Ministry for Primary Industries
Manatū Ahu Matua

Review of sustainability and other management controls for leatherjacket 3 (LEA 3)

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Prepared for the Ministry for Primary Industries
by the Inshore Fisheries Management Team

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SUSTAINABILITY REVIEW OF FISH STOCKS 2013

This Initial Position Paper (IPP) provides the Ministry for Primary Industries' (MPI's) initial views on proposals for inshore fish stock sustainability measures and other management controls for the 1 October 2013/14 fishing year.

MPI has developed this IPP for the purpose of consultation as required under the Fisheries Act 1996 (the Act). MPI emphasises the views and recommendations outlined in the paper are preliminary and are provided as a basis for consultation with stakeholders.

In August 2013, MPI will compile the Final Advice Paper (FAP) for the attached proposal. This document will summarise MPI's and stakeholder's views on the issues being reviewed, and provide final advice and recommendations to the Minister for Primary Industries. A copy of the FAP and the Minister's letter setting out his final decisions will be posted on the MPI website as soon as these become available. Hard copies will be available on request.

DEADLINE FOR SUBMISSIONS

MPI welcomes written submissions on the proposals contained in the IPP. All written submissions must be received by MPI no later than 4pm on Friday, 9 August 2013.

Written submissions should be sent directly to:

Inshore Fisheries Management
Ministry for Primary Industries
P O Box 2526
Wellington 6011

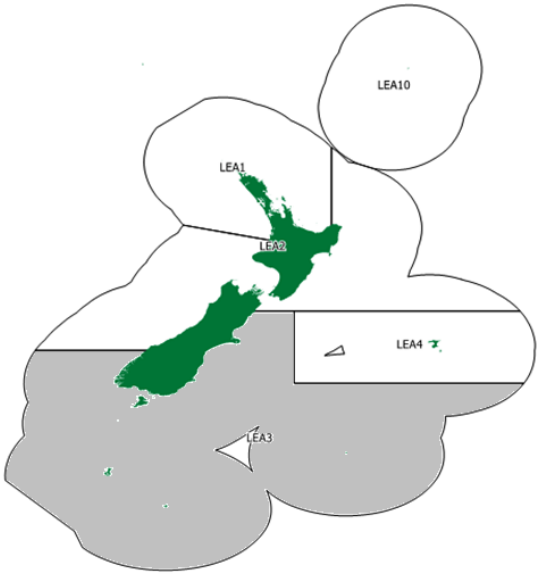
or emailed to FMsubmissions@mpi.govt.nz

OFFICIAL INFORMATION ACT 1982

All submissions are subject to the Official Information Act and can be released (along with the personal details of the submitter) under the Act. If you have specific reasons for wanting to have your submission or personal details withheld, please set out your reasons in the submission. MPI will consider those reasons when making any assessment under the Act.

INTRODUCTION

Figure 1: Quota Management Areas (QMAs) for Leatherjacket LEA 3 is indicated by shading



1. The Ministry for Primary Industries (MPI) is seeking tangata whenua and stakeholder information and views to inform a review of catch limits and other management measures for leatherjacket in Quota Management Area 3 (LEA 3), see Figure 1.

2. MPI proposes the following options for the total allowable catch (TAC), total allowable commercial catch (TACC) and associated allowances (Table 1):

Table 1: Proposed TACs, TACCs and allowances for LEA 3

Option			Allowances		
	TAC (t)	TACC (t)	Customary Māori (t)	Recreational (t)	Other sources of fishing related mortality (t)
Option 1 (Status Quo)	110	100	1	2	5
Option 2	140	130	1	2	6

3. Option 2 includes an increase to the TAC, TACC, and the allowance set for other sources of fishing-related mortality. Customary and recreational allowances remain unchanged.

Context

4. Management settings for LEA 3 have not been reviewed since leatherjacket was introduced into the Quota Management System (QMS) on 1 October 2003. Catch figures from combined monthly harvest returns (MHR) have exceeded the current TACC of 100 tonnes in the last four years.

5. The TAC for LEA 3 is set under section 13 of the Fisheries Act 1996 (the Act). Section 13 requires the Minister for Primary Industries[1] (the Minister) to set a TAC for LEA 3 that enables the stock to be maintained at, or move towards, a level at or above the level that will produce the maximum sustainable yield[2] (B_{MSY}).

6. The available information on LEA 3 is insufficient to enable reliable estimates of B_{MSY}. Where reliable estimates of B_{MSY} are not available, s 13(2A) of the Act requires the Minister to use best available information to set a TAC that is not inconsistent with the objective of maintaining the stock at or above, or moving the stock towards or above, a level that can produce the maximum sustainable yield.

7. The large extent of the LEA 3 quota management area and the relatively low volume of catch in LEA 3 in the past, suggest that there is an opportunity to provide for a modest increase in utilisation over the medium term while and that this may have a limited impact on the stock.

Management approach

8. Leatherjacket stocks are managed under the Draft National Fisheries Plan for Inshore Finfish (the Finfish Plan)[3]. The Finfish Plan is an MPI policy document that came into operation from July 2011. It sets out management objectives for inshore finfish stocks, including LEA 3. Within the Finfish Plan stocks are grouped, with management approaches and objectives tailored accordingly for each group.

9. LEA 3 is in Group 6 in the Finfish Plan. Management objectives for Group 6 stocks are:

   - Enable utilisation of each stock;
   - Ensure catch is at a level that is sustainable;
   - Protect, maintain and enhance habitats of significance to fisheries management; and
   - Minimise adverse effects of fishing on the aquatic environment.

10. As fishing pressure on Group 6 stocks is relatively low, the general approach is to minimise management costs by using catch trends as the key monitoring tool for each stock. Declining catch trends or landings in excess of the TACC are used as a trigger for further investigation and consideration of review.

11. Given the associated uncertainty with using catch as monitoring tool for stock status, a relatively cautious approach should be taken to adjusting catch limits, particularly for species with biological characteristics that make them vulnerable to fishing, like leatherjacket. Additional information or monitoring could support a less cautious approach but for low value stocks such as LEA 3 this is unlikely to be cost-effective. MPI is looking to enhance monitoring by improving catch information and getting better data on LEA 3 from the East Coast South Island trawl survey.

[1] The Minister for Primary Industries now exercises the powers and responsibilities of the Minister of Fisheries under the Act.

[2] Maximum sustainable yield is defined in section 2 of the Act as: '...the greatest yield that can be achieved over time while maintaining the stock's productive capacity, having regard to the population dynamics of the stock and any environmental factors that influence the stock'.

[3] The Fisheries Plan has not been formally approved under the Act.

Previous review

12. The TAC and TACC for LEA 3 have not been reviewed since introduction to the QMS in 2003. Commercial landings exceeded the TACC for the last four years.

Biological characteristics of LEA 3

13. The New Zealand leatherjacket (*Meuschenia scaber*) is present around much of New Zealand, but is most common in the north. Trawl survey records show it to be widespread over the inner shelf of the South Canterbury Bight, extending to depths beyond 100 m, but with greatest abundance at 40–60 m.

Stock Status

14. Estimates of current and reference biomass are not available for any leatherjacket stocks.

15. The best available information on stock status for LEA 3 is a recent characterisation and CPUE analysis completed by Langley (2013). There was an indication that CPUE from the Canterbury Bight fishery has increased since the early 2000s. The index showed that the CPUE remained low at the start of the series and then began to increase from 2007/08 to 2011/12. However, there are a low number of vessels included in this analysis , and changes in market preferences have increased retention of bycatch and increased targeting , and this is likely to have contributed to the trends in CPUE. This leads to the conclusion that the index may not be reliable as an index of abundance.

16. The Southern Inshore Fisheries Assessment Working Group (the Working group) concluded that this analysis only pertains to the stock unit for the East Coast of the South Island; is the best available information on the stock abundance at this stage but trawl survey data may provide better information in the future.

17. The East Coast Trawl survey is monitoring both pre-recruited cohorts, and fish in the recruited size range. The total trawl survey biomass estimates for the entire survey area (10–400m) have large confidence intervals, and there are only 2 years of useful information for the 10-400m strata, there is some indication that the 30–400m strata have shown in increase in recent years. Further developments resulting from proposed restratification of the survey design will result in better and more robust information on leatherjacket biomass especially in the shallow strata.

18. Since introduction into the QMS, commercial landings have ranged from 42 to126 tonnes.

Leatherjacket Fishery

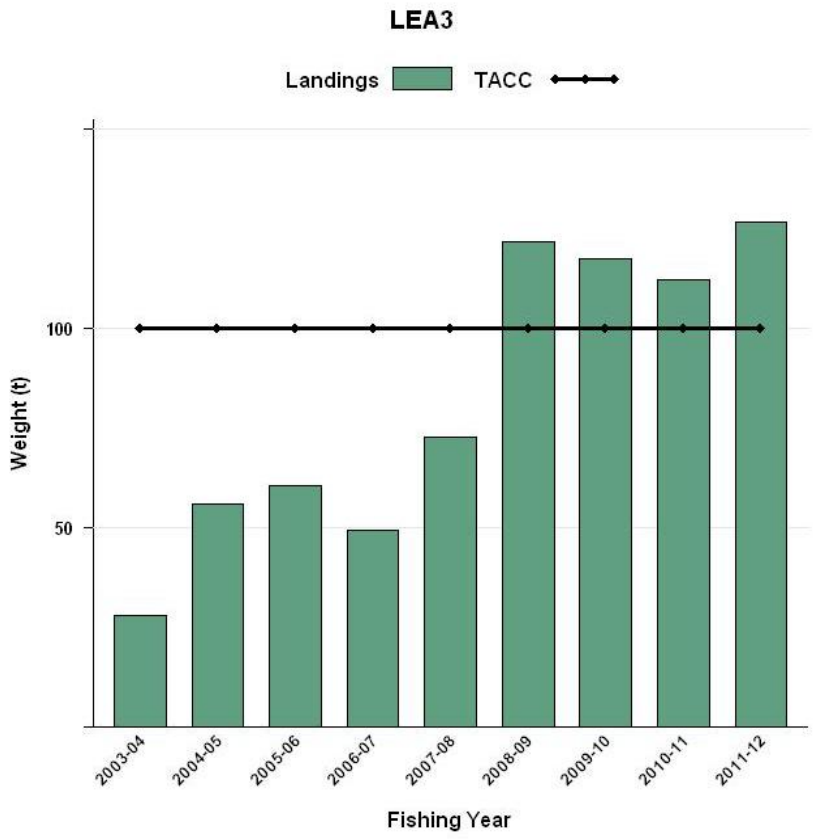
19. Leatherjacket is currently a low value commercial fishery. The Fish Monetary Stock Account: 1996–2009 published by Statistics New Zealand in 2010 estimated the 2009 asset value of all stocks of leatherjacket at $1.9 million.

20. Bottom trawl accounts for 98% if the LEA 3 catch and 80% of the total catch is caught by eight vessels. A recent development is the greater proportion of catch that is taken by trawl fishery targeting spiny dog fish in stat area 025. The main other catches of LEA 3 are bycatch associated with the targeting of flatfish, gurnard and elephant fish.

21. The reported catch volumes for targeted LEA 3 fishing are around 10% of the total annual catch by volume.

22. Highest annual combined landings prior to introduction into the QMS were 60 tonnes. Since then, the highest annual landings for LEA 3 were reported in 2011/12 and totalled 126 tonnes (exceeding the TACC by approximately 26%). The deemed value charges in that year were approximately $21 000. The TACC was again exceeded in 2010/11 to a lesser extent however, deemed value payment was $4500. Landings to date indicate that the TACC may be exceeded in the 2012/13 fishing year.

Figure 2: Reported Catch Landings and TACC (t) for LEA 3 from fishing year 2003/04 to the 2011/12 fishing year



Recreational

23. There is new quantitative information available on recreational fishing of LEA 3 from the 2011-2012 large scale multi species survey (LSMS). The results are preliminary and may be subject to change. Although LEA 3 is caught by recreational fishers the information from the survey indicates the volumes of catch are low.

Māori Customary

24. There is no new catch information since the QMS introduction of LEA 3 in 2003, and no fishing for leatherjacket is reported in the Maori customary database.

Other Sources of Fishing Related Mortality

25. Discards reported for LEA 3 do not feature in the relevant catch reports. But there is anecdotal information to suggest that volumes of leather jackets are returned to the sea, due to this species being unmarketable or unwanted at certain times in part due to processing capacity and market demand. MPI considers it prudent to set an allowance for other sources of fishing related mortality; however, only at the nominal level of 6 tonnes (5% of the TACC).

Other Key Considerations

26. When making a decision concerning the TAC for a stock, the Minister for Primary Industries [4] (the Minister) must have regard to interdependence of stocks, the biological characteristics (discussed above) and any environmental conditions affecting the stock.

27. Some concerns have been raised about catch being taken in "hay paddocks"; these are polychaete worm beds that are biologically sensitive, habitat forming areas, which appear to be diminishing in aerial extent as a consequence of disturbance from bottom trawling.

28. While LEA 3 landings have exceeded the TACC in the past, and there is reported target fishing, this only accounts for approx 10% of the annual catch. A modest increase to the TACC is unlikely to translate to a significant increase in fishing effort and associated impacts on other species or the environment. The proposed TAC increase is to the level of present catch.

PROPOSED RESPONSE

29. Current information suggests the TAC is being exceeded. There is no information to suggest that the current catch (which has been taken for a number of years) has resulted in stock decline (evidenced by reduced catch or anecdotal reports from fishers). Leather jacket in this area has been lightly fished relative to the size of the QMA and likely habitat.

30. There is a need to be cautious because there is no reliable way to estimate abundance. MPI is consulting on the following management options for setting TACs, TACCs and allowances for LEA 3 (Table 2). The proposed options for LEA 3 are to either make no changes to the current TAC and TACC (Option 1) or to increase the TAC by 31 tonnes, the TACC by 30 tonnes, to retain the allowances for recreational and customary. To set an allowance for other sources of fishing-related mortality of 6 tonnes (Option 2).

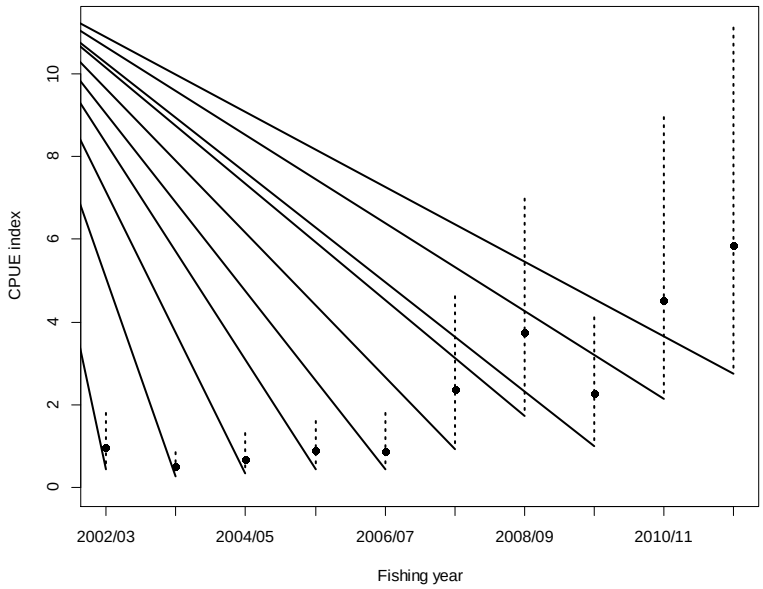
Table 2: Proposed TACs, TACCs, and allowances for LEA 3

Option			Allowances		
	TAC (t)	TACC (t)	Customary Māori (t)	Recreational (t)	Other sources of fishing related mortality (t)
Option 1 (Status Quo TAC)	108	100	2	2	5
Option 2	140	130	2	2	6

[4] The Minister for Primary Industries now exercises the powers and responsibilities of the Minister of Fisheries under the Fisheries Act 1996.

31. The best available information to inform TAC setting for LEA 3 is to use the characterisation and CPUE analysis for the LEA 3 fishery (see Figure 3).

Figure 3: 2013 standardised CPUE index for leatherjacket on the East Coast South Island



32. Because of the diffuse distribution of leather jacket over a large management area, and the low volume of previous catches, MPI considers both the options proposed are consistent with the objective of maintaining the LEA 3 stock to ensure catch is at a level that is sustainable in the short term.

Option 1 (Status Quo)

33. Option 1 proposes to retain the current management settings for LEA 3. This option would retain the current TAC, which is at a similar level to the average landings since introduction into the QMS.

34. However, as most LEA 3 catch volume is taken as an incidental bycatch and the current TACC is constraining catches and in some years fishers are incurring substantial deemed value payments. Attempts to constrain catch to average levels could create further disincentives to report and land catch, making it difficult to identify trends or signals that there are opportunities or concerns arising in the fishery. Addressing these disincentives (e.g. by increasing vessel monitoring) would generate unnecessary costs if the current level of catch is sustainable. An option to incentivise reporting and landing of catch could be a review deemed value settings.

Option 2

35. Option 2 proposes:

- the TAC be increased from 108 tonnes to 140 tonnes;

- the TACC be increased from 100 tonnes to 130 tonnes (an increase of approximately 30%);
- the allowance for other sources of fishing related mortality be set at 6 tonnes;
- no changes to the recreational allowance; and
- no changes to the customary Māori allowance.

36. Option 2 proposes to adjust the TAC to better provide for existing utilisation in the commercial fisheries.

37. A moderate TAC increase from 108 tonnes to 140 tonnes (30%) can provide potential to obtain higher benefits from the stock in the short term. The TAC is slightly higher than average annual landings, but is still relatively cautious because of the wide distribution of leatherjacket and historically low levels of fishing.

38. Option 2 may encourage development of a target LEA 3. But MPI have no information to suggest that this is a real probability or a risk. The sustainability of the LEA 3 can be monitored in the future East Coast South Island Trawl survey.

39. Under Option 2 this increase is allocated to the commercial sector, with a TACC increase from 100 tonnes to 130 tonnes (30%). Based on the 2012/13 port price of $0.67 per kilogram, an additional commercial catch of 30 tonnes is worth $20 100.

40. The large scale multi species survey (LSMS) has provided a clearer picture of recreational fishing, including information on the LEA 3 fishery. It has not been possible at this stage to provide the estimated recreational catch of LEA 3 in 2012 from the LSMS.

41. There is currently no information to support a review of the Māori customary allowance.

Other Management Measures

42. MPI is considering a review of the deemed value rates for this stock, as the current ramped rates maybe be incentivising fishers to discard fish as they cannot balance their catch with available ACE. By flattening the stepped deemed value rates this may encourage better reporting which will inform any future reviews.

FUTURE CONSIDERATIONS

43. Provision and use of better information species composition and reporting of LEA 3 returned to the sea.

INITIAL CONSULTATION

44. During May and June 2013, MPI provided the opportunity for tangata whenua and some stakeholder representatives to provide initial feedback on the options proposed.

45. Te Waka a Maui Fisheries Forum have expressed no opinion on the options offered in this paper.

46. Southern Finfish Management Company has indicted support for Option 2.

47. The FMA 3&5 Recreational Forum currently supports Option 1, based in information they have about leatherjackets around the Christchurch area.

CONCLUSIONS

48. The current TAC and TACC for LEA 3 were set in 2003 when LEA 3 was introduced to the Quota Management System. The TACs have been exceeded a number of times in recent years.

49. Option 2 proposes to enable more efficient utilisation of leatherjacket by increasing: the TAC; the TACC; and the allowance for other sources of fishing-related mortality. The TACC increase of 30 tonnes is low volume given the size of the quota management area. Because Option 2 is only allowing an increase that reflects what is already being caught, the changes are a reflection of current practice rather than encouraging further increases in LEA 3 catch. The proposal to increase the TACC is not anticipated to undermine the interests of customary and recreational fishers.