



Review of Rock Lobster Sustainability Measures for 1 April 2018

Appendix 2: Submissions received on the
MPI Discussion Document

Adam Clow	1
Andrew Jeffs	3
Anouska Greene	5
Awanui Haparapara No. 1 Lands Trust	7
Brad Stubbing	9
Brett Christopher	11
Bruce McFarlane	12
Bruce Taylor	14
Carol Blair	16
Chris Taylor	17
Christina Bettany	19
Christine Hutton	20
Colin Plowman	21
CRA 4 Rock Lobster Industry Association Inc (CRAMAC 4)	23
CRA 4 Rock Lobster Industry Association Inc (CRAMAC 4) (amended CRA 2 option)	30
CRA 8 Rock Lobster Industry Association Inc (CRAMAC 8)	31
CRA 8 Rock Lobster Industry Association Inc (CRAMAC 8) (amended CRA 2 option)	36
Dave Guccione	38
David Horne	39
Deep End Fish Ltd	41
Don MacLeod	43
Environment and Conservation Organisations of New Zealand Inc	46
Environmental Defence Society Inc	49
Forest and Bird	63
Grigor Wilkie and Karyn Meredith	65
Theo Wilkie	67
Grigor Wilkie, Karyn Meredith, and Theo Wilkie (amended CRA 2 option)	69
Guardians of Kāpiti Marine Reserve Trust	70
Hilton Leith	73
Iwi Collective Partnership	75
James Flett	78
Joint recreational submission (New Zealand Sport Fishing Council, LegaSea, and New Zealand Angling and Casting Association Inc)	80
Jonathan Drucker	104
Julian O’Neale	106
Kepa Morgan	108
Mark Berghan	110
Mark Hamer	112
Michael Ellison	113
Mike Cook	114
Mike Hendetson	115
New Zealand Recreational Fishing Council	116
New Zealand Recreational Fishing Council (amended CRA 2 option)	121
New Zealand Rock Lobster Industry Council Ltd	123

New Zealand Rock Lobster Industry Council Ltd (amended CRA 2 option #1)	150
New Zealand Rock Lobster Industry Council Ltd (amended CRA 2 option #2)	158
Nick Dunn	161
New Zealand Underwater Association	162
Pāua Industry Council	164
Peter Quilter	170
Phil Rowe	172
Rich Bayley	173
Ricard Maddock	175
Rodney Waterhouse	177
Scott Tindale	180
Shaun Lee	182
Spearfishing New Zealand	183
Specialty & Emerging Fisheries Group	185
Steven Greene	187
Tauranga Moana Iwi Customary Fisheries Trust	189
Te Ohu Kaimoana Trustee Ltd	191
Te Ohu Kaimoana Trustee Ltd (amended CRA 2 option)	197
Tim Bulmer	198
Willie Maclardy	199
William Macky	201

Submission Form

Ministry for Primary Industries
Manatū Ahu Matua



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Once you have completed this form

Email to: FMsubmissions@mpi.govt.nz

While we prefer email, you can also post your submission to: 2018 Sustainability Review, Fisheries Management, Ministry for Primary Industries, PO Box 2526, Wellington 6140, New Zealand.

Submissions must be received no later than 5pm on Friday 9 February 2018.

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

Submitter details:

Name of submitter or contact person: Adam Clow	
Organisation (if applicable):	
Email:	
Fishstock this submission refers to: <i>Rock lobster – CRA 2, CRA 4, CRA 7, CRA 8</i> <i>Sea cucumber – SCC 3, SCC 7B</i> <i>Southern blue whiting – SBW 6B.</i>	CRA 2
Your preferred option as detailed in the discussion paper (write "other" if you do not agree with any of the options presented):	Option 4 - 919.5 TAC / TACC 80

Official Information Act 1982

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We have been diving & snorkelling in the CRA 2 area (off of whitianga) for the last 25 years. My father has been a commercial crayfisherman in the early years. I am a commercial fisherman myself, a snapper longliner. I have seen a decline in crayfish stocks over the years. We are having major difficulties snorkelling for crayfish, even with our years of local knowledge. I would like to see something major done immediately before our fishery collapses completely.



Please continue on a separate sheet if required.

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Submitter details:

Name of submitter or contact person: Andrew Jeffs	
Organisation (if applicable):	Institute of Marine Science, University of Auckland
Email:	
Fishstock this submission refers to: <i>Rock lobster – CRA 2, CRA 4, CRA 7, CRA 8</i> <i>Sea cucumber – SCC 3, SCC 7B</i> <i>Southern blue whiting – SBW 6B.</i>	All above CRA stocks
Your preferred option as detailed in the discussion paper (write "other" if you do not agree with any of the options presented):	Implement maximum catch reductions

Official Information Act 1982

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Details supporting your views:

I have undertaken scientific research on *Jasus edwardsii* for around 20 years, mostly in relation to the basic biology and ecology of the species. Much of my field research is in CRA2 and I am concerned by the potential widespread and significant ecological impacts that may be caused by the reduction in densities and size range of rock lobsters in coastal habitats as a result of fishing.

Widespread coastal areas of the Hauraki Gulf, Northland, Bay of Plenty and East Coast have shown marked changes in reef habitats – transition from macroalgal-dominated habitats to urchin barrens. In some areas, the change has been estimated to have affected well over 50% of reef habitats. There is good evidence that once urchin predator populations (e.g., rock lobster, snapper, blue cod) increase locally that the proportion of macroalgal habitats are restored.

Macroalgal habitats are highly productive (many more times than urchin barrens), are highly biodiverse, provide habitat structure and high-quality food sources for recruiting organisms, such as lobster and fish, and are therefore vitally important in maintaining our coastal ecology.

There is good evidence that the widespread loss of this macroalgal habitat is associated with fishing activity, and it is clear that the scale and nature of the impact qualifies as an “adverse effects of fishing on the aquatic environment” and therefore should be of serious concern to fisheries managers and rock lobster fishers alike.

Given addressing this concern is a requirement of the Fisheries Act, and that the Ministry of Primary Industries has a commitment to managing fisheries in an ecologically sustainable manner, it could be expected that MPI would be actively investigating the potential link between fishing activity and this adverse ecological change.

However, the “Review of Sustainability Measures for Rock Lobster” dismisses any connection of lobster fishing activity with this observed adverse environmental change on the basis of an unpublished, not publicly available, un-peer reviewed report, prepared and paid for by the commercial rock lobster industry, by a scientist with no track record of research whatsoever in this field in New Zealand waters.

Interestingly this same consultant undertook some of the first field research in the 1970s that demonstrated the relationship between the removal of lobsters by fishing and the increase in urchin population and the corresponding loss of macroalgal habitats in North America. His seminal work in this field, which warned of the potential ecological and fisheries impacts, has since been repeated in a number of similar studies around the world and formed the basis of world-wide concern about trophic cascades generated by lobster fisheries.

Given the lack of credible ecological scientific information being utilised, and the unwillingness of the Ministry of Primary Industries to undertake an informed scientific assessment of the potential adverse ecological effects generated by lobster fisheries, then management decisions should be cautious and minimise the future harvests from all coastal rock lobster populations.

The Ministry of Primary Industries needs to address this ecological concern with some scientific credibility in future fisheries assessment as per its stated policy commitment to do so.

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Submitter details:

Name of submitter

or contact person: Anouska Greene

Organisation (if applicable):

Email:

Fishstock this submission refers to:

Rock lobster – CRA 2, CRA 4, CRA 7, CRA 8

Sea cucumber – SCC 3, SCC 7B

Southern blue whiting – SBW 6B.

CRA2

Your preferred option as detailed in the discussion paper

(write "other" if you do not agree with any of the options presented):

Other. Need an option where the quota reductions are an equal percentage across all stakeholders (commercial, recreational & customary)

Official Information Act 1982

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Details supporting your views:

CRA 2 needs to be split in at least 2 separate management areas - Hauraki Gulf/Coromandel and Bay of Plenty. It seems there are smaller subset areas of populations within the CRA 2 management area which differ greatly in stock health, so why try to manage these together as a single large area? Some small areas would be considered fairly healthy, whilst some areas would be considered "functionally extinct". Geographic micro management is required.

Crayfish as a resource are worth more (not necessarily in terms of financial worth) to New Zealanders as a recreational past-time to catch them and as a food source, rather than an export where profits and benefits are only realised by very few individuals. The 'gold rush' exploitation days of the NZ Crayfishery are over...

It's very frustrating to see that every option proposed by MPI included a 65% cut in recreational tonnage, whereas the TACC biggest proposed quota cut is only 60%. Meanwhile customary catch has no proposed reductions. Not a fair proposal at all. Why are different stakeholders treated differently? Surely the interests of the wider public (recreational) carry more weight than the interests of a select few quota holders and commercial fishermen?

I would be in support of a full seasonal closure when female crayfish are in berry. With regard to recreation catch, I would also be in favor of a decrease in recreational bag limit instead of any proposed short season put in place like has been done in the Scallop fishery - Crayfish are in good edible condition all year round (apart from females in berry) and I like to gather crayfish all year round (even in mid-winter).

I would also like to see the recreational bag limit be different depending on catch method. Recreational pot fishermen should have a lower bag limit than freedivers & scuba divers.

I would also like to see a system where levies are paid by commercial quota holders that goes into re-seeding areas with hatchery bred juvenile crayfish (when the technology allows) or at least to fund micro marine reserves within their quota management areas.



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Submitter details:

Name of submitter Chris Karamea Insley or contact person:	
Organisation (if applicable):	Awanui Haparapara No.1 Lands Trust
Email:	
Fishstock this submission refers to: <i>Rock lobster – CRA 2, CRA 4, CRA 7, CRA 8</i> <i>Sea cucumber – SCC 3, SCC 7B</i> <i>Southern blue whiting – SBW 6B.</i>	Choose the stock(s) here
Your preferred option as detailed in the discussion paper (write "other" if you do not agree with any of the options presented):	3

Official Information Act 1982

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My submission refers to CRA 2 especially. There has been a notable decline in mature crayfish available for whanau and marae. Whanau really struggle to go out and catch a crayfish (legal) at Omaio, Otuhare, Motunui and Waiorore. Gathering of kaimoana has been a long held tradition for our whanau. Given the decline in fishstocks over last 20 years, this not only whanau ability to feed themselves but the decline is having an impact on long held traditions and culture of us as Te Whanau a Nuku, Rutaia and Toihau.

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Submitter details:

Name of submitter or contact person: Brad Stubbing	
Organisation (if applicable):	
Email:	
Fishstock this submission refers to: <i>Rock lobster – CRA 2, CRA 4, CRA 7, CRA 8</i> <i>Sea cucumber – SCC 3, SCC 7B</i> <i>Southern blue whiting – SBW 6B.</i>	CRA2
Your preferred option as detailed in the discussion paper (write "other" if you do not agree with any of the options presented):	Option 4

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Submission:¹

Details supporting your views:

The commercial sector needs to be reduced the most as they have been taking the most and profiting from our natural resource. It is our right as people of New Zealand to have access to our fishery, so please stopping selling off our crayfish!!! Also I'm strongly against reducing the recreational quota further

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

From: [REDACTED]
To: [FMSubmissions](#)
Subject: Crayfish questions
Date: Friday, 2 February 2018 4:07:36 PM

Hi there just a couple questions regarding proposed changes to the recreational Cray catch. Is it looking at dropping from 6 to 4. Is that correct?

Does this include packhorse or can I catch 4 reds and 2 packhorse.

Is there any benefit to having a closed season while they are spawning July to sept.

Possibly changing the size limit 54mm to 56mm for males and for females maybe 60mm to 62mm.

Cheers Brett

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Submitter details:

Name of submitter or contact person: Bruce McFarlane	
Organisation (if applicable):	
Email:	
Fishstock this submission refers to: <i>Rock lobster – CRA 2, CRA 4, CRA 7, CRA 8</i> <i>Sea cucumber – SCC 3, SCC 7B</i> <i>Southern blue whiting – SBW 6B.</i>	CRA2
Your preferred option as detailed in the discussion paper (write "other" if you do not agree with any of the options presented):	Other.

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I support halving of TAC, achieved by a halving of the take from each of: TACC, Customary and Recreational.

I am an Auckland based SCUBA diver and part time dive boat skipper. I hunt lobster most of the times I dive, which is probably around thirty dives per year. I believe:

-The recreational limit of 6 lobster per diver per day is too high. This is a very scarce and valuable seafood in the Hauraki Gulf and I believe a limit of 3 (or even 2) is plenty for each diver to take. In the interests of conservation, when I am skipper I impose a boat limit of three per diver. This is almost always accepted by the divers on my boat without complaint. Realistically, most divers won't be able to get more than three in the area I operate anyway (Hen and Chicks Islands, Little Barrier and Inner Hauraki Gulf).

-Commercial, customary and recreational fishers *all* have a duty to share the reduction in take as they are all responsible for the decline in stock. I do not want to see a disproportionately greater reduction in Recreational take compared to that of Customary and Commercial.

-I am seeing a lot of commercial effort in the areas I dive. This is a non-scientific observation, but I believe commercial fishers are expending more and more effort to catch quota from a diminishing stock of lobster. For example, there must be hundreds of commercial lobster pots around Little Barrier Island and the lobster there don't stand a chance.

Please feel free to contact me if you require more information.

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Submitter details:

Name of submitter or contact person: Bruce Taylor	
Organisation (if applicable):	
Email:	
Fishstock this submission refers to: <i>Rock lobster – CRA 2, CRA 4, CRA 7, CRA 8</i> <i>Sea cucumber – SCC 3, SCC 7B</i> <i>Southern blue whiting – SBW 6B.</i>	CRA2
Your preferred option as detailed in the discussion paper (write "other" if you do not agree with any of the options presented):	Other

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The proposed changes to the CRA 2 are not fair and reasonable to the recreational fishers in the area.

Over the last 15-20 years there has been an increase in both commercial and recreational fishing for crayfish.

My experience in the recreational fishing has spanned over 40 years and over the last 10-15 years here has been a massive increase in the number of commercial pots around the CRA 2 area.

A case in point is around the eastern coast of the Coromandel Peninsula. In the last 15 years and especially the last 9 years, there has been an increase of commercial cray pot around the coast.

To narrow the area down further, between Whitianga and Hot Water Beach there is hundreds of commercial pots which are worked continuously all year round. There is so many pots that navigation around the coast require weaving a path around the pots and the long support lines.

The recreational fishers then come along and pick at what is left. No recreational fisher gets their daily limit these days because the fish stock has been effective cleaned out by the commercial fishers.

Within this area there is 4 commercial boats working the area (apparently 6 ton quota each), there is 1000 crayfish per tonne (approximately), that is 24000 crayfish taken commercially. The recreational take is much smaller. And who owns the resource???? New Zealanders do and these are the people being hit hardest.

To then in force a 60+% catch reduction on the recreational fishers is WRONG and UNJUST!

I suggest you (MPI) take a boat trip through the noted area and see for yourselves, then have a look at the Mercury Islands, same result, different location.

Everyone know that the Hauraki Gulf has been effectively stripped of crayfish and there is few recreational fishers bothering to fish this area. This area in the past has had the same treatment by the commercial fisher, to the extent that they don't both to work the area any longer.

My suggestion is: if the intension is to reduce the recreational take by 60% then do not insult the majority of the population by not enforcing the same cuts to those who have benefited to date.....the commercial sector.

CRA2	TAC	TACC	Customary	Recreational	Other Morality
Status Quo	416.5t	200t	16.5t	140t	60t
Proposed	250t	88.5t	16.5t	100t	45t

Regards

Bruce

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Submitter details:

Name of submitter or contact person:	Carol Blair
Organisation (if applicable):	
Email:	CAN'T PUT STOCK IN BELOW RIGHT HAND BOX
Fishstock this submission refers to:	
<i>Rock lobster – CRA 2, CRA 4, CRA 7, CRA 8.</i> <i>Sea cucumber – SCC 3, SCC 7B.</i> <i>Southern blue whiting – SBW 6B.</i>	
Your preferred option as detailed in the discussion paper (write "other" if you do not agree with any of the options presented):	CRA 2: Other – the fishery should be closed for a time as apparent levels are very low seen in low takes. Option 04 is best but not good enough. CRA 4: 01 CRA 7:02 CRA 8: 01

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Submitter details:

Name of submitter or contact person:	Chris Taylor
Organisation (if applicable):	N/A
Email:	
Fishstock this submission refers to: <i>Rock lobster – CRA 2, CRA 4, CRA 7, CRA 8</i> <i>Sea cucumber – SCC 3, SCC 7B</i> <i>Southern blue whiting – SBW 6B.</i>	CRA2
Your preferred option as detailed in the discussion paper (write "other" if you do not agree with any of the options presented):	other

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Submission:¹

Details supporting your views:

It seems insane to nail the recreational group with a 65% reduction in total catch when I would say 90% of the recreational guys are not currently meeting the current quoter.

Compare that with the commercial group who are seeing a 40% reduction in total catch and are out on the water all year with thousands of pots meeting or coming very close to their quoter. In my experience this same group who are being offered preferential treatment are also abusive and unsafe towards others competing for the same catch.

I have personally witnessed the decline in fish stocks in this area personally over the last 10 years, as a result of this I completely support the reduction of catch however this reduction in catch needs to be shared equally by all of those competing for the catch type whether it be commercial, customary or recreational.

At the end of the day will it be the Commercial group taking 400+ tonnes per year or the recreational group taking 150 tonnes per year that will destroy the fish stocks. However it is everyones problem and the solution needs to be shared equally, so as a group lets fix the issue and reduce the overall catch in the area but reduce everyones catch equally.

Please continue on a separate sheet if required.

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

REVIEW OF SUSTAINABILITY MEASURES – CRA2 QUOTA MANAGEMENT AREA

SUBMITTER DETAILS

FULL NAME: Christina Bettany
ADDRESS: [REDACTED]
TELEPHONE: [REDACTED]
EMAIL: [REDACTED]

To: Minister of Primary Industries


My name is Christina Bettany. I am writing as member of the public with an interest in protecting the waters and marine biodiversity of the Hauraki Gulf Maritime Park. I have been a member of the Long Bay Okura Great Park Society for over eighteen years (several of those years serving as the Convenor) and, as such, have been involved in successful legal action to protect the waters and ecology of the Long Bay Okura Marine Reserve and the Hauraki Gulf. I am currently a member of the Hibiscus and Bays Local Board, but do write this submission as a representative of the Board.

I have been alarmed for some years about the loss of much of our kelp forests in the Hauraki Gulf, so essential for the viability of a complex and integrated marine ecosystem. So I was extremely alarmed to learn recently of the extent of the rapid decline in crayfish numbers since the late 1990s, currently at an all-time low. It has been my understanding that it is the role of the Ministry of Primary Industry to protect our aquatic environment from any adverse effects from fishing, commercial or recreational but feel disillusioned that our kelp forests are so drastically reduced with the impact that many species, including crayfish, have been put at risk.

I believe that all fishing of crayfish should be suspended until an independent survey has been conducted to inform what the actual status of crayfish in the Gulf is, and until the extent and implications of the loss of the kelp forests through the proliferation of kina has been assessed.

I wish to fully endorse the submission of the Environmental Defence Society, see attached.

Yours faithfully
Christina Bettany

From: 
To: [FMSubmissions](#)
Subject: Rock lobster submission CRA2 Hauraki Gulf
Date: Tuesday, 6 February 2018 5:31:45 PM

I wish to make a submission on future crayfish management in the CRA 2 catchment area. My husband and I are long time recreational divers and fishers in this area. We live in Stillwater near Whangaparaoa and have dived the Gulf for 30+ years, including areas all along the east coast from Great Barrier, East Cape and up to the Far North. There is not much of this coast we are not familiar with.

I would forego my diving, as would my husband, if we thought this would help restore crayfish stock. We used to see crayfish regularly in the Hauraki Gulf - around TiriTiri Matangi was good diving for recreational fishers like us. Alas they are no more. The quota system is not working and we are inclined towards believing that these beautiful creatures and other fish will be extinct sooner rather than later. Future generations will miss out. I don't need scientific evidence to tell me there are less crayfish in our Gulf and the coast to the north and south. Of course we must use fact based evidence but my own eyes tell me there is an ever increasing crisis. It's a rare dive now when we see frays - and we are experienced at finding them.

If not a complete ban on recreational and commercial fishers, please substantially reduce the quotas. If we have any hope of sustaining our fish stock, drastic steps must be taken. I would forgo my limit (6 has always been too many and not that we have any chance of getting close to this number in the last 15-20 years), and suggest reducing it to 2 per diver. As for commercial fishes, sorry but I think there should be a complete ban for a period of time in order for the stock to replenish. And if commercial fishers think that's unfair, then ban us all for 2 years or more. Let's see what this might do. Anything less will mean virtual death of an abundant fish life. We implore the government and MPI to take the courageous decision to fight to retain our crayfish on this coast. While it might be unpopular, it's the only way we will save our waters from being extinct of crayfish in coming years.

Kind regards
Christine Hutton



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Sent from Gmail Mobile



Submission Form

Review of sustainability measures for 1 April 2018

Once you have completed this form

Email to: FMsubmissions@mpi.govt.nz

While we prefer email, you can also post your submission to: 2018 Sustainability Review, Fisheries Management, Ministry for Primary Industries, PO Box 2526, Wellington 6140, New Zealand.

Submissions must be received no later than 5pm on Friday 9 February 2018.

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

Submitter details:

Name of submitter
or contact person:

Colin Plowman

Organisation (if applicable):

—

Email:

[Redacted]

Fishstock this submission refers to:

Rock lobster – CRA 2, CRA 4, CRA 7, CRA 8
Sea cucumber – SCC 3, SCC 7B
Southern blue whiting – SBW 6B.

Choose an item:

CRA 2

Your preferred option as detailed in the discussion paper (write "other" if you do not agree with any of the options presented):

Official Information Act 1982

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



Submission:¹

Details supporting your views:

I have seen crayfish numbers in significant decline over a period of 40 years. In the 1970s crayfish were abundant in CRA 2 and the few divers who were able to catch these crafty crayfish were not taking many.

It is only since the granting of many commercial quotas that the problem really began.

Today, myself and other divers see the wide proliferation of commercial pots all around the CRA 2 coast lines. We divers hardly bother to even look. And why the Customary take? Does not seem applicable to CRA 2.

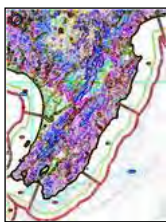
The commercial take is insignificant compared to Chatham, Stewart and Firdland so why have a take at all? The financial effects will be of little matter. Cray boats in CRA 2 are mostly old. Other employment opportunities are abundant in the CRA 2 area.

Finally, why not a crayfish season around spawning time. A 6 month season like scallops would see a rapid rise in abundance.

Please continue on a separate sheet if required.

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

Do not wait 20 years to rebuild. Madness!
Do it now! And stop dithering!



CRA 4 ROCK LOBSTER INDUSTRY ASSOCIATION INC.

CRAMAC 4

February 9th, 2018

REVIEW OF ROCK LOBSTER SUSTAINABILITY MEASURES FOR 2018/19

1. This submission is made to the Minister and MPI on behalf of the CRA 4 rock lobster industry. CRAMAC 4 is an incorporated society established for the betterment of the CRA 4 rock lobster fishery and the commercial participants who are invested in and rely upon the responsible use and management of that fishery. CRAMAC 4 renews a mandate in every year and currently holds more than 90% of all CRA 4 quota shares owned and also maintains the active input and participation of CRA 4 ACE owners.
2. Industry participants have substantial commitments – both in capital assets, large financial and working hour investments over an extended period, and to their dependence on their fishing businesses to maintain lifestyle and security for their families. There is unanimous support from CRAMAC 4 for the continuation of management decision making informed by good science; and a strong belief that **the overall management of what are regarded as 'shared fisheries'** is still lacking in relation to the proper accountability and effective constraints for recreational fishing and fish thieving.
3. In response to the statutory consultation document released by MPI, CRAMAC 4 addresses three key issues to commence our submissions.

The NRLMG

4. The role of the NRLMG is greatly diminished in the MPI documents. Historically it has been NRLMG considerations and recommendations which have formed the basis of the statutory consultation and final advice to Ministers. MPI clearly believes that to no longer be appropriate and has removed most references to the NRLMG other than where they might suit MPI preferences.
5. MPI appears to have changed the rules of NRLMG participation and engagement with no apparent explanation. CRAMAC 4 considers that to be an unacceptable situation. By their actions MPI has demeaned the long term voluntary commitment to and participation in the NRLMG by stakeholder group representatives. There is no fundamental objection from industry to MPI (and/or member stakeholder groups) expressing a particular and/or non-consensus view in the annual NRLMG reports which previously formed the basis of statutory consultation; but this time around MPI has just hi-jacked the NRLMG proceedings

outright and in our view has misrepresented the NRLMG considerations as to management options for the CRA 2 fishery.

6. Therefore, our first submission and recommendation are that MPI must provide the Minister and stakeholder representative groups with a clear and unequivocal position on the future role and function of the NRLMG. If MPI now determine that the NRLMG is not the primary source of management advice to Ministers, then CRAMAC 4 will be recommending that industry goes directly to the current Minister to submit the strong business case in opposition to MPI for representative, mandated and resourced cooperative stakeholder management forums.

Misrepresentation

7. It is our view based on our understanding of NRLMG proceedings in the latter stages of 2017 that MPI have misrepresented the full range of options for the CRA 2 fishery as considered by the NRLMG and instead have promoted four options – all of which represent an effective reallocation of available yield across to the recreational sector; none of **which have been 'modelled' as** inferred in the consultation document; and when doing so have relegated a key NRLMG recommendation to a minor mention.

Failure to Manage

8. The statutory consultation document as it relates to the CRA 2 fishery exposes the ineffectual MPI fish stock and fishing management efforts more dramatically than in other shared fisheries. MPI is forced to concede no confidence in their estimates of illegal unreported removals – MPI proposes no effort be made to actively constrain fish thieving but rather – MPI proposes to reduce commercial removals as a priority and then consolidates an MPI bias in favour of a better public perception of their efforts by proposing an increase in the recreational allowance above most recent catch levels.

DISCUSSION – the CRA 2 Fishery Options

9. It is not acceptable to the CRA 4 Industry that MPI would propose any commercial catch reductions in CRA 2 greater than already made by the industry in two successive fishing years given their proposals come with no concurrent and effective action to constrain illegal unreported removals.
10. In the sequence of CRA 2 TAC setting as proposed in all four MPI options, it will be the commercial operators who subsidise the allowance made for fish thieves and enable MPI to top up the allowance proposed for recreational fishing. In our view it borders on being immoral for MPI to further reduce commercial landings in preference to making any effort to reduce fish thieving.
11. Equally, it is both unethical and inequitable in the circumstances for MPI to be promoting both a further reduction to current commercial landings and an increase in current recreational landings. The proposed commercial reductions will in the circumstances become an uncompensated reallocation of catches available to non-commercial users including fish thieves. How and why MPI

thought that to be appropriate in a situation where the CRA 2 stock is assessed to be below optimum is not explained in the statutory consultation document.

12. That MPI document is also deficient in its failure to properly report the commitment that the CRA 2 industry has made to the ongoing monitoring and management of the fishery over the past three decades. It is possible MPI neglected this because an objective comparison of industry initiatives and Ministry interventions over the same period would likely be an embarrassment to MPI. In our view all the most timely and effective actions have been implemented by the CRA 2 industry on advice from science providers or at their own volition. The CRA 2 industry track record has set a benchmark for similar industry organisations including CRAMAC 4.

13. CRA 2 industry-funded and managed initiatives include –

A vessel logbook programme which has maintained greater than 50% fleet participation since 1997. Supplementary observer catch sampling coverage across the extent of the fishery for the same period and currently. Extensive tag release and recapture projects for CRA and for PHC. Voluntary Statistical Area Harvest Plans which have maintained and constrained a spread of effort over fishing grounds. Deployment of offshore puerulus collectors in an effort to compile a time series of settlement strengths. Implementation of an effective biotoxin response plan to ensure public health in relation to domestic rock lobster consumption and maintain the New Zealand rock lobster reputation for food safety and quality in international markets. Initiating the first CRA 2 Management Procedure and following that through by selecting the most conservative TAC/TACC option off the back of the 2014 CRA 2 stock assessment. Voluntarily retiring 50 tonnes of commercial catching rights in two successive fishing years; not because it could not be caught as alleged by industry critics, but to mitigate any further decline in abundance and have some control over the rate at which commercial catch levels might be increased as a rebuild was confirmed.

14. All of which have required stewardship and strategic intent, financial investment, a commitment of time and effort, patience; and all of which are pretty much glossed over by MPI other than for a superficial mention. **And the 'reward' for these initiatives?** In the statutory consultation document MPI now confirms that to be the loss of commercial catching rights in favour of fish thieves and the recreational sector.

15. Again, in our view the MPI proposals and attitudes reflected in their CRA 2 options for 2018/19 serve to undermine a long-established industry commitment to stewardship and responsible custodial attitude reflected in a range of individual, collective and cooperative actions over the life of the QMS. More than that, they also absolve the recreational sector of any real accountability for their own contribution to management of shared fisheries. In their statutory consultation document, MPI have confirmed that the squeaky wheels will ultimately get the oil.

16. CRAMAC 4 strongly objects to all MPI options proposed for the CRA 2 fishery. The option which we will support subject to two qualifications is one consistent with CRAMAC 2 and NZ RLIC preference and is based on an NRLMG consideration

which in our view is deliberately understated and/or downplayed in the MPI statutory consultation document.

17. CRAMAC 4 supports a new CRA 2 TAC of 233 tonnes to operate for the next five fishing years (with a backup proviso noted below) and apportioned as follows:

- Customary Maori 16.5 tonnes
- Recreational 34 tonnes
- Other mortality 42.5 tonnes **
- Commercial 140 tonnes

** In the 2017 CRA 2 stock assessment 40 tonnes were allowed for illegal removals; subsequently an additional 2.5 tonnes were 'allowed' for fishing related mortalities (not 5 tonnes as stated by the MPI options).

18. To responsibly take account of the possibility of recruitment failure or extended periods of poor recruitment to the CRA 2 fishery, the NZ RLIC has proposed a **'breakout rule' which is endorsed by CRAMAC 4. Incorporating that to the TAC scenario outlined above strengthens the credibility of that option.**

19. Based on the MPI projections noted in Table 6.2 of the consultation document, a 233 tonnes TAC will enable a stock rebuild to an intermediate target with 50% probability within nine fishing years and is therefore a valid option for recommendation to the Minister.

20. There is sound precedent for longer rebuild periods – the CRA 8 fishery from the late 1990s is a useful example. If non-commercial removals are not effectively monitored and managed, trying to accelerate the CRA 2 rebuild by further reducing commercial catches will make minimal difference in terms of future CRA 2 stock abundance. A shorter rebuild period and corresponding larger commercial catch reduction will further impact on the social and economic circumstances of the CRA 2 industry. Industry participants have not established and invested in a long track record of responsible stewardship only to have some of them ejected from the business of fishing by default.

21. However, as CRAMAC 4 has previously noted, our support for any proposed reduction to the CRA 2 TACC beyond the voluntary catch limit agreed by industry is qualified. The qualifications are as follows:

- MPI and the Minister must clearly signal a renewed determination and an action plan to constrain fish thieving across all rock lobster fisheries generally, but immediately in CRA 2. It is just inexcusable that fish thieving should be specifically allowed for when setting a TAC that cuts commercial catch limits – to do so is to openly concede a priority to illegal operators.
- MPI and the Minister must clearly signal that the new CRA 2 TAC must have integrity if the intended and agreed rebuild outcome is to be realised – in which case **'phase 2' of the proposed CRA 2 interventions** must be previewed

at the same time as the TAC/TACC decision is confirmed. All catch components must be routinely monitored and MPI must implement regulatory amendments before October 2018 that will enable timely and effective constraint of recreational removals as confirmed by annual CRA 2 boat ramp surveys.

22. As it has done previously, CRAMAC 4 will continue to strongly object to all TAC/TACC options that are not backed up by the clearly stated intention to constrain all removals to the allocations and allowances made.
23. The MPI CRA 2 TAC options are somewhat unique in the sense that all the tested Management Procedures lock down the TAC for five fishing years and the most efficient procedures anticipate that the initial allowances and allocations within the agreed TAC will be fixed over the same period. The NZ RLIC has developed **the 'fail-safe' breakout rule which backs up the fixed TAC but one of the understated benefits of that five-year commitment is the time available to reconcile the challenges of TAC setting once rebuild has been achieved.**
24. CRAMAC 4 seeks an assurance from government that the CRA 2 lobster industry commitment to responsible stewardship and utilisation will be recognised through a re-instatement of the TACC when the stock has rebuilt enough to sustain that. This requires that the government commit to implementing the full range of management interventions necessary to the intended outcomes and provide to industry, and their supporting financial institutions, the certainty to accept the sacrifices in the expectation there will be a guaranteed future return.

PROPOSED CRA 4 OPTIONS

25. CRAMAC 4 supports option CRA4_02 - the TAC/TACC increase generated by the operation of the current CRA 4 Management Procedure.
26. It is timely to remind MPI and non-commercial stakeholder representatives to the NRLMG that the most conservative CRA 4 TACC option was implemented in April 2017; one which reduced the CRA 4 TACC below 300 tonnes. Our view is that if the Management Procedure was deemed acceptable and useful when that TACC reduction was implemented then the same level of utility and acceptance must be accorded to it in the 2018 decision.
27. It is evident to the CRA 4 industry that their fishery and the current Management **Procedure are not 'static'** – both are dynamic, and the Management Procedure is responding to the agreed fishery performance indicators. Industry accepted the 2017/18 TACC reduction in expectation of an improvement in CRA 4 stock abundance. That improvement is already evident and the recommended TACC increase is appropriate.
28. Although not specifically addressed in the statutory consultation, the decision to confirm a CRA 4 TAC/TACC increase provides an opportunity to correct an error made in the NRLMG advice given to the previous Minister in March 2017.
29. The allowance made for illegal removals in the current CRA 4 TAC is significantly higher than modelled in the 2016 CRA 4 stock assessment. Consequently, the

current TAC on paper at least is higher than it should be. If MPI considers the **incorrect TAC to be 'sustainable'** and therefore not subject to correction, then the **'other mortality'** allowance made in 2017 has directly disadvantaged the CRA 4 industry given the sequence followed in TAC setting.

30. 40 t was used as the estimate for illegal catch in the 2016 CRA 4 assessment, which was also the estimate used in the 2005 (Breen et al. 2006) and 2011 (Breen et al. 2012) CRA 4 stock assessments¹. The allowance is 75 tonnes.
31. There is sufficient doubt about MPI illegal estimates in any case and in our view there very **definitely should be no 'headroom' in the allowance made for fish** thieving when confirming new CRA 4 TAC for 2018/19. The estimate used in the assessment should prevail in the TAC setting.

PROPOSED CRA 7 OPTIONS

32. CRAMAC 4 supports option CRA7_02 - the application of the current CRA 7 Management Procedure and the recommendation for a TAC reduction. In conversations with CRA 7 industry participants it seems that their observations of stock abundance and distribution during the current season are somewhat at odds with the outcome from the operation of the Management Procedure – but industry has reconfirmed a long-held commitment to support management decisions informed by good science.

PROPOSED CRA 8 OPTIONS

33. CRAMAC 4 endorses option CRA 8_02 - the use of the current CRA 8 Management Procedure to guide the TAC/TACC increase. The years of sacrifice and uncertainty experienced by the CRA 8 industry through the 1990s are surely well behind them and the legacy of stock abundance enabled by their initiatives is very special.

DEEMED VALUE RATES

34. **CRAMAC 4 endorses 'no change' to Deemed Value rates for rock lobsters.** The current differentials are sufficient to deter deliberate fishing without ACE and a 'settling' and consolidation of export prices through 2017 and so far into 2018 reconfirms the current deemed value as an effective deterrent.

SUMMARY OF CRAMAC 4 SUBMISSIONS

- a) Full endorsement of the NZ RLIC submission on the Review of Sustainability Measures for CRA 2, 4, 7 and 8 from April 2018.
- b) A strong objection to MPI deliberately understating the role and function of the NRLMG.

1. _____

¹ Data for the 2016 stock assessment of red rock lobsters (*Jasus edwardsii*) in CRA 4 New Zealand Fisheries Assessment Report 2017/28

- c) MPI must provide the Minister and stakeholder representative groups with a clear and unequivocal position on the future role and function of the NRLMG.
- d) No confidence in MPI adequately reporting the outcome of NRLMG considerations in December 2017, particularly in relation to the management options for the CRA 2 fishery.
- e) No support for any of the MPI TAC/TACC options for the CRA 2 fishery.
- f) Opposition to any form of uncompensated reallocation of commercial catch across to recreational or illegal operators.
- g) Support for an alternative management option as described in this submission – setting a 233 tonnes TAC with allowances set as listed.
- h) Support for management option CRA4_02.
- i) Support for review of CRA 4 TAC setting to correct error in allowance for other mortalities.
- j) Support for management option CRA7_02.
- k) Support for management option CRA8_02.
- l) Support for no change to rock lobster Deemed Value regime.

These submissions made to MPI on behalf of the CRA 4 Rock Lobster Industry Association.

Graham Olsen

Chairman

CRA 4 Rock Lobster Industry Association Inc.

Elizabeth King (Liz)

From: Alicia McKinnon
Sent: Monday, 19 February 2018 1:34 PM
To: FMSubmissions
Subject: FW: Industry Submission CRA 2 Options

From: Daryl Sykes [REDACTED]
Sent: Monday, 19 February 2018 1:07 PM
To: Alicia McKinnon [REDACTED]; Mark Edwards [REDACTED]
Subject: FW: Industry Submission CRA 2 Options

From: Graham [REDACTED]
Sent: Monday, 19 February 2018 1:06 PM
To: Daryl Sykes [REDACTED]
Subject: RE: Industry Submission CRA 2 Options

Hi Daryl

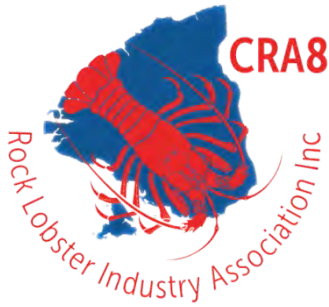
On Behalf of CRAMAC 4, please forward this email to the relevant people.

CRAMAC 4 fully supports the amendments to the CRA2 section of NZ RLIC's submission on the Rock Lobster IPP.

Cra4 understands the reasons for the amendments and is heartened by the conservative approach taken by the shareholders at the CRAMAC 2 AGM last week. We particularly note and endorse the comments about "Monitoring Recreational Catch" & "Addressing illegal fishing", as we believe that both topics are seriously effecting the management of many of the Rock Lobster Fisheries in New Zealand.

Yours Sincerely

Graham Olsen
Chairman CRAMAC 4



8 February 2018

Sustainability Review 2018
Fisheries Management
Ministry for Primary Industries



SUBMISSION

Review of Sustainability Measures for Rock Lobster (CRA 2,4,7 & 8) April 2018/19

This submission is made by the CRA8 Rock Lobster Industry Association Inc. (“the Association”). This organisation is a fully constituted and incorporated society that is recognised as the commercial stakeholder organisation representing the interests of the commercial rock lobster industry in the southern South Island including South Westland, Fiordland, Stewart Island, Foveaux Strait and adjacent islands.

This submission focuses on the proposals for CRA2 and CRA8. We also comment on the issues of recreational and illegal take that affect all rock lobster fisheries.

CRA8

The consultation document presents two management options for CRA8. In both options it is proposed that the status quo applies to the non-commercial allowances.

- Option CRA8_01 proposes the status quo for the Total Allowable Commercial Catch (TACC), accordingly the TAC would be unchanged;
- Option CRA8_02 proposes to increase the TACC to 1070.7 tonnes. This represents an increase of 108.7 tonnes or 11.3%. The TAC would increase to 1,161.7 tonnes.

Use of Management Procedure to Guide TAC/TACC Setting for CRA8

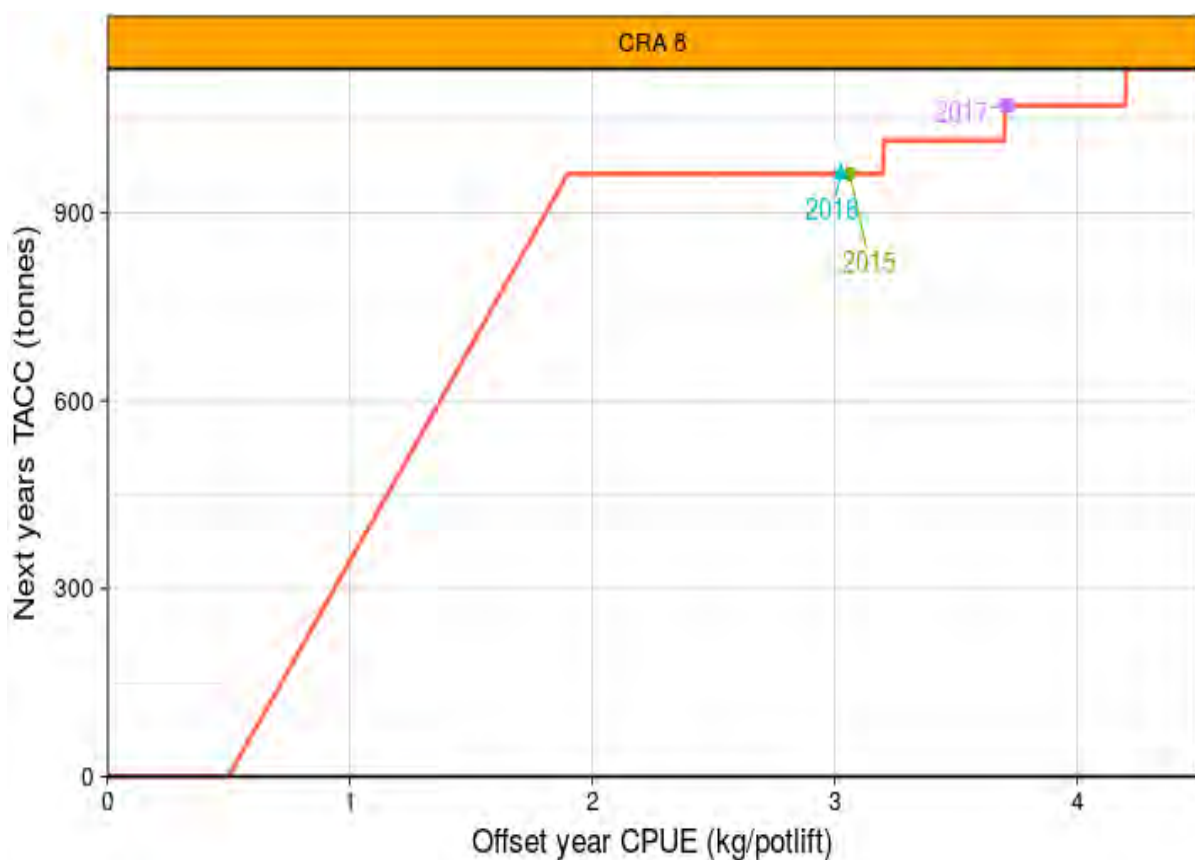
The Association is fully supportive of the use of management procedures within rock lobster fisheries to guide TAC/TACC setting. It therefore follows that the Association supports Option CRA8_02 which results from the operation of the CRA8 Management Procedure.

Management Procedures (also called decision rules) have been used as the main management tool in the CRA8 fishery since 1998 and various iterations and their annual results have been accepted by successive Ministers of Fisheries since that time.

When the current CRA8 Management Procedure was developed the Association advocated that a new management procedure should include both biological and economic considerations in its development. As a result, the Association supported a management procedure that includes a range of CPUE values (lower and upper parameters within a plateau) that would maintain the TACC at a constant level and provide stability for the fishery and industry. In turn this design provides confidence and some certainty for business planning and investment. The steps at the upper parameter acknowledge that if abundance, as indicated by CPUE, is at such a level the TACC should increase to take advantage of this heightened abundance without any risk to the stock.

It is recognised within the CRA8 industry the best economic result is not necessarily achieved through maximum exploitation of the vulnerable biomass. The ability to target fishing effort at certain times of the year and certain grades when market prices are at their most favourable is a much more desirable outcome. This desire to achieve Maximum Economic Yield (MEY) is the favoured position for the CRA8 industry. In the absence of a true MEY model it is reasonable to consider the current management procedure as a proxy given the predicted low exploitation rates and constantly high CPUE.

Given that current CPUE is now at 3.71 kgs - which triggers an increase of two steps on the CRA8 Management Procedure graph – the MEY philosophy remains. As the consultation document explains, there is no risk to the sustainability of the fishery while providing increased utilisation benefits to all sectors¹.



¹ Consultation Document Para 153

The amount of high-grading in the CRA8 fishery is high as a result of the continued high abundance. Data from CRA8 Licenced Fish Receivers show that since 2008 more than 95% of lobsters landed annually have been in the range from minimum legal size to 1.5kgs. MPI in the consultation document estimate that the amount of large (in excess of 1.5kgs) rock lobsters that are returned to the water is 40% by weight². This amount of high-grading, which can also apply to smaller grades at certain times, is the main reason the Association promoted a CPUE algorithm that uses only the weight of lobsters that are landed.

Those lobsters that are returned to the sea may have a reduced economic value but have a very high biological value in that they have resulted in a very large breeding biomass. It is reasonable to assume that the ongoing high abundance in the fishery is a result of this practice coupled with a conservative TACC.

The increase in the TACC will result in an estimated economic return to the CRA8 fishermen of approximately \$8 million. Export earnings will be higher again. A large portion of these increased earnings will be spent within the southern regional economies. This aligns with the government aim of encouraging regional economic development. It is unlikely that this increase will result in the addition of further vessels to the catching fleet. Instead the existing vessels become more financially efficient and profitable.

In summary, there is no reason that the proposed increase should not be approved.

CRA2

The current TAC is 416.5 tonnes, comprising a TACC of 200 tonnes; customary allowance of 16.5 tonnes; recreational allowance of 140 tonnes; and other sources of mortality allowance of 60 tonnes. The status quo is not presented as an option.

The consultation document presents four options for CRA2.

- Option CRA2_01 proposes a TAC of 251.5 tonnes comprising a TACC of 140 tonnes; customary allowance of 16.5 tonnes; recreational allowance of 50 tonnes; and other sources of mortality allowance of 45 tonnes.
- Option CRA2_02 proposes a TAC of 231.5 tonnes, comprising a TACC of 120 tonnes; recreational allowance of 50 tonnes; and other sources of mortality allowance of 45 tonnes.
- Option CRA2_03 proposes a TAC of 215.5 tonnes, comprising a TACC of 100 tonnes, recreational allowance of 50 tonnes; and other sources of mortality allowance of 45 tonnes.
- Option CRA2_04 proposes a TAC of 191.5 tonnes, comprising a TACC of 80 tonnes; recreational allowance of 50 tonnes; and other sources of mortality allowance of 45 tonnes.

There is no doubt that the CRA2 fishery is currently under pressure from all sectors. It is also a fishery that should not be compared to others in terms of CPUE. Current CPUE is lower than historical averages but CRA2 is not a fishery that has ever had what could be considered a high CPUE. It appears that CRA2 does not receive annual recruitment but instead is subject to pulses of recruitment that occur at varying intervals. In recent years the CRA2 industry has taken a number of measures to reduce its catch limit in order to mitigate the effect of

² Consultation Document Para 146

reducing biomass until the next pulse. In spite of these measures the stock does need to be rebuilt as it is currently assessed at being below the soft limit (20% of the unfished stock spawning biomass level).

The main consideration therefore is the appropriate TAC and corresponding rebuild timeframe and socio-economic impacts to achieve a target of doubling the current biomass.

The CRA8 industry has specific knowledge of this situation having been in a similar situation in 1998 where CPUE and biomass were at historically low levels and action was required to rebuild the fishery. This resulted in the introduction of the first decision rule (management procedure) in New Zealand. This original rule sought to balance the biological and economic measures and a 14 year rebuild timeframe was implemented. In each of 2000 and 2002 the TACC was cut by 20% as a result of the operation of the decision rule. History now shows that once the fishery began to rebuild the increase in biomass was rapid and sustained to the extent that by 2007 the fishery was assessed as being rebuilt and sustainable. However the socio-economic impacts were severe with a number of long term fishermen being forced from the fishery through the lack of a financially viable quota holding. For men who had been fishermen all of their working lives, and their families, these were life-changing and challenging times. In hindsight it can be argued that the reductions and impacts were more severe than was necessary. This is a lesson that should be remembered in the current CRA2 case.

After considering the projected rebuild times and the CRA8 experience the Association supports a TACC of 140 tonnes as proposed by Option CRA2_01. This has a projected nine year rebuild target. This is not unreasonable and provides the necessary balance as referred to above.

In respect of the recreational allowance as proposed in each of the Options the Association does not see any justification for a 50 tonne allowance. Given that the recreational data, such as it is, shows a catch estimate of 34 tonnes. The Association notes that the consultation paper states “The NRLMG recommends that submitters consider recreational allowance options of 34 and 50 tonnes³...” And yet 34 tonnes is not presented as a formal option.

Accordingly the Association supports an amended Option CRA2_01 with the recreational allowance set at 34 tonnes.

Recreational Catch

The actual level of recreational catch in rock lobster fisheries continues to be highly uncertain and poorly estimated. Given the perceived size of the recreational catch in some quota management areas this situation is now untenable. To have to rely on data that was collected in 2012 and with the prospect of no new data to inform stock assessments until 2019 for a species that is acknowledged as being very important to all sectors is shameful. This and the lack of constraints that would give credibility to the recreational allowance undermines management efforts in those fisheries where the non-commercial catch represents a significant proportion of the TAC.

There are many examples around the world where accurate and timely recreational data is collected. This shows that it is only a case of the Ministry being willing to put the appropriate

³ Consultation Document Para 90

mechanism in place and then to follow this up with proper management constraints for the current situation to be rectified. Instead we have the situation where the commercial industry has taken steps to leave lobsters in the water only to have this compromised by an unfettered recreational catch.

The Association submits that MPI should make 2018 the year that they finally take positive action to address this and give credibility to the rock lobster TAC in each QMA.

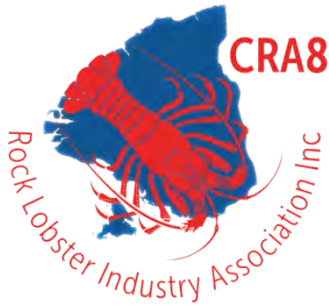
Illegal Take

The only time that the illegal take estimates for rock lobster are changed are as a result of discussions by the Fishery Assessment Working Group. At no time has the Association ever witnessed the Ministry announcing that these estimates can be reduced due to their efforts in curtailing illegal behaviour. Again, in some areas the allowance for illegal take is significant and yet there is no evidence of success in reducing this behaviour that impacts on all of the legitimate sectors and undermines management efforts.

Again, the Association submits that MPI should make 2018 the year where they finally take positive and meaningful action to address this situation.

A handwritten signature in black ink that reads "Malcolm Lawson". The signature is written in a cursive, flowing style.

Malcolm Lawson
Chief Executive Officer



20 February 2018

Sustainability Review 2018
Fisheries Management
Ministry for Primary Industries



SUBMISSION

Review of Sustainability Measures for Rock Lobster 2018
Revised CRA2 Position

This submission is made by the CRA8 Rock Lobster Industry Association Inc. (“the Association”). This organisation is a fully constituted and incorporated society that is recognised as the commercial stakeholder organisation representing the interests of the commercial rock lobster industry in the southern South Island including South Westland, Fiordland, Stewart Island, Foveaux Strait and adjacent islands.

The Association is aware that following the completion of the submission period the shareholders of the CRA2 Rock Lobster Management Company Ltd have agreed to an amended position. The Association is aware of this amended position and supports the proposed Total Allowable Commercial catch of 100 tonnes as part of a Total Allowable Catch of 193 tonnes. The balance comprising a recreational allocation of 34 tonnes; a customary allocation of 16.5 tonnes; and an allowance for other sources of mortality of 42.5 tonnes. This position is set out in the submission of the NZ Rock Lobster Industry Council dated 19th February 2018.

As stated in our original submission, the Association submits that it is imperative that the recreational allocation be constrained to the given allocation. The situation must prevail where catch not taken by the commercial sector - due to the reduction in the TACC - must be left in the water to contribute to the rebuild of the fishery. Given the current state of this fishery the TAC must have credibility.

Further, we reiterate our position that the Ministry must take positive action to address the level of illegal take in this fishery. To not do so in light of the industry's initiative is simply presenting an enhanced opportunity for fish thieves. There is no way that this can be seen as being acceptable.

A handwritten signature in black ink that reads "Malcolm Lawson". The signature is written in a cursive, flowing style.

Malcolm Lawson
Chief Executive Officer

From: [REDACTED]
To: [FMSubmissions](#)
Subject: CRA proposal
Date: Monday, 5 February 2018 2:03:42 PM

In regards to the proposed changes in CRA 2 I am happy that MPI is finally responding to what I have seen as a decimation of accessible CRA stocks in the Tauranga and wider Bay of Plenty area . These are my concerns as a recreational fisher and fisheries biologist.

- That even the most drastic proposal short of closure in area 2 to 80 tonnes commercial imparts a larger cut to recreational allowance than commercial. As recreational fishers we were forced to take that in the SNA 1 changes in 2013 and historically with every change to TACs in shared fisheries. It is time that the commercial sector, which is responsible for the bulk of the depletion, takes their share of the pain.
- Recreational fishers already don't take their allotted tonnage because it's not there. Cutting our bag limits is a poor way to effect change. The vast majority of recreational days don't see a limit of crayfish caught. It is easily arguable that the commercial sector has already infringed on the recreational sector's right of access and that the minister has not "made allowance" for recreational fisheries to the extent required by the fisheries act and Kahawai high court findings. This would be an interesting case should the ministry be sued by recreational interests.
- Judging by CPUE, 20% of SSB is almost certainly not enough to maintain MSY and so is a poor choice for a soft target. This should be changed to 40% just as a precautionary target (as is required by the fisheries act and High court findings) as the consultation document admits that they don't know what biomass is necessary for sustainability. Fisheries science has truly moved on from soft limits of 20-25%.
- There are fundamental problems in measuring SSB only with females. The extension of which is that catch limits for females be curtailed but raised for males. Spawning potential is reduced without large males as the small males are not preferred by females. Large females, the most fecund, may not even be able to successfully breed without large males present. This is another argument for precautionary biomass targets.
- It is time that there is a shift in ethos of fisheries management, that the egalitarian enjoyment of a day's recreational fishing is part of what makes NZ a great place to live for at least a third of its residents every year, and that is worth more to this nation than the access of a few commercial fishers. The commercial sector has full entitlement to the offshore suite of species and they are welcome to them. Where there are shared fisheries, commercial catches must dwindle over time as the population grows to safeguard the right of Kiwis to an expectation of a reasonable recreational catch.

Can you please acknowledge receipt so that I know this has gotten to the right place?

Cheers,

Dave Guccione

Dave Guccione | Department of Marine Science | Toi Ohomai Institute of Technology | [REDACTED]

<http://marine.boppoly.ac.nz>

He herenga waka he whitiwhiti whakaaro he whitiwhiti korero e u ko te marama

Whenever canoes are tied up together, thoughts are exchanged, dialogue is exchanged and enlightenment comes forth.

Submission Form

Review of sustainability measures for 1 April 2018

Once you have completed this form

Email to: FMSubmissions@mpi.govt.nz

While we prefer email, you can also post your submission to: 2018 Sustainability Review, Fisheries Management, Ministry for Primary Industries, PO Box 2526, Wellington 6140, New Zealand.

Submissions must be received no later than 5pm on Friday 9 February 2018.

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

Submitter details:

Name of submitter or contact person: David Horne	
Organisation (if applicable):	
Email:	
Fishstock this submission refers to: <i>Rock lobster – CRA 2, CRA 4, CRA 7, CRA 8</i> <i>Sea cucumber – SCC 3, SCC 7B</i> <i>Southern blue whiting – SBW 6B.</i>	CRA2
Your preferred option as detailed in the discussion paper (write "other" if you do not agree with any of the options presented):	Option 4

Official Information Act 1982

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

All 4 options reduce the recreational catch from 140T to 50T, a reduction to 35% of status quo.

Option 4 reduces the TACC from 200T to 80T which is a reduction to 40% of status quo, so this option represents a fair allowance reduction for the 2 main fisheries.

Option 4 with 46% overall reduction will also allow the CRA2 stocks a better chance of recovery. I have seen a section of CRA1 in Northland where a commercial operator was not working a section of the coast for several years the crayfish stocks improved remarkably.

I am not in favour of the additional option of reducing the recreational allowance to 34T, the commercial sector can harvest from more sustainable area's e:g CRA8

In 1993 my father purchased Cra2 quota as a long term investment, with an inheritance in mind for future generations of his kids and grandchildren.

I have been fishing this quota as a skipper of now my 4th boat 25 years on. I lease this quota from my family and this supports my mother who is now a widow.

In the 25 years I have been sustainably fishing on the Coromandel peninsula and the last 8 years around Little Barrier, Mokahinaus and the inner Hauraki Gulf (as far as Waiheke Island).

In order to fish further afield to maximise profit and spread effort my wife and I purchased a 55 ft vessel to safely navigate these waters.

In previous years I have heard from other fisherman how hard it is to catch crays, these fisherman fish the same spots year in and year out without looking elsewhere because of the financial costs involved in reaching other areas.

We haven't experienced a 'hard' year since 2010 when we moved our family operation north to new grounds, once I had established how to fish these grounds it became a lot easier.

The reports I hear about crays being extinct in the Hauraki Gulf I find ridiculous, and I have the fine scale data to prove it. Crays move, migrate or just plain up and leave an area for many reasons – whether it's environmental or predatory pressure. The myth that 'Kina barrens' are caused by a lack of large cray is a joke – these barrens are usually in low tidal areas where there is a lack of food supply hence a lack of life. Unless you introduce life to these areas they will always be barren.

Environmental conditions have a larger impact on this species than most, and as a harvester you have to adapt to these conditions.

Last year (2016-17) we caught our quota by the middle of January, we like to shut down our operation usually by then because the crays can go into hiding during late summer and early autumn.

This season (2017-18) we caught the same quota by the middle of November.

I have one worker, who has up skilled from deckhand to skipper this season, if the quota is cut severely he will not be given the opportunity to run our boat because we not be able to afford to pay him. Our mortgage, car repayments, maintenance, gear repair and replacement, levies, insurances, Moss requirements, wharf fees, council fees, fuel, wages and just plain living expenses will be a struggle also.

I often hear the argument that we should not export our local products, yet we spend our profits locally!!

We live in a small community that benefits from our income in many ways. From engineers, vehicle maintenance, electricians etc. We always try to use local help to support their businesses as well.

The constant barrage of misinformation from certain sectors has been weighing heavily on myself and my family. We have been responsible fishers and operators on the ocean for quarter of a century and we are treated like second rate citizens. I now know how the farmers feel, and frankly it wears you down physically and emotionally.

Our CPUE data is often not used because as an operation that utilises holding pots it disqualifies the data as they cannot work out the pots pulled vs fish landed. We regularly operate between .5 kg to .8kg per pot. If the price is at an extreme level we will target that size at the detriment of our CPUE.

As an industry we have taken huge steps to be responsible in our approach to enhancing this fishery, the downturn that we saw last year – we saw coming several years ago, so we acted accordingly with voluntary cuts etc. We have invested a lot of time and money into collecting data as well.

I would like to see the Minister get alongside our efforts to rebuild this fishery and not have a knee jerk reaction to manipulated data and an extensive attack upon the Cra2 commercial fishing industry and the QMS.

The misinformation to the public is very damaging to the truth, we have seen all the size classes this season in abundance with new recruitment which is exciting.

Much to the contrary of social media – we do care about our environment and our fishery, we understand that we are a shared fishery and we are also stewards of this fishery. But we do have more flesh in the game than most so we are aware that the health of this fishery is paramount to future stability as an investment. Reinstatement is key to our family.

The 150 tonnes we voluntarily set ourselves to is a healthy level to rebuild our fishery, if we were to drop to 140 tonnes would be damaging to a few operators but would still be sustainable for investors, families and those involved directly and indirectly to this fishery. Any lower than this would be detrimental to a number of people and small communities.

Cra2 has more owner/operators than most other areas and more family investors of previous generations of fishers who are not just in this game for the \$\$, we love the area in which we live and fish and play. We want to see this fishery flourish, and what we have begun as a collective is slowly but surely making headway. We understand that Cra2 will never be a Fiordland but if we can maintain a .5 kg per pot lift then that in my eyes is a success. This will come about by not only looking out for the cray but educating and having full buy in by the fishers – whether commercial or recreational. Personally I would like to see a 50 pot per boat limit for Little Barrier for a start, I have been canvassing the other fisherman who fish this area and they all agree. Through working together with the commercial sector we can come up with great solutions and ideas, lately though we are treated like lepers and thieves. This needs to change.

Thank you,

Yours sincerely,

Daniel McRae

Director,

Deep End Fish Ltd.

[REDACTED]
[REDACTED]
[REDACTED]
9th February 2018

Sustainability Review 2018
Fisheries Management
Ministry for Primary Industries

[REDACTED]
[REDACTED]
Dear Sir/Madam,

Submission on CRA 2 Consultation

I am making this submission as an individual. I have been a keen diver, sailor and fisherman for over 45 years. I have had a long term association with the Hauraki Gulf since I moved to Auckland in 1981. I own a 30 foot launch and I regularly cruise, dive and fish in the North East coast of the North Island and this includes a major part of the area in CRA 2.

- 1) I am extremely disappointed that MPI has waited so long to act on the decline in the population of rock lobster in the CRA2 region. The graph shown in the MPI document Summary of 2017 CRA2 stock assessment results shows a precipitous decline in the Crayfish stocks since 1999 and only now MPI is acting to stem this decline. It concerns me that the MPI discussion document is a result of tangata whenua and stakeholder concerns that finally made MPI act. (Paragraph 65 of the Discussion Document). The stock assessment data clearly shows that this decline had been underway since 1999.
- 2) Rock Lobster are very important NZ resource that provides a commercial, customary and recreational catch for all New Zealanders. This resource must be maintained and managed in long term sustainable manner. The data showed in the Summary of 2017 CRA2 stock assessment results show that it is being plundered. That plundering takes place in three forms;
 - a. Commercial fishing pressure – has been ongoing.
 - b. Customary take – has increased since tangata whenua have been able to exercise customary rights.
 - c. Recreational take mainly through diving which has massively increased in participants since 2000.Unfortunately MPI has real data only on Commercial Fisherman's returns.
- 3) This discussion by MPI clearly shows that their practices to date have failed. These practices include; assessment of rock lobster stocks, measurement of catch volume and policing the fishery. The discussion document identifies that the resource is now at MPI's soft limit of 20% the biomass, but has not detailed how this figure is calculated. I would suggest that if the fishery is at 20% of its biomass it is probably at its hard limit (again another assessment with no data supporting it). Present management of the rock lobster resources has resulted in this decline and drastic action is required to reverse it.
 - a. My diving observations are that the inner Hauraki Gulf is almost devoid of rock lobster. Great Barrier and Mercury Island populations of rock lobster have been

severely depleted. During this time period we have seen the development of kina barren rocks as indicator that crayfish are not present in the ecosystem. Marine scientist Dr Roger Grace has documented the increase of kina barren regions and has identified the drop in the population of rock lobster as the major cause. <http://www.marinenz.org.nz/documents/Why%20Do%20We%20Need%20No-take%20Zones%20for%20Marine%20Spatial%20Plan%20Dr%20Roger%20Grace.pdf>

I believe these three areas within CRA2 would be close to the 10% hard limit already determined by MPI.

- b. In August 2016, Dr Tim Haggitt concluded ‘that Crayfish were functionally extinct in the Hauraki Gulf’. And MPI did not act then. <https://www.stuff.co.nz/business/farming/83684122/Crayfish-functionally-extinct-in-the-Hauraki-Gulf>

Dr Haggitt and his colleagues said that the management of crayfish in CRA2 has to change. He noted that surveys of crayfish larvae they have conducted occur every year in CRA4 and every 6 to 7 years in CRA2.

MPI does not survey rock lobster larvae to forecast future rock lobster populations – Why?

MPI does not do any underwater surveys of rock lobster habitat to determine actual biomass at various times of the year – Why?

MPI has only stopped me once on the water on the East Coast in CRA2 to survey my catch – Why?

Has MPI been asleep at the helm whilst charged with management of rock lobster stocks in CRA2? It would appear so.

- c. Figures 6.1 and 6.2 of the MPI Discussion document confirm my diving observations. Both these graphs also suggest that MPI should have acted sooner and not waited until now to take decisive action. I fully support the statement in Paragraph 79, that the status quo is not a viable option and will only contribute to a further decline. The time is ready for MPI to take drastic action.

- 4) I ask for an assurance from MPI or the future Ministry of Fisheries that future management of Rock Lobster will be proactive and use techniques that are not being used now, with the goal of developing a sustainable long term fishery for all New Zealanders. This will include the following practices;
- Use of new biomass monitoring techniques in the marine environment.
 - Improved surveillance and policing for 365 days of the year the fishery by Fishery Inspectors. I note that Fishery Inspectors are justified on a cost benefit and cost recovery basis, which is not practical for a fishery which has long term sustainable goals. We need more inspectors in the region on more boats actively measuring catches, gathering data and catching those breaking the law.
 - The establishment of more and larger no take marine reserves throughout the marine area of CRA2. They will have to be policed by MPI Fisheries Inspectors. These no take marine reserves should cover at least 10% of the coast (Biodiversity Strategy 2000) in the region and will provide protected areas for rock lobster breeding and larvae development. Research by Auckland based scientists has shown that the Goat Island Marine Reserve has benefited the Hauraki Gulf snapper population using a combination of genetic parentage and relatedness analysis. Le Port A, Montgomery JC, Smith ANH,

Croucher AE, McLeod IM, Lavery SD. 2017 Temperate marine protected area provides recruitment subsidies to local fisheries. Proc. R. Soc. B 284: 20171300.

I acknowledge that this research has not been done to date on rock lobster. But I am prepared to consider that more marine reserves will help rebuild the rock lobster fishery. MPI should be doing or funding research like this for the future of the rock lobster fishery.

- 5) I am not personally in favour of any of the 4 proposed options provided by MPI in the discussion document as the population rebuild time is too slow. Option 4 calculates that 4 to 5 years which is too long to wait whilst we continue the same old practices. Practices which have been shown to reduce the rock lobster population.
This is the same measure introduced in 2014 and subsequent years (paragraph 68 of the discussion document) and the rock lobster population has continued to decline. So doing the same old thing is clearly not acceptable based on existing MPI experience. Dividing the total allowable catch between sectors and reducing the catch rates has failed in the recent past and MPI would likely agree will fail in the next 4 – 5 years. I support a full closure of the rock lobster fishery for at least two years in CRA 2.
- 6) Full closure of the Rock Lobster fishery for all sectors is drastic action, but it will wake up the community to the very real likelihood that it is under serious threat. To shut the fishery down will also require the following to be undertaken by MPI;
 - a. Increased policing by fisheries inspectors to ensure that the fishery is not plundered by black market operators. That is on and off the water.
 - b. The setting up more no take marine reserves in CRA2 to at least 10% of the shore line of CRA 2.
 - c. More leading research on the fishery, the accuracy of MPI catch figures, the health and reproduction rates of rock lobster etc. We do not know enough.

I fully support urgent action to address the significant drop in the rock lobster population in CRA 2.

The best means for rapid results in restoring the rock lobster population based on MPI's data and analysis is an immediate and complete closure of the CRA 2 Rock Lobster fishery for at least 2 years.

Yours faithfully



D.N. MacLeod

From: [REDACTED]
To: [FMSubmissions](#)
Cc: [REDACTED]
Subject: Review of sustainability measures for 1 April 2018
Date: Friday, 9 February 2018 7:07:42 PM
Attachments: [mfojccemnbfbikh.png](#)

2018 Sustainability Review,
Fisheries Management,
Ministry for Primary Industries,
[REDACTED]

See attached ECOs submission on the proposed sustainability measures.

Regards

Barry Weeber

ECO Co-Chairperson

Summary

ENVIRONMENT AND CONSERVATION ORGANISATIONS OF NZ INC.

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

9 February 2018

Sustainability Review 2018
Fisheries Management
Ministry for Primary Industries
[REDACTED]
[REDACTED]

Email: FMsubmissions@mpi.govt.nz

**INITIAL SUBMISSION ON:
APRIL PROPOSALS TO ALTER TOTAL ALLOWABLE CATCHES,
ALLOWANCES, AND TOTAL ALLOWABLE COMMERCIAL CATCHES
FOR THE 2018-19 FISHING YEAR**

The Environment and Conservation Organisations of NZ (ECO) is the national alliance of 50 groups with a concern for the environment. ECO has been concerned at the state of marine management and the impacts of fishing on threatened species for over 20 years.

Thank you for the opportunity to make submissions on these proposals.

A. SUMMARY

Recommendations

Rock Lobster

CRA 2

ECO is concerned at the state of the CRA 2 fishery and the failure of the past assessments to detect the fisheries state. Further concerns over management are:

- Shelving of catch shouldn't be used as a reason for a Minister to make a decision to rebuild the fishery;
- The current catch rate is the lowest of all areas – no fishery has reported a rate so low;
- Continued low recruitment in the fishery could continue making rebuild times overly optimistic;
- Fishery is still being managed to Bref rather than Bmsy or percent Bo eg B40%;
- Current assessment could be well below the soft limit given the uncertainty over the management target;
- The proposed largest cut CRA2_04 may not be sufficient to rebuild the fishery;
- If recreational and commercial cuts were even then the commercial catch would be reduced to 70 tonnes – which is not an option put forward.
- There are no areas of significance for fisheries management identified.

ECO supports a cut to CRA02_04 or below to increase the likelihood of a rebuild with low recruitment.

CRA 4

ECO has concerns over the proposal to increase the TACC for this fishery:

- The current catch rate is the lowest it has been in 10 years;
- Fishery is still being managed to Bref rather than Bmsy or percent Bo eg B40%;
- There are no areas of significance for fisheries management identified.
- The fishery has cycled up and down between different catch rates over the last 20 years.

ECO support maintaining the current catch.

CRA 7

ECO notes that CRA7 provides a window on recruitment in CRA 7 and 8.

ECO has concerns over the proposal for this fishery:

- Fishery is still being managed to Bref rather than Bmsy or percent Bo eg B40%;
- There are no areas of significance for fisheries management identified.

- The fishery has cycled up and down between different catch rates over the last 20 years.
- The linkage to CRA8 is an important consideration.

ECO supports the proposed catch reduction.

CRA 8

ECO has concerns over the proposal to increase the TACC for this fishery:

- The current catch rates are at relatively higher levels;
- Fishery is still being managed to Bref rather than Bmsy or percent Bo eg B40%;
- There are no areas of significance for fisheries management identified.

ECO support maintaining the current catch.

Sea Cucumber

SCC 3 and SCC 7B

ECO opposes any increase in the catch limits for Sea Cucumber. Despite the commentary in the report there is no information in the Stock Assessment Plenary report 2017 on a biomass assessment for these areas. Areas of significance to fisheries management should be identified in both QMAs.

Southern Blue Whiting

SBW 6B: Bounty Platform

Based on current management ECO does not support an increase in the TACC. ECO would support an increase based on the stock assessment but only after:

- Habitats of significant to fisheries management was identified;
- Measures are in place to reduce fur seal captures in the fishery;
- Measure are in place eliminate seabird bycatch.
- Fishing occurred without touching the bottom.

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REVIEW OF SUSTAINABILITY MEASURES – CRA2 QUOTA MANAGEMENT AREA

SUBMITTER DETAILS

FULL NAME: Environmental Defence Society Incorporated
ADDRESS FOR SERVICE: [REDACTED]
CONTACT: Madeleine Cochrane Wright
TELEPHONE: [REDACTED]
EMAIL: [REDACTED]

1 Introduction

- 1.1 This is a submission on the review of sustainability measures applied to the CRA2 Quota Management Area as set in the Ministry for Primary Industries' Discussion Paper No: 2018/02 (**Discussion Paper**).
- 1.2 EDS is a not-for-profit, non-government, national environmental organisation. It was established in 1971 with the objective of bringing together the disciplines of law, science, and planning in order to promote better environmental outcomes in resource management. It has recently undertaken an in-depth study into the operation of the fisheries management system, with a focus on inshore stocks. The Hauraki Gulf (within the CRA2 Quota Management Area) was one of the case study areas. The study included 60 in-depth interviews with people directly involved with fisheries management in New Zealand. It is shortly to be published under the title: "*Voices from the Sea: Experiencing New Zealand's Fisheries Management System*".

2 Summary of Submission

- 2.1 EDS considers that a decision by the Minister based on the Discussion Paper's advice would be unlawful because it:
- a. Fails to include information necessary to fulfil the Minister's statutory obligations under the Fisheries Act 1996 (**FA**) meaning a decision on the basis of the Discussion Paper would fail to take into account relevant considerations.
 - b. Relies on dated and irrelevant information.
 - c. Applies an incorrect interpretation of terms underpinning the environmental principles in s9 FA to which the Minister must have regard.
 - d. Fails to consider mandatory relevant considerations including the Hauraki Gulf Marine Park Act 2000 (**HGMPA**) and relevant regional policy statement and plan provisions.
 - e. Relies solely on an approach to analysing stock status (largely relying on Catch Per Unit Effort (**CPUE**)) which ignores factors critical to estimating the sustainability of

future harvest regimes, which is not best practice, and which does not include any vessel-independent data.

- f. Does not ensure the CRA2 fishery stock is set at a level that will ensure the stock can be restored to or above the level that can produce the maximum sustainable yield.

2.2 EDS seeks that:

- a. It is given an opportunity to meet with Ministry officials to discuss this submission.
- b. Due to insufficient, unreliable, and inadequate information the CRA2 fishery be closed until:
 - i. The information threshold is reached for reaching a lawful decision on the Total Allowable Catch (**TAC**), Total Allowable Commercial Catch (**TAAC**), and on management procedures; and
 - j. In conjunction with/as part of information sourcing, a multi-stakeholder process (including the environmental sector and marine ecologists) is convened to formulate an appropriate target size, rebuild timeframe, and other appropriate management measures to address the full range of matters under the FA for the CRA2 fishery.
- g. A finer spatial management approach is applied to the CRA 2 fishery and a wider range of management tools deployed.

3 Compliance with the FA

- 3.1 When considering setting sustainability measures for a fish stock the Minister's decision-making power is subject to specific and directive statutory requirements under the FA.

Purpose: s8 FA

- 3.2 The Minister's decision must be consistent with achieving the FA's purpose s8 FA: "*to provide for the utilisation of fisheries resources while ensuring sustainability*". The definition of "*ensuring sustainability*" includes in ss8(2)(b) "*avoiding, remedying and mitigating any adverse effects of fishing on the aquatic environment*". The "*aquatic environment*" is defined in s2 as "*the natural and biological resources comprising any aquatic ecosystem*" and to include "*all aquatic life*". The term "*aquatic life*" captures "*any species of plant or animal life that, at any stage of its life history, must inhabit water, whether living or dead; and includes seabirds (whether or not in the aquatic environment)*".
- 3.3 As a result, the Minister's decision must be consistent with avoiding, remedying, and mitigating any adverse effects of fishing on all marine species of plant and animal life as well as on the marine ecosystems which they comprise.
- 3.4 The Discussion Paper sets out proposals to alter the TAC and TACC but contains no information on the adverse effects of harvesting crayfish on other marine species or on

marine ecosystems. EDS considers that a decision made by the Minister based on this advice would be unlawful. We return to this issue in Section 4 of this submission.

Environmental principles: s9 FA

3.5 s9 FA sets out the environmental principles which the Minister must “*take into account*” when making a decision on the setting of sustainability measures. The two most relevant to the CRA2 stock are:

- a. “*biological diversity of the aquatic environment should be maintained*” (s9(b)).
- b. “*habitat of particular significance for fisheries management should be protected*” (s9(c)).

s9(b) FA

3.6 “*Biological diversity*” is defined in s2 FA as meaning “*the variability among living organisms, including diversity within species, between species, and of ecosystems*”.

3.7 The word “*maintained*” is not defined by the FA. The approach taken by the Discussion Paper to defining maintenance/assessing whether s9(b) has been achieved is “*an assessment of the risk that fishing might cause a catastrophic decline in species abundance or cause biodiversity to be reduced to an unacceptable level*” (emphasis added). There appears to be no case law supporting this definition or providing direction as to the correct definition to apply.¹ In the absence of a statutory definition and jurisprudential guidance maintain should be given its plain, ordinary meaning.² The online Oxford English Dictionary³ defines maintain as follows:

“To sustain (life) by nourishment.

To keep up, preserve, cause to continue in being (a state of things, a condition, an activity, etc.); to keep vigorous, effective, or unimpaired; to guard from loss or deterioration.”

3.8 The Compact Oxford Dictionary⁴ defines maintain as follows:

“To keep something in the same state or at the same level.”

3.9 Allowing decline/reduction in biodiversity, catastrophic or otherwise, is not consistent with guarding from loss or keeping biodiversity in the same state or at the same level. EDS considers the definition applied by the Discussion Paper is unlawful.

s9(c) FA

3.10 s9(c) states that “*habitat of particular significance for fisheries management should be protected*”. None of the terms in this subsection are defined by the FA.

¹ There is similarly a lack of guidance around the definition of maintain under the Resource Management Act 1991 which requires regional and district councils to maintain biodiversity. The common meaning appears to have been applied.

² s5 Interpretation Act.

³ <http://www.oed.com/view/Entry/112562#eid38643862>

⁴ 3rd edition, pg 560.

- 3.11 EDS agrees with MPI's conclusion that such habitat includes waters and substrates necessary for marine species to spawn, breed, feed or grow to maturity, that is, to undertake all their life stages.
- 3.12 As with the word maintain there appears to be no case law defining the word protect for the purposes of s9(c) FA. Protect is defined by the Compact Oxford Dictionary⁵ as "*keep safe from harm or injury*". The Courts have confirmed the same definition applies in the context of the requirement to protect significant areas of indigenous vegetation and significant habitats of indigenous fauna under the RMA.⁶
- 3.13 The Discussion Paper suggests that the meaning of protect is the avoidance, remediation, or mitigation of adverse effects. EDS submits this is incorrect and application of this approach would be unlawful. The direction in s9 is outcome focused. Simply avoiding, remedying, or mitigating adverse effects generally is not sufficient – the actions undertaken must be adequate to achieve protection.
- 3.14 The Discussion Paper contains no information on the adverse effects of harvesting crayfish on biological diversity or habitat of particular significance to fisheries management. It is therefore not possible to assess whether the sustainability measures proposed are adequate to achieve protection. This issue is discussed in Section 4 of this submission.

Information principles: s10 FA

- 3.15 When making a decision under the FA, the Minister must take into account the information principles in s10:

"(a) decisions should be based on the best available information:

(b) decision makers should consider any uncertainty in the information available in any case:

(c) decision makers should be cautious when information is uncertain, unreliable, or inadequate:

(d) the absence of, or any uncertainty in, any information should not be used as a reason for postponing or failing to take any measure to achieve the purpose of this Act."

- 3.16 The Discussion Paper contains only partial information, with significant gaps in the provision of information on important matters that the Minister is legally required to take into account (as indicated above and discussed further below). For this reason, EDS considers the Discussion Paper has not provided the best available information. There is also considerable uncertainty in the information provided (as discussed below) requiring the Minister to be cautious when reaching a decision.

⁵ 3rd edition, pg 737.

⁶ [2015] NZEnvC 219 at [63].

Sustainability measures: s11 FA

- 3.17 s11 FA sets out the sustainability measures the Minister may set or vary in order to meet the purposes of the FA. The scope of sustainability measures available to the Minister is wide and includes (but is not limited to):
- a. Setting the TAC and TACC.
 - b. Restricting the size, sex, or biological state of the species harvested.
 - c. Restricting the areas from which any species may be harvested.
 - d. Restricting the fishing methods that can be used to harvest any stock or which are deployed in any area.
 - e. Restricting the fishing seasons that apply to any stock, any area, any fishing method, or any fishing vessel.
 - f. Other methods not specifically described which are aimed at managing the effects of fishing on any stock or on the marine environment.
- 3.18 The Discussion Paper only considers two of these tools, setting the TAC and TACC. No information has been provided on the utility of deploying other tools available.
- 3.19 s11 FA also prescribes matters that the Minister must “*take into account*” and matters the Minister must “*have regard to*” before setting or varying a sustainability measure. These include:
- a. The Minister must take into account any effects of fishing on the aquatic environment (s11(1)(a)).
 - b. The Minister shall have regard to any regional policy statement, regional plan or proposed regional plan under the Resource Management Act 1991 (s11(2)(a)).
 - c. The Minister shall have regard to ss7 and 8 of the HGMPA (s11(2)(c)).
- 3.20 The Discussion Paper contains no information on the first two of these matters and the third matter is only given cursory mention in paragraph 107.
- 3.21 As a result, EDS submits:
- a. The Discussion Paper’s recommendations have not been put forward on basis of the best available information.

- b. A decision by the Minister of basis of the Discussion Paper would fail to take into account relevant factors.⁷

Consultation requirements

- 3.22 Before “*doing anything*” under s11(1) (i.e before setting or varying a sustainability measure) the Minister shall “*consult with such persons or organisations that the Minister considers are representative of those classes of persons having an interest in the stock or the effects of fishing on the aquatic environment on the areas concerned, including Maori, environmental, commercial, and recreational interests*” (s12(1)(a)).
- 3.23 Section 6.3 of the Discussion Paper states that MPI carried out pre-engagement including “*wide public engagement*” but then only refers to responses from customary, recreational, and commercial harvest sectors. There is no evidence of engagement with conservation/environmental or scientific interests. Unsurprisingly, the “*common themes*” identified through pre-engagement do not include any that are relevant to the impacts of fishing on the aquatic environment. The section then refers to the results of the pre-engagement having “*been taken into account*” when developing the options in the Discussion Paper.
- 3.24 The Minister is also required to consult with environmental interests (including EDS) and with representatives of “*those classes of persons having and interest in ... the effects of fishing on the aquatic environment*” which would include scientists who undertake research in this area such as marine ecologists, amongst others. It appears these classes of persons have not been consulted as part of the pre-consultation process. As a result EDS considers the pre-engagement process is improper and deficient. EDS accepts that the current submission process constitutes consultation and provides all interests an opportunity to submit on the Discussion Paper’s analysis and recommendations. However the deficiencies and bias in the pre-engagement process have coloured the options put forward in the Discussion Paper and have therefore compromised the ability of those interests not engaged with to have a genuine and fair role in the process.⁸ EDS is concerned this will inhibit the Minister’s ability to approach written submissions with an open mind, and to start afresh in considering a different range of options.⁹

4 Information basis for the Minister’s decision

- 4.1 As set out above the Minister is required to take the information principles in s10 FA into account when making a decision on the sustainability measures applying to the CRA2 fishery. EDS considers that the Discussion Paper does not present the best available information and should be approached with caution.

⁷ There is a failure to take into account a relevant factor where a matter is acknowledged to be relevant but the decision maker obtains no information on it: *Tamaki Reserve Protection Inc v Minister of Conservation* HC Auckland CP6000/97, 12 March 1999.

⁸ *Daganayasi v Minister of Immigration* [1980] 2 NZLR 130 (CA) at 141 per Cooke J.

⁹ See: *Wellington International Airport Limited & Ors v Air New Zealand Ltd & Ors* HC Wellington CP403/91, 6 January 1992, McGechan. Referenced in CPLA context in *Kyeburn Downs Ltd & Ors v Commissioner of Crown Lands* CIV-2008-412-000197 (HC).

4.2 The scientific information referred to in the Discussion Paper as forming the basis for the Minister's decision is:

- a. The results of the 2017 CRA2 stock assessment.
- b. An estimate of the quantity of the Māori customary and recreational harvests.

4.3 No scientific information is presented in the Discussion Paper on which the Minister can adequately consider the environmental impacts of harvest activity in the CRA2 fishery as required under ss8 and 11 FA. Further information is contained in the November 2017 Fisheries Assessment Plenary Report (**Assessment Report**) which is discussed below.

Assessment Report

4.4 The model used by the Assessment Report is largely dependent on data gathered on commercial harvesting vessels and relies heavily on CPUE. No vessel-independent data gathering has been carried out. The CPUE data is problematic due to the varying catchability of animals at different life stages and changes in vessel and fisher behaviour. It also provides no information on settlement and recruitment, and therefore the likely numbers of new juveniles coming through into legally harvestable animals. Such information is important and necessary to estimate the sustainability of future harvest regimes. Notably pureulus collectors are used to estimate settlement in CRA 3, 4, 5, 7 and 8 but not in CRA 2. It should be.

4.5 Because rock lobster larvae float in oceanic waters for up to two years before settling on reef systems, settlement can be affected by oceanic currents and other conditions which affect their attraction to reef systems and can be episodic. The current low stocks appear to be at least partly explained by recent poor settlement. The stock assessment contains no information on recent settlement levels or inquiry into the causes of likely poor settlement. and therefore is unable to adequately project likely stock levels going forward. The Discussion Paper indicates that if current low settlement conditions continue, the rebuild timeframes would extend considerably, from a 50% probability at being at the intermediate target in nine years under the assumptions made, to an 8.5% probability of being above the intermediate target in 20 years if average estimated recruitment from 2010 to 2014 is used. The Discussion Paper provides no comparable estimates for rebuild times to achieve a 50% probability of reaching the intermediate target in the event that there are poor recruitment levels in the future. It contains no information about rebuild times to achieve a greater certainty of reaching the intermediate target (a 50% probability meaning that it is equally likely the target will not be met). It also contains no information on the likelihood of current poor recruitment levels continuing into the future and therefore an assessment of the robustness of the estimates.

4.6 EDS submits that:

- a. Due to the lack of fishery-independent data, the known difficulties with CPUE data, and the lack of robust information on settlement (and recent pattern of low

settlement), that a highly precautionary approach needs to be taken when setting the TAC and TACC so that harvest levels are at the lower end of the scale.

- b. The Minister has not been provided with sufficient information, or the best available information, to make a fully informed decision about the likely impacts on future stock size of different TAC and TACC settings.
- c. The Minister should require an improved programme of data collection to be undertaken in CRA2 Fishery, including the collection of industry independent data, and settlement data (such as with a pureulus collector), to inform future decision-making.

Impacts of harvesting on the aquatic environment

- 4.7 Inconsistent with ss8 and 9 FA the Discussion Paper does not address the impacts of harvesting in the CRA2 fishery on the aquatic environment.
- 4.8 The Assessment Report contains a short section on this broader topic, which indicates that it has not been updated since 2012, with the exception of a reference to a 2013 article. It appears that the impacts of harvesting on the aquatic environment have not been revisited for this decision-making process.
- 4.9 The Assessment Report purports to be a summary of environmental and ecosystem considerations from the perspective of the rock lobster fisheries, with reference to a more detailed summary from an issue-by-issue perspective contained in the Aquatic Environment and Biodiversity Annual Review (**ABER**). It is presented as a general overview of the topic. No information on potential management responses, or material and/or conclusions that are specific to CRA2 is included to enable the Minister to draw conclusions in respect of that specific fishery. The environmental factors and pressures on each fishery are different therefore demanding a focused analysis of environmental and ecosystem considerations.
- 4.10 In terms of the impacts of rock lobster harvesting on reef kelp communities the Assessment Report refers to only five published articles and one unpublished article. Only two of these six articles are referenced in ABER (Babcock et al 1999 and Schiel 2013). There are no full references in the Assessment Report for Schiel (1990), Schiel (2013) and Breen (unpublished) so an assumption has to be made as to what these address. Three of the published articles date to the 1990s and one does not relate to New Zealand (Edgar and Barrett, 1999). Two of the articles referred to (Schiel & 2001 and Schiel 1990) relate to southern New Zealand so are not relevant to CRA2. The unpublished report is not peer reviewed and has been prepared under commission by the rock lobster industry by a scientist with no relevant research experience in New Zealand so should not be referred to in a scientific summary. Only two of the articles presented have some relevance to the CRA 2 fishery (Babcock et al 1999 and Schiel 2013). Commentary on each article is set out below:
 - a. Schiel, D. R. (1990), This article relates to research in southern New Zealand and so is not directly relevant.

- b. Babcock, R.C.; Kelly, S.; Shears, N.T.; Walker, J.W.; Willis, T.J. (1999). Changes in community structure in temperate marine reserves. *Marine Ecology Progress Series* 189: 125-134. This article is now 18 years old.
- c. Edgar, G.J.; Barrett, N.S. (1999). Effects of the declaration of marine reserves on Tasmanian reef fishes, invertebrates and plants. *Journal of Experimental Marine Biology and Ecology* 242: 107-144. This article does not relate to research in New Zealand and so is not directly relevant.
- d. Schiel, D.R, Hickford, M.J.H. (2001). Biological structure of nearshore rocky subtidal habitat in southern New Zealand. *Science for Conservation* 182:5-54. This article relates to research in southern New Zealand.
- e. Schiel, D.R., 2013, The other 93%: trophic cascades, stressors and managing coastlines in non-marine protected areas. *New Zealand Journal of Marine and Freshwater Research* 47: 374–391.
- f. Breen (unpublished), A short review of lobsters, sea urchin grazing and kelp bed stability. This is an unpublished report which has not been peer reviewed, directly commissioned by the commercial rock lobster industry, and undertaken by a scientist with no track record of research on this topic in New Zealand waters. It should not be referred to in a Fisheries Assessment Report.

4.11 There is a wealth of more up-to-date, peer-reviewed published literature of relevance to the CRA2 fishery which has not been referred to, and which provides a more reliable and nuanced picture of the issue and indications of appropriate management responses. For example:

- a. Babcock R C, 2013, 'Leigh Marine Laboratory contributions to marine conservation', *New Zealand Journal of Marine and Freshwater Research* 47(3), 360-373, which noted the evidence on the increase in kelp cover within the Leigh marine reserve due to increase in abundance and size of spiny lobster and snapper sea urchin predators and at page 365 concludes that evidence from tethering experiments undertaken in the Leigh marine reserve "indicated that large lobsters were the main predators of large urchins whereas both snapper and lobster fed on smaller urchins."
- b. MacDiarmid A B, D Freeman and S Kelly, 2013, 'Rock lobster biology and ecology: Contributions to understanding through the Leigh Marine Laboratory 1962-201', *New Zealand Journal of Marine and Freshwater Research*, 47(3), 313-333, which summarises the research findings that the abundance of sublegal juveniles increased in marine reserves indicating that they provide enhanced settlement, post-settlement survival, or migration of juvenile lobsters into reserves (and therefore strongly implies that their ongoing loss may have contributed to poor settlement in the fishery in recent years). It provides some indication that kelp forests are important for rock lobster settlement and are therefore habitats of particular significant for fisheries management that need to be protected.

- c. Shears N T, R C Babcock and A K Salmon, 2008, 'Context-dependent effects of fishing: Variation in trophic cascades across environmental gradients', *Ecological Applications*, 18(8) which indicates that kina barrens are more likely to occur on moderately exposed coastal locations at depths of around four to six metres, suggesting that spatial protection of these areas from rock lobster harvesting, whilst allowing harvesting in deeper, more exposed, and more sheltered environments, could help mitigate the trophic ecosystem effects of the fishery.
- 4.12 The Assessment Report notes that "*Predation by rock lobsters has been suggested as contributing to trophic cascades in a number of studies in New Zealand*" but only quotes one relevant article published in 1999. It then goes on to refer to studies that indicate trophic cascades are rare in southern waters and then concludes with the findings of an unpublished, industry-sourced literature review that "*suggests that the evidence for lobster-driven trophic cascades in New Zealand is very thin.*"
- 4.13 The ABER reaches different conclusions on this matter. At page 431 it states "*It is likely that the reduction in the abundance of sea urchin predators on some rocky reef systems in north-eastern New Zealand due to fishing has contributed to an ecosystem-level effect in these areas, but this effect is unlikely to be widespread in New Zealand coastal areas (Schiel 2013).*" This indicates that such an impact is more likely than not to occur in places on the north-eastern coast, including the CRA2 fishery, and that the reference to evidence on this point being 'very thin' is inaccurate and misleading.
- 4.14 EDS submits that the Assessment Report on which the Discussion Paper's recommendations rely does not itself rely on the best available information. The information relied on is dated, biased, and misleading. It contradicts the material referred to in the ABER. It does not provide an accurate summary of the material available on trophic cascade impacts relevant to the CRA2 fishery.
- 4.15 In addition to the above deficiencies, the Discussion Paper and Assessment Report contain no assessment of the impact of the CRA2 fishery on maintaining the biological diversity of the aquatic environment as required under s9(b) FA, or on the protection of habitats of particular significance to fisheries management under s9(c) FA. It is estimated that in some places along the north-east coast of New Zealand kina barrens may have now affected well over 50% of former kelp habitats. This is a significant change to marine ecosystems and has resulted in an equally significant reduction of biodiversity and degradation of habitats of importance to fisheries. Kelp reef systems are highly productive, highly biodiverse and provide important habitat and food for juvenile rock lobster and other juvenile fish species. As indicated above, there is also good evidence that rock lobster harvesting has contributed to this extensive biodiversity and habitat loss.
- 4.16 EDS submits that:
- a. The Discussion Paper and Assessment Report do not provide an adequate basis on which the Minister can legally meet the requirements under ss8, 10, and 11 FA.

- b. MPI should seek immediate assistance from an independent marine ecologist with research experience within the CRA2 fishery to compile the best available information on these topics, and to provide advice on potential management responses, so it can be submitted to the Minister with the Discussion Paper and Assessment Report.
- c. Areas where kina barrens have developed, or have the potential to develop, should be mapped as a matter of urgency and rock lobster harvesting should be prohibited in these areas, at least as an interim measure.

Regional policy statements and plans

- 4.17 Under s11(2)(a) FA the Minister must to have regard to regional policy statements and plans under the RMA. The Discussion Paper contains no information on this matter. The relevant instrument is the Auckland Unitary Plan, which includes specific and directive provisions relating to protecting marine biodiversity for example in Sections B7, B8 (specifically B8.5), D9, E11, E15.
- 4.18 EDS submits that as a result, a decision made on basis of the Discussion Paper would fail to take into account a mandatory, relevant consideration.¹⁰

The Hauraki Gulf Marine Park Act 2000

- 4.19 The Discussion Paper contains a cursory reference to the HGMPA. It does not refer to the matters in ss 7 and 8 HGMPA specifically the “*protection*”, and where appropriate the “*enhancement*” of the life-supporting capacity of the Hauraki Gulf (which includes maintaining its ecosystems) and its natural resources (including kaimoana). It does not evaluate whether the proposed management actions are sufficient to achieve such protection and enhancement. It also fails to evaluate whether some options would better meet the objectives of the HGMPA than others to help the Minister make an informed choice on this matter.
- 4.10 The High Court has previously found¹¹ that, in considering a decision of the Minister of Fisheries to allocate the TAC of kahawai, the HGMPA placed an obligation on the Minister to “*pay particular regard to the social, economic, recreational and cultural well-being of the people of the Hauraki Gulf*” and in particular to “*maintain and enhance its physical resources in the form of kahawai stock*”. The High Court found that the Minister had erred in not paying sufficient regard to this issue and was directed to review his decision.
- 4.11 EDS submits that the provisions of the HGMPA indicate that more conservative options are to be preferred over less conservative measures, in particular closure of the fishery until adequate information is sourced and assessment of all relevant matters is undertaken.

¹⁰ There is a failure to take into account a relevant factor where a matter is acknowledged to be relevant but the decision maker obtains no information on it: *Tamaki Reserve Protection Inc v Minister of Conservation* HC Auckland CP6000/97, 12 March 1999.

¹¹ *NZ Recreational Fishing Council v Minister of Fisheries* (NZCA 163/07, 11 June 2008).

5 Current and future management settings

- 5.1 The current management approach has demonstrably failed in terms of the sustainability of the fish stock itself. Total biomass levels are now at the lowest size ever assessed and are only a third of their estimated size in the late 1990s. This indicates a serious fault in management of this stock, which has allowed serious depletion to occur, and which needs to be rectified. It indicates that a different management approach is now required. Options for how this could be achieved are set out below.¹²

Establishing a target stock size

- 5.2 The 'previously agreed' reference level/target for the CRA2 fishery was based on the stock level in 1979-1981. The Rock Lobster Assessment Working Group has expressed concerns about the adequacy of this reference point and EDS concurs. That year was in no way a stable or typical year in terms of stock size, and the target does not appear to be based on any robust assessment of the sustainable stock size in terms of maximum sustainable yield, productivity, environmental impacts, or utilisation by the various harvesting groups. It therefore does not appear to be based on any of the criteria in the FA. The suggested intermediate target is a doubling of the current rock lobster abundance which would place it at just 42% of the previous reference level/target (the current level being just 21%) and only half of the size of that the stock was just four years ago (of 79% of the reference level). It also does not appear to be based on a robust application of the criteria in the FA.
- 5.3 EDS considers that a target of rebuilding the stock to half the size it was four years ago, over a four to nine year period (or a much longer period – potentially over 20 years in Option 1 – if recruitment stays low) is unambitious and inappropriate in a fishery of such significance to user groups and marine ecosystems, and that it is inconsistent with the requirements of the FA. EDS considers the intermediate target should be at the minimum necessary to rebuild the stock to the level it was four years ago, over the next four years. Given the paucity of information, this will require the temporary closure of the fishery as a first step.
- 5.4 EDS submits that a multi-stakeholder process (including the environmental sector and marine ecologists along with harvesters) should be convened to formulate an appropriate target size for the CRA2 fishery to replace the intermediate target, and a rebuild timeframe, and as a basis for a new stock assessment in 2019.

Establishing the TAC and TACC

- 5.5 From the material provided on the impacts of various TAC and TACC settings on the rebuild times for the stock it is clear that the level of recruitment has a large impact on the timeframes. Although information has not been provided on what assumptions have been made about recruitment for the modelling of the impacts of management options, the text

¹² Although part of the High Court's decision was overturned on appeal to the Court of Appeal the Minister was still found to have erred because he did not pay particular regard to the provisions of HGMPA when setting the total allowable commercial catch.

indicates that if recent recruitment levels are used (from 2010 to 2014) rebuild times are likely to more than double.

- 5.6 There is also evidence that the model used, which is largely based on CPUE data, may have considerably over-estimated the current stock size (or at least not have given an indication of the very low stock levels in the western Hauraki Gulf) given recent scientific data gathered from the monitoring undertaken inside and outside the marine reserves at Leigh and Tawharanui which suggests that stock levels in the vicinity are less than 5% of virgin biomass, coupled with the ongoing collapse of rock lobster stocks within the reserves. We note that this recent and relevant research is not mentioned in the Discussion Paper.
- 5.7 EDS submits that, given the matters raised above about uncertainty and lack of adequate information on a number of matters, the only option is closure of the fishery until a fuller stock assessment can be carried out in two years' time based on a broader suite of relevant information, and a more informed decision as to the appropriate TAC and TACC settings can be made.
- 5.8 EDS is concerned the Discussion Paper's options will result in a continued decline in crayfish stocks in the CRA2 fishery. This is inconsistent with s13(2)(b) FA.

The management procedure

- 5.9 A management procedure was put in place in 2014 for the CRA2 fishery. This has proved grossly inadequate given the procedure rule did not indicate that a reduction in TACC was required when evidently a large reduction is needed.
- 5.10 EDS submits that the use of this management procedure should be immediately discontinued due to its patently inadequate performance. Closure of the fishery would secure this outcome. To meet international best practice, any future management procedure needs to be developed in wide consultation with all stakeholders, including environmental interests and marine ecologists, in order to develop appropriate objectives and performance metrics for the fishery that meet stakeholder expectations and address all the required matters to be considered under the FA.¹³

Serial spatial depletion

- 5.11 The CPUE of CRA2 is now at 0.253 crayfish per pot lift, which means that four pots have to be lifted to harvest one legally-sized crayfish. This is by far the lowest CPUE when compared to the other CRA stocks, and far below CRA 8 where the CPUE is 3.858, being 15 times greater. In terms of the four statistical areas within the QMA for CRA2, the lowest CPUE is located in the area along the eastern side of the Coromandel Peninsula. The greatest drop

¹³ Holland D S, 2010, *Management strategy evaluation and management procedures: Tools for rebuilding and sustaining fisheries*, OECD, Paris, at 13

off in CPUE has occurred in the what were the more productive areas in the Bay of Plenty and northern coast of East Cape, presumably due to more effort going into these areas, but the CPUE is now at levels similar to that in the western Hauraki Gulf. As indicated above, data from monitoring inside and outside marine reserves show very low stock levels in the western side the Hauraki Gulf. This indicates the need for finer spatial management in the fishery to avoid the serial depletion that has occurred from north to south of the fishery and to help address the extreme localised depletion which has occurred in many areas.

- 5.12 EDS submits that finer spatial management is required for the CRA2 fishery in order to manage localised and serial depletion. This could initially focus on setting differential harvest limits for each of the four statistical areas within the QMA.

Timing of next stock review

- 5.13 The 2013 estimated stock size of 79% of the reference level (or target stock size) has plummeted to 21% in 2017, which is below the soft limit. This suggests that more active management is required for this stock to maintain healthy abundance and to avoid such population crashes as have occurred over the past four years.

- 5.14 EDS submits that:

- a. The Minister should close the CRA2 fishery and require a fuller stock assessment be undertaken in two years' time (2019) after obtaining additional information and addressing the matters raised above.
- b. A wider range of management tools should be considered, included finer spatial management and protection to ensure healthy stocks and reef habitats and that a range of options for such management should be developed for consideration at the next stock assessment.



Submission Form

Review of sustainability measures for 1 April 2018

Once you have completed this form

Email to: FMSubmissions@mpi.govt.nz

While we prefer email, you can also post your submission to: 2018 Sustainability Review, Fisheries Management, Ministry for Primary Industries, PO Box 2526, Wellington 6140, New Zealand.

Submissions must be received no later than 5pm on Friday 9 February 2018.

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

Submitter details:

Name of submitter or contact person: Dr Rebecca Stirnemann	
Organisation (if applicable):	Forest and bird
Email:	
Fishstock this submission refers to: <i>Rock lobster – CRA 2, CRA 4, CRA 7, CRA 8</i> <i>Sea cucumber – SCC 3, SCC 7B</i> <i>Southern blue whiting – SBW 6B.</i>	CRA2
Your preferred option as detailed in the discussion paper (write "other" if you do not agree with any of the options presented):	other

Official Information Act 1982

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

Forest and Bird considers that a decision by the Minister based on the Discussion Paper's advice would be unlawful because it: a. Fails to include information necessary to fulfil the Minister's statutory obligations under the Fisheries Act 1996 (FA) and thus a decision on the basis of the Discussion Paper would fail to take into account key concerns. b. Relies on old and irrelevant information which considers to large an area. c. Fails to consider key considerations. e. Relies solely on an a flawed approach to analysing stock status (relying on Catch Per Unit Effort) which is an sustain measure, f. Does not include any independent source of unbiased data. g. Does not ensure the stock can be restored to or above the level that can produce the maximum sustainable yield, h) does not take into account ecosystem function.

Forest and bird seeks that: It is given an opportunity to meet with Ministry officials to discuss this submission and that due to the inadequate information this fishery be closed until a system which will ensure the stock will be maintained at a sustainable level which takes into account ecosystem function. We also call for a much finer resolution of data collection to ensure that this fishery is properly managed.

We also call for a better more open system of review which includes all interested iwi, ecologists and environmental groups.

From: [REDACTED]
To: [FMSubmissions](#)
Subject: Rock Lobster Cra 2 Sustainability Review Friday 9th February 2018
Date: Friday, 9 February 2018 1:47:54 PM

SUBMISSION FORM

Review of sustainability measures for 1 April 2018

Name of Submitter: Grigor Wilkie & Karyn Meredith

Email: [REDACTED]

Fishstock: Cra2

Preferred Option: Option 1

OUR SUBMISSION

1. Our first point is it defies belief that MPI are proposing an increase to the recreational take, when its own records show the recreational take at present is approximately 34 tonnes. Instead, MPI are going to reallocate from the TACC to the recreational sector and thereby not achieving the goal of a rebuild in Cra 2.
2. We have shown without a doubt that the Cra 2 fishermen have been the only organisation prepared to take action to restore Cra 2 stocks. Commercial fishermen are the only ones to have taken reductions of any kind.
3. Any greater reduction other than Option 1 will cause severe hardship amongst the Cra 2 fishing fleet.
4. The Legasea organisation and its sister partners have not shown any willingness to help the rebuild other than proposing even more cuts to the TACC.
5. Lack of "puerulus" is probably the greatest factor that has affected stock numbers, undoubtedly due to oceanic factors/climate change/land runoff which is occurring globally, a fact beyond our control.
6. Accountability should be made by every New Zealander of stocks removed from Cra 2 and this should be mandatory by all participants, only then we may get plausible results. This is done in Australia and other parts of the world.
7. All recreational/customary should be made to adopt the following changes to help create the accountability required of the Cra2 stock, and in the process reduce the black market take markedly.
 - (a) Legal size only together with either tagging or telson clipping.
 - (b) Reduction to a three craypot limit per boat together with craypot registration.
 - (c) A three cray per person per day take.
 - (d) A limited season.

8. If MPI were to concentrate on reducing the estimated illegal take of 40 to 50 tonnes by half, this would easily cover the MPI increase to the recreational take.
9. We ourselves over the past 30 years have invested heavily in quota and therefore it is in our interest to keep the stock healthy for the future. It is very hard to have a future when you are on the knife edge of having your quota investment taken from you and reallocated. We are third generation fisherpeople.
10. In isolated communities like ours crayfishermen put far more back into the local economy than the recreational sector who generally bring what they need and are here two to three weeks of the year and then gone again.
11. Maori organisations have invested heavily in Cra 2 quota and receive a major part of their income from catching and leasing this quota. Maori would NOT have signed up to the Sealords deal if it said in the agreement within 30 or so years, their quota was going to be confiscated/reallocated to the recreational sector. It seems inconceivable that after 150 years of colonization, this confiscation is going to take place once again.
12. In summary we have been involved in the crayfish industry for nearly 70 years, as stated before we are third generation fisherpeople.
We are more than prepared to give even more on our part just as long as other participants including MPI also contribute by doing something constructive and with action.

Thanking you, Grigor Wilkie & Karyn Meredith.

From: [REDACTED]
To: [FMSubmissions](#)
Date: Friday, 9 February 2018 9:38:35 AM

Theo Wilkie
Commerical Fisherman

[REDACTED]
CRA2
Option 1

Hi there,

I propose option 1.

I am a third generation fisherman, our family having over 70 years experience in the industry and over 50 years fishing in CRA2. I have grown up in the industry and it is all I have ever known. We above anyone else do not want to see the fall of CRA2, as it is our livelihoods and we have the most to loose.

I would like to see a reporting system brought in for recreational take, as we are the only one providing any credible data, data which on a regular basis is thrown back in our faces to say we are flogging the fishery.

I would like telson clipping to be brought in to try and help with the black market fishery.

I would like to see more research go into the puerulus study as these little things are the start of our rebuild.

I would like the recreational take to be lowered as 6 per day is far too high, lets take Auckland's population for example.

Around 1,400,000, lets say 1% goes fishing and takes 6 crays.
That's 14,000 people taking approximately 3kg of crayfish each,
That's 42 tonne
ONCE A YEAR

I propose 3 crays per person.

Diving or setting pots 4 times in a year would give you 1 cray a month.

I also would like to see the banning or timeline banning of scuba gear being used for crayfish, it is illegal for commercials to use scuba because it is far to devastating to the fishery. Why have such a efficient killing system in place when we are trying to rebuild our fishery.

Like you say on your website, this is a SHARED FISHERY. Lets SHARE in the rebuild. Commericals are doing something, weve taken quota cuts and VOLENTARY shelving, unlike the rest of NZ who only criticise and moan. We want to keep fishing, but it can only happen if it is a joint effort. We ALL helped the fishery get to this state.

Please do not feed into these Legasea lies, the fishery is no where near as bad as what they say.

Thank you for your time

Theo Wilkie

Sent from [Mail](#) for Windows 10

From: [REDACTED]
To: [FMSubmissions](#)
Subject: FW: This to cover off both Wilkie submissions
Date: Monday, 19 February 2018 2:10:18 PM

From: Daryl Sykes [REDACTED]
Sent: Monday, 19 February 2018 1:59 PM
To: Alicia McKinnon [REDACTED]
Subject: This to cover off both Wilkie submissions

To MPI and the NZ RLIC, After hearing about the perilous state of the Cra 2 stocks at our AGM, We Grigor Wilkie, Karyn Meredith and Theo Meredith Wilkie as quota owners, fisher people and shareholders in cra 2, do totally and wholly agree with CRAMAC 2's decision made at the 2018 AGM to support the amended submission made by the NZ RLIC on February 19 2018. Yours Sincerely Grigor, Karyn and **Theo**.

Chief Operating Officer
NZ Rock Lobster Industry Council

[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]

www.nzrocklobster.co.nz



Guardians of Kāpiti Marine Reserve: Submission on proposed increase TACC for CRA 4

The Guardians of Kāpiti Marine Reserve (GoKMR) is a local community network of marine users, recreational and commercial fishers, boaties, divers, marine scientists, educators, conservationists and other members of the local community with an interest in the Kāpiti marine space and a shared interest in the management, protection and enhancement of the Kāpiti Marine Reserve and surrounding environment.

We are opposed to the proposal to increase the TACC by 29.8 t for the CRA 4 fishery.

The Plenary summary document for CRA 4 predicted a strong short term decline in the "surplus production", followed by strong rebuilding in 5 years time, based on puerulus recruitment (*Breen et al.* 2016:19).

The stock assessment indicated that the stock was depleted, but acknowledged that spawning stock biomass was a high proportion of the unfished stock level because of the small size at maturity. Depletion of the stock had been recognised even before the stock assessment by all stakeholders.

The base case operating model predicted further decline in the stock at all reasonable TACC levels, leading to further decreased TACCs for 2018 and then followed in some runs by even further declines.

After the first two years of projections, the strong recruitment in 2015 begins to contribute to the stock, projecting a strong rebuild of the stock to 2022. This follows fluctuating biomass trajectories over 5-10 periods since the 1960s (CRA 4 stock assessment 2016: p73).

The proposed TACC increase is based on a short-sighted assessment: the trajectory shows a likely increase over the 5-year period, but ignores not only the short term decline, but also the overall decline since the early-mid 1980s. GoKMR believe that this management scenario relies too much on puerulus settlement data without any understanding of juvenile survival post settlement until individuals reach minimum size.

Both the long-term vulnerable biomass graph and the puerulus index shows a fluctuating stock with an overall decline since the 1960s. (CRA 4 stock assessment 2016: Figs 44, 47).

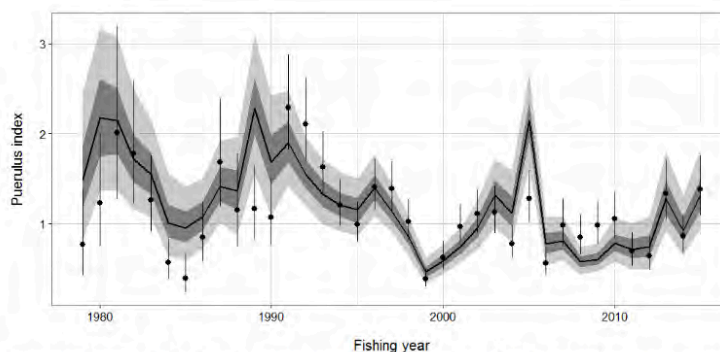


Figure 44: Posterior of the fit to the puerulus index from the base case McMC; shaded areas show the 5%, 25%, 75% and 95% quantiles of the posterior; the heavy solid line is the median of the posterior distribution; error bars on the puerulus values are one standard deviation.

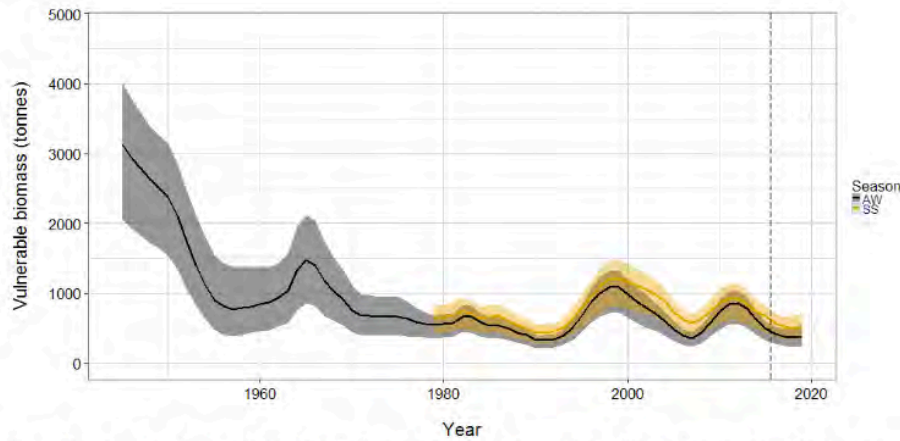


Figure 47: From the base case MCMC, vulnerable biomass from 1945–2019 by season from the base case MCMC; shaded areas show the 90% credibility intervals; the heavy solid line is the median of the posterior distributions; the vertical line shows 2015, the final fishing year of the model reconstruction. Biomass before 1979 is annual but plotted using the AW coding.

A fluctuating stock may be an indication of imminent fishery collapse as naturally fluctuating populations also creates the risk of high fishing pressure occurring during times of naturally declining populations: a combination that could spell disaster for the stock. According to fisheries studies, the best indication of an approaching stock collapse occurs when a population falls to 15-25% of its average size (Essington *et al.* 2015). The MPI assessment document indicates that the CRA 4 stock is currently at or below 20% of the 1950s stock levels (Breen *et al.* 2016: p43).

There is no clear understanding as to what caused the dramatic decline in puerulus settlement in 2015/16, (resulting in a predicted short term decline in stock), although the Plenary Document acknowledges that climate changes are an obvious possible direct or indirect cause, along with inshore ecological changes such as increased siltation (Breen *et al.* 2016:19). No analysis of weather patterns or sea temperatures with stock/puerulus fluctuations over previous years are provided.

Given the climatic uncertainty, and noting that the 2017/18 summer has seen exceptionally high seawater temperatures around New Zealand following a La Nina weather pattern and higher than normal atmospheric pressure warming sea surface temperatures by more than 6 degrees Celsius in some areas, compared to the average for this time of year (Noll, 2017), it would seem that a conservative approach would be best, and keeping the TACC at current levels for the immediate future would be the best stock management option.

Puerulus larvae are pelagic for 18-24 months, so it is unclear where recruitment to CRA 4 originates. The Plenary Document noted that strong sub-area differences existed in populations within the CRA 4 stock, however, the assessment is a simplistic simple stock assumption model. This is particularly important given the likely significant difference between stocks on the eastern Hawke Bay/Wairarapa coasts (statistical areas 912-915) where crayfish larvae are carried by the predominantly southward flowing East Cape current vs. the western Kapiti coast (stats area 935) where the predominant currents carry larvae northward by the Westland current and into the south Taranaki Bight by the D'Urville current.

Prior to any increase of TACC in response to short term (5-year) changes in predicted surplus biomass, there must be a detailed multi-stock assessment carried out in order

to identify stock parameters and possible differences between the eastern Wairarapa and the western Kapiti coast crayfish populations.

Monitoring of populations of crayfish (*Jasus edwardsii*) in eight New Zealand marine reserves for up to 34 years has shown that the populations display highly variable responses to protection. While a few showed rapid (within 1–2 years of protection) increases in abundance, others showed little response even after a decade of protection (Freeman *et al.* 2012). Because of the long pelagic (puerulus) stage of their lifecycle, crayfish populations within reserves are dependant upon larval recruitment from a wider area, and hence population size is directly related to recruitment.

The long-established Kapiti Marine Reserve provides an ideal opportunity for monitoring of a non-harvested crayfish stock that would enable natural fluctuations in the population to be identified and provide more immediate information on stock size dynamics, rather than relying on puerulus settlement data to predict surplus production when immature individuals reach harvestable size several years later.

Refs:

Breen P.A., P.J. Starr, V. Haist, C.T.T. Edwards and D.N. Webber (2016). The 2016 stock assessment and management procedure review for rock lobsters (*Jasus edwardsii*) in CRA 4. *New Zealand Fisheries Assessment Report 2017/29*
<http://fs.fish.govt.nz/Doc/24402/FAR-2017-29-Stock-Assessment-CRA4.pdf.aspx>

Essington, T. E., P. E. Moriarty, H. E. Froehlich, E. E. Hodgson, L. E. Koehn, K. L. Oken, M. C. Siple, and C. C. Stawitz. 2015. Fishing amplifies forage fish population collapses. *Proceedings of the National Academy of Sciences* 112(21): 6648–6652. DOI: 10.1073/pnas.1422020112

Freeman, D.J., Macdiarmid, A.B., Taylor, R.B., Davidson, R.J., Grace, R.V., Haggitt, T.R., Kelly, S. & N.T. Shears. 2012. Trajectories of spiny lobster *Jasus edwardsii* recovery in New Zealand marine reserves: is settlement a driver? *Environmental Conservation*: 1-10. doi:10.1017/S037689291200015X

Noll, B. (2017). A very impressive marine heatwave is unfolding near the east coast of Australia, across the Tasman Sea, and in New Zealand coastal waters.
<https://twitter.com/BenNollWeather/status/936560532345167872/photo/1>

Submission Form

Review of sustainability measures for 1 April 2018

Once you have completed this form

Email to: FMSubmissions@mpi.govt.nz

While we prefer email, you can also post your submission to: 2018 Sustainability Review, Fisheries Management, Ministry for Primary Industries, PO Box 2526, Wellington 6140, New Zealand.

Submissions must be received no later than 5pm on Friday 9 February 2018.

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

Submitter details:

Name of submitter or contact person: Hilton James Leith	
Organisation (if applicable):	CRA1 quota owner
Email:	
Fishstock this submission refers to: <i>Rock lobster – CRA 2, CRA 4, CRA 7, CRA 8</i> <i>Sea cucumber – SCC 3, SCC 7B</i> <i>Southern blue whiting – SBW 6B.</i>	CRA2
Your preferred option as detailed in the discussion paper (write "other" if you do not agree with any of the options presented):	Option 3 with the recreation catch being further reduced to 34 tonnes

Official Information Act 1982

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

Submission:¹

Details supporting your views:

CRA2 aligns with the largest NZ city. The commercial catch has been capped for 27 years apart from the 10% increase in the 90s, which, in hindsight, should never have been allowed. Over that same period the number of affluent recreational fisher people has grown exponentially. In the 80s a trip to the Moko Hinau Islands or the Great Barrier felt like you needed a passport. These islands were a different world from mainland NZ. You rarely saw another vessel. Nowadays hundreds of vessels enter the Hauraki Gulf on most weekends, many reaching its outer islands. The numbers of these wealthy technology equipped boat owning fisher people will only continue to increase.

The problem we now face is not commercial fishermen, not recreational fishermen, not traditional fishing.....the problem is HUMAN BEINGS. We need saving from ourselves and the rock lobster need our support.

The real future of fisheries is abundance. Make the hard calls now and turn the tables on our declining rock lobster in area 2!.

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

9 February 2018



Sustainability Review 2018
Fisheries Management
Ministry for Primary Industries

By email only: FMSubmissions@mpi.govt.nz

Tēnā koe,

REVIEW OF FISHERIES SUSTAINABILITY MEASURES FOR 1 APRIL 2018

The Ministry for Primary Industries (MPI) is seeking feedback on proposed changes to sustainability measures and management controls for selected fishstocks for the fishing year commencing 1 April 2018. In terms of the options proposed by the Ministry, we support the following:

- CRA 2 (Hauraki Gulf/Bay of Plenty) – Option 2 reduction of TACC to 120 mt with a rebuild timeframe of 7 years.
- CRA 4 (Wellington/Hawke's Bay) – Option 2 increase of TACC to 318.8 mt.
- Southern blue whiting – SBW 6B (Bounty Platform) – Option 2 increase of TACC to 3,145 mt.

The Iwi Collective Partnership (ICP) is a coalition of 15 North Island based tribes who own settlement quota allocated under the fisheries Treaty settlement between Māori and the Crown. Collectively the ICP manages circa 16,000 mt of ACE annually. A list of the 15 Iwi Members and QRN numbers are attached as **Schedule 1**.

1. CRA2:

The 2017 CRA2 stock assessment suggests female spawning stock biomass during 2016 was 18% of the unfished level. This would suggest CRA2 is below the 20% soft limit of unfished spawning stock biomass), however, it is unlikely that it is below the 10% hard limit. Furthermore, since 1998, CRA2 CPUE has shown an overall declining trend to 0.25 kg/potlift in 2017.

As a result of the above, all options proposed by the Ministry involve reductions to the TAC (416.5) & Total Allowable Commercial Catch (TACC of 200). The options and rebuild timeframes are summarised below:

- Option 1 - TAC 251.5 TACC 140 – rebuild of 9 years
- Option 2 - TAC 231.5 TACC 120 – rebuild of 7 years
- Option 3 - TAC 211.5 TACC 100 – rebuild of 5 years
- Option 4 - TAC 191.5 TACC 80 – rebuild of 4 to 5 years

All options are geared to restoring the fishery to an agreed 'reference level' within an acceptable timeframe. An intermediate reference point of doubling current rock lobster abundance will equate to 40% of the unfished spawning stock biomass level thereby removing the need for intervention. The difference in the proposed TACC options comes down to how quickly or slowly the fishery can rebuild to the reference point as noted above.

The ICP currently manages 4.585 mt of CRA2 ACE for the April 2017 season with quota ownership spread across 8 of our 15 Iwi Members. We do not support options 3 or 4. The socio economic impact of these two options upon the fishing industry is too severe for the benefit of a 2 to 4 year faster rebuild time compared to options 1 and 2.

Management supports Option 2, which is a reduction of the TAC to 231.5 mt and TACC to 120 mt. The 7 year rebuild timeframe is considered reasonable compared to the alternatives. Our support for Option 2 is conditional upon the recreational sector being constrained to their current actual harvest level. This particular argument is outlined in detail in the submission of New Zealand Rock Lobster Industry Council. We support that aspect of the NZRLIC submission.

We understand that some quota owners support option 1 because of the lower socio economic impact. For clarity sake, we do not oppose option 1. The difference in our submission simply comes down to a matter of personal preference regarding rebuild timeframes. Our preference is for a faster rebuild timeframe of 7 as opposed to 9 years, however, the 2 year difference is relatively minor.

We would expect that any improvements to the fishery would be restored to the commercial sector in similar proportions to the current legal position. Any attempt by the Ministry to use this process to reallocate ICP fishing right to recreational fishers will be vigorously opposed.

2. CRA4:

Following a significant TAC reduction from 592 to 484 mt in April 2017 (current season), the CRA4 CPUE has increased from 0.69 to 0.76 kg/potlift, suggesting abundance has increased in the last year. The result is the potential to increase the TAC of 484 mt & TACC 289 mt by 6.2% to 513.8 and by 10% to 318.8, respectively.

Option 2 is based on the current Management Rule which proposes increases until circa 0.90 kg/potlift at which point it plateaus with no further increases until circa 1.30 kg/potlift.

ICP manages 3.417 mt of CRA4 ACE in the current April 2017 fishing year, with ownership spread across 11 of our 15 Iwi Members. We support application of the current Management Rule which in turn supports an increased proposed under option 2.

ICP does not support retention of status quo under option 1.

3. SBW6B - Bounty Platform

ICP collectively manages 148 mt SBW6B with ownership spread across all 15 of our Iwi Members in proportion to relative tribal population size.

The options proposed by the Ministry are Option 1: Status Quo (TAC 2,426; TACC 2,377) and Option 2: an increase TAC to 3,209 and TACC to 3,145 (mt). The reason for option 2 is a 2017 acoustic survey indicated an increase in biomass. Application of the Harvest Strategy demonstrates that the catch limit can sustainably be increased by 17%.

ICP supports the option 2 increase to the TACC. We do support option 1 retention of status quo.

Ngā mihi,


Maru Samuels
General Manager

████████████████████
████████████████████
████████████████████

SCHEDULE 1 – ICP IWI MEMBERS

QRN	Iwi Entity	Iwi
9791656	Ngati Porou Seafoods Limited	Ngati Porou
9791784	Te Arawa Fisheries Holding Company Limited	Te Arawa
9791938	Ngati Tuwharetoa Fisheries Holdings Ltd	Ngati Tuwharetoa
9791654	Ngati Awa Asset Holdings Limited	Ngati Awa
9791775	Te Waka Pupuri Putea Limited	Te Rarawa
9792062	Ngai Te Rangi Fisheries AHC Limited	Ngai Te Rangi
9792654	Whakatohea Fisheries Asset Holding Company Limited	Whakatohea
9791783	Taranaki Iwi Fisheries Limited	Taranaki Iwi
9791658	Ngati Ruanui Fishing Limited	Ngati Ruanui
9791512	Te Aitanga A Mahaki Trust Asset Holding Company Limited	Te Aitanga a Mahaki
9791717	Rongowhakaata Iwi Asset Holding Company Limited	Rongowhakaata
9792029	Te Pataka O Tangaroa Limited	Nga Rauru Kiiitahi
9791789	Te Kumukumu Limited	Ngaitai
9792455	Ngati Manawa Tokowaru Asset Holding Company Limited	Ngati Manawa
9792311	Ngati Whare Holdings Limited	Ngati Whare

From: [REDACTED]
To: [FMSubmissions](#)
Subject: FW: Review of the CRA2 rock lobster fishery
Date: Monday, 5 February 2018 10:57:55 AM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)

Hello,

Can you advise on this one?

Regards,

Stacey Moir | Customer Enquiries Coordinator
Ministry for Primary Industries - Manatu Ahu Matua

Web: www.mpi.govt.nz



Trouble finding people? info@mpi.govt.nz HELP you
[\[SEEmail\]](#)

From: James Flett [REDACTED]
Sent: Monday, 5 February 2018 9:51 AM
To: [REDACTED]
Subject: Review of the CRA2 rock lobster fishery

Hello,

I have a few comments/feedback regarding the Review of the CRA2 rock lobster fishery for the Hauraki Gulf (primarily inner gulf).

The following comments would not be intended to implemented concurrently, they are only potential ideas.

As a diver and avid, but rare consumer of crayfish, I very much support ongoing closed seasons for taking of crayfish by recreational fisherman, coupled with reduction in commercial catch limits during selected times of the year.

I would also support the increase of any local commercial license fees to fund re-population or research on the basis that the market consumers can absorb such a cost increase.

Furthermore, given increase in national and local populations I would also recommend and support an increase in the soft limit to approximately 500t of spawning biomass, as

this is indicated as the lower point in the early 1990's and mid 2000's.

Kind Regards,

James Flett

Phil Appleyard
President
NZ Sport Fishing Council



Sustainability Review 2018
Fisheries Management
Ministry for Primary Industries



LEGASEA
FISH FOR THE PEOPLE

9 February 2018

Joint recreational submission on the review of rock lobster sustainability measures for 1 April 2018

Contents

A. Overview	1
B. Options supported.....	2
C. Executive Summary	3
D. Rock Lobster Management	4
E. Rock Lobster Proposals	6
Crayfish 2 (CRA 2) Te Arai Point to East Cape	6
Stock assessment 2017	7
Crayfish 2 management proposals.....	9
Harvest Strategy Standard.....	10
Reference points	10
Why a closure must be considered	11
Surveys to measure public opinion.....	11
Statutory Considerations.....	12
Recreational Harvest.....	13
Economic impact.....	13
Social and Cultural Impact.....	14
Crayfish 4 (CRA 4) Hawke Bay to Wellington.....	15
Crayfish 7 (CRA 7) Otago	16
Crayfish 8 (CRA 8) Southland.....	17
F. Appendix One: Determining the status of rock lobster stocks	19
G. Appendix 2: Summary of CRA 2 Survey Results	20

Note: This v_2 submission (10 February 2018) includes minor grammatical corrections and some clarifications not included in the original submission sent to MPI on 9 February 2018.

A. Overview

1. The New Zealand Sport Fishing Council, our public outreach team LegaSea, the New Zealand Angling and Casting Association (NZACA), and other non-commercial representative groups (the submitters) appreciate the opportunity to submit feedback on the Discussion Document No: 2018/02 Review Sustainability Measures for Rock Lobster (CRA 2, 4, 7 & 8) for 2018/19. The Ministry for Primary Industries (MPI) released their proposals on 12 January 2018, with submissions due by 9 February 2018.
2. The submitters object to the Ministry's tight consultation timetable giving only 18 working days to respond to the complex sustainability measures for selected crayfish stocks. It is unreasonable to expect non-commercial entities to respond with adequate information to inform the Minister's decision, as required by ss 12 and 13 of the Fisheries Act 1996 (the Act).
3. The submitters have been highly critical of aspects of rock lobster management and advice given to Ministers in previous submissions. In frustration that we have been largely ignored, the submitters has gone direct to the public with some of our concerns to gather their views.
4. The reliability of commercial Catch Per Unit of Effort (CPUE) as an index of abundance is a major concern as there have been significant changes in fishing gear, technology and market demands since 1980, but there has been no consistent way that these changes are recorded or taken into account. The assumption that a potlift in 1980 is equivalent to a potlift in 2017 has had a major impact on the stock assessment models and the Management Procedures that underpin management advice.
5. The disconnect between the science and management advice and what most fishers are experiencing on the water has been evident for some time now. Commercial fishers have shelved part of their annual catch or opted for more conservative Total Allowable Catches (TACs) in CRA 4, CRA 7 and CRA 8. Clearly the 2014 CRA 2 Management Procedure has failed to maintain or increase abundance, even with significant voluntary shelving by commercial fishers over the last three years. The latest CRA 2 stock assessment and review was bought forward a year because of widespread concern about the continued decline in this fishery.
6. NZSFC have engaged more fully in this review including the working group meetings, the stakeholder meetings and some of the National Rock Lobster Management Group meetings over the last year. While some improvements have been made, the process of developing management advice needs improving. Stakeholders are passionate about representing the interests of their sector, but more independent input is needed. The work of the National Rock Lobster Management Group lacks adequate reporting and transparency.
7. Representatives for the submitters are available to discuss this submission in more detail if required. We look forward to positive outcomes from this review and would like to be kept informed of future developments. Our contact is Helen Pastor, secretary@nzsportfishing.org.nz.

B. Options supported

8. CRA 2 – Closure is an option available to the Minister and must be considered given the low state of the stock. The hard limit has been breached in relation to the reference biomass (Bref) and recent recruitment is at an all-time low adding considerable uncertainty around the rebuild rates. There was significant public support for closure in our online survey. The only other option available to the Minister is to select option 4, with a 191.5t TAC, which is potentially a significant catch against a Vulnerable Biomass estimated at 203 t in 2017. The submitters have

their doubts about the effectiveness of this option but recognise that the Minister must weigh the economic, social, and cultural costs of his decision. The choice is left to the Minister. On the basis that there will be a significant reduction in the TAC to allow CRA 2 stock to be rebuilt as soon as possible, the submitters support a 50 t allowance for recreational fishers. This coincides with the upper bound of the most defensible recreational harvest survey estimate.

9. CRA 4 – The submitters oppose the increase in TACC and support the status quo. There is doubt about the validity of the CRA 4 Management Procedure and the submitters urge the Minister to take a precautionary approach.
10. CRA 7 – The submitters support the 15.5 t decrease in TACC.
11. CRA 8 – The submitters oppose the 108.7 t increase in TACC and support the status quo.

C. Executive Summary

12. The submitters are committed to ensuring that sustainability measures and management decisions are made to achieve the purpose and principles of the Act. A precautionary approach needs to be taken in CRA 2 which is highly valued by customary, commercial and recreational fishers. An urgent rebuild of the CRA 2 stock is required to maintain its potential to meet the reasonably foreseeable needs of future generations.
13. Rock lobster play a vital role in maintaining a healthy balanced inshore ecosystem and the Minister has a statutory duty to avoid, remedy or mitigate any adverse effects of fishing on the aquatic environment.
14. The Minister ought to be concerned that the submitters and others nationwide are becoming disillusioned with the ongoing mismanagement and subsequent depletion of our taonga [treasure], our crayfish. There are major concerns about the failure of the 2014 CRA 2 Management Procedure, which is based on a Catch Per Unit Effort (CPUE) index that is not a reliable index of abundance, and the advice from the National Rock Lobster Management Group at the time. The result of these failures mean that the opportunity to start to rebuild CRA 2 in 2014 was missed and we are all suffering the consequences of depletion now.
15. The 2017 CRA 2 stock assessment is based on more plausible CPUE and shows a significant decline in stock biomass over the last 37 years to a new historic low -
 - a. 2016 Spawning Stock Biomass (SSB) was 328 tonnes, just 18% of unfished levels and below the soft limit.
 - b. 2017 Vulnerable Stock Biomass was 21% of the reference biomass, below the hard limit of 25% of the reference biomass.
 - c. 2017 Vulnerable Stock Biomass was 203 tonnes, just 5% of unfished levels.
16. The CRA 2 stock has consistently been over-exploited since before reliable catch reporting was established and has reach a point where it has no resilience to cope with the current period of poor recruitment.
17. The Harvest Strategy Standard outlines the Ministry’s approach to relevant sections of the Fisheries Act 1996 and, as such, must form a core input to the Ministry’s advice to the Minister of Fisheries. The current low biomass level in CRA 2 means a time constrained rebuild plan is required, and the probability of rebuild should be increased where multiple sectors have significant interests in the fishery.

18. The submitters have committed substantial resources into developing and distributing an online survey to gauge public support for various CRA 2 management options available to the Minister. The 3,594 responses to the survey show strong support for a precautionary approach including closure to all commercial and recreational fishing, followed by support for Option 4 with a 191.5 t TAC, which may rebuild the stock to double the low current biomass in 4 years.
19. There is some resistance to the proposed large cut to the recreational allowance in CRA 2, from 140 t to 50 t, but at this time a 50 t allowance based on the upper-bound of the most defensible recreational harvest survey estimate is reasonable.

D. Rock Lobster Management

NRLMG advice

20. In 1992 the National Rock Lobster Management Group (NRLMG) was established as a statutory body to provide advice to the Minister on managing the rock lobster fisheries. It is advertised as a multi-stakeholder group comprising representatives of customary, recreational and commercial fishing interests, and the Ministry for Primary Industries (MPI).
21. In 2001 it was agreed by the Minister and the NRLMG that the group would “*provide well informed, credible, and consistent research and management information and advice to sector groups, Government agencies, and Ministers¹*”. The Minister must hold the NRLMG accountable to all stakeholders for achieving this unfulfilled commitment.
22. In our view it is time for the Minister to review the NRLMG membership and process. A number of members have been there a long time and developed entrenched positions. It is not clear to us who the recreational participants are representing as there is no transparency or engagement with the fishing public.

CPUE as a proxy for abundance

23. The often-stated assumption that commercial Catch Per Unit Effort (CPUE) is a reliable index of abundance needs to be tested. Until now there has been no allowance for changes in fishing operations, discard rates and market demands, and there is no consistent way of recording these types of changes. This year is the first time that improvements in fishing efficiency have been factored into the CPUE used in a rock lobster stock assessment model and the outcome is dramatic. The science is now a closer reflection of what people are experiencing on the water – depletion in CRA 2.
24. The use of holding pots also complicates the recording of retained catch, which has to be estimated by the fisher each day. At the peak of the season some fishers work a lot of pots or work further afield. Is the fishing effort of a pot lifted every day the same as a pot lifted every 2 days?
25. The rock lobster population is fished at different rates across its range. Areas close to home are often the first to be depleted. As catch rates diminish pots are moved to grounds holding a less heavily fished population, where abundance is greater. When that area is exhausted another move is made, allowing stocks to be serially depleted without any apparent decline in CPUE to highlight changes in stock size.

¹ NRLMG 2003 Annual Report.

Application of Management Procedures

26. Management Procedures (MPs) are a mechanism used to guide catch limit decisions in most rock lobster fisheries. The Management Procedures, which the National Rock Lobster Management Group have staunchly defended and relied on, seem to be unravelling.
27. Setting and altering the Total Allowable Commercial Catches based on self-reported catch by individual commercial fishers, including legal crayfish returned to the sea requires a good deal of faith that the data will not be biased in some way.
28. We have raised concerns about problems associated with CPUE-based Management Procedures in previous submissions and these latest proposals just reinforce our concerns regarding the continued application of this strategy.

MLS and size concessions

29. Concessions enabling commercial fishers to take rock lobster below the Minimum Legal Size (MLS), at 52mm and 53mm, apply in CRA 3 (Gisborne), CRA 7 (Otago) and CRA 8 (Southland). Tracking changes in the age/size composition of commercial harvest is essential if the effects of a concession are to be understood.
30. Since 2013 we have requested the following information. In five years we have not received any response. This is ridiculous, we are not dealing in state secrets. The Minister must be made aware that public demand for this data will increase as long as this information is withheld. We again request the following –
 - a. What percentage of fish below the national MLS are landed, per stock?
 - b. Where and when fish below the national MLS are being harvested, per stock?
 - c. What proportion of legal rock lobster catch is returned to the sea?
 - d. What is the trend in high grading over time in each rock lobster fishery?
31. We submit it must be made mandatory for fish processors to record the number and weight of crayfish of concession size.
32. Management without this supporting information means there is no ability to cross-check the changes observed in CPUE. Validation of such important information enables transparent and credible management. It is submitted that is not a reasonable approach to consult with fishers if the Discussion Paper is based on information that has been withheld without any adequate response by MPI or other reasonable excuse.
33. In a fishery of such high social, economic and cultural value it is important for the Minister to insist he receives full and balanced advice, and MPI must provide the Minister with the best information – not just an all-powerful point estimate of standardised average CPUE.

E. Rock Lobster Proposals

Crayfish 2 (CRA 2) Te Arai Point to East Cape

Recommendation

34. CRA 2 - Closure is an option available to the Minister and must be considered given the low state of the stock. The hard limit has been breached in relation to the reference biomass (Bref) and recent recruitment is at an all-time low, adding considerable uncertainty around the rebuild rates. There was significant public support for closure in our online survey. The only other option available to the Minister is to select option 4, with a 191.5t TAC, which is potentially a significant catch against a Vulnerable Biomass estimated at 203 t in 2017. The submitters have their doubts about the effectiveness of this option but recognise that the Minister must weigh the economic, social, and cultural costs of his decision. The choice is left to the Minister. On the basis that there will be a significant reduction in the TAC to allow CRA 2 stock to be rebuilt as soon as possible, the submitters support a 50 t allowance for recreational fishers. This coincides with the upper bound of the most defensible recreational harvest survey estimate.

Background

35. The discussion paper, while acknowledging a consistent decline in stock abundance, takes a very short timeframe and does not fully identify the extent of the depletion that has occurred over time.
36. The CRA 2 area encompasses extensive areas of rocky coastline and reef around the islands of the Hauraki Gulf, Coromandel Peninsula and the Eastern Bay of Plenty out to East Cape. In the past rock lobster were abundant and played a significant role in coastal ecosystems. Large catches were taken out of some ports in the 1920s for canning and export to Europe. Widespread commercial cray fishing has occurred since 1945.
37. Crayfish became a quota species in 1990. The Total Allowable Commercial Catch (TACC) in CRA 2 was set at 250 tonnes (t) and reduced soon after. It increased to 236 t in 1997 when catch rates were improving and was not reviewed for the next 17 years.
38. The stock assessment conducted in 2013 estimated a reasonably stable fishery with no sustainability issues, it was however below the chosen reference level -
- a. 2012 Spawning Stock Biomass (SSB) was at 37% of unfished levels
 - b. 2012 biomass was 79% of the chosen reference period, 1979-81.
39. The 2014 NZSFC submission stated that the stock assessment estimates of biomass in CRA 2 were simply not credible to anyone with experience in this fishery. The number of potlifts was well over 500,000 per year and still the TACC was not caught every year. This outcome is not good for commercial fishers and it is placing increasing pressure on an already depleted fishery. This level of effort and harvest also reduces ecosystem productivity and the availability of crayfish to recreational and customary fishers.
40. In addition, the 2014 NZSFC submission highlighted major concerns about the reliability of commercial Catch Per Unit of Effort (CPUE) as an index of abundance used in the stock assessment as there have been significant changes in fishing gear, technology and market demands since 1980, but there has been no consistent way that these changes are recorded or taken into account.

41. Commercial fishers who worked through the 1970s, 80s and 90s tell us of expansion, using better boats, mechanical haulers and better pots, enabling the exploitation of new grounds. The major fishing strategy back then was breaking in new territory. Now there are no new grounds to exploit and existing grounds are being heavily harvested to depletion levels.
42. When the Quota Management System fails to sustainably manage fish stocks the support for more marine protected areas or fisheries closures gets louder. In preference, the submitters support fisheries management that is transparent, precautionary, and provides for the interests of all New Zealanders.
43. An opportunity was lost in 2014 to take decisive action in CRA 2 and start the rebuild of rock lobster in this area. As a consequence, any rebuild of this stock will be starting from a lower baseline, so decisive action is required. Now is the time for an aggressive intervention that provides a lasting solution to restore abundance and diversity in the CRA 2 marine environment.
44. The submitters have committed substantial resources into developing and distributing an online survey to gauge public for various management options available to the Minister. Many of the respondents support regulation changes that will ensure that recreational fishers also contribute to the rebuild.
45. However, the implications around future regulation changes ought to have been signalled and identified for consultation in the current Discussion Paper. Doing this would be consistent with good practice consultation and ensure that the Minister is properly informed of the implications of his decision-making, with the likely implications to the daily bag limits for individual fishers being identified at the time of decision-making in relation to the TAC, TACC and non-commercial allowances.

Stock assessment 2017

46. Rock lobster stock assessments are complex and squeezed into a 6-week period. In 2017 the Rock Lobster Working Group met five times. A new base stock assessment model has been developed, and changes were made to the way CPUE is standardised. Data from an old reporting system were split from the Quota Management System reporting system, and the turnover in vessels helped to account for changes in potting efficiency over time.
47. **The new model shows a significant decline in stock biomass over the last 37 years to a new historic low.** The spawning stock biomass is now below the soft limit, which means that management action is required to rebuild the stock within a specified time (Figure 1) -
 - a. 2016 Spawning Stock Biomass (SSB) was 328 tonnes, just 18% of unfished levels.
 - b. 2017 Vulnerable Stock Biomass was 21% of the chosen reference period, 1979-81.
 - c. 2017 Vulnerable Stock Biomass was 203 tonnes, just 5% of unfished levels.
48. The Total Allowable Catch for the last four years has been 416.5 tonnes per year. This was the level determined by the approved Management Procedure that would move the stock toward the management target.

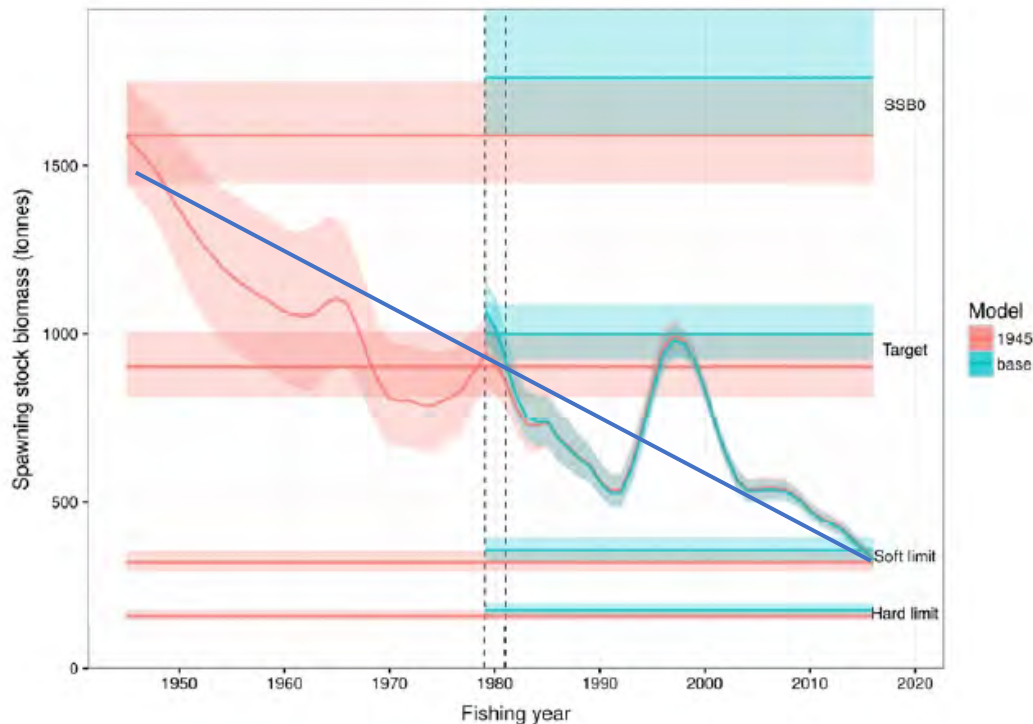


Figure 1: Results of the 2017 stock assessment showing Spawning Stock Biomass by fishing year for two CRA 2 model runs. One that starts in 1945, using highly uncertain catch history (Pink), and the base case from 1979-80 (Green) which estimates the initial unfished Spawning Stock Biomass (SSB0) using average recruitment. The overall trend since the 1940s has been consistent despite a few years of increased CPUE in the 1990s (blue line).

49. The submitters are concerned that fishing mortality in CRA 2 is exceptionally high. This is the proportion of the biomass that is harvested. Information presented at the November Plenary Meeting shows a consistent increase in fishing intensity since 1980, with a peak in 2014 at over 80% during the spring and summer period when all legal size males and females can be harvested.
50. Another indicator of high fishing mortality is the small average size of rock lobster (about 58 mm tail width) which means 50% of the catch consists of males from 54 mm to 58 mm. There is little chance of recovery when rock lobster are fished so hard as soon as they reach legal size.
51. We do not believe the claims by some commercial interests that rock lobster in CRA 2 have always been less productive than stocks in other areas. These claims are based on historic reported catch. That reporting was never a true record of actual catch. Firstly, fishers in the 1960s were able to make a living hand hauling pots from small boats without travelling far because the fishery was abundant and accessible. There was a full range of sizes caught and catch rates were high. Catch reporting was infrequent, monitoring was poor, and cray were sold for cash.
52. In the period 1974 to 1980 discrepancies were discovered between national reported catch totals and total exported weight. These ranged from about 460 t in 1974 to 1159 t in 1978. The size of the discrepancy used in the stock assessment model for CRA 2 is an additional 17% of illegal catch on top of reported catch. No estimate is made of the unreported catch that ended up in the domestic market. In 1979 stricter reporting requirements were introduced, but by then the number of reported potlifts were over 600,000 per year.
53. It seems obvious to the submitters that the CRA 2 stock has consistently been over-exploited since before reliable catch reporting was established and this is the reason for low yields since the 1980s, not inherent low productivity.

54. The submitters are concerned that the CRA 2 stock has now reached a level where it has no resilience to cope with the current period of poor recruitment or an unpredictable natural event.

Crayfish 2 management proposals

55. The MPI Discussion Document proposes four options for the future management of CRA 2. The status quo and closure of the fishery are added for comparison. The Final Advice Paper needs to present the Minister with all six options identified in the table below.

Table 1: The Total Allowable Commercial Catch and allowances for the current fishing year (Status quo) and the four MPI proposed options in tonnes. Also, the estimated time to reach an intermediate target of double the current stock size for each option. The time taken to reach a target in the absence of fishing (Closure) is an important bench mark for rebuild times.

Option	Total Allowable Commercial Catch (TACC)	Allowances			Estimated time to double current stock size
		Customary Maori	Recreational	Other mortality	
Status quo	200	16.5	140	65	N/A
Option 1	140	16.5	50	45	9 years
Option 2	120				7 years
Option 3	100				5 years
Option 4	80				4 years
Closure	0	0	0	0	2 years

56. There are a number of uncertainties about how low the CRA 2 stock is and how long it will take to reach the intermediate target and final rebuild target. These are described in Appendix 1.

57. There is no doubt the Minister has an important decision to make. As part of this decision-making process he must weigh up:

- a. The risks to the stock.
- b. The importance of rock lobster in the ecosystem, including the effects of exploitation on associated species and the environment.
- c. The impacts of a sharp decline in catch to promote a rapid rebuild or a slow and very uncertain rebuild of CRA 2 on:
 - i. Commercial fishing interests.
 - ii. Recreational business interests, including dive shops, suppliers and charter vessel operations.

58. Fortunately, MPI has a Harvest Strategy Standard policy signed off by the Government in 2008 for exactly this situation.

Harvest Strategy Standard

59. “The Harvest Strategy Standard outlines the Ministry’s approach to relevant sections of the Fisheries Act 1996 (“the Act”), and, as such, will form a core input to the Ministry’s advice to the Minister of Fisheries (“the Minister”) on the management of fisheries, particularly the setting of TACs under sections 13 and 14.”
60. Currently the CRA 2 stock is below a couple of important reference points used in the HSS (see below).
61. The Final Advice Paper to the Minister must include a time constrained rebuild plan that complies with the Ministry’s policy on rebuilding stocks. The Minister must then give full consideration to that plan when making a decision for the future management of CRA 2.
62. The HSS states:

“Stocks that have fallen below the soft limit should be rebuilt back to at least the target level in a time frame between T_{min} and $2 * T_{min}$ with an acceptable probability.”

And:

“ T_{min} is the number of years required to rebuild a stock in the absence of fishing and is a function of three primary factors: the biology of the species, the extent of stock depletion below the target, and the prevailing environmental conditions.”

63. The current **management target** for CRA 2 is a reference biomass (B_{ref}) of 965 tonnes.
64. T_{min} to reach the intermediate target in CRA 2 has been calculated to be 2 years. Therefore, any rebuild plan must aim to reach the intermediate target in 2-4 years. MPI’s Option 4 is the only one to reach the intermediate target in 4 years (with 50% probability), assuming recruitment quickly returns to the 10-year average rate.
65. Also, it is the only option to reach the current **management target** (B_{ref}) in less than 20 years. With minimal increase in recreational catch, Option 4 will see biomass reach B_{ref} in 13 years which is about twice the minimum time.
66. The HSS also states:

“ T_{min} reflects the extent to which a stock has fallen below the target, the biological characteristics of the stock that limit the rate of rebuild, and the prevailing environmental conditions that also limit the rate of rebuilding. Allowing a rebuilding period up to twice T_{min} allows for some element of socio-economic considerations when complete closure of a fishery could create undue hardships for various fishing sectors and/or when the stock is an unavoidable bycatch of another fishery. The probability of rebuild should be increased where the information is highly uncertain or where multiple sectors have significant interests in the fishery.”

Reference points

67. The 2017 rock lobster plenary report states that the CRA 2 stock is “Likely (> 60%) that B_{2017} is below the Soft Limit” which is defined as 20% of the unfished spawning stock biomass. However, there is uncertainty in estimating the unfished biomass and in many rock lobster stocks a Reference Biomass (B_{ref}) is used as the **management target** using provisions in s13(2A) of the Fisheries Act 1996. The current B_{ref} for CRA 2 is the average Vulnerable Biomass estimated in the stock assessment from 1979 to 1981.

68. Current science shows that the Vulnerable Biomass available to fishers is about 5% of the unfished biomass and the Minister must ensure that the stock can be rebuilt beyond the intermediate target of two times where it is now.
69. There is however, confusion about which of the different biomass estimates to use to determine the status of rock lobster stocks (See Appendix 1).
70. Neither Spawning Stock Biomass (SSB) nor Vulnerable Biomass (VB) provide a clear picture of stock status for the public or managers.
71. The submitters propose that in future stock assessment model outputs include Recruited Biomass. Recruited Biomass refers to all male and female rock lobster at or above the minimum legal size at the start of the fishing year. This is consistent with the way other stocks are assessed. The Recruited Biomass in CRA2 would be about half way between Vulnerable Biomass and Spawning Stock Biomass.
72. If there is an assumption that a proportion of stock is not available during autumn/winter then that can be stated as a percentage of Recruited Biomass. Using Spawning Stock Biomass alone to determine status of a rock lobster stock against limit reference points for heavily fished stocks like CRA 2 can be misleading.

Why a closure must be considered

73. The submitters understand that the latest stock assessment increased the relative value of B_{ref} but for now the current reference biomass is unchanged, and there is no case made against the use of the current B_{ref} .
74. The Harvest Strategy Standard default limits regarding Maximum Sustainable Yield (MSY) compatible targets, such as the B_{ref} target used in CRA 2, are set at a soft limit of 50% and a hard limit of 25%. Although an intermediate target to double CPUE has been agreed by the Working Group, any decision made still must be moving the stock beyond the intermediate target and towards B_{ref} .
75. The Vulnerable Biomass in 2017 was 21% of B_{ref} , so under these criteria **CRA 2 has breached the hard limit and a closure must be considered.**

Option	Estimated time to reach B_{ref} (years)
Option - 1	20+
Option - 2	20+
Option - 3	20+
Option - 4	16
Closure	7

Surveys to measure public opinion

76. In 2017 the NZSFC and LegaSea conducted an online survey using email databases to measure people's perceptions of the state of the rock lobster fishery in CRA 2. Around 850 responses were received, with many respondents having dived or potted for crayfish for more than 20 years in this area. Of 841 respondents 78% rated the rock lobster fishery as very poor or worse and many backed up that view with details of their experiences.
77. There was support from recreational fishers for additional management measures to help rebuild abundance in CRA 2. Most fishers were prepared to contribute in some way, even if that meant a seasonal or temporary closure for all fishers.

78. In February 2018 the submitters conducted a follow-up survey on rock lobster in CRA 2. As awareness has grown various fishing and diving communities on social media have distributed the survey. In just seven days 3,594 surveys have been completed.
79. This time only people who said that they had caught crayfish in the CRA 2 area were asked the same question as before “*How would you rate the size and availability of crayfish in your most commonly fished area of CRA2?*”. The response was very similar to 2017, with 88% rating the stock as poor or worse.
80. All respondents were shown a table of TACCs and allowances that included the status quo, the four options in the MPI Discussion Paper with rebuild times to the intermediate target, and another option (Closure) showing the rebuild time if the fishery was closed (T_{min}). T_{min} is reference point to help assess the relative rebuild times for all options, and a benchmark for the Harvest Strategy Standard recommended rebuild rate of two times T_{min} , which must be considered. The same table is used in this submission (Table 1, page 9).
81. **There was most support from respondents for a closure of CRA 2 to all fishing.** This shows that for many people none of the Ministry options provided an adequate response to the current poor state of the CRA 2 fishery. Closure was supported by 42% of all respondents, and 37% of people who had caught rock lobster in CRA 2. There was also support for Option 4 with an 80 tonne TACC, a TAC of 191.5 t, reaching the intermediate target in four years. 38% of all responses, and 42% of people who had caught rock lobster in CRA 2 supported this Option.

	Option 1	Option 2	Option 3	Option 4	Closure	Total
Have never fished in CRA 2	18	35	233	483	702	1471
Have Fished in CRA 2	28	51	339	876	776	2070
Total	46	86	572	1359	1478	3541

82. Respondents were asked for their interest in the fishery: recreational; commercial; environmental or other. They were able to select more than one answer, but the pattern of preferred management options was similar (See Appendix 2).

	Recreational fisher/diver	Commercial fisher/diver	Concerned about the environment	Supportive of restoring marine abundance	Others	Total Responses
Closure	91%	1%	69%	74%	1%	1478
Option 1	93%	11%	61%	70%	0%	46
Option 2	95%	2%	66%	72%	2%	86
Option 3	94%	2%	66%	74%	1%	572
Option 4	95%	1%	65%	71%	0%	1359
Total	93%	1%	67%	73%	1%	3541

Statutory Considerations

83. In general, the Minister has wide discretion in setting TAC, TACC, and Allowances under the Fisheries Act 1996 (the Act). Rock lobster must be abundant to enable all people to provide for their social, economic and cultural wellbeing, and be sustainable to meet the reasonably foreseeable needs of future generations, as per section 8(2)(a & b) of the Act.

84. There are several obligations under Part 1 and Part 3 of the Act that deal with Principles, consultation, and economic, social, and cultural effects of decisions. Providing these are adhered to, the Minister may set catch levels to achieve a stock target of anywhere between one that will produce the maximum sustainable yield and an unfished stock.
85. The submitters emphasise the need for the Minister to comply with the provisions of the Hauraki Gulf Marine Park Act when choosing an option. There is a clear obligation to rebuild this fishery to abundant levels to improve marine diversity and to enable all people, not just export-driven fishers, to provide for their social, economic and cultural wellbeing.

Recreational Harvest

86. Prior to 2010 there was concern about the accuracy of recreational harvest estimates for important species like rock lobster and paua. The major problem was recruiting enough fishers in these specialist potting and diving fisheries during national diary or panel surveys to get a representative sample. There have been changes and improvements over time. The 2011-12 National Panel Survey undertaken by NRB provides the most defensible harvest estimates yet, especially for areas with a large number of fishers such as the Hauraki Gulf and Bay of Plenty.
87. In addition, there were two years of intensive recreational fishing surveys at boat ramps and marinas from Port Charles to Maketu in 2010-11 and 2011-12 focused on rock lobster and scallop harvest. The corroboration between these surveys show that the National Panel Survey harvest estimate of 41 tonnes ($\pm 23\%$) is the best available information on recreational harvest in CRA 2.
88. The submitters support the proposed allowance for recreational fishing interest of 50 t (which is 41 t plus 23%).
89. Commercial interests have suggested MPI use the model estimate for 2017 of 34 t as the new recreational allowance, but this is not a survey estimate. The 34 tonnes is based on a simple assumption that provides an approximation of what catch might be. It must be disregarded because there are no confidence intervals associated with this figure. If there were confidence intervals they would probably be about twice the NRB survey levels (as per discussion at the NRLMG), which would give an upper-bound of recreational harvest in 2017 of 50 t (which is 34 t plus 46%).
90. This time next year an updated recreational harvest estimate for 2017-18 will be available from the National Panel Survey that is underway now. The survey will provide a benchmark for current harvest.

Economic impact

91. Recreational harvest surveys show that most rock lobster in CRA 2 are taken by divers (85%) and potting (13%). SCUBA diving has the highest catch rates, but it is expensive to maintain and replace the equipment needed. The decline in recreational catch rates of rock lobster has prompted many experienced divers to hang up their wetsuits, according to comments received in our online surveys. This has had an impact on expenditure with dive shops and dive charter businesses. These days many new entrants to the sport prefer free diving and dive shops have changed product lines to cater for this.
92. The submitters acknowledge that all the options in the MPI Discussion Document will have a significant economic impact on CRA 2 commercial fishers who were operating 33 vessels in 2015-16. Assuming a port price of about \$70 per kg the fishery would have been earning about \$14 million per year with a fully caught 200 t TACC. Based on average ACE price at the time, this would have been shared about half and half between the quota owner and the vessel

operator. However, the majority of the expenses fall on the vessel operator having to build and deploy pots, pay the crew, then bait and lift 10 pots to make \$100 in 2015-16 (\$35 times 0.28 kg per pot lift times 10 lifts). Clearly there are areas in CRA 2 that have not been economic for some time, especially for vessel operators who don't own CRA 2 quota. Any of the proposed options will affect some operations and could reduce vessel numbers.

93. There have been significant reductions in the number of inshore fishing vessels and surface longliners in New Zealand over the last 15 years, even when TACCs have remained the same or increased.
94. The submitters support rapid rebuilding the CRA 2 stock and increasing catch rates so that the remaining fishers can run profitable businesses sooner rather than later. Getting a good return for a reasonable fishing effort has to be the goal. CRA 2 is well behind all other rock lobster stock in New Zealand in this regard.

Social and Cultural Impact

95. There is compelling anecdotal evidence, now backed up by the stock assessment, that the CRA 2 stock has been over-fished for a long time reducing the actual and potential social and cultural wellbeing for non-commercial fishers.
96. What comprises Customary and Recreational interests is not defined in the Act however, the Supreme Court had this to say:

SC [54] The notion of people providing for their wellbeing, and in particular their social wellbeing, is an important element of recreational interests².

SC [59] The terms of the definition of utilisation, including the wellbeing concept, are contextually relevant to what is meant by recreational interests¹⁰ and in that sense are relevant considerations in decisions under s 21.

97. Providing for the cultural and social wellbeing of the public are key relevant factors when the Minister determines allowances. How this 'important element' of people providing for their wellbeing is to be 'allowed for' was subsequently refined, if a little clumsily;

SC [56] Although what the Minister allows for is an estimate of what recreational interests will catch, it is an estimate of a catch which the Minister is able to control. The Minister is, for example, able to impose bag and fish length limits. The allowance accordingly represents what the Minister considers recreational interests should be able to catch but also all that they will be able to catch. The Act envisages that the relevant powers will be exercised as necessary to achieve that goal. The allowance is an estimate and an allocation of part of the total allowable catch in that way.

98. In areas where there has been a substantial decline in abundance rock lobster over time, as apparent in CRA 2, then current estimates of recreational harvest will inevitably reflect the (depleted) state of the stock; and logically ought not to be construed as a reference for what "should be" allowed for by the Minister; in the sense that what "should be" able to be caught by the recreational interests, as intended by the Supreme Court (above) ought to reflect a beneficial, or desirable state for the recreational interests.
99. The Discussion Paper identifies that MPI will begin consultation on possible regulation changes, including possible changes to recreational bag limits later in 2018. If it is possible to estimate likely management changes including bag limit reductions under the different management

options considered in the Discussion Paper, then the implications around these future changes ought to have been signalled and identified for consultation in the current Discussion Paper. Doing this would be consistent with good practice consultation and ensure that the Minister is properly informed of the implications of his decision-making, with the likely implications to the daily bag limits for individual fishers being identified at the time of decision-making in relation to the TAC, TACC and non-commercial allowances.

Crayfish 4 (CRA 4) Hawke Bay to Wellington

Recommendation

100. The submitters support CRA4_01: Status quo.

Introduction

101. CRA 4 covers a significant area from southern Hawke’s Bay around to the Kapiti Coast, including the Wairarapa and Wellington coastlines.
102. Much of this area is important to recreational fishers and divers with crayfish often being a main target and important to the local communities.
103. The current Management Procedure was first applied to CRA 4 in 2017. At that time the Management Procedure recommended a 70 tonne decrease to the TACC.
104. CRA 4 CPUE has been rapidly declining since 2012, anecdotal reports from fishers in the region have not shown any noticeable increase in abundance, just a shift in fishing effort.
105. It is notable that anecdotal reports credit the effectiveness of Moremore Mataitai reserve for providing a reasonable daily catch of crayfish when compared to the poor catch rates in some other parts of CRA 4. The Moremore Mataitai reserve was established by the people of Ngai Te Ruruku o Te Rangi in 2005.

CRA 4 Management Proposals

106. The Management Procedure has recommended an increase of 29.8t to the TACC, and no changes are proposed to the allowances.

Option	TAC	TACC	Allowances		
			Customary Māori	Recreational	Other mortality
CRA4_01: Status quo	484	289			
CRA4_02: Based on the operation of the current CRA 4 management procedure	513.8 ↑	318.8 ↑	35	85	75

CRA 4 Model needs caution

107. The submitters urge caution when the Minister considers catch limits for CRA 4. We note that the latest CRA 2 stock assessment was nowhere near as optimistic as the previous assessment using the same CPUE standardisation as the CRA4 assessment. This is primarily due to the use of a vessel effect parameter which accounts for some of the increases in fishing efficiency since 1990. It is likely that a similar parameter will be added to the CRA 4 model during the next stock assessment (2022), which would be expected to have a significant effect on the overall model.
108. **The Minister must be advised that the CRA 4 CPUE analysis is unreliable.** MPI must advise the Minister of the likely impact of using the new standardisation for CRA 4. The submitters believe that the Management Procedure would no longer be recommending this increase if the new CPUE index was used.
109. It would be irresponsible of the Minister to act upon the recommendations of a Management Procedure using what is now known to be an inaccurate CPUE series. Increasing the TACC based on this flawed data would be irresponsible and in the submitters opinion, conflict with the Minister's duty to consider the best available information and act in a precautionary manner.
110. **The submitters urge the Minister to take a precautionary approach in CRA 4** as it is a fishery that has been in steep decline. Being cautious now will allow the fishery to retain some resilience and eventually rebuild to a more abundant level, allowing higher levels of harvest in the future with less risk.

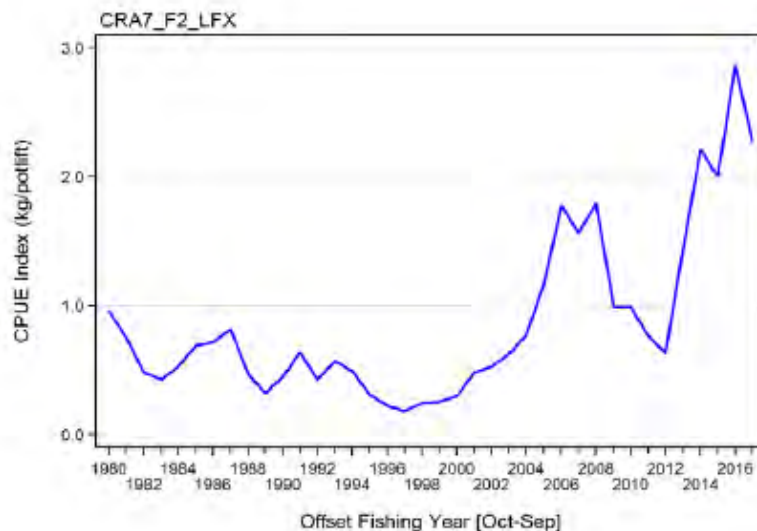
Crayfish 7 (CRA 7) Otago

Recommendation

111. The submitters support option CRA7_02: TAC and TACC reduction.

Introduction

112. CRA 7 Catch Per Unit of Effort (CPUE) was at an all-time high in 2016 prompting the Management Procedure to recommend a 14.8t increase to the TACC.
113. CRA 7 also received TACC increases in 2014 and 2015 from an all-time low of 44 t in 2013.



CRA 7 Management Proposals

114. The current Management Procedure has recommended a 15.5t TACC decrease, back to levels similar to 2016 when CPUE was increasing.

Option	TAC	TACC	Allowances		
			Customary Māori	Recreational	Other mortality
CRA7_01: Status quo	132.52	112.52			
CRA7_02: Based on the operation of the current CRA 7 management procedure	117 ↓	97 ↓	10	5	5

115. The submitters are pleased to see a Management Procedure recommending precautionary action.

116. CRA 7 may also be affected by the addition of a vessel effect parameter in the standardisation of CPUE during the next stock assessment (2020). While the vessel effect parameter it is not expected to be as great as the effect in CRA 2 or 4, it still needs to be considered in this review.

117. The submitters recommend a precautionary approach is taken when making any decisions in crayfish fisheries until this parameter has been adopted.

Crayfish 8 (CRA 8) Southland

Recommendation

118. The submitters support option CRA8_01: Status quo.

Introduction

119. CRA 8 is the highest productivity crayfish stock in New Zealand, sustaining harvest far above other fisheries.

120. CPUE has reached an all-time high of over 3.5kg per potlift. This is around 14 times more, on average, per potlift than CRA 2, which has a CPUE of 0.253 kg per potlift.

121. CRA 8 biomass is estimated to be at 140% of the reference period target.

CRA 8 Management Proposals

122. The CRA 8 Management Procedure has recommended a 108.7 t increase to the Total Allowable Commercial Catch (TACC).

Option	TAC	TACC	Allowances		
			Customary Māori	Recreational	Other mortality
CRA8_01: Status quo	1,053	962			
CRA8_02: Based on the operation of the current CRA 8 management procedure	1,161.7 ↑	1,070.7 ↑	30	33	28

123. Although CRA 8 is a highly productive stock and at an all-time high, the submitters believe 108.7 t increase is excessive and recommend a more modest approach needs to be adopted.
124. In 2009 the CRA 8 TACC was increased to 1019 t, this lasted two seasons before there was a considerable drop in CPUE. The TACC was then reduced to 961.2 t and has fluctuated around this point since then.
125. To jump straight back to a higher TACC, which would be the highest level in recent years seems an unnecessary risk, the submitters recommend a more cautious, incremental approach is taken to protect this productive fishery.

F. Appendix One: Determining the status of rock lobster stocks

126. Part of the discussion about **management targets** used for rock lobster is the relevance of using Spawning Stock Biomass (SSB) or Vulnerable Biomass (VB) as a more logical and relevant measure of stock status.
127. SSB is used in many other fisheries as it is typically understood to be representative of the reproductive capability of the stock, due to SSB representing all the mature females in the population.
128. Crayfish are different to many other species monitored by this reference point in that a large portion of females are unavailable to the fishery during Autumn/Winter so the exploitation rate of females is lower than for males.
129. There is no stock-recruit relationship used in rock lobster assessments. In other words, the size of the spawning stock in an area like CRA 2 probably does not determine the number of individuals recruiting into the fishery. This assumption is made due to the long pelagic larval phase of 12 months, where they drift with the current and don't necessarily return to CRA 2.
130. Vulnerable Biomass is made up of all rock lobster that can be legally taken, which is directly reflected in commercial catch statistics and Catch Per Unit of Effort (CPUE) used in fisheries management. Even the weight of legal fish not suitable for market and returned to the sea are recorded by commercial fishers.
131. During the years in between the stock assessments the fishery is only tracked by catch and commercial CPUE, it would seem reasonable that VB be used to measure performance against the **management target**. Therefore, the status of the VB must also be taken into account in management advice to the Minister.
132. The Harvest Strategy Standard does not specify whether SSB, VB or Recruited Biomass (RB) be used, and SSB has simply been a convention due to its use in other, mainly finfish, fisheries.
133. The HSS describes a limit as:
“A limit represents a point at which further reductions in stock size (or proxies) are likely to ultimately lead to an unacceptably high risk of stock collapse and/or a point at which current and future utility values are diminished or compromised. Limits (both “soft” and “hard”) should be set well above extinction thresholds – rather, they should act as upper bounds on the zone where depensation¹¹ may occur.”
“¹¹ Depensation is a situation where depleted populations may start to decline at an accelerated rate due to factors such as an inability to find mates, impaired breeding success, competition and predation. In the ecological literature, these effects are commonly called Allee effects.”
134. A stock that has a portion described as “functionally extinct”, in our opinion, should not be considered above a limit.
135. The estimates of rebuild times in Table 1 (Page 9) are based on a number of key assumptions including:
- The strength of recruitment in the future.
 - That standardised CPUE is proportional to abundance.
 - Recreational harvest will increase and be double the current model estimate if the biomass doubles.
 - That the interim target is reached at 50% probability of, rather than the recommended 70% probability.

136. MPI's Harvest Strategy Standard states -

“For both limits, the ultimate goal is to ensure full rebuilding of the stock to the biomass target with an acceptable probability (70%). The reason for requiring a probability level greater than 50% is that a stock that has been severely depleted is likely to have a distorted age structure (an over-reliance on juvenile fish, with relatively few large, highly fecund fish). In such instances it is necessary to rebuild both the biomass and the age composition.”

G. Appendix 2: Summary of CRA 2 Survey Results

137. In 2017 the NZSFC and LegaSea conducted an online survey using email databases to measure people's perceptions of the state of the rock lobster fishery in CRA 2. Over 800 responses were received, with many respondents having dived or potted for crayfish for more than 20 years in this area. Of 841 respondents 78% rated the rock lobster fishery as very poor or worse and many backed up that view with details of their experience.
138. In February 2018 the submitters conducted a follow-up survey on rock lobster in CRA 2. As awareness has grown various fishing and diving communities on social media have distributed the survey. In just seven days 3,594 surveys have been completed.
139. All respondents were shown a table (below) of TACCs and allowances that included the status quo, the four options in the MPI Discussion Paper with rebuild times to the interim target, and another option (Closure) showing the rebuild time if the fishery was closed (T_{min}). T_{min} is reference point to help assess the relative rebuild times for all options and a benchmark for the Harvest Strategy Standard recommended rebuild rate of two times T_{min} , which must be considered. The same table is used in this submission.

Table of rebuild times and options

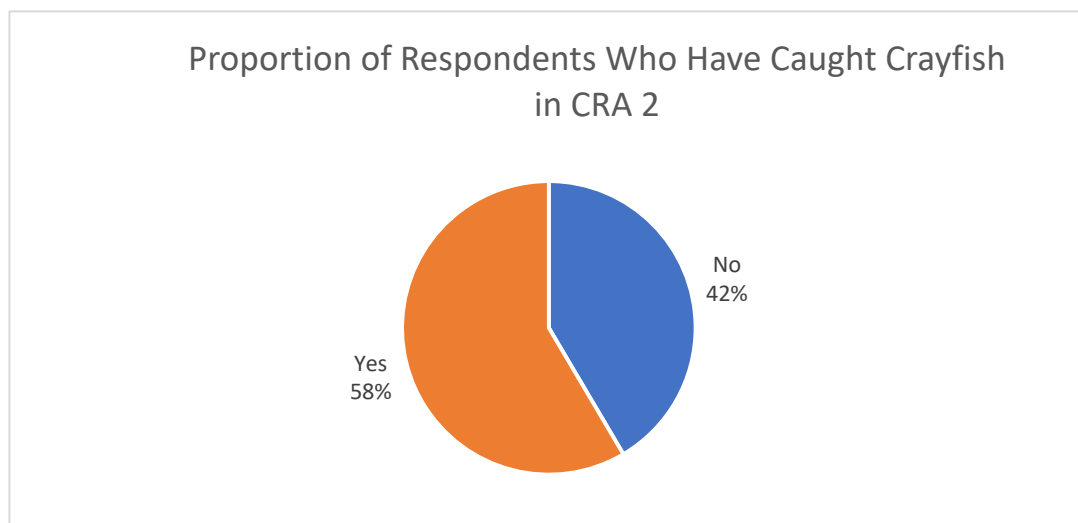
Option	Total Allowable Commercial Catch (TACC)	Allowances			Estimated time to double current stock size
		Customary Maori	Recreational	Other mortality	
Status quo	200	16.5	140	65	N/A
Option 1	140	16.5	50	45	9 years
Option 2	120				7 years
Option 3	100				5 years
Option 4	80				4 years
Closure	0	0	0	0	2 years

Table of options selected by respondents who had fished in CRA 2 and those that had not.

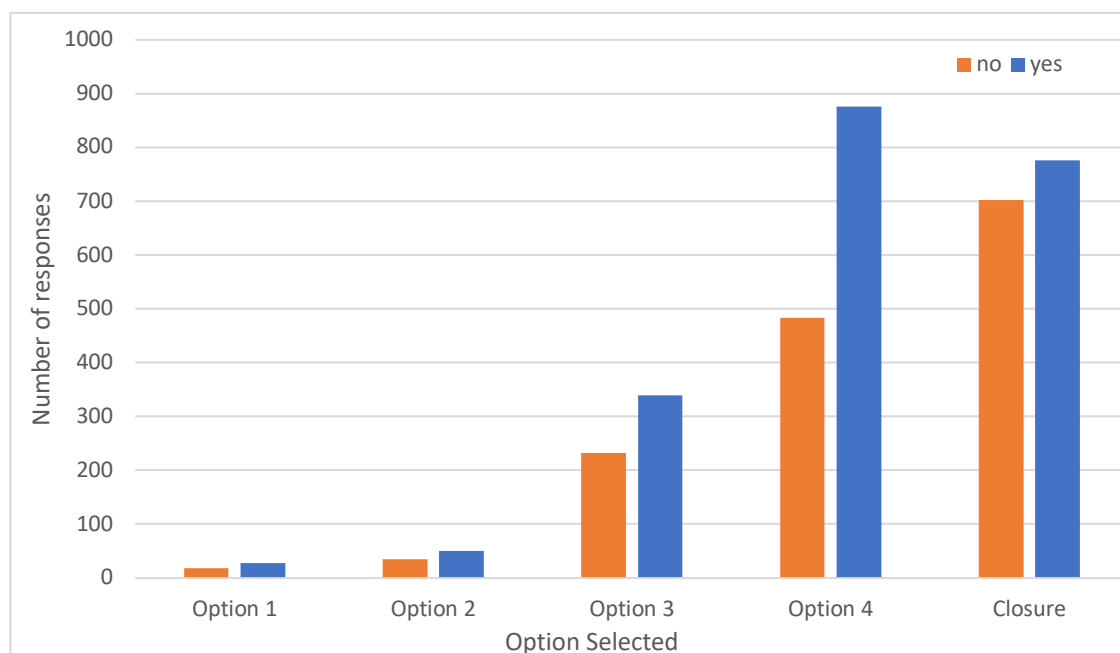
	Option 1	Option 2	Option 3	Option 4	Closure	Total
Have never fished in CRA 2	18	35	233	483	702	1471
Have Fished in CRA 2	28	51	339	876	776	2070
Total	46	86	572	1359	1478	3541

Table of options selected by respondents by stated interest.

	Recreational fisher/diver	Commercial fisher/diver	Concerned about the environment	Supportive of restoring marine abundance	Others	Total Responses
Closure	91%	1%	69%	74%	1%	1478
Option 1	93%	11%	61%	70%	0%	46
Option 2	95%	2%	66%	72%	2%	86
Option 3	94%	2%	66%	74%	1%	572
Option 4	95%	1%	65%	71%	0%	1359
Total	93%	1%	67%	73%	1%	3541

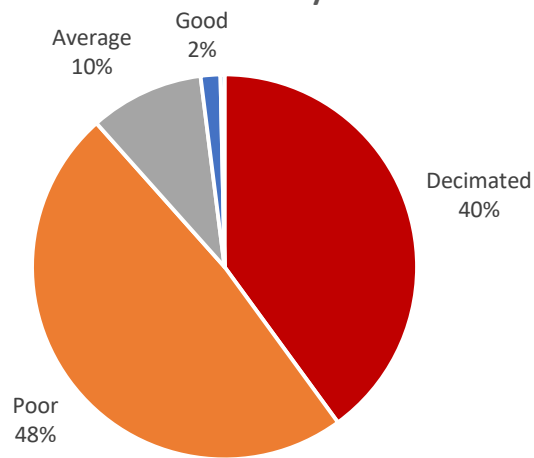


The majority of respondents have fished in CRA 2. Respondents were asked the general areas they usually fished which showed a reasonable spread throughout the whole area.



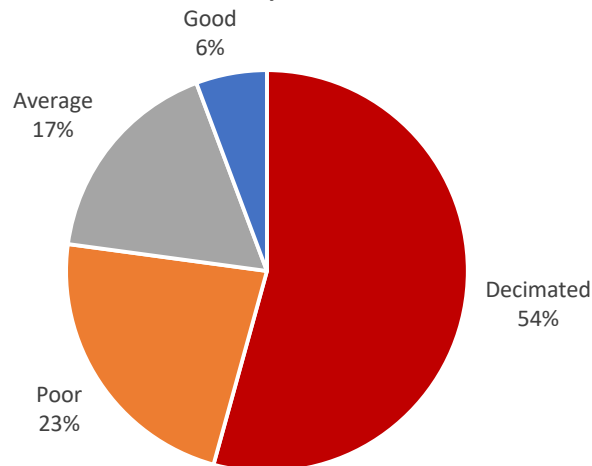
Respondents who had caught rock lobster in CRA 2 were more supportive of Option 4 than a complete closure than those who did not fish for rock lobster in CRA 2. The overall trend showed favour of the more precautionary measures.

How Responding Recreational Fishermen Rate Size and Availability in CRA 2

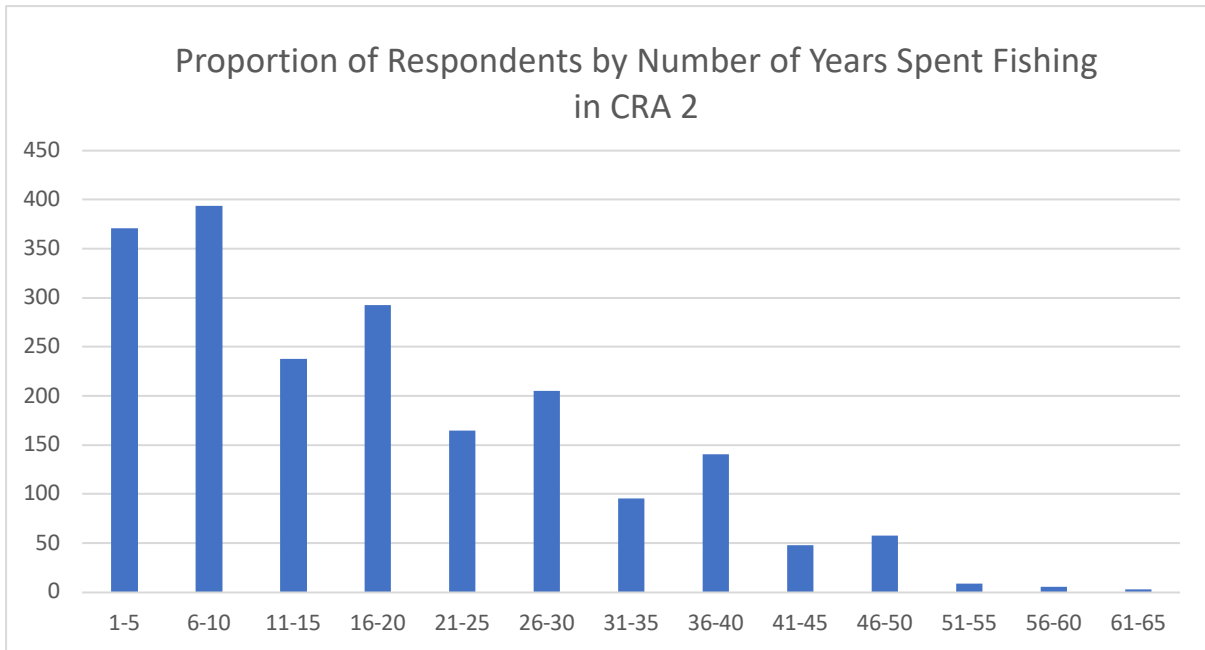


The majority of recreational fishermen who caught rock lobster in CRA 2 (88%) rated the size and availability of Crayfish in CRA 2 as poor or decimated.

How Responding Commercial Fisherman Rate Size and Availability in CRA 2



A higher proportion of respondents identifying as commercial fishermen rated the availability of crayfish in CRA 2 as average or good than the recreational fishers, but also more rated the fishery as decimated.



There was a wide range of experience for respondents who had caught rock lobster in CRA 2.

Comments from fishers in the online survey February 2018

Eastern Coromandel

Diver 3564: The decline in the crayfish population in the last 36 years has been slowly getting more and more noticeable. I am mainly a free diver and the decline is more pronounced when you are checking holes and habitat than if you are potting. It is in a sorry state. So much so that I seldom target them these days and spearfish for finfish in preference.

Something needs to be done. the option 4 will see all parties cut by round 60 % approx, the customary should also be cut as well by 60 odd %. Four years is a small price to pay (for all parties) to restore our fishery.

Diver 3480: The decline i have noticed is worse every year. Cant believe the pots out there now. Even when diving u don't see many young cray like you used to see. Very concerning and would like to see something done about this before its too late.

Hauraki Gulf

Diver 3478: You need to be brave and good at the game along with the ability to travel long distances to get a bag these days, in the 60's I could walk from Martins Bay with a snorkel and do well.

Gt Barrier Eastern Coromandel

Diver 3423: Only comment is that something has to change. My experience is that what was prime habitat for crayfish is now empty. Commercial pots are absolutely everywhere and the effort they go to catch an ever decreasing amount can't be good for the industry.

Eastern Coromandel

Diver 3113: The state of the crayfish fishery in CRA 2 is dismal and has been in serious decline over the last decade, prior to this it was in a moderate state of decline. The significant reduction in the total

number of crayfish and the size of crayfish within the Mercury Bay and Mercury Island region of CRA 2 is apparent to scuba divers like myself who regularly dive within this region. The significant plunge in total crayfish numbers over the last decade is directly matched by the proliferation of the number of commercial crayfish pots that have been deployed in the region. During the commercial harvest periods the density of deployed commercial crayfish pots is both appalling and dispiriting to observe. These pots are placed every 50m along the nearshore coastal zone and around the outlying Mercury Islands. It is no surprise that it has become very difficult to find good sized crayfish within the region and the crayfish that are of legal size are mostly only 1-2mm oversize, or barely legal. It is galling as a responsible recreational cray fisher to know that when I decide to leave these just legal sized crayfish alone to grow and breed there is a high probability they will end up in a baited commercial crayfish pot and on someone's plate in Asia.

The significant decline in total crayfish numbers and the average size of crayfish in the Mercury Island/Mercury Bay region is not the result of recreational cray fishing. The operators of dive shops in the region will confirm total scuba diver numbers have been consistently decreasing over the last two decades as evidenced by the continuing decrease in the number of scuba tank fills each year. Almost all of the deployed cray fish pots I see deployed in this region have commercial fisher identifications and cray pots deployed by recreational cray fishers are relatively uncommon.

The management of the CRA 2 area has been woeful. When the commercial cray fisherman were unable to maintain their TACC a few years ago the Ministry responded to lobbying by the commercial fishing industry and increased the TACC in the Mercury Island/Bay region. This is nonsensical and flies in the face of the foremost principal of the fisheries act and quota management system that states customary and recreational fishing rights take precedence over the TACC.

The evidence is clear that commercial over fishing is the cause of the near collapse of crayfish stocks in CRA 2. As a result the estimated percentage customary and recreational take of the estimated biomass appears to now be significant. However, if the total biomass of crayfish in CRA 2 had not been pillaged by commercial interests and instead was sustainably managed by the Ministry and commercial fishing industry as it has been allowed to, the total biomass would much higher and the percentage customary and recreational take would be much lower.

Because commercial fishing has been responsible for the significant decline of crayfish numbers within CRA 2 I do not support a reduction in the customary and recreational take, and instead support a significant reduction in the TACC. The sector that has caused this deplorable situation must be held accountable to the people of New Zealand.

Submission Form

Review of sustainability measures for 1 April 2018

Once you have completed this form

Email to: FMsubmissions@mpi.govt.nz

While we prefer email, you can also post your submission to: 2018 Sustainability Review, Fisheries Management, Ministry for Primary Industries, PO Box 2526, Wellington 6140, New Zealand.

Submissions must be received no later than 5pm on Friday 9 February 2018.

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

Submitter details:

Name of submitter or contact person: Jonathan Drucker	
Organisation (if applicable):	
Email:	
Fishstock this submission refers to: <i>Rock lobster – CRA 2, CRA 4, CRA 7, CRA 8</i> <i>Sea cucumber – SCC 3, SCC 7B</i> <i>Southern blue whiting – SBW 6B.</i>	CRA2
Your preferred option as detailed in the discussion paper (write "other" if you do not agree with any of the options presented):	CRA2-04

Official Information Act 1982

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

From my experience as a sport diver, the fishery is under too heavy pressure.

It needs time to rebuild.

I support the maximum cut back in quotas.

Please continue on a separate sheet if required.

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Submitter details:

Name of submitter or contact person: Julian O'Neale	
Organisation (if applicable):	n/a
Email:	
Fishstock this submission refers to: <i>Rock lobster – CRA 2, CRA 4, CRA 7, CRA 8</i> <i>Sea cucumber – SCC 3, SCC 7B</i> <i>Southern blue whiting – SBW 6B.</i>	CRA2
Your preferred option as detailed in the discussion paper (write "other" if you do not agree with any of the options presented):	Option 4

Official Information Act 1982

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Submission:¹

Details supporting your views:

In the interests of fairness and equality, I will be extremely disappointed if both the commercial and recreational sectors do not take an equal share of the responsibility to rebuild the CRA 2 stocks.

All options reduce the recreational quota to circa 35% of its current level which I wholeheartedly support, however I was surprised to read that only option 4 reduces the commercial quota to a similar level, circa 40%.

Option 4 or total closure are the only options that I support because under these commercial and recreational interests are both treated equally.

Please continue on a separate sheet if required.

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

From: [REDACTED]
To: [FMSubmissions](#)
Subject: RE: Review of the CRA2 rock lobster fishery
Date: Friday, 9 February 2018 10:57:38 AM

No probs

Stacey

-----Original Message-----

From: FMSubmissions
Sent: Friday, 9 February 2018 10:55 AM
To: Info [REDACTED]
Subject: RE: Review of the CRA2 rock lobster fishery

Kia ora Stacey,

Thanks for your help with this, sorry you've been getting so many emails regarding CRA 2! Thanks for forwarding them on.

I suggest replying with:

"Thank you for your interest in submitting your views on the 2018 sustainability review of the CRA 2 rock lobster stock.

To find out more about the proposal and to make a submission, please visit <https://www.mpi.govt.nz/news-and-resources/consultations/review-of-sustainability-measures-for-1-april-2018/>

Consultation on the proposed changes closes at 5pm on 9 February 2018.

A submission form is available at the website above to help you give feedback. However, you don't have to use the form.

Submissions can be sent to MPI by email or post.

Please send your submission to:
Email: FMSubmissions@mpi.govt.nz

Post:
Fisheries Management
Ministry for Primary Industries
[REDACTED]

We look forward to hearing from you."

Nga mihi,

Sonja Hempel | Fisheries Analyst Inshore Fisheries Fisheries Management | Marine Branch Ministry for Primary Industries | Manatu Ahu Matua | [REDACTED]

Tel: [REDACTED]

-----Original Message-----

From: Info
Sent: Friday, 9 February 2018 10:46 a.m.
To: FMSubmissions <FMSubmissions@mpi.govt.nz>
Subject: FW: Review of the CRA2 rock lobster fishery

Hello,

Can you advise on this one?

Regards,

Stacey Moir | Customer Enquiries Coordinator Ministry for Primary Industries - Manatu Ahu Matua Pastoral House [REDACTED]
Web: www.mpi.govt.nz

-----Original Message-----

From: Kepa Morgan [REDACTED]
Sent: Thursday, 8 February 2018 4:25 PM
To: Info <Info@mpi.govt.nz>
Subject: Review of the CRA2 rock lobster fishery

Tena koutou

The option missing is to prohibit commercial and recreational rock lobster harvests for a two year period at all offshore reefs (more than 1000m from the BOP coastline) and monitor recovery rates. Evaluation can be carried out using a number of scientific methods as well as the Mauri Model Decision Making Framework.

The recovered state after two years can then be adopted as the basis for further recommendations which would be required within six months. The prohibition could then be lifted or retained in entirety or partially.

Mauri ora

Dr Kepa Morgan

Tonoa mai te waea a Kepa

Submission Form

Review of sustainability measures for 1 April 2018

Once you have completed this form

Email to: FMSubmissions@mpi.govt.nz

While we prefer email, you can also post your submission to: 2018 Sustainability Review, Fisheries Management, Ministry for Primary Industries, PO Box 2526, Wellington 6140, New Zealand.

Submissions must be received no later than 5pm on Friday 9 February 2018.

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

Submitter details:

Name of submitter or contact person: Mark Graeme Berghan	
Organisation (if applicable):	
Email:	
Fishstock this submission refers to: <i>Rock lobster – CRA 2, CRA 4, CRA 7, CRA 8</i> <i>Sea cucumber – SCC 3, SCC 7B</i> <i>Southern blue whiting – SBW 6B.</i>	CRA2
Your preferred option as detailed in the discussion paper (write "other" if you do not agree with any of the options presented):	Other

Official Information Act 1982

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MPI requests recreational allowance in CRA2 be reduced to 36% of status quo, with a further option to reduce recreational allowance further to slightly over 24% of status quo. Yet the TACC maximum proposed reduction is only to 40% of status quo. This is clearly inequitable, and even more so when it fails to take into account the population growth of recreational fishers in CRA2.

Any reduction in allowance across the sectors should at the very least be pro-rata, so if Recreational reduces to 36% of status quo (50 ton) then TACC should reduce to 36% of status quo (72 ton).

However none of the recommendations allow for population growth of recreational fishers in CRA2. Currently population growth is 2.6% per annum for Greater Auckland (as per http://archive.stats.govt.nz/browse_for_stats/population/estimates_and_projections/SubnationalPopulationEstimates_MRAJun17.aspx).

The assumption is that at present the recreational harvest is 34 ton (extrapolated from 7 year old data as per item 91 in the Review document). But MPI needs to factor in human population growth to the recreational allowance otherwise its estimates of actual recreational take will never approach reality. Given that time to reproductive maturity for crayfish can be anywhere from 5-8 years, any calculations on recreational fishing harvest need to take into account this increase in fishing pressure over this time. Note also this will impact the “other mortality” allocation as any increase in recreational fishing will inevitably increase “other mortality” actual figures.

For the above reasons I would submit the following:

- That both Recreation and TACC be reduced to 36% of status quo
- A further reduction per year for recreational over 7 years to allow for population growth
- That a totally closed season for both Recreational and Commercial be implemented when crayfish are most likely to be in berry.

From: [Redacted]
To: [FMSubmissions](#)
Subject: Cray 2 Submission
Date: Wednesday, 7 February 2018 4:53:07 PM

Hi,

Here is my submission.


A reduction in the recreational take to 50 tonnes is fine if that is what the science recommends. This reduction equates to 35% of the current recreational take. The highest proposed TACC (140 tonnes) equates to a reduction to 70% of the current TACC, this does not seem like a fair / comparable reduction. A reduction of TACC to 80 tonnes would be a reduction to 40% of the current TACC which seems fairer and more comparable to the recreational reduction. I realise this will impact on some commercial fishers quite hard but there is evidence that recreational fishers and divers contribute a comparable amount to the economy. Fairness and evenness is all I am after.

Mark Hamer | Team Leader Water Quality, Coast and Ecology | Environmental Monitoring | Science and Strategy Directorate
Waikato Regional Council



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From: 
To: [FMSubmissions](#)
Subject: CRA 7 Sustainability Measures Submission
Date: Monday, 5 February 2018 11:03:39 AM

Kia Ora,

As a recreational fisherman in the Otago region I support option 2 for the TACC to be decreased. The crayfish numbers in our area seem to be under a lot of pressure and I find it quite sad to see the huge number of pots set by commercial fishermen within some of the only areas easily accessible to recreational fishermen in particular on the peninsula around Cape Saunders.

I also believe the difference in size requirements for recreational and commercial fishermen is an issue which needs to be addressed, especially when commercial pots are being used in popular recreational areas and are able to take fish before they reach a size which can be taken by recreational fishers. To be clear I am not suggesting a decrease in size for recreational fishermen but instead an increase for commercial fishers. I struggle to see how, with the fishery being in such a healthy state as was claimed when the TACC was recently increased, crayfish not meeting the standard nation wide legal size need to be taken.

Thank you for the opportunity to respond to this and other issues.

Cheers, Michael Ellison

From: [REDACTED]
To: [FMSubmissions](#)
Subject: CRA2 rock lobster fishery
Date: Thursday, 8 February 2018 3:09:15 PM
Attachments: [image001.jpg](#)

Hi my name is Mike Cook, I'm a through and through fisherman, Diver. The CRA2 area affects me directly as I live in Auckland and do a lot of my fishing and diving in the Auckland and Outer Auckland islands.

I fist handily have seen and notice the decrease of Crayfish in the CRA2 area, Personally I only take 2-3 crays per trip so lowering the recreational limit by 50-60% I think is fair. You can always increase this in years to come if stocks are replenished.

I also think if the recreational fisherman is decreased limit the commercial section should share this responsibility and take the same percentage cut, What is good for the goose is good for the gander. I understand our Fisheries exports is one of our biggest earns in this country, but it's not all about money. If it is about money then look into license's or seasonal permits (or something similar) but I want my young family to have the same privileges I have had.....Its slowly depreciating and soon we will all lose out.

My Vote is Option 4 – let's all make a go at this and re-asses in a few years.....



From: [REDACTED]
To: [FMSubmissions](#)
Subject: FW: Website feedback
Date: Monday, 5 February 2018 8:58:20 AM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)

Hello,

Can you advise on this one?

Regards,

Stacey Moir | Customer Enquiries Coordinator
Ministry for Primary Industries - Manatu Ahu Matua

Web: www.mpi.govt.nz



From: MPI Notifications [REDACTED]
Sent: Saturday, 3 February 2018 7:00 PM
To: Info [REDACTED]
Subject: Website feedback

Name

Mike Hendetson

Email

[REDACTED]

Page URL

<https://www.mpi.govt.nz/protection-and-response/sustainable-fisheries/review-of-the-cra2-rock-lobster-fishery/>

Did you find what you were looking for?

No, none of it

How easy was it to find what you wanted?

Did you have any problems on the site?

Yes

Problem type

Please give us the details of your problem

Do you have any other comments to make about the website?

We need to stop commercial and recreation gathering, for a period ,of these creatures in order for our furture generations to gather. My great grandfather was a kauri gum digger but when this was no longer viable he started dairy farming. We need to change with the times . I are also as a dairy farmer are looking to change .cheers



Submission Form

Review of sustainability measures for 1 April 2018

Once you have completed this form

Email to: FMSubmissions@mpi.govt.nz

While we prefer email, you can also post your submission to: 2018 Sustainability Review, Fisheries Management, Ministry for Primary Industries, PO Box 2526, Wellington 6140, New Zealand.

Submissions must be received no later than 5pm on Friday 9 February 2018.

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

Submitter details:

Name of submitter or contact person:	Margaret Wind, Executive Officer, NZ Recreational Fishing Council
Organisation (if applicable):	NZ Recreational Fishing Council
Email:	[REDACTED]
Fishstock this submission refers to: <i>Rock lobster – CRA 2, CRA 4, CRA 7, CRA 8</i> <i>Sea cucumber – SCC 3, SCC 7B</i> <i>Southern blue whiting – SBW 6B.</i>	Rock lobster – CRA 2, CRA 4, CRA 7, CRA 8
Your preferred option as detailed in the discussion paper (write "other" if you do not agree with any of the options presented):	CRA 2: OTHER

Official Information Act 1982

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Submission:¹

Details supporting your views:

NEW ZEALAND RECREATIONAL FISHING COUNCIL

Since 1978, the New Zealand Recreational Fishing Council has been participating in fisheries management and advocating for recreational fishing. They have been doing this work to advocate for the 600,000+ New Zealanders who fish for recreational and sustenance purposes and to provide a voice in partnership with commercial and customary representatives, to ensure sustainability of all marine species around the NZ coast.

The Council has a role to ensure the Minister and Ministry of Fisheries have comprehensive and informed knowledge from the recreational sector, to balance the views of all parties and ensure abundant and healthy fisheries remain the objective when decisions are being made.

There have been notable achievements with the Council's work in influencing decisions on fisheries management. A few examples would include the establishment of recreational only areas for scallops in the Coromandel, heavy involvement in the Hauraki Gulf Maritime Park establishment, restraining commercial drag netting in Tauranga Harbour and getting cray loops legitimised as a valid method of crayfishing.

In short, the NZRFC have been an informed voice speaking for recreational fishers in New Zealand for over 40 years. The Council is recognised by the Government and the Courts as a representative body and are the only national body directly offering membership to individual fishers. The Council works on all fish species, in all regions and for all fishers across New Zealand

OUR SUBMISSION

There are increasing signs that our fisheries management system is not working. This is clearly becoming evident in a number of rock-lobster fisheries with CRA 2 – CRA3 and CRA4 all showing signs of decline, CRA5, 7 & 8 remain a concern to Amateur fishers and this Council.

The sad fate of the Hauraki Gulf and Bay of Plenty crayfish stock (CRA2) is a case in point. CRA2 has been in rapid decline since the late 1990s and is at an all-time low. Commercial harvesters now have to haul four pots to harvest one legally-sized crayfish. Few bother to venture west of the Coromandel Peninsula because there are so few crayfish to be found there.

Continued over page

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



Data from the Leigh research, Goat Island Reserve, suggests that the population may have crashed to less than 5 per cent of its original size. The industry has only survived in the region to this point because of the extraordinarily high prices being obtained for live crayfish in the Chinese market. Whilst the advent of commercial fishers voluntarily shelving ACE or catch was an admirable approach on paper, all it really does is skew the CPUE data, effectively giving a false reading of the very tool we must trust in managing these rock lobster fisheries.

No systematic surveys of the stock have been undertaken and no information about the settlement rates for juveniles, which is regularly collected in other cray fisheries, is gathered by MPI in the Hauraki Gulf and Bay of Plenty.

Since 2014, MPI has adopted a "management procedure" for the CRA2 stock. This is an automatic control system that adjusts the harvest level according to a fixed decision rule. The rule indicated that all was well and no harvest reduction was required. Unfortunately the crayfish stock was actually being fished down to precipitous levels.

This situation is now so dire and with the high level of uncertainty even amongst both scientists and commercial fishers of whom we should be able to trust, serious action must be taken now. The ministry proposal of further cuts of between 40 percent and 54 per cent is too little - too late.

The fishery needs respite from all fishing before more damage is done. This is necessary until accurate data can be gathered to make more informed decisions on a proper management approach involving all sectors.

While much of the decline in this fishery rests primarily with the commercial effort for continuing to fish down this fishery when the CPUE alarm bells were ringing loud, this continued fishing down along with repeated catch and release harm and associated mortality in the self-interest of commercial community survival has been the key part to this dramatic decline.

We also agree that because of this rapid commercial decline in the CPUE, the reduced effort from the recreational sector has assisted in forcing the fishery lower than expected by the science predictions. We say reduced recreational effort because our effort and success can be and is correspondently measured by the commercial CPUE. When the CPUE is high amateur effort and reward is equally high. When the fishery and CPUE declines so do amateur fisher landings.

Couple this to the already high illegal catch, (by fish thieves) the amount of which is so uncertain that managers can only give a best guess. We now find that this illegal fishing is being increased by the opportunist recreational diver who in their desire to take a feed of crayfish for friends or family, are now resorting to taking undersize sub legal lobsters. They do so with the confidence that MPI Fisheries Officers are so thin on the water, the chance of being caught is very slim. We would suggest that most of this catch is being cooked and consumed on overnighting live-aboard type vessels at sea.



Given the history of poor management interventions in this fishery which borders the largest boating population in New Zealand, the public has clearly lost confidence in the MPI management procedures and or the Ministers ability to constrain the harvest levels to the allowed TAC.

Therefore it is our submission that the CRA2 fishery be closed to all fishing, all pots and divers out of the water for three years.

That MPI conduct a **full and proper stock assessment** after two years to determine the status of the recovery of this fishery, prior to any decisions being made to re-open the fishery and the setting of any TAC to be established after three years. Based in this information the Minister will be better informed in his desire to maintain a precautionary approach when making future decisions re allocations.

At this time we would also recommend that 'telson' clipping be introduced as a recreational management tool for identifying rock lobsters taken under the Amateur Fishing Regulations.

To not close this high profile public fishery now, when it is in a state of collapse, irrespective of how you dress the science, would be, in our view, tantamount to mis-management and incompetence on behalf of our fisheries managers.

In conclusion: It is our submission that the CRA2 fishery be closed to all fishing, all pots and divers out of the water for three years.

Margaret Wind
Executive Officer
NZ Recreational Fishing Council
[REDACTED]

Please continue on a separate sheet if required.

From: [REDACTED]
To: [REDACTED]
Cc: [REDACTED]
Subject: CRA2 NZRFC Response
Date: Thursday, 22 February 2018 4:26:08 PM

Good afternoon all

I am very mindful that we were in a situation where the NRLMG could not agree on a recommendation to the Minister in CRA2 with a wide degree of difference between all sector groups. Like we were at the extreme end calling for the fishery to be closed. Industry were were at the other end for economic reasons and Maori while not defined were sitting in the middle.

This was not looking to be a good look for the NRLMG

We recognise that the option to close was not officially on the table, but it would be remiss of all of us, that given the current status of this fishery that we could be looking at closure as a real outcome if we cannot halt the current decline.

We would like to acknowledge the new position offered by the commercial sector and supported by Maori. This is a huge step and we recognise this. But in our view the fishery is now at a stage where we must focus on what is best for the fishery.

Meanwhile we were advised at the meeting that closure was not on the table, so we altered our position in line with our previous discussions to support a TAC of 191.5tonnes. We did this based on the best science presented. Plus we noted the recreational allowance of 50tonne down from 140tonnes in the advice was in keeping with what we are currently experiencing in the fishery.

Incidentally this position was also support by the SFC/LegaSea fisheries management committee in their submission.

We remain concerned that the current CPUE is 0.253 point just .003 off tumbling. We note that in the BoP the CPUE appears to have been strengthened by the reopening of Astrolabe Reef after the RENA grounding, with commercial regaining access to the imposed exclusion area. Without this added bonus who knows where the fishery might be.

This said the science only supports 80tonne based on the spawning stock biomass. However we believe this is biased and should include all legal size lobsters at risk of capture and not just the spawning stock as done. The spawning stock biomass at 18. or 18.5 is still below the soft limit of 20.0. When we add in males, the vulnerable stock bio mass in the 2017 stock assessment is just 5% of unfished levels, which is below the 10.0 hard limit for closing the fishery. Or even at looking at the refined numbers the available bio-mass is probably half way between, still sitting right on the hard limit. Which is why we recommended the position we did as reports indicate the limit could be as low as 5.0 in areas of the north-western part of the fishery including the Hauraki Gulf and Gt Barrier.

We have reviewed our position and looked seriously at the 100t on the table offered by both commercial and Maori.

We note the suggested 34ton allowance for recreational and would argue against this when the best research indicates 41tonne. We clearly supported the notion of 80tonne although

50tonne was up for discussion not 34tonne.

If commercial want to support a lower option than they offered at the last meeting, we recognise this as they, accepting the realisation in recognising the dire situation this fishery is in. But it cannot be made conditional on our allowance being cut.

We wish to make it very clear in the advice paper that recreational do not accept that acceptance of any reduction in our allowance, in any way reflects acceptance of a 'proportional share'.

In seeking comment from the SFC their position remains unchanged from that contained in their submission.

Clearly we all want to support a rebuild in this fishery within 10 years. But, even at 100tons I remain cautious in accepting this is possible. Likewise if the CPUE drops to below 0.25 and its not far off it. We will still be in trouble, leaving the Minister no option but to consider further cuts or closing the fishery.

Therefore based on the available science and best stock assessments our position remains; that while we still have wide support to close the fishery. All pots and divers out of the water. Our fall back position remains.

In recognising the economic impact on commercial fishers, our supported alternative position remains in support of a TAC of 191.5tonnes with a TACC of 80tonnes.

In doing so we would ask that the Minister applies more resources towards combating the illegal catch and not just allow the current limited compliance observation continue in this fishery. The ability to get HFO's and CO's to sea on the water in both DOC and private vessels should be considered and supported.

With the ever increasing number of small lobsters being caught, we would also ask that MPI and commercial consider fitting pots with a smaller mesh size bottom liner to reduce the potential for incidental mortality by tail crushing of small lobsters as these pots are dragged over the rails.

My final comment is that we also ask Maori customary harvest to support the rebuild by stipulating the current amateur regulations and MLS when issuing all customary permits in this fishery.

In closing we support in CRA2 option 4, with a TAC 191.5tonnes with a TACC of 80tonnes.

We thank you for your time and consideration in this matter.

Your aye

Keith Ingram
President
NZ Recreational Fishing Council





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REVIEW OF ROCK LOBSTER SUSTAINABILITY MEASURES FOR 01 APRIL 2017

A submission from the New Zealand rock lobster industry.

February 9, 2018

Contents

1	Introduction.....	3
1.1	Summary	3
2	CRA 2	5
2.1	CRA2 management.....	6
2.2	Rebuilding CRA2	7
2.2.1	Stock status	7
2.2.2	Rate of rebuild	8
2.2.3	Stock management target.....	8
2.2.4	CRA2 TAC management options	9
2.3	Socio -economic consequences of TACC reductions.....	10
2.4	Re-instatement of the TACC.....	14
2.5	Allocating the TAC	14
2.5.1	Recreational allocation.....	15
2.5.2	Better estimation of recreational catch	16
2.5.3	Customary fishing.....	17
2.5.4	Illegal fishing.....	17
2.6	Environmental principles and interdependence of stocks.....	19
3	CRA 4	21
3.1	CRA 4 management and stock status.....	21
3.2	TACC management options.....	21

3.3	Setting allowances.....	22
3.3.1	Recreational fishing.....	22
3.4	Illegal take	23
4	CRA 7	24
4.1	CRA 7 management and stock status.....	24
4.2	TACC management options.....	24
4.3	Setting allowances.....	25
5	CRA 8	26
5.1	CRA 8 management and stock status.....	26
5.2	TACC management options.....	26
5.3	Setting allowances.....	27

1 Introduction

1. The New Zealand Rock Lobster Industry Council (NZ RLIC) welcomes the opportunity to participate in the CRA statutory consultation process for the TAC/TACC decisions that will come into effect on 1 April 2018.
2. The NZ RLIC is the umbrella organisation for the nine regional organisations known as CRAMACs, which operate in each of the rock lobster (CRA) management areas of New Zealand. CRAMAC membership comprises CRA quota owners, processors, exporters, and fishermen (quota share owner-operators and Annual Catch Entitlement (ACE) owners) in each region. All nine CRAMACs hold a significant majority mandate of rock lobster quota shares owned in the regions. CRAMACs are shareholders in the NZ RLIC, and appoint the Board of Directors.
3. NZ RLIC represents about 365 quota share owners nationally who collectively landed around 2,800 tonnes of rock lobster with an export value of about \$330 million in 2016/17. The industry deploys around 290 vessels, employs 2,400 people directly and indirectly, lands its products into about 37 processing and export facilities and supports an extensive network of transport, engineering, electronics and provedoring businesses.

1.1 SUMMARY

4. NZRLIC has considered the information contained in the MPI statutory consultation document (Discussion Paper 2018/02), the most recent assessment documents compiled by the Rock Lobster Fishery Assessment Working Group and the views and information from engagement with the CRAMACs and rock lobster quota share owners.
5. For the stocks under review leading up to 1 April 2018, NZRLIC recommends the following decisions:

CRA 2

- i) Support the use of a constant TAC management procedure to support rebuild of the stock over the next 5 years toward the interim target. Reduce the TACC by a further 30% to 140 tonnes. Set the recreational catch at the best available estimate of current catch of 34 tonnes, retain the current allowance for customary removals (16.5 tonnes), make an allowance for illegal take of 40 tonnes and provision for handling mortality of 2.5 tonnes.
- ii) Achieving rebuild of the stock will depend on steps being taken to constrain catch to the allowances set under TAC. Implement annual catch surveys for recreational fishing in CRA 2. Revise regulations controlling recreational take in CRA 2 and amend regulations by 1 October 2018.

CRA 4

- iii) Support the application of the conservative management procedure put in place for 1 April 2017 that resulted in a substantial TACC reduction to 289 tonnes. That management procedure should be applied to increase the TACC to 318.8 tonnes. No change is proposed for the current allowances for recreational and customary fishing and other sources of fishing mortality.

CRA 7

- iv) Support the application of the current agreed management procedure to decrease the TACC to 97 tonnes. No change is proposed for the current allowances for recreational and customary fishing and other sources of fishing mortality.

CRA 8

- v) Support the application of the current agreed management procedure to increase the TACC to 1070.7 tonnes. No change is proposed for the current allowances for recreational and customary fishing and other sources of fishing mortality.

6. The review of rock lobster stocks has again identified a number of generic issues for the sustainable and effective managements of all of New Zealand's rock lobster fisheries. NZ RLIC recommends the following actions:

- i) All sectors must contribute to the rebuilding of stocks. In many recent circumstances the commercial sector has contributed disproportionately to rebuilding depleted stocks. Management procedures need to be improved to incorporate the management of the recreational sector as well as the TACC. All the effort put into the design of management procedures will not deliver the intended outcomes for the stock if aggregate landings are not constrained to the allowances under the TAC.
- ii) More accurate and more regular information needs to be obtained on recreational catch in rock lobster fisheries. Recreational catch is usually the second most important source of removals from the stocks but relatively imprecise catch estimates are only obtained every 5-6 years. This lack of reliable and timely information introduces uncertainty into stock assessments and compromises sustainability of stocks and reaching management targets.
- iii) Attention needs to be directed to the effective management of recreational take. Poor information of recreational take contributes, but there has also been little attention paid to managing recreational take to allowances set by amending management controls. This means that in some cases stock rebuild is compromised, and in effect re-allocation to the recreation sector occurs with uncontrolled recreational catch expansion.
- iv) An additional outcome of inadequate measurement and management of recreational take is that the industry faces uncertainty about receiving benefits from catch reductions and the impacts of the associated adverse economic impacts. Industry incentives to continue voluntary management initiatives and invest in stock monitoring are undermined if there is no clarity that stock rebuild will result in re-instatement of TACC reductions.
- v) The current poor and dated estimates of illegal take are inadequate to support assessments and coherent management, and represent a potential loss of catch to the legitimate sectors. Industry suggests there is a strong case to better estimate illegal take and industry would strongly support more focus on effective compliance to reduce illegal take.

2 CRA 2

7. CRA2 has never been a high catch rate fishery, with modest productivity and CPUE compared with other rock lobster fisheries in New Zealand. The fishery has apparently been reliant on recruitment “pulses” rather than more regular recruitment. The commercial fishery of about 28 vessels is of modest size compared to the 1980s when there were 120 vessels and commercial catch peaked at 450 tonnes. The long term range has been in the order of 200-250 tonnes.
8. The industry is asking how the stock is now in this less than ideal status given their efforts over recent years? We have a revised assessment that recalculates the CPUE and biomass trajectory and concludes the stock is in a worse situation than the previous assessments estimated. It is not a productive fishery and it is evident cumulative removals have been depleting fishery since a large recruitment pulse in late 1990s. The decision rule put in place in 2014, and the associated TACC reductions, based on the best available assessment information at the time, did not deliver the outcomes sought for the stock in terms of halting decline or supporting a rebuild.
9. Industry remains committed to using (and providing) the best available information to support evidence based decision making. A high calibre science team, including international contractors, has developed a revised assessment, CPUE standardisation approach, and stock projections based on different assumptions about future removals. This new assessment is the core information to inform management decisions.
10. Over the last two decades, the CRA 2 has made a substantial commitment to the fishery through funding investments and a range of voluntary measures in research, stock monitoring and management initiatives, and promoting and supporting the adoption of a management procedure for the CRA 2 fishery.
11. To support these initiatives to rebuild the CRA 2, industry shelved 50 tonnes (25% of the TACC) in each of 2015/16 and 2016/17 fishing years in addition to the 15% TACC reduction implemented in 2013. The shelving of ACE came at very considerable cost to industry; it meant that boats were off the water, crew not employed and a loss of revenue in landed value to the catching sector alone of around \$8.4 million.
12. Other measures and initiatives undertaken by the CRA 2 industry over this two decade period include;
 - i) A comprehensive stock monitoring program, primarily relying on the voluntary log book program, but supplemented annually by observer catch sampling, has been in place since 1996. The log book program coverage has been maintained at close to 50% of all vessels in the CRA2 fleet and the CRA 2 industry funded over a 1000 pot lifts of additional catch sampling in the most recent fishing year. Since 2002 around 140,000 lobsters have been measured in the log book programme and a further 60,000 in the observer catch sampling. The catch monitoring program augments the catch and effort data obtained from catch effort landing returns by providing information on length frequency, sex and female maturity, abundance of pre-recruits, prevalence of non-breeding mature females and prevalence of injury. This information, particularly the first three items, are critical inputs to the stock assessment modelling and estimation of growth, mortality, maturation and selectivity. The comprehensive collection of information results in a data set described by an international member of the science team as the best data set encountered for a crustacean fishery.

- ii) CRA 2 has implemented an extensive tag release and recapture programme which contributes key information on growth of lobsters for the stock assessment, and also provides information on movement of lobsters. Since 1983 around 23,000 lobsters have been tagged and released with about 4,500 lobsters re-captured. Since 1995/96, the tag and release project has been funded by an extension of the CRA 2 industry levy.
 - iii) The CRA 2 industry have taken the initiative to re-establish a puerulus collection programme in the QMA collecting puerulus in three locations.
 - iv) Fishers have put in place effort spreading arrangements and a pot limit of 150 per vessel in statistical area 906 (Coromandel) to help address local concerns of excessive effort and competition with the recreational sector. The effort spreading arrangements mean that fishers operate in their traditional territories and do not introduce additional ACE into those areas.
13. The new stock assessment and CPUE standardisation has altered the historical CPUE and biomass trajectory. The key reason for this is the inclusion of a vessel effect in the CPUE standardisation. Although the new assessment is considerably more conservative, industry supports the evidenced based approach and the stock assessment. The stock is well below the desired target level. It is important to put in place revised management settings that will support the rebuild trajectory. This should be done in a way that does not cause an unnecessary level of socio-economic damage and provides an incentive for stakeholder to commit to and invest in the rebuild, because they have some certainty of realising the benefits.

2.1 CRA2 MANAGEMENT

14. The CRA 2 industry made a strong commitment to the voluntary logbook programme when it was first introduced in 1993 and has continued to use this design as the primary source of stock monitoring information for the fishery. This is supplemented by observer catch sampling on an annual basis. An intensive tag and release programme has also been implemented since the 1980s, fully funded by industry since the mid 1990s.
15. Only four estimates of recreational catch have been made since the 1980s with the two estimates in the 1990s regarded as biased and unreliable by the Fishery Assessment Working Group. The Ministry of Fisheries provided an estimate of illegal take in 1996 and 2001, with no estimate available since that time.

16. CRA2 is not a high abundance fishery. Since the early 1980s CPUE has only exceeded 0.5kg/pot lift for two periods – in the late 1990s and then a much smaller peak in 2007/08 and 2008/09. CRA 2 has almost always provided the lowest CPUE of the nine QMAs throughout that period (see table 1 below).

Table 1; Average CPUE from 1979/80 to 2016/17. Kg / pot lift

CRA 1	CRA 2	CRA 3	CRA 4	CRA 5	CRA 6	CRA 7	CRA 8	CRA 9
1.10	0.50	1.04	0.91	1.00	1.43	0.89	1.76	1.44

17. The TACC for CRA 2 was set at 249.5 in 1990 at the introduction of rock lobster to the QMS. In the following two years it was reduced in two steps to 214.6 tonnes. The TACC was increased to 236.1 tonnes for 1997/98 and was then unaltered until 2014/15. Over that period rationalisation of the fleet occurred from 42 to 33 vessels, and has since further reduced to 28 vessels.
18. In 2014, the Government agreed to use a new management procedure to guide TAC setting in the CRA 2 fishery. A full scientific assessment of CRA 2 in 2013 suggested the abundance of rock lobsters was around 79% of the then agreed reference level and 136% of estimated Bmsy. In response the TAC was decreased from 452.6 to 416.5 tonnes and the TACC was reduced from 236 to 200 tonnes from April 2014. At the time the industry supported the option with the greater level of TACC reduction.
19. By 2015 industry had ongoing concerns about the stock and wanted to take further steps to support a rebuild. However, industry also wanted to have some assurance they would be able to benefit from an improved fishery. The CRA 2 rock lobster industry voluntarily reduced the commercial catch limit in each of 2015/16 and 2016/17 from 200 to 150 tonnes with the monitoring of CPUE to allow the potential for release of shelved ACE if CPUE recovered. These steps bought the total reduction in commercial catch since 2014 to 36%. No changes were made to non-commercial management controls or allocations in 2014 or since.
20. As a result of concerns about the fishery, the full scientific stock assessment of CRA 2 was bought forward by one year from 2018 to 2017.

2.2 REBUILDING CRA2

2.2.1 Stock status

21. The 2017 CRA 2 stock assessment results suggest female spawning stock biomass (SSB₀) during the 2016 autumn-winter season was 18.5% of the unfished level. It is likely that CRA 2 is below the soft limit (20% of the unfished spawning stock biomass level); the level at which it is MPI policy to implement a formal, time-constrained rebuilding plan. However, it is very unlikely that it is below the hard limit (10% of the unfished spawning stock biomass level); the level at which it is MPI policy to consider closing the fishery.

2.2.2 Rate of rebuild

22. In considering the way and rate in which a stock is moved towards or above a level that can produce the MSY under section 13(2)(b) or (c) or (2A), the Minister must have regard to such social, cultural and economic factors that are considered relevant.
23. The MPI Harvest Strategy Standard and Operational Guidelines suggest rebuild timeframes for stocks that have fallen below the soft limit between T_{min} and $2 \times T_{min}$. For rock lobster this would correspond to a period of 4-8 years. However, in discussion about T_{min} and B_{msy} in the Fishery Assessment Group it was acknowledged that the guidelines are not well formulated for rock lobster as they were constructed with a focus on finfish stocks.
24. For rock lobsters, a short rebuild period is unnecessary as there are no overt risks to the stock. There are a large number of size classes in the CRA 2 fishery. The estimated recent low recruitment is not related to stock size, but rather to prevailing environmental conditions. In the circumstances, 10 years is reasonable rebuild period. Fast rebuild rates will have unnecessarily severe socio-economic impacts including loss of revenue and jobs in the rock lobster sector and greater impacts on associated infrastructure industry and services and regional communities. Longer rebuild periods have been used in the past in rock lobster fisheries. The CRA 8 fishery used 14 years.
25. The rebuild periods used in *Jasus edwardsii* fisheries in other jurisdictions are useful to consider. Both Tasmania and Victoria use 10 yrs in their rebuild programmes to build stocks toward their target biomasses.

2.2.3 Stock management target

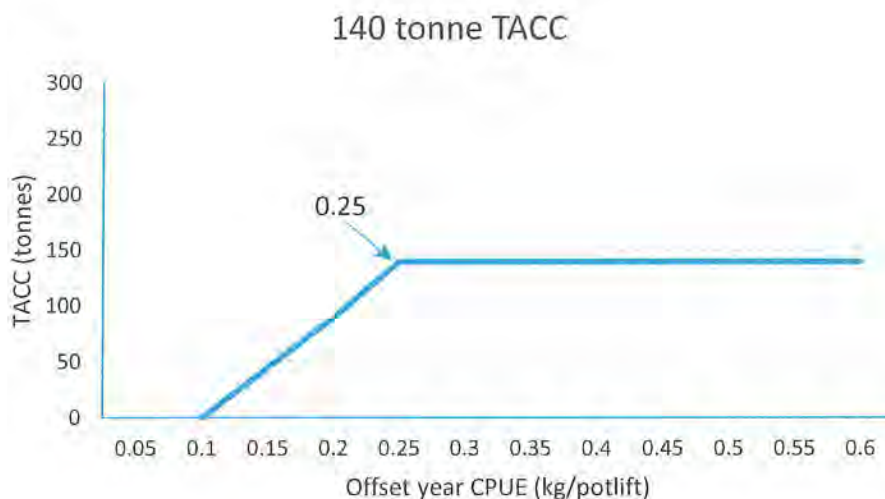
26. Section 13(2A) of the Fisheries Act sets out that where B_{msy} estimates are not available, the Minister should set a TAC that is not inconsistent with moving the stock toward or above a level which can produce the maximum sustainable yield.
27. Bref is a construct created where B_{msy} is not available or cannot be calculated – but there is no current valid or appropriate Bref for CRA 2. The Bref period used in 2013 was chosen based on the characteristics of the historic CPUE trends assumed at the time. The CPUE trend and modelled biomass trajectory are now quite different with the revised standardisation procedure and improved assessment. For these reasons the SAWG noted that the previous Bref was no longer appropriate and unrealistically high.
28. Because there is no available estimate of B_{msy} , the current status of the CRA2 stock relative to this statutory target is not known. In many situations, the estimated spawning stock biomass (SSB) is used as a key index of stock status. The MPI harvest strategy guidelines specify the soft and hard limits in terms of spawning stock biomass (20% unfished SSB level and 10% unfished SSB level respectively). The CRA2 spawning stock biomass is estimated to be at 18.5% of unfished SSB level – below the soft limit, but very unlikely to be below the hard limit.
29. The NRLMG proposed an interim target of double the current CPUE (and biomass) with a probability of greater than 50%. Doubling the current biomass equates to approximately 40% of the unfished spawning stock biomass level. Although B_{msy} is not known – for many species B_{msy} is estimated to be at about 40% B_0 . Although it is not known whether this will be the appropriate target for rock lobster stocks– more work is required to confirm this – it is reasonable to suggest this is an MSY compatible target and is consistent with the

Minister's obligations under section 13 of the Act. Rebuilding the stock toward that level will represent a very substantial improvement in stock status.

2.2.4 CRA2 TAC management options

30. The interim target of double current estimated biomass has been selected by the NRLMG and the TACC options and two options for a recreational allowance were selected as representing alternatives to achieve this target over time. In the current circumstances – a constant TAC management procedure has been selected. Rules that lead to dramatic reductions in TACC to low levels and then increases in catch are difficult for the industry to adapt to. The focus over the next five years is to rebuild the stock and it is not anticipated that TACC increases or increases in recreational catch would be appropriate over that period.
31. Using the base case assumptions (those identified by the FAWG as most likely) reducing the commercial TACC by a further 30% to 140 tonne, with recreational catch constrained to its estimated current level (no reduction in catch), will allow the stock to rebuild to the target in 9 years with a greater than 50% probability. For a 140 tonne TACC and recreational catch constrained at current levels, there is an 89% probability that the stock biomass will have increased in the next five years (to 2022), and conversely an 11% possibility of stock decline over that period. A 40% reduction in the TACC to 120 tonnes will only allow the stock to rebuild 2 years faster. A 50% reduction in the TACC to 100 tonne will allow the stock to rebuild 4 years more quickly – in 5 years, but with substantially grave socio-economic impact.
32. Nine years is arguably a reasonable rate of rebuild for a stock for which there is no serious biological risk. Although the stock is at historically low levels, the stock monitoring program shows there are still a large number of year classes in the fishery. There is no attenuation of the length frequency structure that would suggest growth overfishing.
33. The situation around recruitment is, however, of concern. The base case projections use recruitment at the level of the average of the most recent 10 years of estimated recruitment. However, the model estimates that recruitment has been at a lower level over the most recent 4 years in which estimates can be made. If recruitment were to remain at these low levels the stock would not rebuild with a 140 tonne TACC and a recreational allocation of 34 tonnes – but would remain at about its current level. To address this risk it is proposed that commercial CPUE continues to be monitored on an annual basis. CPUE provides a reliable index of relative stock biomass – if commercial CPUE should decline below 0.25 kg per pot lift a further reduction to the TACC should be implemented and the regulatory controls that constrain catch from the recreational sector be reconsidered and adjusted to reduce recreational sector removals. The figure 1. below outlines how this breakout rule would operate.

34. Figure.1. Breakout rule



35. The stock assessment used data from the fishery up until 30 September 2017. Given some discussion of positive signs from the fishery this summer, an extract of data from the log book programme for October 2017 until January 2018 was undertaken and compared with the four previous years. Without overstating their significance, this data shows a 7% aggregate increase in CPUE from the previous year.

2.3 SOCIO -ECONOMIC CONSEQUENCES OF TACC REDUCTIONS

36. Section 13 (3) requires the Minister to consider social, cultural and economic factors that may be relevant to the way and rate a stock is moved towards or above BMSY (or a level that is not inconsistent with BMSY).
37. The proposal to reduce the TACC is expected to have a number of economic impacts on the industry. The stock assessment suggests that a TACC reduction to 140 tonnes will be necessary to rebuild the stock to the interim target in nine years. For TACC reductions greater than 140 tonnes, the impacts will be progressively more severe.
38. The socio-economic impacts of TACC reductions are likely to include unemployment, vessels off the water, loss of income in the catching sector, for quota owners and processors and distributors, inability to service debt, reduced economic viability and forced exit and bankruptcy, stranded assets, social impacts on iwi beneficiaries, and impacts on regional communities. These matters are discussed for CRA 2 in the paragraphs below.
39. Some operations are marginally economic as a result of voluntarily retiring 50 tonnes of commercial catch in each of the last two fishing years. A TACC reduction will mean that less Annual Catch Entitlement (ACE) will be available with a loss of revenue to the catching sector of ~\$84,000 per tonne (landed price in cost recovery model is \$83.83/kg). This will lead to a restructuring of the fleet with some loss of vessels as they will no longer be economically viable or will not be able to obtain the legally required minimum ACE holdings.

40. There will also be reduced revenue to quota owners from selling ACE. CRA 2 ACE has been trading at ~\$50,000/tonne. Quota owners include companies, iwi, owner operators and retired fishermen dependent on ACE for income. The ACE price is linked to the port price paid to fishermen. That port price will not change with a reduced TACC; it is driven by the price obtained on export markets. A reduction in the TACC will create a scarcity of ACE but it is not envisaged 2018 ACE prices will escalate to compensate for the loss.
41. Further economic pressure will be put on a fishing operation because the largely fixed costs e.g. vessel maintenance, insurance and labour will remain, although variable costs (e.g. diesel and bait) may reduce. Some have suggested increased CPUE will balance the economic impacts by reducing fishing costs, but this is much less the case where operations are fishing to catch the most valuable grades of fish.
42. A TACC reduction will also affect quota owners through reduced equity in quota. CRA 2 quota shares have been trading at the equivalent of \$650,000 per tonne and higher for small quantities. A TACC reduction will essentially remove that value from the quota owner. It is not expected there will be any significant compensatory adjustment in quota price. NZ is a price taker on international markets and the value of quota is driven from the revenue generation.
43. For some operators, the loss of income will negate their ability to service debt, and could lead to calling in of loans and inability to pay mortgages. The inability to service debt can lead to the need to close business or bankruptcy and restructuring. These economic impacts will impact on investor confidence in the industry and influence the cost of capital to remaining participants.
44. The licensed fish receivers (LFRs), processors and distributors who receive, hold and transport lobsters will also lose revenue. There is one CRA 2 LFR which is 100% dependent on the receipt and export of CRA 2 lobsters. A substantial TACC reduction would severely impact on the viability of this business. Other CRA 2 processor/exporters are diversified across other rock lobster fisheries and/or finfish/shellfish species. The impact on them will be less severe in terms of ongoing viability.
45. The reductions in fishing and receiving businesses will have flow on impacts in reduced economic activity for a number of associated servicing and support businesses such as transport, storage, provedoring, engineering, boatyards, marine electronics, and bait suppliers. These fishing and support businesses are often in smaller regional towns and communities along the coastline. In some of these communities commercial fishing is an important proportion of economic activity.
46. Most rock lobster fishing operations are wholly reliant on rock lobster and don't fish other species or use other methods. They therefore don't have alternatives to maintain or substitute income. Rock lobster vessels are fairly specialist; even if an operator could afford to modify and re-equip the vessels, and develop the expertise in new fisheries, they couldn't fish without the very significant additional capital outlay needed to purchase ACE/quota.
47. TACC reductions will reduce export returns and foreign exchange for NZ and the associated businesses who earn revenue in foreign markets. By the time the lobsters reach export markets they can fetch prices in excess of US\$100/kg with recent prices in the range of \$70-\$90/kg.

48. There will be reduced or little return for sunk costs such as fishing equipment and holding tanks which in general will have limited utility for other purposes. It will be difficult to sell the vessels; there is a limited market for specialist vessels.
49. The job losses for skippers, crew, and employees in sheds and processors will often be in regional area with limited prospects for other employment. This can lead to a forced shift out of regional communities to larger centres where there is better prospect of employment. Serious impacts are likely on the social programs funded by iwi and runanga from the benefits of their settlement assets. For some iwi, ACE income is important to fund their staff complement and marae activities.
50. These economic reductions will have flow on impacts on infrastructure and services, often in regional communities including loss of revenue for retail, businesses, lower attendance at schools, lowered use of various services. These cumulative impacts could lead to loss of economies of scale. Reduced revenue and throughput may make some businesses unviable, particularly in relatively isolated regional communities, leading to closure and consolidation of businesses. Fishing is an integral part of maintaining the viability of these coastal communities.
51. A lower TACC and smaller pool of available ACE coupled with a geographically scattered fleet will require some restructuring and changed arrangements between the catching sector and the LFRs. It may no longer be economically viable to send trucks to isolated landings points with reduced vessel catch. This issue is likely to be most prevalent in the eastern Bay of Plenty lobster and northern Coromandel. It is not likely to be so much an issue in Tauranga, Whitianga and Leigh.
52. The CRA 2 rock lobster industry is characterised by many small family businesses and father and son/daughter operations. Other members of the family often work in support services for the operation, bookkeeping, boat launch and retrieval, processing and transport etc. The same families have operated in particular areas for decades with three generations moving through the business. These families are dependent on fishing and usually don't have other trades or qualifications. For the older generation, their quota assets represent their superannuation funds.
53. Under section 74 of the Fisheries Act, for a quota owner to have the authority to undertake rock lobster fishing, the entity requires quota ownership that will generate at least 3 tonnes of ACE. Quota owning entities are entitled to remain fishing if there is a TACC reduction that reduces their holding below the 3 tonne minimum. They are "grandfathered" to remain operating in the fishery. ACE dependent fishers who do not own 3 tonnes are not entitled to fish for rock lobster.
54. There are 28 vessels operating across CRA 2 in the current season. By examining ACE held at January 2018, the likely annual ACE holdings of fishing entities after the usual annual trading, including purchase of ACE from non-fishing entities, can be seen. This analysis suggests there will be at least 11 fishing entities currently entitled to fish who will fall under the three tonne ACE minimum with a reduction of the TACC to 140 tonnes (a reduction of 30%). Some of these entities may be able to purchase additional ACE from the significantly reduced pool of ACE held by non-fishing quota owning entities, but they will be competing against the larger players who will also be seeking to obtain ACE to try and partially redress the impact on them of the TACC reduction. Some of those larger entities will have long established commercial relationships with the ACE owning entities.

55. This analysis is somewhat pessimistic because ACE shelving will not continue in 2018/19 and that ACE, as reduced by the TACC cut, will become available. If you assumed this ACE was uniformly distributed among fishing entities there would be at least 6 fishing entities currently entitled to fish who will fall under the three tonne ACE minimum. These alternative approaches suggest a reduction of the TACC to 140 tonnes might result in 6-11 fishing entities being forced off the water. Greater levels of ACE distribution across the fleet could reduce the number of operations that fall below the legal minimum. It is difficult to determine if any other operations, although still holding an entitlement that legally allows fishing, will no longer be economically viable for the area they fish and their own economic circumstances such as servicing debt.
56. Larger TACC reductions will make this ACE shortage more acute and increase the number of fishing entities who will struggle to obtain a legal, or economically viable, portfolio of ACE. Using the same analysis as above, a TACC reduction to 120 tonnes could result in a range of 8-13 fishing entities unable to fish, a TACC reduction to 100 tonnes a range of 12-14 vessels. Because of the spread of quota and ACE holdings a reduction to an 80 tonne TACC will have a massive impact with potentially 14 - 20 fishing operations forced off the water.
57. Another reason it is difficult to reliably estimate the impact on vessels and employment is that we know there are at least two fishing operations which hold a 'pool' of ACE used by a small number of vessels operating under the authority of a single permit. They are likely to be vulnerable to reduced availability of ACE.
58. The table below summarises the rebuild timeframes under different TACC options, and assumptions about recreational catch constraint, and the potential impact on vessel numbers based on the analysis of potential ACE distribution in the paragraphs above.

Table.2.

TACC (tonnes)	140	120	100	80
Rebuild time (recreational catch constrained)	9 years	7 years	5 years	4 years
Rebuild time (recreational catch unconstrained)	15 years	8 years	6 years	5 years
P (B2022>B2018) basefix	89%	95%	99%	100%
Vessels off the water	6-11	8-13	12-14	14-20

59. The rock lobster industry in CRA 2 is clearly committed to rebuilding the stock. They have made substantial voluntary investments over many years in ensuring there is good data to inform management decisions, and taken voluntary reductions in catch in recent years with very substantial financial impact. Because of their investments, and their commitment to the fishery and the lifestyle, they do not want to take risks with the stock. However, there is an issue as to how severe the reductions need to be to achieve a rebuild objective.

Unnecessary conservatism will have very serious economic and social consequences, some irreversible. A further TACC reduction of 30% to 140 tonnes will achieve the rebuild target over a reasonable timeframe. If unfavourable environmental conditions persist and impact on the rebuild, the breakout rule suggested can be utilised to ensure a biomass increase trajectory for the stock.

2.4 RE-INSTATEMENT OF THE TACC

60. Industry remains dedicated to ensuring that the stock is rebuilt. They have substantial commitments – both in assets, large financial and time investments over an extended period, and their dependence of their fishing businesses, and lifestyle for their families. Accepting that based on the best assessment information available, further catch reduction is needed, they seek an assurance from government that their further endeavours will be recognised through a return of catch entitlements when the stock has rebuilt to the target and can sustain increases in catch.
61. Such an assurance would give the industry the confidence and incentive to try and remain in the fishery, even if not profitable and increasing debt for a period, rather than walking away, firing employees and dissolving assets for whatever return can be achieved. The assurance might also induce financial institutions to give businesses some flexibility and breathing space for a period. This requires that the government commit to implementing the management decisions made and provide to industry, and the financial institutions they have debt with, with the certainty to make the catch reductions in the expectation there will be a return down the track through re-instatement of the TACC when the stock rebuilds.

2.5 ALLOCATING THE TAC

62. After setting or varying the TAC, a separate decision arises in respect of allocating the TAC. When setting a TACC for a stock under section 20 of the Act, section 21 requires the Minister to have regard to the TAC for that stock and allow for Māori customary non-commercial fishing interests, recreational interests, and all other sources of fishing-related mortality to that stock (including illegal catch and handling related mortality).
63. The Act does not provide an explicit statutory mechanism to apportion available catch between sector groups either in terms of a quantitative measure or prioritisation of allocation. Accordingly, the Minister has the discretion to make allowances for various sectors based on best available information.
64. The Courts have in a number of cases considered what is involved in allowing for non-commercial interests. In *Snapper 1*¹ the Court of Appeal said that the recreational allowance is simply the best estimate of what recreational fishers will catch while being subject to the controls which the Minister decides to impose. The Supreme Court in *Kahawai*² endorsed this approach and said that the words “allow for” require the Minister both to take into account the interests and make provision for them in the calculation of the TACC.³ The Supreme Court went on to say that sections 20 and 21 prescribe a framework within which the Minister must operate when setting the TACC. The frame work requires apportionment of the TAC by the Minister among the various interests and other mortality. The sequential nature of the method of allocation provided for in section 21 does not indicate that non-commercial fishing interests are to be given any substantive priority over commercial

¹ *New Zealand Fishing Industry Association (Inc) v Minister of Fisheries* CA 82/97, 22 July 1997 (“*Snapper 1*”).

² *New Zealand Recreational Fishing Council Inc v Sanford Limited* [2009] NZSC 54 (“*Kahawai*”).

³ *Kahawai* [55].

interests. In particular the allowance for recreational interests is to be made keeping commercial interests in mind.⁴

65. The Supreme Court further said that in the end, within the limits provided for by the Act, the Minister makes a policy decision as to what allocations are appropriate for non-commercial interests and other mortality and what is to be the TACC. These decisions are interdependent. The Act does not confer priority for any interests over the other. It leaves that to the Minister's judgment.⁵

2.5.1 Recreational allocation

66. The current 140 tonnes allocation was set following the 1997/98 review on the basis of the available uncertain estimates of catch. The recent SAWG analysis indicates that recreational catch was never close to this level even at the peak of stock abundance in the late 1990's. In the 2013 review of CRA 2, the recreational allocation was almost three times greater than the best estimate of recreational catch in the model (56.3 tonnes)⁶, but that allocation was not changed although there was considerable discussion in the NRLMG prior to final advice.
67. At the CRA 2 stakeholder engagement forums in late 2017 in Whakatane and Thames, recreational fishers accepted they needed to contribute to the stock rebuild. Although TACC reductions made in 2013, there have been no changes to recreational bag limit and size controls since the 1980s.
68. In setting the allocation for recreational catch, we suggest that the current stock status and the need to constrain catch to support a rebuild is that primary consideration. In these circumstances, to provide for increased recreational catch through an allocation larger than current catch would not be responsible or appropriate.
69. The Rock Lobster Fishery Assessment Working Group considered information from surveys of recreational catch in recent years. In reviewing those survey, their methodology and suitability to measure rock lobster catch, some estimates are now regarded as unreliable and the Fishery Assessment Working Group has little confidence in the estimates. The three most recent surveys, one in 2010 and two in 2011, are regarded as useful. From this information, the Fishery Assessment Working Group constructed a trajectory of recreational catch and the best estimate of current (2016) recreational catch is 34 tonnes.
70. The Courts have in a number of cases considered what is involved in allowing for non-commercial interests. In *Snapper 1*⁷, the Court of Appeal said that the recreational allowance is simply the best estimate of what recreational fishers will catch while being subject to the controls which the Minister decides to impose upon them, e.g. bag limits and minimum lawful sizes. The best current estimate of recreational catch is 34 tonnes.
71. The Courts have commented further on the Minister's responsibilities in respect of allowances. The allowance represents what the Minister considers recreational interests should be able to catch, but also all that they will be able to catch. Both the law and common sense dictate that a Minister should not reduce the TACC for conservation reasons unless able to take, and taking, reasonable steps to avoid the reduction being rendered futile through increased recreational fishing⁸. It is accepted that recreational catch is related to

⁴ Kahawai [61]

⁵ Kahawai [65]

⁶ MPI IPP, December 2013, Table 4.2

⁷ *New Zealand Fishing Industry Association (Inc) v Minister of Fisheries* CA 82/97, 22 July 1997 ("*Snapper 1*")

⁸ *Snapper 1* at 101-102

stock status and the catch rates achieved. In the current stock circumstances, with the current management controls, 34 tonnes is what recreational fishers are catching. It is assumed that no consideration will be given to increasing bag limits or removing or relaxing other constraints as it would not be responsible given the current stock status. There would not seem to be any reasonable basis to set the allowance at greater than 34 tonnes, and some arguments to set it at a lower level.

72. At the stakeholder engagement forums, many of the recreational representatives expressed their willingness, and acknowledged that it would be responsible, for the recreational sector to also contribute to the rebuild. The proposal for a 50 tonne allocation for recreation catch would represent a catch increase for a stock in a depleted situation. The proposal is not justified in the current circumstances – both in terms of compromising the stock rebuild and representing a reallocation of catch to the recreational sector, in direct contrast to the reductions in catch, pro-active voluntary measures and restraint exercised by quota owners and iwi. The 50 tonne figure is based on the upper bound of a 2011/12 estimate of catch - there is also no justification for using the upper bound of a dated catch estimate.
73. The management strategy evaluation projections show that unconstrained recreational catch expansion will slow the stock rebuild by years. For example, with a 140 tonne TACC, if recreational catch is allowed to increase as the biomass recovers, the projections suggest the stock will reach the interim target 6 years later. These assessments support the need to monitor recreational catch more closely.

2.5.2 Better estimation of recreational catch

74. The rebuild rate sought will not be achieved if recreational catch exceeds the allowance set. This reinforces the need to review the controls on recreational fishing to ensure catch is constrained. The stock assessment and management strategy evaluation demonstrate the impact of unmanaged increases in recreational catch on delaying the stock rebuild. MPI considers that the best available information on current recreational catch is provided from the 2011/12 National Panel Survey. This survey and the boat ramp intercept survey undertaken by J Holdsworth in CRA 2 in 2010 estimated recreational catch at the time was around 40 tonnes. A second boat ramp survey in 2011 estimated a lower level of catch but that may have been impacted by the Rena stranding and associated closures.
75. An updated recreational catch estimate for 2017/18 will be available in 2019 from a National Panel Survey that is currently underway. However, the National Panel Surveys will only provide estimate every 6 years or so, with the estimate gained being more than a year out of date because of the time taken for analysis of results. This frequency of information on catch is inadequate and inconsistent with the annual catch information and close monitoring of commercial catch. There is a strong case for repeating the Holdsworth type boat ramp surveys on an annual basis. These survey cost about \$400K to undertake, and these costs could be reduced through greater use of technology such as videos and pressure triggered ramp vehicle counters. In any event, this is a very modest cost compared with the level of recreational expenditure attributed to recreational fishing in the region, and a reasonable investment by government in having the best available information to support the stock rebuild.
76. Alternatively, a program to tag recreational rock lobster, such as being considered in Tasmania and implemented in Victoria in Australia could be considered. A tag programme has also been used for fin fish in Western Australia and several fisheries in the United States. Victoria have moved in this direction because they have had the concept of a TARC (Total

Allowable Recreational Catch) in their rock lobster management plan since 2003. Tagging is a more direct approach to assessing catch and operates by requiring recreational fishers to attach (free) tags to lobsters retained and report the use of tags at intervals. This can provide very good estimates of catch and has the additional advantage of impeding poachers who seek to undertake their activities under the guise of being a recreational fisher. Such a scheme would be most effective if applied nationally but could be trialled in CRA 2.

77. South Australia introduced pot registration 15 years ago to help better estimate recreational catch. In their rock lobster fisheries, the recreational sector has a specified shares (as a %) of the fishery and the recreational fishing sectors is managed to restrain catch within their allocated share. There is also provision for adjustment in shares in the fishery through the recreational purchase of commercial entitlements.
78. Tasmania has taken similar steps to more effectively manage recreational fishing. On the east coast where there is more recreational fishing pressure, the total catch limit is allocated between the commercial and recreational sectors based on historical catch, with recreational catch constrained with bag limit reductions, boat limits and shorter seasons. Recreational catch is monitoring on an annual basis to allow for adjustments of management controls.
79. Victoria, South Australia and Tasmania all take the same species as in the New Zealand fishery (*Jasus edwardsii*). All three jurisdictions have had quota management regimes in place to closely manage catch from their commercial fisheries for a considerable period, and as pressure from recreational fishing has increased have progressively moved to introduce more effective measures to measure and manage recreational take. These arrangements are necessary to ensure the sustainability of total removals and ensure the maintenance of healthy stock levels or in some case support the rebuild of fisheries. In New Zealand improved arrangements to manage recreational fishing are lagging and compromise the outcomes sought from fisheries management.

2.5.3 Customary fishing

80. Despite the efforts of iwi and reporting in some areas, information on actual levels of customary take are somewhat uncertain. The best available information on Māori customary catch of rock lobster indicates that tangata whenua use of customary Māori harvesting rights for taking rock lobster is minimal and well within the current customary Māori allowance of 16.5 tonnes.
81. In consultation meetings in BOP, iwi have acknowledged the stock situation and outlined their intention to support stock rebuild by exercising more restraint in providing authorisations for customary take. There is no imperative to change the customary allocation at this stage. It is important to improve stock status to better provide for customary fishing.

2.5.4 Illegal fishing

82. MPI have acknowledged that the current estimates of illegal catch are very dated and not credible. However, the Fisheries Assessment Working Group had little option but to use the historical MPI estimates of illegal take to derive an estimate to use in the 2017 stock assessment model. The 88 tonne estimate from 1996 was decreased to an amount of 40 tonnes in 2017 based on the assumptions that the level of illegal take tends to lower when overall abundance of a stock is lower.

83. Given the substantial reductions to commercial catch being considered, and the impacts that that level of illegal catch has on impacting directly on the TACC and recreational and customary catch, it is essential that urgent steps are taken to reduce opportunities for illegal catch of rock lobster from the fishery. Reductions in illegal catch mean the rebuild of the fishery can occur faster and there may be more lobsters available to the legitimate catching sectors. Suggesting that "investigation of further measures" should occur is vague and inadequate. Credible and specific options to reduce illegal take need to be introduced from 1 April 2018 to defray the impact of catch reductions on the legitimate sectors.
84. It is also important that MPI assign some priority and resources to developing better estimates of illegal catch. 20 year old estimates in which no one has any confidence do not provide the best available information for the Minister in making allocation decisions. Estimating illegal take is not straightforward but other jurisdictions have done it through the collection and analysis of the right metrics. Other than reducing impact on the legitimate sectors, and providing better information for assessments to mitigate risks to sustainability, such information is important to guide tasking and deployment of compliance resources.
85. NZ RLIC submits that there are viable options to reduce illegal take that should be evaluated and implemented. Some options are set out in the following paragraphs.

Telson clipping and an accumulation limit

86. MPI and stakeholder groups have been concerned about the apparent level of illegal rock lobster fishing in CRA 5. It is believed that illegally landed rock lobsters are destined for the domestic market in New Zealand. These markets include the retail and hospitality trades, pub and service club raffles and sales from vehicles or in workplaces. These concerns have led to the intention to introduce telson clipping and an accumulation limit with "bag and tag" conditions. The telson clipping will clearly mark a lobster as recreationally caught, and therefore unable to be sold, bartered or traded on the black market. Telson clipping is undertaken in Western Australia and Victoria for the same reasons. In New Zealand, telson clipping has already been implemented for the Kaikoura Marine Management Area, since August 2014. MPI suggest the telson clipping has been successfully in reducing the flow of recreationally caught lobsters illegally entering the commercial supply chain (e.g by fish dealers and restaurants). Tangata kaitiaki/tiaki could be encouraged to make telson clipping a condition of customary permits or authorisations under this option.
87. The accumulation limit with associated "bag and tag" conditions are intended to limit the ability to store and transport large quantities of rock lobster for illegal sale where people deliberately exceed the daily bag limit or where the bag limit is consistently taken for sale or barter. Accumulation limits also help set a threshold for compliance action. They have been introduced for other high value species and regions in New Zealand.
88. Further consultation on telson clipping and accumulation limits for CRA 5 is due to commence in the near future and could be expanded to propose telson clipping for CRA 2, and for other rock lobster management areas. This measure in no way suggests that legitimate recreational fishers are responsible for illegal take – rather it reduces the potential for legitimate recreational take to be mis-used by criminals for illegal sale.

Reward for information

89. The rock lobster industry is prepared to offer a reward of \$5000 for provision of information to MPI that materially supports a successful prosecution for illegal take and sale of rock



lobster from CRA 2. This proposal demonstrates that industry is serious about trying to reduce illegal activity. A reward system might encourage provision of new intelligence that helps MPI's compliance operations and targeting of resources. If such additional information prevented 1 tonne of illegal take – that is ~US\$100,000 of foreign exchange flowing into the New Zealand economy and might help keep another vessel on the water.

Engagement on compliance risk

90. There is little or no current engagement between MPI and the rock lobster industry on the potential sources and causes of compliance risk. Industry has a clear incentive to reduce illegal take and therefore take steps to increase the effectiveness of compliance, particularly in respect of the poaching and black market sectors. Illegal take by these sectors is a direct cost to the legitimate commercial sectors, and often involves theft from commercial pots, as well as threatening rebuild. Engagement with industry on these issues does not compromise in any way the independence of compliance operations and could improve their effectiveness by increasing understanding of the fishery and obtain intelligence to inform compliance operations. Because industry operators are on the water, and have intimate knowledge of the fishery – they may well have new ideas about mitigation strategies to control risks and apprehend offenders. Engagement between the agency and the department responsible for fisheries compliance is common in other jurisdictions.
91. Engagement with MPI would allow the exploration of ideas to reduce illegal take. A greater focus on profiling, where suspect illegal / unreported removals are suspected, or close attention to documentary product flow, higher number of inspections, or increased covert surveillance might be useful to explore. Where the industry has confidence in the compliance strategy, it might support increased resources for compliance through a new initiative bid. More resources could support more inspections at points of landing, commercial premises, or vehicles, or more surveillance.

2.6 ENVIRONMENTAL PRINCIPLES AND INTERDEPENDENCE OF STOCKS

92. Section 9 prescribes three environmental principles that the Minister must take into account when exercising powers in relation to the utilising of fisheries resources or ensuring sustainability. Principle 1 requires that associated or dependent species should be maintained above a level that ensures their long-term viability. There are low levels of bycatch in rock lobster fisheries and the potting method means that any bycatch can be returned unharmed.
93. The third principle requires that habitat of particular significance for fisheries management should be protected and adverse effects on them avoided, remedied, or mitigated. Rock lobster are most numerous on reef and rocky substrate in close inshore waters- but can be found out to 300m. Little has been done to address adverse effect on their habitat from anthropogenic disturbance – the most of important of which is probably sedimentation.
94. The second principle concerning the maintenance of biological diversity of the aquatic environment overlaps with the requirement in section 13 to have regard to the interdependence of stocks. These involve considering the risk that fishing for a species might cause catastrophic decline in abundance of associated species abundance, or cause biodiversity to be reduced to an unacceptable level. This might occur through non-target species (bycatch) or benthic species that are incidentally impacted by fishing gear. The role of the target stock in the food chain should also be considered. In particular, interdependence involves a direct trophic (i.e. one stock is likely to be directly affected

through a predator prey relationship by the abundance of another stock) relationships between stocks.

95. Potting is used exclusively by commercial fishers to target rock lobster in CRA 2. This method is considered to have very little direct effect on non-target species and benthic species. The most frequently reported incidental species caught via commercial rock lobster potting, in decreasing order of catch across all stocks are: octopus, conger eel, blue cod, trumpeter, sea perch, red cod, butterfish and leatherjackets.
96. Rock lobsters are predators of molluscs and other invertebrates and predation on rock lobsters is known from octopus, blue cod, groper, southern dogfish, rig and seals. Some studies, particularly in the greater Hauraki Gulf, have suggested that predation by rock lobsters might contribute to "trophic cascades" (i.e. if fished predators such as rock lobster, snapper and blue cod are reduced to certain levels urchin-grazed kelp 'barrens' can form). However, a literature review (Breen unpublished) suggests that even in north east New Zealand, there is only poor evidence that sea urchin barrens are a general result of rock lobster fishing. The evidence for lobster-driven trophic cascades at a national scale is weak.
97. The media recently picked up on a phrase "functionally extinct" used in the announcement of the result of a study in the Hauraki Gulf suggesting a decline in abundance of rock lobster. These statements are not consistent with the stock assessment which suggests the stock is at a lower than optimal level, but not at biological risk.

3 CRA 4

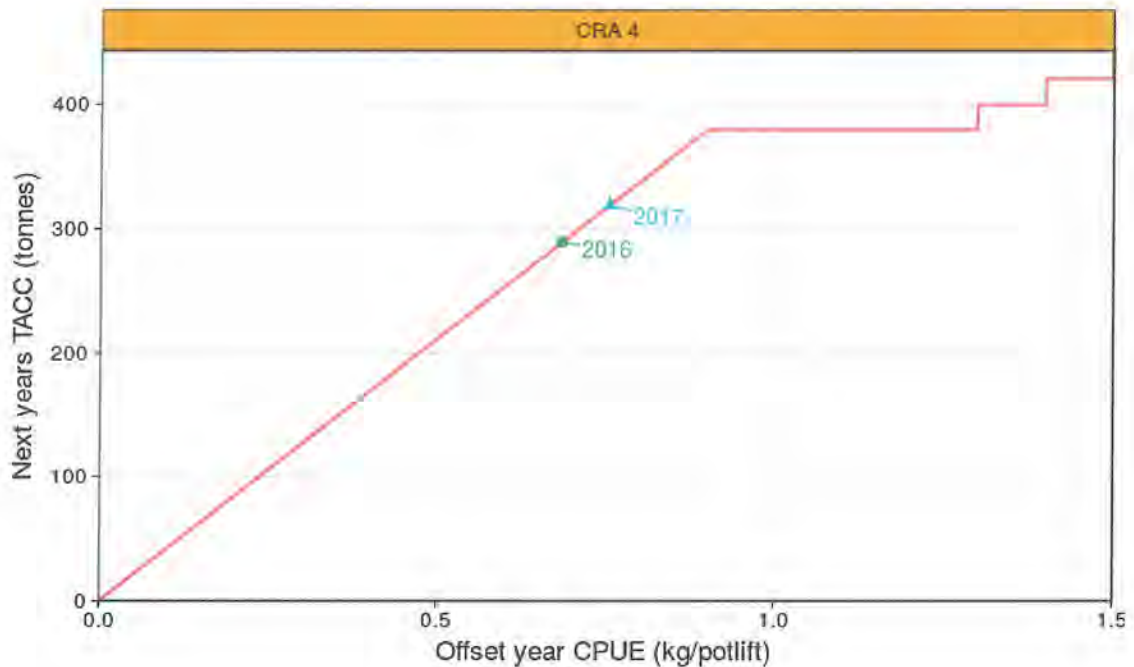
3.1 CRA 4 MANAGEMENT AND STOCK STATUS

98. The results of the most recent CRA 4 stock assessment carried out in 2016 suggest that stock biomass in 2016 was below the agreed reference level, Bref, by 25%. Bref is a biomass management target likely larger than Bmsy, the default management target in the Fisheries Act.
99. In response to this revised assessment, the NRLMG put forward two options for new management procedures, both of which would put in place a rebuild trajectory to move the stock toward Bref. The Minister's decision was to select the more conservative of these options, and as a result the operation of the new management procedure for 1 April 2017 led to a substantial TACC reduction of 108 tonnes (27%). No changes were made to the allowances provided for other sectors.
100. Standardised CPUE is considered to be a reliable indicator of relative stock size in CRA 4 and is the abundance indicator used in the CRA 4 management procedure. CPUE increased from 2008 to 2012, then declined. Between 2016 and 2017 CPUE increased from 0.69 to 0.76 kg/pot lift, suggesting rock lobster abundance in CRA 4 has increased in the last year.

3.2 TACC MANAGEMENT OPTIONS

101. The MPI statutory consultation document puts forward two options for 1 April 2018 – to maintain the status quo or to apply the management procedure and increase the TACC from 289 tonnes to 318.8 tonnes, a 10.3% increase.
102. The relatively conservative management procedure determined in 2017 for the 2017/18 to 2021/22 fishing years is designed to rebuild the stock towards the management target. There are some in the industry who are not surprised that the substantial TACC cut last year resulted in this response from the management procedure. There are others who did not expect an increase after the substantial TACC decrease at the beginning of the fishing year.
103. A workshop of CRA 4 operators held in December in Masterton considered the operation of the management procedure and their recent experiences of the fishery across its range of five statistical areas from southern Hawkes Bay to the coast west of Wellington. Many operators confirmed their positive recent experience in the fishery and none identified concerns or negative signs from their fishing.
104. A modest increase in the TACC would ease the pressure on some fishing operations and associated businesses that were operating with lower levels of ACE and revenue as a result of the substantial TACC reduction of 1 April 2017.

Figure.2.



105. There is considerable investment in the stock assessment and management procedure for CRA 4. Figure.2. above shows, based on CPUE, where the CRA 4 fishery is estimated to be on its biomass increase trajectory.
106. Unless there are compelling reasons to depart from the procedure, it should be applied, both where it suggests the need for catch reductions and where it supports increases. Industry would be concerned if the projected stock rebuild was to be threatened and sought a management procedure that would be responsive to CPUE changes. However, the advice from the Rock Lobster Fishery Assessment Working Group is that it is expected that applying the procedure will ensure the stock size increasing so that it exceeds reference level with a probability of 92% by 2021. This is a rapid rebuild timeframe.

3.3 SETTING ALLOWANCES

107. In the past, only the TACC has been increased or decreased to give effect to variations in catch generated by the operation of the management procedure. MPI's statutory consultation document suggests that any TAC increase is effected only through an increase in the TACC. No changes have been made to allowances and catch controls for the recreational sector in recent years.

3.3.1 Recreational fishing

108. The most recent recreational catch estimate comes from the 2011/12 National Panel survey, which estimated that recreational catch in CRA 4 was 44 tonnes. There is uncertainty in this estimate, but that estimated catch is less than the current allowance of 85 tonnes.
109. With the stock status and CPUE improving in CRA 4, it is expected that recreational catch, and potentially participation, will increase. In the advice provided on CRA 2 earlier in this submission, NZRLIC raises again the need for more precise and regular estimates of recreational take to better inform management decisions.

110. An updated recreational catch estimate for 2017/18 will be available in 2019 from a National Panel Survey that is currently underway, 6 years after the last estimate. This frequency of information on catch is inadequate and clearly out of step with the annual catch information and close monitoring of commercial catch. Surveys to estimate recreational catch need to be undertaken more frequently, with the ability to update estimates on an annual basis. This would provide decision makers with useful information to compare catch estimates with allowances, so that management arrangements have integrity, and management action can be taken if necessary. Catch needs to be measured and constrained if the benefits of achieving a rebuild are not just a re-allocation between the sectors.

3.4 ILLEGAL TAKE

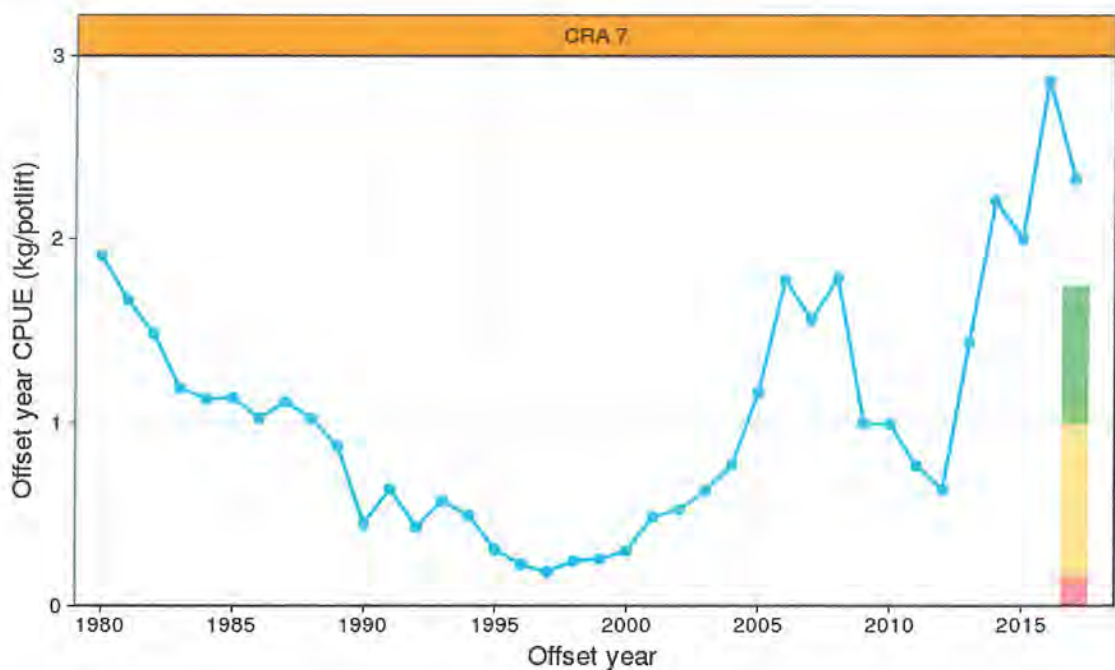
111. The illegal catches estimates for CRA 4, as with other QMAs, are very dated and highly uncertain. This leaves the Rock Lobster Fishery Assessment Working Group in a position of having to guess as to current levels to feed into their assessment, given they have no source of information. This introduces uncertainty in the assessment process, whether their guess of current and past levels are overestimates or underestimates. It can result in overestimating stock productivity and in foregone catch for the legitimate sectors. Although not a straightforward exercise, the absence of work on estimating illegal catch for more than a decade is a real shortcoming of current management by MPI.
112. NZRLIC continues to urge greater effort be exerted to try and address illegal fishing activity, particularly blackmarket and poaching activity which directly impacts on catch able to be taken by legitimate commercial and recreational fishers. There has been no recent engagement with the industry representative body on this matter and we have no information on the steps that are being taken to target illegal removals.
113. The allowances for illegal take and handling mortality should be reduced to reflect the actual estimates used in the 2016/17 review process.

4 CRA 7

4.1 CRA 7 MANAGEMENT AND STOCK STATUS

114. The results of the most recent CRA 7 stock assessment conducted in 2015 demonstrated a stock in very good shape with biomass estimated at twice the agreed reference level, Bref.
115. Standardised CPUE is considered to be a reliable indicator of relative stock size in CRA 7 and is the abundance indicator used in the CRA 7 management procedure. CRA 7 commercial CPUE over recent years is shown in figure 4 below. The coloured bar on the right represents the plateau (green) and slope (orange) of the procedure. CPUE increased substantially from 2012 to 2016, but declined slightly in 2017, but is still well above the plateau.

Figure.4.



4.2 TACC MANAGEMENT OPTIONS

116. The MPI statutory consultation documents puts forward two options for 1 April 2018 – to maintain the status quo or to apply the management procedure and decrease the TACC from 112.5 tonnes to 97 tonnes (Option CRA7_02).
117. In discussing this and other stocks, the NZ RLIC and NRLMG position has been to implement the agreed management procedures. Adopting a management procedure requires considerable investment in scientific assessments and evaluations, and they have in general demonstrated their value in providing a principled mechanism to make adjustments to the TACC and maintain or moving stocks toward their management targets. As outlined in the previous sections on CRA 2 and CRA 4, the shortcomings of the current management process relate more to the information on recreational and illegal removals, and meaningful efforts to measure and manage recreational catch and reduce illegal activity.

118. Under Option CRA7_02 the CRA 7 TAC would be decreased to 117 tonnes. The proposed TAC decrease is guided by the use of CRA 7 management procedure that was first agreed to in 2013. The CRA 7 management procedure was evaluated with a new operating model in 2015, effectively extending its use to the 2019/20 fishing year.
119. As a result of concern from some CRA 7 industry participants, a check was undertaken to ensure all relevant offset year CPUE was included in the CPUE standardisation that informs the operation of the management procedure. This work confirmed the CPUE trend and the 14% TACC reduction generated by the procedure. It is accepted that the design of management procedures means they are responsive to both increases and decreases in abundance signalled by CPUE. Experience suggests this is particularly necessary in CRA 7 given the migratory characteristics of the Otago fishery.
120. This TACC cut will result in a substantial reduction in landed revenue and impacts on associated businesses. However, the operation of the CRA 7 management procedure is expected to achieve the objective of maintaining the stock above the agreed reference level (Bref) with greater than 50% probability. Simulation testing indicates it would maintain the stock above Bref with 98% probability.

4.3 SETTING ALLOWANCES

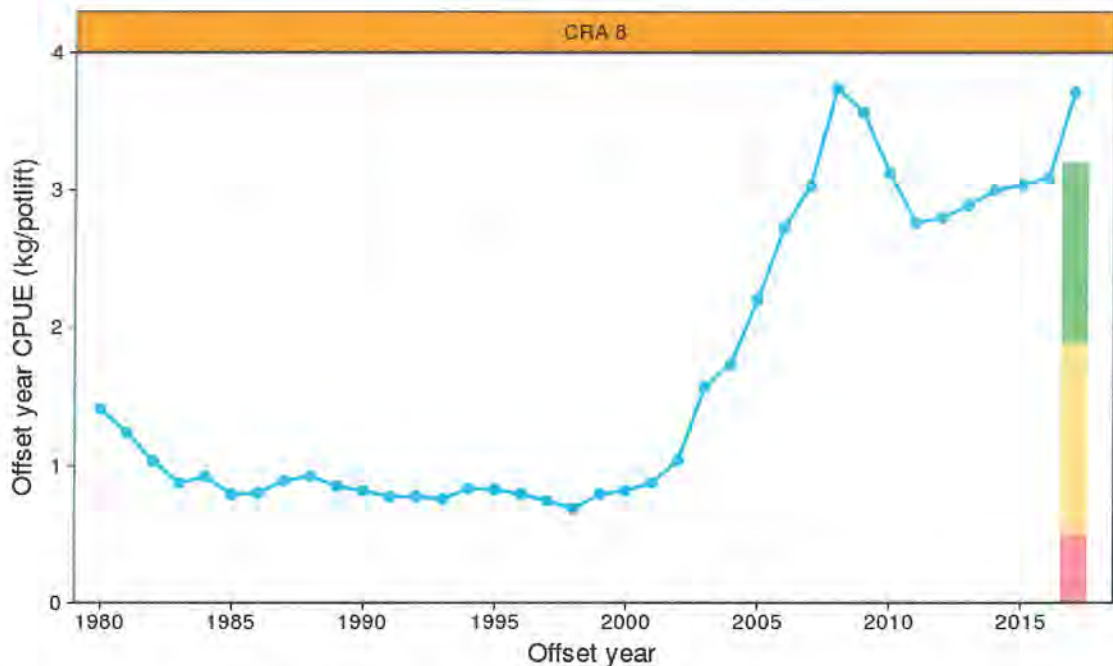
121. The management procedure for CRA 7 has only operated to increase or decrease the TACC to give effect to the variations in the TAC. The MPI statutory consultation paper proposes that the TAC decrease comes solely from a 15.52 tonne decrease to the TACC.
122. There are no reliable recreational harvest survey estimates available for CRA 7 and therefore no information to inform decision makers about catch in relation to the allocation. This situation reinforces the point made elsewhere in this submission about the imbalanced nature of the management regime with little attempt to inform decisions on recreational catch.
123. No efforts have been made to estimate illegal catch in the area for more than 15 years. The science process has little option but to use the very dated estimate.

5 CRA 8

5.1 CRA 8 MANAGEMENT AND STOCK STATUS

124. The results of the most recent CRA 8 stock assessment carried out in 2015 suggest that the CRA 8 fishery is in a very healthy state. Stock biomass in 2015 was 1.4 times the agreed reference level, Bref, and likely well in excess of the statutory target of Bmsy.
125. Standardised CPUE is considered to be a reliable indicator of relative stock size in CRA 8 and is the abundance indicator used in the CRA 8 management procedure. The history of CRA 8 commercial CPUE is shown in the figure 4 below. In recent years the CPUE has increased steadily with a marked increase in the last offset fishing year. The CPUE is now well above the plateau (the green bar on the graph below) and at 3.71 kg/pot lift is a remarkable catch rate by any standard.

Figure.5.



5.2 TACC MANAGEMENT OPTIONS

126. The operation of the management procedure (Option CRA8_02) would increase the CRA 8 TAC to 1,161.7 tonnes and the TACC to 1,070.7 tonnes (an increase of 108.7 tonnes). The application of the CRA 8 management procedure is expected to maintain the stock above Bref with greater than 50% probability. Simulation testing indicates it would maintain the stock above Bref with 99% probability.
127. The increase in the TACC will recognise the careful management of the stock and provide increased economic return to the commercial sector with utilisation benefits increasing for all sectors by maintaining the high CRA 8 abundance levels. There is no information to suggest a reservation in implementing the management procedure. The elevated stock levels achieved with this management target are supported by the CRA 8 industry, not only because it more than ensures stock sustainability, but because it delivers economic benefits

through an ability to target fishing effort at certain times of the year and certain grades when market prices are at their most favourable.

128. As with other rock lobster stocks, in CRA 8 only the TACC has been increased or decreased to give effect to the operation of the management procedure. Although there is no reason to be concerned about current levels of recreational or customary take, the situation reflects a broader issue of measurement and management by MPI focussed almost entirely on commercial catch.

5.3 SETTING ALLOWANCES

129. The MPI statutory consultation document acknowledges that little is known about recreational catch in CRA 8. The most recent estimate from the 2011-12 National Panel Survey has such a high variance that it is not reliable. The CRA 8 stock assessment has estimated a level and an assumed recreational catch trajectory. Recreational catch in the QMA is thought to be relatively modest so this is unlikely to have a material impact of the assessment process.
130. There is currently no reliable information on current levels of illegal catch. In the 2015 assessment the Rock Lobster Fisheries Assessment Working Group needed to use MPI estimates last considered in 2002 and acknowledged to be unreliable.

NZ Rock Lobster Industry Council

On behalf of

CRAMAC 2 – CRAMAC 4 – CRAMAC 7 – CRAMAC 8



Mark Edwards

Chief Executive Officer



Daryl Sykes

Chief Operating Officer



NZ ROCK LOBSTER INDUSTRY COUNCIL LTD

Ka whakapai te kai o te moana



www.nzrocklobster.co.nz

REVIEW OF ROCK LOBSTER SUSTAINABILITY MEASURES FOR 01 APRIL 2018

Revised CRA 2 submission from the New Zealand rock lobster industry.

February 19, 2018

Contents

1	Introduction	2
2	Revised proposal for TAC and TACC.....	2
2.1	Reasons for amended position	2
2.2	Recreational allocation	3
2.3	Managing recreational catch	4
2.4	Monitoring recreational catch	4
2.5	Industry investment and contribution.....	4
3	Addressing illegal fishing.....	5
4	Re-instatement of the TACC	6
5	Environmental principles and interdependence of stocks	6
6	Conclusion.....	8

1 Introduction

1. After further careful consideration of the stock assessment information, and discussion with CRA 2 quota share owners and fishermen at their 15 February AGM, NZ RLIC is submitting a position that has been revised for certain elements.
2. This new submission should be read with the NZ RLIC submission of 9 February. Most of the content of the submission remains the view of NZ RLIC and CRAMAC 2 and contains information and analysis that are relevant and should be considered by the decision maker. Where we have adjusted the 9 February submission this is set out in the material below.

2 Revised proposal for TAC and TACC

3. The CRAMAC 2 AGM fully supported a resolution that NZ RLIC should amend the submission to MPI to support a reduced TAC of 193 tonnes consisting of a TACC of 100 tonnes, a recreational allocation of 34 tonnes, a customary allocation of 16.5 tonnes, provision for illegal take of 40 tonnes and handling mortality of 2.5 tonnes.
4. A TACC reduction of this magnitude will have very serious socio-economic consequences for quota share owners, fisherman, associated businesses and iwi through unemployment, vessels off the water, loss of income of catching sector, for quota owners processors and contributors, inability to service debt, stranded assets, effects on iwi beneficiaries and flow on impacts to support businesses and regional communities. These consequences are set out in more detail in section 2.3 of our previous submission and remain relevant.
5. Despite these serious impacts, in considering the stock status and the need to put the stock on a clear rebuild trajectory with a high degree of certainty, we accept that a 50% TACC reduction is necessary. The discussion at the AGM confirmed the rock lobster industry adherence to the principles that the fishery must come first and that evidence based decision making should prevail.
6. Industry will be actively considering the support that might be necessary for their members in these very difficult circumstances. Many will not have alternative available employment opportunities, and as outlined in our previous submission, their vessels, equipment and experience will not be suitable for other fisheries, nor will they have the capital to purchase ACE for other stocks. Professional counselling, support and financial advice services may need to be considered where people wish to use those services.

2.1 REASONS FOR AMENDED POSITION

7. The new CRA 2 stock assessment considered a range of factors that could impact on a projected rebuild of the stock. There are tools to control removals by stakeholders, but environmental driven recruitment variation is not a factor that can be influenced. The only

management response is to constrain overall removals so the fishery can rebuild even if the recent lower recruitment were to persist. A TAC of 193 tonnes, with a TACC of 100 tonnes will ensure a rebuild irrespective of the range of recruitment scenarios considered by the Stock Assessment Working Group.

8. If recruitment is at the base case level (the average of the last 10 years) the stock will rebuild to the interim target in 5 years. Even if recruitment remains at the low levels estimated for the most recent years for an extended period this TAC will still ensure a rebuild to the interim target in 15 years. This low recruitment projection assumed recreational catch increasing as the biomass rebuilt. If recreational catch is constrained to support the rebuild the biomass increase trajectory will be faster.
9. The TAC of 193 tonnes therefore ensures a rebuild in a reasonable timeframe even in the most pessimistic of scenarios considered by the Stock Assessment Working Group. A 193 tonne TAC provides between an 86% and 93% probability in each of the next 10 years of that the stock will rebuild even with low recruitment. If the base case recruitment occurs there will be a 97% to 100% probability.
10. The NZ RLIC submission proposed a breakout rule that was designed to effect greater TACC reductions and accompanying changes to controls on the recreational sector if the stock declined further from its current position, as detected through CPUE changes. However, it is acknowledged that this rule would not address the situation where further deterioration of the stock position was arrested, but it did not rebuild from its current low point. Only reductions to current levels of removals will achieve that.
11. In the submissions and NRLMG discussion attention was drawn to the current estimates of vulnerable biomass in 2017 (203 tonnes) and spawning stock biomass (SSB) in 2016 (328 tonnes). These estimates suggest a high exploitation rate for the stock. This was another factor that indicated that a lower TAC and TACC would be appropriate.

2.2 RECREATIONAL ALLOCATION

12. The revised proposal from industry represents a 50% cut in the TACC, and a further 33% reduction on commercial removals in the last two years effected by the voluntary shelving. In these circumstances, at a maximum, the recreational allocation should be set at current removals. The best estimate of current removals by the Stock Assessment Working Group is 34 tonnes. In the context of further severe reductions to commercial catch it would not be responsible to consider providing for increased recreational catch by setting an allowance of 50 tonnes. In decision processes, the variation around the best estimate is considered but there is no precedent for selecting the high end of a range, or for using a six year old estimate when a more recent one is available.

2.3 MANAGING RECREATIONAL CATCH

13. The grave consequences for the CRA 2 industry, associated businesses and iwi, and the rebuild of the fishery, will be undermined if all sources of mortality are not constrained to ensure the integrity of the TAC set. This requires that immediate steps are taken to evaluate and put into effect meaningful adjustments to the controls on recreational take. These measures must take into account the likely improved fishing success for recreational fishers as the stock rebuilds. The measures need to be accompanied by implementing annual surveys to estimate recreational catch. A large proportion of submissions from the recreational sector acknowledged that the current bag limits were unsustainable in the current stock situation and that substantially lower individual daily bag limits of 2-3 were necessary and that other measures such as closures needed to be evaluated.
14. These new controls need to be implemented urgently. The level of reduction in commercial take can be expected to result very quickly in increasing availability and catch rate for recreational fishers. The management strategy evaluations show that unconstrained recreational catch expansion will slow the stock rebuild by years. It is imperative that MPI meet their stated commitment to have revised measures in place by 1 October 2018.

2.4 MONITORING RECREATIONAL CATCH

15. Having taken stringent measures to ensure stock rebuild, an improvement must be made in monitoring recreational catch so that decision makers have up to date and reliable information to inform further management interventions that might be necessary. Much has been learned from surveys undertaken in recent years and there are now hybrid on-site mechanisms that can be used to deliver cost effective annual estimates of recreational catch. Off-site survey mechanisms could be made much more accurate and less expensive if there was a free register of rock lobster fishers. Section 2.5.2 of our previous submissions outlines other options for more effectively estimating recreational take. Whatever the approach used, annual estimates of recreational take are needed to inform decisions on management of this key fishery. Just in landed revenue, industry will forego \$8.4m annually from a 50% TACC reduction. An investment by government in annual catch estimation for the recreational sector will be very modest in comparison.

2.5 INDUSTRY INVESTMENT AND CONTRIBUTION

16. Industry will continue, and enhance, its voluntary contributions and investment in the CRA 2 stock.
 - a. The CRA 2 industry is determined to continue its commitment to the log book programme and observer catch sampling. You will understand that given the exit of vessels that cannot obtain the minimum legal ACE entitlement, or no longer have economic holdings, the CRA 2 industry will need to work hard to achieve the same high level of coverage achieved in recent years.
 - b. The tag release and recapture programme will continue so the assessment team has up to date estimates of growth to inform their modelling

- c. The puerulus settlement collectors will continue to be deployed so a relative abundance time series can be developed. Over time this may provide key information that can inform assessments by providing more predictive capacity of the strength of future year classes.
- d. Industry will continue the voluntary effort spreading arrangements in statistical area 906 to help address concerns about spatial competition, noting that the fleet reduction likely as a result of a 50% TACC reduction might temper the need to continue this initiative.
- e. NZ RLIC will take the lead in developing a proposal for a new approach to pre-recruit monitoring. This will likely involve the deployment of traps specifically designed to sample animals after settlement and before they reach the minimum legal size. An index of pre-recruit strength would fill a key gap in the information available to the stock assessment team to accurately predict future stock trends. NZ RLIC will work with science advisors to develop a proposal for review by the Stock Assessment Working Group.

3 Addressing illegal fishing

17. The 50% TACC reduction proposed will result in many current operators being forced to exit the industry and find new employment, quota share holders, processors and LFRS will suffer significant revenue losses and many associated businesses will lose substantial income. In these circumstances government must implement effective new measures to reduce illegal take in CRA 2. Illegal take for purpose of sale or barter is a direct extraction from the stock that could instead contribute to the rebuild or provide harvest for legitimate users. Relatively minor infringements such as an animal under the MLS are not the activities causing substantial levels of illegal extractions – increased focus is needed on poaching and blackmarket activity that leads to large quantities of rock lobster being traded other than that authorised by legal catching entitlements.
18. The current very dated and unreliable estimates of illegal take are inadequate to inform coherent management and MPI needs to take steps to collect the necessary metrics and provide useful estimates to inform the stock assessment. The rock lobster industry confirms its commitment to offer a reward of \$5000 for provision of information to MPI that materially supports a successful prosecution for illegal take and trade of rock lobster from CRA 2. This commitment demonstrates that industry is serious about using its resources to try and reduce illegal activity. A reward system should encourage provision of new intelligence that makes MPI’s compliance operations and targeting of resources more effective.
19. Section 2.5.4 of our previous submission sets out other suggestions for improving the effectiveness of MPI’s compliance activities. This includes the introduction of telson clipping which seems to have a considerable measure of support in the recreational sector and will be a meaningful step to expose fish thieves attempting to operate under the guise of recreational fishing. NZRLIC would also be prepared to provide submissions to governments appropriation process in support of a new initiative bid for increased resources for MPI to be directed at poaching and blackmarket activity. Credible and effective new measures need

to be introduced urgently to avoid any further erosion of catch entitlements for legitimate fishers.

4 Re-instatement of the TACC

20. The revised position in this submission, including the 50% reduction to the TACC, demonstrates the commitment of the CRA 2 industry to ensuring the rebuild of the fishery. Their assets, livelihoods and lifestyle, and that of their families and communities are inextricably linked to the health of this fishery. They have proposed these measures at huge personal cost to ensure rebuild of the fishery, and can reasonably expect to derive some benefit of that rebuild in future. Likewise, the financial institutions they are in debt to will be looking for signals that the restraint and financial pressure on reducing debt burden will be eased down the track. A clear signal here may mean some operators can remain solvent and make it through the tough period.
21. It is critical in this circumstance that government gives a clear signal that when the stock assessment indicates that fishery can sustain an increase in harvest, that there will be re-instatement of the TACC. It is accepted that future increases must be considered with some care – we are not talking about risking the rebuild to the management target. It is also recognised that when that increased take can be sustained this must be shared equitably with the recreational sector, and iwi authorities will be able to relax the constraint they have applied to customary take authorisations. NZ RLIC was much encouraged by the responsible position taken in many submissions, and the discussion in the NRLMG, that recognised the interests of both the non-commercial and commercial sectors and their shared responsibility and future in the fishery.

5 Environmental principles and interdependence of stocks

22. Some submissions discussed the role that rock lobsters play in coastal marine ecosystems and suggested that lower abundance of lobsters is contributing to changes in habitats such as the prevalence of urchin barrens and loss of macrophytes. The Minister's responsibilities under the Fisheries Act to consider the interdependence of stocks, the maintenance of biological diversity and the protection of habitats of particular significance to fisheries management are acknowledged. An examination of the scientific literature both here and overseas, and particularly research has been undertaken on the north east coast of the North Island, suggests there are a number of contributing factors that are important in influencing the observed changes in these marine environments.
23. These elements include the presence and abundance of different predators on algal grazers such as urchins, recruitment, survival patterns and disease for urchins, environmental and climatic forces including water temperature, nutrients and storm events, depth and adverse impacts such as catchment derived sedimentation and pollution. Some of the evidence is contradictory, and it is certainly complex.

24. Whatever the role of abundance of rock lobster relative to other elements in these changes in community assemblages, and there is real uncertainty about the relative importance of these factors and the way they interact, taking decisive steps to rebuild the rock lobster stock to higher levels of abundance will mitigate issues that might be related to rock lobster as a predator on urchins.

6 Conclusion


25. The measures outlined in the paragraphs above are a package outlined by the CRA 2 industry and NZ RLIC to rebuild this important fishery for all stakeholders. The elements of the package are linked and mutually supporting to ensure not only an outcome of rebuilding the fishery, but making critical improvements to the management of the CRA 2 fishery. All sectors need to work together and making the necessary contribution to support the utilisation benefits they enjoy and avoid the risks of further stock depletion. Government also needs to step up and put in place arrangements to deliver on its responsibilities as a regulator.

26. The elements of the package are;

- a. Reduction of the TACC by 50% to 100 tonnes
- b. Reset the allowance for recreational fishing to 34 tonnes
- c. Meaningful adjustments to the regulatory controls on recreational take must be promulgated by 1 October 2018.
- d. Annual surveys to estimate recreational rock lobster catch in CRA 2 must be put in place to inform decisions makers.
- e. Industry will continue, and enhance, its voluntary contributions and investment in the CRA 2 stock including the log book programme and observer catch sampling, the tag release and recapture programme, the deployment of puerulus settlement collectors and voluntary effort spreading arrangements in statistical area 906.
- f. NZ RLIC will take the lead in developing a proposal for a new approach to pre-recruit monitoring for review by the Stock Assessment Working Group.
- g. New initiatives must be implemented urgently by MPI to reduce illegal fishing. Industry will, for its part provide a \$5000 reward for information leading to a successful prosecution and is actively considering further measures.
- h. MPI needs to take steps to collect the necessary metrics and develop useful illegal take estimates to inform the stock assessment.
- i. Industry will seek a commitment from the Minister to re-instatement of the TACC when the stock assessment indicates this is sustainable while not preventing the rebuild or maintaining the stock at the target.

NZ Rock Lobster Industry Council

On behalf of CRAMAC 2



Mark Edwards

Chief Executive Officer



Daryl Sykes

Chief Operating Officer

From: [REDACTED]
To: [REDACTED]
Subject: NZ RLIC and CRA 2 - revised position for 1 April 2018
Date: Monday, 19 February 2018 10:33:08 AM
Attachments: [NZ RLIC Revised CRA 2 submission for 1 April 2018 \(Final\).pdf](#)

Good morning all

After further careful consideration of the stock assessment information, and discussion with CRA 2 quota share owners and fishermen at their AGM, NZ RLIC has a position revised from that in our submission of 9 February. The CRA 2 AGM on 15 February fully supported a resolution that NZ RLIC should amend their submission to propose a reduced TAC of 193 tonnes consisting of a TACC of 100 tonnes, a recreational allocation of 34 tonnes, a customary allocation of 16.5 tonnes, provision for illegal take of 40 tonnes and handling mortality of 2.5 tonnes. NZ RLIC has lodged an amended submission with MPI (attached).

A TACC reduction of this magnitude will have very serious socio-economic consequences for quota share owners, fisherman, associated businesses and iwi but in considering the stock status, and the need to put the stock on a clear rebuild trajectory with a high degree of certainty, we accept that a 50% TACC reduction is necessary.

The stock assessment considered a range of factors that could impact on a projected rebuild of the stock. There are tools to control take by stakeholders, but environmental driven recruitment variation is not a factor that can be influenced. The only management response is to constrain overall removals so the fishery can rebuild even if the recent lower recruitment were to persist. A TAC of 193 tonnes, and a TACC of 100 tonnes will ensure a rebuild irrespective of the range of recruitment scenarios considered by the Stock Assessment Working Group.

If recruitment is at the base case level (the average of the last 10 years) the stock will rebuild to the interim target in 5 years. Even if recruitment remains at the low levels estimated for the most recent years for an extended period this TAC will still ensure a rebuild to the interim target in 15 years. This low recruitment scenario assumed recreational catch increasing as the biomass rebuilt. If recreational catch is constrained to support the rebuild the biomass increase trajectory will be faster.

The TAC of 193 tonnes therefore ensures a rebuild in a reasonable timeframe even in the most pessimistic of scenarios considered by the Stock Assessment Working Group. A 193 tonne TAC provides between an 86% and 93% probability in each of the next 10 years of that the stock will rebuild.

The NZ RLIC submission of 9 February proposed a breakout rule that was designed to effect greater TACC reductions and accompanying changes to controls on the recreational sector if the stock declined further, as detected through CPUE changes. However, it is acknowledged that this rule would not address the situation where further deterioration of the stock position was arrested, but it did not rebuild from its current low point. Only

reductions to current levels of removals will achieve that.

In the submissions, and NRLMG discussion, attention was drawn to the current estimates of vulnerable biomass in 2017 (203 tonnes) and spawning stock biomass (SSB) in 2016 (328 tonnes). These estimates suggest a high exploitation rate for the stock. This was another factor that indicated that a lower TAC and TACC would be appropriate.

The revised proposal from industry represents a 50% cut in the TACC, and a further 33% reduction on commercial removals in the last two years effected by the voluntary shelving. In these circumstances, at a maximum, the recreational allocation should be set at current removals. The best estimate of current removals by the Stock Assessment Working Group is 34 tonnes. In the context of further severe constraints on commercial catch it would not be responsible to consider increase to recreational catch to 50 tonnes. In decision processes, the variation around the best estimate is considered but there is no precedent for selecting the high end of the range for a (dated) estimate.

The measures outlined in the revised submission are a package outlined by the CRA 2 industry and NZ RLIC to rebuild this important fishery for all stakeholders. The elements of the package are linked and mutually supporting to ensure not only an outcome of rebuilding the fishery, but making critical improvements to the management of the CRA 2 fishery. All sectors need to work together and making the necessary contribution to support the utilisation benefits they enjoy and avoid the risks of further stock depletion. Government also needs to step up and put in place arrangements to deliver on its responsibilities as a regulator.

The elements of the package are;

- a. Reduction of the TACC by 50% to 100 tonnes
- b. Reset the allowance for recreational fishing to 34 tonnes
- c. Meaningful adjustments to the regulatory controls on recreational take must be promulgated by 1 October 2018.
- d. Annual surveys to estimate recreational rock lobster catch in CRA 2 must be put in place to inform decisions makers.
- e. Industry will continue, and enhance, its voluntary contributions and investment in the CRA 2 stock including the log book programme and observer catch sampling, the tag release and recapture programme, the deployment of puerulus settlement collectors and voluntary effort spreading arrangements in statistical area 906.
- f. NZ RLIC will take the lead in developing a proposal for a new approach to pre-recruit monitoring for review by the Stock Assessment Working Group.
- g. New initiatives must be implemented urgently by MPI to reduce illegal fishing. Industry will, for its part provide a \$5000 reward for information leading to a successful prosecution and is actively considering further measures.
- h. MPI needs to take steps to collect the necessary metrics and develop useful

illegal take estimates to inform the stock assessment.

- i. Industry will seek a commitment from the Minister to re-instatement of the TACC when the stock assessment indicates this is sustainable while not preventing the rebuild or maintaining the stock at the target.

Regards

Mark Edwards

CEO

NZ Rock Lobster Industry Council

[Redacted]


[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

From: 
To: [FMSubmissions](#)
Subject: Proposed changes to cray 2
Date: Friday, 9 February 2018 3:28:13 PM

Hi

I believe the option 4 would be the best for the fishery, either that or
a complete closure for a year then reduced take for BOTH recs and comms until levels are restored

Cheers

Nick

Sent from my iPhone

New Zealand Underwater Association

[Redacted]

[Redacted]



FEBRUARY 9, 2018

Ministry of Primary Industries

[Redacted]

Subject 1: New Zealand Underwater Association support for Joint Recreational Submission submitted by NZSFC-LegaSea, specifically where it applies to CRA2 - Te Arai Point to East Cape

New Zealand Underwater takes this opportunity to support the NZSFC-LegaSea Joint Recreational Submission, submitted on Friday the 9th of February, 2018, as it applies to the rock lobster management area CRA2.

The specific excerpt from the NZSFC-LegaSea Joint Recreational Submission referred to in this letter of support is:

"B. Options supported

8. CRA 2 – Closure is an option available to the Minister and must be considered given the low state of the stock. The hard limit has been breached in relation to the reference biomass (Bref) and recent recruitment is at an all-time low adding considerable uncertainty around the rebuild rates. There was significant public support for closure in our online survey. The only other option available to the Minister is to select option 4, with a 191.5t TAC, which is potentially a significant catch against a Vulnerable Biomass estimated at 203 t in 2017. The submitters have their doubts about the effectiveness of this option but recognise that the Minister must weigh the economic, social, and cultural costs of his decision.

The choice is left to the Minister.

On the basis that there will be a significant reduction in the TAC to allow CRA 2 stock to be rebuilt as soon as possible, the submitters support a 50t allowance for recreational fishers. This coincides with the upper bound of the most defensible recreational harvest survey estimate."

Reference: Joint recreational submission on the review of rock lobster sustainability measures for 1 April 2018, Page 2 - 3

Subject 2: Submissions in the case of rock lobster management areas CRA 4 (Wellington/Hawkes Bay), CRA 7 (Otago) and CRA 8 (Southern).

As of today, the New Zealand Underwater Association does not believe it is in a position to make a formal submission or to support another organisation's submission on these rock lobster management areas.

The NZUA (a nation-wide body established in 1953, directly representing recreational divers) is not aware of any formal invitation to public consultation for these management areas. The NZUA believes the information distributed on 12th of January, 2018 (only 4-weeks ago during a holiday period) requires more detail and a longer period of consultation with its membership in the affected areas before any informed and democratic submission on behalf of recreational divers can be made.

The New Zealand Underwater Association takes this opportunity to formally request an extension of 90-days to the MPI submission date of 9 January, 2018, to allow it to consult properly with its members and the public in order to supply such an informed and democratic submission.



On behalf of the New Zealand Underwater Association

Tristan Reynard,

President,

New Zealand Underwater Association

About New Zealand Underwater:

New Zealand Underwater is the country's recognised leading not-for-profit organisation promoting and advocating safe and enjoyable underwater activities in a protected marine environment.

The Association, established in 1953, is comprised of three distinct user groups including Spearfishing NZ, affiliated scuba clubs throughout the country and Underwater Hockey NZ.

NZU's large and diverse audience is bound by a common thread of passion for underwater sports and the environment these activities are conducted in. The Association boasts a social media audience of 43,784 followers and conducts regular marketing campaigns focused on safety and environmental issues.

A snapshot of safety-focused media activity for 2018 to date includes:

- 197,470 safety campaign Video Views on YouTube and Social Media
- 3,465,000 safety campaign impressions across a range of advertising networks



Submission to the Ministry for Primary Industries on Review of sustainability measures for rock lobster (CRA 2, 4, 7 & 8) for 2018/19

31 January 2018

Introduction

1. The Pāua Industry Council (PIC) has a practical interest in the Ministry for Primary Industries' *Review of Sustainability Measures for Rock Lobster (CRA 2, 4, 7 & 8) for 2018/19*. Like many rock lobster stocks, pāua is a highly valued “shared fishery”. The pāua industry therefore encourages the Minister to use the rock lobster sustainability review to set a positive precedent and send a strong signal about the new Government’s commitment to the effective management of shared fisheries.
2. Improving the management of shared fisheries requires the following basic steps to be taken, each of which is addressed in more detail below in relation to the CRA stocks under review and recent experiences with pāua fisheries:
 - Obtaining better information on recreational harvest levels;
 - Requiring all sectors to contribute to rebuilding a stock;
 - Constraining recreational catch within the allowance;
 - Improving certainty about the distribution of future benefits; and
 - Reducing opportunities for illegal harvest.
3. New Zealand’s rock lobster fisheries are a leading example of good fisheries management practice. In particular, the advisory role of the multi-stakeholder National Rock Lobster Management Group (NRLMG) and science-based decision-making using management procedures (decision rules) are elements that PIC aspires to in the management of pāua fisheries. PIC therefore supports the continued effective operation of the NRLMG and we conclude our submission with some comments on this aspect of the consultation document.

Better information on recreational harvest

4. The consultation document demonstrates that lack of accurate information on recreational catch remains a significant barrier to the effective management of shared fisheries such as CRA 2. The most recent “least biased” recreational survey was undertaken in 2011/12 and the results of the next recreational survey will not be available until 2019, leaving a deplorably long time between

surveys. The 2017 CRA 2 stock assessment relies on modelled recreational catch trajectories rather than up-to-date, verifiable catch data.

5. Given the value of CRA 2 and other important shared fisheries such as pāua to recreational, customary and commercial fishers, PIC considers the lack of credible, timely information on non-commercial removals to be unacceptable. In the absence of accurate information on all sources of removals:
 - It is not possible to design management interventions that will effectively constrain recreational catch within the recreational allowance and enable stock management targets to be achieved;
 - The Act's purpose of "ensuring sustainability" may be compromised by unconstrained growth in recreational harvest levels as stock abundance increases; and
 - Precautionary TAC and TACC decisions will be required, leading to foregone economic opportunities for all sectors and undermining the "utilisation" purpose of the Fisheries Act.
6. PIC urges the Minister to direct MPI to give priority to obtaining accurate information on the harvest levels of all sectors. New Zealand prides itself on its "world leading" QMS but our management of recreational fishing – starting with information on recreational harvest – lags behind world's best practice as defined by the United Nations Food and Agriculture Organisation (FAO). The FAO's 2012 guidelines for responsible recreational fisheries recommend that recreational fishing should be licensed under all types of management regimes. The FAO notes that licensing need not be fee-based in order to be useful. Even licensing regimes with no fees provide important information to help with fisheries management.
7. Many other jurisdictions have developed recreational data collection models that New Zealand could learn from. In Maine, for example, fishers pay a nominal \$1 registration fee, allowing the state to monitor how many people are fishing recreationally in its waters. In California, recreational fishing licences are generally required. Although children under sixteen don't need a licence to catch lobster they must still fill out catch reports. Each time a recreational fisher takes one of California's highly valued red abalone they must enter the catch on an Abalone Report Card and attach one of the 18 tags appended to the report card to the shell of the abalone. Tagging recreational catch is also adopted in some Australian states (e.g., for rock lobster in Victoria) as a means of both improving information about harvest levels and reducing illegal take.
8. In New Zealand, even a basic, zero-fee registration system would provide a better understanding of how many people are fishing. Identifying recreational fishers would improve the efficiency and reduce the cost of estimating recreational harvest. Add to that a simple reporting or tagging requirement in key shared fisheries, and we would have timely, more reliable information on what is being taken.

All sectors should contribute to stock rebuild

-
9. While we understand that the Fisheries Act provides the Minister with wide discretion when allocating the TAC, PIC promotes an allocation approach that ensures all sectors contribute to the rebuilding of a stock. Expecting the commercial sector to contribute disproportionately to rebuilding depleted stocks undermines the incentives for investment and sustainability that the QMS was designed to encourage. In a politicised fisheries management environment where quota owners are uncertain that the constraints they exercise today will be rewarded by benefits of increased future stock abundance, their willingness to support TACC reductions and to implement voluntary management measures will be weakened.
 10. In 2016 the pāua industry was subjected to management decisions that required quota owners to bear 100% of the costs of rebuilding the PAU 7 (Marlborough) fishery – the PAU 7 TACC was reduced by 50% but the recreational allowance and daily bag limits were left unchanged. Decisions like this are contrary to achieving the objectives of the QMS because they undermine the essential principle that all users have a shared interest in the health of the stock. In the case of CRA 2 we consider that it is critical that all sectors actively contribute to the rebuild. We note that the CRA 2 TACC was reduced by 15% in 2014 (with no reduction in the recreational allowance), and the CRA 2 industry has shelved a further 25% of quota in each of the last two fishing years. All options in the consultation document entail significant reductions in commercial catch. In these circumstances the Minister should not be contemplating any increase in recreational catch. The best estimate of current recreational catch is 34 tonnes. An allowance of more than 34 tonnes would be contrary to the Court of Appeal’s ruling in *NZFIA v Minister of Fisheries* that the allowance is simply the best estimate of what recreational fishers will catch while being subject to the controls which the Minister decides to impose upon them.¹
 11. The tables in MPI’s consultation document present a single option for the recreational allowance – i.e., 50 tonnes, which is significantly higher than the current estimated catch. A 50 tonne allowance would provide for an increase, rather than constraint, of recreational catch as stock abundance gradually improves. Furthermore, PIC does not understand why MPI has not presented the NRLMG’s recommended alternative 34 tonne recreational allowance as a valid option of equivalent status to MPI’s proposed 50 tonne allowance. The consultation document provides no rationale for the 50 tonne option, but there is a clear rationale for an allowance based on the current estimated catch of 34 tonnes.

Constraining recreational catch within the allowance

12. Setting a new recreational allowance (whether 34 or 50 tonnes) is meaningless unless management measures are established to constrain recreational catch within the recreational allowance both immediately, and as the stock rebuilds. If recreational harvest is able to grow beyond the bounds of the recreational allowance, the sustainability benefits and stock rebuild rates intended to be delivered through careful setting of the TAC and TACC will be lost. The Courts have emphasised the

¹ *New Zealand Fishing Industry Association (Inc) v Minister of Fisheries* CA 82/97, 22 July 1997.

■

need for the Minister to “restrain recreational fishing in a way which seeks to prevent the commercial sacrifice being caught on recreational hooks”.²

13. The pāua industry does not support MPI’s current management approach of de-coupling changes to the recreational allowance from the review of recreational regulations such as daily bag limits. Stakeholders have no certainty that anything will be done to constrain the level of recreational harvest within the new allowance. Even if management measures are eventually adopted, the time delay often reduces the benefits of the intended catch reduction as recreational harvest continues unchecked in the interim. In the case of CRA 2, the management strategy evaluation projections show that unconstrained recreational catch expansion (as stock abundance increases) will slow the stock rebuild by many years.
14. Pāua fisheries provide a telling recent example of this concern. Following the Kaikōura earthquake in November 2016, the Kaikōura-Cape Campbell pāua fishery (part of PAU 3 and PAU 7) was closed to all sectors. MPI has been aware for some time that recreational fishing effort is being displaced to areas north (Marlborough Sounds) and south (Motunau, Banks Peninsula) of the closed area. In October 2017 quota owners in PAU 3 took a 50% TACC cut and in PAU 7 a further 10% cut on top of 2016’s 50% TACC reduction. However, four months later (covering the peak summer fishing season) no constraints on recreational catch have been put in place, or even proposed, for either fishery.
15. We appreciate that recreational fishing regulations are amended through a separate process, but nevertheless consider that controls on recreational fishing should have been proposed – for PAU 3 and PAU 7, as well as for CRA 2 – at the same time that consultation is undertaken on TACs and allowances. When setting a recreational allowance, the Minister must make a judgement on the anticipated and allowable level of recreational catch which is directly dependent on the regulatory settings for recreational bag limits and other controls. The two decisions are not unrelated.
16. We therefore recommend that reviews of recreational management measures should be undertaken and implemented immediately for PAU 7, PAU 3 and CRA 2.

Improving certainty about future benefits

17. The corollary of PIC’s position that all sectors should contribute to rebuilding a fishery, is that all sectors should be confident of benefiting once the stock is rebuilt. However, uncertainty over future allocation of shared fishstocks means that the commercial sector can never be sure that sacrifices they make today will be worth their while in terms of actual future benefits. In PIC’s experience, this uncertainty is demonstrably affecting the industry’s willingness to take and support management actions that are in the best interests of fisheries sustainability. Increasingly, we are seeing quota owners seek assurance from government that the industry’s support for and implementation of conservative management measures today will be recognised through re-instatement of the TACC once the stock has rebuilt. For example, PauaMAC 3 has raised these concerns with Ministers in

² Ibid, page 18.

relation to post-earthquake management measures in PAU 3. This is also a very real concern for the CRA 2 industry.

18. PIC strongly urges the Minister to take the necessary steps to provide quota owners with greater confidence that the rebuilding of fisheries will not be used by government as an opportunity to reallocate catch shares from the commercial sector to the recreational sector – either actively through changes to TACCs and allowances, or passively by failing to constrain recreational harvest within allowances. Assurance could be provided by developing a generic policy position or offering fisheries-specific undertakings. We consider that these assurances – which have zero implementation costs – would considerably enhance the economic performance of the industry by providing a more secure environment for investment, as well as supporting fisheries sustainability.

Reducing opportunity for illegal harvest

19. PIC considers that current levels of illegal harvest in high value fisheries such as pāua and rock lobster, although imprecisely estimated, are unacceptable. The estimated 40 tonnes for illegal fishing in CRA 2 should be available for legitimate harvesting sectors, not for fish thieves.
20. Careful analysis is required to reduce opportunities for theft by altering management settings in high value fisheries – in particular, by ensuring that recreational catch and fishing activity is clearly distinguishable so that illegal fishing is more obvious. In fisheries such as pāua and rock lobster, steps that could be taken include marking recreational catch (e.g., by tagging or, for rock lobster, telson clipping), labelling recreational fishing gear, and registering recreational fishing vessels. Consideration should also be given to the role that closed areas (i.e., where commercial fishing is prohibited) play in facilitating the occurrence of illegal fishing.

The NRLMG

21. PIC has no direct involvement in the operation of the NRLMG but, as mentioned at the beginning of this submission, we have an interest in supporting its effective operation. It is therefore with considerable concern that we observe that MPI has downplayed and marginalised the role of the NRLMG in the consultation document. We have already noted that MPI has not afforded the NRLMG's option of a 34 tonne recreational allowance the same status in the consultation document as the MPI-preferred 50 tonne allowance. This suggests that MPI is distancing and distinguishing itself from the NRLMG by providing a separate stream of advice.
22. In the 2016 review of management measures for rock lobster the NRLMG is described as ***“the primary advisor to the Minister for Primary Industries on catch limit, regulatory and other management actions that apply specifically to rock lobster fisheries”***. The NRLMG is also *“the primary advisor to the Minister”* in the 2017 review. However, in the current consultation document the NRLMG is described as ***“an advisor on rock lobster management matters”***. It is not clear whether this change in status reflects a change in the terms of reference in the NRLMG, a change of MPI's role within the NRLMG, a change in the Minister's relationship with the NRLMG, or a change in policy as to how MPI interacts with fisheries stakeholders generally.



23. Whatever the cause, PIC considers this to be an extremely unhelpful development. It sends bad signals to other shared fisheries such as pāua who are aspiring to a more collaborative, inclusive and transparent approach to fisheries management.

A handwritten signature in black ink that reads "Storm Stanley". The signature is written in a cursive, slightly slanted style.

Storm Stanley
Chairman
Pāua Industry Council

Submission Form

Review of sustainability measures for 1 April 2018

Once you have completed this form

Email to: FMSubmissions@mpi.govt.nz

While we prefer email, you can also post your submission to: 2018 Sustainability Review, Fisheries Management, Ministry for Primary Industries, PO Box 2526, Wellington 6140, New Zealand.

Submissions must be received no later than 5pm on Friday 9 February 2018.

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

Submitter details:

Name of submitter or contact person: Peter Quilter	
Organisation (if applicable):	
Email <input type="text"/>	
Fishstock this submission refers to: <i>Rock lobster – CRA 2, CRA 4, CRA 7, CRA 8</i> <i>Sea cucumber – SCC 3, SCC 7B</i> <i>Southern blue whiting – SBW 6B.</i>	CRA2
Your preferred option as detailed in the discussion paper (write "other" if you do not agree with any of the options presented):	CRA2_01

Official Information Act 1982

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

I support rebuilding the CRA 2 (Hauraki Gulf/Bay of Plenty) fishery through decreases to the TAC, the recreational and other mortality allowances, and the TACC. I am 34 years old and spent much of my life in the Mercury Bay area and being a keen spear fisherman it appears to me that there are much fewer crayfish than there used to be (Figure 6.3 would this story much better if it were normalised for catching effort). Although I agree that population fluctuations naturally occur as a result of variable inter decadal weather patterns, this decline has gone on for too long. The TAC and TACC collectively need to be reduced now.

I support CRA2 01 because this represents the most significant reduction and is consistent with the Precautionary Principle to cope with possible risks where scientific understanding is yet incomplete. The immediate financial risk to the livelihoods of commercial operators is overshadowed by a collapse in the medium to long term. These discussions would not be on the table if it were not.

Recreational fisherman need to realise that 6 Cray per day is not reasonable anymore. Recreational pressure in CRA 2 outgrew this limit quite some time ago. Additionally, there needs to be some means of licencing comparable to western Australia to monitor future catch volumes.

In the long term, there appears much less risk associated with a precautionary approach. If a significant cut is made this time, perhaps TAC and TACC could be increased in the future? At least then we will have a functioning quota management system.

From: [REDACTED]
To: [FMSubmissions](#)
Date: Thursday, 1 February 2018 9:00:38 PM

For the bop region I am a recreational diver who finds it almost impossible to get a feed of crayfish in the motiti island area anymore. The commercial boats are extensively potting the area year round and seem to have literally wiped out the stocks. I believe a cut to 3 or 4 crayfish per diver and cut in commercial catch would help

Submission Form

Ministry for Primary Industries
Manatū Ahu Matua



Review of sustainability measures for 1 April 2018

Once you have completed this form

Email to: EMsubmissions@mpi.govt.nz

While we prefer email, you can also post your submission to: 2018 Sustainability Review, Fisheries Management, Ministry for Primary Industries, PO Box 2526, Wellington 6140, New Zealand.

Submissions must be received no later than 5pm on Friday 9 February 2018.

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

Submitter details:

Rich Bayley	
Organisation (if applicable):	
Fishstock this submission refers to: <i>Rock lobster – CRA 2, CRA 4, CRA 7, CRA 8</i> <i>Sea cucumber – SCC 3, SCC 7B</i> <i>Southern blue whiting – SBW 6B.</i>	CRA2
Your preferred option as detailed in the discussion paper (write "other" if you do not agree with any of the options presented):	I support rebuilding the CRA 2 (Hauraki Gulf/Bay of Plenty) fishery through decreases to the TAC, the recreational and other mortality allowances, and the TACC.

Official Information Act 1982

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I support rebuilding the CRA 2 (Hauraki Gulf/Bay of Plenty) fishery through decreases to the TAC, the recreational and other mortality allowances, and the TACC.

Inter decadal weather patterns considered, this decline has gone on for too long.

The immediate financial risk to the livelihoods of commercial operators is overshadowed by a collapse in the medium to long term. These discussions would not be on the table if it were not.

Recreational fisherman need to realise that 6 Cray per day is not reasonable anymore. Recreational pressure in CRA 2 outgrew this limit quite some time ago.

In the long term, there appears much less risk associated with a precautionary approach. If a significant cut is made this time, perhaps TAC and TACC could be increased in the future? At least then we will have a functioning quota management system.



Submission Form

Review of sustainability measures for 1 April 2018

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Email to: FMSubmissions@mpi.govt.nz

While we prefer email, you can also post your submission to: 2018 Sustainability Review, Fisheries Management, Ministry for Primary Industries, PO Box 2526, Wellington 6140, New Zealand.

Submissions must be received no later than 5pm on Friday 9 February 2018.

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

Submitter details:

Name of submitter or contact person: Richard Maddock	
Organisation (if applicable):	
Email <input type="text"/>	
Fishstock this submission refers to: <i>Rock lobster – CRA 2, CRA 4, CRA 7, CRA 8</i> <i>Sea cucumber – SCC 3, SCC 7B</i> <i>Southern blue whiting – SBW 6B.</i>	CRA2
Your preferred option as detailed in the discussion paper (write "other" if you do not agree with any of the options presented):	CRA2_04

Official Information Act 1982

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Submission:¹

Details supporting your views:

I fish and dive the Hauraki Gulf and there are very few crays about these days.

In the 10years I have dived the crays have become harder and harder to find and I would like to teach my children to catch them if things keep as they are going this won't be achievable.

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

Submission Form

Review of sustainability measures for 1 April 2018

Once you have completed this form

Email to: FMsubmissions@mpi.govt.nz

While we prefer email, you can also post your submission to: 2018 Sustainability Review, Fisheries Management, Ministry for Primary Industries, PO Box 2526, Wellington 6140, New Zealand.

Submissions must be received no later than 5pm on Friday 9 February 2018.

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

Submitter details:

Name of submitter or contact person: Rodney Waterhouse	
Organisation (if applicable):	
Email:	
Fishstock this submission refers to: <i>Rock lobster – CRA 2, CRA 4, CRA 7, CRA 8</i> <i>Sea cucumber – SCC 3, SCC 7B</i> <i>Southern blue whiting – SBW 6B.</i>	CRA2
Your preferred option as detailed in the discussion paper (write "other" if you do not agree with any of the options presented):	other 140Tonne TACC 34Tonne Recreational

Official Information Act 1982

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Submission:

Details supporting your views:

Back ground

My wife and myself are commercial rock lobster fishers with 34 years' experience in the CRA2 907 statistical area (Bay of Plenty). 5 years ago our son returned home to carry on with the fishing business making it a 2nd generation family business. We operate from a small coastal town, this is a familiar scenario of many commercial rock lobster fishers throughout CRA2.

Our experience has shown CRA2 has never been a high catch fishery compared with other lobster fisheries in New Zealand. We have relied on small pulses of recruitment to sustain the fishery in the various statistical areas, it appears 907 receives a greater and more consistent recruitment pulse than the others.

Since 1996 the CRA2 industry has contributed substantially to the fishery through investment in a range of research and stock monitoring, such as the log book program, tagging, annual sex / size assessment, this has brought the fishery from one of little knowledge pre 1996 to one of the best researched lobster fisheries with about 50% of the CRA2 fleet contributing to this data gathering. Commercial lobster fishers are passionate about the fishery and want to ensure sustainability hence the voluntary shelving of 25% of the TACC for two years 2015-2017 to assist with the re-build, this equates to approximately 8 million dollars of lost earnings.

Stock status

Scientific evidence shows there has been low lobster recruitment in the CRA2 and TAC adjustment is required to ensure a stock rebuild. A picture has been painted that all of CRA2 statistical areas are in a critical state of decline this is not correct, although all areas have suffered stock decline, 906 has been the worst effected, other statistical areas within CRA2 show the stock decline has bottomed or started to recover. My on the water observations and data collected show we have had recruitment in the past season but as it falls outside of the stock assessment period so does not reflect what I believe to be the current status. My observations have also been confirmed other lobster fishers and divers in the 907 area. I am confident the 907 statistical area has already started the re-build.

Re-build

There has been a lot of finger pointing, emotional accusations as to why stock levels have declined. The quota management system remains the best tool in managing fisheries, it appears those not involved in the fishery struggle to understand this is a shared fishery and all sectors need to contribute to the rebuild. The TACC was reduced in 2013, industry voluntary shelved a further 25% of quota for the last two fishing seasons, Iwi have outlined their intent to be conservative in authorising customary take, in recent consultation workshops recreational fisher indicated their willingness to contribute to the re-build but to date failed to offer any practical solution as to how better recreational fishers can improve catch data or manage allocation share, such as reduced bag limits or removing accumulative catches.

It has been indicated from the Fishery Assessment Working Group a further 30% of TACC to 140 Tonnes and if recreational catch is retained to the current estimated 34 tonne the fishery would re-build over a 9 year period. This would seem to be an acceptable time frame. This TACC reduction will impact heavily on the commercial sector financially any greater TACC reduction would have minimal impact on a re-build (i.e. 120t TACC = 7 year re-build) but have catastrophic social economic consequences to the industry and communities. Vessels would be forced out of the industry, loss of assets, loss of confidence from the financial sector, jobs as well as financial impact on the small communities many lobster fishers operate from.

A re-build target of twice the current commercial CPUE is a realistic one, some statistical areas will achieve this target easier than others, the ability to micro manage CRA2 will become important. Reinstatement of lost TACC as stock levels improve is imperative to ensure the financial wellbeing of fishers and confidence in the CRA2 lobster industry

Way forward.

Monitoring of stock / catch rates are essential.

Catch data from the commercial sector is accurate, easily obtained and assessed this is not so for the other sectors (recreational and customary) it is impossible to manage a fishery when you do not have complete data. Urgency must be placed on methods of obtaining regular and accurate data on recreational and customary catches.

Scientific assessments have traditionally used historic data for stock assessment, I believe better data collection from the recreational & Iwi sectors coupled with better use of current collected commercial data would greatly assist with forward projection and micro manage the fishery rather than the knee jerk reaction we have experienced in the past.

Illegal take

This is the blight in the fishery, it is not acceptable to have the estimated 40 tonne removed by fish thieves, MPI must put a halt to this activity, why should legitimate fishers (recreational, Iwi & commercial) suffer at their hands.

Telson clipping has been used successfully in Australia for many years, this clearly distinguishes a recreational caught lobster from commercial. This alone will greatly assist MPI officers in crushing the lobster black market.

Summary

- CRA2 has never been a highly productive fishery, it is unrealistic to expect it to match other NZ lobster fisheries
- Each statistical area within CRA2 is unique, it may not be practical to manage CRA2 as one fishery and micro management should be considered.
- The commercial sector has contributed greatly over the past 20 years in research and data collection, these needs to be acknowledged, encouraged to continue.
- The commercial sector cannot rebuild the fishery in its own, other sectors must contribute.
- Recreational catch must be capped at 34 tonne.
- TACC reduction below 140tonne will have severe social economic consequences to the industry and communities.
- Set a re-build target of 2 x current CPUE, micro-manage as statistical areas reach the target.
- More accurate catch reporting from recreational and customary.
- Telson clipping introduced to assist with the eradication of illegal catch.
- Better use of current data to predict future stock
- Re-instatement of the TACC once stocks have recovered.

From: [REDACTED]
To: [FMSubmissions](#)
Subject: FW: Review of the CRA2 rock lobster fishery
Date: Friday, 9 February 2018 12:22:48 PM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.jpg](#)

From: Info [REDACTED]
Sent: Friday, 9 February 2018 9:02 a.m.
To: 'Scott Tindale' [REDACTED]
Subject: RE: Review of the CRA2 rock lobster fishery

Thank you for your interest in submitting your views on the 2018 sustainability review of the CRA 2 rock lobster stock.

To find out more about the proposal and to make a submission, please visit <https://www.mpi.govt.nz/news-and-resources/consultations/review-of-sustainability-measures-for-1-april-2018/>

Consultation on the proposed changes closes at 5pm on 9 February 2018.

A submission form is available at the website above to help you give feedback. However, you don't have to use the form.

Submissions can be sent to MPI by email or post.

Please send your submission to:
Email: FMSubmissions@mpi.govt.nz

Post:
Fisheries Management
Ministry for Primary Industries

[REDACTED]
[REDACTED]

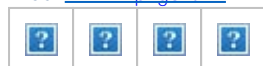
We look forward to hearing from you

Regards,

Stacey Moir | Customer Enquiries Coordinator
Ministry for Primary Industries - Manatu Ahu Matua

[REDACTED]

Web: www.mpi.govt.nz





From: Scott Tindale [REDACTED]
Sent: Thursday, 8 February 2018 8:00 PM
To: Info [REDACTED]
Subject: Review of the CRA2 rock lobster fishery

HI I would like to support the option 3 with a further reduction to recreational take to 34t to help the rebuild.

Cheers
'S. Tindale

Sent from my Samsung device

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 [REDACTED] or notify us by return email and erase the original message and attachments. Thank you.

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From: [REDACTED]
To: [FMSubmissions](#)
Subject: Review of sustainability measures for 1 April 2018
Date: Thursday, 8 February 2018 7:12:40 AM

NAME: Shaun Lee
EMAIL: [REDACTED]
REF: Rock lobster – CRA 2
PREFERRED OPTION: Other

Under MPIs care crayfish (*Jasus edwardsii*) have become functionally extinct in the Hauraki Gulf (*State of our Gulf 2014*). The entire fishery now faces the real possibility of collapse. I am very surprised that a complete closure was not listed as an option in Table 6.1. Please close the fishery immediately for future generations.

sl

Shaun Lee

[REDACTED]

IN THE MATTER OF:

**REVIEW OF SUSTAINABILITY MEASURES FOR
ROCK LOBSTER (CRA 2, 4, 7 & 8) FOR 2018/2019**



SUBMISSION OF SPEARFISHING NEW ZEALAND



About the Submitter

This is the submission of Spearfishing New Zealand Incorporated (SNZ). We are an Incorporated Society representing the interests of freedive spearfishers in New Zealand. We are a distinct sub-group of the recreational fishing sector.

Freedive spearfishers are active in the CRA fisheries.

SNZ reports directly to approximately 5,294 divers nationwide. The wider freedive spearfishing community is approximated by the 12,525 members of the most active (NZ) social media pages in our sport.

All our members rely on abundant fisheries as a food source and for the recreation value of harvesting.

CRA Consultation

We have read the Joint Recreational Submission prepared by NZ Sport Fishing Council and LegaSea.

Whilst we are unable to complete a full submission in the short consultation period, we support the views expressed in the Joint Recreational Submission.

We thank MPI for the opportunity to submit on these important issues, and look forward to assisting MPI in future decision making that affects our members.

Kind Regards,

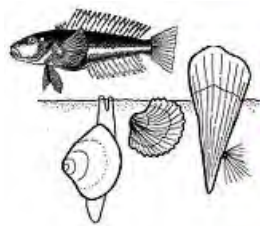
Reid Quinlan
Secretary
Spearfishing New Zealand
8 February 2018

[Redacted]

[Redacted]

[Redacted]

[Redacted]



SPECIALTY & EMERGING FISHERIES

[REDACTED]

Sustainability Review 2018
Fisheries Management
Ministry for Primary Industries

[REDACTED]

6th February 2018

Emailed to: FMsubmissions@mpi.govt.nz

Submission from the Specialty & Emerging Fisheries Group (S&EF) on the proposed Review of Sustainability Measures for Rock Lobster (CRA 2, 4, 7 & 8) for 2018/19: MPI Discussion Paper No: 2018/02

Introduction

The Specialty and Emerging Fisheries Group (S&EF Group) is a representative collective of commercial fishing associations operating mainly niche fisheries and markets, including Southland blue cod (BCO5). The contact person is Mr Bill [REDACTED]

This submission is made on behalf of S&EF Group for CRA8 only. S&EF Group has no comment to make on proposals outside CRA8. S&EF Group is involved with CRA8 because a large number of Southland-based blue cod fishermen and fish processors also deal with crayfish, and the catching method (potting) is similar.

Proposal for CRA8: S&EF Group supports OPTION 2

With regard to the Discussion Paper's proposals for CRA8, S&EF Group also supports the submission from the CRA8 Rock Lobster Industry Association Inc, and agrees with all points made in their submission.

The reasons why we support Option 2 for CRA8 is because S&EF Group supports sustainable fisheries management based on robust and transparent science. In the case of CRA8, the science has shown that the proposed TAC and TACC increases are justified, and under the present management process it is likely that these increases will be sustainable.

Yours faithfully

[REDACTED]

W. Chisholm



Submission Form

Review of sustainability measures for 1 April 2018

Once you have completed this form

Email to: FMsubmissions@mpi.govt.nz

While we prefer email, you can also post your submission to: 2018 Sustainability Review, Fisheries Management, Ministry for Primary Industries, PO Box 2526, Wellington 6140, New Zealand.

Submissions must be received no later than 5pm on Friday 9 February 2018.

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

Submitter details:

Name of submitter or contact person: Steven Greene	
Organisation (if applicable):	
Email:	
Fishstock this submission refers to: <i>Rock lobster – CRA 2, CRA 4, CRA 7, CRA 8</i> <i>Sea cucumber – SCC 3, SCC 7B</i> <i>Southern blue whiting – SBW 6B.</i>	CRA2
Your preferred option as detailed in the discussion paper (write "other" if you do not agree with any of the options presented):	Other. Need an option where the quota reductions are an equal percentage across all stakeholders (commercial, recreational & customary)

Official Information Act 1982

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Details supporting your views:

CRA 2 needs to be split in at least 2 separate management areas - Hauraki Gulf/Coromandel and Bay of Plenty. It seems there are smaller subset areas of populations within the CRA 2 management area which differ greatly in stock health, so why try to manage these together as a single large area? Some small areas would be considered fairly healthy, whilst some areas would be considered "functionally extinct". Geographic micro management is required.

Crayfish as a resource are worth more (not necessarily in terms of financial worth) to New Zealanders as a recreational past-time to catch them and as a food source, rather than an export where profits and benefits are only realised by very few individuals. The 'gold rush' exploitation days of the NZ Crayfishery are over...

It's very frustrating to see that every option proposed by MPI included a 65% cut in recreational tonnage, whereas the TACC biggest proposed quota cut is only 60%. Meanwhile customary catch has no proposed reductions. Not a fair proposal at all. Why are different stakeholders treated differently? Surely the interests of the wider public (recreational) carry more weight than the interests of a select few quota holders and commercial fishermen?

I would be in support of a full seasonal closure when female crayfish are in berry. With regard to recreation catch, I would also be in favor of a decrease in recreational bag limit instead of any proposed short season put in place like has been done in the Scallop fishery - Crayfish are in good edible condition all year round (apart from females in berry) and I like to gather crayfish all year round (even in mid-winter).

I would also like to see the recreational bag limit be different depending on catch method. Recreational pot fishermen should have a lower bag limit than freedivers & scuba divers.

I would also like to see a system where levies are paid by commercial quota holders that goes into re-seeding areas with hatchery bred juvenile crayfish (when the technology allows) or at least to fund micro marine reserves within their quota management areas.

Submission Form

Review of sustainability measures for 1 April 2018

Once you have completed this form

Email to: FMSubmissions@mpi.govt.nz

While we prefer email, you can also post your submission to: 2018 Sustainability Review, Fisheries Management, Ministry for Primary Industries, PO Box 2526, Wellington 6140, New Zealand.

Submissions must be received no later than 5pm on Friday 9 February 2018.

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

Submitter details:

Name of submitter Kia Maia Ellis or contact person:	
Organisation (if applicable): Tauranga Moana Iwi Customary Fisheries Trust	
Email: <input type="text"/>	
Fishstock this submission refers to: <i>Rock lobster – CRA 2, CRA 4, CRA 7, CRA 8</i> <i>Sea cucumber – SCC 3, SCC 7B</i> <i>Southern blue whiting – SBW 6B.</i>	CRA2
Your preferred option as detailed in the discussion paper (write "other" if you do not agree with any of the options presented):	Other

Official Information Act 1982

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

Submission:¹

Details supporting your views:

The Tauranga Moana Iwi Customary Fisheries Trust supports a reduced TAC of the CRA2 fishery to enable a sustainable fishery.

Under the customary fishing rights of the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992 and the 1992 Deed of Settlement, we agree that the customary allowance remains at 16.5 tonnes. Particularly given that the customary allocation is very small in comparison to commercial and recreational sectors.

Under the Deed of Settlement, MPI has specific obligations to Māori to provide for;

- Customary fisheries management practices; and
- Traditional gathering of fish.

We support the reduced commercial allowance of 120 tonnes, and the reduced alternative recreational allowance of 34 tonnes.

Other mortality could be reduced to 45 tonnes if rebuilding of stock measures are implemented, including enhancement of the rock lobster fishery to reduce mortality. Assisting migration of rock lobsters where populations have been depleted has been proven successful elsewhere.

The Tauranga Moana Iwi Customary Fisheries Trust will be available to engage with MPI to discuss this matter further where appropriate.

Noho ora mai,

Kia Maia Ellis

Tauranga Moana Iwi Customary Fisheries Trust

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

9 February 2018

National Rock Lobster Management Group
C/O Ministry for Primary Industries

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

Tēnā koutou,

Review of Rock Lobster Sustainability Measures for 2018/19 - 2018/02

1. Te Ohu Kaimoana Trustee Ltd (Te Ohu Kaimoana) is the corporate trustee of Te Ohu Kaimoana Trust. The purpose of the trust is to advance the interests of iwi individually and collectively, primarily in the development of fisheries, fishing, and fisheries-related activities. Te Ohu Kaimoana welcomes the opportunity to submit on the review of rock lobster sustainability measures for 1 April 2018.
2. This submission responds to the NRLMG review of rock lobster fisheries in each of the quota management areas that operate management procedures. In developing this submission, we have made our draft submission available to Mandated Iwi Organisations (MIO) and Asset Holding Companies (AHCs) for input. Their feedback is reflected in this submission.
3. Setting appropriate sustainability measures involves balancing the interests of commercial, recreational and customary non-commercial fishing sectors. Iwi are the only group represented across all three different sectors. Our submission therefore seeks to take forward the combination of iwi interests in a manner that recognises the legitimacy of all and encourages collaboration between the sectors to secure sustainability and enable use and enjoyment by all.
4. Te Ohu Kaimoana fills one of the two customary seats on the National Rock Lobster Management Group (NRLMG), and has been a member of the group since it was set up in 1994. The second seat is filled by a representative of Te Waka a Maui Fisheries Forum, who joined the NRLMG in 2016 to represent the commercial and non-commercial rock lobster interests held by the nine Mandated Iwi Organisations of Te Waipounamu. We support the decisions they have made regarding the current review and the operation of management procedures in CRA7 and CRA8.
5. We take this opportunity to remind the Ministry for Primary Industries (MPI) of their responsibilities to iwi arising from the 1992 Fisheries Deed of Settlement. In the preamble to the deed the Crown recognises that traditional fisheries are of importance to Maori and that the Crown has a Treaty duty to develop policies to help recognise use and management practices and provide protection for and scope for exercise of rangatiratanga in respect of traditional fisheries.
6. We do not intend for this submission to derogate from or override any submissions iwi through their MIOs and/or AHCs may decide to make.

Our Position

In relation to CRA2

7. Te Ohu Kaimoana supports a variation of option CRA2_02 which sets a TAC of 215.5 tonnes¹ (t), decreases the TACC from 200 t to 120 t, maintains the customary allowance at 16.5 t, decreases the recreational allowance from 140 t to 34 t², and decreases other mortality from 60 t to 45 t.

In relation to CRA4

8. Te Ohu Kaimoana supports option CRA4_02 which increases the TAC from 484 t to 513.8 t, increases the TACC from 289 t to 318.8 t, and maintains allowances for customary at 35 t, recreational at 85 t and other mortality at 75 t.

In relation to CRA 7

9. Te Ohu Kaimoana supports the Te Waka a Maui Fisheries Forum decision for option CRA7_02. This follows the management procedure which decreases the TAC from 132.52 t to 117 t, decreases the TACC from 112.52 t to 97 t, and maintains the allowance for customary at 10 t, recreational at 5 t and other mortality at 5 t.

In relation to CRA 8

10. Te Ohu Kaimoana supports the Te Waka a Maui Fisheries Forum decision for CRA8_02. This follows the management procedure which increases the TAC from 1,053 t to 1,161.7 t, increases the TACC from 962 t to 1,070.7 t, and maintains allowances for customary at 30 t, recreation at 33 t, and other mortality at 28 t.

Background

Annual Assessment Results for CRA 2, 4, 7 and 8

11. The Ministry for Primary Industries (MPI) is currently receiving submissions on NRLMG proposals to adjust the total allowable catch (TAC) settings in CRA 2, 4, 7 and 8. The proposals are based on new stock assessment information for CRA 2, and the results from the operation of current management procedures in CRA 4, 7 and 8. These management procedures are designed to move or maintain stock abundance at or above agreed reference levels, while recognising a range of customary Maori, recreational and commercial values.

CRA2

12. The CRA2 stock assessment results have identified a need to reduce catches to halt the further decline in CPUE, and to move stock populations to an intermediate target of 40% SSB (Spawning Stock Biomass, which is the weight of all mature females in the autumn-winter).³
13. The 2017 stock assessment utilised CPUE data from vessels that have fished in CRA 2 longer than 5 years. Previous assessments have used CPUE data from vessels with fewer years in the fishery. The assessment results suggest female stock spawning biomass during the 2016 autumn-winter season was 18% of the unfished level, which is very likely to be below the soft limit of 20% of the unfished spawning stock biomass level. MPI policy requires a formal, time constrained rebuild plan to be put in place when a fishery is below 20% of the unfished spawning stock biomass. At 10% (the hard limit) a closure of the fishery is considered.

¹ The TAC has been reduced by 16 t to account for the reduction we have applied to the 50 t allowance in the IPP.

² Reduced from 50 t.

³ An alternative target reference level will be developed by the NRLMG in 2018.

14. The Initial Position Paper (IPP) proposes to decrease the TAC from 416.5 t to between 251.5 t and 191.5t, decrease the TACC from 200t to between 140t and 80t, decrease the recreational allowance from 140t to 50t, and decrease other sources of mortality from 60t to 45t. The customary allowance is retained at 16.5t.

CRA 4

15. Increasing CPUE has resulted in the management procedure proposing increases to the TAC and TACC. The IPP options are to either maintain the status quo or increase the TAC and TACC. Under both options the allowance for recreational and other sources of mortality remain at 85t and 75t respectively. The customary allowance remains at 35t.

CRA7

16. Decreasing CPUE has resulted in the management procedure proposing a decrease in the TAC and TACC. Two options are proposed, either status quo or a decrease to the TAC and TACC. The TAC decreases from 132.52 t to 117 t, the TACC decreases from 112.52 t to 97 t, and the current settings for customary, recreational and other sources of mortality are retained.

CRA 8

17. Increasing CPUE has resulted in the management procedure proposing increases to the TAC and TACC. The options include status quo or a TACC increase. The second proposal involves increasing the TAC from 1053 t to 1161 t, and allocating the increase to the TACC. The current settings for customary, recreational and other sources of mortality are retained.

18. The proposals for each stock are set out in table 1 below.

Table 1: Proposed management options in tonnes for CRA 2, 4, 7 and 8 from 1 April 2018.

Stock	Option	TAC	TACC	Allowances		
				Customary Māori	Recreational	Other mortality
	<i>Status quo</i>	416.5	200	16.5	140	60
CRA 2	CRA2_01	251.5 ↓	140 ↓			
	CRA2_02	231.5 ↓	120 ↓	16.5	50 ↓	45 ↓
	CRA2_03	215.5 ↓	100 ↓			
	CRA2_04	191.5 ↓	80 ↓			
CRA 4	CRA4_01: <i>Status quo</i>	484	289			
	CRA4_02: Based on the operation of the CRA 4 management procedure	513.8 ↑	318.8 ↑	35	85	75
CRA 7	CRA7_01: <i>Status quo</i>	132.52	112.52			
	CRA7_02: Based on the operation of the CRA 7 management procedure	117 ↓	97 ↓	10	5	5
CRA8	CRA8_01: <i>Status quo</i>	1,053	962			
	CRA8_02: Based on the operation of the CRA 8 management procedure	1,161.7 ↑	1,070.7 ↑	30	33	28

Commentary

CRA2

Resetting the TAC and TACC

19. We agree that significant measures are required to correct the decline in the CRA2 CPUE, and to begin moving the fishery towards the intermediate target of 40% SSB.
20. The IPP presents four options for iwi and the wider public to consider. They are all aimed at achieving the same target rebuild but at different timeframes of between 4 and 9 years.
21. We support a variation of proposal CRA2_02, which provides for a 120 t TACC, for which the stock assessment model predicts a 7 year rebuild timeframe. This option is a good balance between all the options (80 t - 4 years, 100 t – 5 years, 120 t – 7 years, and 140 t – 9 years), the economic implications of TACC reductions on quota owners and fishers i.e. job losses, the impact on recreational and customary interests, and the need to rebuild the fishery to the intermediate target level within an appropriate timeframe.
22. Under our varied proposal, CRA2_02 reduces the TAC from 416.5 t to 215.5 t, decreases the TACC from 200 tonnes to 120 t, maintains the customary allowance at 16.5 t, decreases the recreational allowance from 140 t to 34 t, and decreases other mortality from 60 t to 45 t.
23. We do not support the 4 or 5 years rebuild options (reduce TACC to 80 t or reduce TACC to 100 t) because they will have a severe and unjustified impact on quota owners and commercial fishers. These two options will unnecessarily ruin the commercial viability of some of the 33 fishing vessels, processors, and transport operators.
24. The infrastructure supporting the rock lobster industry has already been adversely impacted through the industry voluntary catch reductions during the last two fishing years. This has left some operators marginally viable. The proposed reductions set out in the IPP will further increase the impacts on industry by reducing catches even further.
25. Based upon the current port price for CRA2 rock lobster, revenues will reduce by between \$4.32m and \$8.64m, depending on the option chosen by the Minister. As noted above, industry has shelved 50 t in each of the last two years, and has forgone profits in favour of the sustainability of the fishery.
26. The effects of TACC reductions on iwi and their Fisheries Settlement, and normal quota shareholdings, is that less resources will be available to support their members social and cultural activities, marae, and broader general charitable purposes. It means less work for iwi members that are employed in the industry. The implications of the proposed ACE reductions on industry, iwi, and communities under all options are significant.
27. Regarding proposal CRA2_01, we consider that the 9-year predicted timeframe in which to rebuild the fishery, is too long. Therefore, we consider the 140 t TACC is too high. It is also too close to the reduced catches achieved by industry shelving in 2015/2016 (50 t), and 2016/2017 (50 t). While these conserving actions by industry are commendable, the reality is that little improvement in CPUE (and abundance) appears to have been achieved, even at these reduced levels.
28. A close eye will need to be kept on recruitment into the CRA2 fishery in case it is much less than the assumption used in the base case.

Recreational allowance

29. At a meeting of the NRLMG on 6 December 2017, the group proposed two options for the recreational allowance for CRA2 be put out for consultation; 34 t and 50 t. However, when the IPP was released in January 2018, only the 50 t option was included.
30. In 2016, the model estimate of recreational catch was 34 t. However, MPI considers that the best available information on current recreational catch is provided from the 2011/12 National Panel Survey estimate of 40.86 t. This highlights a lack of consistency in the estimates used by MPI and raises the question why the 40.86 t was not applied in 2016. Furthermore, if we take into account the decline in the fishery since 2011/12, we would expect the 40.86 t estimate to have reduced to the 34 t model estimate used in the 2016 estimate.
31. In addition, if 34 t was used in the model assessment, then proposing a 50 t allocation will mean the model is over-optimistic and the timeframes for recovery will be longer than stated in the IPP. This reinforces the need to set the recreational allowance based upon the best available information.
32. For the fishery to recover as intended, recreational catches need to be managed within the recreation allowance to maintain the integrity of the TAC setting process. At 34 t or 40.86 t, significant actions will be required to keep fishers within the allowance.
33. In the multi stakeholder pre-consultation meetings there was support expressed by iwi and recreational representatives for seasonal closures. We fully support using this approach to manage recreational fishers inside the recreational allowance. Having Auckland on the doorstep of CRA2, means there may be too many people for bag constraints to be effective, and lower bag limits will likely cause greater compliance issues.
34. Commercial and customary have the infrastructure and systems to manage their interests within the TAC settings. Both have been constraining their catches for more than 2 years because of declining stocks. Industry has voluntarily left 100 t of rock lobster in the water over the last 2 fishing seasons. We encourage the recreational sector to take steps to improve the fishery too.

Duration of setting

35. The IPP refers to there being no adjustments to the TAC until CRA 2 is assessed again in 5 years' time. We support this proposal. Iwi and each sector need to actively manage their respective rights and interests in CRA 2. However, if each sector is managing within its allocations but the decline in the CPUE does not stop within the next year or two, perhaps because of low recruitment, additional corrective actions may be required.

Accommodation of customary interests

36. An issue that was raised in the pre-consultation meetings by representatives of iwi and Mai I nga Kuri a Whareki Tihirau Fishery Forum, was fisheries managers need to understand that iwi can only exercise customary rights within their respective rohe moana. Therefore, managers need to develop strategies that ensure iwi have access to rock lobster for customary purposes, within their areas, particularly those iwi that have strong customs and traditions associated with the rock lobster fishery.
37. Iwi also raised issues relating to the three Islands offshore from Whakatane, and their concern to ensure this important traditional fishing ground is sustainably managed for

future generations. To this end, iwi would like to see constraints placed on the amount of rock lobster that can be harvested from the area commercially. Industry has offered to meet with iwi to further discuss the issues raised. We encourage iwi and industry to meet. We are available to assist in these discussions if required.

CRA 4

Operation of the CRA 4 management procedure

38. We support the operation of the CRA 4 management procedure, and the proposed 29.8 t increase in the TACC.
39. If possible, we would like to see industry take the increase in the TACC from the northern area of CRA 4 (statistical area 912, 913, 914), which are the statistical areas that have experienced the increases in CPUE, and triggered the management procedure to increase the TACC.
40. We also suggest more research is done in determining the implications of only using CRA 4 CPUE data from vessels that have been in the industry more than 5 years, the same approach taken in CRA 2. We strongly suggest MPI reviews the research budgets required to support this and other work that may be required outside the standard stock assessment work done by the NRLMG.

CRA 7

41. We support the decision of the Te Ika a Maui Fisheries Forum to support proposal CRA7_02, and to decrease the TAC and TACC for CRA7.

CRA8

42. We support the decision of the Te Ika a Maui Fisheries Forum to support proposal CRA8_02, to increase the TAC and TACC for CRA8,

Noho ora mai rā,



Dion Tuuta
Chief Executive Officer
Te Ohu Kaimoana

From: [REDACTED]
To: [FMSubmissions](#)
Subject: FW: Te Ohu review of CRA 2 options
Date: Thursday, 22 February 2018 11:51:12 AM

From: Alan Riwaka [REDACTED]
Sent: Thursday, 22 February 2018 11:23 a.m.
To: Sonja Hempel [REDACTED]; Alicia McKinnon
[REDACTED]; Allen Frazer [REDACTED]; Darcy Webber
[REDACTED]; Daryl Sykes [REDACTED]; Geoff Rowling
[REDACTED]; George Zander [REDACTED]; Graeme Hastilow
[REDACTED]; Jo Akroyd [REDACTED]; Julie Hills (Jules Hills)
[REDACTED]; Keith Ingram [REDACTED]; Malcolm Lawson
[REDACTED]; Mark Edwards [REDACTED]; Nigel Scott
[REDACTED]; Paul Breen [REDACTED]; Peter van Kampen
[REDACTED]
Subject: Te Ohu review of CRA 2 options

Good morning everyone,

I would like to confirm that we have gone back out to iwi in recent days to discuss a change in our original submission to support a 120 t TACC in CRA 2. I can confirm that Te Ohu will now support a 100 t TACC in CRA 2.


I would like to take the opportunity to acknowledge industry for moving from their original position of 140 t. I would also like to acknowledge the iwi Asset Holdings Companies that have also got in behind the 100 t option. There will be major job losses in the industry resulting from their decision to support a 50% TACC reduction. This demonstrates to us the industry's commitment to ensuring a sustainable CRA 2 fishery.

Regarding customary and recreational interests, they can only benefit from the new industry position through a faster rebuild and greater certainty. The 100 t TACC proposal for CRA 2 will certainly close the gap between iwi and sectors. The remainder of our submission will stand.

Alicia/Sonja, if you need anything more from us let me know.

Regards

Alan

From: 
To: [FMSubmissions](#)
Subject: CRA2 Feedback
Date: Thursday, 8 February 2018 12:44:35 PM

Hi there,

I'm just writing a submission about my opinion for the CRA2 proposed changes.

If I had to support one of the propositions, it would be option 4. I believe the current population of *Jasus Edwardsii* in the CRA2 area is critically low and needs the maximum restrictions imposed as possible.

If I could propose my own suggestion, it would be a three (3) year temporary ban, then in the following years adopt the proposed option 4 until proof that the fishery was indeed growing at an acceptable rate was presented to the general public. Then we could have another public discussion about what levels of catch are appropriate.

Nga mihi,

Tim Bulmer
Resident of Auckland, diving enthusiast.

Submission Form

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Once you have completed this form

Email to: FMsubmissions@mpi.govt.nz

While we prefer email, you can also post your submission to: 2018 Sustainability Review, Fisheries Management, Ministry for Primary Industries, PO Box 2526, Wellington 6140, New Zealand.

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

Submitter details:

Name of submitter or contact person:	Willie Maclardy
Organisation (if applicable):	Maclardy Fishing Limited
Email:	
Fishstock this submission refers to: <i>Rock lobster – CRA 2, CRA 4, CRA 7, CRA 8</i> <i>Sea cucumber – SCC 3, SCC 7B</i> <i>Southern blue whiting – SBW 6B.</i>	CRA2
Your preferred option as detailed in the discussion paper (write "other" if you do not agree with any of the options presented):	100T TACC

Official Information Act 1982

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Submission:¹

Details supporting your views:

I am a commercial crayfisherman out of Whitianga. I've been doing it 6 years and my father did it for 35 years previous to that. I have a son 3 months old and I would like to think this will be something he would like to do when he grows up.

We have come down from 236 ton to 150 ton. We are struggling to catch that so the reduction needs to be another considerable amount which is why I would prefer 100 ton.

This will remove the large amount of "lifestyle" crayfisherman from the industry and those left are there to do it properly and professionally. In turn this will mean large amounts of pots will be removed from the water and also means that the remainder of the fisherman can move around the area more and spread the harvest load wider.

One of the greatest concerns for me is the increase in population which in turn means the amount of people using the resources. That number has multiplied considerably. All you have to do is look at the boat ramps in the Whitianga, Kuaotunu, Matarangi and Whangapoua area to see how much more pressure there is.

I'm a recreational diver and I have had many discussions with my Diving peers. They all agree that 3 crayfish is more than enough for the bag limit.

If this is a shared fishery then we all need to share the burden.

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

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Submitter details:

Name of submitter or contact person: William Scott Macky	
Organisation (if applicable):	
Email:	
Fishstock this submission refers to: <i>Rock lobster – CRA 2, CRA 4, CRA 7, CRA 8</i> <i>Sea cucumber – SCC 3, SCC 7B</i> <i>Southern blue whiting – SBW 6B.</i>	CRA2
Your preferred option as detailed in the discussion paper (write "other" if you do not agree with any of the options presented):	Other

Official Information Act 1982

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Obviously, a disastrous state has developed.

Management will only work if you change to a safe sustainable system; that is where juveniles are harvested, and breeding stock are left. The current system appears intended to drive the species to extinction.

Visit a farm and see how a farmer does it. They keep their breeding stock. Watch what lions do; much the same.

Also, quota held should expire after 5 or 10 years and fishers be required to buy more at auction on a regular basis. It's ridiculous the handing over of this national asset into private hands.

I see closure at 5 pm Friday night. Happy Friday night and weekend processing this information. Many people work during the week until 5 pm Friday night. I don't believe you start at 5 pm Friday night. There is no reason you could not leave this open till 8 am Monday.