THE INCLUSION OF KINGFISH ON THE SIXTH SCHEDULE OF THE FISHERIES ACT 1996

Executive Summary

- 1 Kingfish (KIN) is a highly valued shared fishery. Kingfish were introduced into the Quota Management System (QMS) on 1 October 2003 and, at that time, the total allowable catches (TACs) were set in order to improve stock status by reducing current use (estimated) by 15%. At the same time, deemed values were set (\$8.90, annual) with the objective of ensuring the integrity of total allowable commercial catches (TACcs). Kingfish deemed values were subsequently reduced for KIN 2 (\$4.92, annual) to reflect the lower port price for this stock (new port price information became available in 2004).
- 2 In the first year of QMS management for kingfish, the TACC for KIN 8 (and by inference the TAC) was significantly exceeded and year-to-date catch (as at March 2005) is close to the TACC.

Table 1	TAC (tonnes), TACC (tonnes), catch (tonnes), catch YTD (tonnes), and deemed value liability
	(\$) for 2003-04

Kingfish stock	TAC	TACC	Catch 2003-04	Catch YTD	Deemed Value Liability 2003-04 (\$)
KIN 1	673	91	48.5		2 638
KIN 2	170	63	50.2	29	968
KIN 3	3	1			
KIN 4	3	1			
KIN 7	21	7	3	1.3	819
KIN 8	83	36	57.1	34.5	307 345
KIN 10	2	1			

- 3 Industry are concerned at the high cost of over catch, which is said to be threatening the viability of the high-volume, low-value Jack mackerel (JMA 7) fishery and the snapper (SNA 8) and trevally (TRE 7) fisheries. The Ministry of Fisheries (MFish) is concerned that the integrity of the KIN 8 TACC is not being ensured.
- 4 The use of the Sixth Schedule as a mechanism for assisting fishers to manage bycatch to available annual catch entitlement (ACE) for kingfish was contemplated on the introduction of this species into the QMS. MFish assesses that kingfish is a robust species that is often brought on board the fishing vessel alive and can survive return to the water in most instances after capture by most methods other than set netting. The Minister of Fisheries anticipated further discussion of this option after the introduction of kingfish into the QMS.
- 5 The purpose of this proposal is to reconsider the listing of kingfish on the Sixth Schedule of the Fisheries Act 1996 to allow the release of kingfish taken commercially, subject to conditions. Only kingfish with a high likelihood of survival could be released under this provision (reducing the mortality on the stock as a whole) and released fish would therefore not count against ACE. The likely survival of kinfish when released after being taken by commercial fishing methods will be a key criterion for this proposal to proceed.

Proposal

- 6 MFish proposes that kingfish (all stocks) be listed as a species on the Sixth Schedule of the Fisheries Act 1996 to allow kingfish to be returned to the sea, subject to the condition that fish are:
 - a) Not taken by the method of set netting;
 - b) Likely to survive;
 - c) Returned to the same waters from which they are taken;
 - d) Returned as soon as practical; and
 - e) Returned catch is recorded and reported on catch and effort forms using an appropriate code.

Background

- 7 The catch limits and associated sustainability measures for kingfish were set prior to the introduction of this species into the QMS on 1 October 2003. At that time MFish concluded the minimum legal size (MLS) of 65 cm should be retained for kingfish taken by commercial fishers.
- 8 MFish considered the role an increase to the commercial MLS from 65 cm to 75 cm could play in mitigating bycatch and providing a disincentive to the development of target fisheries for kingfish. This is because MFish accepted there could be socio-economic effects from adopting options of low TACCs in the absence of other management measures to assist fishers in managing their bycatch. An increase in MLS would assist in this regard by reducing the proportion of bycatch that could be lawfully landed. However, an increase in size limit would have increased the proportion of the kingfish catch (below the MLS) that had to be released whether dead or alive. An increase in fishing-related mortality could have resulted from this measure.
- 9 MFish's preferred option at the time of QMS introduction was to give consideration over time to the use of the Sixth Schedule for fishing methods (other than set netting) as a means of mitigating bycatch. Set net caught kingfish would not be considered for this provision because they are not likely to be taken alive.
- 10 MFish noted the Sixth Schedule can be used as a management tool at any level of TACC. Importantly, MFish considers that kingfish is a robust species and, if handled correctly, there is a high likelihood of its survival on release. This assessment is based on limited observations from 'catch at sea' sampling but extensive tag and release of kingfish.
- 11 In submissions on proposals for catch limits and other controls for kingfish, the New Zealand Seafood Industry Council and Te Ohu Kai Moana were silent on options for managing commercial catch. They suggested that further discussion should occur once decisions on catch limits were known.
- 12 Recreational fishers supported using the Sixth Schedule, so that fish that are likely to survive could be returned to the sea as soon as is practicable after being taken. This support was given with respect to the Sixth Schedule provisions applying to kingfish taken that are above the MLS.

- 13 More generally, industry did not support using this provision to manage their kingfish bycatch. MFish assessed that ensuring compliance with the Sixth Schedule provisions to prevent the return of dead kingfish was potentially a significant problem, especially where a high deemed value relative to port price was proposed (as was the case with kingfish). Therefore, in the absence of majority industry support for the measure, and the associated commitment to manage the more complex compliance issues that result, MFish did not propose inclusion of kingfish on the Sixth Schedule at the time the species was introduced to the QMS.
- 14 However, MFish noted that this remained an option available to assist in the management of kingfish catch to the available ACE. This view was reiterated by the Minister of Fisheries when outlining his catch limit decisions as follows:

"With regard to the management of commercial catches the use of the Sixth Schedule of the Fisheries Act 1996 to allow the return of live kingfish to the water remains open for further consultation. This option (coupled with the removal of the MLS) could reduce substantially the allowance for other sources of mortality attributed to commercial fishing which is currently wasted fish. It is also a potential tool to manage the bycatch of kingfish either with or without a MLS to assist the commercial fishery to remain within the TACCs that I have set. However, I recognise that there are compliance concerns that would need to be resolved before this could occur. I urge commercial fishers to work with MFish to develop options to address these compliance concerns and to improve the management of commercial landings".

- 15 Following a year of managing kingfish within the QMS, it is clear the management problems anticipated exist in the KIN 8 stock. Over catch of kingfish is at an unacceptably high level in this stock, and this is creating a sustainability risk for this stock and high costs for industry. While these issues are only apparent in one kingfish stock, MFish sees no reasons that the option of Sixth Schedule listing, if accepted, should not apply to all stocks but seeks feedback on the alternative. That is, restricting the application of the Sixth Schedule provisions to the area of the KIN 8 fishery only.
- 16 Maintaining the *status quo* is not considered to be an option, as it will result in continued over catch of the KIN 8 TACC, the associated cost to the industry, and an ongoing risk to the sustainability of the stock.
- 17 The option of reducing deemed values for KIN 8 will result in reduced costs to industry per tonne of catch in excess of ACE. Realistically, no reduction in bycatch can be anticipated if this measure is implemented. A reduction in the deemed value could well create an incentive for an increase in landings of kingfish bycatch, and it is therefore not proposed as an option. The alternative of an increase in deemed values carries the risk of increased dumping and, therefore, the potential that further steps to ensure compliance would need to be taken. As a result, such an increase is not considered a viable option at this stage.

Statement of the Problem and Need for Action

18 Kingfish is subject to the QMS and all kingfish taken by commercial fishing must be landed unless they are below the 65 cm minimum legal size limit. The deemed value for kingfish has been set at twice the port price and differential deemed values apply. The level of kingfish bycatch may be threatening the commercial viability of some associated fisheries (JMA 7 and SNA 8) because of the liability for deemed value payments. More particularly, in some stocks (KIN 8) the sustainability of kingfish (a highly valued shared fishery) is at risk because fishers continue to over catch this species.

Preliminary Consultation

19 Preliminary consultation indicates the initial opposition of some industry sectors to the listing of kingfish on the Sixth Schedule may have moderated.

Options for Management Response

Non-regulatory

20 There are no non-regulatory mechanisms available to address this problem.

Regulatory

Inclusion of kingfish on the Sixth Schedule

- 21 Inclusion of kingfish on the Sixth Schedule (subject to the conditions in paragraph 6 above) will provide a mechanism to allow management of bycatch, and assist in ensuring that commercial fishers landing kingfish do not exceed the TACCs. The Sixth Schedule provides a mechanism to better match catch to available ACE, but more importantly, adherence to the conditions associated with release will result in a reduction in fishing mortality for kingfish. This mechanism is applied in a number of fisheries for this reason.
- 22 The initial industry opposition to the use of this mechanism is likely to have moderated because of the current over catch difficulties in the KIN 8 stock. The level of support for this proposal will be important because a commitment from the industry will be required to ensure that the conditions of Sixth Schedule release are adhered to.

Statement of the Net Benefits of the Proposal

Benefits

23 There will be a benefit from this proposal if, as anticipated, the use of the Sixth Schedule allows for better management of kingfish bycatch and helps match landings to ACE. Benefits are reduced costs to industry (unwanted deemed value payments) and reduced fishing-related mortality for kingfish.

Costs

- 24 There will be a cost to fishers who wish to utilise Sixth Schedule provisions. For example, special handling procedures will be required to provide for the immediate release of kingfish if they are to be returned. Recording and reporting procedures will also be required for any kingfish catch that is returned alive.
- There will be a biological cost if this mechanism merely provides a match between landings and ACE, and fishing-related mortality of kingfish remains at the same levels.

Commercial fishers will also need to consider other mechanisms to minimise the capture of kingfish as bycatch (eg, area and time of fishing).

Administrative Implications

- Administrative implications include the initial administrative process of listing these stocks on the Sixth Schedule and the ongoing requirement to record and report kingfish returned under the provisions of the Sixth Schedule (but not count these against quota).
- 27 Section 72 (7) of the Fisheries Act 1996 provides for the Governor-General, by Order in Council made on the recommendation of the Minister of Fisheries, to add the name of any stock and any new provisions to the Sixth Schedule. An Order in Council will be required to give effect to this proposal.
- 28 Educational material will be required to inform fishers of the availability of this option and to inform them of the requirements associated with its use.

Compliance Implications

- 29 MFish assumes that industry systems are in place to ensure that undersized kingfish are returned to the sea as soon as possible in order to maximise the likelihood of their survival. Such provisions would also apply (or would require development) in order to satisfy the provisions of return under the Sixth Schedule.
- 30 The introduction of this measure, and adherence to the Sixth Schedule conditions, would rely to a large degree on industry support because 'on the water' enforcement of these provisions would be difficult. The requirement to report returned catch under the provisions of the Sixth Schedule (but not count this catch against ACE) will also provide information to assess whether incentives to minimise kingfish bycatch by means of area and/or seasonal changes in fishing patterns remain.
- 31 There is a risk that fishers may use the Sixth Schedule provision to discard kingfish whether or not it is likely to survive in order to avoid deemed value penalties. MFish notes this risk also exists under current management arrangements. However, in order to mitigate any increased risk of discarding, MFish would anticipate that a code of conduct for assessing fish for release and to guide their handling would be a necessary pre-requisite for the current proposal to proceed.

Conclusion

32 MFish considers the provisions of the Sixth Schedule have the potential to significantly assist the management of kingfish bycatch when taken by line, trawl or purse seine. The support of industry will be required for its successful application in establishing and maintaining procedures to ensure that kingfish that are returned have the maximum likelihood of survival. In addition, other mechanisms to avoid kingfish bycatch (such as avoiding areas or times of high kingfish bycatch) will also need to be applied. At this stage, the alternative to including kingfish on the Sixth Schedule is an increase in deemed values (and a subsequent increase in compliance measures).

Preliminary Recommendation

- 33 MFish recommends that:
 - a) Kingfish is listed as a species on the Sixth Schedule of the Fisheries Act 1996 to allow kingfish to be released to the sea, subject to the condition that fish are
 - i) not taken by the method of set netting;
 - ii) likely to survive;
 - iii) returned to the same waters from which they are taken;
 - iv) returned as soon as practical; and
 - v) returned catch is recorded and reported on catch and effort forms using an appropriate code.
 - b) A code of conduct is developed to allow ready identification of kingfish likely to survive release and to guide their handling.