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Rock Lobster submissions
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NZ Sport Fishing Council submission on the review of Rock Lobster sustainability measures for 1 April 2014

Contents

1. INTRODUCTION.....	2
2. RECOMMENDATIONS.....	3
3. NZ SPORT FISHING COUNCIL - LEGASEA	3
4. EXECUTIVE SUMMARY	4
5. ROCK LOBSTER MANAGEMENT	5
5.1. NRLMG ADVICE.....	5
5.2. CPUE AS A PROXY FOR ABUNDANCE	6
5.3. APPLICATION OF MANAGEMENT PROCEDURES	7
5.4. MLS AND SIZE CONCESSIONS.....	7
5.5. FISHERIES ACT SUPPORT FOR REASONABLE PUBLIC CATCH	8
6. ROCK LOBSTER PROPOSALS	9
6.1. CRAYFISH 2 (CRA 2) PAKIRI TO EAST CAPE	9
<i>Differing worlds of modeled and observed stock.....</i>	<i>9</i>
<i>Commercial potlift effort and catch</i>	<i>11</i>
<i>Hauraki Gulf Marine Park Act.....</i>	<i>13</i>
<i>Public frustration with CRA 2 depletion</i>	<i>13</i>
6.2. PROPOSED TAC CHANGES IN CRA 3 (GISBORNE)	14
6.3. PROPOSED TAC CHANGES IN CRA 4 (HAWKE BAY – WELLINGTON).....	15
6.4. PROPOSED TAC CHANGES IN CRA 7 (OTAGO)	16
6.5. NEW MANAGEMENT PROCEDURE PROPOSALS AND ALLOWANCES FOR CRA 9 (KAIPARA HARBOUR - WESTLAND)	18
7. PREVIOUS NZSFC SUBMISSIONS.....	19

1. INTRODUCTION

The New Zealand Sport Fishing Council and supporters of our LegaSea outreach (the submitters) are seriously concerned that Nathan Guy, the Minister for Primary Industries, is again being exposed to a highly public backlash arising from shallow commercial advantage being disguised as balanced advice from the National Rock Lobster Management Group. The Group's latest advice is within the *Discussion Document No: 2014/06 Review of Rock Lobster Sustainability Measures for 1 April 2014*. Flaws in the National Rock Lobster Management Group's process and advice have been identified in many past submissions and this year these cannot be tolerated.

As submitters we are only interested in firstly, maintaining the marine ecosystem so species such as rock lobster (crayfish) can thrive, and secondly, to ensure the public has reasonable access, taking into account the state of the ecosystem and popularity of the species.

In respect of current rock lobster management, the National Rock Lobster Management Group processes show no genuine regard for the public's interests, in environmental and fishing terms, and our social, economic and cultural wellbeings.

These interests and wellbeings are largely ignored or passed over with a cursory paragraph or two. This sense of disengagement is amplified by the truncated submission periods offered to stakeholders by the Ministry.

The Minister must be advised that we are tired of his Ministry using short timeframes, for submission preparation and constituency consultation, so offensively. We question the legality of this process and whether it complies with the Court of Appeal's definition of effective consultation –

“Consultation must allow sufficient time, and a genuine effort must be made. It is a reality not a charade. To consult is not merely to tell or present. Nor, at the other extreme is it to agree. Consultation does not necessarily involve negotiation towards an agreement, although the latter not uncommonly can follow, as the tendency in consultation is to seek at least consensus. Consultation is an intermediate situation involving meaningful discussion.....Consulting involves the statement of a proposal not yet fully decided upon, listening to what others have to say, considering their responses and then deciding what will be done.

“Implicit in the concept is a requirement that the party consulted will be (or will be made) adequately informed so as to be able to make intelligent and useful responses. It is also implicit that the party obliged to consult, while quite entitled to have working plan in mind, must keep its mind open and be ready to change and even start afresh. Beyond that, there are no universal requirements as to form.”¹

This current process compromises our ability to offer the NZSFC club delegates and their committees, and LegaSea supporters the opportunity to review and offer feedback on our draft submission. Accordingly, we expect to undertake the necessary public awareness work after the Ministry's deadline. We expect to make supplementary comments to the Minister following this consultation.

The New Zealand Sport Fishing Council and LegaSea supporters are adamant that 2014 is the year this mismanagement must stop, and we expect the Minister to intervene on the public's behalf so that we can restore our rock lobster fisheries to abundant levels.

While we aspire to have our rock lobster fisheries managed well above *Bmsy* most of us have not seen that level of abundance. These videos of crayfish off the Taranaki coast (CRA 9) offer some hope that we can have abundance in other crayfish stocks –

<https://www.youtube.com/watch?v=j7XFwPsU3rs>

http://www.youtube.com/watch?v=R_RB2P2wLnw

<http://www.youtube.com/watch?v=nTodtHoBjP4>

¹ International Airport Ltd and Air New Zealand (CA 23/92, 73/92[1993] 1 NZLR 671).

² NRLMG 2003 Annual Report.

³ NEW ZEALAND RECREATIONAL FISHING COUNCIL INC AND ANOR V SANFORD LIMITED AND ORS SC 40/2008 [28 May 2009]. Para 542
Review of Rock Lobster Sustainability Measures for 1 April 2014: NZSFC submission: 21 February 2014.

2. RECOMMENDATIONS

- The Minister must take a more active role in the management of rock lobster, to restore abundance and to decrease the risks associated with low biomass levels, and to provide for reasonable public use.
- The Minister addresses the sustainability concerns of non-commercial stakeholders by agreeing to stop the use of Management Procedures based on Catch Per Unit of Effort (CPUE) controls, and to initiate a full review of rock lobster management.
- CRA 2 –
 - The Minister must address the long-term depletion evident in CRA 2 by implementing measures to double the existing biomass.
 - The Ministry must present the Minister an option in the final advice paper to achieve the rebuild required to double the biomass.
- CRA 3 –
 - The Minister selects option CRA 3_02 and retains the current TACC until the Management Procedure is reviewed in 2014, and then provides for public use in a reasonable manner.
 - The Minister rejects any TACC increase while the concession enabling commercial fishers to take undersized rock lobster remains.
- CRA 4 – The Minister supports CRA4_01 to reduce the TAC and TACC in CRA 4.
- CRA 7 – The Minister rejects any TACC increase in CRA 7 while the concession enabling commercial fishers to take undersized rock lobster remains.
- CRA 9 – The Minister applies a precautionary management approach when setting the TAC in CRA 9 to ensure sustainability, and in doing so set aside reasonable allowances to account for the uncertainty in the current harvest estimates -
 - 20 t for Maori customary non-commercial fishing interests;
 - 30 t for recreational; and
 - 5 t for other fishing related mortality.

3. NZ SPORT FISHING COUNCIL - LEGASEA

1. The New Zealand Sport Fishing Council and our public outreach LegaSea, (the submitters) appreciate the opportunity to submit feedback on the *Discussion Document No: 2014/06 Review of Rock Lobster Sustainability Measures for 1 April 2014*. The Ministry for Primary Industries (MPI) released their proposals on 27 January 2013, with submissions due by 21 February 2014.
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 and SCA 7. 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 New Zealand Sport Fishing Council is a National Sports Organisation with over 32,000 affiliated members from 55 clubs nationwide and a growing number of contributing supporters to LegaSea. Our representatives are available to discuss this submission in more detail if required. We look forward to positive outcomes from this review and would like to be kept informed of future developments. Our contact is Roz Nelson, secretary@nzsportfishing.org.nz.
4. Rock lobster must be abundant to enable us to provide for our social, economic and cultural wellbeings, and be sustainable to meet the reasonably foreseeable needs of future generations, as per section 8(2)(a & b) of the Act.

5. The submitters are committed to ensuring that sustainability measures and management controls are designed and implemented to achieve the purpose and principles of the Act. A precautionary approach needs to be taken in this highly valued fishery, which is managed using uncertain and incomplete information. For many club members and LegaSea supporters, these prized crayfish simply cannot be valued in dollars.
6. The New Zealand Sport Fishing Council is concerned that our members, LegaSea supporters and others nationwide are becoming disillusioned with the ongoing mismanagement and subsequent depletion of our taonga [treasure], our crayfish.

4. EXECUTIVE SUMMARY

7. The Ministry for Primary Industries (MPI) is following advice from the National Rock Lobster Management Group (NRLMG) that will maintain rock lobster stocks in Crayfish 2 (Pakiri to East Cape) below levels that provide for reasonable public use.
8. Catch Per Unit of Effort (CPUE) point estimates, with little supporting information, are not a reliable proxy for abundance, particularly in CRA 2. In our view implementation of the proposed Management Procedures will maintain this stock at depleted levels for years and not meet the statutory obligations in the Fisheries Act 1996 (the Act).
9. The growing gap between modeled stocks and the observed stocks is diverging to the point where the standardised CPUE, the Management Procedures based on CPUE, and stock assessment models can no longer be relied upon as providing the ‘best available information’, as required by the Act. Where there is uncertainty in what is being measured by CPUE the Minister is obliged to apply a precautionary management approach to ensure sustainability.
10. A full review must be undertaken to correct the misnomer that in all rock lobster stocks ‘CPUE is a reliable indicator of abundance’. An alternative management strategy must be used where CPUE does not reflect abundance.
11. The submitters consider the current proposals benefit commercial interests, as have management interventions for the past decade. Despite our advice at the time pointing out the costs of such folly, the last management intervention in CRA 2 was to increase the TACC by 10%, resulting in further stock depletion and subsequent collapse of the public catch. The cost has been passed to recreational interests and the ecosystem in which rock lobster are part, while commercial interests have banked another 2000t of catch. Now the fishery is in a state of near collapse the cost of rebuilding must be largely borne by commercial interests.
12. The once-prolific Gisborne fishery, CRA 3, is now so depleted that surveys of recreational catch estimate just 8 tonne of catch, with the lowest average weight (580g) per crayfish in the country. Recreational harvest is being constrained by low levels of availability, small animal size and the concession granting commercial fishers access to undersized rock lobster. While the concession remains the submitters will reject any Total Allowable Commercial Catch (TACC) increase.
13. The submitters support a reduction in the Total Allowable Catch (TAC) and TACC in CRA 4, between Hawke Bay and Wellington. Only time will tell whether the previous, large TACC increases are sustainable – we think not.
14. The submitters remain committed to opposing the CRA 7 (Otago) concession allowing commercial fishers to harvest undersized crayfish. We reiterate our requests to review the data on the number of concession sized crayfish taken by fishing year and the proportion of CRA 7 landings in this category. If

stock abundance is improving then there is no need for the concession, which contributes to growth overfishing.

15. CRA 9, extending from the Kaipara Harbour to Westland, west coast of the South Island has a relatively healthy fish stock with a reasonable number of large adult fish. The submitters support a TAC being set in CRA 9 for the first time and expect the Minister to set aside reasonable allowances for non-commercial environmental and fishing interests.
16. The Minister cannot continue to hide behind the veil of the National Rock Lobster Management Group when it comes to the sustainable management of our taonga, our crayfish. Consultation, the science process and ongoing management are being hijacked by a few interested parties, to the detriment of the marine environment. It is time the Minister became more active and risk averse when managing our fragile fisheries and ecosystems.

5. ROCK LOBSTER MANAGEMENT

5.1. NRLMG advice

17. 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). In reality, sector representatives are limited to Te Ohu Kaimoana (TOKM), NZ Rock Lobster Industry Council (NZ RLIC), New Zealand Recreational Fishing Council (NZRFC) and the Environment and Conservation Organisations of Aotearoa New Zealand (ECO).
18. Representatives sitting on the NRLMG routinely select data with the comment “agreed to by Working Group members”. This arises from the demands of the stock assessment models or Management Procedures for information, much of which is unknown. In our view, what is known about rock lobster stocks is overwhelmed by the unknowns.
19. The potentially most valuable data sets to inform on the status of a rock lobster fishery relate to:
 - a. Annual recruitment and abundance of pre-recruits; and
 - b. The full description of the catch and harvest by sex and size.It seems that these data are missing or merely guessed at.
20. The purpose and principles of the Fisheries Act 1996, sections 8-10, support the management of fisheries at abundant levels to enable people to provide for their social, economic and cultural wellbeings. The public has rights to fish for food and recreation under the Act and failure to properly provide for these rights is unreasonable. There are many ways that the public’s fishing interest in the stock could be advanced in advice papers, but these are forgone in the pursuit of commercial benefits through higher catches.
21. In our view the NRLMG fails to give advice that enables all sectors to maximise the benefits from the rock lobster fisheries, instead adopting strategies and crafting advice that benefit commercial users, while barely noting the effect of continued low abundance on non-commercial fishers.
22. 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 Ministers²". The NRLMG must be held accountable to all stakeholders for achieving this unfulfilled commitment.

23. The submission period is too short. Details of the review of rock lobster sustainability measures for CRA 2, CRA 3, CRA 4, CRA 7 and CRA 9 as well as South Island scallops in SCA 7 were released on 24 January 2014 with submissions due on 21 February. A submission timeframe of just 18 working days has limited our consultation to only a few of our members and interested parties.
24. Consultation, the science process and ongoing management are being hijacked by commercial interests, to the detriment of the marine ecosystem. It is time the Minister became more active and risk averse when managing our fragile fisheries. The Minister cannot continue to ignore the weaknesses in the NRLMG process that enables commercial interests to so easily capture the advice he is given.
25. The introduction of Management Procedures for CRA 2 and CRA 9 for the first time are significant management changes. Once adopted they may not be reviewed for the next five years. We have raised concerns about problems with CPUE-based Management Procedures in previous submissions and these latest proposals just reinforce our concerns regarding this high-risk strategy and the lawfulness of this approach.
26. Applying the current Management Procedure in CRA 4 now means a TACC reduction is required. It is notable that even commercial fishers do not now believe their CPUE is reflecting abundance.

5.2. CPUE as a proxy for abundance

27. Assuming that commercial Catch Per Unit of Effort (CPUE) is proportional to abundance comes with many risks. Commercial CPUE is often affected by operational changes and market demands, but there is no consistent way that these changes are recorded or taken into account.
28. The practice of high grading and returning the less profitable grades to the sea has become widespread. This is allowed under Schedule 6 of the Fisheries Act, but legal fish released are included in the CPUE (kg/potlift). Fisher estimates of the weight of those released crayfish have a significant influence on CPUE. 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 or 3 days? No account seems to be taken of these operational changes when assuming that standardised CPUE is proportional to abundance.
29. Another critical assumption is that commercial fishing effort effectively samples the vulnerable biomass. The submitters reject the assumption that CPUE gives an unbiased sample of population abundance, primarily on the grounds that rock lobster have always suffered serial depletion, as the stock is fished down effort is redeployed to pockets of remaining adult stock.
30. The rock lobster population is fished at different rates across its range. Areas close to home ports such as Gisborne are 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 is getting exhausted another move is made, allowing stocks to be serially depleted without any apparent decline in CPUE to highlight changes in stock size.
31. Without knowing what effort is applied to the same area, in the same way, and the catch composition, the changes in raw CPUE data becomes non-attributable.

² NRLMG 2003 Annual Report.

32. Anecdotal reports in 2013 from remote areas in CRA 2 are that large numbers of commercial pots are turning up in areas that have seldom been fished.
33. In future, some form of electronic logging of location and catch by potlift would show the extent of shifting effort.

5.3. Application of Management Procedures

34. Management Procedures are a mechanism used to guide catch limit decisions in most rock lobster fisheries. Management Procedures are driven by the annual standardised CPUE from the previous year.
35. Setting and altering the Total Allowable Catches based on un-validated fisher-recorded catch, including legal crayfish returned to the sea and number of potlifts, requires a good deal of faith to overcome the possibility that fishers can ignore the high incentive to report an increase in CPUE.
36. Fishers have ready access to better boats, better haulers, and pots. Electronic aids such as sounders, sonar, GPS and bottom mapping software are now available. A potlift in 2013 is not directly comparable to a potlift 10, 20 or 33 years ago.
37. The basic understanding of rock lobster settlement, recruitment, growth, migration, natural mortality, and natural variances are mostly missing. A few small pieces have been studied, but the knowledge base is dominated by the unknown, and this alone reinforces the need for the Minister to act in a lawful, precautionary manner when managing rock lobster fisheries.
38. To understand how the stock is affected by fishing it is critical that we know the numbers of each cohort being taken in commercial crayfish pots. This data is important if we are to have any understanding of population changes and exploitation rate, particularly when no reliable index of rock lobster settlement and recruitment exists.

5.4. MLS and size concessions

39. Tracking changes in the age/size composition of the harvest is essential if the effects of a Minimum Legal Size (MLS) concession are to be understood.
40. Moreover, we are seriously concerned that commercial fishers, in CRA 3 in particular, are reliant on concession fish. At earlier CRA 3 regional meetings fisheries managers advised that concession fish were estimated to be between 60 and 70% of landed catch.
41. The Minister must insist that information on where, when and how many fish below the Minimum Legal Size, at 52mm and 53mm, are being harvested by commercial fishers as per the concession. This information is critical to determining whether it is the abundance of these small fish that are skewing the CPUE results. Having validated this information the Minister will then be empowered to make a more informed TAC decision.
42. Without this information we can only guess at the proportion of how many rock lobster below the MLS are contributing to the CPUE.
43. In 2013 the NZSFC requested the following information. We received no response. We repeat our questions with the expectation of receiving answers this year –
 - a. What percentage of fish below the MLS are landed, per stock?
 - b. Where and when fish below the 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?

Management without this supporting information means there is no ability to cross-check the changes observed in CPUE. Validation of such important information enables credible management.

44. 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.

5.5. Fisheries Act support for reasonable public catch

45. Advice to the Minister includes comments on his statutory duties when making decisions under the provisions of the Fisheries Act 1996. This advice would include, among other matters, how the decision conforms to the Act's purpose in section 8.
46. The purpose directs the Minister to manage fisheries sustainably, to both enable people to provide for their social, economic and cultural wellbeing, and to maintain the potential of the fishery to meet the reasonably foreseeable needs of future generations. (s8)(2)(a & b).
47. The Supreme Court has also identified the obligations of the Minister in saying, "*the notion of people providing for their wellbeing, and in particular their social wellbeing, is an important element of recreational interests*³".
48. The submitters urge the Minister to make a lawful decision. To do so, the Minister must be informed that the application of Management Procedures to set TACs and TACCs, particularly in CRA 2, ignores the public's fishing interests and has resulted in further depriving the public of an opportunity to a reasonable catch.
49. Increasing abundance in our rock lobster fisheries would yield many benefits for the Minister and all other interests including, but not limited to:
 - a. Improved marine environment, with more diversity and robust fisheries;
 - b. Increased real-time CPUE for commercial fishers;
 - c. Increased size and abundance of rock lobster available for non-commercial use;
 - d. Reduced conflict between various interest groups; and
 - e. Simplified and more credible management processes inclusive of stakeholder input.
50. We note the reasonable relationship between commercial and non-commercial interests in CRA 5 (North and east coast, South Island) has many benefits. CRAMAC5, the local industry body, manages this fishery to a more abundant level than what is deemed necessary by Management Procedures. This provides the local community reasonable access to rock lobster and it enables people to provide for their wellbeings. It also gives the community confidence in local commercial rock lobster fishing operations and a measure of confidence that there will be crayfish available for future generations.

³ NEW ZEALAND RECREATIONAL FISHING COUNCIL INC AND ANOR V SANFORD LIMITED AND ORS SC 40/2008 [28 May 2009]. Para 54.

6. ROCK LOBSTER PROPOSALS

6.1. Crayfish 2 (CRA 2) Pakiri to East Cape

Stock	Option	TAC	Customary	Recreational	Other mortality	TACC
CRA 2	CRA2_01: Be guided by the <u>new Rule 4</u> CRA 2 management procedure and decrease the TAC and TACC	416.5 t ↓	16.5 t	140 t	60 t	200 t ↓
	CRA2_02: Be guided by the <u>new Rule 6</u> CRA 2 management procedure and decrease the TAC and TACC	426.5 t ↓	16.5 t	140 t	60 t	210 t ↓
	CRA2_03: Retain the current CRA 2 TAC, allowances and TACC	452.583 t	16.5 t	140 t	60 t	236.083 t

Table 1: MPI summary of Total Allowable Catch, allowances and Total Allowable Commercial Catch proposals for CRA2.

Differing worlds of modeled and observed stock

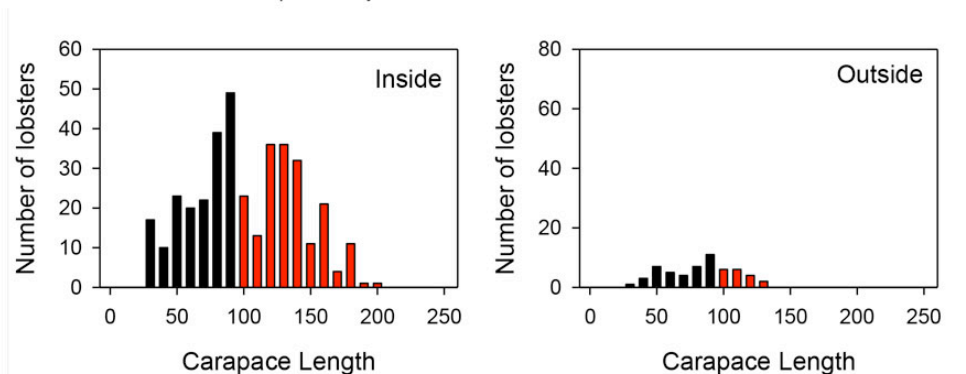
51. The submitters are unable to endorse either option proposed by the National Rock Lobster Management Group. (Table 1 above).
52. We totally reject the CRA 2 stock assessment estimate that the stock is at 37% of the unfished biomass (B_0). There has clearly been an enormous reduction in the number and size of rock lobster in east Northland, the Hauraki Gulf, outer islands and Bay of Plenty. Formerly rock lobster was one of the top three species in the Hauraki Gulf ecosystem and now they are near the bottom⁴.
53. If it is true that the current spawning biomass is 530 t (37% B_0), then using standard calculations the original, unfished biomass would have been 1430 t. This estimate is implausible given the prime crayfish habitat between Pakiri in the north and East Cape.
54. The assumptions made of stable rock lobster stocks, used as a basis to estimate historical abundance (*Bref*) and *Bmsy*, is an illusion – convenient certainly, but unfortunately not supported by observation.
55. There has not been a stable period since the Second World War. Ask any fisher that worked through the 1960s, 70s and 80s and hear of expansion, as better boats, mechanical haulers and better pots enabled the exploitation of new grounds. The major fishing strategy was breaking in new territory.
56. Clearly there is something fundamentally wrong with a model that cannot be confirmed by observations. The changing size of rock lobster in the CRA 2 population and the loss of range confirm a stock that long-time observers have estimated at less than 10% of the unfished stock – below the Ministry's Harvest Strategy Standard (HSS) 'hard limit', requiring consideration to close the fishery for rebuilding.
57. In the mid 1990s non-commercial representatives were concerned about the long-term viability of CRA 2. They warned the then Minister, John Luxton, against increasing the TACC when setting the TAC for the first time. He ignored their advice and proceeded to increase the TACC from 214.6 t to 236.1 t from the 1997-98 fishing year. CRA 2 now has the lowest CPUE of all areas. In fact, the CRA 2 stock has been depleted for so long that even the stock assessment model concludes that this is its natural state. The submitters reject both this view and the model that would perpetuate this depletion.
58. Quite small pockets of marine protected area can maintain more and larger rock lobster than similar habitats subject to fishing. It is simply not true that habitats in CRA 2 are different to those in other areas and cannot support abundant crayfish numbers (see figure below).

⁴ A Long View – the impacts of humans on the New Zealand marine ecosystem since first settlement. By a multi disciplinary team drawn from 14 institutions.

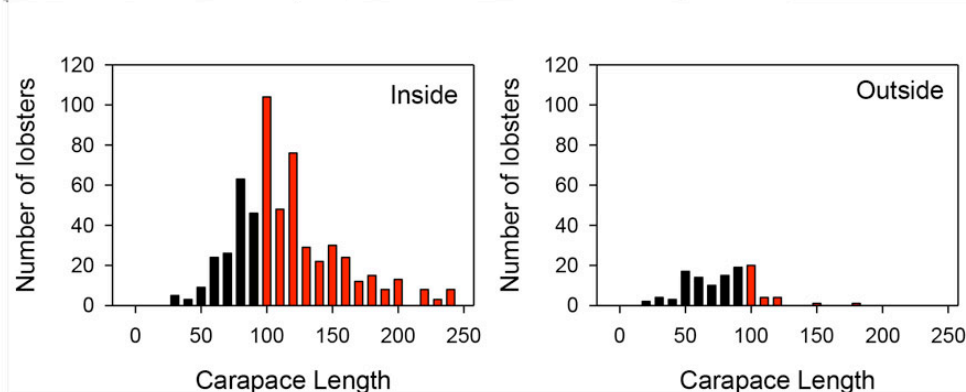
59. The average number of rock lobsters in fished areas outside the Cape Rodney to Okakari Point Marine Reserve has fluctuated between 6% and 28% of those encountered within the reserve, while average number of rock lobsters outside the Te Whanganui-a-Hei Marine Reserve have fluctuated between 5% and 15% of those encountered inside. Reserve populations are dominated by lobsters above the legal size limit, with relatively high numbers of old and large animals. In contrast, fished populations are dominated by sub-legal animals.

Figure 22: Comparison of lobster size and abundance between protected and non-protected areas. Data are presented from the a) Cape Rodney to Okakari Point Marine Reserve in 2009¹ and b) Te Whanganui-a-Hei Marine Reserve in 2009², and c) Tawharanui Marine Park in 2009¹. Note that the patterns in the Cape Rodney to Okakari Point Marine Reserve in 2009 and Te Whanganui-a-Hei Marine Reserve are also consistent with those reported from other years.

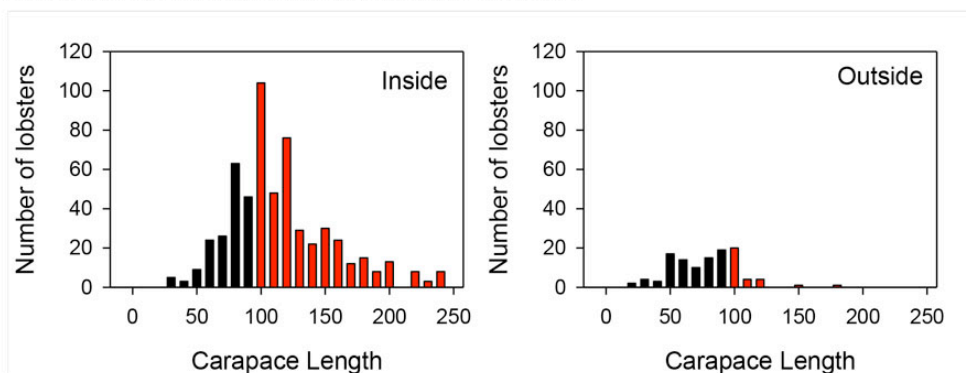
- a) Lobsters inside and outside Cape Rodney to Okakari Point Marine Reserve in 2009



- b) Lobsters inside and outside Te Whanganui-a-Hei Marine Reserve in 2009



- c) Lobsters inside and outside the Tawharanui Marine Park in 2009



¹ Data from Haggitt and Mead (2009a)

² Data from Haggitt and Mead (2009b)

CRA 2 Seasonal

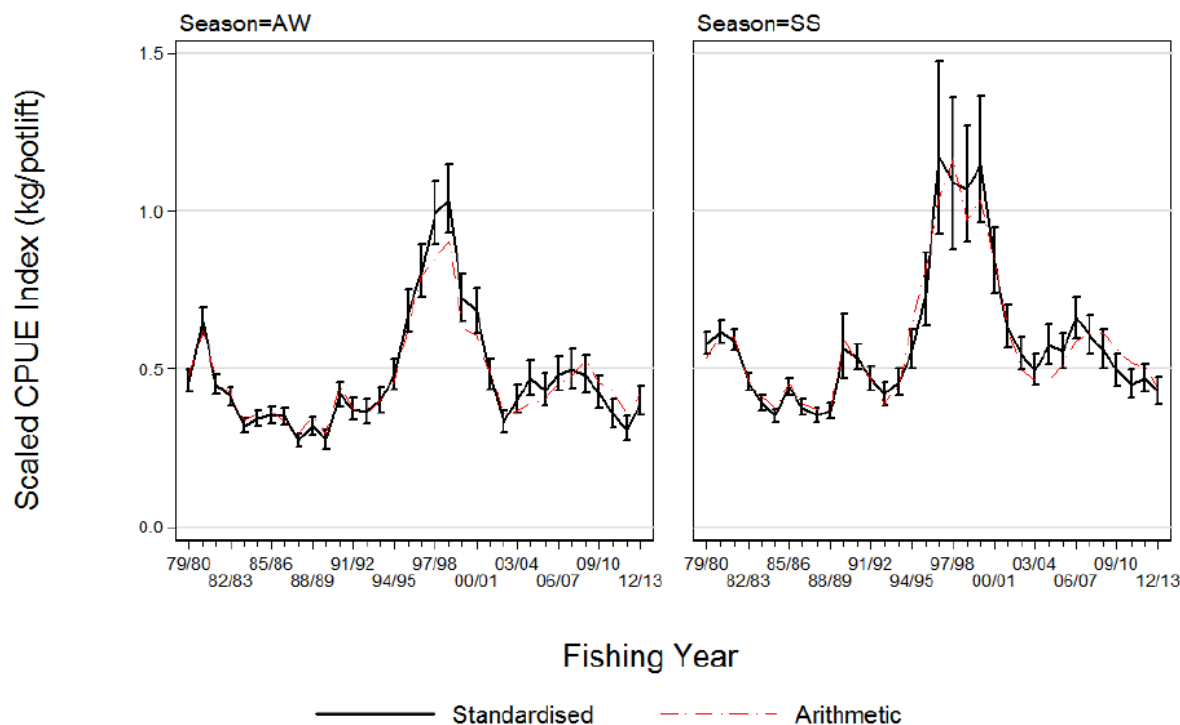


Figure 1: CRA 2 CPUE comparing the standardised time series used in the model with the raw data (Arithmetic) by fishing year and season.

Commercial potlift effort and catch

60. In Figure 1 the standardised CPUE, used as an index of abundance in the stock assessment for CRA 2 and the raw CPUE (red dashes) are almost identical. The standardisation is intended to take account of changes in vessel, area, season and fishing power. The plot in Figure 1 shows that a potlift in 1979–80 has the same effective fishing power as a potlift in 2012–12. This is clearly not true. The speed and power of vessels and haulers has increased, the pot design has improved, fishers have GPS and broad band sounders with bottom mapping capability. They know exactly where they are, where they have been and what reef systems are ahead of them.
61. Commercial fishers in CRA 2 are making a similar number of potlifts in 2012–13 as in 1979–80 (530,000 per year) with less than half the number of boats. There are now 35 boats in this fishery compared to 80 in 1979-80.
62. The submitters believe there has been a significant improvement in the efficiency of commercial pots and the efficacy of the way they are deployed. If this had been accounted for, then the standardised CPUE would fall below the raw CPUE in Figure 1.
63. Anecdotal information from recreational fishers is that crayfish abundance was much higher in the 1980s than it is today. This was most evident in remote areas of Coromandel, Mercury Islands, Little Barrier and Great Barrier. All these areas have progressively been fished down by commercial fishers.
 - The CPUE analysis and therefore the model that fits to it are significantly underestimating the decline in the CRA 2 stock, and the reference biomass estimated for 1979 to 1981 should be significantly higher.

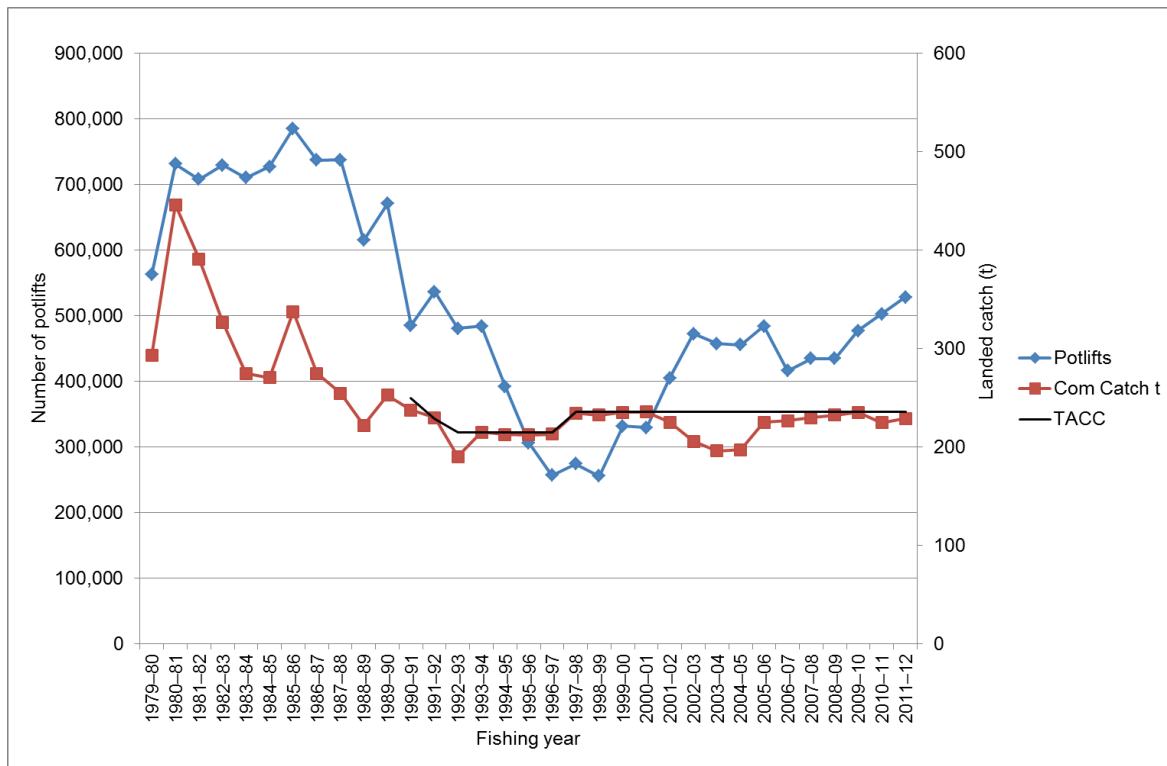


Figure 2: The number of potlifts and catch in tonnes in the CRA 2 commercial fishery since 1979–80.

64. The available catch history shows a high catch in 1980–81 declining over the next 10 years. Introduction to the Quota Management System capped annual landings in 1990. The TACC was increased to 236.1 t in 1997–98. Since then potlifts have increased 105%, and in the last few years the TACC has not been fully caught. Add in the benefit of new technology and it is clear to us that **this is a fishery that has continued to decline**.
65. The stock assessment estimates of biomass in 2012 36% above *B_{msy}*, and 37% of the unfished biomass are simply not credible to anyone with experience in this fishery.
66. The number of potlifts is now well over 500,000 per year and still the TACC cannot be caught. (Refer Figure 2 above). This is not good for commercial fishers, it is increasing pressure on an already depleted fishery, and it reduces ecosystem productivity and the availability of crayfish to recreational and customary fishers.
67. The Management Procedure options presented by the NRLMG have no hard limit and a broad plateau at 200 t or 210 t. Catch at these plateau levels make relatively minor adjustment (11 to 15% reduction) to the TACC and are totally inadequate to turn this fishery around from years of overfishing. Indeed, such paltry reductions are known to be inconsequential when there is a need for a substantial rebuild.
68. International best practice is to restore stocks to target quickly, as having them languish below fully productive levels imposes huge costs across all benefit sectors, including the ecosystem, social, cultural, and economic, and maintains excessive and unnecessary risks. This CPUE-based Management Procedure is not a plausible stock rebuild strategy– it’s a do-nothing strategy.
69. Where are the real effective management options for the Minister?

70. The two Management Procedures presented have just a 10 t difference in TACC until CPUE reaches 0.5 kg/potlift and a projected average catch rate of 0.48 kg/potlift under Rule 4 or 0.46 kg/potlift under Rule 6. Given the uncertainty around these projections it seems the outcome is effectively identical.
 - Under the proposed Management Procedures CRA 2 will remain the most severely depleted rock lobster fishery in NZ, with by far the worst commercial catch rate and expectations of extremely poor recreational catch for the foreseeable future. This is unacceptable.
71. The Harvest Strategy Standard defines a Hard Limit for stocks such as CRA 2 as 25% *Bref*. Stocks that are below the hard limit must be closed.
72. For CRA 4, 5, 8, and the proposed Management Procedure in CRA 9, if CPUE falls below 0.3 to 0.5 kg/potlift the TACC is set at zero. The same standard is not being applied in CRA 2. Neither of the proposed Management Procedures reduces the TACC to zero if CRA 2 is below the hard limit.
73. The NRLMG and MPI propose CRA 2 is managed by generating TACC based on CPUE at only 10% of the level that closes other fisheries. There is nothing that makes CRA2 different – same fish, growth, distribution and ecosystem function. The same principles ought to apply!
74. By ignoring existing principles and making a rule that allows current practice of depletion to continue exposes the NRLMG and MPI to charges that their only interest is protecting existing quota owners, as these proposals have no regard for the public or the resource.
75. In our view, the Management Procedures being proposed for CRA 2 fail to meet the provisions of ss8 13, 20, 21 of the Fisheries Act 1996, by making changes to the TACC while barely paying lip-service to the need to provide for public catch or comply with other statutory duties.
76. Where is the option that will see CRA 2 stock rebuild to a point that will provide for the reasonably foreseeable needs of future generations?
 - The CRA 2 biomass must be doubled from where it is now.
 - The Minister must be presented with an option in the final advice paper to achieve the rebuild required to double the existing biomass.

Hauraki Gulf Marine Park Act

77. The Hauraki Gulf Marine Park boundaries fall within the CRA 2 management area. When setting the TAC the Minister is required, under s11(2)(c) of the Hauraki Gulf Marine Park Act 2000, to have ***particular regard*** to sections 7 and 8. These sections recognise the Hauraki Gulf's national significance, the wellbeing of people and the protection and enhancement of the natural resources, including kaimoana, within the Park.
78. The submitters emphasise the need for the Minister to comply with the provisions of the Hauraki Gulf Marine Park Act, to rebuild this fishery to abundant levels to improve marine diversity and to enable people to provide for their social, economic and cultural wellbeings.

Public frustration with CRA 2 depletion

79. Abundance continues to fall along in the northeastern rock lobster fisheries. Non-commercial catches have been adversely affected by stock depletion.

80. The concentration of commercial potting on the remnants of the rock lobster stock has the public questioning the process that permits increasing fishing effort to be applied to a stock that, in many places, is almost completely fished out.
 81. The cycle of NRLMG advice being accepted on face value, in stark contrast to the observations of the public, has seriously eroded confidence in the Ministry's ability to control and manage commercial activity in the rock lobster fisheries.
 82. There are increasing numbers of people aware that this advice is only guided by a goal of securing a short-term commercial benefit. NZSFC members have asked the executive to explore other means of influencing these decisions.
 83. The NRLMG and the Minister need to show that they take non-commercial interests and needs seriously, and recognise that advice from the NRLMG is almost all simple commercial advocacy. The notion of impartial advice remains invisible.
 84. There was a clear message from the stakeholders' meeting held in Tauranga in May 2013. Joint sector aspirations were identified and high abundance was the goal:
 - Higher abundance (including a wide size distribution of rock lobsters)
 - Improved stability
 - Improved CPUE
 - Improved information on non-commercial catches and recruitment dynamics.
- We submit –
- Neither of the near-identical CRA 2 management proposals will meet non-commercial expectations or the Minister's statutory obligations
 - The Minister must not implement either of the proposed CRA 2 Management Procedures
 - The CRA 2 biomass must be doubled from where it is now
 - That we are willing to discuss measures required to achieve doubling CRA 2 biomass
 - That the final advice paper to the Minister must contain advice on management action required to double the biomass in CRA 2, to mitigate the risks associated with low biomass levels, and to address serious public concerns over the depleted state of the fishery.

6.2. Proposed TAC changes in CRA 3 (Gisborne)

Stock	Option	TAC	Customary	Recreational	Other mortality	TACC
CRA 3	CRA3_01: Be guided by the CRA 3 management procedure and increase the TAC and TACC	389.95 t ↑	20 t	20 t	89 t	260.95 t ↑
	CRA3_02: Retain the current CRA 3 TAC, TACC and allowances	354.5 t	20 t	20 t	89 t	225.5 t

Table 2: MPI summary of Total Allowable Catch, allowances and Total Allowable Commercial Catch proposals for CRA3.

85. CRA 3 is a relatively small but significant fishery for commercial, customary and recreational fishers. It is well documented that recreational fishers feel disadvantaged by the commercial concession allowing undersized male rock lobster to be taken.
 - The Minister must revoke the concession that allows commercial fishers to take undersized male rock lobster.
 - While the concession remains the submitters will reject any TACC increase.

86. In 2013 the standardised commercial CPUE in CRA 3 was 2.36 kg/potlift. The existing Management Procedure would allow a 50 t increase for 2014, but a 10% cap on the size of annual increases is also part of the Rule. NRLMG propose to add all of the 34.5 t increase to the TACC, which would rise from 225.5 t to 261 t, up 15.7%.
87. Again, there is a disconnect between trends in commercial CPUE and what recreational fishers are experiencing. Recreational fishers struggle to find legal sized crayfish in places where they have historically been. A 2011–12 national survey of amateur harvest estimated just 8 tonne (cv 0.33) in CRA 3, with the lowest average weight (580 g) per animal in the country.
88. While the NRLMG state in the Discussion Document “*the allowances made for recreational fishers do not constrain their overall harvest*” there is obviously considerable constraint due to low availability, small average rock lobster size, number of fishable days and limited access. The allowance for the public should be caught, and providing abundance that enables opportunity for this catch is a basic statutory duty.
89. Does a management process that provides 2% of the TAC for public catch in a populated region sound even vaguely reasonable? It clearly is nonsense.
- NZSFC has not supported the CRA 3 Management Procedure from the outset.
 - The CRA 3 Management Procedure selected in 2010 is not a good fit to current fishery performance and we look forward to its review in 2014.
 - We submit the Minister select option CRA 3_02 and retain the current TACC until the Management Procedure is reviewed in 2014.

6.3. Proposed TAC changes in CRA 4 (Hawke Bay – Wellington)

Stock	Option	TAC	Customary	Recreational	Other mortality	TACC
CRA 4	CRA4_01: Be guided by the CRA 4 management procedure and decrease the TAC and TACC	662 t ↓	35 t	85 t	75 t	467 t ↓
	CRA4_02: Retain the current CRA 4 TAC, allowances and TACC	694.7 t	35 t	85 t	75 t	499.7 t

Table 3: MPI summary of Total Allowable Catch, allowances and Total Allowable Commercial Catch proposals for CRA4.

90. This is the third year that the CRA 4 Management Procedure has been in operation. CRA 4 includes southern Hawke Bay, Wairarapa and Wellington. Last fishing year the TACC was increased by 33 t. This year the proposal generated by the Management Procedure is to reduce the TAC by about 5% and the TACC by 33 t. (Figure 3 below).
91. The Discussion Document says that commercial fishers claim that the decrease in the 2013 CPUE was caused by poor weather in autumn-winter and low market prices, rather than a reflection of available abundance. This is another example of operational changes affecting the standardised CPUE, which in 2013 may not be tracking abundance.
92. Based on current catch the extra 33 t made available from last year’s increase may not be caught.
93. Rock lobster is a popular target species in the CRA 4 area with a total amateur harvest in the 2011–12 national survey of 44 t (cv 0.17). The current allowance for recreational fishers is 85 t, the customary allowance 35 t and other sources of fishing related mortality 75 t.
- The submitters support a reduction in the Total Allowable Catch (TAC) and TACC in CRA 4. Only time will tell whether the previous, large TACC increases are sustainable – we think not.

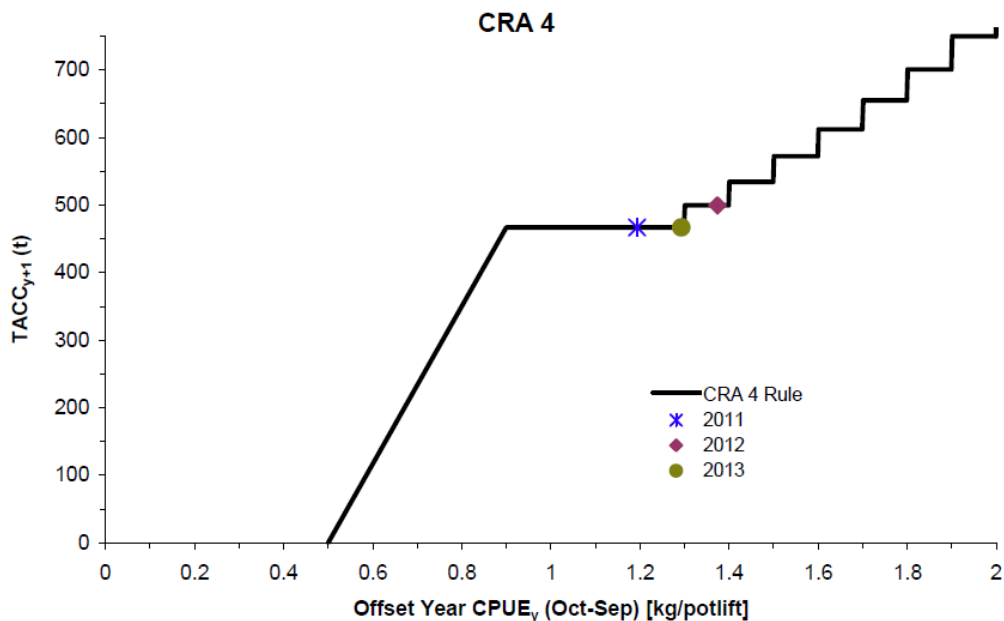


Figure 3: The CRA 4 Management Procedure with the main plateau at 467 t and a first step to 500 t.

6.4. Proposed TAC changes in CRA 7 (Otago)

Stock	Option	TAC	Customary	Recreational	Other mortality	TACC
CRA 7	CRA7_01: Be guided by the CRA 7 management procedure and increase the TAC and TACC	86 t ↑	10 t	5 t	5 t	66 t ↑
	CRA7_02: Retain the current CRA 7 TAC, allowances and TACC	64 t	10 t	5 t	5 t	44 t

Table 4: MPI summary of Total Allowable Catch, allowances and Total Allowable Commercial Catch proposals for CRA7.

94. This is the second year that the revised CRA 7 Management Procedure has been in operation. CRA 7 is located on the east coast of Otago. There are limited areas of reef habitat and this fishery relies heavily on new recruits reaching the legal size.
95. The TACC has been as high as 189 t in 2009–10 but was not caught (137 t). Last year the TACC was reduced from 64 t to 44 t. This year the proposal generated by the Management Procedure is to increase the TACC by 50%, the maximum allowed by a Rule in the current Management Procedure (Figure 4).
96. In 2013 CPUE increased over the previous year by 69% to 1.36 kg/potlift. It is encouraging to see the commercial catch rate in CRA 7 increase and hope that this can be maintained for several years.
97. Currently it is assumed that after a few years crayfish recruited in one year i.e. 2013, will move out of CRA 7 to Foveaux Strait and Stewart Island. Our concern is that 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. We believe commercial fishers in CRA 7 understand this pattern and have accepted a conservative Management Procedure because of the uncertainty.

98. The NRLMG have ignored the significant regulation changes made on 1 October 2013. The removal of the commercial closure of the Otago Concession Buffer Zone, and the removal of the commercial closed season from 20 November to 31 May, are major operational changes in CRA 7. These must have an impact on commercial CPUE.
99. Yet again, operational changes will mask real trends in stock abundance in years to come. NRLMG advice to the Minister stating “*Standardised commercial CPUE is considered to be a reliable indicator of relative stock size in CRA 7*” is wrong, as it is in CRA 2, CRA 4 and CRA 9. This is a fundamental flaw in Management Procedures.
100. We 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. If stock abundance is improving then there is no need for the concession, which contributes to growth overfishing.
- The submitters recommend the Minister reject any TACC increase while the concession enabling commercial fishers to take undersized rock lobster in CRA 7 remains.

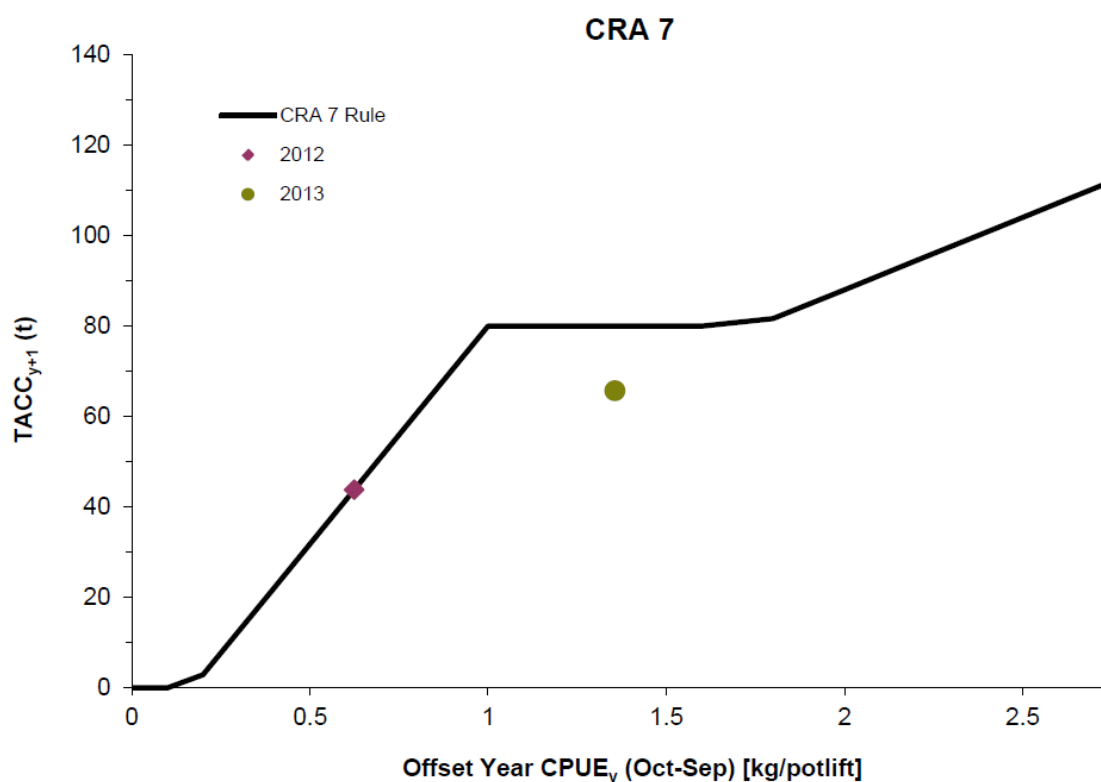


Figure 4: The CRA 7 Management Procedure with the main plateau at 80 t TACC but a rule that the increase in any one year will not exceed 50% limits the proposed new TACC to 66 t.

6.5. New Management Procedure proposals and allowances for CRA 9 (Kaipara Harbour - Westland)

Stock	Option	TAC	Customary	Recreational	Other mortality	TACC
CRA 9	CRA9_01: Be guided by the <u>new Rule 4041</u> CRA 9 management procedure, set a TAC of 91.8 tonnes and increase the TACC	91.8 t	5 t	25 t	1 t	60.8 t ↑
	CRA9_02: Be guided by the <u>new Rule 4041</u> CRA 9 management procedure, set a TAC of 115.8 t and increase the TACC	115.8 t	20 t	30 t	5t	60.8 t ↑
	CRA9_03: Be guided by the <u>new Rule 4144</u> CRA 9 management procedure, set a TAC of 98.6 t and increase the TACC	98.6 t	5 t	25 t	1 t	67.6 t ↑
	CRA9_04: Be guided by the <u>new Rule 4144</u> CRA 9 management procedure, set a TAC of 122.6 t and increase the TACC	122.6 t	20 t	30 t	5t	67.6 t ↑
	CRA9_05: Retain the current CRA 9 TACC (no TAC or allowances have been previously set for CRA 9)	N/A	N/A	N/A	N/A	47.008 t

Table 5: MPI summary of Total Allowable Catch, allowances and Total Allowable Commercial Catch proposals for CRA9.

101. CRA 9 is a large area covering the west coast of the North Island, south of the Kaipara Harbour, and northwest coast of the South Island. The current TACC is 47 t and this is fished by relatively few boats. From 1982 to 2000 CPUE was about 1 kg/potlift but it has increased markedly over the last few years to a new peak of 3.2 kg/potlift. Large rock lobster caught and release are included in the standardised CPUE.
102. The NRLMG state “*For CRA 9 there is a small amount of commercial catch data available for CPUE analysis, which may result in CPUE indices that are sensitive to different catching patterns rather than changes in stock size. Despite this sensitivity, CRA 9 CPUE has been used as the abundance indicator in the new CRA 9 management procedure.*”
103. The submitters are concerned that CPUE indices for all rock lobster stocks are sensitive to different catching patterns and advancements in technology. Where there is uncertainty in what is being measured by CPUE the Minister is obliged to apply a precautionary management approach to ensure sustainability.
104. The Management Procedure proposed for CRA 9 is reasonably conservative. The model projections predict a long-term average around 2 kg/potlift. (The Management Procedures in CRA 2 and CRA 3 are not conservative, with regular increases in the TACC if there is good recruitment and/or the CPUE index increases).
105. A healthy fish stock has a reasonable number of large adult fish. Large crayfish are prime breeding stock and can play an important role in the ecosystem. It is encouraging that CRA 9 still has reasonable numbers of large crayfish.
106. This is the first time a TAC and allowances have been set for CRA 9. The submitters support reasonable allowances for non-commercial fishers -
 - 20 t for Maori customary non-commercial fishing interests;
 - 30 t for recreational; and
 - 5 t for other fishing related mortality, to allow for the uncertainty in the current estimates.

7. PREVIOUS NZSFC SUBMISSIONS

2013 – Submission on the review of Rock Lobster [sustainability measures for 1 April 2013.](#)

2012 – Submission on the review of [Rock Lobster regulatory controls.](#)

2012 – Submission on the review of Rock Lobster [sustainability measures for 1 April 2012.](#)

2011 – Submission on the review of Rock Lobster [commercial Concession Area Regulations](#)

2011 – Submission on the review of Rock Lobster [sustainability measures for 1 April 2011](#)

2010 – Submission on the review of sustainability measures for [CRA 3 & 4, for 1 April 2010.](#)

2010 – NZSFC Zone 5 clubs submission on the review of CRA [sustainability measures for 1 April 2012.](#)