

LOCAL DEPLETION OF HAPUKU/ BASS IN THE CENTRAL FISHERIES MANAGEMENT AREA – INITIAL POSITION PAPER

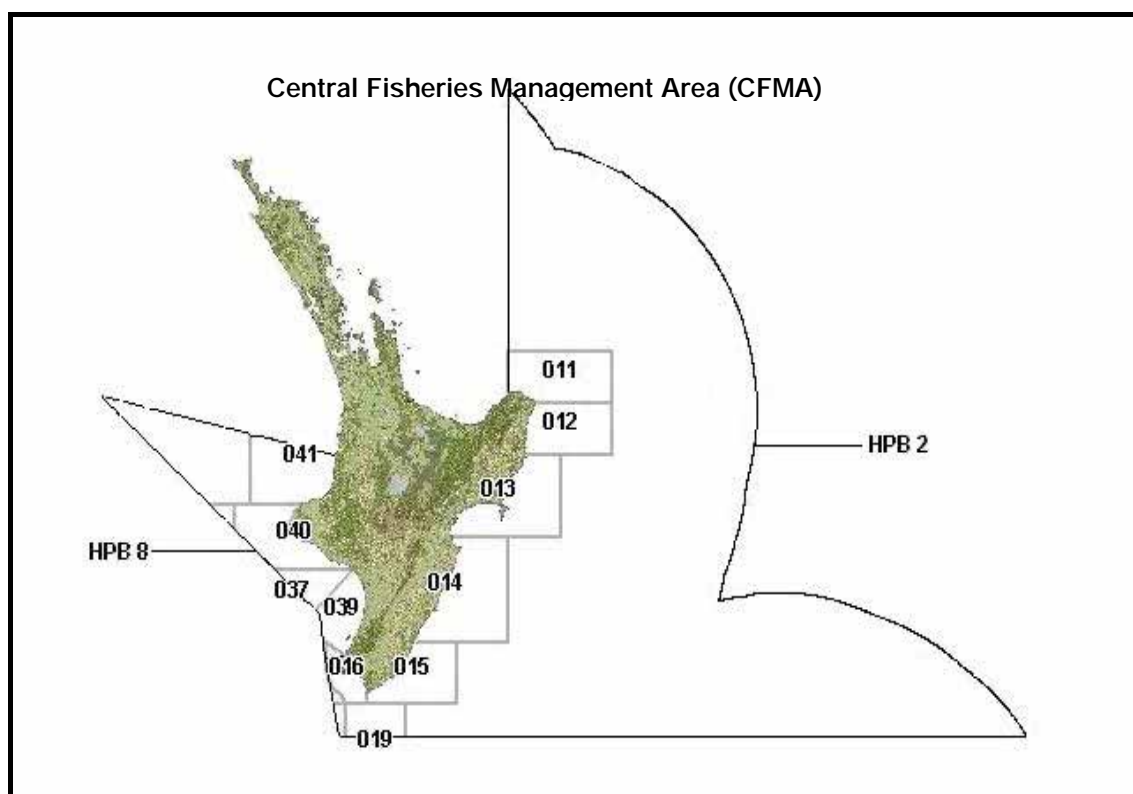


Figure 1: Map showing the Central Fisheries Management Area (CFMA), which encompasses Hapuku/Bass Quota Management Areas HPB 2 and HPB 8, and the inshore statistical areas.

Executive Summary

- 1 The Ministry of Fisheries (MFish) is proposing changes to the rules that manage recreational take of hāpuku/bass in the Central Fisheries Management Area (CFMA; refer Figure 1).
- 2 The relevant statutory considerations are set out in the Fisheries Act 1996 and the Fisheries (Central Area Amateur Fishing) Regulations 1986. Regulation 3A of the regulations sets out the limits applying to the taking of hāpuku/bass. Currently the regulation allows a recreational fisher to take a combined maximum daily bag limit of five hāpuku/bass and kingfish
- 3 MFish has received multiple reports from non-commercial (ie, recreational and customary) fishing stakeholders of localised depletion of hāpuku/bass in the CFMA. Non-commercial stakeholders state the localised depletion is reducing non-commercial fishing values. Specifically, they report a decline in non-commercial hāpuku/bass catch rates and in the size ranges of hāpuku/bass

being caught in popular non-commercial fishing areas in Poverty Bay, Hawke Bay, and the Wairarapa in HPB 2, and in unspecified areas in HPB 8.

- 4 The reports from non-commercial stakeholders cite increased recreational fishing as causing the localised depletion. However, reports differ in the nature of the increase in effort. Some reports cite an “across the board” increase in recreational fishing as the problem whilst others cite increased fishing by recreational charter vessels only.
- 5 MFish has no independent information to confirm reports of localised depletion in popular non-commercial fishing areas in the CFMA. MFish notes the following biological characteristics of hāpuku/bass make the species vulnerable to localised depletion: slow-growth; long-life; late age at sexual maturity; and, demonstrate a high level of residency around favoured marine features.
- 6 MFish has only limited information on recreational fishing for hāpuku/bass in the CFMA and that information is not fine-scale enough to confirm reports of increased recreational fishing in popular non-commercial fishing areas.
- 7 Although information is limited, MFish believes consideration of management intervention is appropriate because the problem is principally internal to the recreational sector; nearly all the anecdotal information on the problem and its cause has been provided by recreational fishers, and the cause identified is increased recreational effort.
- 8 This paper puts forward four management options for discussion:
 - Option 1, the status quo, would not change the management of hāpuku/bass but would continue to monitor available information on the fishery
 - Option 2 would introduce a maximum daily bag limit of three hāpuku/bass per person in the CFMA for recreational fishers
 - Option 3 would introduce a maximum boat limit of 15 hāpuku/bass per vessel in the CFMA for recreational fishers
 - Option 4 would introduce an accumulation limit of one daily bag limit of hāpuku/bass per person in the CFMA for recreational fishers.
- 9 At this time, and based on the best available information, MFish considers Option 2 the most effective option to address the reported localised depletion. Option 2 reduces the maximum fishing potential of every recreational fisher targeting hāpuku/bass in the CFMA and is therefore more likely to reduce the amount of hāpuku/bass harvested by recreational fishers in popular non-commercial fishing areas. Unlike Options 3 and 4, the effectiveness of Option 2 is not reliant on the accuracy of information about the nature of the increased recreational fishing effort.
- 10 MFish recognises, however, that information on this issue is limited and largely anecdotal. MFish invites stakeholders to provide additional

information to inform the decision making. In particular, MFish invites information on:

- a) the locations of areas where localised depletion of hāpuku/bass is occurring within the CFMA
 - b) the cause of localised depletion in popular non-commercial hāpuku/bass fishing areas
 - c) how recreational effort in popular non-commercial hāpuku/bass fishing areas has changed through time
 - d) recreational values associated with hāpuku/bass fishing and their relative importance
 - e) The 'value-costs' and 'value-benefits' of the options presented.
- 11 None of the options presented would negatively impact on the values of Tangata/Tiaki Kaitiaki and customary fishers, commercial quota owners and fishers, or environmental stakeholders. Options 2, 3 and 4 may benefit these stakeholders by reducing overall risk to the sustainability of HPB 2 and HPB 8 fishstocks.

Summary of Options

- 12 This paper discusses four management options. Options 2, 3 and 4 are not discrete options; just one or any combination of these options could be adopted.

Option 1: Status quo

- 13 Option 1 would not change the management of hāpuku/bass in the CFMA. MFish would continue to monitor, and consider new, fishery information as it became available.
- 14 The Fisheries (Central Area Amateur Fishing) Regulations 1986 allow a recreational fisher in the CFMA to take a combined daily bag limit of five hāpuku/bass and kingfish per person, with no more than three kingfish.

Option 2: Introduce a recreational daily bag limit of three hāpuku/bass

- 15 Under Option 2, an amendment would be made to Section 3A of the Fisheries (Central Area Amateur Fishing) Regulations 1986 limiting recreational fishers to a daily bag limit of three hāpuku/bass per person.
- 16 The amendment would reduce the maximum number of hāpuku/bass able to be taken per day by a recreational fisher in the CFMA from five to three. The amendment would not change the existing combined daily bag limit of five hāpuku/bass and kingfish per person, or the daily bag limit of three kingfish per person.

Option 3: Introduce a recreational boat limit of 15 hāpuku/bass per vessel.

- 17 Under Option 3, an amendment would be made to Section 3A of the Fisheries (Central Area Amateur Fishing) Regulations 1986 limiting the number of hāpuku/bass able to be possessed to 15 per vessel for recreational fishers.
- 18 On its own, Option 3 would reduce the number of hāpuku/bass able to be taken by recreational fishers on vessels carrying four or more fishers. It would not change the number of hāpuku/bass able to be taken by recreational fishers on vessels carrying three or less fishers.
- 19 If the maximum daily bag limit of hāpuku/bass is reduced to three (that is, if Options 2 and 3 are used together), the amendment would reduce the number of hāpuku/bass able to be taken by recreational fishers on vessels carrying six or more fishers. It would not change the number of hāpuku/bass able to be taken by recreational fishers on vessels carrying five or less fishers.

Option 4: Introduce an accumulation limit of one daily bag limit of hāpuku/bass

- 20 Under Option 4, an amendment would be made to Section 3A of the Fisheries (Central Area Amateur Fishing) Regulations 1986 limiting the amount of hāpuku/bass recreational fishers can accumulate to one daily bag per person in the CFMA.
- 21 The amendment would limit the number of hāpuku/bass able to be possessed by any recreational fisher in the CFMA at any time to one daily bag limit of hāpuku/bass (that is, five hāpuku/bass if the bag limit is unchanged and three hāpuku/bass if Option 2 is adopted).
- 22 The amendment would not change the existing combined daily bag limit of five hāpuku/bass and kingfish per person, or the daily bag limit of three kingfish per person.

Rationale for Management Options

The Management Problem

- 23 MFish has received multiple reports from non-commercial fishing stakeholders of localised depletion of hāpuku/bass in the CFMA.
- 24 The first reports in 2005 related solely to the Ranfurly Banks (in statistical area 11 – refer figure 1). Subsequent reports in 2006 and 2007 related to Ranfurly Banks and popular non-commercial areas off Gisborne (statistical areas 12 and 13), in Hawke Bay (statistical area 13), off the Wairarapa coast (statistical areas 14 and 15) and in non-specific areas in HPB 8.

Risk to the sustainability of the HPB 2 and HPB 8 fishstocks

- 25 MFish has no independent information to verify the reports of localised depletion. The biological characteristics of hāpuku/bass make the species vulnerable to localised depletion. Hāpuku/bass are slow-growing and long-

lived (approximately 60 years), have a late age-at-maturity and demonstrate strong site fidelity (in tagging studies, large numbers of tagged hapuku/bass are re-captured at, or near, the initial tagging site). Studies also show hapuku/bass have an annual spawning season but little is currently known about the location of spawning grounds or nursery areas.

- 26 Spreading or “serial” localised depletion can increase risks to fishstock sustainability. Information on the status of hapuku/bass fishstocks is limited. A maximum constant yield (MCY) of 1330 tonnes has been estimated for hapuku/bass fishstocks HPB 1-3 and 6-10 combined. Recent combined catches across these fisheries are less than 1330 tonnes and are considered sustainable. Monitored fishery information in HPB 2 and HPB 8 (commercial catches against TACC) does not suggest notable changes in hapuku/bass abundance in either quota management area as a whole.

Risk to the value achieved by HPB 2 and HPB 8 fishery stakeholders

- 27 Recreational and customary fishers have stated that localised depletion is reducing the value of customary and recreational fishing experiences. Specifically, recreational and customary stakeholders note a decline in their hapuku/bass catch rates and in the size ranges of hapuku/bass being caught.
- 28 MFish has no independent or quantitative information to verify whether or not recreational or customary fishing values have declined in recent years. However, anecdotal information suggesting declining values has been consistent, has derived from multiple sources (including individuals, recreational charter fishers, recreational fishing club representatives, MFish recreational forums, and hapu representatives) and has been provided over a number of years (2005 to present).
- 29 MFish has not received any reports from commercial fishers expressing concern about declining commercial values in HPB 2 or HPB 8. Indicators of the commercial value of hapuku/bass include (but are not limited to) commercial landings against Total Allowable Commercial Catch (TACC), and the value of Annual Catch Entitlement (ACE) or quota. The TACC for HPB 2 is set at 266 tonnes. The average ACE trading price per tonne of HPB 2 has increased from \$1,585 to \$1,807 over the same period. The average ACE trading price per tonne of HPB 8 has increased from \$748 to \$1,188 over the same period.

Risk to the credible management of hapuku/bass fisheries in the CFMA

- 30 Credible fisheries management is management that is clearly understood by the fishery stakeholders and achieves the desired result of ensuring maximum value is obtained through the sustainable use of the HPB 2 and HPB 8 fishstocks in the long term.
- 31 Reports from non-commercial stakeholders indicate there may be growing dissatisfaction with the current management of recreational hapuku/bass fisheries in the CFMA.

Rationale for Management Options

- 32 MFish believes consideration of management intervention is appropriate despite the absence of independent information to verify the reported localised depletion. This is because the problem is principally internal to the recreational sector; that is, nearly all the anecdotal information on the problem and its cause has been provided by recreational sector participants, and the cause identified is increased recreational effort.
- 33 MFish considers management intervention is justified if consultation feedback from CFMA stakeholders:
- reveals widespread agreement among non-commercial fishers that localised depletion is occurring in popular non-commercial fishing areas;
 - reveals widespread agreement among non-commercial fishers that localised depletion is caused by increased recreational fishing effort in these areas;
 - indicates management intervention would increase the overall value of the non-commercial hapuku/bass fishery in the CFMA; and
 - other fishery stakeholders would not be negatively impacted by the chosen management intervention.

Rationale for Option 1: Status quo

- 34 Fine-scale information on hapuku/bass abundance is limited and does not enable independent verification that localised depletion is occurring within the CFMA. As noted above, available fishery information is limited but does not suggest a sustainability problem in HPB 2 or HPB 8. Research to develop a monitoring tool to better assess the status of hāpuku/bass fish stocks around New Zealand is being commissioned by MFish. The results of this research will be available to MFish in 2009.
- 35 Information on recreational fishing effort distribution and trends is also limited and does not enable verification of reports that recreational fishing effort is increasing in popular hapuku/bass fishing spots in the CFMA. A telephone diary survey to update recreational harvest estimates is planned for 2009/10. Information on the extent of recreational charter boat fishing effort may also become available in the future through the ‘activity and catch reporting for recreational charter vessels’ proposal, which formed part of the November 2007 Cabinet decision on the Shared Fisheries Policy. Non-commercial stakeholders are likely to be consulted on this proposal in 2008.
- 36 The recreational fishing community is both diverse and dispersed. Current anecdotal reports of localised depletion are consistent and derived from a variety of sources but may not reflect the perspective of the wider recreational fishing community.

- 37 Retaining the existing management framework is therefore a realistic management option. Management intervention could be considered again in the future when more information is available or as part of a fisheries plan.

Rationale for Option 2: Introduce a daily bag limit of 3 hāpuku/bass per person

- 38 The reports provided by non-commercial fishers consistently cite an increase in recreational fishing effort as the primary cause of localised depletion in popular non-commercial fishing areas. The reports note an increase in membership of fishing clubs, increased traffic across club boat ramps and increased sales of boats and fishing equipment as evidence of a general increase in fishing effort in the CFMA.
- 39 The most commonly used tool to constrain recreational catch is the recreational daily bag limit. Introducing a hāpuku/bass-specific daily bag limit of three fish per day in the CFMA is therefore a realistic management option. The hāpuku/bass-specific daily bag limit would reduce the maximum potential catch of every recreational fisher in popular non-commercial fishing areas and the CFMA as a whole.
- 40 The number three was chosen primarily based on reports from recreational fishermen indicating three hāpuku/bass is a credible daily bag limit given the comparatively large size (hāpuku/bass are large and most landed fish weigh 10 and 40 kgs or more), the popularity of hāpuku/bass and the current concerns about localised depletion. Three is also consistent with the current daily bag limit applying to kingfish and therefore is likely to be easy to remember.

Rationale for Option 3: Introduce a boat limit of 15 hāpuku/bass per vessel

- 41 Some reports provided by non-commercial fishers have cited increased recreational charter fishing effort as the principal cause of localised depletion in popular non-commercial fishing areas.
- 42 Information on recreational charter fishing effort in the CFMA is limited. Recent research identifies hāpuku/bass as the third most frequently targeted species by charter vessels (after snapper and kingfish), and suggests the physical number of recreational charter vessels has increased in the CFMA over the period 1997-98 to 2006. However, there is no information to determine if charter fishing effort has increased at a slower rate, the same rate, or a faster rate than recreational effort generally. Nor is it possible to determine the proportion of total recreational catch of hāpuku/bass in the CFMA taken by recreational fishers on charter vessels.
- 43 Boat limits are a tool that provides for some targeting of catch constraints to specific groups of fishers. Introducing a boat limit is therefore a realistic management option, if the best available anecdotal information indicates targeted catch constraints are warranted. Some reports from recreational fishers suggest fishers on charter vessels (and large private recreational vessels) may take more fish because these vessels tend to carry large groups of fishers, have larger holds to transport catch, go out more regularly, have

experienced skippers that know where the fish can be found, and are able to fish in rougher weather.

- 44 A boat limit applies to all vessels, not just charter vessels. At this time, MFish is not aware of any reason why charter vessels carrying multiple fishers should be treated differently to private vessels carrying multiple fishers. The proposed boat limit would affect recreational fishers on vessels carrying four or more passengers if the maximum daily bag limit remains at five, and on vessels carrying six or more passengers if the maximum daily bag limit is reduced to three.
- 45 The number fifteen was chosen primarily based on the reports from recreational fishers suggesting 15 as a credible boat limit for hāpuku/bass in the CFMA.

Rationale for Option 4: Introduce an accumulation limit of one daily bag limit of hāpuku/bass

- 46 Hāpuku/bass is a popular target species among recreational fishers and advances in fishing technology enable even relatively inexperienced fishers to accurately and repetitively locate specific fishing spots. Some reports from non-commercial stakeholders refer to fishers returning to the same popular non-commercial fishing areas repetitively to target hāpuku/bass. Non-commercial stakeholders note hāpuku/bass are large fish and a bag limit “goes a long way”. They have expressed particular concern about large landings of hāpuku/bass from vessels involved in multi-day fishing trips.
- 47 Information on accumulation of hāpuku/bass by individual recreational fishers is limited and MFish has no information on the number of fishers that currently possess more than a bag limit (five) of hāpuku/bass at any one time.
- 48 Although accumulation limits apply to all recreational fishers equally, they are more likely to affect (constrain the activity of) fishers on multi-day fishing trips and fishers that fish for hāpuku/bass frequently and regularly take the maximum bag limit.
- 49 The proposed accumulation limit is one daily bag limit of hāpuku/bass. The number one was chosen primarily based on the reports from recreational fishers suggesting one bag limit is credible given the comparatively large size and popularity of hāpuku/bass and the current concerns about localised depletion.

Other Management Options Looked At

Reducing commercial catch

- 50 None of the reports from non-commercial stakeholders has cited commercial fishing as a cause of localised depletion of hāpuku/bass in popular non-commercial fishing areas.
- 51 Some overlap does occur between commercial and non-commercial fishers taking hāpuku/bass. Commercial catch of hāpuku/bass in FMA 2 is a target and by-catch species in the dahn line, bottom long line and bottom trawl

fisheries, whereas hāpuku/bass in FMA 8 is predominantly a by-catch species in the bottom long line and bottom trawl fisheries. The TACC for HPB 2 is 266 tonnes. The commercial catch trend in HPB 2 has remained relatively constant since 2001/02, with catches fluctuating between 226 and 281 tonnes. The TACC for HPB 8 is 80 tonnes. The commercial catch trend in HPB 8 has also remained relatively constant since 2001/02, with catches fluctuating between 62 and 80 tonnes.

- 52 Available commercial catch data is not detailed enough to provide analysis of hāpuku/bass catches taken in, or near, popular non-commercial fishing areas¹, but estimated commercial catches of hāpuku/bass for most statistical areas in the CFMA appear to be relatively constant or declining since 2001/02 fishing years with the exception of statistical areas 13, 40 and 41. Hāpuku/bass catch in statistical area 13 increased in 2005/06 and 2006/07, and appears to be linked to hāpuku/bass bycatch in the bluenose (BNS 2) target fishery.² Hāpuku/bass catches in statistical areas 40 and 41 increased in 2002/03 and 2004/05, but have since reduced in 2005/06 and 2006/07.
- 53 The absence of information indicating a causal link between the reported localised depletion in popular non-commercial hāpuku/bass fishing areas and commercial fishing, and the absence of information indicating a sustainability concern, means reducing commercial catch is not considered a realistic option.
- 54 As noted above, research to develop a monitoring tool to better assess the status of hāpuku/bass fish stocks around New Zealand is being commissioned by MFish. The results of this research will be available to MFish in 2009.

Closed seasons in hāpuku/bass spawning areas

- 55 Some stakeholders have suggested closing hāpuku/bass spawning areas during spawning season.
- 56 Research shows hāpuku/bass do have an annual spawning season (this varies considerably between the North and South Islands) but little information is currently known about the location of spawning grounds or nursery areas for hāpuku/bass. Consequently, the introduction of closed seasons in hāpuku/bass spawning areas is not a realistic option at this time.

Assessment of Management Options

Option 1: Retain the status quo

- 57 Option 1 retains the existing management framework for hāpuku/bass in the CFMA.

¹ The introduction of new commercial catch effort reporting forms for trawl and lining fishing methods on 1 October 2007, will provide more fine scale information on the location of fishing effort, particularly latitude and longitude data. In the future this information may enable more precise analysis of the location of commercial fishing effort, and assist with determining if commercial fishing effort is a cause of localised depletion for other fish stocks

² The deemed value for BNS 2 was increased from 1 October 2007.

- 58 Information on the problem and its cause is limited and anecdotal. Retaining the existing management framework would therefore be appropriate if consultation feedback from CFMA stakeholders:
- reveals a lack of widespread agreement among non-commercial fishers that localised depletion is occurring in popular non-commercial fishing areas in the CFMA;
 - reveals a lack of widespread agreement among non-commercial fishers that localised depletion is caused by increased recreational fishing effort in these areas;
 - indicates management intervention would not increase the overall value of the non-commercial hapuku/bass fishery in the CFMA; or if
 - new information would shortly be available that would better inform decision-making on addressing reported localised depletion in the CFMA.

Benefits

- 59 Of the three options presented, Option 1 has the lowest implementation cost (nil additional costs) as no change to the management framework would result.
- 60 Under Option 1, no additional constraints on recreational harvest of hāpuku/bass would apply. If localised depletion is limited to only a few areas, the value-benefit to recreational fishers of being able to take up to five hāpuku/bass daily may exceed the value-benefit of reducing maximum daily take to improve recreational fishing success in areas currently experiencing localised depletion.
- 61 Option 1 would also allow new information to be considered. New information on hāpuku/bass fisheries that is likely to become available in the next few years includes:
- research to identify an improved monitoring tool for hāpuku/bass fishstocks due to be reported in 2009
 - a telephone diary survey to estimate recreational harvest is planned for 2009/10
 - finer-scale information on commercial catch distribution from new catch reporting forms operating from 2007/08
 - potential information on the extent of recreational charter boat fishing effort (may become available through ‘activity and catch reporting for recreational charter vessels’ – a proposal which formed part of the November 2007 Cabinet decision on the Shared Fisheries Policy and is likely to be consulted on in March 2008).
- 62 MFish notes, this new information will not provide verification of reported localised depletion. Nor will it necessarily provide information on changing recreational harvest over time because, as illustrated in the table below,

existing estimates of recreational catch in HPB 2 and HPB 8 are highly uncertain and widely variable.

Table 1: Recreational harvest estimates from recreational surveys.

	1992-3	1993-4	1996	1999-00
FMA 2	45-85 tonnes	5-10 tonnes	75-125 tonnes	307-608 tonnes
FMA 8	5-10 tonnes	No data	No data	6-32 tonnes

Costs

- 63 Option 1 poses the greatest risk to non-commercial values and also to the medium to long-term sustainability of the HPB 2 and HPB 8 fishstocks (no short-term risk to sustainability has been identified).
- 64 Retaining the status quo would not reduce or resolve reported localised depletion of hāpuku/bass in popular non-commercial fishing areas in the CFMA. If localised depletion is occurring across a number of popular non-commercial fishing areas in the CFMA, the value-benefit to recreational fishers of reducing maximum daily take to improve recreational fishing success in areas experiencing localised depletion is likely to exceed the value-benefit of being able to take up to five hāpuku/bass daily.
- 65 In the medium to long-term, localised depletion may spread to other areas as fishers seeking better catch rates relocate their fishing effort to new areas. For slow-growing species that show a high level of residency to particular areas like hāpuku/bass, serial localised depletion can increase risks to the sustainability of a stock.
- 66 Option 1 may not be credible to non-commercial fishers experiencing localised depletion. Some consider a maximum allowable catch of five hāpuku/bass to be excessive given the size of the fish, its popularity among non-commercial fishers and its vulnerability to localised depletion.

Option 2: Introduce a daily bag limit of three hāpuku/bass per person

- 67 Introducing a daily bag limit of three hāpuku/bass per person would reduce the maximum quantity of hāpuku/bass a recreational fisher is able to take in the CFMA from five to three per day.
- 68 Introducing a reduced daily bag limit is appropriate if consultation feedback from CFMA stakeholders:

- reveals widespread agreement among non-commercial fishers that localised depletion is occurring in popular non-commercial fishing areas in the CFMA;
- reveals widespread agreement among non-commercial fishers that localised depletion is caused by increased recreational fishing effort in these areas;
- indicates the increase in recreational fishing effort is ‘across the board’ or that the nature of the increasing recreational fishing effort is unknown; and
- indicates management intervention would increase the overall value of the non-commercial hapuku/bass fishery in the CFMA.

Benefits

- 69 Of the three options, Option 2 is likely to be the most effective at reducing or resolving reported localised depletion in popular non-commercial fishing areas in the short to medium-term. (MFish notes the effectiveness of a reduced bag limit in the medium to long-term would be dependent on the amount of growth in recreational fishing effort over the period.)
- 70 Introducing a hapuku/bass-specific daily bag limit potentially reduces the total number of hapuku/bass taken by recreational fishers in the short to medium-term. The quantum reduction in recreational catch of hapuku/bass achieved by reducing the daily bag limit is unknown. Information on recreational harvest of hapuku/bass in the CFMA is uncertain and MFish has no current information on the proportion of fishing events that occur where a fisher takes more than three hapuku/bass.
- 71 The daily bag limit would apply to every recreational fisher targeting hapuku/bass in the CFMA. Therefore, unlike a boat limit (Option 3), the effectiveness of the tool is not as reliant on the correctness of assumptions about the nature of the increase in recreational fishing effort.
- 72 If localised depletion is occurring across a number of popular non-commercial fishing areas in the CFMA, the value-benefit to recreational fishers of reducing the maximum daily bag limit to improve recreational fishing success in areas experiencing localised depletion is likely to exceed the value-benefit of being able to take up to five hapuku/bass daily.
- 73 Best available information at this time indicates Option 2 is also the most credible option. Daily bag limits are familiar to, and widely understood and accepted by non-commercial stakeholders as a tool to manage recreational harvest. Bag limits restrict the maximum fishing potential of all individual recreational fishers equally. Furthermore, existing reports from stakeholder suggest a bag limit of three hapuku/bass is sensible given the large size of hapuku/bass.
- 74 MFish notes that its compliance strategy for the HPB 2 and HPB 8 fishstocks in the long term are to maximise voluntary compliance and maintain an

effective deterrent. Although recreational fishers are expected to be aware of the fishing regulations in the CFMA, compliance activity includes informing recreational users of the relevant rules as well as enforcement activities including patrols, inspections and prosecution of offences.

- 75 Introduction of a hāpuku/bass-specific bag limit would not affect the values of Tangata/Tiaki Kaitiaki and customary fishers, commercial quota owners and fishers, or environmental stakeholders. Option 2 may benefit these stakeholders by reducing overall risk to the sustainability of HPB 2 and HPB 8 fishstocks and by reducing risks to biological diversity in popular non-commercial areas over the short to medium-term.

Costs

- 76 Reducing the daily bag limit may result in a net value loss to recreational fishers. If localised depletion is limited to only a few areas, the value-benefit to recreational fishers of being able to take up to five hāpuku/bass daily would likely exceed the value-benefit of reducing maximum daily take to improve recreational fishing success in areas currently experiencing localised depletion.
- 77 Option 2 will result in administrative costs to fulfil regulatory amendments and education costs to inform non-commercial stakeholders of the new regulation. The education costs would include:
- the cost of updating published recreation rules information (eg, the 'Recreational Fisher's Handbook') and information boards within the CFMA
 - education activities to inform fishers of the new rule.

Option 3: Introduce a boat limit of 15 hāpuku/bass per vessel

- 78 Introducing a boat limit of 15 hāpuku/bass would limit the maximum quantity of hāpuku/bass able to be possessed per vessel in the CFMA to 15.
- 79 Introducing a boat limit is appropriate if consultation feedback from CFMA stakeholders:
- reveals widespread agreement among non-commercial fishers that localised depletion is occurring in popular non-commercial fishing areas in the CFMA;
 - reveals widespread agreement among non-commercial fishers that localised depletion is caused by increased recreational fishing effort in these areas;
 - reveals widespread agreement among recreational fishers that distinguishing between fishers on small vessels and fishers on large vessels is credible; and
 - indicates management intervention would increase the overall value of the non-commercial hapuku/bass fishery in the CFMA.

Benefits

- 80 The introduction of a boat limit would potentially reduce the number of hāpuku/bass taken by vessels carrying multiple recreational fishers (ie, four or more fishers if the bag limit of five is retained and six or more fishers if the bag limit is reduced to three) on any trip. If large recreational and charter vessels are a principal harvester of hāpuku/bass in popular non-commercial fishing areas, introducing a boat limit may reduce or resolve reported localised depletion of hāpuku/bass in popular non-commercial fishing areas in the short-medium term.
- 81 MFish is unable to quantify the total reduction in annual catch of hāpuku/bass that may occur from introducing the boat limit. There is no research information available to MFish on the ratio of recreational fishers to large recreational or charter vessels targeting hāpuku/bass in FMA 2 and 8.
- 82 Introduction of a hāpuku/bass boat limit would not affect the values of Tangata/Tiaki Kaitiaki and customary fishers, commercial quota owners and fishers, or environmental stakeholders. Options 3 may benefit these stakeholders by reducing overall risk to the sustainability of HPB 2 and HPB 8 fishstocks and by reducing risks to biological diversity in popular non-commercial areas over the short to medium-term.

Costs

- 83 On its own, Option 3 would only be effective if vessels carrying multiple fishers are responsible for a significant proportion of the hāpuku/bass catch. MFish has no information to confirm whether this is the case therefore Option 3 is a riskier approach to resolving reported localised depletion in these areas than Option 2, which seeks to reduce the maximum harvest potential of all fishers. As noted above, new information on the extent of recreational charter boat fishing effort may become available in the future through the 'activity and catch reporting for recreational charter vessels' proposal, which is likely to go out for consultation in March 2008.
- 84 Option 3 would only be credible if vessels carrying multiple fishers are harvesting appreciably more hāpuku/bass per fisher per fishing trip than other recreational fishing participants. MFish has no information to verify that this is the case, therefore boat limits may be seen as discriminatory (ie, unjustifiably targeting fishers that use charter vessels and those that fish in groups off large vessels).
- 85 Option 3 would result in administrative costs. The costs are likely to be higher than Option 2 because boat limits as a management tool are not familiar to, or widely understood by, recreational fishers. A more intensive education and information programme would therefore be required to ensure fishers understood the tool and how it operated.
- 86 Option 3 potentially impacts on the recreational values of fishers in other FMA's by constraining the activity of fishers travelling into the CFMA to fish. Whilst in the CFMA, vessels cannot exceed 15 hāpuku/bass even if the

hāpuku/bass were taken from the neighbouring Fisheries Management Area where no boat limit applied.

- 87 MFish is unable to assess the impact introducing a boat limit would have on the value of recreational fishing within the CFMA. The impact will depend on the extent of the localised depletion problem, the amount of fishers and number of fishing trips that would be constrained by the proposed boat limit and the effectiveness of the tool in reducing or resolving reported localised depletion.
- 88 MFish notes boat limits are more difficult to enforce than bag limits. The opportunities to intercept fishers not complying with boat limits are limited to on-the-water inspections and boat ramp inspections. Other interactions, for example vehicle inspections, would be less effective as once the hāpuku/bass are removed from the vessel, securing evidence of illegal activity would become more difficult.

Option 4: Introduce an accumulation limit of one daily bag limit of hāpuku/ bass per person

- 89 Introducing an accumulation limit of one daily bag limit of hāpuku/bass would limit the maximum quantity of hāpuku/bass able to be possessed in the CFMA.
- 90 Introducing an accumulation limit is appropriate if consultation feedback from CFMA stakeholders:
- reveals widespread agreement among non-commercial fishers that localised depletion is occurring in popular non-commercial fishing areas in the CFMA;
 - reveals widespread agreement among non-commercial fishers that localised depletion is caused by increased recreational fishing effort in these areas;
 - reveals widespread agreement among recreational fishers that targeting accumulation of hāpuku/bass is credible; and
 - indicates management intervention would increase the overall value of the non-commercial hapuku/bass fishery in the CFMA.

Benefits

- 91 The introduction of an accumulation limit would potentially reduce the number of hāpuku/bass taken by fishers on multi-day trips and fishers that fish often and regularly accumulate more than one daily bag limit. If these fishers are a principal harvester of hāpuku/bass in popular non-commercial fishing areas, introducing a boat limit may resolve or reduce reported localised depletion of hāpuku/bass in popular non-commercial fishing areas in the short-medium term.
- 92 MFish is unable to quantify the total reduction in annual catch of hāpuku/bass that may occur from introducing an accumulation limit. MFish has no

information to determine how many recreational fishers regularly possess more than one daily bag limit of hāpuku/bass in the CFMA.

- 93 Introduction of an accumulation limit would not affect the values of Tangata/Tiaki Kaitiaki and customary fishers, commercial quota owners and fishers, or environmental stakeholders. Option 4 may benefit these stakeholders by reducing overall risk to the sustainability of HPB 2 and HPB 8 fishstocks and by reducing risks to biological diversity in popular non-commercial areas over the short to medium-term.

Costs

- 94 On its own, Option 4 would only be effective if a large proportion of recreational fishers are regularly possessing more than one daily bag limit of hāpuku/bass. If this is not the case, introducing an accumulation limit on its own would have limited effect and is unlikely to significantly reduce or resolve reported localised depletion of popular non-commercial fishing areas.
- 95 Option 4 would only be credible if recreational fishers are regularly possessing more than one daily bag limit of hāpuku/bass. MFish has no information to verify that this is the case.
- 96 The introduction of an accumulation limit may affect recreational values in other FMA's by constraining the activity of fishers travelling into the CFMA to target hāpuku/bass. Whilst in the CFMA, recreational fishers on multi-day trips would be unable to possess more than one daily bag limit of hāpuku/bass even if the fish were taken in another fisheries management area.
- 97 MFish is unable to assess the impact introducing an accumulation limit would have on the value of recreational fishing within the CFMA. The impact would depend on the extent of the localised depletion problem, the amount of fishers and number of fishing trips constrained by the proposed accumulation limit, and the effectiveness of the tool in reducing or resolving reported localised depletion.
- 98 Option 4 has similar implementation costs to Option 3. Accumulation limits as a management tool are not familiar to, or widely understood by, recreational fishers. Therefore a targeted education and information programme would be required to ensure fishers understood the tool and how it operated.

Conclusion

- 99 Based on the best available information at this time, MFish considers Option 2 to be the best approach to address reported localised depletion of hāpuku/bass in popular non-commercial fishing areas in FMA 2 because:
- a) multiple reports of localised depletion in popular non-commercial fishing areas have been received and the reports consistently cite increased recreational fishing effort as the cause
 - b) management intervention is justifiable despite the absence of independent information to verify the reported localised depletion

because the reported problem and cause are principally internal to the recreational sector

- c) introducing a hāpuku/bass-specific bag limit would reduce risks to non-commercial values and to long-term sustainability of the CFMA hāpuku/bass fisheries
- d) introducing a hāpuku/bass-specific bag limit is more likely to be effective at reducing or resolving reported localised depletion because it reduces the maximum fishing potential of every hāpuku/bass fisher and is not reliant on unverifiable assumptions about who in the recreational sector is causing the problem
- e) reducing the daily bag limit would not negatively affect stakeholder values associated with customary fishing, commercial fishing or the environmental access in the short to medium term; and
- f) daily bag limits are widely understood and accepted by recreational stakeholders

100 At this time, MFish considers more information would be needed about the value-costs and value-benefits of Options 3 and 4 before they could be adopted.

101 MFish recognises the information available to inform decision making is limited. MFish therefore invites stakeholders to provide additional information. In particular, MFish invites information on:

- a) the locations of areas where localised depletion of hāpuku/bass is occurring within the CFMA
- b) the cause of localised depletion in non-commercial
- c) how recreational effort in popular non-commercial hāpuku/bass fishing areas has changed through time.
- d) recreational values associated with hāpuku/bass fishing and their relative importance
- e) The 'value-costs' and 'value-benefits' of:
 - i) retaining the status quo of a maximum daily bag limit of five hāpuku/bass per person
 - ii) reducing the maximum daily bag limit to three hāpuku/bass per person
 - iii) introducing a boat limit of 15 hāpuku/bass per vessel
 - iv) introducing an accumulation limit of one daily bag limit of hāpuku/bass per person in the CFMA.

Statutory Considerations

102 In forming the options for addressing reported localised depletion of hāpuku/bass in popular non-commercial fishing areas in the CFMA, the following statutory considerations under the Fisheries Act 1996 have been taken into account.

- a) **Section 5(a):** A wide range of international obligations relate to fishing. MFish is unaware of any international obligation that would be affected by the management options proposed.
- b) **Section 5(b):** MFish considers the options are consistent with the provisions of the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992. None of the options considered negatively impact availability of, or access to, hāpuku/bass for customary purposes, and the impacts of each management option on commercial stakeholders (including Maori commercial stakeholders) are fully explored.
- c) **Section 8:** None of the management options proposed is contrary to the purpose of the Act, which is to provide for utilisation of fisheries resources whilst ensuring sustainability. Options 2, 3 and 4 potentially improve utilisation of the HPB 2 and 8 fish stocks by ensuring the reported value achieved by non-commercial stakeholders of catching hāpuku/bass is 'spread' over more fishers in the short to medium-term.
- d) **Section 9(a) and (b):** Interactions between species have been identified (eg, predator-prey relationships). It is unlikely any of the management options proposed would materially affect these interactions.
- e) **Section 9(c):** None of the management options proposed would affect impacts on habitats of particular significance for fisheries management. Recreational fishing methods used to target hāpuku/bass are sensitive to the environment, and will not change as a result of the options proposed.
- f) **Section 10:** Best available information is incorporated into this assessment of management options, and uncertainties in information are identified and discussed. The uncertainties in information make it difficult to accurately quantify costs and benefits to sustainable utilisation; these uncertainties are clearly identified and discussed. At this time, MFish considers further information on the nature of the reported increase in recreational fishing effort is required before Options 3 and 4 can be considered. MFish has included these options for discussion with non-commercial stakeholders to provide an opportunity for additional information to be provided if available.
- g) **Section 11(1)(a):** The effect of fishing activity on hāpuku/bass were considered and discussed. Few permits for customary take have been issued for hāpuku/bass, and commercial catch has remained relatively constant in the last five years. Anecdotal evidence suggests an increase in recreational fishing effort and an increase in small, large and charter

vessel trips targeting hāpuku/bass. The potential environmental impacts of hāpuku/bass fishing were considered and discussed.

- h) **Section 11(1)(b):** The maximum daily bag limit for hāpuku/bass in the Central Fisheries Management Area
- i) **Section 11(1)(c):** Little is known about the natural variability of hāpuku/bass. Research shows hāpuku/bass do have an annual spawning season, but this varies considerably between the North and South Islands. There is little information on the location spawning grounds or nursery areas for hāpuku/bass. The management options proposed are not likely to make the HPB 2 and 8 fishstocks more or less vulnerable in terms of natural variability.
- j) **Section 11(2)(a) and (b):** There are no provisions applicable to the coastal marine area known to exist in any policy statement or plan under the Resource Management Act 1991, or any management strategy or plan under the Conservation Act 1987 that are relevant to the management options proposed.
- k) **Section 11(2)(c):** The options are discussed in a manner consistent with the Hauraki Gulf Marine Park Act 2000.
- l) **Section 11(2A) (a and c):** MFish is not aware of any provisions applicable to the coastal marine area known to exist in any policy statement or plan under the Resource Management Act 1991, or any management strategy or plan under the Conservation Act 1987, which are relevant to reducing the maximum daily bag limit for hāpuku/bass in FMA 2 and 8.
- m) **Section 13:** The TAC for hāpuku/bass would not be affected by the options in the paper.
- n) **Section 21(1)(a and b) and (4)(I and ii) and (5) statement:** As the TACC, customary and recreational allowances are not altered, there are no implications for section 21 from these proposals.
- o) **Section 297(1)(ii)** prescribes the power of the Minister to regulate, authorise or prohibit the taking or possession of fish, aquatic life or seaweed from any area.
- p) **Regulation 3A(4) of the Fisheries (Central Area Amateur Fishing) Regulations 1986** sets out the maximum daily number of Hapuka/Bass that may be taken or possessed by an individual on any one day.

LOCAL DEPLETION OF HAPUKU/ BASS IN THE CENTRAL FISHERIES MANAGEMENT AREA – SUMMARY OF SUBMISSIONS

1 MFish received 23 submissions from different fishery stakeholders throughout the CFMA. The fishery stakeholders that made submissions are listed below:

- Area 2 Inshore Finfish Management Company (A2IFMC);
- Bay Fishing Charters (BFC);
- Joe McClutchie (McClutchie);
- John Fargher (Fargher);
- Mahia Boating Club (MBC);
- Mana Cruising Club (MCC);
- Neville Nitschke (Nitschke);
- New Zealand Big Game Fishing Council (NZBGFC);
- New Zealand Big Game Fishing Council Zone Six (Zone 6);
- Ngati Toa and Ngati Koata Iwi (NTNK);
- Nine S Schotanus (Schotanus);
- North Island South East Recreational Forum (NISE);
- Pete Lamb Fishing (PLF);
- Pukemanu Boating and Fishing Club (PBFC);
- Russ Hawkins (Hawkins);
- Sanford Limited (Sanford);
- Scott McIntosh (McIntosh);
- New Zealand Seafood Industry Council (SeaFIC);

- Skippers and crews of Tillerman, Leakhead, G and T, and Leagasea (TLGTL);
- Wellington Recreational Marine Fishers Association (WRFA);
- West Coast Charters (WCC);
- Whakatane Charter Fishing Fleet (WCFF);
- Te Kupenga Whiturauroa a Maui Forum (Te Kupenga).

Option 1 –Status quo (no action)

- 2 NZBGFC and Zone 6 support the retention of existing Amateur regulations in the CFMA.
- 3 MCC, NISE and McClutchie oppose the retention of existing Amateur regulations in the CFMA.

Option 2 –Introduce a daily bag limit of three hāpuku/bass per person

- 4 Fargher, Hawkins, MBC, A2IFMC and WCFF all support the introduction of a daily bag limit of three hāpuku/bass. NTNK, McClutchie and Te Kupenga also support the introduction of a daily bag limit, but restricted to two hāpuku/bass.
- 5 NZBGFC and Zone 6 oppose the introduction of a daily bag limit of three hāpuku/bass.

Option 3 – Introduce a boat limit of 15 hāpuku/bass per vessel

- 6 NTNK, WRFA and NISE support the introduction of a boat limit of 15 hāpuku/bass per vessel. McClutchie also supports the introduction of a boat limit, but restricted to 12 hāpuku/bass per vessel.

Option 4 – Introduce an accumulation limit of one daily bag limit of hāpuku/ bass per person

- 7 WCFF supports the introduction of an accumulation limit, but for the limit to apply to two daily bags of hāpuku/bass per person.
- 8 NTNK, MCC and PLF oppose the introduction of an accumulation limit of one daily bags of hāpuku/bass per person.

Combination of options listed above

- 9 TLGTL supports the introduction of Option 2 (daily bag limit of three hāpuku/bass), Option 3 (daily boat limit, but amended to a range between 15-18 hāpuku/bass per vessel) and Option 4 (accumulation limit of one daily bag of hāpuku/bass per person) as a combined option.

- 10 BFC, WCC, MCC, McIntosh, Nitschke and PLF support Option 2 (daily bag limit of three hāpuku/bass) and Option 3 (daily boat limit of 15 hāpuku/bass per person) as a combined option.

Other Submissions

- 11 Sanford and SeaFIC refrain from supporting or opposing any of the options because the measures relate to the management of the recreational sector, and insufficient information is provided in the IPP.
- 12 Schotanus and PBFC did not support or oppose any of the options in the IPP.