

KAHAWAI (KAH 1 – 10) - EXECUTIVE SUMMARY

Initial Proposal

- 1 You agreed earlier this year to review the total allowable catches (TACs) for kahawai for the 2005–06 fishing year. You indicated your intention was to ensure that there is some certainty that stocks will be rebuilt for the benefits of all sectors of the fishery. You also raised consideration of adopting an objective for managing kahawai above a level of biomass that can produce the maximum sustainable yield (B_{MSY}).
- 2 In reviewing sustainability and other controls for kahawai, the IPP consulted on the following proposals regarding all kahawai stocks:
 - a) The target stock level size (at or above B_{MSY});
 - b) The level of the TACs and allocations to the fishing sectors;
 - c) Other associated management measures.
- 3 Two options were proposed for setting a TAC, allowances and TACC for each kahawai stock as shown in Table 1 below.

Table 1: Options for setting TACs, allowances and TACCs for kahawai.

Stock	TAC (t)	Customary allowance (t)	Recreational allowance (t)	TACC (t)	Fishing-related incidental mortality
KAH 1					
Option 1 (Status quo)	3 685	550	1 865	1 195	75
Option 2	3 315	495	1 680	1 075	65
KAH 2					
Option 1 (Status quo)	1 705	205	680	785	35
Option 2	1 530	185	610	705	30
KAH 3					
Option 1 (Status quo)	1 035	125	435	455	20
Option 2	935	115	390	410	20
KAH 4					
Option 1 (Status quo)	16	1	5	10	0
Option 2	14	1	4	9	0
KAH 8					
Option 1 (Status quo)	1 155	125	425	580	25
Option 2	1 040	115	385	520	20
KAH 10					
Option 1 (Status quo)	16	1	5	10	0
Option 2	14	1	4	9	0

Key Issues

- 4 The key issues submitters commented on were:
- Rationale for management action;
 - Current stock status;
 - Evaluation of TAC options; and
 - Other issues, including level at which the TACC and allowances should be set.

Rationale for Management Action

- 5 The key benefits of managing kahawai above B_{MSY} include:
- The increased availability and catchability of fish; and,
 - The increased size of fish.
- 6 The key costs of managing kahawai above B_{MSY} include:
- Yields are not maximised; and
 - The costs of moving the stock to the target level if below this level.
- 7 Industry strongly opposed this management objective and emphasised that they do not support this idea. Further, Industry suggests that the lawfulness of this objective is questionable and in the absence of clear and obvious benefits to all fishing sectors it should not be adopted.
- 8 Recreational submissions support this objective and highlight the benefits for recreational fishing.
- 9 The Ministry of Fisheries (MFish) considers that you do have the legislative discretion to manage a stock above B_{MSY} . In considering whether to do so you should take into account the costs and benefits of an above B_{MSY} management objective as noted above. Such a management objective is likely to provide greater benefits to one stakeholder group (recreational fishers) over another because, although overall yields from the fishery are reduced, the abundance and the size range of fish are likely to be increased. You need to consider whether it is reasonable in this case to provide for this greater benefit. In considering this issue MFish notes that the importance of the fishery to various stakeholder groups, value, and socio-economic factors are all relevant issues.
- 10 MFish discusses both views in this advice and concludes that, based on current information, it is not possible to determine the specific benefits of managing the kahawai stock above B_{MSY} . There is insufficient information available to determine where the current biomass of the stock is relative to any target level (although the plenary notes that the estimated 1996 biomass was still above B_{MSY}). In the absence of information it is not possible to determine a TAC that will move the stock toward any specified target level in a way and a rate you might consider reasonable. At best the setting of a management objective of above B_{MSY} would be factor you could take into account when weighting uncertainty in the status of the current stock and trends

in biomass. The higher the biomass target level, the more cautious you may need to be when setting TACs in the absence of an estimate of sustainable yield.

Current Stock Status

- 11 A stock assessment of kahawai will be available in 2007. Until then there is considerable uncertainty in the estimates of yield and stock status for kahawai. In making the 2004 decisions, you took this uncertainty into account by reducing current commercial and recreational utilisation by 15%. New information has not added substantially to our understanding of the status of kahawai stocks.
- 12 The recreational perception of depleted kahawai stocks has not abated during the course of the current year. Reference is made in submissions of the need for rebuilding kahawai stocks depleted by purse seining to restore access to a healthy fish stock and to give non-commercial fishers a reasonable chance of catching a reasonable daily bag of acceptable size kahawai. The commercial view is that there is a lack of information to support any suggestion of a decline in stock size, and those views remain unchanged from 2004.
- 13 Much of the debate about the stock status and the need for additional management measures relates to widely differing perceptions by stakeholders regarding fishery information.

Available information

- 14 Sources of information about kahawai include: some recent scientific information, valuation studies and a dated stock assessment (1997); biological characteristics; information about commercial and non-commercial catches; and anecdotal information.
- 15 In determining whether to take management action you should consider the weight placed on this information. Section 10 of the Fisheries Act requires that decisions should be made on the best available information. You need to consider the uncertainty in information when giving weight to various information sources as part of your decision making process. MFish considers that scientific information on stock status should be given more weight than anecdotal information, which is inherently less certain. The more uncertain the information about a sustainability concern, the greater the weight that should be placed on information about the impacts of any reduction in catch limits.
- 16 There is no new stock assessment information available to assist in determining sustainability of current TACs. The research programme for kahawai is intended to provide information for a stock assessment of kahawai in 2007.
- 17 However, in response to your request, some research from the current research program was fast tracked in support of this review of catch limits and allowances for kahawai in 2005. As a result, the following findings are now available to assist the review:
 - a) The size and age of the kahawai sampled from the recreational fishery has remained relatively constant;

- b) Hauraki Gulf surveys of recreational catch supports the assertion that recreational harvest in this area over the summer of 2003-04 was lower than expected if the estimates from the earlier diary harvest surveys are considered accurate;
 - c) Since 1991, recreational catch rates have fluctuated in the three regions sampled (Northland, Bay of Plenty and Hauraki Gulf), and there is some evidence of a declining catch per trip in the Hauraki Gulf in recent years;
 - d) A preliminary relative index of abundance for part of KAH 1 between 1977-78 and 2003-04 shows no clear trend in biomass.
- 18 For the most part this new information consists of preliminary findings or is limited in scope to certain geographic areas of the fishery only.

Evaluation of TAC Options

- 19 The following matters were taken into account when evaluating TAC options:
- Uncertainty in information on status of kahawai stocks;
 - Anecdotal information on declining abundance from some non-commercial fishers;
 - A quantitative valuation suggesting that recreational fishers more greatly value the fishery than industry;
 - Desire to provide a greater level of certainty that the stock biomass will at least maintain its current level and preferably provide for an increase in biomass;
 - Socio-economic information including the potential impacts and benefits to all sectors;
 - The individual circumstances relating to sustainable utilisation of QMAs; and
 - Availability of new information to support a stock assessment of kahawai in 2007.
- 20 Two options were proposed in the IPP and evaluated in this FAP.
- The first option is to maintain the status quo TACs, allowances, and total allowable commercial catches (TACCs) pending new scientific information to support a change. This option assumes that current catch limits will at least maintain and preferably provide for an increase in the kahawai biomass.
 - The second option is to reduce TACs further to take additional account of the uncertain information surrounding the status of kahawai stocks and provide greater certainty in sustainability measures set for kahawai stocks.
- 21 It was recognised that a key issue in considering the different TAC options is the benefits associated with each option, relative to the socio-economic impacts if catch limits were reduced.

- 22 All industry submissions support Option 1 (no change) submitting that there is no evidence of sustainability concern for kahawai stocks and that any review of TACs must await a revised assessment planned for 2007.
- 23 Recreational submissions support reducing TACs submitting the need for rebuilding kahawai stocks depleted by purse seining to restore access to a healthy fish stock and to give non-commercial fishers a chance of catching a reasonable daily bag of acceptable size kahawai. Some support Option 2; while others reject both options and request that you consider an additional more conservative option.
- 24 MFish notes that the TAC option based on a reduction of 10% in current TACs allowances and TACCs will have socio-economic impacts on commercial fishers. For example, Sanford emphasise the importance of kahawai to its overall purse seine operations. These impacts should be considered along with weighting of the uncertain information on stock status when making your decision. You should take into account the fact that, while a new stock assessment of kahawai is planned, results will not be available until 2007.
- 25 The information available in support of decisions on TACs is uncertain. There is a stock assessment for kahawai but it is dated (1997) and inputs into the assessment are increasingly regarded as being unreliable. The stock assessment indicated that by 1996 the biomass of kahawai had declined to around 50% of its original level. Information on recent trends in stock abundance is conflicting. Industry contends there has been no change since 2004. This needs to be considered in contrast to the strong recreational (and some customary) submissions suggesting that the stocks have declined below acceptable levels.

Allowances

- 26 If you decide to reduce TACs for kahawai stocks you will need to decide on allowances and TACCs for the relevant stocks.
- 27 In determining allocations for kahawai you have a choice between a proportional and non-proportional approach. A proportional approach would result in all allowances being adjusted proportionally so that each sector group shares in the pain of rebuilding the fishery. MFish favours the adoption of a proportional policy as a baseline position where the TAC is being adjusted. As a default approach it reflects the case where there is no particular reason to reallocate between sectors. However, such an approach does not fetter your discretion to recognise the competing demands on a resource by changing the relative proportions of the TAC allocated to each sector. The generic issues of the Final Advice paper discusses various allocation options in more detail.
- 28 There are competing demands for kahawai. You are not required to fully satisfy the demands of any sector group. In determining allocations you must consider competing demands for the resource and the socio-economic impacts of allocations proposed. The recreational sector considers that the historic effects of commercial fishing are responsible for what they perceive to be the poor state of kahawai stocks today. MFish considers that information does not support that view. Consequently, because kahawai have considerable value for all sectors, MFish considers that the

proportional mechanism for reducing allowances and TACCs be preferred for kahawai, in the event that you decide to adopt option 2.

- 29 On balance, MFish considers that the TACs, allowances and TACCs depicted in Table 1 appropriately reflect sustainability concerns and competing demands, current use in the fishery, and the socio-economic effects of current versus reduced use. To a large extent the options for determining allowances and TACCs will be driven by the TAC option you consider most reasonable. MFish support a proportional reduction to recreational allowances and TACCs for the kahawai fishery if the lower TAC option is chosen.

Other Issues

- 30 MFish notes a point of difference relating to individual circumstances in KAH 8. While the KAH 8 fishery is of considerable social, and cultural importance to non-commercial fishers, their view is that this fish stock is capable of additional utilisation. Further recreational fishers have:
- Expressed satisfaction with their current catch rates;
 - Do not believe they have been disadvantaged by any low historical biomass of the fishery in this area; and
 - Recognised the need for providing for commercial bycatch in KAH 8.
- 31 MFish has evaluated potential economic impacts of TAC options in KAH 8 and concludes there may be a greater risk of economic impacts of a TAC reduction in this fishstock than for other fishstocks. This is because catch limits in KAH 8 were set largely on the basis of existing bycatch levels.
- 32 Accordingly, should you decide that the TACs for one or more stocks be reduced you may chose not to reduce the TAC in KAH 8 on the basis of both industry and recreational submissions in support and the potential economic impact.
- 33 There is no proposal for applying additional management controls to further constrain non-commercial catch. You have already agreed with recreational fishers that current catches are within the current allowance and therefore do not require additional management controls. There is no new information to suggest that current controls on recreational catch would allow for catch in excess of either current allowances, or any proposed reduced allowances, at present levels of abundance. Monitoring recreational catch of kahawai to ensure that it is within allowances set for the fishery, so ensuring the integrity of TACs, is a priority.
- 34 Should you decide that the recreational allowance for one or more stocks be reduced and that additional management controls are required, separate advice can be provided as to the additional controls that may be appropriate.