e.g. forestry erosion. To improve land use and practices particularly with reference to forestry operations in the Marlborough Sounds and adjoin water ways.

Recreational Daily bag Limit

The impact on the fishery and cumulative tonnage annually taken by the recreational sector is now significant.

The Minister needs to de-politicalize this elephant in the corner of the room and reduce the amateur daily bag limit. Being cognizant of the several reductions and shelving's that the commercial sector have absorbed.

An elegant solution would be to mirror the Kaikoura "Te Korowai" initiative of reducing the daily limit from 10 to 6 Paua per fisher per day. Marlborough and Kaikoura are adjoining fisheries and having the same daily bag limit would remove any compliance ambiguity.

Prohibit exporting of amateur Paua take

There is anecdotal evidence that paua meat is being taken within baggage off shore by outward bound tourists.

Many are Asian and clearly have not personally gathered the seafood. The pathway to their possession is dubious.

The Minister should prohibit such activity and make such practice an offence except where appropriate documentation supplied by a licensed LFR is provided. I understand this is the case in Australia.

Spatial Depletion

I support the initiative of Marine Reserves, protected and customary areas.

When making a decision to approve, the Minister <u>must consider and be</u> responsible for the impact on the fishery and to the individual quota <u>owners</u>.

The quota supported from the affected coastline needs to be quantified and retired from the QMS by purchasing from the open market.

Other administrations have this view and even within New Zealand a legal precedents exists. E.g. The Public Works Act where by the Crown acquires land compulsorily from an entity for the common good of the community and enters into a private treaty or by way of an independent valuation to purchase said asset from the disaffected party.

Land Care and Use

There is increasing evidence that the relationship between land use and the marine environment is homogenous. In none of my readings of the MPI reports relating to our fishery does it comment on the sedimentation, water quality and turbidity.

Land use, run off, sedimentation, fresh water quality all impact on the coastal maritime environment.

Interestingly the Cawthron Institute has looked at the negative effect of sedimentation on the respiratory impact of haliotis.irs.

The Ministry for the Environment has standardized the reporting required of Regional Councils on the environment to give an national overview.

Coastal fisheries management needs to interface with the relationship of land and sea.

Summary:

I congratulate the PAUAMAC7 organization on:

- Data Loggers
- Reseeding program
- Diver training and registration
- Quota shelving

- · Variable minimum legal size limit
- Dialogue with local Iwi & recreational sectors
- Liaison with MPI and NIWA

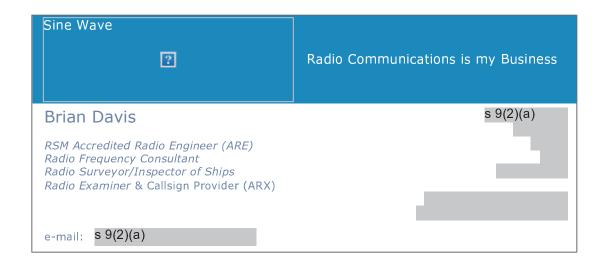
However, I strongly feel that Minister <u>needs to open his tool box more fully</u> and moderate the expectation that the commercial sector must accept all of the pain and responsibility for PAU7 fishery.

You will see that I have been involved in the Fishery for many years, attended more meetings that I can count, travelled thousands of kilometers to attend, listened to multiple experts and officials as they come and go with their circular arguments. History would not score them well.

Yours faithfully

Brian Davis

Quota Owner





28th June 2017

Review of Earthquake-affected Fisheries 2017 Fisheries Management Ministry for Primary Industries P O Box 2526 Wellington 6011.

To whom it may concern,

Submission RE Review of Earthquake-affected Fisheries 2017.

<u>Proposed further closure for Kaikōura and Cape Campbell earthquake-affected</u> fisheries

Burkhart Fisheries Ltd (BFL) agrees with MPI positions upon reviewing the emergency closure within the Kaikoura and Cape Campbell Areas.

BFL supports Option 2 of the management Action plan that being to —

Replace the emergency closure with a closure under section 11 of the Fisheries Act 1996.

BFL also supports MPI using available resources and methods to attempt to enhance the concept of the Social Responsibility Recreational and other stakeholder user's groups could contribute to the long-term sustainability of the Fisheries Assets everyone shares; especially around this area and until the science supports any further changes.

Kind Regards

Dennis Burkhart

Managing Director

C/O Fisherman's Office

s 9(2)(a)

Chatham Islands

23 June 2017

To: Sustainability Review 2017, Fisheries Management, Ministry for Primary Industries, P O Box 2526, Wellington 6011.

Re: Submission on Review of Sustainability Controls for PAU 4

This is a submission on the MPI document entitled: "Review of Sustainability Controls for 1 October 2017. Proposals to Alter Total Allowable Catch, Allowances, Total Allowable Commercial Catch and Deemed Value Rates for Selected Fishstocks. MPI Discussion Paper No: 2017/17" (the Document).

This submission is made by the Chatham Islands Harvesters Forum, which represents the majority of paua harvesters of the Chatham Islands fishery, holding >180 T of current PAU 4 ACE. The Harvesters Forum's main objective is the sustainability and now re-build of the Chatham Islands paua fishery (PAU 4). The contact person for this submission is Val Croon, s 9(2)(a)

The Harvesters Forum endorses the submission of the PauaMAC 4 Industry Association, and agrees with most points made in their submission.

Background

Over the last 10 years, measures have been put in place to improve the sustainability of the PAU4 fishery at the Chathams. These initiatives included:

- 1. Reducing catch through ACE shelving.
- 2. Spreading effort through meat weight reporting, use of UBA and spatial datalogging
- 3. Raising size limits
- 4. More accurate mapping of catch areas through data logging.

A 10- 20% quota shelving has been in place for the last four years. However, the amount being left uncaught (i.e. left in the water) is being offset by a lower meat weight being recorded this season. Because the PAU 4 fishery is reported by meat weight, not green weight as it is in other NZ paua fisheries, this lower recovery rate has the nett effect of allowing more paua to be landed. This has diminished the effectiveness of the 20% shelving.

The use of UBA was primarily introduced as a safety tool, allowing protection from great white sharks. A secondary benefit is that it allows divers to be more selective of the paua taken, and spread their effort to areas not easily reached without UBA.

An increase in size limit from 125mm to up to 132mm at Pitt Island was introduced to protect the biomass from serial depletion and give paua a longer spawning period before being harvested. This also gave a better yield-per-recruit, and allowed divers to assess progress with recruitment into the larger size class.

Datalogging has been introduced to map the fishery and give spatial CPUE. This will allow for better fine-scale management of the fishery and help the development of a Plan for this fishery.

Status of the PAU 4 Fishery

We unanimously believe that the PAU 4 fishery is in trouble, and we have encouraged a substantial shelving for next season. From the data available to us, and using the dashboard model, we calculate that a commercial harvest reduction of at least 40%, through shelving, is necessary. We agree with the Document's assertion that a reduction in the commercial catch rate is warranted. The Document explains that this is largely based on "a cautious approach ... that takes into account the anecdotal information from fishers and tangata whenua, as well as the limited quantitative data." The Document also frequently refers to "sustainability concerns". These are essentially anecdotal information. Given the Minister's responsibility to use the best available information to set a TAC, we submit that the best available information is scientific information, not anecdotal information. Accordingly, the best available scientific information is the data analysis conducted in early 2017. This analysis was accepted by the Shellfish Working Group, with considerable reservations. The analysis pointed to a need for catch reductions in PAU 4. We agree with this conclusion, as it is the best available information; but we do not agree that it is robust enough to force drastic reductions in TACC's.

Accordingly, we do not agree that the use of anecdotal information is appropriate in fisheries management, and we are concerned that any proposed TACC reductions could be subject to legal challenge. For these reasons we prefer that harvest reduction occurs through shelving rather than TACC reduction.

The Document states: "Shelving of ACE has, however, not addressed concerns that the biomass of the fishery is declining." This implies that ACE shelving is not a viable option. This is incorrect. The amount of shelving needs to increase from 10-20% to 40-50% to become effective in recovering the fishery. The benefits of the current 10-20% shelving have also been negated (at least in part) by the problems with meat weight reporting.

The Proposal

We submit the following management controls are implemented:

- 1. Agree that a Total Allowable Catch (TAC) be introduced, as proposed in the Document.
- 2. We support the proposed allowances for recreational and customary fishing and other sources of mortality caused by fishing.
- 3. We strongly support a PAU 4 harvest reduction of 40%. We prefer this 40% harvest reduction to be carried out through shelving. A harvest reduction through a 40% TACC reduction is not preferred. This is because there is insufficient scientific information to prevent legal challenge. If TACC reductions are directly imposed, then this also jeopardises the suite of additional (voluntary) management controls already in place to help recover the fishery.
- 4. We submit that, concurrent with a 40-50% shelving, a decision-rule system is developed to allow authorised management of this fishery. This could be done

- through the development of an Industry Management Plan, and eventually a Fisheries Plan, for PAU 4.
- 5. We submit that an Industry Management Plan is immediately developed. This will describe key measures to address local area and wide-scale depletion. These measures will include more effective ways of spreading effort, addressing serial depletion; shelving; rapid adjustment of catch levels; and provide stronger incentives for quota owner participation in management measures, allowing better local responsibility for the fishery.

Yours faithfully

Valentine Croon

For CHATHAM ISLANDS HARVESTERS FORUM

7 July 2017

Ms T Bock Manager Deepwater Fisheries Ministry for Primary Industries P O Box 2526 Wellington 6011

By email: tiffany.bock@mpi.govt.nz

Dear Tiffany,

DWG Submission on MPI Proposals to Change HAK 7 and ORH 3B TACCs

Deepwater Group Ltd is a non-profit company representing the interests of deepwater quota owners including the owners of 93% of HAK 7 and 95% of ORH 3B quota. This submission has been prepared on their behalf.

1. HAK 7

New Stock Assessment Accepted by MPI in 2017

A new stock assessment was accepted in 2017 with two model runs based on different biomass indices – one is based on commercial trawl CPUE and the other is based on the results from the WCSI research trawl surveys. These two indices show different trends in the HAK 7 biomass trajectory and in stock status. MPI noted in their discussion paper that both runs have been "accepted by the Deepwater Working Group (DWWG) and considered to be equally plausible".

The runs based on the trawl survey results show a decline in stock size with stability over the past nine years. The runs based on commercial CPUE show a decline with an increase during the past nine years. These are shown in the biomass trajectories from the MCMC runs in Figure 1 below.

In summary, the results from the 2017 stock assessment are:

- Trawl survey index: B_0 = 79,190 t; B_{2016} = 20,940 t; B_{2016}/B_0 = 26% B_0 (19-37%). The stock is likely to be stable in size, is very likely (>90%) to be below the target of 40% B_0 , is as likely or not (40–60%) to be below soft limit of 20% B_0 , is very unlikely (<10%) to be below hard limit of 10% B_0 .
- CPUE index: $B_0 = 92,100$ t; $B_{2016} = 46,550$ t; $B_{2016}/B_0 = 50\%$ B₀ (35-74%). The stock is likely to be increasing in size, is very likely (>90%) to be above the target of 40% B_0 , is very unlikely (<10%) to below the soft limit of 20% B_0 , is extremely unlikely (<1%) to be below the hard limit of 10% B_0 .



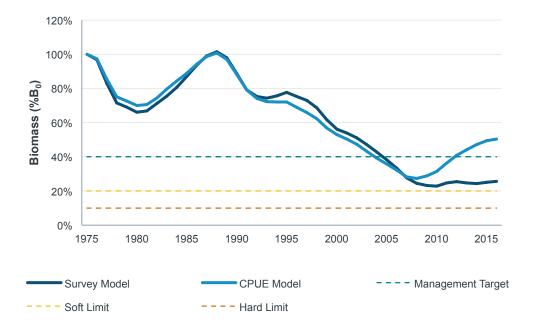


Figure 1: Biomass trajectory of HAK7 stock under each of the biomass indices in relation to the default management target (40% B_0), the soft limit (20% B_0) and the hard limit (10% B_0)

Both biomass indices have major associated issues and assumptions and neither is likely to be robustly indexing the HAK 7 stock:

- The trawl survey was not originally designed with hake as the target species and the surveys have not been covering enough of the known range of hake here, missing a substantial proportion of the grounds in the deeper water. Deeper strata were added to address this in the most recent survey (2016). Future surveys will include strata in the deeper water with the objective improving the reliability of the biomass index for HAK 7.
- The CPUE time series assumes that all included vessels behave in the same way and there is good evidence that this not the case. The hake fishery in this area is described as a 'target and avoid' fishery, where different vessels behave differently at different times. Essentially, some vessels target hake while others avoid hake and the same vessel can show these two behaviours at different times during the year. Thus, the commercial CPUE will include a mix of different fishing modes and is unlikely to be a reliable index of stock abundance.

Recent Recruitment Poor but Signs of Improvement

Recruitment during the period 2000-09 is assessed to have been below the long-term average over 1973-2009. There is evidence from the 2013 and 2016 trawl surveys and from the commercial fishery of that recruitment levels over the last three years may have been greater than during 2000-09, but it is as yet unknown how these compare with the long-term average.

There is a need to continue to monitor the strength of recruitment into this fishery and DWG has asked MPI to ensure there is adequate observer coverage to obtain the required samples from commercial catches during the 2017 and 2018 fishing seasons.



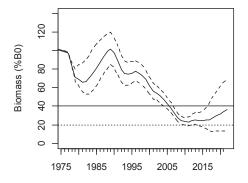
Biomass Projections

Biomass projections have been undertaken over a five-year period (i.e. 2016-21) assuming an annual catch of 4,100 t and average long-term recruitment from 1973-2009, and an annual catch of 7,700 t and average recruitment from 2000–09.

The annual catch of HAK 7 has not reached the TACC of 7,700 t since 2006-07. During the most recent 9 years the annual catch has averaged 4,144 t (ranging between 2,620 t and 6,219 t).

The results of these biomass projections are shown in the figures below (after MPI's 2017 Plenary Report) and in summary are:

- Based on the trawl survey index, there is a high probability that the stock will remain below 40% B₀,
- Based on the CPUE index, there is a high probability that the stock will remain above 40% B_θ
- If annual catches are set at 4,100 (at the recent average level) and recruitment is at the long-term average, both indices estimate the stock size will increase



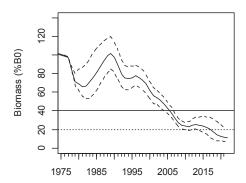
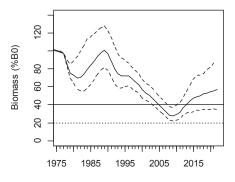


Figure 2: Trawl Survey Index: Estimated median spawning biomass trajectories (dashed lines are 95% credible intervals) as a percentage of B_0 , projected to 2021. LHS with future annual catches set at 4,100 t and average recruitment from 1973–2009. RHS with future annual catches set at 7,700 t and average recruitment from 2000–09.



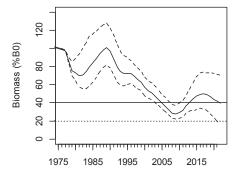


Figure 3: Commercial CPUE Index: Estimated median spawning biomass trajectories (dashed lines are 95% credible intervals) as a percentage of B_0 , projected to 2021. LHS with future annual catches set at 4,100 t and average recruitment from 1973–2009. RHS with future annual catches set at 7,700 t and average recruitment from 2000–09.



MPI have undertaken further analyses to assess two options that would minimise the risk of the stock size declining below 20% B_0 in the short term, pending new information and an updated stock assessment in 2020:

- A TACC of 4,524 t (i.e. the average annual catch over the past five years), assuming recruitment at the long-term average, and based on the trawl survey biomass index. This estimates a probability of 83% that the stock size will be >20% B_0 in 2019. This is MPI's Option 2.
- A TACC of 5,069 t set to provide 80% probability that the stock size will be >20% B_0 in 2019 assuming recruitment at the long-term average allowing for further analyses to be undertaken in 2017-18 and 2018-19. This is MPI's Option 3.

Management Commentary

The 2017 assessment is considered as having greater than usual uncertainty. The results estimate:

- The recent below average levels of recruitment <u>may</u> have resulted in a reduced stock size over recent years,
- Under the catch levels over the past nine years, the stock size is either stable or increasing

Annual catches at the level of the TACC (i.e. 7,700 t) are assessed to not be sustainable using the biomass index from the trawl surveys, and are assessed to be sustainable using the biomass index from commercial CPUE projected out to 2021.

DWG notes that the previous stock assessment for HAK 7 estimated B_{2012} to be 57.7% B_0 and the catch projections from this assessment, for the period 2012-17 estimated:

- With catches of 4,500 t, the stock status would remain above 40% B₀, increasing to 61.2% B₀
- With catches of 7,700 t, the stock status would remain above 40% B₀, decreasing to 47.4% B₀

The current management target is set at the default of $40\% B_0$.

Deterministic B_{MSY} is estimated to be 26% B_0 (in the 2012 stock assessment).

DWG notes that the HAK 7 stock is assessed (in both 2012 and 2017) to be at, or above, the level that will provide the MSY.

DWG also notes that no stock-specific analysis has been made for this fishery to estimate the appropriate management target and that such an analysis should be undertaken.

In the 2017 stock assessment, the results from the WCSI trawl surveys are driving the assessed decline in the HAK 7 stock size. DWG notes that the four surveys in the time series prior to 2016 were not optimised to sample for hake and that new strata were added in 2016 to improve sampling for hake in deeper water. These strata accounted for 29% of the hake encountered in 2016. On this basis, further information is required and these will be obtained in the next WCSI research trawl survey, scheduled for July/August 2018 and incorporated into the 2019 stock assessment.

Meantime, if annual catches remain at around 4,100 - 4,400 t (i.e. around the recent average levels) and recruitment is at the long-term average (1973-2009), the projections using either index estimate that the stock size will increase.

It is likely that recruitment during the last three years was higher than during 2000-09 but possibly not as high as the long-term average. On this premise, the stock response is likely to be between the two catchbased projections and that the stock status should improve (or at worst, stabilise) in the short-term, avoiding sustainability concerns before more information can be obtained.



Close monitoring of the HAK 7 fishery to assess recruitment is required, with appropriate, representative observer coverage to provide length-frequencies and age-frequencies from the commercial fishery during the next two years being essential.

DWG proposes that a cautious and staged management approach is required:

- The first stage is to stabilise the annual catch to no more than recent levels; collect further information on abundance and recruitment during the next twelve months; determine the appropriate stock-specific management target; and update the stock assessment (based on the new information) in 2019.
- The second stage is to reassess the management and TACC in the light of the 2019 stock assessment and against the stock-specific management target, prior to the 2019-20 fishing year.

Deepwater Group's Submission on HAK 7

DWG submits that:

- The catch during 2017-18 and 2018-19 to be held at a level that will stabilise the stock size or to allow it to continue to increase,
- Quota owners submit that a reduction in the TACC is not required at this time,
- To ensure continued sustainable outcomes, quota owners will collectively manage their fishing
 operations to ensure the total annual catch does not exceed 4,525 t during the next two years, while
 further information is collected.
- Information is obtained from the commercial catches during 2017 and 2018 to establish the current levels of recruitment.
- Prior to, or as part of the next stock assessment in 2019, options should be explored that use the
 information from the core and deep strata to develop one or more biomass indices that are more
 plausible. For example, the development of separate 'core' and 'deep' indices or the use of 'deep' strata
 information from recent surveys to create options for a 'core+deep' index, starting in 2012.
- The trawl survey design should be reviewed prior to the next survey to ensure the data pertaining to hake are optimised and can be used in the time series,
- The next WCSI trawl survey is undertaken in 2018, and the next stock assessment of HAK 7 is undertaken in 2019 and includes assessing options for a stock-specific management strategy,
- After establishing the management target for this stock, the medium-term management goals can be set and the TACC can be adjusted, as may be required, prior to the 2019-20 fishing year.



2. ORH 3B Puysegur

New Stock Assessment Accepted by MPI in 2017

A new stock assessment for ORH 3B Puysegur fishery was accepted by MPI in 2017, the first accepted since 1997. This fishery has been closed by quota owners since 1997-98 to promote rebuilding. Since then industry has undertaken acoustic research surveys to measure the biomass in 2005, 2006 and 2015.

The results of the 2017 stock assessment are:

- B_0 is estimated to be 17,000 t (13,000 t 23,000 t)
- B₂₀₁₇ is estimated to be 8,200 t (4,700 14,000 t)
- Stock status (B_{2017}/B_0) is estimated to be 49% B_0 (35 62% B_0), which is at the top of the management target range (30 50% B_0)
- The stock is considered to be fully rebuilt with >70% probability that the stock size is above the lower end of the management target range

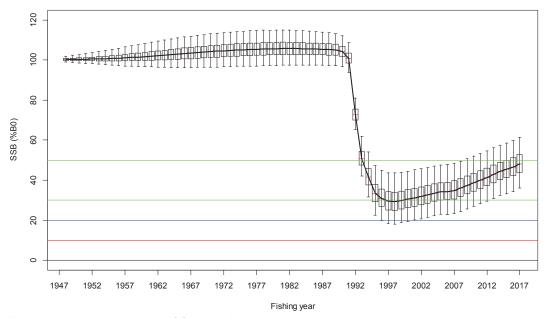


Figure 3: Biomass trajectory of ORH 3B Puysegur stock showing management target range (green lines, 30% to 50% B_0), the soft limit (blue line 20% B_0) and the hard limit (red line 10% B_0)

Biomass Projections and Application of the Orange Roughy Harvest Control Rules

A Harvest Control Rule has been specifically developed for orange roughy fisheries with the objective to maintain the stock size within the management target range (i.e. $30 - 50\% B_0$) and to ensure that there is no probability that the stock size will fall below the soft limit (i.e. below $20\% B_0$). This HCR has been applied in two other ORH 3B fisheries (Northwest Chatham Rise and East & South Chatham Rise), as well as in ORH 7A.

DWG submits that the HCR should now be applied in the ORH 3B Puysegur fishery

Application of the HCR to the Puysegur assessment to calculate a catch limit for 2017-18 is complicated because of the poorly estimated selectivity in catches taken outside of the spawning season. The data



suggest orange roughy caught during the non-spawning at Puysegur are much younger compared to those caught during the spawning season. If this is true then a higher catch limit would be appropriate for a purely non-spawning season fishery compared to a purely spawning season fishery. However, if the non-spawning season selectivity is close to the maturity ogive then the calculated catch limit for a non-spawning season fishery could be too high. Given the uncertainty in the estimation of non-spawning selectivity, DWG is of the view that it is prudent to base catch limits on spawning season biomass.

Biomass projections have been undertaken over a five-year period (2017-22).

The results show that there is a clear tradeoff between the level at which the catch limit can be set and the year of the next stock assessment. If an assessment is planned in 2019-20 then annual catches of 600 - 800 t from the spawning stock would pose little risk. If the assessment is planned for 2020-21 then annual catches of 400 - 600 t would similarly pose little risk. These results are contained within the draft FAR and are summarised in the table below (for a stock assessment undertaken in 2020):

Scenario	Model	Non-spawn catch (t)	Spawn catch (t)	P(B ₂₀ <20%B ₀)	$P(B_{20} < 30\%B_0)$
1	Base	910	0	0.00	0.01
2	Base	0	460	0.00	0.01
3	Base	0	685	0.00	0.05
4	Base	0	910	0.01	0.12
5	Low	0	460	0.00	0.12
6	Low	0	685	0.02	0.24
7	Low	0	910	0.06	0.39

Management Commentary

The long-term annual yield from using the HCR to keep the spawning stock size within the management target range of 30-50% B_0 is estimated to be around 300 t (with a 95% CI of 140 t to 360 t). The exploitation rate is 0.045 (or 4.5%).

The current status of this stock is assessed to be 49% B_0 , near to the upper bound of the management target range. At this level, the exploitation rate from the HCR is 5.5%. In essence, there is a high catch available for a period as the stock is moved from 49% B_0 towards 40% B_0 .

The results of these analyses provide the following plausible catch levels from the current stock assessment:

- Annual catch of 685 t from both spawning and non-spawning season
- Annual catch 460 t from the spawning season alone

Given the paucity of information from this fishery, quota owners have agreed to collect more information from Puysegur catches and, in the meantime, to take a conservative approach to catch levels.

During 2017 and 2018 sampling and ageing of catches taken in the non-spawning season will be undertaken to reduce the currently high level of uncertainty associated with the estimation of non-spawning selectivity.

In the context of setting a catch limit for this newly reopened fishery, quota owners agree that the objective is to apply the orange roughy HCR – in order to keep the stock within the management target range of 30-50%



 B_0 , with a low probability of breaching the lower limit of the management target range (30% B_0) and a zero probability of breaching the LRP (20% B_0).

This implies a catch limit following projections from the base case of between 460 t ($P(B_{2021} < 30\% B_0) = 2\%$) and 685 t ($P(B_{2021} < 30\% B_0) = 10\%$).

DWG proposes the catch limit for ORH 3B Puysegur be set at 685 t for 2017-18 and that quota owners will set aside 335 t of ACE to provide for a total catch of not more than 350 t during 2017-18 fishing year. DWG notes the agreement by quota owners to not fish orange roughy from the Puysegur area since 1977-78, other than for research purposes has been honoured.

DWG would then seek to review this arrangement with MPI prior to the 2018-19 fishing year, based on consideration of the results of:

- the new age (selectivity) information, and
- an updated stock assessment and forward projections under the HCR during 2018.

DWG also seeks discussion with MPI on the scheduling of future biomass surveys of and stock assessments for the ORH 3B Puysegur fishery, which we propose be undertaken on a four-yearly cycle (as for other orange roughy fisheries), the next biomass survey being scheduled for 2019 and stock assessment for 2020.

Deepwater Group's Submission on ORH 3B Puysegur

DWG submits that:

- The orange roughy HCR is applied to this fishery, as has been done in each of the two other ORH 3B fisheries,
- From 2017-18, the catch limit for ORH 3B Puysegur be set at 685 t and the ORH 3B TACC be set at 5,535 t accordingly,
- ORH 3B quota owners agree to 'set aside' 335 t of ACE during 2017-18 to provide for a total catch of not more than 350 t from the ORH 3B Puysegur during 2017-18
- DWG and MPI agree to jointly collect and age samples from commercial catches taken during the 2017 spawning and non-spawning seasons and assess these in an updated stock assessment in time to provide management advice for the 2018-19 fishing year.
- DWG and MPI agree to jointly develop a work plan to routinely undertake further biomass surveys and stock assessments from this fishery

DWG and quota owners would be happy to engage in further discussions with MPI on any matters pertaining to this submission before MPI finalise their final advice on the sustainable management of these two fisheries

Regards,

George Clement CEO

Deepwater Group Ltd

From: s 9(2)(a)To: $\underline{FMSubmissions}$

Subject: RE: Review of fisheries sustainability measures for 1 October 2017

Date: Wednesday, 7 June 2017 11:46:25 a.m.

Attachments: image001.jpg

Too late for Aston Trawling s 9(2)(a). We were abused enough by the high deemed value for TRE2, saw the prospect of similar ripping off by MPI, so we sold & got out of the Fishery. You might say that's good because it seems to me that that is what MPI wants but as people employed to bassist with the fish management system, you should be ashamed.

Denis Lander Director

Phone: +64 4 939 0899
Fax: +64 4 939 0898
www.urlichlander.co.nz
DLander@Urlichlander.co.nz
21 Broderick Road

PO Box 13 339, Johnsonville Wellington 6440

cid:image002.jpg@01D06C81.ACA463E0



URLICH LANDER LIMITED: This email and any attachments are confidential and intended exclusively for the person to whom the email is addressed. If you are not the intended recipient, do not read, copy, disclose or use the contents in any way. Please notify us immediately by return email and destroy the email and attachments. URLICH LANDER LIMITED does not accept any liability for any changes made to this email or attachments after sending by URLICH LANDER LIMITED. You must scan this email and attachments for viruses. The opinions expressed are not necessarily those of URLICH LANDER LIMITED.

URLICH LANDER LIMITED accepts no liability for any loss, damage or consequence, whether caused by our own negligence or not, resulting directly or indirectly from the use of this email and attachments.

From: FMSubmissions [mailto:FMSubmissions@mpi.govt.nz]

Sent: 7 June 2017 11:30 AM

Subject: Review of fisheries sustainability measures for 1 October 2017

Dear stakeholder

Review of fisheries sustainability measures for 1 October 2017

The Ministry for Primary Industries (MPI) is seeking feedback from tangata whenua and stakeholders on proposed changes to sustainability measures and management controls for selected fishstocks.

The 1 October review of sustainability measures and other management controls for selected fishstocks is an annual process.

The proposals for each stock have been assessed in the context of the relevant statutory requirements and the best available information, including the latest scientific information on

the status of the stocks and tangata whenua and stakeholder input.

MPI is consulting on changes to management settings for the following fishstocks:

Proposed amendments to sustainability measures:			
Bluenose (BNS 1, 2, 3, 7 & 8)			
Red gurnard (GUR 7)			
Hake (HAK 7)			
Paua (PAU 3, 4 & 7)			
Red cod (RCO 2)			
Orange roughy (ORH 3B)			
Proposed amendments to deemed value rates:			
Green-lipped mussel (GLM 9)			
Red cod (RCO 2)			
School shark (SCH 3)			
Skates (RSK 8, SSK 8)			
Tarakihi (TAR 8)			
Trevally (TRE 2)			

The Consultation Document that outlines the proposals for each fishstock can be found on the MPI public consultation webpage at: https://www.mpi.govt.nz/news-and-resources/consultations/review-of-fisheries-sustainability-measures-for-1-october-2017/

Alternatively, hardcopies of the Consultation Document may be requested at the email or post address provided below.

Making a submission

All submissions should be received by **5pm, Friday 7 July 2017.**

Written submissions should be sent directly to:

Email

FMSubmissions@mpi.govt.nz

Post

Sustainability Review 2017 Fisheries Management Ministry for Primary Industries P O Box 2526 Wellington 6011

Yours sincerely,

FMSubmissions

Zealand

This email message and any attachment(s) is intended solely for the addressee(s) named above. The information it contains may be classified and may be legally privileged. Unauthorised use of the message, or the information it contains, may be unlawful. If you have received this message by mistake please call the sender immediately on 64 4 8940100 or notify us by return email and erase the original message and attachments. Thank you.

The Ministry for Primary Industries accepts no responsibility for changes made to this email or to any attachments after transmission from the office.

REVIEW OF EARTHQUAKE-AFFECTED FISHERIES 2017

Of the two options proposed by the Ministry for Primary Industries for the Kaikoura coastal area affected by the 2016 earthquake, I support Option 2 and will comment on reasons for this selection.

Option 1 Reopen fishery after expiration date in November 2017

Option 2 Kaikoura area remains closed to fishing until further notice The New Zealand Coastal Policy Statement (2010) gives clear direction to apply a "precautionary approach" to coastal resource management and supports ss9 and 10 of the New Zealand's Fishery Act (1996). It is in recognition of these principles that I consider Option 2 to be the most prudent approach to fisheries management in the coastal area surrounding the Kaikoura earthquake zone.

ADVANTAGES TO OPTION 2

- 1) Maintaining a fishery closure supports the commercial fishing sector (particularly New Zealand abalone industry) who understand the reproductive requirements of their quota species. Maintaining a closure in the Kaikoura coastal area, provides the maximum opportunity for sexually mature organisms to spawn and re-establish populations.
- 2) Generally, New Zealand marine research outcomes have been undertaken in periods of moderate environmental variation. Minimal marine research exists after chaotic events such as the 2016 earthquake. Maintaining the Kaikoura fishery closure provides an opportunity for current and proposed marine research projects to investigate the spatial and temporal re-colonisation of extant populations endemic to New Zealand coastal waters, after a sudden and catastrophic environmental event.
- Building on the existing body of marine research within this ecosystem is a prudent approach towards meeting the needs of future generations, especially in light of the challenges facing marine organisms (and humans) into the next century.
- 4) While recreational fishers may object to maintaining a fishery closure, it should be noted that this sector are able to relocate to other areas un-restricted by fishery closure and ITQ restrictions.

DISADVANTAGES OF OPTION 1

- The remaining shellfish brood stock, essential for maximum reproductive capacity and optimisation of habitat, are at risk of fishing pressure if the area is reopened to meet commercial, recreational and customary needs. This could ensure the reduction of viable breeding populations, based on the Alee effect and lack of viable adult shellfish ¹, specifically in abalone species, which are regularly harvested in this region.
- Opening the area to fishing pressure diminishes the valuable opportunity to investigate recolonization of shellfish populations on a temporal and spatial scale and subsequent ecological and environmental pressures on these newly established populations.
- Opening the fishery has the potential to affect experimental design and therefore analysis of marine research in the coastal zone, resulting in inferior scientific methodologies, results and conclusions. The flow on effect from this is a lack of confidence in the reliability of fisheries data and management plans.
- 4) Though commercial and customary fishers are willing to reduce their harvest into the future, recreational will be able to remove their TAC for the region which could have a serious effect on population dynamics and structure.

CONCLUDING COMMENTS

Shellfish populations will restore themselves in a natural timeframe. However, that time frame may not be consistent with the expectations of the human populations familiar with access to these marine resources. Reinforcing my choice of Option 2 as the preferred management strategy, I quote from the United Nations Integrated Marine Assessment.² "There is a delay in implementing known solutions to problems [...]. In many fields, it has been shown that there are practicable, known measures to address many of the pressures [...] thereby causing social and economic problems. Delays in implementing such measures, even if they are only partial, will leave more

¹ 2000 Density dependence in marine protected populations: a review. https://rua.ua.es/dspace/bitstream/10045/36099/1/densodependenciaEC.pdf

² 2016 United Nations First Global Integrated Marine Assessment, Theme I and J http://www.un.org/depts/los/global reporting/WOA RPROC/Summary.pdf

to be done, which mean we are unnecessarily incurring those environmental, social and economic costs".



7 July 2017

Mr M Dunne Ministry for Primary Industries PO Box 10420 Wellington

Dear Martyn

COMMENTS ON DRAFT 2017/18 SUSTAINABILITY CONTROLS

- 1. MPI has issued Discussion Paper No: 2017/17 on Sustainability Controls for 1 October 2017 stocks and invited submissions on the proposals.
- 2. This submission is presented on behalf of Fisheries Inshore New Zealand Ltd (*Fisheries Inshore*). Any comments or queries should be directed to Tom Clark, Policy Manager, Fisheries Inshore.
- 3. Fisheries Inshore is the Sector Representative Entity for inshore finfish, pelagic and tuna fisheries in New Zealand. Its role is to deal with national issues on behalf of the sector and to work directly with, and behalf of, its quota owners, fishers and affiliated sector representative organisations. Its key outputs are:
 - a. developing appropriate policy frameworks, processes and tools to assist the sector to manage inshore, pelagic and tuna fishstocks more effectively;
 - b. minimising fishing interactions with protected species and the associated ecosystems;
 - c. working positively with other fishers and users of marine space where we carry out our harvesting activities.
- 4. Responsibility for the implementation of these policies, processes and tools falls naturally on quota owners, fishers and Commercial Fishery Stakeholders (CSOs) who collectively choose the best ways to deal with issues in their regions. CSOs will generally deal with all matters pertaining to fishstocks in their region. Fisheries Inshore has the mandate to support this work where requested but does not have the ability to take on this work except where the fishery is managed as a single stock across the country. In that instance Fisheries Inshore must work with all the relevant quota owners, fishers and CSOs in developing appropriate measures and submissions.
- 5. Unless otherwise noted, the views in this submission represent the views of Fisheries Inshore or its associated parties Area2 and Southern Inshore Ltd.
- 6. We note that companies and other quota-holders may also make their own submissions on the proposals.

TAC/TACC REVIEWS

BNS 1, 2, 3, 7 and 8

- 7. Bluenose is assessed as a single stock and managed at the Quota Management Area (QMA) level. This makes responding to the discussion paper on BNS the responsibility of Fisheries Inshore to ensure full representation of all BNS stocks are presented in the submission.
- 8. This submission has been developed by Fisheries Inshore on behalf of all Fisheries Inshore members. Fisheries Inshore have also canvassed views from wider BNS quota owners and industry organisations. Notwithstanding Fisheries Inshore's mandate to submit on this proposal, individual companies may choose to provide their own submissions, containing their specific recommendations.

Stock Status and Future Research

- 9. The 2016 assessment indicates the state of the stock is below the target biomass being between 17 and 27% B_0 (below the 40% B_0 target set by MPI).
- 10. The 2016 assessment suggests that biomass has either levelled off after 2011 or increased slightly, and is projected to increase at current catch levels. The statement on the recent trend in biomass in the 2016 plenary highlights is "Biomass was estimated to have declined continuously from the 1980s to 2011 and then to have either levelled off or increased slightly. Biomass has been below the default 40% B₀ target since around 2000."
- 11. We understand that the fishery is rebuilding but not at the rate required to achieve the target biomass within the required timeframe as defined by MPI's Harvest Strategy Standard (HSS);
 - Objective: ensure rebuild of the fishery with the timeframe and targets currently set
 - Target: 40% B₀
 - Timeframe: 2011 assessment 2*TMIN = 20-26yrs = 2031 to 2037
- 12. The next stock assessment is currently scheduled for 2021. We propose that the next assessment be brought forward and conducted in the 2017/18 fishing year. This would utilise the most recent length frequency data to address the major sources of uncertainty identified in the 2016 Plenary and thereby provide greater precision about the status of the stock. Notably, the existing model is based on a simple two fishery model (trawl and longline) with deterministic recruitment assumed.
- 13. Bringing the next stock assessment forward is aligned with industry's reasonable expectation that fisheries management is based on the best available science. An updated stock assessment would therefore enable the MP to be implemented with an updated stock assessment not just an updated CPUE.
- 14. Fisheries Inshore expect that an updated stock assessment will adequately address industry concerns regarding the impacts of overcatch and alleged misreporting within the fishery. Recognition and inclusion of these data in the next stock assessment will contribute to a more robust and reliable stock assessment and reflect the impact this has had on the fishery.

Management and Monitoring Plan

15. Options 2 & 3 of the discussion paper both mention the requirement for continued information following a TAC reduction. We consider that the discussion paper has not

- sufficiently considered or incorporated the current work the industry has done to date to get an agreed Management Procedure (MP).
- 16. Options 2 & 3 both allude to the continued requirement for data but don't provide any details and there is no clear consideration provided for the ongoing management of the fishery. The information provided implies a 'set and forget' approach. We do not consider that approach to be either appropriate or responsible fisheries management. Where a stock has a sustainability issue, sound fisheries management practice would promote additional information being gathered and the stock status being more closely monitored.
- 17. BNS quota holders are cognisant that an agreed MP will require TAC reductions as part of its implementation. That notwithstanding, there remains support for implementing an MP. If, after the updated assessment in 2017/18 and the establishment of an agreed MP, it is necessary to proceed with further cuts then industry is committed to this management action to rebuild the stock.
- 18. An annual review of the MP allows fishery managers to remain certain that the fishery is continuing to rebuild, whilst allowing for more informed decisions to be made about whether to vary the speed of the rebuild by adjusting the TAC, where appropriate.
- 19. To date MPI's reluctance to endorse the Management and Monitoring Plan appears to rest on one small difference of view; the rebuild target and timeframe. MPI has adopted a default rebuild to 40% B₀ in 26 years, whereas quota owners initially proposed 35% B₀ in 30 years.
- 20. Our current submission is based on retaining the certainty provided by an MP but one that will rebuild the BNS stocks to MPI's stated biomass target and timeframe.
- 21. The MP methodology proposed in previous discussions with MPI has been accepted by the MPI Working Group process.

Updated projections

- 22. To enable time for a Management and Monitoring Plan to be agreed, the 2016 Ministerial decision was to implement an "interim" cut to the total TACC from 1,110 t to 910 t (inclusive of BNS 10). The Minister stated "I want to provide the opportunity for a management procedure/decision rule to be developed".
- 23. Since this decision, industry has remained committed to a monitoring and research plan and has engaged with Ministry to endorse the Management and Monitoring Plan.
- 24. As a sign of our commitment to sustainability and the Management and Monitoring Plan, BNS quota owners funded further work to update the MP. This work is consistent with the Ministry's HSS requirements. Industry has already committed to the ongoing monitoring of the stock and have continued to collect data to this end. This work demonstrates good faith investment by industry to the continued sustainable management of the stock to develop an agreed MP.
- 25. As outlined in our 2016 submission, the MP is the core of the Management and Monitoring Plan. The MP is designed to maintain the rebuilding trajectory to target biomass. The MP is run annually and TACCs adjusted accordingly. The TACC would be reduced if the rebuild is not maintained.

MPI Option 2

26. Fisheries Inshore supports Option 2, pursuant to a MP being agreed with MPI.

- 27. MPE runs comparable to Option 2 have been conducted by Fisheries Inshore as part of implementing a Management and Monitoring Plan.
- 28. An MPE incorporating a 100 t TACC reduction in 2017/18 (excluding BNS 10) demonstrated consistency with the 2016 Ministerial decision (Figure 1). The key results of a 100 t TACC reduction shows it meets MPI's Harvest Strategy Standard default;
 - TACC reduced by 100 t to 800 t (excluding BNS 10) for 2017/18. In subsequent years the TACC will be reduced gradually before rising again between 2030 2040.
 - Probability of achieving 40% B_0 by 2037 is 57% (i.e. greater than the Working Group's required level of certainty).
 - Mean yield 2018 2028 is 695 t.

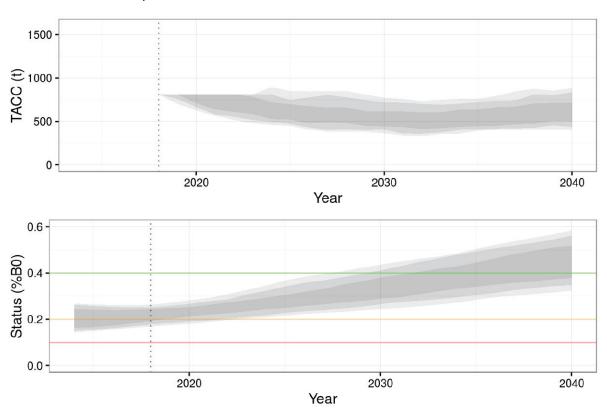


Figure 1 Management Procedure Evaluation results associated with a 100 t TACC reduction in 2017/18 for BNS 1, 2, 3, 7 and 8.

MPI Option 3

- 29. Fisheries Inshore does not support Option 3 that would reduce the TACCs for BNS 1, 2, 3, 7 and 8 from 900 t to 620 t.
- 30. As acknowledged by the discussion paper, Option 3 has an impact on the ability to monitor the fishery. We consider that this is not consistent with the Minister's decision letter for 2016/17 which stated, "I am supportive of a management procedure approach in that it provides the opportunity for more certainty around targets, rebuild timeframes and most importantly, when and what management action is required to stay on track." Adopting an MPE in conjunction with a 100 t TACC reduction under Option 2, provides the management requested by the Minister.

- 31. Reductions to the levels set out in Option 3 would quickly mean that most, if not all, BNS fisheries would become bycatch fisheries. A reduction of this nature would be detrimental to the continued collection of adequate CPUE data to inform a Management Procedure. To effectively monitor and manage BNS stocks it is imperative to have the required data to inform management decisions.
- 32. Industry's commitment to the sustainability of the BNS fishery is based on evidence-based fisheries management. We are concerned that the discussion paper (paragraph 84) implies a "set and forget approach" to fisheries management. The discussion paper notes that Option 2 is preferable by providing the ability to rebuild the fishery pursuant to an MP and to promote continued data collection and associated understanding of the fishery.

Social, cultural and economic factors

- 33. Social, cultural and economic factors are difficult to estimate and the consultation paper provides some suggested impacts by computing the value of catch based on port price and export price. Actual impacts are of course more difficult to quantify as they vary depending on the specific nature of fishing operations.
- 34. The discussion paper states that this will be a loss to New Zealand of \$1,755,600 in commercial revenue based on an average port price. The economic implications of TACC reductions should not be understated, as Table 5 in the discussion paper only relates to predicted revenue costs and doesn't account for wider economic effects.
- 35. As indicated by the revenue losses detailed in Table 5 of the MPI Discussion paper, further substantial reductions in the BNS TACCs at the scale proposed in Option 3 would result in further rationalisation in the domestic fleet harvesting BNS and has significant implications for maintaining a bluenose target fishery.
- 36. With severely reduced fishing options available, fishers may be forced to leave the industry. While it may sound simple to change to other species, there are inherent difficulties that mean this may not be practically or economically viable. These include lack of ACE, geographic limitations or lack of specific expertise in a new fishery.
- 37. Retaining the TACCs at a level provides for sufficient ACE availability to retain target fisheries for the core fleet ensuring their ability to maintain the CPUE series used to monitor the state of the fishery.
- 38. While Option 3 has a greater probability of achieving target biomass by the target date, Option 2 with an MPE meets the Minister's stated rebuild target and timeframe. The improved probability of Option 3 does not justify the economic impact or the impact on our ability to monitor the bluenose fishstocks.

Specific views

- 39. As is apparent from this submission, the benefits associated with the Management and Monitoring Plan are the primary concern of quota owners. TACC reductions may well be necessary but any reductions should be considered in terms of a Management Procedure.
- 40. The response from Fisheries Inshore members provided 100% support for Option 2 and demonstrated a united willingness to invest in science and management.
- 41. Non-Fisheries Inshore members were canvassed to gauge the wider industry position from BNS quota holders and industry organisations. The overwhelming majority indicated a

preference for Option 2, supporting the mandated Fisheries Inshore position (97% of all industry responses in terms of quota shares supported Option 2).

Allowances

- 42. It is notable that MPI is not considering any adjustment to the allowances for recreational or customary fishers. Our concern is that MPI is not sending a consistent sustainability message for a shared fishery when it does not proportionally reduce the catching allowance for each sector.
- 43. The discussion paper states that "MPI believes that reversing the decline in the stock and mitigating risks to sustainability are of primary importance". Industry supports this view but questions the validity of this statement given Option 2 and 3 only consider reductions to commercial TACCs. Section 3.2.2 identifies that BNS is an important recreational species and that the most recent recreational catch estimates are 34.8 t (i.e. 55% of the current recreational allowance).
- 44. We consider that ensuring sustainability is everyone's responsibility. On the basis on the BNS discussion paper, it would appear that MPI hold the view that the commercial sector is solely responsible while it is appropriate not only to provide in full for recreational demand, but to provide more than that demand.
- 45. Further, by not even consulting on any changes to allowances, MPI is tying the Minister's hands. The Fisheries Act requires the Minister to consult on TAC and TACC changes which inevitably also include the possibility of changes to the other allowances. By not considering or consulting on changes to allowances, MPI could is effectively making those allocation decisions on the Minister's behalf. That is not the function of the executive, the Fisheries Act makes is plain that such decisions are for the Minister.

Summary

- 46. With the demonstration that the most recent MPE meets the Ministry's HSS, and the continued commitment of industry to maintain a high level of monitoring for all BNS stocks, we consider that the Minister has the best available information to make a decision to adopt Option 2 for the 2017/18 fishing year.
- 47. Our support for Option 2 is premised on MPI adopting the MPE and bringing forward BNS stock assessment in the 2017/18 fishing year to address the major sources of uncertainty identified in the 2016 Plenary.
- 48. We strongly recommend Option 2 for the 2017/18 fishing year based on the following:
 - Fisheries Inshore is committed to the Management Procedure process. BNS quota owners seek a commitment from MPI to support the continued implementation of the Management and Monitoring Plan. Industry's view is that applying an agreed Management and Monitoring Plan will result in a better managed fishery and will set a valuable example that will lead to improvements in other inshore fish stocks.
 - The key benefit of establishing an MP is that it can provide increased certainty for those involved in the fishery. Establishing an MP will also direct what information is required annually to inform and continually review the MP to ensure where the fishery is in terms of the required rebuild.
 - A TACC reduction without effective fisheries management will be detrimental to the continued monitoring and management of the stock. Not being able to maintain the

- CPUE series currently used to monitor stock abundance of BNS and make future management decisions significantly less certain.
- The industry acknowledges that changes to TACCs are part of operating in the seafood industry. However, it is vital that those changes are evidence-based and utilise the best available science. In the case of BNS this is pursuant to a Management and Monitoring Plan that allows all stakeholders to understand and support the necessary changes.

GUR7

49. Fisheries Inshore endorses Southern Inshore's support for Option 3 for GUR7. The stock is under no sustainability pressure and the level of increase is low relative to the healthy status of the stock.

RCO₂

- 50. The Area2 regional committee supports a review of the TAC and TACC but are concerned about the consideration provided to changes in allocation.
- 51. Paragraph 244 states the TAC was up for review, including the TACC, but this is contrary to paragraph 249 which states that 'MPI is proposing to set the TACC at the current level'. The review is solely focused on setting allowances for recreational and customary stakeholders.
- 52. MPI asserts that no change to the current TACC is required as the in-season review provides for the ability to provide for increased abundance. Since 2013, the Minister has managed RCO 2 under an 'in-season' management procedure. The performance of the management procedure has been severely and significantly compromised by the decision-making processes following the scientific analysis of in-season catch.
- 53. The 2016/17 in-season management procedure has taken over 6 months, with no decision made at the time of this submission. The timeframes for the current in-season management procedure results in Ministerial decisions being made so late that industry have reduced time to act on the increased TACCs, thereby reducing the intended benefits of the process.
- 54. The consideration of changing the interim deemed value indicates that MPI consider the TACC to be incorrectly set, with the necessity to incentives fishers to balance their ACE throughout the year. Comments regarding the Deemed Value proposals for RCO2 have been addressed in a later section of this submission.
- 55. Given the outlined concerns regarding the allocation consideration, the existing in-season increase decision process and the consideration of changing interim deemed values, we propose a wider review of the management processes and their effectiveness for this fishery. A more comprehensive consultation is required to review the current in-season process and the validity of this process in comparison to a higher TACC.

DEEMED VALUE PROPOSALS

56. Industry has commented in previous submissions on deemed values on the need for deemed values to be used as a fisheries management tool in a manner that is appropriate to the stock to which they apply. Deemed values are not an independent process.

- 57. We remind MPI that the policy approved by the Minister in 2008¹ includes a management review of the circumstances giving rise to the over-catch and an evaluation of the management options available, including TACC reviews, discussions with industry and further science before any decision is made to adjust deemed values.
- 58. We have repeatedly reminded MPI that where the TACCs are significantly out of balance with the stock abundance in the water, deemed values are incapable of constraining the catch to the TACC. There are simply too many other drivers and motives to allow deemed values to operate effectively in those circumstances. Deemed values are not a substitute for poorly set TACCs. Rather than achieve sound fisheries management, inappropriately set deemed values will engender poor fisheries management practices and impede the performance of the management framework.
- 59. Sadly, the recommendations in this consultation do not seem to demonstrate that MPI has accepted our previous advice, with the one possible bright light being the reduction of RSK8 and SSK8 deemed values.
- 60. The advent of an IEMRS framework requires MPI to address the TACC anomalies and inconsistencies that they have long known exist in the inshore fisheries. Over-reliance on deemed values to control incidental over-catch equally will not resolve the issue.
- 61. It is against that background that we comment on the MPI deemed value proposals for 2017/18.

RCO₂

- 62. The Area2 Regional Committee opposes the introduction of a higher interim rate for RCO2.
- 63. MPI's rationale for increasing the interim value is based on fishers not covering their catch with ACE in a timely manner with the perceived risk that this will lead to the TACC/total available being exceeded.
- 64. There is no need to incentivise fishers to balance their ACE throughout the year in this case. The in-season decision-making processes currently in place mitigate these risks.
- 65. The RCO 2 "in-season" TAC review process means fishers are able to balance early season catches with interim deemed values in the knowledge that they will be able to source ACE based on the in-season increase.
- 66. With a current annual deemed value of \$0.28 compared to a port price of \$0.75, there is no incentive to over-catch RCO2. RCO2 is not a target and is caught primarily as a by-catch in the ECNI mixed trawl fishery.
- 67. While we might ordinarily support the move to lift the interim deemed value, in this instance we cannot support such a proposal until the in-season processes are reviewed and streamlined to make the additional catching capacity available at a time when industry can avail themselves of the opportunity.
- 68. The Area2 Regional Committee does not support the proposal at this time.

¹ http://fs.fish.govt.nz/Doc/13392/DV Review decisions.pdf.ashx

SCH3

- 69. Fisheries Inshore supports the position of Southern Inshore in opposing the proposed increase in deemed values for SCH3.
- 70. MPI proposes to increase the deemed rate for SCH3 from \$1.80 to \$3.60 per kg. The current port price is \$2.30. MPI contends that the market for SCH fins has improved and the combined price for trunks and fins exceeds the current deemed value price and incentivises fishing on deemed values. Contrary to the MPI view,
 - a. the market for school shark fins has not improved and fins currently receive less than 50% of the price received prior to 2014;
 - b. shark fins must be landed in conjunction with the trunks and port prices are based on the joint landing of trunk and fins;
 - c. setting a deemed value in excess of the port price is not sound fisheries management practice.
- 71. We cannot support the MPI proposal.

TAR8

72. Fisheries Inshore supports the position of Southern Inshore in opposing the proposed increase in deemed values for TAR8.

TRE2

- 73. Fisheries Inshore (on behalf of the Area 2 Regional Committee) opposes the introduction of a higher interim rate for TRE 2.
- 74. As noted in our general comments on deemed value proposals we do not consider deemed values as a substitute for poorly set TACCs.
- 75. The TRE2 TACC is poorly set and needs reviewing based. TRE 2 is included under Group 6 of the National Fisheries Plan for Inshore Finfish and can be monitored by annual commercial landings. Given this a review of the annual landings in relation to the TACC is a more appropriate and responsible fisheries management.

GLM9, RSK8 and SSK8

76. Fisheries Inshore does not have a mandate to comment directly on these stocks but considers it necessary and appropriate to comment on the deemed value proposals in the absence of having an associated party to form a view on the proposals.

GLM9

- 77. MPI proposes to increase the deemed value for GLM9 to an initial annual rate of \$10.00 per kilo from a current price of \$6.00. The interim deemed value for GLM9 was increased to \$5.40 in 2016 when the fishery was overcaught for the second time since the stock was introduced into the QMS. MPI proposes to set the rate at a level above the prices paid for spat.
- 78. MPI comments that the high levels of over-catch might threaten the sustainability of GLM9. Given that the product is sourced from beach cast or dislodged seaweed rather than

- harvested directly from seaweed attached to the seafloor, the over-catch will not threaten sustainability it will merely reduce the amount of unharvested mussel spat that would otherwise die on the beach.
- 79. Green mussel spat has been collected from beach cast seaweed for the last 40 years with no discernible decrease in abundance of spat or abundance of mature green mussel stocks in the wider Northland area. We do not accept the sustainability argument advanced by MPI as the basis for an increase in the deemed value.
- 80. Increasing deemed values generates Crown revenue. Increasing the TACC would see the revenue on the commercial catch of GLM9 being returned to the quota-holders through their sale of ACE, rather than the revenue being retained by the Crown. We see no reason to augment the Crown's revenue by increasing the deemed values in preference to other management responses.
- 81. The Minister's 2008 decisions on the deemed value policy approved an initial step of considering all appropriate management responses before addressing deemed values. Other options include commissioning research, reviewing the appropriateness of the TAC, using the Schedule3 provision for an in-season review and also reviewing the deemed values.
- 82. GLM9 is a Schedule 3 stock and, as such, can have both the normal TAC review as per section 13 of the Act and also an in-season review of the TACC. Under the in-season review provision, the Minister would need to be informed of the abundance during the fishing year as a pre-requisite to any review. An in-season review process has not been developed for the stock and, given that the bulk of the catch is taken from June through to December in the following fishing year and is dependent on weather conditions, it is highly unlikely that an in-season TACC review process can be established.
- 83. We also understand that there is an issue in respect of the ratio of spat and seaweed. The conversion factor for GML9 spat is currently 50% of the weight of the juvenile mussel and the seaweed to which it is attached. It is believed that the ratio of mussel to seaweed is lower than 50%. Any reduction as such would undoubtedly have an indirect impact on the effective TACC for GLM9.
- 84. The deemed value guidelines indicate that deemed values should be set at a margin below port prices. GLM9 spat currently fetches around \$8.50 \$9.00 per kg. A deemed value above the spat price would be inappropriate.
- 85. However, GLM9 is a fishstock where the catch level can be managed with certainty and there is no justification for any over-catch of the TACC other than financial gain. Ensuring that fishers cannot fish profitably on deemed values is fundamental to protecting the TACC and the sustainability of stocks. An increase in the deemed value for GLM9 is warranted on that principle.
- 86. In view of the above arguments, while we are not averse to an increase in the deemed value rate, we consider there are other management responses that should be considered.

RSK8 and SSK8

87. This is a long-standing issue. Over-catches of the TACCs have existed since the stocks were introduced into the QMS. At the time of their introduction:

- a. the combined RSK8 and SSK8 TACCs were set at a level lower than the pre-QMS catch levels which were reported on the levels landed and did not include any returns to the sea; and
- b. the split between RSK and SSK was arbitrary since fishers had previously reported one generic code SKA.
- 88. RSK8 and SSK8 are not target stocks. While a Schedule 6 Return to the Sea provision applies and a significant number are returned to the sea, not all catch can be returned to the sea. The need to avoid the catch of snapper in FMA8 has seen fishers move locations away from snapper grounds but into grounds where there is a higher by-catch of skates. In addition, fishers have noted a steady increase in the abundance of skate in RSK8 and SSK8. We have submitted previously that a review of the TACC is the appropriate response, not tinkering with deemed values.
- 89. The current deemed values are set at the current port price and, when an operating cost is taken into account, the current deemed value levels incentivise catch mis-reporting.

 Decreasing the deemed values as proposed will reduce that dis-incentive.
- 90. We support the decrease in deemed values as a means to encourage fishers to land excess catch but re-iterate our opinion that the appropriate management response is an increase in the TAC/TACC. The Crown has benefitted by more than \$250,000 in deemed values since the stocks were introduced into the QMS. We submit that it is now time for the TAC/TACCs to be addressed and have that revenue returned to quota-holders.
- 91. Skate are managed as a low value and low information stock and undertaking stock specific research is not warranted. However, we submit that the history of the management of the stocks and the maintenance of consistently high catch levels warrants an increase in the TACC.

From: s 9(2)(a)
To: FMSubmissions

Subject: Shellfish & Seaweed Species Kaikoura. **Date:** Monday, 19 June 2017 12:33:04 p.m.

As a recreational fisher and in relation to the present crisis with Paua along the earthquake effected coastline of Kaikoura. I would like to offer my support for an extention of the current emergency closure. Provided all the stakeholders agree, given time, I think we can achive a rebuild of the fishery. Regards Gerald O'Rourke.

From: s 9(2)(a)To: FMSubmissions

Subject: Review of earthquake affected fisheries 2017.

Date: Saturday, 1 July 2017 3:23:00 p.m.

Hi my name is Deane Gregg ,managing director of Gregg Fishing ltd.We currently run a commercial crayfishing boat off ward beach in the cape campbell area .I am writing in support of option 2 for a continuation of the closure of the affected coastline until such time as the fishery has had time to recover.My reasoning being having a first hand knowledge of the paua grounds around cape campbell .This is where we also crayfish, the amount of ground lost for them is staggering.It will be interesting how long the process of juvenile recruitment will take as there is still a lot of rock available for the slow process of their habitat rebuild.Crayfish on the other hand is in much better shape due to the amount of habitat available. There is so much deeper ground that hasnt been overly affected by the uplift ie of our grounds that we've traditionally fished the earthquake has affected maybe 20% and even then fishing with the right weather conditions some of that ground will be accessable also.

Deane Gregg, Gregg Fishing coy ltd,

s 9(2)(a)

7 July 2017

Ministry of Primary Industries WELLINGTON

Tena ko,

REVIEW OF SUSTAINABILITY CONTROLS FOR PAU4, 1 OCTOBER 2017

Hokotehi Moriori Trust (HMT), is the mandated Imi authority for Moriori on Rekohu and elsewhere. HMT owns 15 tonne of Paua quota in Area 4.

We fully support the submissions made by PAUMAC4 (of which HMT is a member) and also the Ngati Mutunga Asset Holding Company Limited.

Sustainability is extremely important to Moriori and all stakeholders on the Chathams. The paua fishery is at risk and needs local control and management to ensure its recovery and future sustainability via the PAUMAC4 proposed Fishery Plan. This will put control back into the hands of those who are best situated to manage the fishery.

HMT supports a 30% shelving as this is the most preferred option among quota owners and with effective management control this could be increased if this was deemed necessary in the future.

We would be concerned if the Minister imposed a cut to the TACC as, in the event of a future increase, this would result in the allocation of a further 19 tonne of quota to section 28N rights holders which would effectively erode the value of the commercial sea fisheries settlement for Moriori.

HMT submit that the best and most effective way to manage the Paua4 fishery is by managing it via shelving (coupled with effective management tools as proposed in the PauMAC4 submission) and is consistent with section 5 of the Fisheries Act 1996.

Hokotehi Moriori Trust
PO Box 188
Rekohu
CHATHAM ISLANDS 8942

S 9(2)(a)

F:(03)305 **49**454

HMT would like to appear in support of its submission should there be an opportunity to do so.

Me rongo

Maui Solomon

Executive Chairman

From: s 9(2)(a)To: $\underline{FMSubmissions}$

Subject: REVIEW OF SUSTAINABILITY MEASURES OCT 2017

Date: Wednesday, 14 June 2017 11:03:40 a.m.

Attachments: image001.jpg

Independent Fisheries Ltd hereby make the following comments in regard to the proposed reduction of the HAK7 TACC.

As your document states less activity occurs in this target fishery and the catch is becoming more predominantly a bycatch to hoki.

The main reason that HAK7 catches have declined in recent years is that the fleet of BATM class vessels no longer targets HAK7.In addition a significant amount of HAK7 was caught by three Korean vessels which have ceased fishing in New Zealand.

IFL accepts that the TACC should reduce based on the information presented.

There is little science behind the TACC reductions proposed.

We note that MPI is going to analyse fleet wide CPUE data and modelling expected in the 2017/18 fishing year .Accordingly we believe the TACC reduction in the 2017/18 year should be less than the options proposed until this additional data and analysis is conducted.

We suggest a TACC of approximately 6,000 tonnes.

To date during June 2017 our bycatch of HAK7 while targeting HOK1 is higher than previous years.

A TACC reduction in the order of 40% (as proposed) would financially penalise our Company as we would need to spend significant sums acquiring ACE or paying deemed value if ACE was unavailable.

Given the very limited number of vessels targeting HAK7 we believe there is very little risk in reducing the HAK7 TACC more gradually especially as more information becomes available to MPI.

Thank you for considering this submission.

Stephen





Inshore Fisheries Management Ministry for Primary Industries P O Box 2526 Wellington 6140

By email only: FMsubmissions@mpi.govt.nz

Tēnā koe,

REVIEW OF FISHERIES SUSTAINABILITY MEASURES FOR 1 OCTOBER 2017

The Ministry for Primary Industries (MPI) is seeking feedback from tangata whenua and stakeholders on proposed changes to sustainability measures and management controls for selected fishstocks.

The Iwi Collective Partnership (ICP) manages 16,000 mt of ACE derived from our 15 Iwi Member quota owners annually. The respective stocks and ACE volumes for October 2016 are set out in the following table. A list of the 15 lwi Members and QRN numbers are attached in **Schedule 1**.

Stock	ACE (kgs)
BNS1	3,327
BNS2	10,818
BNS3	2,272
BNS7	1,194
BNS8	567
HAK7	180,188
ORH3B	72,873
RCO2	13,990
PAU4	480
PAU7	350

In terms of the relevant stocks under review, we support the following:

- Bluenose (BNS 1, 2, 3, 7 & 8): We support a 100 mt TACC reduction under Option 2. We have contributed to and support the detailed submission of FINZ.
- Hake (HAK 7): We support Option 3 and a TACC reduction to 5,069 mt with a review on completion of the next stock assessment. We would also support a voluntary shelving reduction to 4,524 mt which is effectively Option 2 but without the TACC adjustment.
- Paua (PAU 4 & 7): We support a 30% reduction to PAU 4 to 228 mt whether that be via a TACC adjustment or voluntary shelving.

OFFICE +64 9 259 5867

FAX +64 9 270 7791

We support either of the TACC reductions to PAU 7 but we do not support status quo.

- Red Cod (RCO 2): We urge MPI to improve the in-season adjustment mechanism. We have contributed to and support the detailed submission of FINZ.
- Orange roughy (ORH 3B): We support a minimum TACC increase of 152 mt to the Puysegur sub area.

We make no comment regarding the review of deemed values.

Ngā mihi,

Maru SamuelsGeneral Manager

s 9(2)(a)

s 9(2)(a)

s 9(2)(a)

SCHEDULE 1 – LIST OF ICP IWI MEMBERS

aki
·

From: s 9(2)(a)To: FMSubmissions

Subject: Review Of Closure For Earthquake-Affected Fisheries

Date: Monday, 3 July 2017 10:44:07 a.m.

To whom it may concern

I Jason Burkhart support the Option 2 of the proposed management action plan. To replace the emergency closure with section 11 Closure of the fisheries act 1996.

I Jason Burkhart strongly urge MPI to use all Available resources to maintain the stocks at a sustainable level for long term utilisation by all sectors..

I am concerned about the effect the displaced effort is having on the non closed areas outside the closed area. I believe daily bag limits need to be reduced on the areas either side of the closed area, otherwise these areas are going to be striped very fast.

Although MPI has recreational allowances and daily limits, there is no way of actually constraining the recreational catch to these limits. I strongly urge MPI to impliment a mandatory reporting system for all Other sectors Recreational, Maori, commercial already has mandatory reporting of catch.

This is in the best interest of the long term management of fish stocks..

This is the only way scientist can get a true indication of the stocks being taken..

Jason Burkhart s 9(2)(a) 3rd July 2017

Review of the Earthquake-affected Fisheries 2017

Fisheries Management

Ministry for Primary Industries

PO Box 2526

Wellington 6011

To whom it may concern,

Submission RE Review of Earthquake-affected Fisheries 2017

Proposed further closure for Kaikoura and Cape Campbell Earthquake-affected Fisheries

I Jeremy Phipps agree with the MPI positions upon reviewing the emergency closure within the

Kaikoura and Cape Campbell areas.

I Jeremy Phipps support Option 2 of the Management Action Plan that being to - Replace the

emergency closure with a closure under section 11 of the Fisheries act 1996.

I Jeremy Phipps also support MPI using available resources and methods to attempt to enhance the concept of the Social Responsibility Recreational and other stakeholder user's groups could

contribute to the long-term sustainability of the Fisheries Assets everyone shares, especially around

this area and until the science supports any further changes.

Kind Regards

Jeremy Phipps

s 9(2)(a)

Submission on Sustainability of Earthquake damaged area Paua 7

Having been a commercial stake holder of Paua 7 and active diver for 25 years I would like to submit the following:

- 1. I firmly believe the earthquake damaged area Cape Campbell to Clarence River should remain closed for a further 3 years.
- 2. Support for Commercial shelving 10% Area 7 from MPI.
- 3. Reduced recreational catch area 7.
- **4.** Ongoing evaluation by Science provider and Commercial sector jointly over a 3 year period.
- **5.** Government (MPI) co-operation to any viable proposal to assist with earthquake recovery to assist rebuild of fishery. Translocation maitaitai fish down on West Coast in consultation with top of South IWI would assist immensely.

Point 1.

Minimum 3 year closure period of effective areas, to allow for recruitment of juvenile stock and observation, together with undisturbed spawning and rebuilding of stock bio-mass.

Point 2.

T.A.C.C. set has reduced from 267 Tonne to 93 Tonne. The reduction has come solely from the commercial sector with no contribution from recreational or Iwi. Illegal take is still an unknown quantity.

Point 3.

Reducing recreational bag limits, would assist the increased effort that has been exerted on the fishery due to an increase of boating ownership and water sport activities over the last decade.

I have been an accommodation provider for 30 years, on questioning recreational Diver's on Paua fishing bag limits, the responses have been that the Paua limit at 10 is excessive whereas 5-6 is acceptable to their needs. Their focus is more on their ability to enjoy the activity of catching Paua.

Introducing a tagging system for recreational gatherers similar to the Australian concept, would give figures to evaluate recreational catch data.

Point 4

Ongoing Evaluation:

The evidence of Caroline Algae already rejuvenating to effected earthquake damaged areas is encouraging. The tidal splash zone area is extremely important for Paua larvae settlement.

The Joint input from the Commercial sector and Science provider's evaluation is important for providing a balanced view point.

Summary

Along with the voluntary commercial shelving of Quota the Government and MPI must help financially and recognise and support ongoing efforts to rebuilding the fishery.

Customary IWI should be encouraged to assist by allowing a fish down on the West Coast area to alleviate pressure on remaining area 7. Also support from IWI on translocation efforts currently being conducted by Paua 7 management group.

Yours faithfully

7/7/2017

John Scheerhoorn

.

s 9(2)(a)

Jonathan Blair Allan Tester Submission to:

MPI Discussion Paper 2017/17

Re: Deemed Value Review Green-Lipped Mussel (GLM9)

I am a second generation mussel farmer having grown up around the industry all my life. The spat supply from 90 mile beach is hugely important for the mussel industry and the affordable efficient allocation of the resource is essential for the economic well-being of the industry and its participants.

The industry has been recognised by Government as a priority industry on the Business Growth Agenda for its real potential to help create a more productive and competitive economy with a light touch on the environment and through its Aquaculture Strategy Government has committed to enabling the industry to reach its sustainable potential. Continued unencumbered access to a sustainable harvest of mussel spat from GLM9 is essential for this potential to be realised.

Statement of Submission

I submit that the MPI Discussion Paper 2017/17 has been written in the absence of proper background and understanding of the unique character of the GLM9 fishery or the special context within which it was brought into the QMS_1^1 . I submit that the Deemed Value Guidelines do not properly apply to GLM9 and that there is a case for special consideration by the Minister.

Furthermore | submit that in order to maintain the integrity of the QMS any consideration of deemed value should be made within the terms of the unique agreement and context with which they were written

Background – the Strategic Importance of the GLM9 Fishery for Aquaculture

GLM9 is of strategic importance to the New Zealand mussel industry as it is the source of the majority of the industry's spat and therefore supports the majority of its export earnings. In a number of growing regions mussel farmers are effectively limited to using GLM9 by biosecurity conditions that preclude other major spat sources.

In areas where mussel farmers are able to utilise spat from several regions, accessing GLM9 along with other spat types ensures availability of harvest condition mussels for most of the year. This is because spat sourced from different regions fattens at different times of the year. This in turn enables the industry to support year-round employment in regional New Zealand.

The GLM9 fishery is unique. The availability of spat on beach cast seaweed at 90-Mile Beach arises from the intersection of a variety of biological and physical factors. Because a number of these factors are temporally variable, strandings of GLM9 spat, while they generally occur within a known season, are largely episodic².

¹ Primary Production Committee (2004). *Fisheries Amendment Bill (No 3) 109-1*. Report of the Primary Production Committee

² Alfaro, Andrea (2001). *Ecological Dynamics of the Green-lipped Mussel, Perna canaliculus, at Ninety Mile Beach, Northem New Zealand.* University of Auckland Doctoral Thesis.

Furthermore GLM9 spat can be seeded onto farms and held until needed, before being moved into the final grow out cycle. This provides growers with a natural means of smoothing variability in the availability of spat. As a result, growers need access to GLM9 spat whenever it is available and as such its management within the QMS was not intended to constrain this access.

The New Zealand aquaculture industry has a growth goal of \$1 billion in sales by 2025. Some of this growth is anticipated through innovation, productivity, efficiencies, new products, new markets and new species. However a good proportion of this growth is also anticipated through increasing mussel production and continued access to a proportional increase in spat supply is imperative.

There are no recognised sustainability issues associated with GLM9 as its harvest on beach-cast seaweed has no impact on further recruitment of the adult mussel population. This is because both spat and seaweed originate from south of Ahipara and drift northwards along 90 Mile Beach and then with the prevailing currents around North Cape.

This drift spat does not cycle back into the adult population, south of Ahipara. AQNZ has corresponding research available if MPI does not currently have that to hand.

Background – a Unique Fishery in the QMS

The Ministry of Fisheries brought GLM9 into the QMS in 2004 'despite there being no pressing sustainability concerns with the fishery' in order to 'provide for efficient utilisation and future development'³. Its introduction enabled repeal of one of the few remaining provisions of the Fisheries Act 1983 (the spat catching permit regime) while continuing to provide for the aquaculture industry's future needs.

It was recognised at the time that the fishery was unique and its introduction into the QMS 'required innovation given the particular characteristics of the fishery'. The Minister took the advice of the fishers and the mussel industry regarding the TACC level and recognised that 'those with an interest in the fishery are in the best position to know what catch level will provide for the most efficient use of the resource.' The TACC at that time was set 'to meet the expected demand for juvenile mussels over the next five years' (ie to 2009).

Importantly the fishery was brought into the QMS as a s14, schedule 3 stock, in recognition that the purpose of the Act would be better achieved by setting an alternative TACC rather than to Maximum Sustainable Yield. This was in the context of knowledge and research that sustainability of the fishery was not a concern.

Please refer to the explanatory note when this was listed as a schedule 3 stock that reads (which lists stocks that are managed with an alternative total allowable catch)

Another important innovation at introduction was setting a low deemed value for GLM9 in order to enable 'non-quota owners to gain access to the fishery and provide competition to quota holders. This added competition makes it more difficult for quota holders to artificially inflate the price of juvenile mussels and it would encourage quota holders to act collectively to achieve efficiencies so they remain competitive. A low deemed value helps address the concerns of some mussel farmers that the QMS could lead to quota being aggregated and GLM9 quota holders acting anti-competitively.'

³ Workman, Martin (2004); Moving to Rights Based Management: Green-Lipped Mussel Case Study. IIFET 2004 Japan Proceedings.

A challenge for the introduction of GLM9 was 'how to measure and report juvenile mussels when they are harvested attached to seaweed'. 'The Ministry overcame this problem by requiring all fishers harvesting seaweed on 90 Mile Beach to report their catch using a set ratio for converting the weight of the material landed into the weight of the juvenile mussels and seaweed. This was based on the 'best estimate of the fishers' at the time, at 50%. The back ground to this was over the preceding 10 years the ratio was cyclic and had varied greatly between 10% and 90% it was agreed that from a management perspective the unit of measure be permanently set at 50% this allowed us to progress with the setting and management of the TACC level and deemed value rate. Over the last few years we have been going through a period of low ratios of mussels to seaweed however changing this ratio now will be problematic in the future when we return to a period of high ratios of mussels to seaweed

Request for Review of MPI Discussion Paper 2017/17

I request a withdrawal of section 6.1 of the MPI Discussion Paper 2017/17 as it was written in the absence of the context provided above. A number of assumptions within the GLM9 section are of particular relevance and concern:

'Landings have been variable but in recent years has increased to exceed the TACC with commercial fishers paying deemed values as a result'. This statement does not recognise the principle at introduction of providing a low deemed value to enable non-quota holders to gain access to the fishery in order to ensure secure and consistent supply of spat across the whole of the Greenshell mussel industry. It also does not recognise that fishers were still paying deemed values even when the TACC was not exceeded which further demonstrates the need to enable continued access through low deemed values regardless of the TACC.

- 1. 'However, fishers have chosen to land GLM9 mussels and spat in excess of ACE holdings, suggesting that the current deemed value settings, in relation to the reported port price, do not accurately reflect the value of the fishery to industry'. This statement also does not recognise the unique settings in which GLM9 was introduced to the QMS where MPI were mandated to manage this stock by way of varying the TACC and specifically agreed not to increase the deemed value rate.
- 2. 'No change to the TAC or TACC for GLM 9 is proposed for the 2017/18 fishing year, but ongoing intentional harvest of GLM 9 in excess of the TACC and available ACE could lead to sustainability risks in the long-term'. This statement, and others, are significant in their failure to understand the of the fishery or its introduction into the QMS. As stated above, there are no sustainability issues, risks, vulnerabilities or otherwise that are recognised or sought to be addressed through the QMS and management was never required or intended to constrain access to the Greenshell mussel industry's vital source of spat.

The Discussion Paper makes reference to the MPI Deemed Value Guidelines (2012) which are framed to manage 'most stocks', 'low value stocks' and 'highly vulnerable stocks'. They were not written with the unique GLM9 fishery in mind but do note that there are certain circumstances where it may be appropriate to depart from the principles and that MPI will outline these to the Minister on a case-bycase basis. I submit that GLM9 is such a circumstance and that the proposal should be reviewed in the context of the background provided above.

Summary

In summary | request that MPI;

- 1. Withdraw section 6.1 of the Discussion Paper 2017/17 as it does not adequately reflect the GLM9 fishery in the context of the QMS.
- 2. Reduce the deemed value rate back to the level it set to at introduction to the

QMS

3. Increase the TACC by the 11% that we over fished last year.

This would bring MPI back into line with what they are mandated to do and be a considered and responsible interpretation of the law as it stands.

This would keep the industry on a firm footing now and on into the future with MPI only having to adjust the TACC occasionally.

Yours sincerely,

Jonathan Tester

From: s 9(2)(a)
To: FMSubmissions

Subject: Glm9

 Date:
 Thursday, 15 June 2017 12:06:01 p.m.

 Attachments:
 Screenshot 2017-06-15-11-17-04.png

Please note that glm9 is a scedule 3 stock Management of this stock is by variation of the tacc not by variation of the deemed value Thanks kirk

Date: Monday, 19 June 2017 11:14:10 a.m.

Glm9 was brought in to the quota system by way of a special agreement with the ministry of fisheries

This agreement specified how the quota was to be allocated and how the stock was to be managed

Firstly the stock was put on the 3rd schedule with no sustainably issues. This was because the tace was set by industry demand and allowed for the tace to be increased as industry required. we were initially asking for a tace twice the size.

Glm9 was only 'also added' to the 6th schedule for practical reasons namely us being able to return the seaweed we sorted out back to the beach

Section 382 of the praposal shows mpi is mistakenly managing this stock as a scedule 6

The law states that mpi must manage this stock by altering the tacc. Increasing the deemed value rate is not a tool available to them because of the fact that it was brought into the quota system by special agreement.

Kirk

Sent from my Samsung device

Kirk Denison Submission to:

MPI Discussion Paper 2017/17

Re: Deemed Value Review Green-Lipped Mussel (GLM9)

I have been a self employed mussel spat collector for the last 23 years and was heavily involved with the extensive consultation process when it was brought into the QMS

The industry has been recognised by Government as a priority industry on the Business Growth Agenda for its real potential to help create a more productive and competitive economy with a light touch on the environment and through its Aquaculture Strategy Government has committed to enabling the industry to reach its sustainable potential. Continued unencumbered access to a sustainable harvest of mussel spat from GLM9 is essential for this potential to be realised.

Statement of Submission

I submit that the MPI Discussion Paper 2017/17 has been written in the absence of proper background and understanding of the unique character of the GLM9 fishery or the special context within which it was brought into the QMS ¹. I submit that the Deemed Value Guidelines do not properly apply to GLM9 and that there is a case for special consideration by the Minister

Furthermore I submit that in order to maintain the integrity of the QMS any consideration of deemed value should be made within the terms of the unique agreement and context with which they were written

Background – the Strategic Importance of the GLM9 Fishery for Aquaculture GLM9 is of strategic importance to the New Zealand mussel industry as it is the source of the majority of the industry's spat and therefore supports the majority of its export earnings. In a number of growing regions mussel farmers are effectively limited to using GLM9 by biosecurity conditions that preclude other major spat sources.

In areas where mussel farmers are able to utilise spat from several regions, accessing GLM9 along with other spat types ensures availability of harvest condition mussels for most of the year. This is because spat sourced from different regions fattens at different times of the year. This in turn enables the industry to support year-round employment in regional New Zealand.

The GLM9 fishery is unique. The availability of spat on beach cast seaweed at 90-Mile Beach arises from the intersection of a variety of biological and physical factors. Because a number of these factors are temporally variable, strandings of GLM9 spat, while they generally occur within a known season, are largely episodic².

¹ Primary Production Committee (2004). *Fisheries Amendment Bill (No 3) 109-1*. Report of the Primary Production Committee

² Alfaro, Andrea (2001). *Ecological Dynamics of the Green-lipped Mussel, Perna canaliculus, at Ninety Mile Beach, Northem New Zealand.* University of Auckland Doctoral Thesis.

Furthermore GLM9 spat can be seeded onto farms and held until needed, before being moved into the final grow out cycle. This provides growers with a natural means of smoothing variability in the availability of spat. As a result, growers need access to GLM9 spat whenever it is available and as such its management within the QMS was not intended to constrain this access.

The New Zealand aquaculture industry has a growth goal of \$1 billion in sales by 2025. Some of this growth is anticipated through innovation, productivity, efficiencies, new products, new markets and new species. However a good proportion of this growth is also anticipated through increasing mussel production and continued access to a proportional increase in spat supply is imperative.

There are no recognised sustainability issues associated with GLM9 as its harvest on beach-cast seaweed has no impact on further recruitment of the adult mussel population. This is because both spat and seaweed originate from south of Ahipara and drift northwards along 90 Mile Beach and then with the prevailing currents around North Cape. This drift spat does not cycle back into the adult population, south of Ahipara. AQNZ has corresponding research available if MPI does not currently have that to hand.

Background — a Unique Fishery in the QMS

The Ministry of Fisheries brought GLM9 into the QMS in 2004 'despite there being no pressing sustainability concerns with the fishery' in order to 'provide for efficient *utilisation and future development*³. Its introduction enabled repeal of one of the few remaining provisions of the Fisheries Act 1983 (the spat catching permit regime) while continuing to provide for the aquaculture industry's future needs.

It was recognised at the time that the fishery was unique and its introduction into the QMS 'required innovation given the particular characteristics of the fishery'. The Minister took the advice of the fishers and the mussel industry regarding the TACC level and recognised that 'those with an interest in the fishery are in the best position to know what catch level will provide for the most efficient use of the resource.' The TACC at that time was set 'to meet the expected demand for juvenile mussels over the next five years' (ie to 2009).

Importantly the fishery was brought into the QMS as a s14, schedule 3 stock, in recognition that the purpose of the Act would be better achieved by setting an alternative TACC rather than to Maximum Sustainable Yield. This was in the context of knowledge and research that sustainability of the fishery was not a concern.

Please refer to the explanatory note when this was listed as a schedule 3 stock that reads (which lists stocks that are managed with an alternative total allowable catch)

³ Workman, Martin (2004); *Moving to Rights Based Management: Green-Lipped Mussel Case Study.* IIFET 2004 Japan Proceedings.

Another important innovation at introduction was setting a low deemed value for GLM9 in order to enable 'non-quota owners to gain access to the fishery and provide competition to quota holders. This added competition makes it more difficult for quota holders to artificially inflate the price of juvenile mussels and it would encourage quota holders to act collectively to achieve efficiencies so they remain competitive. A low deemed value helps address the concerns of some mussel farmers that the QMS could lead to quota being aggregated and GLM9 quota holders acting anti-competitively.'

A challenge for the introduction of GLM9 was 'how to measure and report juvenile mussels when they are harvested attached to seaweed'. 'The Ministry overcame this problem by requiring all fishers harvesting seaweed on 90 Mile Beach to report their catch using a set ratio for converting the weight of the material landed into the weight of the juvenile mussels and seaweed. This was based on the 'best estimate of the fishers' at the time, at 50%. The back ground to this was over the precedeing 10 years the ratio was cyclic and had varied greatly between 10% and 90% it was agreed that from a management perspective the unit of measure be permanently set at 50% this allowed us to progress with the setting and management of the TACC level and deemed value rate. Over the last few years we have been going through a period of low ratios of mussels to seaweed however changing this ratio now will be problematic in the future when we return to a period of high ratios of mussels to seaweed

Request for Review of MP | Discussion Paper 2017/17 | request a withdrawal of section 6.1 of the MP | Discussion Paper 2017/17 as it was written in the absence of the context provided above. A number of assumptions within the GLM9 section are of particular relevance and concern:

'Landings have been variable but in recent years has increased to exceed the TACC with commercial fishers paying deemed values as a result'. This statement does not recognise the principle at introduction of providing a low deemed value to enable non-quota holders to gain access to the fishery in order to ensure secure and consistent supply of spat across the whole of the Greenshell mussel industry. It also does not recognise that fishers were still paying deemed values even when the TACC was **not** exceeded which further demonstrates the need to enable continued access through low deemed values regardless of the TACC.

- 1. 'However, fishers have chosen to land GLM9 mussels and spat in excess of ACE holdings, suggesting that the current deemed value settings, in relation to the reported port price, do not accurately reflect the value of the fishery to industry'. This statement also does not recognise the unique settings in which GLM9 was introduced to the QMS where MPI were mandated to manage this stock by way of varying the TACC and specifically agreed not to increase the deemed value rate.
- 2. 'No change to the TAC or TACC for GLM 9 is proposed for the 2017/18 fishing year, but ongoing intentional harvest of GLM 9 in excess of the TACC and available ACE could lead to sustainability risks in the long-term'.

 This statement, and others, are significant in their failure to understand the

context of the fishery or its introduction into the QMS. As stated above, there are no sustainability issues, risks, vulnerabilities or otherwise that are recognised or sought to be addressed through the QMS and management was never required or intended to constrain access to the Greenshell mussel industry's vital source of spat

The Discussion Paper makes reference to the MPI Deemed Value Guidelines (2012) which are framed to manage 'most stocks', 'low value stocks' and 'highly vulnerable stocks'. They were not written with the unique GLM9 fishery in mind but do note that there are certain circumstances where it may be appropriate to depart from the principles and that MPI will outline these to the Minister on a case-by-case basis. I submit that GLM9 is such a circumstance and that the proposal should be reviewed in the context of the background provided above.

Summary

In summary I requests that MPI;

- 1. Withdraw section 6.1 of the Discussion Paper 2017/17 as it does not adequately reflect the GLM9 fishery in the context of the QMS.
- 2. Reduce the deemed value rate back to the level it set to at introduction to the QMS
- 3. Increase the TACC by the 11% that we over fished last year

.This would bring MP | back into line with what they are mandated to do and be a considered and responsible interpretation of the law as it stands.

This would keep the industry on a firm footing now and on into the future with MPI only having to tweek the TACC occasionally

Yours sincerely

Kirk Denison

3rd July 2017

Review of Earthquake-affected Fisheries 2017 Fisheries Management Ministry for Primary Industries P O Box 2526 Wellington 6011.

To whom it may concern,

Submission RE Review of Earthquake-affected Fisheries 2017.

<u>Proposed further closure for Kaikōura and Cape Campbell earthquake-affected</u> fisheries

Lanfar Holdings (No4) Ltd (Lanfar) agrees with MPI positions upon reviewing the emergency closure within the Kaikoura and Cape Campbell Areas.

Lanfar supports Option 2 of the management Action plan that being to —

Replace the emergency closure with a closure under section 11 of the Fisheries Act 1996.

Lanfar also supports MPI using available resources and methods to attempt to enhance the concept of the Social Responsibility Recreational and other stakeholder user's groups could contribute to the long-term sustainability of the Fisheries Assets everyone shares; especially around this area and until the science supports any further changes.

Kind Regards

Dennis Burkhart

Director

6th July 2017

Review of Earthquake-affected Fisheries 2017 Fisheries Management Ministry for Primary Industries P O Box 2526 Wellington 6011.

To whom it may concern,

Submission RE Review of Earthquake-affected Fisheries 2017.

<u>Proposed further closure for Kaikōura and Cape Campbell earthquake-affected</u> fisheries

Larnce Wichman supports Option 2 of the management Action plan that being to —

Replace the emergency closure with a closure under section 11 of the Fisheries Act 1996.

I support the work and effort Puamac 3 & 7 are undertaking to recruit more seeded Paua stock in to the coastal environment, I believe MPI should work collaboratively with commercial to achieve a better outcome for New Zealand.

I also support MPI using available resources and methods to attempt to enhance the concept of the Social Responsibility with Recreational and other stakeholder user's groups could contribute to the long-term sustainability of the Fisheries Assets everyone shares; especially around this area and until the science supports any further changes.

Kind Regards

Larnce Wichman

Mail.

s 9(2)(a)

4th July 2017

Review of Earthquake-affected Fisheries 2017 Fisheries Management Ministry for Primary Industries P O Box 2526 Wellington 6011.

To whom it may concern,

Submission RE Review of Earthquake-affected Fisheries 2017.

<u>Proposed further closure for Kaikōura and Cape Campbell earthquake-affected fisheries</u>

1

Lester Gregg agree with MPI positions upon reviewing the emergency closure within the Kaikoura and Cape Campbell Areas.

I support Option 2 of the management Action plan that being to —

Replace the emergency closure with a closure under section 11 of the Fisheries Act 1996.

I also support MPI using available resources and methods to attempt to enhance the concept of the Social Responsibility Recreational and other stakeholder user's groups could contribute to the long-term sustainability of the Fisheries Assets everyone shares; especially around this area and until the science supports any further changes.

Regards

Lester Gregg

-18-79

s 9(2)(a)

From: s 9(2)(a)To: s 9(2)(a)Subject: GLM9 Submission

Date: Sunday, 23 July 2017 9:23:59 p.m.

Hi Allen,

Conscious of the time, in my haste to send you something in writing on Friday night, I realised that after sending it there were various grammatical errors. Please ignore my Friday 21 July 5.23pm email and use this one instead. Thanks Gary

Hi Allen,

Following our phone call, we make the following submission with respect to proposed changed in the deemed values for GLM9

Our Position on the Proposals

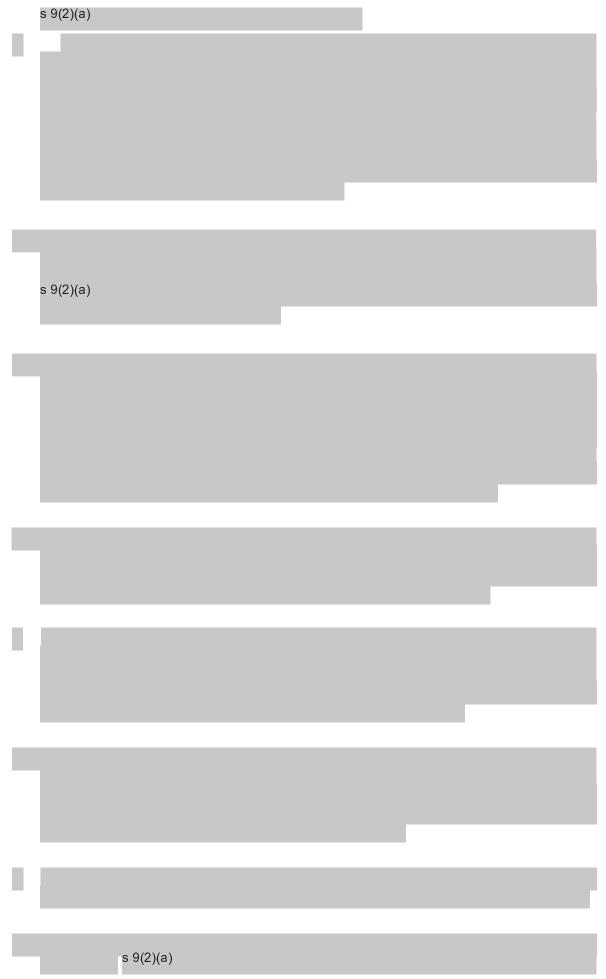
Firstly, we do not believe there is a sustainability issue with GLM9 given that the weed is washed up on the beach and if not collected, the spat dies which seems to be a huge waste of resource. For reasons above, the inclusion of this stock in the QMS is not really the perfect fit, although we can see logic in having it in there to avoid a complete uncontrolled "free for all".

However, we believe it is appropriate to achieve all objectives by having a **modest deemed value** by retaining the deemed value at the same rate and/or a **more favourable TACC catch ratio** limit per quota share.

We do not believe the QMS is working that well for this stock as there is no ACE market due to concentration of a substantial portion of quota controlled by a few dominant players. It is therefore unfair on other players and a barrier to growth if the deemed values increase.

The following Comments are CONFIDENTIAL and must not be released to the public domain.

s 9(2)(a)		





Gary Rountree Financial Controller MacLab (NZ) s 9(2)(a)



7th July 2017

Sustainability Review 2017 Fisheries Management

MFA Submission on the GLM9 Deemed Value Rate Review

- 1. The Marine Farming Association (MFA) is a subscription based organisation representing marine farmers in the top of the South Island of New Zealand. The MFA has 130 ordinary members who own, lease or sublease Greenshell mussel, oyster and King Salmon farms in the upper South Island. Marine farmers in the MFA's growing area grow 70% of the marine products farmed in New Zealand.
- 2. Sales from those farms exceed \$270 million per year. Marine farms in Marlborough contribute around 5.7% of Marlborough's GDP (from farming and processing). The industry accounts for approximately 250 FTEs in farming and approximately 600 FTEs in processing in Marlborough.
- 3. The MFA was set up with the objective to promote, foster, advance, encourage, aid and develop the rights and interests of its members and the marine farming industry in general. The MFA works alongside other industry bodies to see the New Zealand Aquaculture sector recognised within New Zealand and around the world as producing healthy, high quality, environmentally sustainable aquaculture products.
- 4. The top of the South region of New Zealand produces between 65 and 70% of the Greenshell mussels farmed in New Zealand. The average annual tonnage harvested is around 70,000 tonnes. To support this achievement mussel farmers in the top of the South require substantial amounts of mussel spat. Traditionally this spat comes from Kaitaia (GLM9, 75%), Golden Bay/ Tasman Bay (20%) and the Marlborough Sounds (5%). Although not all mussel farmers in the top of the South are GLM9 quota owners, they are certainly 'stakeholders' in the GLM9 fishery. The MFA is their representative body and therefore has an interest in the current Deemed Value Review.
- 5. This submission is lodged on behalf of non GLM9 quota owning members whose businesses rely on the unencumbered availability of GLM9 spat at a price that makes their businesses sustainable/ profitable.
- 6. The GLM9 mussel spat fishery is unique. It was brought into the QMS in 2004 'despite there being no pressing sustainability concerns with the fishery'. The introduction of GLM9 into the QMS was done with the knowledge that it 'required innovation given the particular characteristics of the fishery'. At that time the Ministry of Fisheries noted 'those with an

interest in the fishery are in the best position to know what catch level will provide for the most efficient use of the resource'. The basic premise has not changed since 2004.

- 7. The historic catch of mussel spat from 90 Mile Beach has been based on the spat to seaweed ratio of 50:50 which was based on 'the best estimate of fishers' at that time. There is a strong likelihood that his figure is incorrect and because of this the current reporting system probably over reports GLM9 catch.
- 8. The MFA has a long standing policy on the 'utilisation of Kaitaia spat' (Annex 1). In principal the MFA 'supports industry wide access to and the availability of Kaitaia spat at a reasonable cost and without encumbrances' and the 'MFA supports any change in the quota based on sound science which would result in increased supplies of Kaitaia Spat'.
- 9. In respect of the Section 6.1 review of GLM9 mussel spat harvest the MFA:
- 10. AGREES that there are no current short or medium term sustainability risks in this fishery (para 383). The MPI document talks of the possibility of long term risk, however this is presented as conjecture only.
- 11. NOTES that there is no science information to support the suggestion that there 'could' be long term sustainability risks.
- 12. NOTES that no science data has been presented to inform and update the current spat : seaweed ratio (and subsequent TACC).
- 13. SUGGESTS that rather than over fishing the TACC, there has been an over statement in landed catch due to the incorrect spat ratio being used.
- 14. Because of these points the MFA DISAGREE with the proposed increase in Deemed Values as presented in Table 1 (para 358).
- 15. The proposed increase in Deemed Value Rates are excessive, not based on science, do not reflect the quest for innovation and availability (as originally proposed by the Minister of Fisheries) and can be seen as a cash grab by MPI which will only result in an increase in the cost of Kaitaia Spat to mussel farmers in the top of the South (for no proven good reason).
- 16. The MFA therefore requests that MPI delays the decision of the Deemed Values for GLM9 until the question of the spat: seaweed ratio have been agreed to by quota owners and stakeholders.
- 17. The MFA supports the submission made by Aquaculture New Zealand Ltd.

Thank you for providing us the opportunity to respond to your Deemed Value Rates proposal. We are available to further discuss concerns should you wish to meet with us.

Yours Sincerely

Jonathan Large

MFA President 76

26: UTILISATION OF KAITAIA SPAT POLICY

1. BACKGROUND

At the MFA Executive Committee Meeting on the 17th April 2015 it was noted that:

- It was desirable to optimise the availability and access to Kaitaia spat to all farmers.
- A review of the spat/weed ratio was a worthwhile initiative.
- There was an ownership issue created through the GLM 9 quota rights and that the MFA supported an increased ratio, however, the weed quota tonnage was a matter for negotiation between the GLM 9 shareholders and MPI.

2. POLICY

- 1. The MFA supports the position of AQNZ in respect of the weed/spat ratios.
- 2. The MFA supports industry wide access to and the availability of Kaitaia spat at a reasonable cost and without encumbrances.
- 3. In respect of the rights of GLM 9 quota owners, the MFA supports any change in the spat ratio which would result in increased supplies of Kaitaia spat.
- 4. Any increase in GLM9 quota is a matter to be agreed between MPI and the GLM9 quota owners, however the MFA supports any change in the quota based on sound science which would result in increased supplies of Kaitaia Spat.

From: S

To: FMSubmissions; Nicole Heybourn; Mark Geytenbeek (Mark Geytenbeek)

Subject: Fwd: Proposed extension of emergency closure to take any shellfish or seaweed.

 Date:
 Thursday, 6 July 2017 1:31:44 p.m.

 Attachments:
 Conchocelis at depth a review ETM-1.pdf Conchocelis at depth a review ETM-4.docx

The Reproductive Cycle and Structures of Pyropia-1.docx

----- Forwarded Message ------

Subject:Proposed extension of emergency closure to take any shellfish or seaweed.

Date:Mon, 23 Jan 2017 14:04:31 +1300

From: s 9(2)(a)

To: FMsubmissions@mpi.govt.nz

To FM @MPI 06/07/2017

My submission for this round of submissions is a copy of my first on 23/1/17.

This season I have carried out surveys on areas of the coast, and found that regrowth is occurring in the areas that I harvested last year and previous years.

I have met with Mark Gutenberg from MPI and spoken with John Parker from University Of Canterbury who is carrying out the Coastal Survey, regarding Porphyra (Karengo), they sounded positive of regeneration within its tidal zone area from what has be seen to date this season.

The tidal zone where Porphyra grows, is not in the area that paua are situated, and should not be included with the seaweeds that were devastated in the earthquake uplift that the inshore fisheries depended on.

I also enclose papers on the regeneration of porphyra.

My concern was that the uplift may have affected one section of the sporing cycle, the papers supplied to me by Eliot Masters from Nelson Marlborough Institute Of Technology have clarified the depths that conchocelis occurs and clears the concern I had.

To include Porphyra (Karengo) in a total closure without the knowledge of how it performs this season, the information from my two remits, and the information that will be provided from Mark Gutenberg MPI, Dr John Parker from Canterbury Universitywho has been contracted by the Ministry to advise it, local MPI resident Fisheries Inspectors, local IWI, and myself would be very very disappointing.

Thanks Martina MacDonald

To FM @ MOI,

23/1/2017

I have a Permit to harvest Porphyra (Karengo) seaweed between the Huranui River mouth, south of Kaikoura to Waipapa Bay north of Kaikoura.

My Permit allows me to harvest 10 wet tons per year between 1st July to 31st October.

The areas that are excluded for harvesting in my Permitted area are defined in the Kaikoura Marine Area

I have had a permit to harvest Porphyra since 1979.

I have only harvested what I thought an area would sustain.

The proposed closure area would shut my operation down.

My concern also is that MPI and all the names that it has had, in the last 37 years that I have been involved with Porphyra, have not had a great deal of knowledge about the seaweed, The exception to this was between 1980 / 1984 when the Hon Duncan McIntyre had the Dept of Ag & Fish carry out a Karengo survey, the scientists where Mike Bradstock ,and Dr Wendy Nelson and her

team and I was asked to assist as required.

The outcome of the survey was that there was a sustainable supply on the coast to grant my permit.

In the survey it was also found that the Life Cycle of Porphyra was quite different to others on the coast.

Porphyra (karengo) grows from spores which are released by a plant that bears no physical resemblance to the porphyra blade. This plant called conchocelis, is the summer phase of the Porphyra life cycle. It is a microscopic filamentous plant which developes from spores released by the mature Porphyra blade. In nature the conchocelis filament burrows and grows beneath the surface of mollusk shells. The filaments branch and develop inside the shell, forming a plant mass that will eventually be visible to the naked eye as a darkly stained area on the shell surface. In the fall, as water temperatures drop and day length shortens, the conchocelis spore bearing branches, called sporangia, mature and release spores. these spores will float into the high intertidal and attach to rocks or any other suitable substrate, developing into Porphyra blades and completing the life cycle.

At the time of the earth quake I had stopped harvesting and the life cycle of the Porphyra was in the conchocelis stage, by mid May 2017 it will be possible to do a Monospore survey of the areas of Kaikoura, South Bay and Peninsular / Seal Colony ,Mangamanu, and Rakautara as I do every year to determine the areas to harvest, if the survey showed good coverage a further survey would be done July, and harvesting would start August.I would be harvesting seven tonne this season.

The area the Porphyra grows on a normal tide is approx between the High and Low Tide mark,generally there are no other types of seaweed that grow in this region, which eliminates any bycatch. At times toward the end of harvest time Alva will grow between the low tide mark and the start of the Porphyra growth zone, also the only creature that inhabits the seaweed is a small hopper which is found in all other kelp in the area, because Porphyra is only on the the rocks for six months then disappears, I do not see it as a seaweed dependent by other marine species.

I would hope that the information I have provided will assist any decisions made on a total ban of all seaweeds or only those that would be required to sustain other species.

I am not opposed to sustainable management and await your decision on my submission.

I would also add that I am disappointed that I had not received any correspondence from MPI or FishServe on the above and only found out about what was being proposed by talking to a friend yesterday.

71		- 1	
n	01	١k	9
- 11	141	IК	

Martina MacDonald	s 9(2)(a)		
-------------------	-----------	--	--

Mechanisms for regeneration of karengo on the Kaikoura coast, 2017: A Review

Given the extreme geophysical and evident biotic impacts of the 2016 Kaikoura earthquake on the nearshore marine environment, an abundance of caution would seem to be justified in restricting harvest of all benthic organisms by a blanket moratorium.

However, recent observation and review of the literature suggests that inclusion of karengo (*Pyropia* syn. *Porphyra* spp.) in such a moratorium is not justified by the complexities of reporoduction in the species. The leafy thallus which is harvested from rocks at the tide line is annual growth, seeded by a microscopic conchocelis phase which bores into shell sediment at some depth. Recent observations seem to indicate that karengo along the earthquake-affected area of the Kaikoura coast has been effectively repopulated by its annual cycle of sporulation. A comprehensive review of the literature indicates that the microscopic conchocelis phase occurs in calcareous substrate (mainly scallop shells) at greater depth that may be immediately apparent, effectively constituting a generative (and genetic) reserve of sporulating conchocelis.

Since the conchocelis phase of was definitively linked to the genus in 1949, it has been extensively studied under laboratory conditions, but only rarely documented in its natural environment (i.e. in situ). The relevant literature describes a resilient benthic organism which has been found to be well established within a range of over 80 meters of depth, from above to well below the mean low water.

Among the first *in situ* observations of conchocelis depth, Bird (1973) found conchocelis of *P. linearis* at a depth of 9 m in the sub-littoral zone near Sandy Cove, Halifax County, Nova Scotia.

With considerably greater focus on the limits and implications of its range in two successive studies, the conchocelis phase was sampled at a depth of 78 m in the Firth of Clyde, Scotland, by Clokie et al. (1979) and Clokie and Boney (1980). The authors identified *Pyropia conchocelis* as 'usually the deepest growing plant' – and proposed it as a 'form range organism' in that the maximum depth of its occurrence represents 'the lower limit of the photic zone' (ibid).

More recently, Tribollet et al. (2017) documented occurrence of living conchocelis in coral at depths of between 2 and 35 m in Indonesia, and, at the upper extreme, conchocelis was noted up to 1.4 m above mean low water at San Juan Island, Washington State, USA (Martinez 1990).

Although the mechanism by which conchospores released by the conchosporangia at depth rises to reach the tidal zone, it may be supposed that the along-shore advection and upwelling noted at Kaikoura provides such a mechanism, as described by Chiswell and Schiell (2001). It seems evident that conchospores have been effectively generated and transported to littoral substrate since the Kaikora earthquake, where they have anchored and grown into leafy thallus at densities proximate to pre-event levels.

Eliot Masters
Nelson Marlborough Institute of Technology
(NMIT)



References:

Bird, C. J. (1973). 'Aspects of the life history and ecology of *Porphyra linearis* (Bangiales, Rhodophyceae) in nature'. *Canadian Journal of Botany* 51(12): 2371-2379. Online at: https://doi.org/10.1139/b73-304

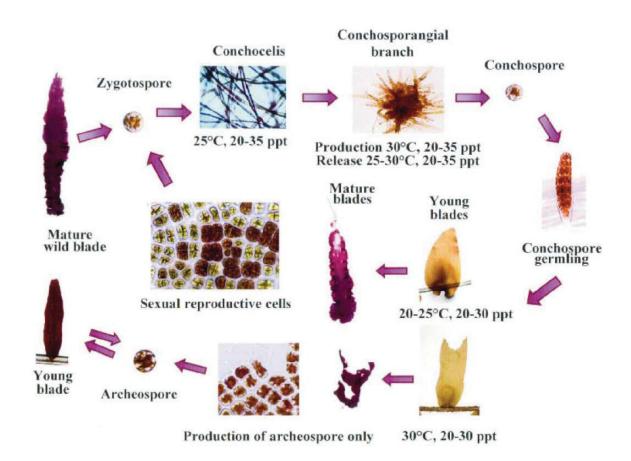
Chiswell, S.M. and D.R. Schiell (2001). 'Influence of along-shore advection and upwelling on coastal temperature at Kaikoura Peninsula, New Zealand'. New Zealand Journal of Marine and Freshwater Research 35: 307-317.

Clokie, J.J.P. and A.D. Boney (1981). 'Depth maxima of *Conchocelis* and *Phymatolithon rugulosum* on the N. W. Shelf and Rockall Plateau'. *Marine Ecology - Progress Series* 4:131–133.

Clokie, J.J.P.; A.D. Boney and G.E. Farrow (1979). 'The significance of Conchocelis as an indicator organism: data from the Firth of Clyde and N.W. Shelf'. *Br Phycol* J 14:120–121.

Drew K.M. (1949). 'Conchocelis-phase in the life-history of *Porphyra umbilicalis* (L.) Kütz. Nature 164:748–749.

Tribollet, A.; D. Pica, S. Puce, G. Radtke, S. E. Campbell and S. Golubic (2017). 'Euendolithic Conchocelis stage (Bangiales, Rhodophyta) in the skeletons of live stylasterid reef corals'. *Marine Biodiversity*



The Reproductive Cycle and Structures of *Pyropia* syn. Porphyra spp. from: Ruangchuay, R. and M. Notoya (2003). 'Physiological Responses of Blade and Conchocelis of *Porphyra vietnamensis* Tanaka et Pham-Hoang Ho (Bangiales, Rhodophyta) from Thailand in Culture'. In: *Algae* 18(1): 21-28, 2003

Ministry of Primary Industries
Wellington
By email to FMsubmissions@mpi.govt.nz
7 July 2017

Submission of Moana New Zealand in relation to the Review of Sustainability Controls for 1 October 2017 for Bluenose Stocks

This submission has been prepared by Aotearoa Fisheries Limited, trading as Moana New Zealand (Moana), in response to pages 12 to 21, Part B, of MPI Discussion Paper 2017/17 Review of Sustainability Controls for 1 October 2017 (the Discussion Paper).

- 1. Moana is 100% Iwi owned with all Iwi r holding shares in the Company. Moana was established by the Maori Fisheries Act 2004 (the MFA). The company operates processing facilities in Bream Bay, Auckland, Whitianga, Coromandel, Palmerston North, Wellington, and Waitangi on the Chatham Islands. Moana markets fresh, live, and processed seafood and other food products to customers in all parts of the world. Moana is committed to, and is reliant on, the sustainable management of fisheries.
- 2. Moana is a significant holder of BNS quota and is a major participant in the BNS target fishery in on the east coast of the north island. Moana holds 30% of BNS1 and 27% of BNS2 quota shares, approximately 200 t ACE equivalent at the current TACC. BNS makes a valuable contribution to Moana's product portfolio in fresh markets in Australia and North America. Sustainable management of the BNS fishery is essential to Moana's future profitability. Moana is committed to supporting whatever actions are necessary to secure the long term future of the BNS fishery.
- 3. Moana is a member of Fisheries Inshore New Zealand (FINZ). Moana supports the submission of FINZ in response to the BNS sustainability controls proposed in the Discussion Paper.
- 4. Specifically Moana supports:
 - a) Responsive management of the fishery through the use of Management Procedures (MP) as have been discussed by MPI and FINZ over the past 18 months.
 - b) A reduction in the TACC from 900t to 800t conditional on completion of a new stock assessment during the 2017/18 fishing year and the implementation of a MP approach to management of the fishery.
- 5. Moana does not support:
 - a) A reduction in the TACC to 620t. A reduction of this size simply to increase the likelihood of achieving the target rebuild time is not tenable. The resulting economic and social disruption is disproportionately excessive in relation to the unquantified benefits of increasing the likelihood of achieving a default rebuild timeframe. A reduction in the TACC to 620t will result in the BNS fishery becoming largely a bycatch fishery restricting the ability to collect data to monitor and manage the fishery.
 - b) Reducing the TACC without committing to active management of the fishery during the rebuild of the stock. A "set and forget" approach to management of the BNS fishery, or for that matter any other economically important fishery, will not deliver optimal use of our marine resources.

c) Leaving the recreational allowance unchanged. All fishers who benefit from utilising the fishery should invest in its future. Recreational fishers should be encouraged to invest in the sustainability of the BNS fishery and should not be insulated from the need to reduce current consumption in order to maintain future consumption.

This submission is made by Steve Tarrant, Chief Operating Officer, Moana New Zealand.

Contacts

Steve Tarrant s 9(2)(a)

Nathan Reid s 9(2)(a)

To Ministry of Primary Industrier

F.M. Submission. Pau3.

From. N& I Boyd Family Trust. Fish Serve Client No:

s 9(2)(a)Contact. Linda Boyd

Noel Boya.

s 9(2)(a)

Received by post 29/6/17

While I have viewed first hand and fully appreciate the devastation and losses incurred to Paua & their habitat both North & South of Kaikoura, I feel that just closing with TAC reductions / shelving etc, should be rigorously debated & all options pursued.

From a statistical area point of view, I suggest discussing the following:-

1: Area 304.

Have there been any substantial losses here? Mangamanu – Hapuku was a very good resource. From the Cemetery to Hapuku River, extending well offshore, I feel has perhaps been unaffected.

2: Area 309 (Mikonui South) & 310.

These areas do not appear to be greatly affected (as viewed from the air)??

3: Area 312/313/314.

These are all areas that are underutilised due to dirty water.

4: Area 316 – 321 (South of regularly dived NapeNape area).

There's a large area, virtually untouched due to dirty water which has known Paua beds. Probably the biggest untapped resource in Area 3.

5: All of Banks Peninsula.

Stunted stock here – I believe there are still many areas that have not been adequately explored. Also stunted stock with 'Fishdowns' being debated for several years.

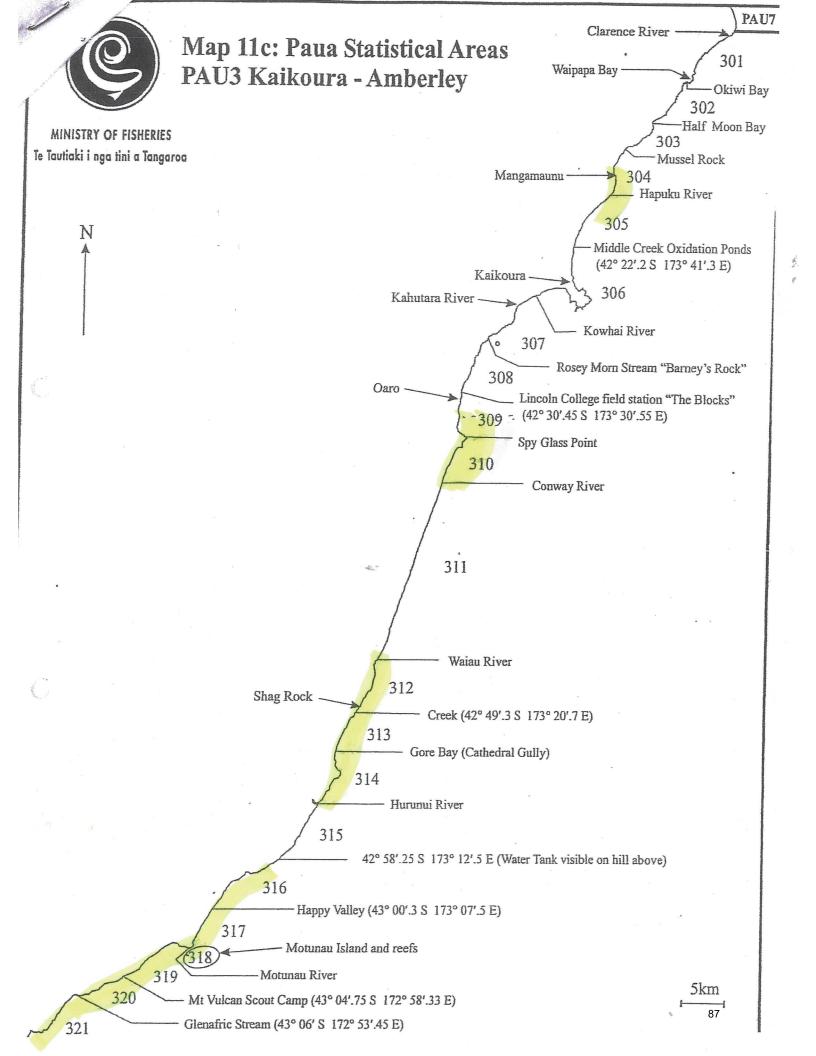
6: Area 338.

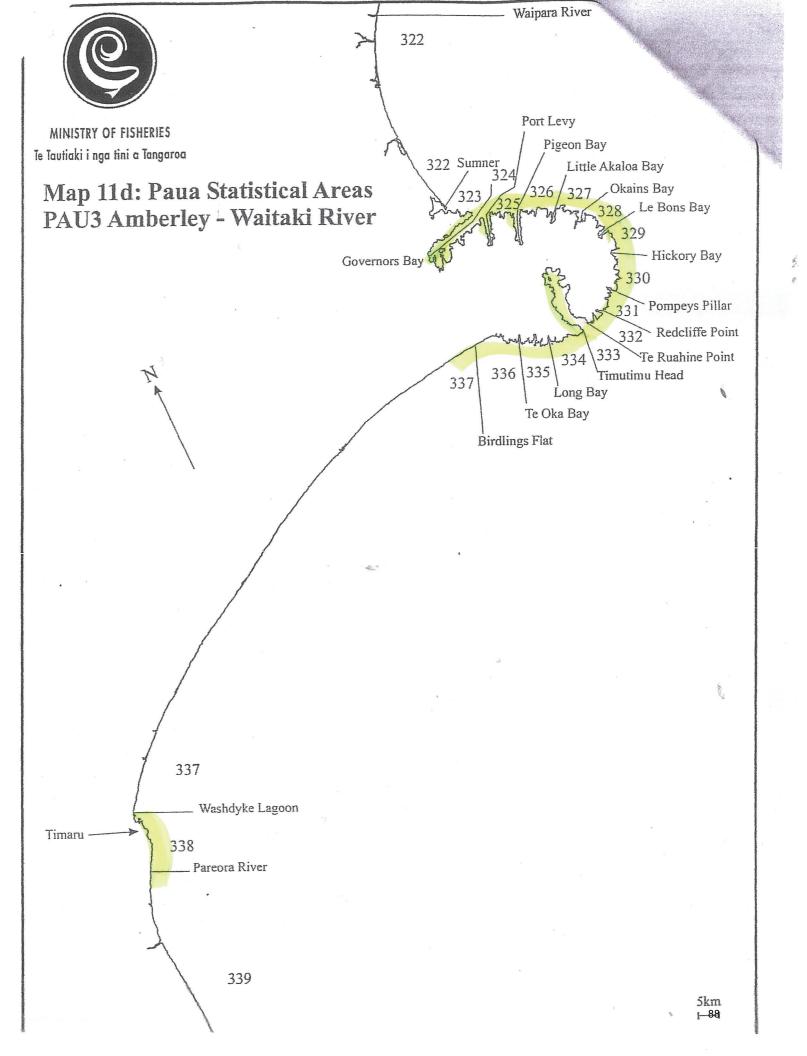
I understand there are Paua here but in dirty water.

I suggest that we discuss & agree or disagree, on a system to explore and take conservative amounts from these (or some of these) areas, in the form of a commercial catch / survey for one season with the aid of air. (See the Chatham Island concession for UBA) to negate the dirty water issues - all rigorously monitored by data loggers & or camera data!

OR – Another, completely 'outside the square' thought – There are some large & untouched (apart from the 'burglars' who have a field day there!) areas:- Wellington Coast & the West Coast of the South Island both have a large & untapped resource. Compensate any cuts or shelving losses with 'Special Permits' to take the equivalent stock from these areas until ours recovers.

Above all we need to remember that all (& more than) the Area 3 TAC used to be taken basically from The Clarence to Conway! This of course was probably not sustainable long term. The 'Dirty Water' coastline would possibly equate to an approximately similar area as above, although with (at this stage), unknown total stock levels.





Phil Appleyard
President
NZ Sport Fishing Council
PO Box 207-012
Hunua 2254
secretary@nzsportfishing.org.nz

LEGASEA
BRINGING BACK THE RITE



Sustainability Review 2017 Ministry for Primary Industries P O Box 2526 Wellington 6011 FMsubmissions@mpi.govt.nz

7 July 2017

Review of sustainability measures for 1 October 2017 – Inshore Stocks DP 2017/17 Review of closure for Earthquake-affected Fisheries DP 2017/21

Submission:

- NZSFC support Option 3 for Bluenose, with a 704 tonne combined TAC for the five main areas.
- NZSFC supports Option 2 for Gurnard in GUR 7, a 65 tonne increase in the TAC.
- NZSFC support Option 2 in Red Cod in RCO 2, a 61 tonne increase in the TAC.
- NZSFC support Option 2 for the proposed Kaikoura closure, full closure under Section 11.
- NZSFC supports Option 1 for PAU3, 50% reduction in TACC.
- NZSFC support Option 2 for PAU7, 10% reduction in TACC.

The submitters

- 1. The New Zealand Sport Fishing Council and supporters of our public outreach LegaSea, (the submitters) appreciate the opportunity to submit feedback to the Ministry of Primary Industries (MPI) on the 2017 Review of sustainability controls for inshore stocks for 1 October, and the Review of closure for earthquake affected fisheries. MPI released their proposals on 7 June 2017. Submissions are due by 7 July 2017.
- 2. The New Zealand Sport Fishing Council is a National Sports Organisation with over 33,000 affiliated members from 56 clubs nationwide and a growing number of contributing supporters to LegaSea. 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 Dave Lockwood, secretary@nzsportfishing.org.nz.
- 3. We are committed to ensuring that sustainability measures and 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 and ensuring sustainability.

Proposal to decrease Total Allowable Catch for Bluenose

Background

- 4. Bluenose is a long-lived, low-productivity stock which means it is less responsive to management changes than some other species. Significant concerns arose in 2011 when a stock assessment indicated that the combined biomass for the five Bluenose QMAs was between 14 and 27% of the virgin (unfished) biomass (B₀).
- 5. In 2011 the Minister agreed to a three-year reduction plan aimed at rebuilding Bluenose stocks to 40% of B₀ by 2031-2037. The first two planned reductions of the rebuild plan happened in 2011 and 2012. On the basis of positive signs from the fishery the final phase of catch reductions in 2013 was deferred to allow for further investigation of new information.
- 6. After three subsequent years of declining CPUE, and an updated stock assessment in 2016, new management action was deemed necessary to meet the rebuild target. The TACC was reduced by 200 tonnes in 2016. This was an interim measure until an agreed Management Procedure was developed to guide Bluenose management into the future. As a Management Procedure has not been agreed upon, further management action is proposed to help ensure the stock reaches the agreed target within the Minister's timeframe.

Proposals

7. MPI proposes to review the total allowable catch (TAC), including allowances and the total allowable commercial catch (TACC) for Bluenose in all quota management areas (QMAs). Reductions, if applied, could be spread proportionally across TACCs for the five QMAs. MPI considers that, at this time, there is no new information to suggest recreational allowances should be changed.

Table 1: Proposed management settings in tonnes (t) for BNS 1, 2, 3, 7 & 8 combined from 1 October 2017

		Total	•	Allowances			
Option	Total Allowable Catch (t)	Allowable Commercial Catch (t)	TACC tonnage decrease and % change	Customary Māori (t)	Recreational (t)	All other mortality caused by fishing (t)	
Option 1 (Status quo)	990	900	-	9	63	18	
Option 2	888 ↓	800 ₩	100 t ↓ (11%)	9	63	16 ✔	
Option 3	704 ↓	620 ↓	280 t ↓ (31%)	9	63	12 ₩	

Submission

- 8. In 2011 our members considered that the Bluenose stock had been significantly fished down and that an immediate, or staged, reduction of the combined TACs to 787 t or below was required to produce a timely rebuild to target biomass.
- 9. The NZSFC submission in 2016 again expressed concern about the state of the stocks and supported a combined TAC of 704 t, as per the rebuild plan signed off by the Minister in 2011.
- 10. We highlight the collapse of the Australian fishery for this species as a clear warning that a precautionary approach is needed.

11. NZSFC support Option 3 for Bluenose, with a 704 t combined TAC in the five main areas because half-measures implemented to date have consistently failed to turn this fishery around and start rebuilding the stock to the target level (The 2016 stock assessment results are summarised in Figure 8 from the May 2017 Fishery Assessment Plenary document, below).

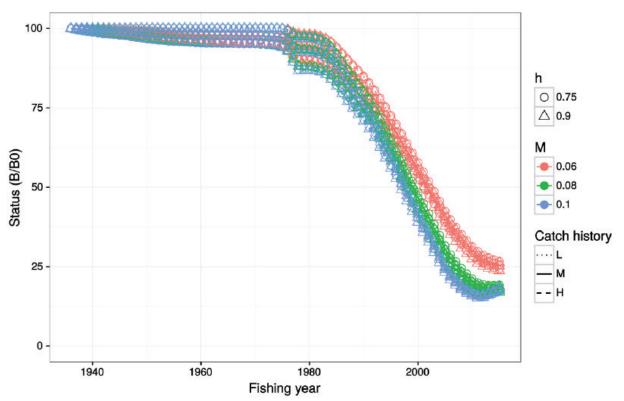
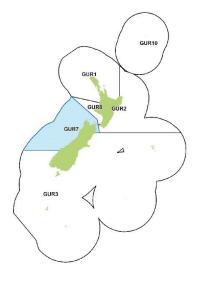


Figure 8: Results of the national Bluenose stock assessment showing the change in biomass as a proportion of the unfished biomass using three different values for natural mortality (M) and two estimates for steepness (h).

Proposal to increase Total Allowable Catch for Red Gurnard in GUR 7

Background

- 12. Red Gurnard have a fast growth rate and relatively short lifespan, and fluctuations in recruitment may result in large fluctuations in stock biomass.
- 13. The catch limits for Red Gurnard in GUR 7 were last reviewed in 2014 when results from the West Coast South Island trawl survey showed an increasing index of abundance. The TAC was increased from 855 to 919 tonnes and the TACC was increased from 785 to 845 tonnes.
- 14. The Fisheries Assessment Working Group has set a management target of the average West Coast South Island trawl survey biomass estimate from 1992 to 2013. This is 436 t from the area surveyed.



Proposals

15. MPI proposes the following options for the total allowable catch (TAC), total allowable commercial catch (TACC) and associated allowances for Red Gurnard in GUR 7 (Table 1). These proposals include TACC increases of 7% or 15%.

Table 1: Proposed management settings in tonnes (t) for GUR 7 from 1 October 2017

,	Total Allowable Catch (t)	Total Allowable Commercial Catch (t)	TACC tonnage increase and % change	Allowances			
Option				Customary Māori (t)	Recreational (t)	All other mortality caused by fishing (t)	
Option 1 (Status quo)	919	845	-	10	22	42	
Option 2	984 🔨	905 🛧	60 t 🔨 (7%)	11 🛧	24 🔨	44 🛧	
Option 3	1062 🛧	975 🛧	127 t 🛧 (15%)	12 🛧	25 🛧	50 🛧	

MPI rationale for increasing the TACC

- 16. MPI rationale for reviewing Red Gurnard 7 includes:
 - Red Gurnard stock size can be highly variable from year to year.
 - Updated information in 2017 shows that the WCSI trawl survey relative biomass is three times higher than the target level and is likely to remain high in the short term as a result of good recruitment.
 - Two different options are proposed to allow for consideration of the uncertainty in the available information and the management of sustainability risk. The Information Principles in the Fisheries Act require that caution be applied when making decisions.
 - Ongoing monitoring of the stock using trawl surveys (the next is in 2019) will enable responsive management and appropriate adjustments to address risk and possible opportunity.

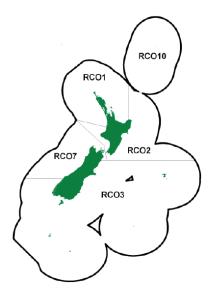
Submission

- 17. It is incorrect for MPI to claim there has been a steady increase in the Trawl Index since the 2014–15 review, and a greater opportunity for sustainable utilisation now exists. There has only been one trawl survey since 2015 which shows that the index is effectively at the same level.
- 18. NZSFC supports the use of data from fishery independent surveys and believes they will become increasingly important as technology changes.
- 19. It is common that fish stocks have natural cycles in abundance. Significant increases in catch allowances when abundance is at a peak may exacerbate the decline when it comes.
- 20. NZSFC supports the more precautionary of MPI's proposals for GUR 7, Option 2, a 65 tonne increase in the TAC providing a 7% increase to the TACC in addition to the other two increases in recent years.

Proposal to increase Total Allowable Catch for Red Cod in RCO 2

Background

- 21. Red Cod are a fast-growing, short-lived species with highly variable recruitment. These factors result in pulses of recruitment leading to variable stock abundance and a large variation in catches between years.
- 22. Red Cod is a relatively low value species in commercial terms and in RCO 2 they are mostly taken as bycatch in the inshore bottom trawl fishery off the East (FMA 2) and West Coast (FMA 8) of the lower North Island.
- 23. Primarily, RCO 2 commercial catch comes from fisheries targeting tarakihi (35.7%), flatfish (24.2%) and Gurnard (19.8%). Approximately two-thirds of commercially caught RCO 2 has been taken in and around Hawke Bay in recent years.



- 24. Since 2013, the Minister has managed RCO 2 using a Management Procedure which uses commercial catch rates in October and November to estimate the likely annual catch and propose an 'in-season' increase in the TAC. In a separate review, MPI is proposing to increase the TAC for 2016–17 and to set non-commercial catch allowances for this year only.
- 25. To date, no baseline allowances for Māori customary fishing, recreational fishing, and all other mortality caused by fishing in the RCO 2 fishery have been set.
- 26. In the 2011–12 National Panel Survey of recreational harvest more Red Cod were reported from FMA 2 and FMA 8 (RCO 2) than other quota areas. The total recreational harvest estimate for RCO 2 was 20,000 fish with an estimated weight of 24 tonnes.

Proposals

27. MPI proposes the following options for the total allowable catch (TAC) allowances for Māori customary fishing, recreational fishing, and all other mortality caused by fishing for Red cod in RCO 2. (Table 1).

Table 1: Proposed management settings in tonnes (t) for RCO 2 from 1 October 2017

	Total	Total	Allowances				
Option	Total Allowable Catch (t)	Allowable Commercial Catch (t)	Māori Customary (t)	Recreational (t)	All other mortality caused by fishing (t)		
Current (baseline) settings	500	500	-	-	-		
Option 1	554 ↑	500	5	24	25		
Option 2	561 ↑	500	5	31	25		

MPI rationale for increasing the TAC

- 28. MPI rationale for reviewing Red Cod 2 includes:
 - For the 2017–18 fishing year, MPI is proposing to set the TACC at the current level. The initial setting of the baseline non-commercial allowances would necessitate an increase to the baseline TAC.
 - The best available information suggests that both options proposed (see Table 1) for setting the baseline TAC could provide for an appropriate baseline allowance for the non-commercial harvest and all other mortality caused by fishing of Red Cod in RCO 2.

Submission

- 29. Information in the discussion document on the proposed in-season increase in the TAC for RCO2 suggests that Red Cod abundance is currently high. NZSFC accepted this, but opposed the increase because it was unlikely to be caught in the time remaining in the 2016–17 fishing year, and if it was caught, it would be because trawl fishing effort had significantly increased. Any increase in trawl effort will be counter-productive to the effort by our Hawke's Bay team to negotiate meaningful inter-sector agreements and reduce trawling inshore in Hawke Bay.
- 30. MPI need to be more careful about implying that the allowance for "all other sources of mortality from fishing" is part of the non-commercial allowances (Paragraph 263). Clearly this is set at 5% of the TACC, which consists largely of trawl catch. This language is also creeping into the rock lobster discussion documents and will be challenged.
- 31. NZSFC support Option 2 in RCO 2, a 61 tonne increase in the TAC. The Minister has a statutory duty to 'allow for' non-commercial fisheries within the TAC, and if stock abundance is increasing it is essential that any increase in availability is considered when making these allowances.

Proposal Closure of Earthquake effected fisheries in the Kaikoura Region

Background

- 32. On 20th November 2016, a magnitude 7.8 earthquake caused large portions of seabed to be raised by up to 6 metres in the Kaikoura region. This caused parts of the coast to be raised out of the water, affecting the marine inhabitants of these areas and their reproductive capabilities.
- 33. The Minister used the emergency closure powers held in Section 16 of the Fisheries Act 1996 to immediately close the fishery to all harvest. After one month the rock lobster fishery was reopened, after research showed it was unlikely this event caused any real damage to the fishery.
- 34. After consultation in February, the Minister extended this closure of the shellfish and seaweed fisheries to the maximum period allowed under section 16. This closure will expire on 20th November 2017, allowing harvest at the same levels as before the earthquake. It is believed that the stocks would be unable to handle this level of harvest and may lead to further decline.

Proposals

35. MPI proposes to enact another closure of the Kaikoura area (Figure 1) under section 11 of the Fisheries Act 1996. This closure would prohibit all harvest except customary. The local iwi have voluntarily agreed to limit their harvest to tangi only. This proposal would allow the Minister to manage the closure of individual species as science reveals when/if these can be reopened and the management that would be required to facilitate this.

Table 1: Proposed options for the earthquake-affected fisheries in Kaikoura and Cape Campbell

Management action

Option 1 Take no action. The current emergency closure will expire at 5pm 20 November 2017 and the affected shellfish and seaweed fisheries will be reopened. Option 2 Replace the emergency closure with a closure under section 11 of the Fisheries Act 1996.

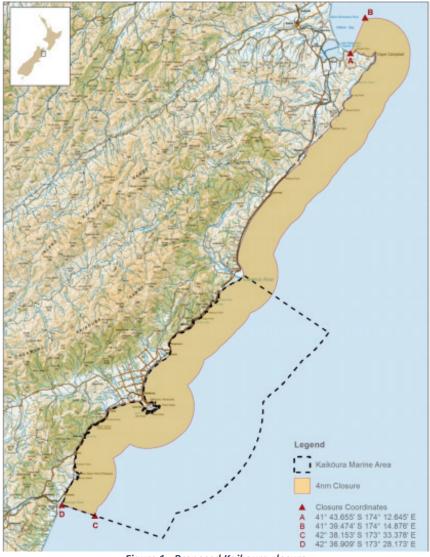


Figure 1 - Proposed Kaikoura closure

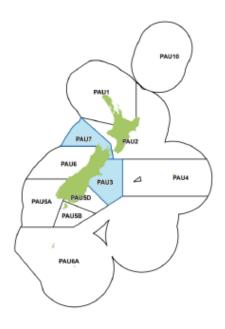
Submission

- 36. The NZSFC support the full closure of shellfish and seaweed fisheries in this area until such a time that the best available science deems it safe to reopen.
- 37. We acknowledge the cooperation from local iwi to refrain from the harvest during this closure, the need for all users to allow this at-risk fishery to recover is clear.

Proposal to decrease Total Allowable Catch for PAU3 and PAU7

Background

- 38. The continued closure of the earthquake affected areas has the potential to cause problems for the surrounding areas by shifting the paua catch effort from the closed areas.
- 39. To combat this problem, the Minister proposes a reduction in the Paua TAC to remove effort from the fishery.
- 40. The Minister has proposed two changes, representing reductions equal to the maximum and minimum estimate harvest in the closed area over the last 15 years.



Proposals

41. MPI proposes the following options for the total allowable catch (TAC), total allowable commercial catch (TACC) and associated allowances for Paua in PAU3 (Kaikoura – Christchurch) and PAU7 (Marlborough/Tasman/Cape Campbell)

Table 1: Proposed management settings in tonnes (t) for PAU 3 and PAU 7 from 1 October 2017

Stock	Option		Commercial decreas		Allowances		
		Total Allowable Catch (t)		TACC tonnage decrease and % change	Customary Māori (t)	Recreational (t)	All other mortality caused by fishing (t)
	Current settings	-	91.615	-	-	-	-
PAU	Option 1	79.3	45.8 ↓	45.8 t ↓ (50%)	15	8.5	10
•	Option 2	57.6	27.5 ₩	64.1 t √ (70%)	15	5.1	10
PAU 7	Option 1 (Status quo)	133.6	93.6	-	15	15	10
	Option 2	121.8 ↓	84.2 ₩	9.4 t √ (10%)	15	12.6 ↓	10
	Option 3	116.5 ₩	79.6 ↓	14 t ↓ (15%)	15	11.9 ₩	10

Submission

- NZSFC supports Option 1 for PAU3, 50% reduction in TACC.
- NZSFC support Option 2 for PAU7, 10% reduction in TACC.
- 42. The above options are based on the previous 15 years harvest, and represents the minimum and maximum estimated harvest from within the closed area.
- 43. NZSFC notes that the last assessment of PAU7 revealed an estimate of 18% B0. It is important that caution is taken when dealing with a fishery that has recently been under pressure.
- 44. It is our understanding that a system was put in place in 2001 to spread commercial effort more evenly across PAU3. This system meant that closer to 50% of the commercial harvest was taken from inside the closed zone.
- 45. NZSFC is aware that there is some concern for the displacement of recreational pressure. While we agree there will be some displacement, paua abundance and accessibility in other areas is lower for recreational fishers than it was in many areas on the Kaikoura coast. NZSFC believe there will be a significant decrease in recreational fishing effort and harvest in these QMAs due to the closures.
- 46. New estimates of recreational harvest and information on areas fished will be collected during the next National Panel Survey in 2017–18.
- 47. NZSFC has discussed the proposals with the Paua Industry Council (PIC) and acknowledge their views and efforts to restore this fishery. However, the NZSFC do not support shelving as a first-choice management option as the TAC represents all available catch. If catch is not available, the TAC needs to be reduced.