

Review of Rock Lobster Sustainably Measures

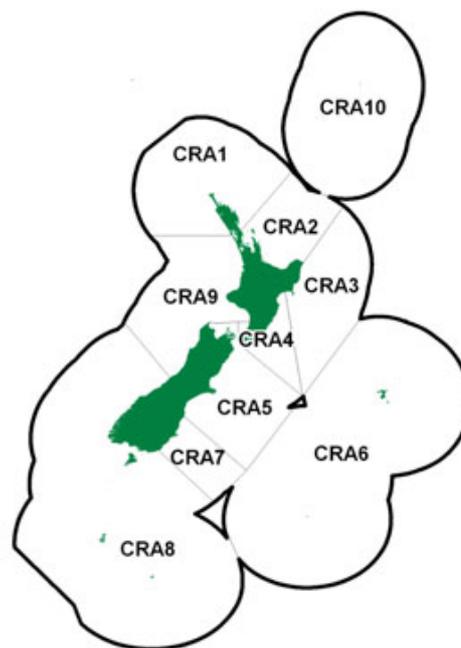
A summary of proposals for the New Zealand Sport Fishing Council

29 January 2015

The National Rock Lobster Management Group (NRLMG) is seeking tangata whenua and stakeholder views on proposed new Management Procedures to set Total Allowable Catches (TACs) in the CRA 1 (Northland) and CRA 3 (Gisborne) rock lobster fisheries.

Existing Management Procedures are being used to increase the Total Allowable Commercial Catch (TACC) in CRA 7 (Otago), while a decrease is proposed for CRA 5 (Canterbury/Marlborough) and CRA 9 (west coast Kaipara to Franz Josef).

The Ministry for Primary Industries (MPI) seeks information and comments in writing on the proposals summarised in Appendix 1. **Submission deadline is 17 February 2015.**



This document provides a summary of the proposals. A preliminary view and recommendations will follow next week.

The NRLMG's management goal is for all rock lobster fisheries:

“to be managed and maintained at or above the assessed and agreed reference levels, using a comprehensive approach that recognises a range of customary Maori, amateur, commercial and environmental concerns and benefits”.

During the review of CRA 2 in 2014 the New Zealand Sport Fishing Council (NZSFC) clearly outlined its concerns and expectations on the Minister to manage the crayfish stocks to abundant levels to enable all users to provide for their social, economic and cultural wellbeings. Our concerns and expectations of the Minister remain.

The IPP notes the Management Procedures applying in CRA 2, 4 and 8 results in no change to the management of these stocks from April 2015. The catch per potlift in CRA 2 declined slightly in 2014.

CRA 1 Assessment and Management Procedures

Points of interest:

- There is a new stock assessment for CRA 1. It shows a steady increase in biomass, from a low point in the mid-1990s to the mid-2000s. Biomass has been relatively constant since then.
- The stock assessment model is largely driven by the commercial catch rate (CPUE) in kg per potlift, which is higher when commercial fishing effort is based in the Three Kings and Far North areas.
- The stock assessment estimates current vulnerable biomass is 850 tonnes (t). The Total Allowable Commercial Catch (TACC) has been about 131 t since the mid-1990s and is fully caught each year.
- CRA 1 was introduced into the QMS in April 1990. No Total Allowable Catch (TAC) has been set in CRA 1.
- If the status quo is retained under option CRA1_05 the NRLMG propose that no TAC will be set and no allowances will be made for non-commercial interests.
- If the new Management Procedure is applied to alter the TACC, a TAC and allowances will need to be specified. The IPP proposes a 50 t allowance for recreational fishers and options of 10 t and 20 t for the customary allowance.

- As with other crayfish stocks, the stock assessment is used to test a Management Procedure based on the commercial catch rate (CPUE) in kg per potlift for the year.
- **Two Management Procedures are provided as options in the IPP. The first has a step up at 1.5 kg per potlift the second has the step up at 1.7 kg per potlift. The 2014 standardised CPUE was 1.580 kg/potlift so the first rule results in a 6.6 t increase in TACC while the second holds the TACC at 131 t.**
- An allowance of 72 tonnes is proposed for other sources of fishing-related mortality in CRA 1. Most of this is based on an old estimate of illegal catch, but seems very high given the frequency and scale of illegal crayfish detected in recent years.
- The Te Puna Mataitai Reserve was established on 27 August 2013. This excludes commercial fishing and potting from a large area of the western Bay of Islands, including Cape Wiwiki to the Black Rocks.

Comments:

The science suggests that CRA 1 is doing okay under the current fixed TACC of 131 t. In part, this is because there are relatively few commercial fishers and an increase in fishing effort around the Three Kings about 2000. More recently catches at the Three Kings have declined with good catches off the west coast between 90 Mile Beach and Kaipara Head. However, as these populations are fished down CPUE is likely to decrease.

Also, around 2000 fishing effort in the southeast area (Takou Bay to Mangawhai) reduced. This area has smaller crayfish and consistently low commercial CPUE. This is the area where most of the recreational catch comes from and there are a few areas that don't get a lot of commercial fishing effort. However commercial fishers can intensively fish an area for a while then move on, which has concerned recreational fishers who see depletion in their local area. If catch rates in the Far North and Three Kings decline then a lot of effort could move back in to the southeast area.

Commentary in the Initial Position Paper (IPP) is clearly designed to highlight the benefits of increasing utilisation if the Minister increases the TACC. There is no similar emphasis on highlighting the benefits of increasing the environmental, social and cultural outcomes, by setting aside an adequate allowance for both present and future non-commercial fishing interests.

CRA 3 Assessment and Management Procedures

Points of interest:

- There is a new stock assessment for CRA 3. It shows a rapid increase in biomass from 2009 to 2013 and a decline in 2014. The model is largely driven by the commercial catch rate (CPUE) in kg per potlift. Biomass is projected to decline by 15-31% in the next four years.
- The stock assessment estimates current vulnerable biomass is 525 t. The TACC increased from 164 t to 261 t under the old Management Procedure and this has been fully caught each year.
- The distribution of crayfish is unusual, with an abundance of small males and few females north of Gisborne, and larger crayfish with more females further south, around Mahia Peninsula.
- The IPP proposes no change to the 20 t allowance for recreational fishers or the 20 t customary allowance.
- The old CRA 3 Management Procedure allowed the maximum 10% increase in the TAC every year and would have provided another 10% this year if it had not been replaced. The new Management Procedures have a number of plateaus and steps that apply to the TACC only, in line with recent practice.
- There are two options in the IPP. The first Management Procedure has a ramp up from 1 to 2 kg per potlift then a plateau between 2 and 3 kg per potlift. The second option is similar, but with a plateau between 1.3 and 2 kg per potlift that would hold the TACC at 225 t for CPUE in that range.
- **The 2014 standardised CPUE was 2.214 kg/potlift and both new Management Procedures would hold the TACC at the current level of 261 t.**

- Model projections suggest CPUE will decline over 4 years and could be 0.77 kg per potlift in 2017. Both Management Procedures would have the TACC at 150 t if that happened. This would be an historic low.
- An allowance of 89 tonnes is proposed for other sources of fishing-related mortality in CRA 3. Most of this is based on an old estimate of illegal activities, but seems high. Ironically, one of the justifications for implementing the concession was to reduce black market sales from commercial vessels that were struggling to catch legal size crayfish.

Comments:

The stock assessment model suggests that CRA 3 is currently okay, but is heading for a hefty decline. This stock and the model are hard to understand. It seems there are large fluctuations of small crayfish in most of the area driven by settlement and recruitment.

Despite the model results, non-commercial interests fishing around Gisborne remain concerned that their access to sufficient quantities of legal sized crayfish is being thwarted by the existing commercial concession.

The IPP notes the ongoing dispute regarding this commercial concession. Options for changing size limits or having recreational only areas will be part of a separate process in 2015.

The new Management Procedures seem reasonably conservative, especially compared to the last one, with no increase from current TACC until CPUE reaches 3 kg per potlift. Option 2 would require more frequent changes to the TACC when CPUE was between 1.3 and 2 kg per potlift, otherwise there is not much between them.

While these new Management Procedures for CRA 3 seem conservative they are still based on CPUE as reported by commercial fishers and includes concession size fish that are not reported separately.

The Minister should insist that data describing the number of concession sized crayfish, by fishing year, area and proportion of total landings, is collected and made available for public scrutiny. We are not dealing in state secrets.

CRA 5 Management Procedure

Points of interest:

- The commercial CPUE in CRA 5 has decreased since 2009, but remains at a reasonable level.
- **The 2014 standardised CPUE was 1.355 kg per potlift and it is proposed to reduce the TACC by 4%, from 350 to 336 t. Industry support retaining the current TAC and TACC.**
- Some of the Management Procedures for other areas have a 5% threshold for changing the TACC. The IPP says that this was not applied to CRA 5 as the science suggested a decline below 1.4 kg per potlift was unlikely.
- The current recreational allowance is 40 t, customary allowance 40 t and other mortality 37 t.
- No change is proposed to the recreational allowance. However, a recreational harvest survey of Kaikoura and Motinau boat based catch estimated a recreational harvest of 55 t. The catch from other areas in CRA5 and by shore based fishers is likely to be significant. It is likely that the current recreational harvest is much more than last year's allowance and that proposed for 2015.
- The IPP also states, "*CRA 5 stock assessment is to be carried out in 2015 instead of in 2016 as originally scheduled. It is proposed that initial consultation is undertaken with regional fishery interests in 2015 on potential allocation approaches.*" Does this mean that NRLMG wants to set Allocation policy between sectors for some stocks or something else?

Comments:

CRA 5 was considered to be in reasonable shape. Commercial fishers may be a bit surprised at the sudden decline in CPUE. They may look for a scapegoat, such as blaming increasing recreational catch or possibly

the effect of implementing of the Te Korowai agreement on the east coast of the South Island.

As has happened in previous reviews such as SNA1, a perceived large increase in recreational catch estimates could trigger commercial pressure to reduce bag limits. This would be patently unfair if the tonnage set aside to allow for recreational interests is not sufficient to provide for current catch.

Therefore, the Minister must decide how he is going to “allow for” current recreational interest in CRA 5. He has a variety of options, but ultimately he cannot knowingly allow the TAC to be exceeded or make a recreational allowance that he knows will be exceeded. Medium-term recreational harvest rates may be affected by the change due to Te Korowai, however this mainly restricts harvestable areas and will likely shift effort to outside this region

CRA 7 Management Procedure

Points of interest:

- The commercial CPUE in CRA 7 has spiked up sharply in the last 2 years. Typically this is a result of good recruitment with young fish entering the fishery.
- **The 2014 standardised CPUE was 2.304 kg per potlift and it is proposed to increase the TACC by 48%, from 66 to 98 t.**
- The current recreational allowance is 10 t, customary allowance 10 t and other mortality 5 t. There is little information in the IPP on the rationale used when setting these allowances and no change is proposed.

Comments:

In 2014 commercial CPUE was well up and the TACC was increased by the maximum 50% allowed under the Management Procedure, from 44 t to 66 t.

Current thinking is that after a few years crayfish recruited in 2014 and 2015 will move out of CRA 7 to Foveaux Strait and Stewart Island. This Management Procedure will always be chasing the tail of CPUE and probably won't reflect true abundance in the current or the following fishing year.

NZSFC remains opposed to the CRA 7 concession allowing commercial fishers to harvest undersized crayfish. We should ask again to see the data on the number of concession sized crayfish taken by fishing year and the proportion of CRA 7 landings in this category.

CRA 9 Management Procedure

Points of interest:

- The commercial CPUE in CRA 9 has decreased since 2013, but remains at a reasonable level.
- **The 2014 standardised CPUE was 2.095 kg per potlift and it is proposed to reduce the TACC by 25%, from 61 to 46 t.**
- The current recreational allowance is 30 t, customary allowance 20 t and other mortality 5 t. There is little information in the IPP on the rationale used when setting these allowances and no change is proposed. The National Panel Survey estimate for CRA 9 was 18 t in 2011-12.

Comments:

This fishery covers a large area of exposed west coast in the North and South Islands. Commercial effort is not high and weather conditions and access to suitable rocky reef areas may affect CPUE as much, or more than, abundance. Reportedly there are a lot of large crayfish in areas such as Taranaki, good for recreational fishers, but not the preferred target size for commercial fishers.

A TACC of 47 tonnes was in place from 1992 to 2014. Last year the TACC was increased to 61 t, under the

first year of the new Management Procedure with CPUE at an historic high, at over 3 kg per potlift.

In 2015 the TACC will be back at 46 t. This fluctuation over just one year again proves the folly of relying on CPUE as a measure of abundance. Clearly commercial CPUE is not a good measure of abundance or the risk to sustainability of this fishery.

Some of the comments made in the CRA 9 IPP need to be challenged by all sectors, including, but not limited to:

“Option CRA9_01 will decrease the current utilisation benefit of the fishery. How this reduction is shared amongst the fishery sectors will depend on allocation decisions.”

“Under Option CRA9_02 the CRA 9 TACC would stay at its current level. This option would maintain the current utilisation benefit of the commercial fishery, but would increase risk to stock sustainability.”

Other matters (pg 35)

The IPP contains the usual rhetoric about uncertainty of illegal and non-commercial harvest, the risk regarding uncontrolled and increasing non-commercial catch jeopardising management, the QMS, negative effects on commercial ownership and utilisation rights and opportunities.

MPI is exploring a new way to estimate illegal take. We need to know what this is.

In the submission the NZSFC will comment on the need to “allow for” these catches, and factor in these uncertainties.

There is a high level of catch classed as “recreational” taken by commercial under s111 of the Fisheries Act 1996. This catch is taken using commercial methods and inflates the recreational harvest figures. Nothing specified in CRA 9, but in CRA 7 it is 1.7 t of a 5 t allowance, 34% of known catch.

Stock	S111 catch (t)	Recreational allowance (t)	% of recreational allowance
CRA 1	5.01	50 (proposed)	10
CRA 3	2.94	20	14.7
CRA 5	6.2	40	15.5
CRA 7	1.7	5	34
CRA 9	??	30	??

Appendix One

Table 2.1: TAC, allowances and TACC proposals for CRA 1, CRA 3, CRA 5, CRA 7 & CRA 9.

Noting: Options CRA1_01 and CRA1_02 both propose the use of the *Rule 8d* CRA 1 management procedure and the same TACC increase, but have different customary allowance options; Options CRA1_03 and CRA1_04 both propose the use of the *Rule 9d* CRA 1 management procedure and no change to the current TACC, but have different customary allowance options; Options CRA3_01 and CRA3_02 propose the use of two different CRA 3 management procedures (*Rule 4* versus *Rule 6*), but with no change to the existing TAC, allowances and TACC.

Stock	Option	TAC	Customary	Recreational	Other mortality	TACC
CRA 1	CRA1_01: Use the <u>new</u> <i>Rule 8d</i> CRA 1 management procedure and set the following TAC, allowances and TACC	269.62 t	10 t	50 t	72 t	137.62 t ↑
	CRA1_02: Use the <u>new</u> <i>Rule 8d</i> CRA 1 management procedure and set the following TAC, allowances and TACC	279.62 t	20 t	50 t	72 t	137.62 t ↑
	CRA1_03: Use the <u>new</u> <i>Rule 9d</i> CRA 1 management procedure and set the following TAC, allowances and TACC	263.062 t	10 t	50 t	72 t	131.062 t
	CRA1_04: Use the <u>new</u> <i>Rule 9d</i> CRA 1 management procedure and set the following TAC, allowances and TACC	273.062 t	20 t	50 t	72 t	131.062 t
	CRA1_05: Retain the current CRA 1 TACC (no TAC or allowances have been previously set for CRA 1)	N/A	N/A	N/A	N/A	131.062 t
CRA 3	CRA3_01: Use the <u>new</u> <i>Rule 4</i> CRA 3 management procedure and retain the TAC, allowances and TACC	389.95 t	20 t	20 t	89 t	260.95 t
	CRA3_02: Use the <u>new</u> <i>Rule 6</i> CRA 3 management procedure and retain the TAC, allowances and TACC	389.95 t	20 t	20 t	89 t	260.95 t
CRA 5	CRA5_01: Use the <u>current</u> CRA 5 management procedure and decrease the TAC and TACC	452.81 t ↓	40 t	40 t	37 t	335.81 t ↓
	CRA5_02: Retain the current CRA 5 TAC, allowances and TACC	467 t	40 t	40 t	37 t	350 t
CRA 7	CRA7_01: Use the <u>current</u> CRA 7 management procedure and increase the TAC and TACC	117.72 t ↑	10 t	5 t	5 t	97.72 t ↑
	CRA7_02: Retain the current CRA 7 TAC, allowances and TACC	86 t	10 t	5 t	5 t	66 t
CRA 9	CRA9_01: Use the <u>current</u> CRA 9 management procedure and decrease the TAC and TACC	101 t ↓	20 t	30 t	5 t	46 t ↓
	CRA9_02: Retain the current CRA 9 TAC, allowances and TACC	115.8 t	20 t	30 t	5 t	60.8 t