FLATFISH (FLA 1) – EXECUTIVE SUMMARY

The current total allowable commercial catch (TACC) is 1 187 tonnes. A total allowable catch (TAC) and other allowances have not yet been set for FLA 1. The Ministry of Fisheries (MFish) proposed the following management measures for the FLA 1 fishery for the 2005–06 fishing year:

Table 1: Proposed TAC (tonnes), TACC (tonnes) and allowances for FLA 1 for the 2005-06 fishing year

| | Proposed TAC (tonnes) | Customary allowance (tonnes) | Recreational allowance (tonnes) | Other sources of fishing-related mortality (tonnes) | Proposed TACC (tonnes) |
|---|-----------------------------|------------------------------------|---------------------------------------|---|------------------------------|
| Option 1 (TAC based on recent catch) | 1 382 | 270 | 270 | 27 | 815 |
| Option 2 (TAC based on recent catch) | 1 307 | 270 | 270 | 27 | 740 |

Key issues

- 2 The key issues submitters commented on were:
 - Problem definition;
 - Available sources of information to support the problem definition;
 - Tools to manage the problem; and
 - Allocation of the TAC.

Problem definition

- The key issues that MFish considered when determining the problem definition for FLA 1 are that:
 - The existing management of FLA 1 relies on a TACC well above current catches, to provide flexibility for commercial fishers to take flatfish in larger numbers in years of high abundance. This way of managing FLA 1 has the benefit that commercial fishers have flexibility to fish FLA in years of high abundance without the Crown needing to adjust the TACC.
 - There is a relatively low sustainability risk associated with the current TACC at a stock-wide level, because the main flounder species in FLA 1 have high productivity. Given favourable environmental conditions, flatfish biomass is likely to rebound even if fished to relatively low levels.
 - A minimum legal size allows most flatfish to spawn once before they can be legally harvested (although it may provide less protection for female yellow-belly flounder).

- However, in years when recruitment is lower, the high TACC may allow localised depletion of flatfish in areas of high effort. It may also create conflict with other users of the resource, both customary and recreational.
- The high TACC may not ensure sustainability of some flatfish species within the FLA grouping that are less productive or not so highly variable. Recent information indicates that of the two most common species, sand flounder may be substantially more variable than yellow-belly flounder. There is also evidence that flatfish recruitment and abundance have been declining (although commercial fishing is unlikely to have caused the decline).
- Further, this approach may not fit as well within the legislative framework of the Fisheries Act 1996, which provides several alternative ways of providing for the variability of fishstocks.
- 4 After analysis of key information, MFish considered a TAC needed to be set for FLA 1 under the Fisheries Act 1996, taking into account the risks and benefits of different management approaches.
- MFish considers FLA 1 should be managed under s 13 of the Fisheries Act. Under s 13, you must set a TAC that maintains or moves a stock towards or above the level that can produce the maximum sustainable yield (MSY). There is no provision for a TAC set under s 13 of the Act to be set at an elevated level to provide for additional utilisation in years that abundance is high. As such, you would need to be confident that any TAC you set for flatfish would be sustainable if it were consistently caught from year to year.
- The 2005 Plenary report noted that: "...a constant catch at the level of the current TACCs is unlikely to be attainable or sustainable, nor would it be likely to allow the stock to move towards a size that will support the MSY. It is unknown if recent catches will allow the stock to move towards a size that will support the MSY."
- 7 MFish considers that problems associated with the management of FLA 1 can be identified as one or more of the following:
 - A stock-wide sustainability issue;
 - A localised depletion issue (which may have aspects of both sustainability and utilisation);
 - An inter-sector conflict.
- MFish notes the views of most commercial stakeholders that there are no sustainability concerns in FLA 1. This view is based in part on the productivity of flatfish species in FLA 1. As noted, flatfish in FLA 1 may be fished to a relatively low level but still have good recruitment in the following year. The level of fishing effort is probably less important than environmental factors in determining whether flatfish abundance will be high in any given year.
- MFish agrees there is little evidence of a stock-wide sustainability problem caused by fishing in FLA 1. However, MFish notes that catch per unit effort analysis does indicate declining abundance and recruitment in the main fisheries. The main fisheries are in the Manukau and Kaipara Harbours and the Firth of Thames.

Regardless of whether these declines are caused by fishing, MFish considers it a relevant factor when setting the TAC. The potential productivity of a fishstock is important to consider when setting a TAC.

- Concerns about localised depletion of flounder have been raised in many places within FLA 1, including both the east and west coasts. In particular, high levels of anecdotal concern are evident for fisheries in the Manukau and Kaipara Harbours. These areas account for most of the FLA 1 commercial take, along with the Firth of Thames. Other areas where MFish is aware of concerns about availability of flatfish include the Bay of Islands, Whangaroa Harbour, Whangarei Harbour, Firth of Thames, Raglan/Whaingaroa, and Kawhia and Aotea Harbours.
- MFish considers the concerns are probably more about utilisation that is, access to flatfish for non-commercial fishers than stock-wide sustainability problems caused by fishing. Nonetheless, declining abundance and recruitment would worsen these problems, so the problem is also related to overall sustainability. Where flatfish abundance may be declining, non-commercial fishers probably experience disproportionate declines in availability of fish.
- Finally, MFish considers there is evidence of inter-sector conflicts in various parts of FLA 1. The Kaipara study group has documented conflicts between commercial fishers and marae based around the harbour, and between commercial fishers. MFish considers conflict between sectors is also reflected in the attempts of Manukau Harbour marae to implement customary fishing provisions. Both non-commercial and some commercial submitters have highlighted that the high TACC creates conflict between sectors.

Available information

- Sources of information about stock status for FLA 1 include: scientific information; biological characteristics; information about commercial and non-commercial catches; and anecdotal information.
- Section 10 of the Fisheries Act 1996 requires that decisions should be made on the best available information. MFish considers the best available information is the scientific information about a stock. However, you should also take into account the other information sources, including anecdotal 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 should be given more weight than anecdotal information that is inherently less certain.
- MFish has provided more information in the final advice paper that will allow you to better place the anecdotal information in context. MFish has clarified for which areas concerns have been raised, and has assessed whether the concerns more likely relate to localised depletion, inter-sector conflict, or wider stock sustainability.
- MFish also notes that the available scientific information is largely consistent with the anecdotal information, in that both sources indicate declines in the availability of flatfish. Non-commercial stakeholders attribute declines in flatfish abundance to excessive commercial fishing. The Inshore Fisheries Assessment Working Group considers environmental factors were a more likely cause of decline.

- Nonetheless, commercial fishing may limit the availability of flatfish to non-commercial fishers.
- The anecdotal information stakeholders have presented provides you with further information to assess the impacts of the current management strategy. The submissions from recreational fishing organisations (option4, NZRFC, Muriwai Sport Fishing Club), environmental groups (Forest & Bird and ECO), iwi (Ngapuhi), and a community group (Kaipara study group) indicate they consider the existing high TACC leads to localised depletion of flounder, and tension between sectors. MFish confirms that it has reports of this from a range of sources. MFish considers these concerns are valid, because commercial fishers have greater fishing power, and therefore greater ability to catch available fish in less abundant years.

Management tools

- 18 MFish considers that two management options are available:
 - a) Set a TAC that would retain the existing TACC; or
 - b) Set a TAC that would incorporate a TACC lower than at present (two reduction options are discussed in the final advice paper).
- 19 The benefit of current management is that commercial fishers have flexibility to increase catches in years of higher flatfish abundance. Sustainability at the stock level would probably not be compromised, because the minimum legal size limit is likely to allow flatfish to spawn at least once before they are harvested.
- The risks are that in years when recruitment is low, the high TAC may allow localised depletion in areas of high effort. In years of lower abundance, commercial fishers may be able to preferentially harvest flatfish, disadvantaging non-commercial fishers. Further, this approach may not fit as well within the legislative framework of the Fisheries Act 1996.
- The Fisheries Act 1996 provides several ways that were not a part of the 1983 Act for providing for variable fishstocks. Two options an in-season increase to the TAC for stocks listed on the Second Schedule, and potentially a TAC set under s 14 of the Act can deal with interannual variability that might otherwise constrain utilisation.
- There is no provision for a TAC set under s 13 of the Act to be set at an elevated level to provide for additional utilisation in years that abundance is high. As such, you would need to be confident that any TAC you set for flatfish would be sustainable if it were consistently caught from year to year. The benefit of the lower TAC option is that it is more likely to be consistent with obligations under s 13, and with the intent of the Act in managing variable stocks.
- The risk associated with this approach is that commercial utilisation may be constrained in some years. There may be a delay in increasing the TAC in-season, which means available yield might be foregone. As Northern Inshore submits, there are currently uncertainties about how to assess fluctuations in abundance in order to use the Second Schedule provisions. The extent of this risk depends on which option is chosen for setting the TAC.

- MFish notes the purpose of setting the TAC at a level that reduces the TACC would be to manage the risks of current management, as outlined above. Setting a lower TAC is probably more likely to meet your obligations under s 13. The current TACC is set at the highest yield level, based on catches before 1986. In comparison, MSY is the greatest yield that can be sustainably attained over time. As such, it is more likely to be an average of high and low yields.
- An additional risk of the existing management is that it will contribute to tensions between commercial and non-commercial fishers. The alternative management approach may lessen that risk.
- MFish notes that ensuring the sustainability of separate species within multi-species stocks may be difficult. Information suggests some species have different productivity, variability, and spatial distribution. Investigation of area and species splits may help better ensure sustainability and provide for utilisation.
- An alternative to setting a lower TAC at this stage would be to first investigate further whether the flatfish species in FLA 1 could be better managed as individual species, possibly in smaller quota management areas (QMAs). This would potentially allow you to set higher TACs for more productive species, while ensuring less productive species also had an appropriate TAC. This process would likely take several years.
- MFish acknowledges that other tools would probably better manage some of the utilisation concerns stakeholders have raised.

Alternative tools

- Submitters proposed a range of management measures they considered would address some of the problems in FLA 1, whether alongside a TAC reduction, or instead of any reduction:
 - Subdividing the existing QMA. This proposal arises out of concern that distinctive west coast harbour fisheries are not being managed well as part of a much larger area. Splitting the QMA is thought to provide more flexibility for managing intensive effort in some areas such as the Kaipara Harbour.
 - Reviewing the length of time nets can be set (soak time). Long soak times are
 considered to contribute to higher bycatch rates and higher juvenile mortality.
 They are also considered to add to tensions between stakeholders, because nets
 set for a long time can limit spatial access in harbours.
 - Increasing the minimum mesh size for commercial fishers, to reduce catches of immature fish and increase the likelihood that flounder have spawned at least once before they are caught.
 - The use of non-regulatory tools such as codes of practice or voluntary agreements. Such tools may include differential bag limits, fishing restrictions, minimum legal size, or area closures.
 - Managing flatfish species individually, as eight separate quota management species rather than as a generic 'flatfish' grouping.

- MFish notes a TAC change would not resolve a number of the utilisation problems stakeholders raised in submissions. Some of the alternative management proposals such as voluntary agreements and potentially changes of QMA boundaries may have greater benefits than a change to the TAC for managing utilisation problems. However, MFish has not had an opportunity to fully analyse the costs and benefits of such measures.
- Managing the eight flatfish species separately rather under a single FLA code, possibly in separate east and west coast fisheries, may provide the opportunity to better address problems with sustainability and utilisation that have spatial differences, or are related to individual species within FLA. However, this is not an immediate solution to problems in the fishery.
- 32 Some of the measures submitters have proposed would require substantial additional analysis and consultation. The proposals are outside of the scope of this final advice paper, but could be investigated further.
- MFish notes that some stakeholders are already exploring voluntary codes of practice that cover issues such as soak times, mesh sizes, and best practice to avoid fish wastage. At this stage, MFish is not aware of discussions that cover the whole of FLA 1. MFish also notes the views of some stakeholders that the turnover of fishers makes it difficult to maintain voluntary agreements in this fishery.

Allocation

- In the initial position paper, MFish proposed to allocate the TAC on the basis of current catch for both commercial and non-commercial fishers. The status quo option introduced in the final advice paper would retain the existing TACC, and include allowances for non-commercial catch based on the best available information about what these sectors catch.
- MFish notes that despite concerns about the poor quality of information on levels of recreational fishing, most submissions supported the proposed allowances for customary and recreational catches.
- MFish acknowledges the concerns about setting non-commercial allowances for the first time, based on recreational catches from what some stakeholders consider to be a depleted fishery. MFish lacks sufficient information to propose an alternative allocation model. Further, both Options 1 and 2 already incorporate substantial cuts to the TACC. The impact of a further cut, in order to increase the non-commercial allowances, could be high.