

Kahawai Management and Accord Submission

John Holdsworth, Blue Water Marine Research, Tutukaka

Introduction

John Holdsworth is a fisheries scientist based in Tutukaka, Whangarei. John and Pete Saul are directors of Blue Water Marine Research, a company that focuses on New Zealand's pelagic species such as marlin, tuna and kingfish. They also provide technical fisheries management advice to many non-commercial fishing interest groups. John has been to most Hokianga Accord hui and enjoyed them all.

One of John's main tasks is to attend and report on the Ministry of Fisheries (MFish) science and Working Group meetings. He then interprets the technical information, advises possible responses and writes draft submissions for groups such as the NZ Sport Fishing Council (ex New Zealand Big Game Fishing Council).

John also wrote several affidavits and had a major input into the evidence put to the Courts during the four-year Kahawai Legal Challenge⁹, which both Ngapuhi and Ngati Whatua had supported.

Kahawai review

Currently MFish are developing proposals for the future management of kahawai nationally. After public consultation the Minister will decide how much to set aside as an allowance for non-commercial interests and what the total allowable catch (TAC) and total allowable commercial catch (TACC) ought to be.

The Minister will need to make a fresh decision for each of the six fish stocks that make up the kahawai fishery. (Refer Figure 4.)

Within the proposals there is likely to be several options for allowances, TAC and TACCs. The most controversy is likely to be around the allowances and catch limits for Kahawai 1 (KAH1), which extends from North Cape to East Cape.

As proven through history, allowing high commercial catches has a major effect on how many fish were available to non-commercial fishers.

Two days before the hui both John and Trish Rea attended a Working Group meeting with MFish officials, industry and NIWA scientists.

This meeting was to discuss which of the two most recent recreational harvest estimates for KAH1 ought to be included in advice to the Minister. After the Minister's approval the management proposals would be released for public consultation.

Both John and Trish challenged the lower harvest estimate (800 tonne) and how it would be used. (The upper bound was 1865t.) If the 800t was an under-estimate of actual harvest the Minister may decide on a recreational allowance that was too low.

Historically, MFish has used the recreational allowance as a benchmark when making an allowance for customary interests.

Considering the significance of the recreational harvest estimate and possible flow-on effect to the customary allowance, it was important that the Hokianga Accord and its various groups were given the opportunity to discuss the information and develop a consensus position.

A written statement from the Hokianga Accord was due to be given to the Working Group the following day.

⁹ <http://www.option4.co.nz/kahawai/index.htm>

Figure 4: Kahawai Quota Management Areas.

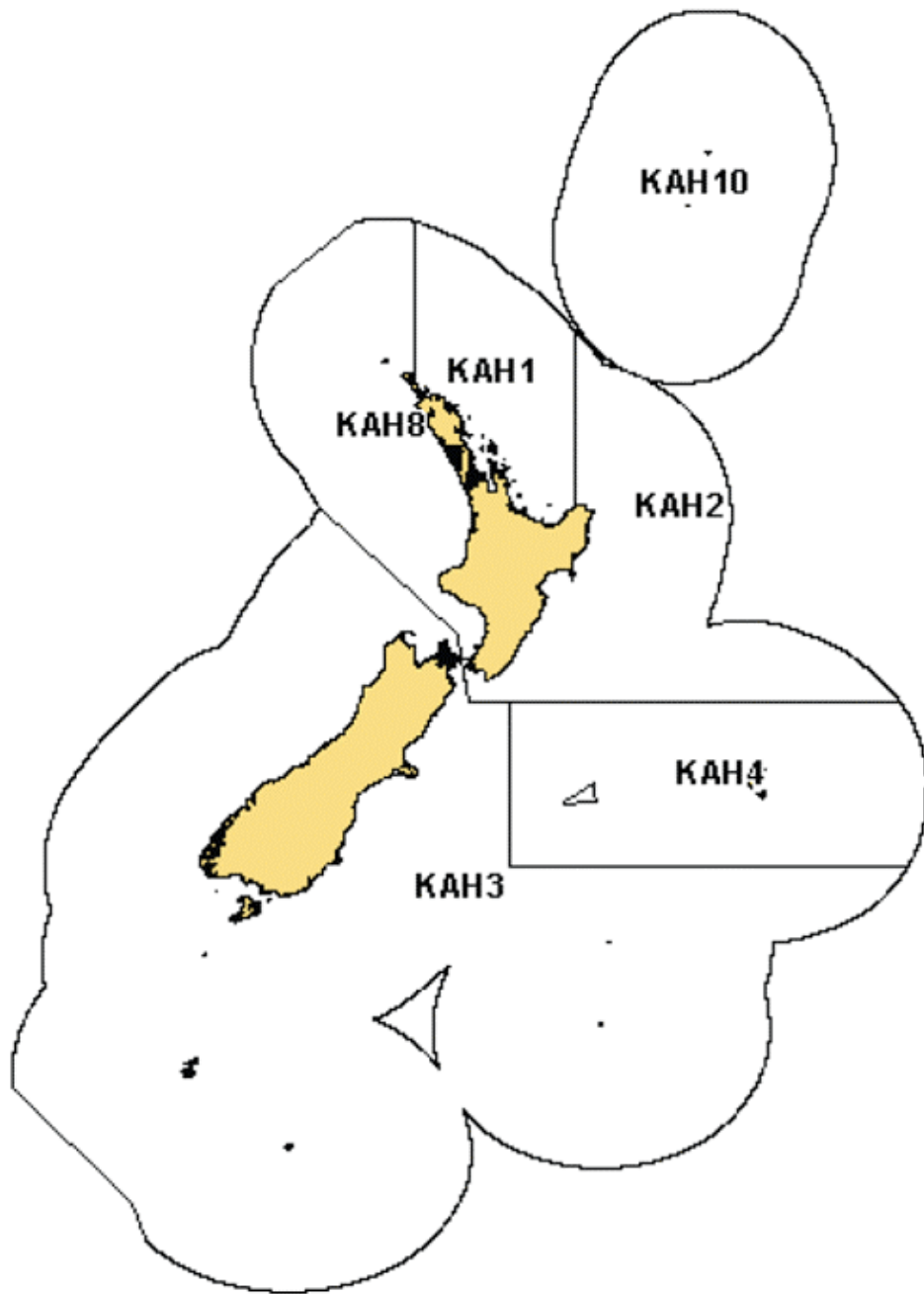


Table 1: Current KAH allowances, total allowable commercial catch (TACCs), and total allowable catch (TACs) for each quota management area, in tonnes:

Fishstock	Recreational allowance	Customary allowance	Other mortality	TACC	TAC
KAH 1	1680	495	65	1075	3315
KAH 2	610	185	30	705	1530
KAH 3	390	115	20	410	935
KAH 4	4	1	0	9	14
KAH 8	385	115	20	520	1040
KAH 10	4	1	0	9	15

Kahawai harvest estimates

The non-commercial allowances, both customary and recreational, can have a significant effect on what is available for the Minister to allocate to commercial interests. If low allowances are set aside for non-commercial interests then the Minister is likely to allocate more quota to commercial interests. Conversely, if the allowances are higher there is less of the total allowable catch (TAC) available to allocate to commercial interests.

There has been much debate about the recent recreational harvest estimate of 530 tonnes (t) in KAH1, based on an over-flight count of boats and ramp surveys. This 530t is approximately one quarter of what the earlier harvest surveys had estimated and around one third of the current recreational allowance of 1680t.

MFish proposed using one of two recreational harvest estimates, either 800t or 1865t. The Working Group was asked to decide which of these two estimates had the strongest scientific rationale to support its use, and importantly, what was defensible by the Minister if there was a challenge.

Historical kahawai catch

John described the historical commercial kahawai catch. Intensive purse seine fishing for kahawai started in the mid-1970s. Catch peaked in the late 1980s and tailed off as controls were imposed. Catch levels remained high after the introduction of the quota management system in 1986 because kahawai (and kingfish) were left out of the QMS.

As quota and catch limits were applied to snapper, tarakihi and other species fishers began targeting kahawai and kingfish because there was minimal cost involved.

After intense lobbying by recreational interests the Minister imposed purse seine catch controls in the early 1990s. These controls were suspended after kahawai entered the QMS in 2004.

Around half the total commercial catch of kahawai is taken from KAH1. And KAH1 is the only area that has a stock assessment. KAH1 recreational kahawai catch rates have not improved much since the early 1990s and this suggests the fishery has not recovered well from the early, intensive exploitation.

Kahawai 1 modelling exercise

Originally MFish and the Working Group were going to use the 530t estimate in their stock assessment model for KAH1. But, from a non-commercial perspective, the 530t estimate was not a good estimate of the long-term average of recreational catch in that fishery.

The MFish Working Group accepted John's recommendation that the model should use a lower bound of 800t and an upper bound of 1865t with the annual catch likely to vary between these. MFish now want agreement to choose one of these estimates to present as the most likely model to the Minister.

Actual catch is both likely to be somewhere in between these estimates, and vary from year to year. But, because there is no data to support an estimate in between these figures MFish has presented the choices as either 800t or 1865t.

After a presentation from the scientist that managed the aerial over flight survey, the majority decision from the Northern Inshore Working Group supported using the 800t estimate in the model and advice to the Minister.

John described the advantages and disadvantages associated with using either of the estimates. The quandary is that a higher historical non-commercial catch results in estimates of a more productive stock, able to support a higher total allowable catch. On the other hand, using the smaller harvest estimate would result in a more conservative total allowable catch.

Hui Discussion

It was interesting to note the catch history of kahawai. Catch by area was not described well in MFish's early records. It was notable that there was at least 10,000t of kahawai taken over five years from a 50-mile stretch along the Kaikoura coast.

Without pre-empting the pending MFish management proposals for Kahawai 1 (KAH1), between East and North Cape, it would be unwise for the Ministry to propose a drastic reduction of the 495 tonne customary allowance even though there were very few, if any, customary permits issued for kahawai.

As discussed during the June 2009 Hokianga Accord hui, historically the Minister of Fisheries has set the customary allowances for many fish stocks well above what the actual catch has been, in recognition of Treaty obligations¹⁰.

Given the 2009 Supreme Court's ruling on kahawai and the stance taken by Sanfords and Sealords during the earlier High Court proceedings, there is a possibility this management approach will be challenged by commercial interests. In the High Court the commercial parties claimed a share of the "excessive" customary allowance because it was not being fully caught.

But there is a gulf of difference between commercial catch and non-commercial interests, which are broader than just catch. These interests include environmental, social and cultural values.

Non-commercial catch varies with abundance. If there are lots of fish available more will be caught. Conversely, if the fishery is depleted then non-commercial fishers will catch less.

If there are less fish available commercial fishers have the ability and resources to increase fishing effort to maintain their annual catch levels.

It will be very controversial if the Minister, as a result of this review, reduces the customary and recreational allowances and increases the commercial catch limits for kahawai.

Higher commercial limits means more kahawai will be taken out of the water as a low value product. This was contrary to the high value placed on kahawai by non-commercial interests, which need "more fish in the water", to sustain current and future generations.

Reduced allowances may require individual daily bag limit cuts, to ensure the overall allowance is not exceeded.

During the earlier kahawai review NIWA advised that to achieve a 25 percent reduction in recreational catch bag limits would need to be reduced from 20 per person (mixed bag) to around six. Further study by John

¹⁰ http://www.option4.co.nz/Fish_Forum/documents/har609.pdf, page 59.

Holdsworth revealed that kahawai bag limits in KAH1 (North to East Cape) would need to be reduced to three or four.

A case study would help to understand what the implications were if MFish used the 800 tonne estimate in advice to the Minister. John and Trish used the census information to determine how many people had access to KAH1 and then divided that number by the MFish participation rate of 20 percent. The result was a conservative estimate of 500,000 fishers in KAH 1. It was nonsense to suggest that these half a million fishermen were only taking one kahawai each per annum.

MFish and other interests were not keen to estimate the participation rate in fishing and would not accept the figures put forward by John and Trish. One reason is that many fishers of European descent target other species, such as snapper and gurnard, and therefore did not land as many kahawai as Maori or other ethnic groups.

Whatever estimate is used, in the interests of sustainability the Minister has to be reasonable and 'allow for' the annual catch that will be taken as part of the overall non-commercial interests.

The main concern is how the estimate will be used in management terms. Historically MFish has used catch history and the minimum estimate as a basis for recreational allowances. This approach is objectionable because it does not allow for *interests*, merely for estimated catch.

MFish has asked for scientific reasoning as to what estimate was acceptable. John and Trish advised the Working Group that a statement would be forwarded to MFish after the Hokianga Accord hui.

While non-commercial representatives have historically argued for the largest allowance for non-commercial fishers there are some benefits in having a more conservative estimate of how productive the fishery is.

After about an hour of discussion representatives of Ngapuhi, Ngati Whatua, other northern iwi and hapu, Greenpeace, ECO, option4, Te Korowai (Kaikoura), and NZ Sport Fishing reached a consensus.

The Hokianga Accord appreciated John's effort and expertise in representing non-commercial interests in the fisheries science and management processes.

John would advise MFish that neither the 800t nor 1865t was acceptable as the single estimate of historical amateur catch in Kahawai 1. There were also concerns about how these estimates would be used in management.

** On the second day of the hui John Holdsworth sent the following memo to the Ministry of Fisheries, on behalf of the Hokianga Accord –

Recreational kahawai harvest estimate for KAH1

A detailed presentation and discussion of available data on recreational harvest estimates for kahawai occurred at the 14th meeting of the Hokianga Accord at the Oturei marae, Dargaville on 22 April 2010.

The consensus of those present was that neither 800 t nor 1865 t should be used as the single estimate of historic recreational harvest in KAH1.

While we appreciate that MFish is looking to provide a single coherent line of advice to the Minister, we are concerned that the selection of a single base case for the kahawai stock assessment locks in a set of assumptions and management outcomes.

We note the general conclusions in the note of meeting of the Northern Inshore Working Group 26-27 March 2008 which requested *“that MFish Science ensure that users of the results are aware that the range of true*

uncertainty could be much larger than that represented in the four states of nature considered". The selection of a single model run strips away most of the underlying uncertainty in the modelling approach used.

Specific concerns

- ⇒ The assumption of a single constant recreational harvest estimate for the last 35 years as a model input is clearly not true. Non-commercial harvest varies with abundance.
- ⇒ It appears that 2004–05 was a particularly poor year for kahawai harvest.
- ⇒ The implications for other QMAs were not discussed. There is a concern that one years aerial over flight estimates of SNA and KAH catch could be used as a benchmark for adjusting harvest estimates in other QMAs.
- ⇒ While surveys based on direct observation (boat counts and ramp interviews) tend to be intuitively more precise, in examples where information is less than perfect, they tend to underestimate recreational harvest (KIN1, SNA in outer Marlborough Sounds, SNA8).
- ⇒ The so-called discussion document on harvest estimates in KAH1 turned up unannounced on the MFish working group web site the afternoon before the meeting. There was no time to inform the groups we represent of the rationale for selecting a harvest estimate and potential implications prior to the meeting.
- ⇒ There is no MFish fisheries management forum where kahawai management objectives can be discussed. MFish still refuse to tell us what management options are being considered.
- ⇒ The members of the Hokianga Accord are committed to good process and a better understanding of objectives based fisheries management. We are not convinced yet that this is being delivered.

For the Hokianga Accord
John Holdsworth
23 April 2010.