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Submission: Proposed measures for the Northland spiny rock lobster fishery (CRA 1)

Problem statement

The abundance of spiny red rock lobster on the North Island's east coast has collapsed while creating trophic cascades in the form of kina barrens, and impacting associated and dependent species and habitats. The progressive collapse of CRA 1 has been drawn out by successive Ministers and Fisheries New Zealand (FNZ) who have failed to administer the Fisheries Act (**the Act**) as required by law. The same situation has also been witnessed in CRA 2 where rock lobster in the Hauraki Gulf have been described as being "functionally extinct", we are seriously concerned that this statement also applies to the east coast of CRA 1.

The depletion of rock lobster on the east coast of CRA 1 and consequent proliferation of kina barrens could have been prevented if the purpose and principles of the Act were comprehensively applied. The Minister for Oceans and Fisheries, through FNZ, have failed to avoid, remedy, or mitigate the adverse effects of fishing, and this was confirmed by the High Court's ruling in 2022.

Years on, we are still only talking about how to prevent the expansion of kina barrens, with rock lobster at the centre of those discussions. Rock lobster has been overfished and the manner in which catch settings were established has failed to defend the stock or the rocky reef ecosystem. While species such as rock lobster are managed at levels that prioritise harvest and ignore the wider ecosystem we will not have abundant, functioning, marine ecosystems.

Small management changes will not be effective. Until the Minister has a recovery plan in place to reduce the current extent of kina barrens and prevent their spread, the removal of rock lobster from the east coast of CRA 1 needs to stop.

There is no sound argument for continuing to harvest an already depleted species from a degraded ecosystem. How can the Minister continue to lawfully set catch limits each year whilst stretches of east Northland's shallow reefs have been degraded due to the cumulative effects of fishing?

Given the current state of CRA 1, it's implausible to think we can fish our way towards an abundant stock.

The recovery plan requires immediate actions including Quota Management Area subdivision and a pause in all rock lobster catch from east Northland (CRA 1). When the stock is sufficiently abundant to allow for harvest, the recovery plan will guide an increase to the minimum legal harvest size, a new method for establishing a precautionary Total Allowable Catch (**TAC**), and effort limits.

It's obvious that what we are doing now is not working. The Minister and FNZ have had their chance to effectively manage CRA 1. The High Court has issued directions about not crossing the environmental bottom lines and the failures are evident. This is another example of commercial interests internalising the benefits of depleting our natural resources while passing on the costs of extraction to future generations.

Recommendations

1. **The Minister acknowledges that the following measures proposed by Fisheries New Zealand are not sufficient to ensure the recovery of kelp forest ecosystems –**
 - a. Non-regulated or voluntary industry measures.
 - b. Vessel or accumulation limits for recreational fishers.
 - c. Measures for recreational fishing of packhorse lobster.
2. **The Minister takes a precautionary approach** and closes CRA 1 south of North Cape to rock lobster fishing until Fisheries New Zealand has a recovery plan for rock lobster that will enable them to fulfil their natural role within the ecosystem.
3. **The Ministers acknowledges** that a Total Allowable Catch cannot be lawfully set for the east coast of CRA 1.
4. **The Minister acknowledges** that the following recovery plan package of measures may support the long-term management of rock lobster and contribute to the functioning of kelp forest ecosystems –
 - a. A new method for setting appropriate catch limits;
 - b. Splitting the CRA 1 quota management area into a minimum of two smaller areas;
 - c. Seasonal closures over breeding periods (April-June) to align with tikanga and kaitiakitanga;
 - d. Introduction of a maximum legal size;
 - e. Setting a management target that takes into account ecosystem considerations; and
 - f. Increasing the minimum legal size in CRA 1 east and west by 5 mm for commercial and recreational fishers.
5. **The Minister acknowledges** that smaller, temporary section 11 closures in isolation, at this stage of stock depletion, are band-aid solutions to an overarching problem of mismanagement.
6. **Fisheries New Zealand provides to the Minister** advice on setting commercial pot/effort limits as a measure to improve the management of rock lobster which will contribute to overall ecosystem functioning over the long-term.

The submitters

7. The New Zealand Sport Fishing Council (**NZSFC**) appreciates the opportunity to submit on the review of proposed measures for rock lobster (*Jasus edwardsii*), in Quota Management Area CRA 1. Fisheries New Zealand's (FNZ) Discussion paper was received on 14 November 2024, with submissions due by 15 December 2024.

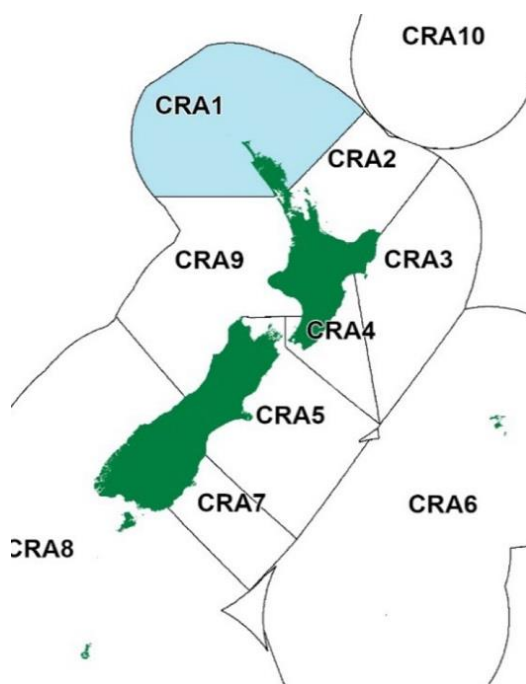
8. The New Zealand Sport Fishing Council is a recognised national sports organisation with over 37,000 affiliated members from 55 clubs nationwide. The Council has initiated LegaSea to generate widespread awareness and support for the need to restore abundance in our inshore marine environment. Also, to broaden NZSFC involvement in marine management advocacy, research, education and alignment on behalf of our members and LegaSea supporters. www.legasea.co.nz

9. The New Zealand Angling and Casting Association (**NZACA**) is the representative body for its 24 member clubs throughout the country. The Association promotes recreational fishing and the camaraderie of enjoying the activity with fellow fishers. The NZACA is committed to protecting fish stocks and representing its members' right to fish.

10. The New Zealand Underwater Association comprises three distinct user groups including Spearfishing NZ, affiliated scuba clubs throughout the country and Underwater Hockey NZ. Through our membership we are acutely aware that the depletion of inshore fish stocks has impacted on the marine environment and the wellbeing of many of our members.

11. Collectively we are '*the submitters*'. The joint submitters are committed to ensuring that sustainability measures and environmental management controls are designed and implemented to achieve the Purpose and Principles of the Fisheries Act 1996, including "maintaining the potential of fisheries resources to meet the reasonably foreseeable needs of future generations..." [s8(2)(a) Fisheries Act 1996].

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



Fisheries New Zealand's proposals

13. Fisheries New Zealand (**FNZ**) has released a [Discussion Document](#), canvassing the public for their opinion on potential rock lobster management measures. The proposed measures are intended to better manage the predator-prey relationship between rock lobster and sea urchins, to mitigate the formation of urchin barrens.

14. FNZ’s proposals are a directive from the 2023 Minister for Oceans and Fisheries who acknowledged that the proliferation of urchin barrens will need to be addressed by a range of measures beyond catch limit reductions for rock lobster.
15. The management measures being considered to help address urchin barrens in CRA 1 are shown in Table 1.

Non-regulated measures implemented by the rock lobster industry

Non-regulated harvest limits and area/seasonal closures for 2024/25

Potential additional regulated measures

Subdivision of the CRA 1 Quota Management Area

Adjustments to legal size requirements

Area and/or seasonal closures

Accumulation and/or vessel limits for recreational rock lobster fishing

Measures to reduce recreational fishing pressure of packhorse rock lobster (*Sagmariasus verreauxi*).

Urchin barrens

16. The proliferation of sea urchins throughout the east coast of the North Island has led to areas known as urchin barrens or kina barrens. FNZ have loosely defined a sea urchin barren as:

“sea urchin dominated areas of rocky reef that would normally support healthy kelp forest but have little or no kelp due to overgrazing by sea urchins.”¹

17. An estimated 30% (7–49%) of shallow reef area is impacted by sea urchin barrens from Tāwharanui Peninsula in the Hauraki Gulf to Maitai Bay near the tip of Karikari Peninsula in Northland, with even higher estimates of up to 90% in parts of the Bay of Islands.²
18. There are two primary species of sea urchin known to cause barrens on temperate rocky reefs in New Zealand. Kina (*Evechinus chloroticus*) is endemic to New Zealand, and long-spined urchins (*Centrostephanus rodgersii*) which have been known to occur in New Zealand since the 1920s or earlier. *Centrostephanus* is less common, however, with warming water and changing ocean currents, their spatial distribution is expanding and abundance has been increasing.
19. The formation of urchin barrens is thought to be driven by a combination of factors including changes in environmental conditions and a significant reduction in the number of predators causing a fishery-induced trophic cascade (FITC). In northeastern New Zealand, fishing of top reef predators is considered to be a key factor driving the proliferation of kina, resulting in extensive kelp loss and expansion on urchin barrens.³

¹ Doheny B., Davis J.P., Miller B. (2023). Fishery-induced trophic cascades and sea urchin barrens in New Zealand: a review and discussion for management.

² Aquatic Environment and Biodiversity Annual Review (AEBAR). 2024. Chapter 13 – Trophic and ecosystem-level effects. At p. 17

³ Discussion of proposed measures for the Northland spiny rock lobster fishery (CRA 1). Fisheries New Zealand Discussion paper No: 2024/30. November 2024

20. Large snapper (*Pagrus auratus*), blue cod (*Parapercis colias*) and rock lobster are widely accepted as the primary predators of kina. Both snapper (SNA 1) and rock lobster (CRA 1) populations have historically been fished down to levels where they cannot fulfil their natural ecosystem services. Additionally, there is anecdotal information from fishers and local communities that highlights localised depletion of snapper and rock lobster in areas of know urchin barrens.
21. Both rock lobster and packhorse lobsters (*Sagmariasus verreauxi*) have been reported as predated on *Centrostephanus*, however, their long spines may make them a less favourable prey option, therefore, *Centrostephanus* dominated barrens may require management interventions where predation does not limit spread.
22. Heavy grazing by urchins have turned previously diverse rocky reef habitats into barren areas with low biodiversity and productivity. This ecosystem imbalance is a clear example of where the single-species based Quota Management System (**QMS**) has failed and the Minister and FNZ have resiled from administering the Fisheries Act as lawfully required, this was supported by the CRA 1 High Court decision in 2022 (see below).
23. In New Zealand, the occurrence and severity of sea urchin trophic cascades is complex. Many reef finfish, invertebrates and macroalgae have been displaced by urchin barrens. A number of reef fish are also known to eat juvenile kina or kina spat. Yet these species have been excluded from the urchin barren conversation. Setnet fishing on reefs has also seriously depleted the number of long lived resident reef fish in many areas.
24. Reducing the present extent of urchin barrens and preventing further formation of barrens will require a combination of active and passive measures including fine scale management of fishing and active habitat restoration. But active restoration efforts are pointless unless the Minister and FNZ can contribute to the long-term control of urchin populations and the recovery of rock lobster populations and rocky reef ecosystems as a whole.

CRA 1 High Court decision

25. CRA 1 is fished on the east and west coast of Northland. Since 1999, a large proportion of the commercial catch (30% to 50% per year) has come from the Three Kings area, a group of 13 islands about 55 kilometres northwest of Cape Reinga. The Three Kings area represents just 1 of the 5 fisheries management statistical areas in CRA 1. Since 2020–21, around 10–5% of the Total Allowable Commercial Catch (**TACC**), has been taken from the east coast of the North Island.
26. In 2022, the Environmental Law Initiative (**ELI**) and a Northland hapū challenged decisions made by the Minister for Oceans and Fisheries based on decisions made in 2020/21 and 2021/22. Recreational fisheries supported the legal challenge and the NZSFC was a third party intervenor.⁴ The NZSFC was one of three intervenor parties to the judicial review proceedings

⁴ Environmental Law Initiative v Minister for Oceans and Fisheries [2022] NZHC 2969 [11 November 2022].

challenging the Minister's 2021/22 and later 2022/23 decisions for the future management of CRA 1.

27. ELI successfully argued the Minister had been misled, using inaccurate and outdated information to make his decisions. In November 2022 Justice Churchman (**Churchman J**) of the High Court upheld the challenge and directed the Minister to reconsider the 2022/23 decision for CRA 1 using best available information and in accordance with the judgment.
28. In 2023, the Minister at the time reduced the catch limits for CRA 1 in recognition of the need to increase the abundance of rock lobster to enable them to fulfil their ecosystem role in controlling sea urchin populations. The Total Allowable Catch (**TAC**) was reduced from 193 t to 172 t (-10.8%), the recreational allowance was reduced from 27 t to 22 t (-18%), and the TACC was reduced from 105 t to 89 t (-15%). The Minister at the time additionally cut the recreational daily bag limit in half, from 6 to 3.
29. The High Court provided clarification on the Minister's responsibilities in terms of setting the TAC. Churchman J. described those responsibilities (in part) as follows –

*“When setting or varying [the] TAC the Minister **must take into account any effects of fishing on any stock and the aquatic environment.** ‘Effect’ means the direct or indirect effect of fishing, including any positive, adverse, temporary, permanent, past, present, future, and/or cumulative effect. ‘Fishing’ means the catching, taking, or harvest of fish, aquatic life, or seaweed.”⁵ [emphasis added]*

30. In August 2024, ELI challenged the remade (2023) decision. ELI's key concern is that FNZ continues to ignore a key part of the law which requires a more ecosystem-based approach to fisheries management. We are still waiting for the High Court's judgement.

Regulatory capture

31. An effective regulatory regime is necessary for fisheries to be managed and operated efficiently and equitably. It is inevitable that the regulator will become captured, but the degree of capture will vary across agencies from low to high. Strong capture violates the public interest to such an extent that the public would be better served by either (a) no regulation of the activity in question – because the benefits of regulation are outweighed by the costs of capture, or (b) comprehensive replacement of the policy and agency in question (Carpenter and Moss 2014: 11).
32. Fisheries in general, and rock lobster in particular, suffer from strong regulatory capture. In CRA 1 the stock assessment outputs are generated in concert by an industry lobby and government agency. The harvest strategies devised by this process are preoccupied with maximising commercial catch, often using contrived models to support the strategy. The steady declines of age structure and abundance in CRA 1 and CRA 2 over time contradict the harvest strategies.

⁵ Environmental Law Initiative v Minister for Oceans and Fisheries [2022] NZHC 2969 [11 November 2022]. At 22.

33. Neither CRA 1 or CRA 2 will survive to rebuild to functional levels while this process continues. The regulatory environment has become heavily captured and the popular quote attributed to Albert Einstein seems appropriate: *'No problem can be solved from the same level of consciousness that created it'*. Over time it has become more obvious that the problem of overexploitation will not be solved with current actors and processes. We must immediately apply policy that values abundance and ecosystem function over a short term desire for maximum catches. That is the only correct response to the High Court decision.

Existing urchin barren management

34. Since 2023, the Minister has approved a variety of management measures which are intended to remedy and prevent urchin barrens. These measures have primarily been related to the management of rock lobster or urchins.
35. In July 2024, the Minister approved an increase in the recreational daily bag limit from 50 kina to 150, the bag limit includes *Centrostephanus*. The decision was made on the basis that an increase in the bag limit may mitigate the formation of barrens in areas that are fished. The submitters did not support an excessive increase due to concerns of localised depletion, and instead supported an increase to 70 kina. The Minister's decision came into effect 1 August 2024.
36. In July 2024, the Minister approved the introduction of a new special permit purpose under section 97 (1)(c) of the Act. This will allow FNZ to receive, assess and where appropriate, issue special permits under a new purpose –

*"To allow persons or organisations to take and dispose, cull, or translocate sea urchins for the purpose of habitat restoration and/or prevention of urchin barrens."*⁶

The first special permit under this purpose was issued in November 2024 to the Te Kohuroa Rewilding Initiative. The submitters supported the approval of the new special permit purpose as it is widely accepted that snapper and rock lobster do not prefer urchins within barren areas due to lack of a healthy roe (also known as "skinny roe"). The new special permit purpose supports the notion that active removal helps help to re-establish and contributes toward restoring the balance between kina and kelp.

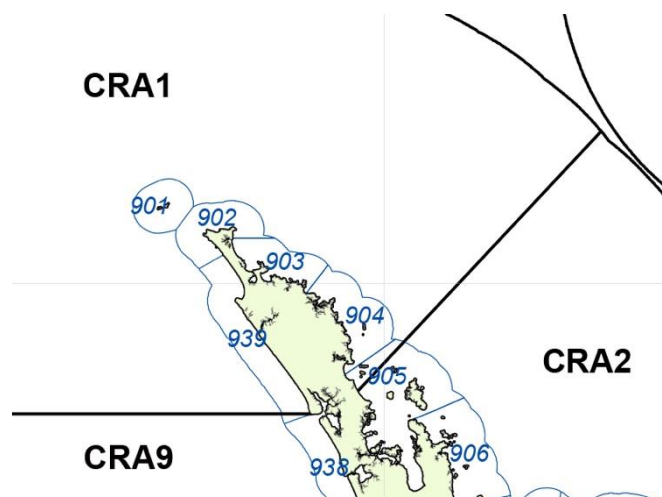
37. A number of local community groups have been active in monitoring kina barrens and some kina clearance trials have been undertaken. The rāhui at Maitai Bay has been in place since 2017, the 186A closure to fishing except kina removal in Maunganui Bay, Bay of Islands, has been in place since 2010, an Ecklonia restoration project has been under way in Tutukaka Harbour since 2021 and this year the Rehuotane Ki Tai 186A was approved in the Whāngai Mokopuna rohe moana (Tutukaka, Ngunguru and Horahora). Fisheries New Zealand has part funded a benthic habitat survey and trial kina removals in the Whāngai Mokopuna rohe moana. Also, FNZ contracted research project ZBD2023-03 to summarise and update knowledge on the distribution of kina barrens in East Northland and other key regions.

⁶ Ministers decision letter. Introduction of a new special permit purpose under section 97 of the Fisheries Act 1996. July 2024.

Rock lobster (CRA 1)

Catch information and current management

38. Rock lobster is an important species and fishery for all sectors in Aotearoa New Zealand. 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 rock lobster fishing has occurred since the 1930s.



39. The CRA 1 commercial landings for the 2023–24 fishing year were 89 tonnes. The majority of commercial catch, around 95% is taken from statistical areas 901, 902 and 939. A small proportion is taken from the east coast, statistical areas 903 and 904, where kina barrens are known to occur.
40. An updated estimate of recreational harvest from the 2022–23 National Panel Survey in CRA 1 was 8 tonnes (+/- 3.9 t), not including 2.02 tonnes of catch taken for personal use while commercial fishing (section 111 landings) and 160 kg of reported amateur charter vessel catch.⁷⁸ The majority of recreational catch is estimated to come from the east coast.⁹
41. The commercial quota year applying to rock lobster is 1 April to 30 March the following year. The minimum legal size (**MLS**) for harvesting male rock lobsters is 54 mm tail width (**TW**) and a minimum of 60 mm TW applies to female rock lobster. These apply to commercial and recreational harvest.
42. Recreational fishers have a maximum daily bag limit of 3 rock lobsters, within a combined daily bag limit of 6 including packhorse crayfish.
43. Commercial and recreational fishers must return to the sea rock lobsters that are undersize, in berry, soft shelled or unmeasurable.
44. No pot limits apply to commercial fishers. Recreational fishers are limited to 3 pots per person, and up to 6 pots for 2 or more people fishing from a boat.
45. Reviews of rock lobster stock abundance and management, including catch levels, are conducted regularly. Before the Minister decides on TAC settings they receive advice from FNZ

⁷ Fisheries Assessment Plenary – Volume 1: Introductory sections and Albacore to Yellowfin Tuna. November 2024. Fisheries New Zealand. At [p.296-297]

⁸ Discussion of proposed measures for the Northland spiny rock lobster fishery (CRA 1). Fisheries New Zealand Discussion paper No: 2024/30. November 2024. At [30]

⁹ Discussion of proposed measures for the Northland spiny rock lobster fishery (CRA 1). Fisheries New Zealand Discussion paper No: 2024/30. November 2024. At [31]

which includes input from the National Rock Lobster Management Group (**NRLMG**), feedback from the public and Iwi Fisheries Forums.

Status of CRA 1

46. The last full stock assessment for CRA 1 was in 2019, the next assessment is planned for 2025. In 2023, FNZ conducted a rapid update assessment. The rapid update interim target (B_{REF}) was estimated at 454 tonnes. The 2023 rapid update estimated the CRA 1 biomass as 'About as Likely as Not (40–60%) to be at or above B_{REF} '. In relation to the soft and hard limits, in 2023, CRA 1 spawning stock biomass¹⁰ was estimated as 'Very Unlikely (<10%)' to be below the soft and hard limits. There was no change estimated between assessments for the spawning stock biomass and a slight increase in the adjusted vulnerable biomass^{11, 12}.
47. Given the uncertainty around recent and historic commercial catch and fishing effort information, which is assumed to be tracking changes in stock abundance in the CRA 1 stock assessment model, real life observations of changes from people who have spent hundreds of hours in the waters of CRA 1 must be taken into account. This is a necessary reality check.
48. On 11 January 2023, the submitters launched the Northland Crayfish Survey to gather peoples' feedback on the state of the spiny (red) rock lobster fishery around Northland, in CRA 1. Respondents were advised their feedback would be aggregated with all responders' surveys and used to inform the [CRA 1 submission](#) for the 2023 April Sustainability Round. The Survey closed on 19 January 2023 and results are included in this submission as Appendix 1.
49. There was a total of 548 responses to the survey. Not all respondents answered every question. 518 respondents indicated that their most common fishing area is in Northland (CRA 1). The remainder mainly fished in other areas between Canterbury and the Hauraki Gulf.
50. Of the 518 respondents who mostly fished in CRA 1, 95% were recreational fishers, around 2% identified themselves as Māori customary fishers, and less than 1% identified as a commercial fisher. The majority, 66%, had over 20 years' experience fishing for rock lobster.
51. Of the 518 respondents who mostly fished in CRA 1, 508 fishers described the change in the availability of crayfish in their most commonly fished area, compared to when they first started fishing. Around 14% of respondents advised that there were no or very few crayfish left. Another 22% advised there were around 20% of historic crayfish numbers. And, 23% of respondents said there were around 40% of historic numbers available in their most commonly fished area. Overall, this represents 59% of Northland respondents independently saying there is a major change in the abundance of rock lobsters in the CRA 1 management area. Northland respondents who had have been cray fishing for over 20 years were more likely to have experienced a decline in crayfish abundance, with 63% saying that availability of crayfish is 40% or less of what it was when they started fishing.

¹⁰ The combined weight of all mature female rock lobsters in the autumn and winter.

¹¹ The autumn and winter biomass of rock lobster biomass that is available to be caught legally.

¹² Fisheries Assessment Plenary – Volume 1: Introductory sections and Albacore to Yellowfin Tuna. November 2024. Fisheries New Zealand. At [p.314]

52. The survey represents a substantial body of opinion by experienced fishers comprising thousands of hours of direct observation over many years. The results clearly show that most recreational crayfishers have seen rock lobster abundance drop to 40% or less of what it was when they started fishing, which contradicts the results of the stock assessment and rapid updates that indicate little change in CRA 1 abundance since 1990.
53. We are not aware of any similar large-scale survey of rock lobster fishers in CRA 1 and submit that these 2023 survey results need to be presented to the Minister as part of current available information on stakeholder views and the availability of rock lobster to fishers in CRA 1 (See Appendix 1).

Rock lobster management failure

54. FNZ does not independently monitor fish stocks, it relies on self-reported information submitted by commercial fishers. This usually takes the form of Catch Per Unit of Effort (**CPUE**), and is a measure of the catch taken by unit of fishing effort. The underlying assumption is that CPUE is a reliable index of abundance. And therein lies the problem – science has accepted an unscientific relationship.
55. The problems with using CPUE in this fashion are well researched and the results conclusive. Stock assessments based on CPUE are notoriously unreliable, leading to over estimation of biomass and yield eventually leading to stock collapse.
56. CPUE can only measure where commercial fishing occurs, not across an entire management area. This means only the best fishing spots are used as a measure of abundance across a very large area, most of which remains unfished. Evidence of this failure is unfolding in CRA 1 and CRA 2.
57. Even if CPUE is standardised appropriately, the resulting index of relative abundance, in isolation, provides limited information for management advice or about the effects of fishing. In addition, CPUE data generally cannot provide information needed to assess and manage rocky reef and benthic communities or ecosystems.
58. CPUE based stock assessments have been used for over 30 years. At times, changes in catch settings have been automatically linked to changes in CPUE. This reliance of CPUE and the assumptions being made about the link to abundance has been rejected and contested for 20 years by the NZSFC. It is notable that FNZ has never acknowledged the dilemma despite submitting research and anecdotal evidence of the decline in rock lobster abundance being disguised by using CPUE.
59. Recently published fishery-independent information needs to be taken into account. The abundance of rock lobster in the outer Hauraki Gulf is showing the same signals of depletion as east Northland. Leading marine ecologists compared rock lobsters populations on shallow reefs (<20 m depth) in three marine reserves with six fished locations across the Hauraki Gulf to provide a fisheries-independent assessment and the degree of recovery following catch reductions. Region-wide surveys found that rock lobsters populations within protected areas

were dominated by large, legal-size individuals, whereas lobster in fished locations were mostly below or around legal-size. Total, vulnerable, and spawning stock biomass (**SSB**) was 12–43 times higher within marine protected areas (**MPA**) compared to fished locations. From 2021–22 their mean estimate for spawning stock biomass was 5%, suggesting a small improvement from 3% in 2018–19.¹³

60. This fisheries-independent data suggest that recent stock assessments have severely overestimated the recovery and state of lobster populations in the Hauraki Gulf and that populations on shallow reefs remain depleted. Overall, biomass at fished locations was <10% of that in reserves and there was little evidence of recovery following catch reductions.¹⁴ These findings highlight the critical need for fisheries-independent data and the value of MPA monitoring data in evaluating population status and recovery following fisheries management actions. Given the similarity between East Northland and the outer Hauraki Gulf there is a high probability that both areas are below the 10% SSB hard limit and should be closed.
61. In July 2024, a panel of independent reviewers reviewed and evaluated the rock lobster stock assessment models used in New Zealand. The review concluded with 25 recommendations for future work. One recommendation was for fishery-independent surveys to be conducted under repeatable and consistent frameworks aimed at reducing fisher-induced changes in the catchability of fish. Fishery-independent surveys are common practice in many lobster fisheries globally and inclusion of fishery-independent data into assessment have been shown to have positive stock and financial outcomes through robust assessments and less conservative quota set.¹⁵

FNZ proposed management measures

62. In November 2024, Fisheries NZ released a range of proposals in *Discussion Paper No: 2024/30* including a range of options that purport to address the proliferation of urchin barrens. FNZ acknowledge that a range of measures beyond catch limit reductions for rock lobster are required and advise that a number of measures have been implemented since April 2023. However, the measures implemented to date will not sufficiently address kina barrens, and the proposed measures do not include any substantive analysis around the implementation of closure areas.
63. The best available information from published literature shows that spatial closures are the most effective tool to address urchin barrens,¹⁶ yet none of the proposed measures concern the implementation of large scale spatial closures.

¹³ Nessia HR, Hanns BJ, Haggitt TR, Shears NT (2024) Using marine protected areas to assess the status and recovery of the spiny lobster *Jasus edwardsii* fishery in the Hauraki Gulf, Aotearoa New Zealand.

¹⁴ Nessia HR, Hanns BJ, Haggitt TR, Shears NT (2024) Using marine protected areas to assess the status and recovery of the spiny lobster *Jasus edwardsii* fishery in the Hauraki Gulf, Aotearoa New Zealand.

¹⁵ Review of red rock lobster stock assessment modelling and the determination of management reference points. August 2024. Fisheries New Zealand. New Zealand Fisheries Science Review 2024/01. At [p.6]

¹⁶ Nessia HR, Hanns BJ, Haggitt TR, Shears NT (2024) Using marine protected areas to assess the status and recovery of the spiny lobster *Jasus edwardsii* fishery in the Hauraki Gulf, Aotearoa New Zealand.

64. The submitters acknowledge that large scale spatial closures would be unpopular even amongst our own constituents. However, the rock lobster population on the northeast coast in particular is in such a dire state that these must be considered, at least discussed and debated. Moreover, the Minister is obliged to apply the law when making management decisions. As clarified by Justice Churchman, and admitted by the then Minister, Ministerial decisions must be informed by the best available information, and that is that large scale spatial closures are the most effective tool to address kina barrens.
65. If best available information is not used when making decisions for the future management of CRA 1 we risk the ecological issue playing out for years to come with our rocky coasts remaining barren and unproductive. This outcome would breach the purpose and principles of the Fisheries Act 1996, and consign abundant rock lobster populations to annals of history.
66. The submitters have responded to each of FNZ's potential measures below. We accept that for kelp forest ecosystems on the east coast of the North Island to recover, there will need to be a package of measures rolled out that will impact stakeholders to various levels. The measures are supported as a package and as recommended below.
67. Prior to the Minister agreeing to any measures, **the submitters recommend for the Minister to direct FNZ to clearly develop a strategic plan for east coast kelp forest recovery, including objectives and desired results.**

Non-regulated measures

68. FNZ have outlined a suite of non-regulated management measures which have been documented in the CRA 1 Rock Lobster Industry Association (**CRAMAC 1**) Annual Operating Plan (**AOP**) for 2024–25. The AOP includes non-regulated commercial fishing practices that have been agreed to by members of CRAMAC 1, including –
 - a. A commercial harvest cap of five tonnes across both statistical areas 903 and 904 combined for the 2024–25 fishing year.
 - b. Non-regulated commercial closed seasons between 20 December and 20 February for statistical areas 902, 903, and 904 and between 1 December and 28 February for statistical areas 901 and 939 be implemented to avoid fishing over summer when increasing water temperatures are thought to be responsible for increasing mortality in lobsters either landed or returned to the sea.
 - c. Non-regulated closed areas, including the north side of Tutukaka Harbour to Bay of Island, Hokianga to Herekino Harbours, and parts of Three Kings to mitigate conflict between commercial and non-commercial fishers.
69. In the discussion document, FNZ acknowledges constraining commercial harvest to five tonnes in selected areas may not substantially increase abundance of rock lobster and large rock lobster due to remaining harvest in these areas. FNZ also states that the AOP is reviewed annually, so

measures in the plan may be adjusted and does not guarantee that closures or catch reductions will remain in place for the time required for rock lobster recovery.¹⁷

70. The submitters view the above measures as short-term, band-aid solutions at best. They will help reduce gear conflict between sectors but if the catch needs to be reduced for rock lobster then the Minister has a statutory obligation to manage the sum of all catches within the TAC, and commercial catch within the TACC.
71. The submitters agree with the limitations provided by FNZ and that the non-regulated industry measures will not address the urchin barren issue.
72. **We do not accept the non-regulated measures as stated above, as sufficient to ensure the recovery of kelp forest ecosystems.**

Regulated measures

QMA subdivision

73. CRA 1 is made up of two different marine environments, from rugged, exposed coastline and cooler waters to the west and north with upwellings and strong currents, through to East Northland with extensive rocky coastline with sheltered bays and warmer waters which affect rock lobster recruitment and growth.
74. Since the late 1990s there has been a significant increase in the proportion of catch taken from the reporting areas for the Three Kings area (901) and the west coast (939) where catch rates are higher and kina barrens are not yet prevalent. Less commercial catch has been taken from East Northland (903 and 904) where catch rates are lower and kina barrens are impacting biodiversity and the environment. While statistical area is taken into account in the analysis of rock lobster catch rates, the data that drives the outcome of CRA 1 stock assessment models comes from the north-western area. Most commercial rock lobster fishers have a distinct area (patch) that they fish given the need to lift pots every day or two and supply live rock lobster for export. In previous submissions for CRA 1, the submitters have advocated for CRA 1 to be subdivided just south of North Cape to create a minimum of two smaller QMAs.
75. Though subdividing the CRA 1 QMA will not alleviate the issue of urchin barrens over the short-term, it is a long-term solution that will allow FNZ to better manage the CRA 1 rock lobster fishery based on areas with different productivity. This will be particularly important as rock lobster abundance increases. A fair mechanism for splitting quota holdings will be required and the submitters support payment for some quota buy out or compensation if necessary.
76. A subdivision of the CRA 1 QMA will allow the Minister to lawfully set a TAC by excluding the east coast. The north east coast statistical areas cannot have a lawful TAC set due to the cumulative effects of fishing. If there is no subdivision, the risk is a complete closure of CRA 1.

¹⁷ Discussion of proposed measures for the Northland spiny rock lobster fishery (CRA 1). Fisheries New Zealand Discussion paper No: 2024/30. November 2024. At [p.10]

77. **The submitters support a subdivision of CRA 1 just south of North Cape, into two smaller QMAs, as part of a package of measures to mitigate the formation of urchin barrens.**

Increasing the minimum legal size

78. All sizes of rock lobsters are important for predating on kina across all size classes. In CRA 1, female rock lobsters larger than 83 mm TW and males larger than 68 mm TW are considered to be an important predator, capable of feeding on the largest size classes of urchin.
79. FNZ is considering increasing the minimum legal size (MLS) for rock lobster across CRA 1. If the QMA is subdivided FNZ propose that the new MLS will only apply to the new east coast QMA where urchin barrens need to be addressed.
80. FNZ contracted modelling to understand the potential fishery impacts of altering the existing MLS. The modelling estimated that when the stock is managed to be at or around the current interim reference level target, increasing the MLS would be expected to lead to a higher vulnerable biomass and spawning stock biomass and eventually more large individuals. It was estimated that it would take at least 15 to 20 years for these changes to be fully realised, depending on the MLS change.¹⁸
81. Spawning biomass and vulnerable biomass are estimated to increase when the MLS for each sex is increased by 5 mm. FNZ have stated in their discussion paper that the average annual catch across all sectors combined would be expected to decline with larger MLS limits. Modelling provided estimated the Maximum Yield would decrease by 2.2% if the MLS for each sex is increased by 5 mm, and to decrease by 5.7% if the MLS is increased by 10 mm. However, annual growth in CRA 1 is higher than other areas and the yield per recruit would increase. Poor recruitment is one of the underlying problems in East Northland.
82. **The submitters would support an increase in minimum legal size of 5 mm for male and female rock lobsters for the east and west coast of CRA 1 as part of a long-term recovery plan. It is important that both coasts are included to avoid confusion and reduce compliance costs. We support this change on the condition that it applies to both commercial and recreational harvest, and it is part of a package of measures to mitigate the formation of urchin barrens.**

Introducing a maximum legal size limit

83. In addition to investigating a change in MLS, FNZ contracted modelling to understand the effect of implementing a maximum legal size (MaxLS) for rock lobster. Modelled scenarios included the introduction of 64 mm, 66 mm, 68 mm, or 71 mm MaxLS TW for males and 77 mm, 80 mm, 83 mm, or 87 mm MaxLS TW for females.
84. FNZ state that over the long-term, an increase in the abundance of large rock lobster is expected given the 2023–24 reductions to the TACC and retention of the current MLS for each sex. However, modelling using size frequency and catch assumptions suggests that the number of rock lobster in

¹⁸ Discussion of proposed measures for the Northland spiny rock lobster fishery (CRA 1). Fisheries New Zealand Discussion paper No: 2024/30. November 2024. At [137]

the population would decrease by 21.1% if the lowest MaxLS were imposed (64 mm TW for males and 77 mm TW for females) and by 39.7% if the highest MaxLS were imposed (71 mm TW for males and 87 mm TW for females).

85. This would occur because it is assumed that commercial fishers are currently keeping large rock lobster and would take the same tonnage every year. The model predicts that fishers would therefore have to harvest greater numbers of smaller rock lobster in order to catch the same tonnage. Consequently, fewer lobster were predicted to have survived in the population by the time that they had grown through to any of the modelled MaxLS. There would also be a decrease in yield per recruit.
86. The introduction of a MaxLS would mainly affect recreational fishers who prefer to take large rock lobster given the reduced daily bag limit. Commercial fishers generally keep the most profitable smaller grades of rock lobster. The current and probably future commercial catch in CRA 1 east is very low, so the switch from taking large rock lobster to keeping small rock lobster would be negligible. There are large rock lobster in CRA 1 west and few kina barrens, and a MaxLS may need to be set based on a grade size that does not unduly affect returns. The MaxLS must apply to commercial and recreational fishers and to all of CRA 1, but is unlikely to influence illegal or customary catch. This change will have some impact on the rock lobster population and contribute to the reduction of urchin barrens.
87. **The submitters support an introduction of a maximum legal size where it can be shown to contribute to the long-term elimination of urchin barrens in CRA 1, without having a negative effect on the rock lobster population structure over the long-term. The submitters support this measure as a package and if it applies to recreational and commercial fishers across CRA 1.**

Seasonal and spatial closures

88. FNZ is proposing seasonal or spatial closures as a measure for better managing the impact of rock lobster fishing on urchin barren formation.
89. Spatial and seasonal closures to rock lobster fishing would be set under section 11 of the Act and will apply to both commercial and/or recreational fisheries. Section 11 closures would not impact customary fishing authorised under the Act and other legislation.
90. The CRA 1 breeding season is earlier than in the southern waters and generally runs from April to the end of June, with mature females carrying berries until October. Seasonal closures could apply to key rock lobster breeding periods (April-June). While existing restrictions already protect “in-berry” females and soft-shell rock lobsters, a seasonal closure during the breeding period may reduce handling mortality.
91. Seasonal closures associated with breeding periods have been identified by tangata whenua as being aligned with tikanga and kaitiakitanga.
92. **The submitters support seasonal closures over the main rock lobster breeding periods of April to the end of June to align with tikanga and kaitiakitanga.** During the breeding period rock lobster

move from deeper waters to shallow rocky reef habitat to gather in dens. This movement to shallow reef habitat may contribute to suppressing urchin populations. A breeding period seasonal closure would provide for a long-term benefit for rock lobster, with an indirect positive effect on urchin barrens, if implemented for the foreseeable future.

93. A risk of spatial closures is the displacement of fishing effort. It is important to note that fishers are being displaced from once healthy, diverse reef ecosystems as they are overrun by urchin barrens or included in MPAs. The addition of spatial closures limits access to valued fishing areas.
94. As part of a package of measures, targeted spatial closures may be effective if implemented alongside active habitat restoration initiatives. Some Northland hapū and community groups are already actively removing kina from identified barrens. The resources required for FNZ to implement and monitor a network of large scale temporary closures would be better utilised supporting these hapū-led community initiatives in removing kina and restoring degraded habitat.
95. Targeted closures that are established as a mechanism to support hapū and community-led initiatives are more likely to have support and therefore higher levels of compliance. A discussion will be required with affected communities as to whether closures will be for just rock lobster fishing or fishing of all potential predators.
96. FNZ state in the discussion paper that fishing would be able to be reintroduced into closed areas if the area is shown to have recovered.¹⁹ The submitters have concerns that fishing pressure and higher catch rate following the removal of a temporary closure will consequently lead to fishing down of the rock lobster population as happened when the closure of Astrolabe Reef following the Rena disaster was removed.
97. As part of a recovery plan, the submitters agree with published information that targeted closures of areas where active habitat restoration is occurring may encourage faster recovery. The submitters view temporary spatial closures as contributing to urchin barren reductions over the short-term while restoration is occurring but do not view temporary spatial closures as a long-term solution for trophic cascades and the loss of marine biodiversity.
98. **As a long-term solution to mitigating the formation of urchin barrens, the submitters support Ahu Moana as a form of localised fine scale spatial adaptive management of coastal waters to rebuild abundance of local marine life whilst avoiding the inflexibility of no-take marine protected areas. Ahu Moana is localised marine management by mana whenua and local communities, supported by FNZ resources. The managed area would extend from the mean high-water springs mark out to 1 km.**

Vessel and accumulation limits for recreational fishers

99. FNZ have highlighted additional measures for restricting recreational take of rock lobster. Vessel and accumulation limits may be beneficial for discouraging trading or black market sales, however, most illegal take is already undertaken outside existing regulations.

¹⁹ Discussion of proposed measures for the Northland spiny rock lobster fishery (CRA 1). Fisheries New Zealand Discussion paper No: 2024/30. November 2024. At p. 18

100. Accumulation limits aim to limit the frequency of fishing trips or the amount of fishing that occurs on multi-day fishing trips and have been stated by FNZ as a useful tool to address illegal take. Vessel limits aim to reduce fishing pressure by a group of people in a single fishing event, these are as stated by FNZ, useful for moderating take from offshore reefs that people travel on a boat to collect their daily limit.
101. FNZ do not explain in their proposal how vessel or accumulation limits for recreational fishers will contribute to the elimination of urchin barrens and recovery of degraded habitat.
102. Given the recreational daily bag limit has been halved and the 2022–23 harvest was estimated to be only 8 tonnes, the submitters fail to see how vessel and accumulation limits will contribute to the recovery of kelp forest habitats.
103. The submitters supported the bag limit reduction and have supported some accumulation limits in the past where it has been deemed essential. However, for CRA 1 **we do not support an introduction of vessel or accumulation limits for recreational fishers to mitigate the formation of urchin barrens.**

Measures for packhorse lobster

104. FNZ have proposed an option to restrict recreational harvest of packhorse lobster. Tangata whenua in CRA 1 have requested the recreational daily bag limit of for packhorse to be reduced, however, packhorse lobster are managed under a separate QMA (PHC 1) which covers the whole of New Zealand. FNZ have not stated in their discussion document whether a change in the packhorse daily bag limit would apply to the whole PHC 1 QMA or if it would only apply in CRA 1.
105. The 2022–23 boat ramp survey in CRA 1 estimated recreational harvest of packhorse lobster to be lower than rock lobster at 6.73 tonnes (C.V 0.58).
106. Reducing the daily bag limit of packhorse lobster may have a positive effect on urchin barrens. FNZ have not outlined any benefits of a reduction in packhorse daily bag limit and given the patchy distribution of packhorse lobster and current stock status (Likely to be at or above the interim target of B_{MSY}), the submitters do not see the long-term value in a change in packhorse management.
107. **The submitters do not support any change in measures for recreational fishing of packhorse lobster to contribute to the elimination of urchin barrens and recovery of kelp forests. If there is a sustainability issue for packhorse lobster, this can be reviewed as part of a separate consultation process.**

Other considerations

Commercial effort limit

108. Non-commercial cray fishers are limited in the amount of fishing effort able to be lawfully deployed – the use of a maximum of 3 pots per person. Commercial fishers have no effort limit –

they may lawfully deploy as many pots as they wish. The effect of not limiting commercial effort was clearly displayed as a primary cause in the collapse of CRA 2.

109. Limiting total catch is a raw and unsophisticated policy. The High Court identified several factors that need to be fully considered and taken into account when setting catch limits. These factors attempt to refine a little more how the high level catch limit can be set and clearly identifies the limitation of just setting single-species catch limits.
110. Catch limits become completely ineffective if fishing effort is able to increase and maintain catches when fish stocks are declining. Relying on CPUE without understanding efficiency gains as an index of abundance is a delusion, and is perfectly reflected in the collapse of CRA 2. Policy must progress beyond reliance on catch limits.
111. Despite such an obvious policy gap, FNZ propose possible restrictions across recreational fishing, yet remains silent on matters of commercial fishing effort which the submitters have consistently raised as vital for effective management.
112. In the view of the submitters, the lack of effort limits applying to commercial fishing reduces the effectiveness of past catch reductions; both are required for stocks with moderate productivity and variable recruitment. A broad age structured rock lobster population cannot be maintained by catch limits alone, and this policy gap needs urgent reform.
113. Each vessel must be limited in the number of pots able to be lawfully deployed. If there is insufficient catch from this level of effort the option of increasing pot numbers is unavailable. The signal of depletion will become very clear.
114. An effort limit on commercial rock lobster harvest will contribute to mitigating the formation of urchin barrens in the long-term.
115. **Given the Minister's statutory responsibilities as clarified by the High Court, to create an environmental 'bottom line' of sustainability, this policy gap must be addressed immediately. An effort limit must be applied firstly in CRA 1, and ultimately in other fish stocks.**

Management targets

116. B_{MSY} reference level is used as an interim target and settles on a vulnerable biomass target for CRA 1 of 454 t (14.4% of the unfished biomass level) with an annual exploitation rate weighted across seasons of 29.8%. This is an unacceptably low target biomass and high exploitation rate given the low and uncertain recruitment in CRA 1, especially in East Northland, and the need to re-establish older age classes in the population.
117. The estimation of B_{MSY} reference level as a proportion of the unfished level remains elusive largely due to the unknown size and age structure of the virgin biomass. Our concern is that it's not that current abundance is 15, 30, or 40% of the unfished size estimated in a model, it's that in most places all indications point to a stock size of 2, 3, or 5% of historic levels in eastern North Island.

118. In CRA 1, 2 and 3 rock lobster were a major rocky reef ecosystem service provider. The original biomass in all three areas is not being recognised in modelling, because if the real degree of depletion was taken into account these stocks would be below the hard limit which would require the Minister to close the fishery. Consequently, we are presented with implausible models that don't match our reality or the available fishery independent data, but clearly serve to maintain commercial catches.
119. The estimated B_{MSY} reference level for CRA 1 (454 tonnes) provides guidance for the management of rock lobster. Further work needs to occur, including stakeholder engagement, to recommend management realistic targets for all spiny rock lobster stocks to the Minister.
120. Single stock B_{MSY} management targets do not take into account wider ecosystem considerations or environmental interactions.
121. **Until rock lobster are managed at a level that allows them to fulfil their ecological role, they will not be able to contribute to the maintenance of sea urchin populations and prevent the expansion of new urchin barrens.**

Summary

122. The ongoing challenge of urchin barrens and evident reduction of rock lobster abundance in CRA 1 necessitates immediate and comprehensive action from FNZ and the Minister. While FNZ has proposed potential measures to address urchin barrens, including measures that are suggested to increase rock lobster abundance, we argue that these proposals fall short of achieving what is needed for large-scale ecosystem recovery.
123. The adverse effects of fishing in CRA 1 are evident. A TAC set in CRA 1, in its current state of ecological degradation would not be a lawful decision.
124. FNZ need to develop and enact a strategic recovery plan for eliminating current urchin barrens, preventing expansion of barrens, and recovering kelp forest ecosystems. Until such a plan is in place, the submitters recommend a closure of CRA 1 on Northland's east coast to rock lobster fishing.
125. A recovery plan may will require elements of rock lobster management measures alongside measures that enhance the wider ecosystem. Rock lobster management measures that may contribute to preventing expansion of urchin barrens require a package of initiatives, including –
- a. Splitting the CRA 1 QMA into at least two smaller QMAs to improve fine-scale management;
 - b. Increasing the minimum legal size by 5 mm for commercial and recreational fishers;
 - c. Seasonal closures over breeding periods;
 - d. Introducing a maximum legal size for rock lobster if shown to not have a long-term negative effect on rock lobster;

- e. Introducing commercial pot effort limits;
- f. Establishing a higher management target that takes into account wider ecosystem considerations including age structure;
- g. A new method for setting catch limits; and
- h. Targeted spatial closures in areas where active restoration is taking place.

126. Other measures proposed by FNZ may provide short-term benefits but will not contribute to the long-term recovery of kelp forest ecosystem function.

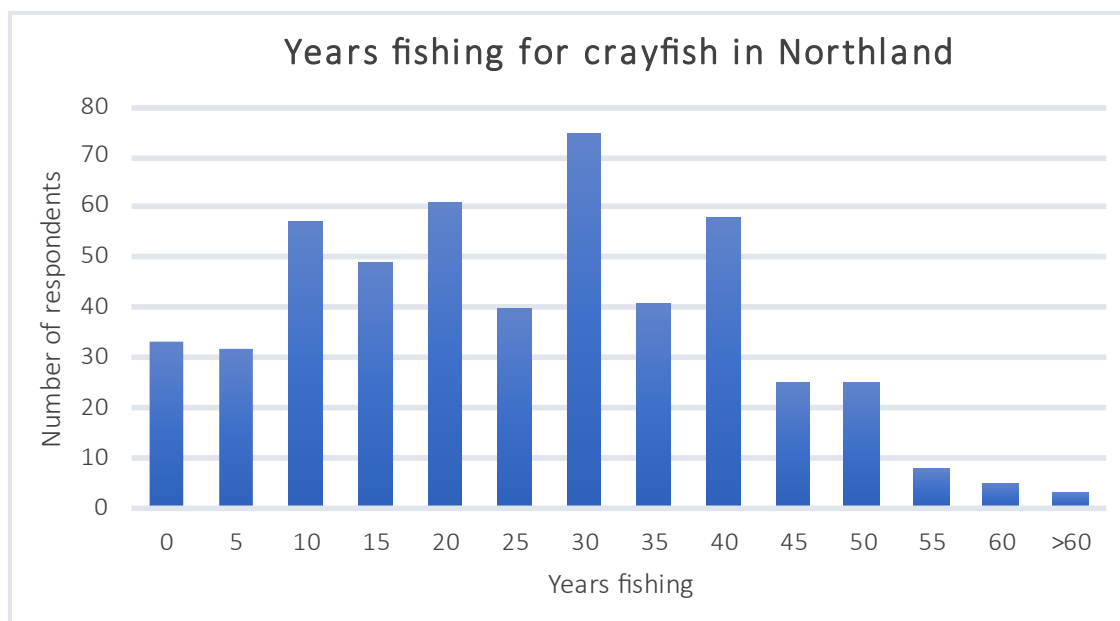
Appendix 1 – 2023 survey of Northland crayfishers

Introduction

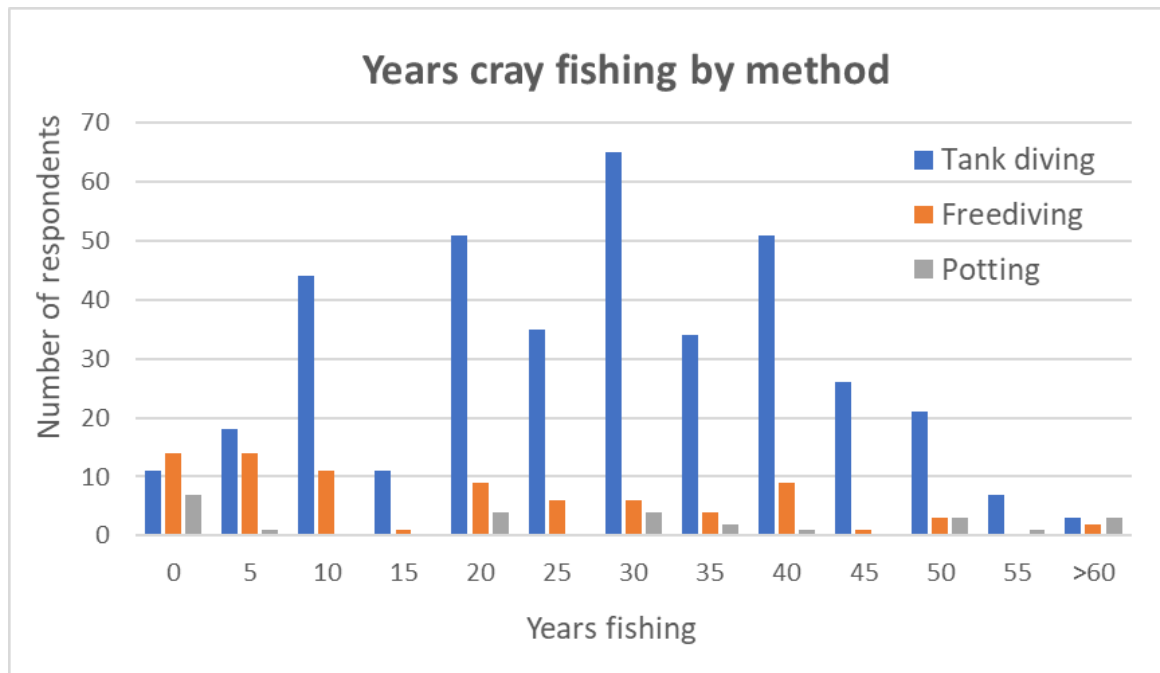
127. The Northland Crayfish Survey was conducted from 11 to 19 January 2023. The objective was to gather peoples' feedback on the state of the spiny (red) rock lobster fishery around Northland, called CRA 1. Respondents were advised their feedback would be aggregated with all responders' surveys and used in a submission in response to Fisheries New Zealand's 2023 April Sustainability Round proposals.
128. There was a total of 548 responses. Not all respondents answered every question. 518 respondents indicated that their most common fishing area is in Northland (CRA 1). The remainder mainly fished other areas including Canterbury and the Hauraki Gulf. We are not aware of any similar large-scale survey of rock lobster fishers in CRA 1.
129. Total number of respondents: 548
Northland 518 : Other 30
Northland fishers - Recreational 492 (95%)
Māori customary 9
Commercial 3
Did not specify 14

Participants

130. Survey respondents had a broad range of experience. 66% of the 518 survey participants who most often fished for crayfish in Northland have over 20 years of experience fishing in the CRA 1 region. These are summarised by 5 year bins in the plot below e.g. 5 = 5 to 9 years.

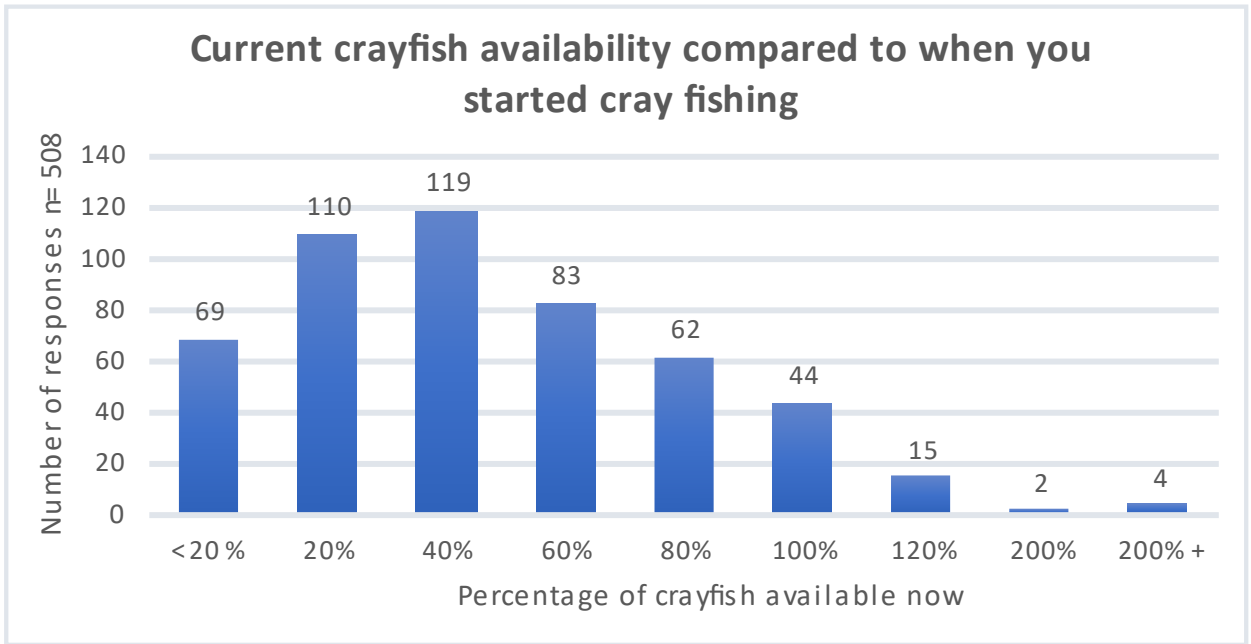


131. The main method used by 78% of respondents was diving with tanks (SCUBA), while 16% were mainly free divers, and 6% used pots. A higher proportion of SCUBA use was by divers with 20 to 40 years' experience, while freediving was more popular for divers with less than 10 years' experience fishing for crayfish.



Changes in availability of crayfish

132. 508 survey participants who fished for crayfish in Northland provided their feedback on the following question –
- For Northland fishers – As a percentage, how would you describe the change in the number of crayfish in your most commonly fished area since you began fishing?
 <20% No or very few; 20%, 40%, 60% or 80% of past numbers; 100% (no change); 120% (slight increase); higher; 200% (availability has doubled).
133. Of the Northland fishers, 298 (59%) sit at or below the 40% availability bracket, while 4% of Northland fisher respondents indicated an increase in availability.
134. Around 14% of respondents advised that in their most commonly fished area there were no or very few crayfish left. Another 21% advised there were around 20% of historic crayfish numbers. And, 23% of respondents said there were around 40% of historic numbers available in their most commonly fished area.
135. Northland respondents who have been cray fishing for over 20 years were more likely to have experienced a decline in crayfish abundance, with 63% saying the availability of crayfish is 40% or less of the numbers compared to when they started fishing.

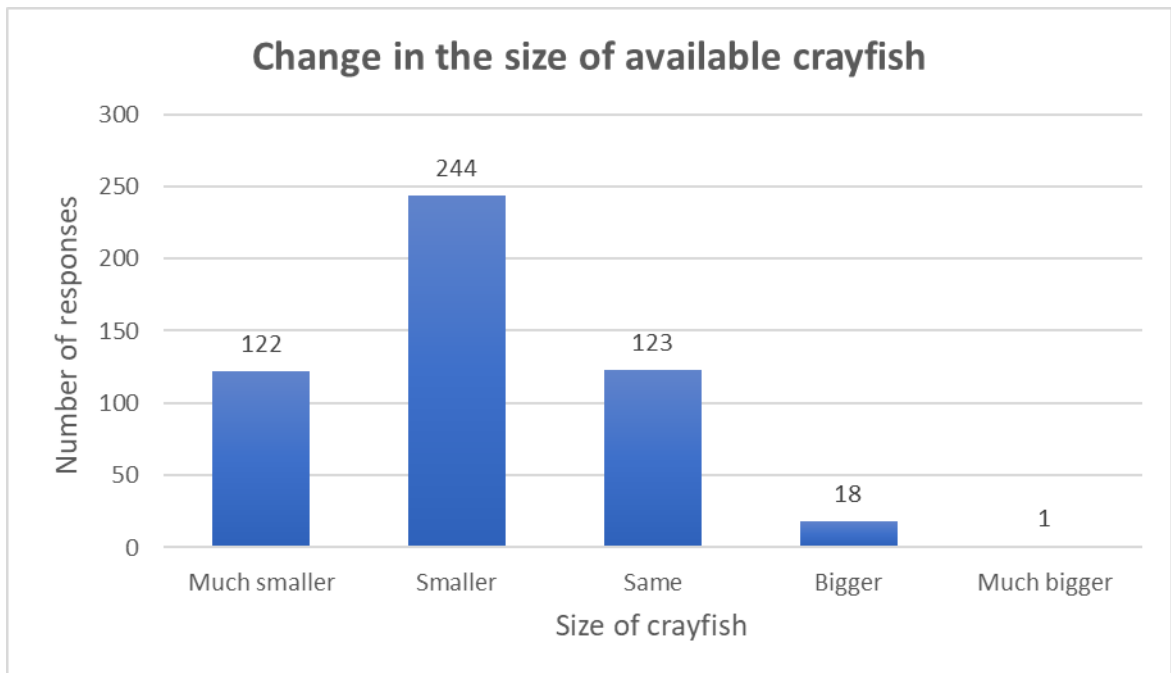


Changes in size of crayfish

136. 508 survey participants who fished for crayfish in Northland provided their feedback on the following question –

How would you rate the change in size of crayfish (red rock lobster not packhorse) in your most commonly fished area of Northland and other areas?

137. Of the 508 survey participants who answered this question, 72% indicated that crayfish were smaller in size now than when they first started fishing.



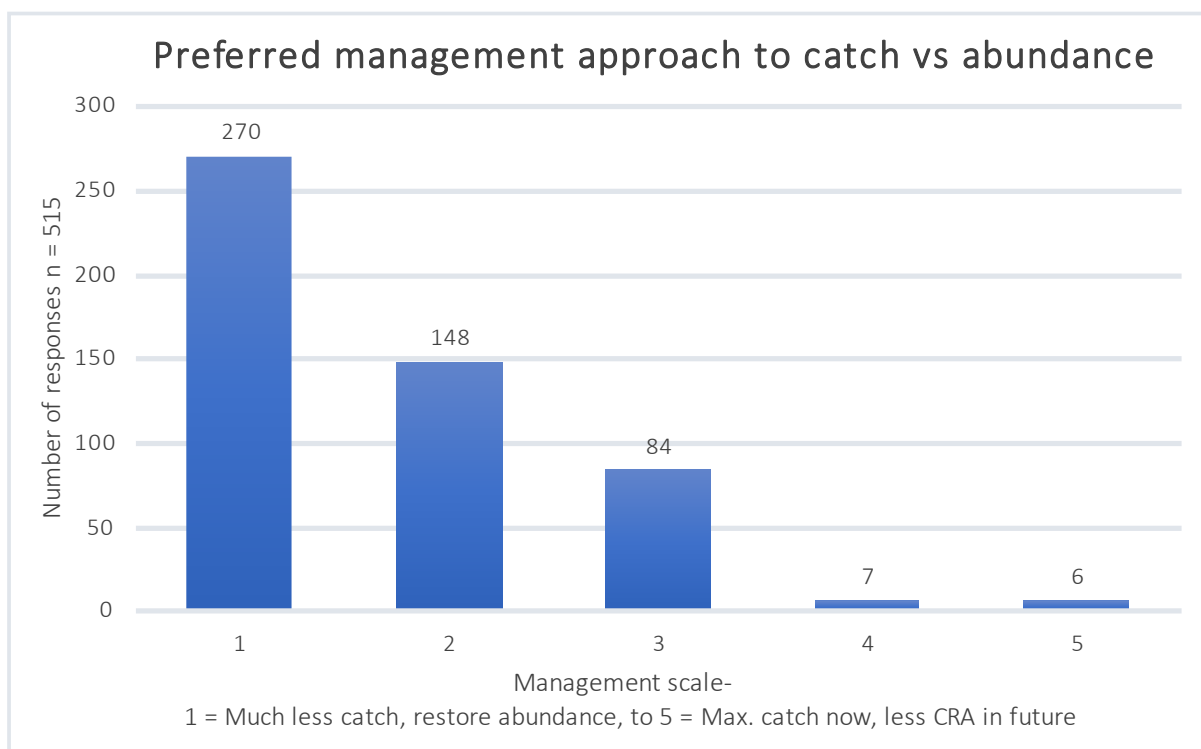
Management

138. Future management. 515 of the Northland respondents answered the question about which future management option for CRA 1 they would support. The question was:

“Based on your current perspective on the state of crayfish in your area, how do you think total commercial, recreational and Māori customary crayfish catch in Northland should be managed using the scale below –

Much less catch now more CRA in future 1 : 2 : 3 : 4 : 5 Max catch now less CRA in future.”

139. Responses. 52% of respondents chose option 1 – much less catch now for more crayfish in the future.



Recreational daily bag limits

140. Bag limit change. The question regarding a possible change to recreational daily bag limits was as follows –

When a fishery is depleted recreational fishers can contribute to the rebuild of crayfish numbers by reducing their daily catch. The Minister will be considering changes to the recreational daily bag limit for crayfish in Northland (CRA 1). The current bag limit is 6. What bag limit would you support in Northland for the next 5 years?

141. Bag limit responses. All 518 Northland fishers responded to the bag limit question. Of these respondents, 75% fell around the 2 to 4 daily bag limit option. And, 48 respondents (9%) opted to retain the status quo – a bag limit of 6 per person, per day.

142. There was a similar response to the question about a possible change to recreational daily bag limits from the 346 Northland fishers with 20+ years fishing experience. 74% fell within the 2 to 4 daily bag limit option, with 10% supporting retention of the status quo.

