INTRODUCTION OF NEW SPECIES INTO THE QUOTA MANAGEMENT SYSTEM ON 1 OCTOBER 2004

SUBMISSION ON BEHALF OF NON-COMMERCIAL FISHERS

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Contents

Overview	1
1. Introduction	3
1.1 Representative groups	3
1.2 History of kahawai fisheries	6
2. Management Objectives	9
2.1 Harvest strategy and objectives	9
2.2 Sustainability	9
2.3 Core area management	10
3. Management Structure	11
3.1 Statutory obligations and policy guidelines	11
3.2 Kahawai and the QMS	12
3.3 Allowing for non-commercial harvest	12
4. Kahawai Ecology	13
4.1 Kahawai in the food chain	13
5. Kahawai and the public	15
5.1 Kahawai as food	15
5.2 Customary harvest	16
5.3 The fishing experience	17
5.4 Visual impact	17
5.5 Non-commercial harvest estimates	18
5.6 Non-commercial harvest trends and values	19
5.7 Recreational fisheries reform	21
6. Commercial Fisheries	22
6.1 Reported catch	22
6.2 Kahawai catch history	22
6.3 Purse seine catch	23
7. Management Options	25
7.1 MFish IPP proposals	25
7.2 The need for a rebuild	27
7.3 The path to recovery	27
7.4 Revised kahawai TAC	28
7.5 Deemed value	30
8. Conclusion	30
9. Recommendations	31

Overview

The introduction of kahawai to the Quota Management System provides the Minister with the first opportunity to make some well-considered management decisions in this fishery for many years. Mismanagement of this fishery to date has resulted in a major decline in availability of kahawai to non-commercial fishers.

The Ministry of Fisheries in its IPP has chosen to ignore the well-founded concerns of non-commercial fishers expressed over many years. Instead they are proposing to allow the fishery to continue to decline by basing quotas on recent catch history. We believe this advice if followed will prevent future Ministers from making any management decisions to rebuild the customary and recreational fisheries because it will then require compensation to commercial fishers to reduce their excessive quota. The time to decide on the future of the kahawai fishery is now.

Poor management of kahawai adversely affects all non-commercial fishers equally. If a decision is made that continues to permit excessive commercial catches and further decline in this fishery it will adversely affect customary Maori harvest as well as all other non commercial users. Failure to allow for both customary Maori and recreational interests is in contravention of section 21 of the Fisheries Act 1996.

Non-commercial catch rates for kahawai have plummeted in most areas. An outraged public attribute the decline to the impact purse seine fishing has had on kahawai stocks. Purse seine boats capable of taking entire schools of kahawai in a single set land 75% of the commercial harvest. The unrestrained use of this method produced a collapse in non commercial catch-rates during the late 1980s and early 1990s. The decision to allow purse seining has allowed this method to encroach on the rights of all non-commercial fishers. The injustices produced by this decision have not been addressed by MFish's proposal to allocate quota in perpetuity to commercial fishers.

The ordinary people of this country are clearly angry about what has happened to their kahawai and are asking to be given back access rights to their fishery. Many believe the very people now queuing up for overly generous gifts of kahawai quota have effectively stolen it from them.

This paper provides an alternative management approach to the single option in the IPP. Our option promotes the benefits of a lower overall TAC which will allow for a rebuild of the kahawai stocks to properly allow for all non-commercial fishing interests. Our approach recognises the damage caused by the rapid expansion of the targeted purse seine fishery in the midst of what was a stable recreational, customary and commercial by-catch fishery. We strongly argue that the kahawai fishery should be rebuilt, and that this should be achieved by removing the targeted purse seining catch history from calculations before setting the TACC. It is our opinion purse seining, which has clearly been the cause of the decline in this vulnerable inshore fishery, should never have been allowed in the first place. Our objective is to restore the catch rates of all non-commercial fishers: customary Maori, sustenance and recreational to pre purse seine levels.

Under the Deed of Settlement the Minister is required to provide for and protect customary Maori fishing rights as well as providing a commercial allocation of 20% of new species to Maori. In this case, sustainability of the resource and adequate access for non-commercial fishers must have priority over commercial allocation. It is a delusional exercise to "allow for" a 1500 tonne customary catch when the fishery is so depleted that nowhere near that amount can possibly be caught.

Commercial fishers land most kahawai as bulk fish to keep the purse seiners and the factory staff working through the off-season. Industry has had thirty years to develop a value added product from the bulk kahawai catch. They have not managed to do this.

Its time to give back the fish taken unjustly from the people through the mindless implementation of property rights ideology in this fishery. The Government has a very clear choice: it can promote the corporate interests of a handful of uneconomic purse seiners, or recognise the legitimate interests of over one million New Zealanders.

All non-commercial fishers place a high value on kahawai. For some coastal communities it is the primary source of protein. Before the advent of the targeted commercial fishery, kahawai were the most reliable source of finfish kaimoana used by tangata whenua to provide for hui and tangi. Other people, including a growing legion of international fans, enjoy the sport of catching them on fly or lure, while for many the value is in the wonder generated by the almost lost spectacle of vast schools of kahawai moving through our harbours and up our coasts. Diving birds, working dolphins and kingfish associated with such boil-ups fills the observer with joie de vivre. It would be a sad reflection on New Zealand, our policy makers and our industry chiefs to repeat the errors of our history by plundering yet another natural resource without recognition of its place in our heritage, tradition and culture.

A cautious approach to management is required because of the importance of kahawai in the marine ecosystem. While the ecological significance of kahawai is not well understood, anecdotal evidence points to a decline in a number of seabirds whose feeding habits required the assistance of kahawai. The most notable decline has been in white fronted terns, locally known as "kahawai birds". Other anecdotal evidence points to the appearance of plagues of barracouta since kahawai have been a targeted commercial catch. Further, the common observation of both kingfish and dolphins feeding in kahawai driven boil-ups suggests they also play a significant role in the ecology of sea mammals. The viability of some dolphin populations is currently under scrutiny.

The kahawai IPP proves once again that the Ministry's goal is to slavishly follow it's property rights ideology and promote development of any commercial fishery, no matter how low its value, at the expense of the cultural and recreational values held by the public of this country. We fail to see how the Ministry has fulfilled its statutory obligation to take into consideration the social and cultural values of the non-commercial sector. We believe that acceptance of this IPP will entrench the ongoing hardships and perpetuate the injustices caused by MFish's failure to recognise the just claims of the non-commercial fishing community.

1. Introduction

1.1 Representative groups

The Minister of Fisheries (the Minister) has invited stakeholders to provide submissions on the Ministry of Fisheries' *Initial Position Paper – Introduction of New Species into the Quota Management System on 1 October 2004* (IPP), prior to the Minister making his final decision on the setting of Total Allowable Catches, Total Allowable Commercial catches and the measures taken to allow for non-commercial catch. It is noted that the deadline for submissions for 19 species was originally Friday 27 February but an extension was granted for kahawai submissions following requests from a number groups.

This document comprises the primary submission from the following non-governmental organisations (NGOs) that promote the interests of non-commercial marine fishers in New Zealand.

1.1.1 option4

option4 was formed in the year 2000 by a concerned group of recreational fishers, in response to MFish's invitation to participate in the process of redefining the nature and extent of the rights of the public to gather seafood in New Zealand.

The Ministry of Fisheries (MFish), in conjunction with the New Zealand Recreational Fishing Council, compiled a discussion document called "Soundings". This document suggested three options for the future management of the public's rights and access to public fisheries.

In option4's opinion none of the three options presented were acceptable for the future management of New Zealand's recreational fisheries, nor were they capable of improving the lot of non-commercial fishers. This was because all the proposed options in the "Soundings" document allowed for the continual erosion of the fishing public's individual rights.

option4.co.nz was developed to ensure that the fishing public, clubs, organisations and individuals could send a clear message to the Government's fisheries managers on what is required to ensure that the rights of current and future generations of non-commercial fishers are protected.

Since its formation four years ago, option4 has gained widespread support from the recreational fishing public, clubs and organisations of New Zealand. In 2001 over 61,000 individual submissions supporting the principles of option4 were made to the Minister of Fisheries on the "Soundings" process. This represented an overwhelming majority of 98.3% of total submissions received on the issue. Since then, more than 35,000 further individuals have either confirmed their support for the 4 principles or subscribed to the monthly Updates and Alerts.

Through its nationwide network, regular monthly Updates published in Fishing News, its website www.option4.co.nz and with on-going support from recreational fishing clubs and organisations, option4 has established that it has the support of a large section of the recreational fishing public of New Zealand.

Furthermore, option4 representatives have made a full contribution to the process known as the "Ministerial Consultative Group" that met many times with the Minister and Ministry officials throughout 2001.

In 2002 there was little activity or discussion with Minister or Ministry regards future management of the public's rights and access to public fisheries. However, this hiatus did see the 4 Principles that option4 promoted endorsed by NZRFC, NZBGFC and NZACA. The "Consensus Letter" to the Minister in December 2002 further confirmed these fundamental principles - http://option4.co.nz/oldsite/consensus.htm

2003 saw option4 representatives once again play a full part in the next new process initiated by the Minister known as the Reference Group. An exhaustive analysis and discussion commanding all available resources that culminated in another "consensus letter" to the Minister outlining elements of reform that were opposed and elements that were supported -http://option4.co.nz/oldsite/refgpl1203.htm

The Minister's acknowledgement of this correspondence sets the scene for future work - http://option4.co.nz/oldsite/refgplminr1203.htm

option4 have submitted on a wide range of fisheries management proposals since 2001. These submissions and the other relevant process documentation may be reviewed online at http://option4.co.nz/Fisheries_Mgmt/species.htm. The above brief outline of option4 involvement in fishery matters is somewhat at odds with the description of option4 offered by Ministry to the Minister in the "Briefing for the Minister of Fisheries" paper (dated 5/3/04) which states —

"Option 4 (Please note the ongoing incorrect spelling of the name of our group – option4). This is an issues-based group that arose in response to an earlier Ministry attempt at reform (Soundings). It does not claim to represent amateur fishers, but has actively participated in the current reform process".

1.1.2 NZ Big Game Fishing Council

The NZ Big Game Fishing Council (NZBGFC) was formed in 1957 to act as an umbrella group for sport fishing clubs and to organise a tournament that would attract anglers from around the world. Club membership has grown steadily and it now represents more than 33,000 financial members in 61 clubs spread throughout NZ. They still run New Zealand's only nationwide fishing tournament, which has evolved over time and remains successful.

The NZBGFC compiles and publishes the New Zealand records for fish caught in saltwater by recreational anglers. The Council identified kahawai as an excellent sport fish and in the 1970s was instrumental in having the species recognised by the International Game Fish Association as a qualifying species for world record catches.

In the early 1980s the NZBGFC helped to establish and fund the NZ Recreational Fishing Council (NZRFC) to ensure better representation of non-commercial fishers at a national level. The NZRFC continues to be recognised in this role.

The NZBGFC has been a consistent contributor to the fisheries management process for many years. It was a key contributor to discussions on kahawai purse seine limits in the early 1990s, has regularly sent representatives to MFish working groups, and has made written submissions on a wide range of management issues and species. In recent years its membership has expanded beyond the traditional deep-sea angling clubs to include many local clubs targeting inshore species.

1.1.3 NZ Angling and Casting Association

The NZ Angling & Casting Association Inc. (NZACA) was formed nearly 50 years ago as the parent body for boating clubs, small boat and shore fishers. It maintains that 'parenting' role today.

The NZACA was a foundation member of what is now the NZ Recreational Fishing Council (NZRFC) and is part of their executive. NZACA was one of the few recreational fishing voices on the former Consulting Committee set up by the Minister of Fisheries dealing with the complete NZ Fishery.

The NZACA is a member of the International Casting Federation and is affiliated to the International Game Fish Association (IGFA). The NZACA is the governing and issuing body for NZ fishing records for all species other than those recognised as game fish. These records are open to all fishers in shore and boat caught categories, ladies, mens and junior grades. NZACA hold two annual national casting competitions per year in an effort to encourage casting competitions at club level.

The NZACA participate in the consensus forum with the NZRFC, NZ Big Game Fishing Council and option4. This forum has been active over the past few years in the process to protect and improve the right of non-commercial fishers to access and harvest seafood and has also contributed to fishery management processes.

Whilst having an important "political" role the NZACA encourages the development of good fellowship and closer comradeship among amateur fisherpersons. The NZACA promotes the conservation of fish, the marine environment, our natural resources and the continued access to these resources for all New Zealanders.

1.1.4 Public Submissions

Non-commercial representatives were convinced the Ministry had not given the public adequate opportunity to submit on the kahawai proposal. To address this and other concerns regarding the IPP an electronic notice was delivered to the option4 database and others.

The notice, option4 Alert #6, was sent on April 8th 2004. The Alert #6 offered a summary of the proposal, what the likely implications were if the proposal was successful and what the public could do in response. An online submission facility was created that enabled the public to make an individual submission. They could also choose to support the draft discussion document that would form the basis of the joint submission from option4, NZBGFC and NZACA.

In seven days over 600 individual submissions were received through the option4 website and all were supportive of the joint submission. These submissions were delivered to option4, Ministry personnel and certain politicians as they were entered online.

A final analysis of the submissions will be completed at the conclusion of the process. The overwhelming response from the public, many with heartfelt comments added to their individual submissions proves the kahawai fishery is of major concern and importance to the public who fish. It also proves the public are outraged by the Ministry proposal and are likely to be carefully watching how well their submissions are considered.

1.2 History of kahawai fisheries

Kahawai has a long history of use in New Zealand. It was a frequent catch, and an important food for Maori in some areas. Early New Zealand authors have described the abundance and sheer visual spectacle of huge schools of kahawai. They describe the hard fighting qualities of kahawai on rod and reel and lament the decline of this major inshore species. Some of this history is best described by the authors of the time.

Rod Fishing in New Zealand Waters by T. E. Donne 1927

Kahawai fishing by Maori

'On reaching the scene of the schooling, four or more lines were trailed from each canoe, to the end of each line there was attached a hook formed of a shank of hard wood, inlayed with a piece of the bright green iridescent *paua* shell (halieotus) to which was fitted a sharp, barbed point of bone-no bait.

The canoes were then paddled quickly to and fro, up and down, with the tide, across it and against it; racing, twisting, turning amongst the thousands upon thousands of jumping, sprat-catching kahawai that "took" the bare hooks as salmon take the fly. There was great excitement amongst the Maoris: yells of glee, shouts of success, boasting of cleverness, and songs of joy. The shouting of the human beings, the activities of the kahawai, the flip-flopping of the frightened sprats and the raucous

screaming of the sea-birds made a commotion that was bewildering to watch and earsplitting to listen to, as men, fishes and birds pursued their fishing competition.'

Rod Fishing in New Zealand Waters by T. E. Donne 1927

Page 112

'The schooling or "shoaling" of the kahawai is a truly wonderful sight and one not to be forgotten on a long summer day; thousands upon thousands of these active fishes enter into a riotous ravenous feed of small mullet; amongst the myriads of these "sprats" the kahawai dart hither and thither, never for a moment ceasing to snap and swallow their prey, the jumping, splashing, twisting sea salmon, as he is termed, lashes the surface water into violent agitation as if a huge super-heated cauldron were at it greatest activity in the midst of the calm sea; it appears as if fishdom has gone quite crazy, and, to add additional turmoil and a tremendous accession of noise, ten thousand sea – birds – gulls and terns – appear like a huge, animated black and white cloud, falling on and rising from the sea. They dart down on the unlucky sprats that have no rest either in the sea or out of it; the voracious kahawai drive them to the surface and the hungry birds drive them down again until the bewildered sprat does not know whether in the immediate future he is to become bird or fish. The general melee and the calling, crying, discordant, air-piercing shrieking of the birds, creates a pandemonium that is indescribable.'

The Saltwater Angler by Wal Hardy 1966

Page 222

'But to see the kahawai at its best we have to go to New Zealand. There, huge shoals of these fish range the coast and work away up the inlets and rivers. One of these big bodies of fish on the move is a stirring sight.'

Hook, Line & Sinker by Ray Doogue 1967

Page 216

'Kahawai are certainly prolific. I counted 35 schools, none of less than an acre, in a 5 – mile flight along the coast one calm morning last summer.' (*flying out from Tauranga*)

Fighting Fins by Neil Illingworth 1961

Page 146

'The Kahawai is an excellent fighter, leaping higher and more often, and running further and faster than many trout of comparable size. They average about 3 or 4lb, but they can grow up to 16lb, and a fish of anywhere near this size can take up to an hour or even more to land on 4-lb nylon.

Many fishermen of wide experience have claimed that the kahawai takes a lot of beating in the seven oceans and one, Colonel John K. Howard, of Boston, Massachusetts, was so fascinated with them on his first visit to Mayor Island that he devoted the whole of a Press interview to singing their praises, saying he considered them to be one of the best game fish, size for size, in the world.'

New Zealand Fisheries by J. G. Watkinson & R. Smith 1972

Page 42

'In New Zealand there is little market demand for kahawai, although the fish was formerly popular with the Maori. Until recently there was no fishery for kahawai and it was caught as a by-catch in other fisheries. Small amounts are caught by trawlers but most are discarded at sea'.

The Golden Years of Fishing In New Zealand by Phillip Holden 1984 Page 223

'The kahawai ascends many of New Zealand rivers, and frequently be taken in fresh water, though more generally it follows only as far as the tide flows. Out at sea the fish is to be found in great schools and it is no uncommon sight in Auckland waters to see schools or shoals many acres in extent'.

MFish have been aware of the poor state of the fishery for many years and ignored any advice given. The debate over the need for kahawai management has been going on for almost twenty years. In 1987 Lew Ritchie prophetically wrote, "Right now we may be witnessing the end of kahawai as we know it. The commercial catch of kahawai has risen from an insignificant level 10 or even five years ago to currently (1985, the most recent year for which full catch statistics are available) second in landed weight among coastal and sixth in finfish overall in the New Zealand 200 mile exclusive economic zone. This is nothing short of a tragedy. It is a classic case of the last available and easily exploited coastal fish being plundered just "because it is there" by the greedy, the thoughtless and the over-capitalised. It is a sad reflection on New Zealand, its policy makers, and its industry chiefs that virtually every available natural resource is plundered, whether valuable or not, and irrespective of its place in our heritage, tradition, culture and recreation."1

Until the mid 1970s kahawai was caught as a by-catch of commercial fishing methods targeting other species such as snapper, the preferred table fish on the domestic market. Some kahawai was used for bait but much of it was dumped at sea. In the mid 1970s domestic purse seine vessels started fishing for skipjack tuna in the summer and other species during the winter, mainly in the Bay of Plenty and around Poverty Bay. By the late 1970s purse seining for kahawai during the winter and spring months had extended from Northland to the Wairarapa Coast, into the Taranaki Bight and around the north and east of the South Island. ² Catches peaked in the late 1980s and began to fall before the Minister set purse seine catch limits.

¹ Ritchie, L. D. 1987. Northern Advocate

² Ministry of Agriculture and Fisheries. 1990. Kahawai. Proposals for the management of the kahawai fishery.

Kahawai were once present in numerous and at times vast schools. They form an important traditional food source. Fishers from around the world marveled at the sight and sound in the presence of a melee of birds, bait and kahawai. These authors were also impressed by the strength and aerial displays of kahawai on a line.

The commercial fishery went through a rapid expansion in the 1980s.

2. Management Objectives

2.1 Harvest strategy and objectives

There is no harvest strategy for kahawai. There are a number of sectors competing for an important inshore species but there has been no discussion on what kahawai management should aim to achieve. Each sector will have a different expectation of what a well-managed kahawai fishery will deliver for them. How can the Minister possibly weigh up the expectations of competing users with no overall objective or target in place?

The objective should be to maximise the benefits of this fishery for all New Zealanders. The single goal of the MFish Strategic Plan 2003 – 2008 is: "Maximise the value New Zealanders obtain through the sustainable use of fisheries resources and protection of the aquatic environment". Nowhere in the IPP is MFish's single strategic goal stated or referred to. MFish also fail to mention Strategy 2 in their plan which is headed 'Enable people to get the best value from the sustainable and efficient use of fisheries.' These are major omissions on the part of MFish, not only in words, but also in intent.

Non-commercial fishers insist that MFish address the words and intent of their single strategic goal in the Final Advice Paper to the Minister. Without a clear idea of the strategic direction of fisheries management how will the new Minister be able to get the balance right when setting the TAC and TACC for kahawai?

The Minister needs to take a strategic view of kahawai management and maximise the value of this fishery for all New Zealanders.

2.2 Sustainability

The Ministry may claim that the overall objective is to ensure sustainable management of kahawai. However, there are different interpretations of "sustainability". For example, Japanese tuna scientists insist that the southern bluefin tuna catch is sustainable although the stock has been fished down to just 3% of virgin biomass, and it seems MFish agrees with that principle though it is clearly bad management.

The kahawai Plenary Report discusses a sustainable kahawai stock at about 20% of virgin biomass3. This stock size may meet the criteria for maximising commercial harvest, but is totally unacceptable to non-commercial fishers who require the Minister to consider the social, economic, cultural and ecological benefits of a kahawai stock no more abundant than one fifth of its virgin biomass.

Last year the Minister introduced kingfish to the QMS with controls aimed at reducing harvest levels. The intent was to manage the fishery at a level above the maximum sustainable yield (MSY) to allow for more large kingfish. This decision angered some commercial operators because this particular harvest strategy had not been widely discussed or agreed to. Now we are heading down the same path with kahawai, where management decisions are taken in the absence of agreed objectives.

United States fisheries managers aim to find the Optimum Yield from a fishery that provides for the best value to the nation as a whole. It is clear the kahawai fishery is currently below the optimum yield that will provide for non-commercial fishers in New Zealand.

What is the sustainable yield for kahawai? There is no single number. Even if we had good data on kahawai stocks, there would still be many sustainable harvest levels to choose from, depending on the management objective selected.

2.3 Core area management

Selecting a sustainable yield for a single nationwide kahawai stock without having a harvest strategy is hard enough. Understanding how catching a large proportion of that harvest in one region or taking entire schools of fish affects the population in that area and surrounding regions must also be considered.

There maybe regions in New Zealand where kahawai are still abundant, due to low fishing pressure or migratory paths that concentrate older fish. Tagging studies have shown that there is a "tendency for movement of tagged fish between North and South Islands to be predominantly southward. This suggests that a substantial proportion of recruitment to the east coast South Island may consist of adult immigrants from further north". 4 Kahawai tagged off east Northland were mainly recaptured in Northland, Hauraki Gulf and Bay of Plenty. Some kahawai are highly mobile but movement appears to be restricted by natural boundaries such as North Cape and East Cape.

Most of the commercial kahawai catch in northern New Zealand in the last twenty years has been taken from the Bay of Plenty. Why is it then that recreational and commercial

- ³ Annala, J.H. et al. Report from the Fishery Assessment Plenary, May 2003: stock assessments and yield estimates.
- ⁴ Wood, B.A. Bradstock, M.A. & James, G.D. Kahawai (*Arripis trutta*) tagging programme in New Zealand waters, 1981-84.

fishers in the Bay of Plenty have been able to maintain reasonable kahawai catches, while there appear to be far fewer kahawai beyond the Bay of Plenty, in east Northland, Hauraki Gulf and from the Motu River to East Cape? Bradford comments on the change in recreational catch by region between the 1994 north region survey and the 1996 national survey and found "the numbers of kahawai caught increased slightly in the Bay of Plenty but declined in other sub-regions in the North region."5

The Bay of Plenty appears to be a core kahawai area. This area could be receiving the benefit of migration from northern areas. This means that the greater the harvest from the core area the greater the migration from surrounding less preferred regions. Catch rates can be maintained in the core area while local populations on the fringes are depleted.

While overall management of the stock is important MFish must also consider that core areas in large fisheries can act like a sinkhole i.e., removing fish from the middle draws fish in from surrounding areas, thus having an impact over a vast area.

3. Management Structure

3.1 Statutory obligations and policy guidelines

MFish state, "The management options seek to ensure sustainability of the stock by setting a TAC..." We suggest sustainability is questionable if "current utilisation" continues and the Minister accepts MFish's recommendations.

The Minister is obliged to have regard for the social, cultural and economic factors when moving a stock to a level that can produce MSY (section 13 FA 1996). With kahawai we have no idea what the MSY or biomass is. This lack of adequate information should mean the precautionary approach to management decisions should apply for this stock as per section 10 of the Fisheries Act 1996.

MFish proposed TACs would have social and economic consequences. While MFish consider the economic effects to be minor (pt 65c IPP), the decimation of this fishery has impacted on many communities. To underestimate the social and economic effects is to ignore the rights of future generations to this fishery and contrary to Sections 8 and 13 of the Fisheries Act 1996.

Bulk industrial purse seine fishing has had a major impact on the availability and abundance of kahawai and other dependent species. The impact on predatory fish cannot be underestimated. Anecdotal evidence suggests the reduction in kahawai schools has also affected the numbers of terns and shearwaters. There has been a noticeable decline in the numbers of feeding birds at sea. The impact on associated and

⁵ Bradford, E. 1998. Harvest comparisons for major recreational species between regional and national diary surveys.

dependent species must be taken into account under section 9 iv of the Fisheries Act 1996.

The kahawai fishery needs to be cautiously managed in order to rebuild it. Preserving the status quo will only see this once healthy fishery ravaged to the detriment of the public. MFish will then be responsible for another scandal that will outrage the public, but this time it would be a fishery near and dear to its heart.

3.2 Kahawai and the QMS

We agree with section 13 management of this fishery.

We strongly object to only one management option being presented for consideration by the Minister in the IPP. A range of options would have been better, as this fishery has been the subject of public concern for twenty years.

MFish's management option is clearly based on maintaining commercial catching rights at the current level while ignoring the facts of a declining fishery. In reality they are proposing to allow the continued destruction of this most valuable inshore-shared species by the removal of 60% of the remaining stock.

We note the Ministry has failed to allow all for fishing related mortality. In the IPP MFish have only taken into consideration purse seine incidental mortality at 5%. They have not allowed for the considerable amount of kahawai caught in set nets and dumped at sea. Kahawai caught in set nets overnight are unmarketable due to damage from lice. Fish damaged in trawl nets are unmarketable and are dumped at sea. Some longline caught kahawai is used as bait and not reported.

This paper provides an alternative management approach to the single option in the IPP. Our approach acknowledges the damage to the fishery by purse seining and argues that consideration should be given to rebuilding the kahawai fishery by disallowing the targeted purse seine portion of the commercial catch history. Also we remind the Ministry that all sources of incidental fishing related mortality must be allowed for.

3.3 Allowing for non-commercial harvest

Section 21 of the Fisheries Act 1996 states that the Minister shall allow for non-commercial interests including Maori customary, recreational and other sources of mortality before setting the commercial TACC.

We contend the provisions of section 21 have now been in place for a sufficient period to place an obligation upon the Minister to make such allowance on an informed basis. The Ministry should be required to take reasonable steps to determine the extent of non-commercial catch.

Government policy is to increase population by immigration. Government must take this into account as per the statutory obligations. If the Minister fails to allow for this population growth the Crown could face compensation issues in the future.

The Court of Appeal has already considered what allowance actually means. In the case of New Zealand Fishing Industry Association (Inc) v Minister of Fisheries CA 82/97 J. Tipping determined, "To take recreational fishers as an example, the "allowance" is simply the Minister's best estimate of what they will catch during the year, they being subject to the controls which the Minister decides to impose upon them e.g. Bag limits and minimum lawful sizes. Having set the TAC the Minister in effect apportions it between the relevant interests. He must make such allowances as he thinks appropriates for the other interests before he fixes the TACC. That is how the legislation is structured..."

It is our contention that the Minister has to allow for non-commercial interests before he sets the TACC in the kahawai fishery.

4. Kahawai Ecology

4.1 Kahawai in the food chain

Kahawai are an inshore school fish living mostly from mid-water to the surface. Where the seabed slopes steeply (as at Kaikoura) schools can occur over moderate depths but generally they remain in waters shallower than 50m.6 The 50m contour scribes a very narrow band around most of New Zealand – about 10 km wide in the Bay of Plenty but down to just a few kilometres wide on most of the east Northland and Wairarapa coasts.

Kahawai spawn over the warmer summer months (in the Far North they spawn after Easter) and large females may carry more than 750,000 eggs. Growth rate is moderate with fish reaching about 15 cm at the end of the first year and 35 cm in four years. A healthy kahawai stock would produce billions of eggs and hundreds of millions of juveniles every year.

Larger kahawai form an important link in the inshore food chain, feeding on plankton and small fish such as anchovy and pilchard, and in turn become prey to larger fish. Dolphins, including the endangered Maui dolphin feed on kahawai. Considerable effort has gone into protecting this species. It would be appropriate for the Minister to ban purse seining from the same set net ban area on the west coast of the North Island.

Kahawai are one of the few inshore fish that push krill and small fish to the surface where seabirds can reach them. The absence of kahawai schools is most often noticed by the lack of flocks of white-fronted terns, whose darting and diving feeding flight can be seen at a distance. The white fronted tern is an endemic species that breed only in

6 Paul, L. 2000. New Zealand Fishes. Revised edition

New Zealand. It is described as especially common around the northern coasts of the North and South Islands. 7 Shearwaters and red-billed gulls also interact with kahawai schools.

Birds that have a strong symbiotic relationship with kahawai around East Cape are Fluttering and Bullers shearwaters (*Puffinus gravia*, *P bulleri*). Sadly they are rarely seen with gannets when a kahawai school emerges now. It seems seabirds are a much less common sight in northern New Zealand as well, both in the air and at the once packed rocky roosts.

The ability of kahawai to force baitfish to the surface is important for birds which breed during winter. These birds include the grey-faced petrel (Pterodroma macroptera), which breed on the offshore islands around the upper North Island and the rare Westland petrel (P westlandica) whose population is estimated at only 2000-5000 pairs. The Fairy prion (Pachyptila turtur) return to nest sites in the Poor Knights, Cook Strait and Foveaux Strait areas in May and June and the Little shearwater (Puffinus assimilis) inhabit the upper North Island. Less kahawai schools has to have an impact on the potential of these birds to feed their offspring.

We are not aware of any study that has been conducted to examine the relationship between food availability and nesting success of seabirds but it's obvious that the more difficult it is for the parents to obtain food the less chance there is of the chicks fledging. There are other rare inshore seabirds that rely on kahawai such as the rare native Caspian tern (Sterna caspia) and the critically endangered Fairy tern (S neresis). A strong kahawai stock will increase the chances of breeding success and survival of all these bird species.

Removing an entire school of kahawai with a purse seine shot destroys the bird/fish interaction instantaneously and the dependent species are displaced from the area. Under the current Ministry policy, fishing stocks down to 20% of the virgin biomass is encouraged, as this is the stock size that will support the Maximum Sustainable Yield. If 80% of kahawai schools are gone then dependent species like seabirds will have to expend at least five times as much energy searching for food sources made available by kahawai. Kahawai tend to move to core areas of preferred habitat. In a depleted population kahawai may seldom be found in areas where they were once common. Seabirds in many areas may not be able to reach their food supply at all from nesting sites distant from the core areas.

The decline in kahawai abundance has also been linked to the sudden influx of large numbers of barracouta to northern inshore waters during the early 1990s, as described in Appendix 1 by Evan Daysh and witnessed by many others.

Kahawai are a highly productive part of the inshore ecosystem. Even if the stock was deemed to be commercially productive and technically sustainable at 20% of the virgin

7 Chambers, S. (1989) Birds of New Zealand, Locality Guide

biomass, it would not mean that the natural balance and biodiversity would be maintained if the Minister allowed the kahawai to be fished down to the 20% level.

MFish have not adequately addressed the effect of a declining kahawai stock on associated and dependent species.

5. Kahawai and the public

5.1 Kahawai as food

A lot of kahawai caught by non-commercial fishers is for food. Cooked fresh or smoked at home, it is becoming increasingly popular. Surveys of returning fishers at some boat ramps have shown that 90% of fishers return home with no fish. Attitudes to kahawai have changed. Today a wide range of fish species are taken home for the table, as prime species have become less abundant.

There are many people in small coastal communities who rely on the sea for food. They have no supermarket, often no shop at all, where they live. Many cannot afford to buy fish at retail prices. Of course they do not eat fish all the time, but without it their standard of living drops. They may go hungry. These people, Maori and non-Maori, are subsistence fishers who rarely have a voice in corridors of power or the offices of MFish.

Maori representatives (national and iwi/hapu) often have other priorities. Lately it seems they have been very focused on the opportunities provided by commercial quota, aquaculture development, and a strong customary right.

MFish does not define subsistence fishers as customary. They only take what they need under the amateur bag limits and it is not for the purposes of hui or tangi. It is for the purposes of traditional harvest, quality of life, supporting an individual or family, as is the custom in many seaside communities. Kahawai was once their most accessible fish, caught from the beach, wharf or rocks, harbours, estuaries, open coast headlands and reefs. MFish make no mention at all of the subsistence fisher and have ignored their need for access to a healthy kahawai stock. Arguably their needs are the greatest of all; not for the quantity they take, but for the impact on their lives.

Our objective is to improve the catch rates of all non-commercial fishers: customary Maori, subsistence and recreational. What will the Ministry do to provide for the needs of subsistence fishers?

5.2 Customary harvest

There have been some large customary kahawai fisheries that have performed poorly over the last twenty years, notably the fishery at the Motu River mouth and the mouths of other eastern Bay of Plenty rivers. The director of the Dominion Museum published an account by Tiimi Waata Rimini describing what the fishery was once like, "After the ceremony, word is sent to the people on the East Coast and northwards that Motu is open for fishing. This is in early December, and lasts for two or three months... the shoals of fish are of great size, and thickly packed. The men and women stand on both sides of the tidal portion of the river so that all the space is taken up. The river is here about 100 ft wide. The fish caught during the day are cooked in huge ovens, over 200ft in length and about 4 ft wide. About 20,000 or 30,000 fish are cooked in an oven."8

Fisheries managers have failed to protect the customary rights of Maori fishers in these areas. Dr Mark Feldman quotes catch rates from MAF surveys at the Motu River mouth. For the period January to April 1982 the local residents caught an average of 4.17 kahawai per hour, while visiting fishers caught an average of 2.55 kahawai per hour. More recent surveys in this area show a marked decline in these catch rates in the wider Motu area. Can MFish explain how the management regime proposed in the IPP will restore this and other customary fisheries for kahawai?

Maori have a customary right to harvest seafood for hui and tangi. Maori also have traditionally taken kaimoana to feed their families at home. The Treaty of Waitangi (Fisheries Claims) Settlement Act 1992 sec 10 (b) states: *The Minister, acting in accordance with the principles of the Treaty of Waitangi, shall- (ii), "Develop policies to help recognise- use and management practices of Maori in the exercise of non-commercial fishing rights."* The Minister must ensure that he is meeting his obligations under this clause of the Settlement Act.

It is not sufficient for the Minister to just allow for 1500 tonnes of Maori customary catch when the places traditionally fished for hundreds of years are no longer capable of providing for customary needs because of commercial purse seining.

Non-commercial kahawai fisheries overlap. Much of the catch by Maori for traditional or customary purposes is taken in the same way as non-Maori, under the amateur catch limits. We note that Ngapuhi stated in their submission to the parallel process for the introduction of kingfish to the QMS last year "Ngapuhi individuals and whanau are passionate about recreational fishing both in Northland and wherever they might live throughout the country"

Poor management of kahawai will affect all non-commercial fishers in the same way.

8 Hamilton, A. 1908. Fishing and sea-food of the ancient Maori.

The Minister must take action that will ensure that there are fish available to be caught to meet customary needs. Customary and traditional non-commercial uses must have priority over (low value) commercial fisheries.

5.3 The fishing experience

Taking the kids fishing is part of the Kiwi experience for many families. Often the first large fish that kids catch off the wharf or boat is a kahawai. They pull hard, swim in wide arcs near the surface and will jump to try to shake the hook free. Catching a kahawai is a real thrill for anglers of all ages.

Junior sports fishing anglers often hone their skills catching kahawai and learn the techniques and culture of catch and release. Marlin and tuna fishing come later and require a lot more patience and perseverance than kahawai.

Saltwater fly fishing is becoming increasingly popular with locals and big spending international fishers alike. Kahawai are an excellent target species because the angler can see the fish they are presenting the fly to; because they will strike at a slow moving fly and, once hooked, will jump and run harder than any trout. Small fly hooks do not unduly harm the fish and catch and release is widely practiced. It is the sight fishing factor that gives kahawai such a wide international reputation.

Kahawai used to be targeted more easily than many species because they were seen feeding on the surface during the day, or they seemed to be in "resident" schools around most rocky headlands or reefs that break the surface. When kahawai were ubiquitous they were widely used as bait. There was a time when all gamefish boats caught kahawai on the way out fishing to tow as fresh skip baits. Snapper fishers also did not buy bait because it was always available. Those times have gone, maybe forever. Now anglers buy their bait, which is caught by purse seine and set net. This, we are told, is good for the economy, taking a public resource and selling it back to them.

As a source of food, learning or sport, kahawai are highly valued by non-commercial fishers.

5.4 Visual impact

Kahawai have a high intrinsic value. In other words it is nice to have them around. You do not have to be fishing to enjoy seeing the ocean come alive with hungry mouths and rapid splashes. Sharp-eyed terns race to join the mêlée and make the school visible from a distance.

Fish schooling on the surface are becoming an increasingly rare sight in some areas of New Zealand. The public perception is that this is a reflection of poor fisheries management and proof that there are far fewer fish than there used to be. On the other

hand, if the kahawai stock were rebuilt and surface schools became common once more, the clear impression would be given that fisheries management is working. The proof is right before the eye.

New Zealand's natural beauty is a draw card for tourists from around the world. The Bay of Islands is a major destination. Cape Brett and the Hole in the Rock (Piercy Island) are two of the most photographed locations in the country. What is missing from most of the photographs these days is the mass of school fish on the surface that used to be such a prominent part of the scenery. It is not just Cape Brett that has been affected, but also most of the other main headlands along the coast. Visitors are often impressed with any sign of fish or marine mammals. Imagine the lasting impressions of an abundant ocean that could be made if the school fish were allowed to return.

MFish has not adequately addressed the intrinsic value of kahawai surface schools in the IPP or how their management proposal will protect these values.

5.5 Non-commercial harvest estimates

There have been a series of regional harvest surveys in the early 1990s and two national surveys in 1996 and 2000. In 2001 a continuation of the diary component of the survey allowed an estimate for that year. The surveys were structured in a similar way. An estimate of the number of fish from fishers' diaries is scaled up by the estimate of all eligible fishers and the average weight of each species caught. The results of the 1996 and 2000 surveys differed enormously.

The surveys in the 1990s estimated that less than 10% of New Zealanders over 14 years old fished in the sea in the 12 months prior to being interviewed. The 1999-2000 survey estimated that over 30% of New Zealanders were eligible using the same criteria. Investigation showed that the difference was due to the way the questions were asked at the start of the survey. Therefore, the surveys in the early and mid 1990s are fundamentally flawed.

After considerable debate the MFish Recreational Working Group has decided: 'The Recreational Working Group has concluded that the methodological framework used for telephone interviews produced incorrect eligibility figures for the 1996 and previous surveys. Consequently the harvest estimates derived from these surveys are considered to be considerably underestimated and not reliable.'

MFish must not use the clearly incorrect harvest estimates from 1996 in recommending how much kahawai they should allow for recreational fishers. The 2000 survey results should be used with caution. 'The Recreational Working Group considered that the 2000 survey using face-to-face interviews better estimated eligibility and that the derived recreational harvest estimates are more accurate and probably slightly overestimate recreational harvest. An exception to this are the estimates for QMA2 which are considered to be erroneous, probably because of an unrepresentative diarist sample. Harvest estimates from the 1996 survey should not be used. Harvest estimates

from the 2000 survey should be evaluated with reference to the range of the estimate and coefficient of variation.'

The Minister is required to use the best information available. MFish needs to update its advice in line with decisions made in specialist working groups. Clearly as kahawai have become scarce the catch per fisher has declined. Measuring the current catch does not fairly represent the non-commercial catch prior to the boom in purse seining.

The law also requires copies of customary permits and the quantities taken for each one to be reported to MFish. The authors of the IPP claim there is no information available. Why not? What is the total number of kahawai permits issued in recent years and what was the catch? Even if the system is not yet fully implemented, what data is available?

MFish do not have good estimates of non-commercial catch. We do know that the Minister is required to use the best information available. Therefore the Minister should use the 2000 national recreational harvest survey results except for QMA2 which should be based on the 2001 survey.

5.6 Non-commercial harvest trends and values

The public have been concerned about the decline in the kahawai fishery since the late 1980s. The discontent was sufficient to spark a discussion document in 1990 looking at the issues of the time. Under the heading 'Need for Management Change' the document sums up the concerns of non-commercial fishers as follows:

'Recreational fishers state that the recreational kahawai fishery:

- has suffered significantly reduced catch rates because of increasing fishing pressure on the stock;
- has significantly declined in quality in recent years, both in size of the fish available and in abundance of fish;
- is no longer managed to provide recreational access to a reasonable share of the kahawai resource;
- is in conflict with commercial fisheries, particularly with purse seiners and set netters.

Maori consider that management of the kahawai fishery needs to recognise:

- that kahawai has been traditionally fished by Maori;
- that Maori share the same concern about reduced quality of fishing, sizes of kahawai and catch rates, as stated by recreational fishers.' 9

The Ministry had recommended a new Term Transferable Quota for kahawai but this was squashed under the weight of Maori, the Waitangi Tribunal and the courts who

9 Ministry of Agriculture and Fisheries. 1990. Kahawai. Proposals for the management of the kahawai fishery.

were looking to resolve Treaty rights to all fisheries. The problem remained and in 1991 purse seine catch limits were imposed, rather than issuing a new property right.

The shock of losing the last abundant inshore non-commercial fish did not diminish with these measures and the Minister was convinced that further cuts to purse seine catch limits were required (30 % decrease in KAH1 and 35% decrease in KAH 3). There was considerable concern about the disappearance of kahawai 15 years ago. The Ministry and the Minister clearly shared that concern in the early 1990s because catch limits were introduced. There is no evidence of a rebuild in non-commercial catch rates since.

Catch rates of kahawai from the 1996 national boat ramp surveys show that fishers who report targeting kahawai catch just 0.79 kahawai per hour - in other words five hours fishing for four fish. Fishers who say they were targeting snapper on their trip (most trips in the north) caught just 0.11 kahawai per hour – in other words nine hours fishing for one kahawai. 10 Is this how you remember the kahawai fishery as it used to be? Is this the best the Ministry can offer non-commercial fishers for the future?

A recently published report for the NZ Marine Research Foundation characterises the recreational fishery for kahawai in New Zealand. It looked at the size of fish (described by the length frequency) and the number of fish caught and kept (landing rates) from several boat ramp surveys between 1994 and 2003 in northern areas. The authors conclude in their draft report. "A comparison of annual length frequency distributions from east Northland, the Hauraki Gulf, and the Bay of Plenty showed no apparent change over time."

The Ministry may claim this as a victory, because at least the size of kahawai landed is not smaller but the 1994 results were obtained after the decline of the species. The Minister in 1991 set out to improve the non-commercial fishery, not to let it stabilise at the same low level that caused the call for urgent management action. The Minister said at the time, "It is essential that any future management plan enables reasonable access by non-commercial fishers to a quality fishery." 11 It is now time to deliver on that promise.

The Ministry in its IPP makes no attempt to describe why the purse seine catch limits were introduced. The truth is that catch limits were required to prevent excessive commercial catch damaging the stock further, and to better provide for the needs of non-commercial fisheries. MFish must answer the following questions.

- 1. Are the needs of customary fishers being met? If not, why not?
- 2. Are the needs of sustenance fishers being met? If not, why not?
- 3. Are the needs of the recreational fishers being met? If not, why not?

10 Bradford, E 1999. Comparison of marine recreational fishing harvest rates and fish size distributions.

11 Ken Shirley. 1990. Introduction from the Minister of Fisheries. Kahawai discussion document.

Depletion of the kahawai stock has been an issue for non-commercial fishers for many years. Accepting the dregs of an overheated purse seine fishery that was unconstrained until 1991 is not good enough, and will not be accepted by non-commercial fishers, now or in the future.

5.7 Recreational fisheries reform

For over five years various recreational groups have been working with MFish on proposals that would "better define" recreational fishing rights. Following the Soundings public consultation process, the Cabinet Finance, Infrastructure and Environment Committee decided that further work was needed. As a guide they noted in 'FIN Min (01) 28/4' that all parties agreed to the objectives set out in the 1989 recreational fishing policy as follows:

- a) "Access to a reasonable share of inshore fishery resources equitably distributed between recreational fishers;
- b) Improve, where practical, the quality of recreational fishing;
- c) Increase public awareness and knowledge of the marine environment and the need for conservation of fisheries resources;
- d) Improve management of recreational fisheries;
- e) Reduce conflict within and among fishery user groups;
- f) Maintain current tourist fisheries and encourage the development of new operations where appropriate;
- g) Prevent depletion of resources in areas where local communities are dependent on the sea as a source of food; and
- h) Provide more opportunities for recreational fishers to participate in the management of fisheries."

Every one of these objectives needs to be recognised and addressed in the Final Advice Paper to the Minister. The Cabinet Committee also noted that the Minister had asked that MFish work within the constraints as follows:

- a) "Avoid the undermining of the fisheries Deed of Settlement;
- b) Recognise the legitimate rights of other fisheries stakeholders including the commercial and customary sectors;
- c) Operate within the fiscal constraints imposed by the Crown and rules surrounding expenditure of public funds;
- d) Recognise the explicit consideration given to sustainability of fish stocks and the environmental principles of the Fisheries Act 1996"

When reading the IPP it is clear that MFish has so burdened itself with the constraints that it is unable to deliver on any of the objectives set out for non-commercial fishers.

Recreational fishers and Cabinet agreed on the objectives set out in the 1989 recreational fishing policy. The Ministry has not delivered a management proposal for kahawai that delivers on these objectives.

6. Commercial Fisheries

6.1 Reported catch

Kahawai is a low value commercial species. In the past it was often dumped at sea or used as bait. The following is from the 1990 Ministry discussion document: 'In the past, reported landings of kahawai have understated the actual catch levels because, as a lower valued species, often it was dumped at sea or when landed recorded as "mixed fish". Additionally, it is estimated that prior to 1986 around 300 tonnes of kahawai were taken annually for rock lobster and longline bait by commercial fishers, and not recorded on fisheries statistics.' 12

The purse seine catch records used to report significant quantities of mixed fish in a landing. Just how this has been accounted for in the catch records is unclear. It seems likely this practice is not acceptable these days with trevally, jack mackerel and blue mackerel in the quota system.

How has MFish taken account of under-reporting and mixed fish landings in calculating commercial catch? If accurate records were maintained, estimates of historical commercial catch could be significantly higher and closer to the truth than what is being presented in the IPP.

6.2 Kahawai catch history

Kahawai was left out of the quota system in 1986 and this created perverse incentives for commercial fishers to target them. The fishers and companies that survived the introduction of the QMS saw non-quota species as a cost efficient way to grow their business. After a while it became obvious that establishing a catch history was valuable in its own right as species such as kahawai were being considered for introduction to the QMS. The "race for quota" in the late 1980s and early 1990s saw huge jumps in the landings of kingfish, blue mackerel, kahawai and other species that had been left out of the QMS.

12 Ministry of Agriculture and Fisheries. 1990. Kahawai. Proposals for the management of the kahawai fishery.

Finally, the catch history years were set by the Fisheries Act 1996 to include the best 12 months between October 1990 and September 1992. The commercial fishers who will benefit most from the introduction of kahawai will be those who led the race for quota 14 years ago. The result has been the squandering of the last near-virgin inshore fish stock to provide low value product, and to secure the property right to keep fishing that stock down or maintain it at unacceptably low levels that adversely affects non-commercial access.

The Treaty of Waitangi (Fisheries Claims) Settlement Act 1992 ensures that TOKM receive 20 % of the TACC of new species introduced to the QMS. A number of species including kahawai were considered fully developed non-quota species when the Fisheries Act was written in 1996. The state of the stock would not allow 20 % increase on top of the TACC to provide for Maori. This meant that new legislation was required.

The IPP only includes catch histories from 1993 to 2002. Had the tables presented shown catches as far back as possible, it would be easier for the Minister to see what has really happened in this fishery. The Minister should demand full disclosure on all information held by the Ministry relating to the kahawai fishery. We also want to know why the Ministry has omitted this readily available and vital historical information from its advice paper on such an important inshore-shared fishery.

Voluntary agreements exist that limit purse seining in some areas from December to Easter. Concerns are held for kahawai that, as they become scarcer, voluntary agreements and seasonal behaviours will be ignored for economic reasons. 75% of all commercial kahawai catch is taken by the purse seine method.

MFish should provide the Minister with a more complete description of the commercial catch history. This would clearly show that the purse seine method has been responsible for the decline in this stock.

6.3 Purse seine catch

There was a time when there was little market for kahawai as a commercial catch and by-catch was dumped at sea (see quotes in section 1.2). Kahawai have become a significant commercial catch since the purse seine fleet expanded in the 1980s. Landing of large quantities of kahawai required an efficient method of capture and the onshore infrastructure to handle and process the product. Purse seine caught kahawai is a low value product. It appears that to make a profit large volumes need to be caught, preferably close to port.

The seven coastal purse seine vessels in New Zealand now all work out of Tauranga. The purse seine catch of kahawai and other school fish has been increasing in the western Bay of Plenty (Stat area 009) in recent years. It is unknown if this trend will

continue. There is certainly concern expressed by Tauranga fishing clubs that this industrial scale fishery operates for much of the year on their doorstep.

In many northern areas the large schools of kahawai are gone and the purse seine fleet, whose catch peaked at over 9,000 tonnes a year, is still tracking the remaining schools with aerial spotter planes. Whole schools are caught in a single set and sold as low value product which we believe includes pet food, crayfish bait and fish meal.

Over the last 10 years three quarters (75%) of all the commercial kahawai catch was taken by purse seine. There is no complete record of purse seine catch that could be found. Figure 1 shows the kahawai catch in tonnes per season from a number of different sources. Data for seasons since 1993-94 is derived from the IPP.

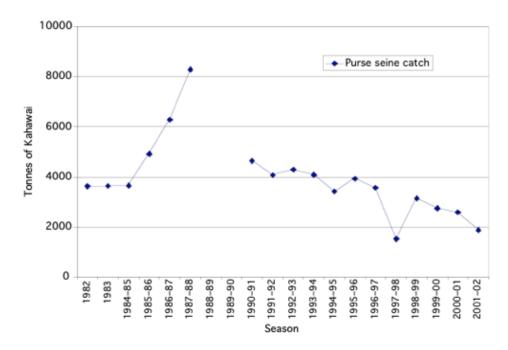


Figure 1. Purse seine reported catch of kahawai by season.

What can be seen is the rapid increase in purse seine catch in the mid 1980s. This is typical of an unconstrained fishery in the process of fishing down the standing stock. It was at this time that the non-commercial fishers began to notice the change in kahawai abundance. Since October 1993 there has been no change in the purse seine catch limits, and over this time the catch has declined steadily from over 4000 tonnes to 2000 tonnes. This is typical of a fishery affected by a decline in abundance, or profitability, or both.

MFish have used the average commercial catch for the last five years to set the TACC for each Quota Management Area. For three of those five years the purse seine fleet has exceeded the commercial catch limit of 1200 tonnes in KAH1 and KAH9 combined. Catch by purse seine in excess of the catch limit is illegal and must not be used when setting the TACC. According to the figures in the 2003 Plenary Report MFish must deduct 216 tonnes of excess catch from the 1998-99 season, 171 tonnes of excess purse seine catch from the 1999-00 season, and 56 tonnes of excess purse seine catch from the 2000-01 season, and any catch in those seasons from KAH9. MFish must check that

the purse seine catch figures come from the actual weights at the factory (LFRRs) not the estimated catch onboard the vessel (CELRs). The Minister must not reward these fishers for exceeding their catch limits by issuing extra quota. Why has the Ministry included illegal catch as part of commercial fishers catch history? Why has it used the less reliable CLER catch figures?

MFish notes the declining catches in QMA3. It suggests this decline is associated with reduced purse seining effort in the area. We suggest the decline is due to the overexploitation of this fishery that has made it uneconomic to continue the pillage in this QMA.

We understand that QMA 1 and 9 were previously combined under a single purse seine catch limit to prevent the shift of purse seine effort into area 9. We have concerns that when kahawai are introduced into the QMS the quota from KAH1 and KAH9 will be combined to increase the purse seine catch off northern NZ. This will undoubtedly have an impact on the availability of kahawai on the north west coast, an area of key importance to tangata whenua.

The commercial value of kahawai is a pitiful \$1,700 - \$5,100 per tonne (IPP pt.129). Most purse seine catch would be at the lower end of this range. Due to its low value commercial purse seine fishers will target schools close to their home port. This has an undue affect on non-commercial fishers who target those same fish. There is no value in having plenty of fish off the West Coast of the South Island when most non-commercial fishers (75%) live north of East Cape.

The purse seine catch has declined over the last few years. Has the fishery become less abundant, or less profitable, or both?

MFish must not include purse seine catch history for the 443 tonnes of kahawai taken in KAH1 over and above the purse seine catch limit. No quota should be issued for the portion of illegally targeted purse seine catch history for this species. The kahawai TACCs should be set at the level of unavoidable by-catch.

7. Management Options

7.1 MFish IPP proposals

There is only one management option presented in the IPP. This is not acceptable to the public and we trust the Minister will agree with us. We recognise the right of commercial fishers to catch kahawai. We do not believe they should be given the right to further damage the resource and further reduce access for other sectors as they have been allowed to do over the last twenty years.

A viable alternative option is required that will ensure the rebuild of this stock, especially in the north where it has been hit hardest.

The current biomass is unknown and the MCY is pure conjecture. Basing management decisions for an important fishery on inadequate evidence is reckless and irresponsible. Section 10(c) of the Fisheries Act 1996 states, "Decision makers should be cautious when information is uncertain, unreliable, or inadequate." We would recommend a more cautious approach and acknowledgement given to data from the non-commercial sector that clearly demonstrates a serious decline in availability and abundance.

The tonnages outlined in the IPP are all derived from completely different baseline information. The recreational allowance is based on a crude averaging exercise, the customary figure is guesswork based on some criteria established with no public discussion and inconsistently used. Other mortality is another guess.

The Preliminary Recommendations (pt.66 a-j) made in the IPP reflect the fundamental flaws in the Ministry's advice to the Minister i.e.

MFish recommends that the Minister:

Agrees to set a TAC of 3 910 tonnes for KAH 1 and within that TAC set:

- i. A customary allowance of 790 tonnes;
- ii. A recreational allowance of 1 580 tonnes;
- iii. An allowance for other fishing-related mortality of 60 tonnes; and
- iv. A TACC of 1 480 tonnes.

The law does not say, "set a customary allowance or set a recreational allowance". Section 21 of the Fisheries Act states, "When setting or varying a total allowable commercial catch...the Minister shall allow for non-commercial fishing interests..."

What should be presented as MFish recommendations needs to read -

MFish recommends that the Minister:

Agrees to set a TAC of xxx tonnes for KAH1 and within that TAC allow for

- i. Customary Maori xxx tonnes
- ii. Recreational xxx tonnes
- iii. Other fishing-related mortality of xx tonnes
- *iv.* And then set a total allowable commercial catch (TACC) of xxx tonnes

We do not agree with the recommendations made to the Minister regarding allowances for each TAC. The Ministry is obliged to be more accurate in its wording of recommendations to the Minister.

7.2 The need for a rebuild

Some of the commercial catch of kahawai is taken as an unavoidable by catch while fishing for other species. The obvious place to effect better management is to reduce the commercial catch by removing the offending purse seine catch history before setting a TACC. This would mean all quota would have to be used to cover genuine by-catch with insufficient left for targeted purse seine activities. This is fair and just as it is the purse seine vessels, which actually target whole kahawai schools that are the root cause of the conflict between commercial and non-commercial fishers.

Non-commercial fishers believe the Minister has an opportunity to return the kahawai stock to previous abundance levels by insisting on cautious management and not merely relying on the crude allocation process set out by the Ministry.

The overall objective should be to restore the kahawai schools and maximise the value of kahawai to New Zealanders.

Specific objectives of a rebuild strategy would be:

- 1. To restore the availability of kahawai to recreational, customary and sustenance fishers.
- 2. To improve the management of non-commercial fisheries.
- 3. To reduce the impact of kahawai fisheries on associated and dependent species.
- 4. To use a precautionary approach to the management of this important inshore shared fishery until more accurate data is available.
- 5. To develop a harvest strategy that will meet these objectives.

Despite previous attempts to limit the purse seine catch these limits seem to have had little or no impact on rebuilding this fishery. A rebuild is required to improve the fishery and add value to the resource. The state of the kahawai fishery has been of concern to non-commercial fishers for almost 20 years. These concerns, although mentioned have largely been ignored in the IPP.

7.3 The path to recovery

The Minister needs to be given an option that will rebuild the kahawai stocks. We consider the practice of targeting kahawai by purse seine is not only excessive and wasteful, it also seriously adversely impacts on the rights of other legitimate users. It is a very efficient bulk fishing method that can land and sell fish for a low price below what would be economic for other methods. It has been the increase in catch by this method that has coincided with the disappearance of kahawai around much of the coast.

The Fisheries Act does not provide the Minister with a statutory provision to prohibit method once quota has been allocated. Thus the targeting of fish is allowed for although the method employed can be wasteful, and sub legal mortality is not accounted for.

We propose that MFish remove all the kahawai target purse seine catch history from its calculation for setting the TACC. We have deducted the 1997 to 2002 average purse

seine target catch for each Quota Management Area in order to calculate what the TACCs would be in our alternative management option.

The methods used in calculating the recreational harvest estimates in 1996 have been shown to be seriously flawed. Those estimates cannot be used by the Minister in their current form when allowing for recreational and customary take. The 2000 and 2001 surveys provide the best information available at this time, although there is concern that some estimates may be biased high. The KAH2 (East Cape, Hawke Bay & Wairarapa) estimate for 2000 is believed to be too high and should not be used. We submit that the only option for the Minister is the allow for the average recreational catch estimated from the 2000 and 2001 surveys, except for KAH2 which should use the 2001 estimate only.

Allowing for this amount of recreational catch does not mean that it will all be caught. Amateur fishers may choose to conserve kahawai and assist in the rebuild. Some clubs and many individuals already release kahawai voluntarily. However, these estimates are the best information available to the Minister and they must be used.

Kahawai is an important Maori customary food source. However, we believe much of kahawai harvest by Maori is taken within the amateur bag limits. In the absence of more accurate information the Minister should allow for Maori customary harvest at a level of half the revised recreational estimates. It is not sufficient on it own to set an allowance for customary fishers. The Minister must ensure that the priority right of customary fishers to access kaimoana is protected. The Treaty of Waitangi (Fisheries Claims) Settlement Act 1992 does not say that Maori commercial rights have priority over Maori non-commercial customary rights.

Access to reasonable catch rates must be restored for all non-commercial fishers. A rebuild of this fishery is the only way to enhance non commercial access and catch rates. Not only will rebuilding not occur at the level of TACC proposed by the Ministry in the IPP, the stocks will be allowed to fall to 40% of the current level before TACC's are able to be cut. This would be a tragedy.

7.4 Revised kahawai TAC

Before allowing for non-commercial fishers and setting the TACC the Minister must decide the Total Allowable Catch (TAC) for kahawai. Non-commercial fishers want a more conservative (lower) TAC. As the rebuild occurs, there will be greater availability of larger fish for non commercial fishers to catch.

MFish estimate that the biomass (total weight of all fish) of kahawai in 1996 was about 50% of virgin stock biomass. They acknowledge that this estimate is very uncertain. The shocking thing is that MFish and industry would allow kahawai to be fished down to 20% of what it once was, to fulfil their "maximum sustainable yield" policy/aspirations. The MFish proposal could see as much as 60% of the remaining stock removed before any management action needs to be taken to ensure

sustainability. This could mean 60% less schools and future non-commercial catches plummeting to below our, already dismal, catch rate. Not only that, the fish we catch would get smaller and smaller.

Of all our fisheries, kahawai is the most inappropriate species have the standard MFish management objective of "maximum sustainable yield" (MSY), which means fishing the stock heavily to maximise harvest of small fish. Kahawai is not an industrial fishery like hoki or orange roughy - it is the people's fishery and it must be allowed to rebuild. If the catch history of kahawai caught using bulk commercial methods is eliminated the target of "maximum sustainable yield" becomes irrelevant. Having said that, we can also expect the commercial by-catch of kahawai to grow over time. The notion of fishing to achieve "maximum sustainable yield" and Bmsy simply does not apply to kahawai.

Don't forget last year's kingfish decisions. The Minister effectively ruled that kingfish are to be fished above Bmsy, with a very good chance that this fishery will recover to the benefit of all non commercial fishers and commercial fishers catching kingfish as a by-catch.

If MFish are going to quote the 1996 stock assessment in support of the TAC proposed in the IPP, then it deserves closer examination. Non-commercial representatives are not convinced that the critical values in the stock assessment are correct. The sustainable yield MFish quote is 7600 tonnes per year. This is based on natural mortality of 0.20 and a biomass that will support the maximum constant yield less than 20% of the virgin biomass. If the Ministry is going to set the TAC, it should use the best estimate of natural mortality which is 0.18 (Jones et al 13) and it must set out to manage this fishery above the biomass that will support maximum sustainable yield.

Because we totally reject the single management option presented by MFish - the status quo - we have had to develop the alternative option below.

We recommend:

- A TAC of 6900 tonnes derived from the best estimate of natural mortality.
- Discounting the purse seine catch history for kahawai target shots. Therefore the TACC would be largely based on the by-catch of kahawai.
- Recreational harvest estimates from the 2000 and 2001 surveys.
- Customary harvest of half of the recreational harvest.
- Estimates of other sources of fishing related mortality at 5% of all commercial fishing methods (not only purse seine).
- Minimum commercial allowance in the Kermadec area where a separate species of kahawai is found.

13 Jones, B. Cresswell, P. Drummond, K. McKenzie, J. (1992). Kahawai. NZ Fisheries Assessment Research Document 92/2.

There is a good record in commercial fishing returns for each purse seine shot by target species. The Ministry will have the final figures, but we have revised the TACCs based on the average purse seine catch by QMA for the five years 1997-98 to 2001-02. They show: that 90% of kahawai purse seine catch came from target shots in KAH1; 88% of kahawai caught by purse seine in KAH2 came from target shots; 75% of kahawai caught by purse seine in KAH3 came from target shots; and the small purse seine catch in KAH8 was assumed to be 75% target also.

Non-commercial fishers strongly urge the Minister to allow for customary and recreational fishers under section 21 of the Fisheries Act (1996) then to set the TACCs in each management area as follows:

Table 1. Distribution of the kahawai TAC by quota management area.

QMA	Tonnage to allow for	Tonnage to allow for	Tonnage to allow for	Commercial Allowance	Total
	Customary	Recreational	Other Mortality	TACC	TAC
KAH1	1000	2000	22	430	3452
KAH2	375	750	5	115	1245
KAH3	275	550	7	155	987
KAH4	3	4	0	10	17
KAH8	200	400	28	565	1193
KAH10	2	3	0	1	6
Totals	1855	3707	62	1276	6900

7.5 Deemed value

If the Minister agrees to remove the catch history of purse seine target fishery then the deemed value could be set at 32 cents. However, if he insists on the status quo for this fishery the deemed value must be set at .86 cents.

8. Conclusion

option4, NZBGFC and NZACA thank the Minister and the Ministry of Fisheries for the opportunity to make this submission. We look forward to the Minister's reply. We have taken on this task as we believe the public's concerns for kahawai have not been acknowledged and they are entitled to more consideration than has been offered in the IPP.

The public believe the kahawai have been stolen from them and they want their rights to this fishery restored. If an unjust allocation of commercial quota is made in perpetuity

New Zealanders will lose part of their heritage and also forego the rights of future generations to reasonable access.

We reject the Ministry's commercial allocation proposal in the IPP. We will not accept the dregs of an overheated purse seine fishery that was unconstrained until 1991. We intend fighting with every available resource we have and for as long as it takes to achieve a just and fair outcome. Do not underestimate our resolve in this matter.

If insufficient allowance is made for non-commercial interests in this very important decision the Crown could face a challenge and possible compensation claims from commercial fishers in the future. We recommend that the Minister considers the historic claims to this fishery by customary Maori and recreational fishers prior to the introduction of the purse seine fleet. This fishery is now the most contentious of all inshore shared species and the views of the public are clear: they want their fishery back and we support that claim.

It is an affront to the people of New Zealand that our precious kahawai are caught by such destructive methods, exported for so little value and, we believe, used almost entirely as crayfish bait, pet food and fishmeal. This is insulting when it has far more value to us culturally, socially, economically and environmentally.

We have taken the opportunity here to address how the Ministry could help non-commercial groups to contribute in the future. There is still much work to do but we cannot let that stand in the way of a rebuild of our valuable kahawai fishery. A prompt response to the several requests for additional information will greatly assist us.

9. Recommendations

We submit that:

- a) the Minister should take a strategic view and maximise the value of the kahawai fishery for all New Zealanders
- **b)** the Minister should agree to rebuild the kahawai fishery.
- c) the purse seine fishery has been responsible for fishing this stock down.
- **d)** the Minister should remove the catch history of target purse seine kahawai fishing from the commercial catch history when considering the TACC.
- e) The Minister must not include purse seine catch history for the 443 tonnes of illegally taken kahawai in KAH1 which was over and above the purse seine catch limit.
- f) the 1996 recreational harvest estimates were not based on a reasonable estimate of the number of recreational fishers and should not be used.
- **g**) the Minister should use the recreational harvest estimates from the 2000 and 2001 recreational surveys.
- **h)** The Minister must take action that will ensure that there are fish available to be caught to meet Maori customary needs.
- i) the Minister should set the allowance for other sources of fishing related mortality at 5% of all commercial fishing methods.

- j) the Ministry of Fisheries must address the affects of a declining kahawai stock on associated and dependent species such as seabirds, gamefish and marine mammals.
- **k**) the Ministry of Fisheries must take account of the intrinsic value of kahawai surface schools.
- l) the Ministry of Fisheries needs to take into account the objectives for recreational fisheries as set out in the Cabinet Paper FIN Min (01) 28/4.
- **m**) the Ministry of Fisheries must be more accurate in its wording of recommendations to the Minister when setting a TAC and "allowing for" non-commercial fishers.
- **n**) the Minister should use a precautionary approach to the management of important inshore shared fisheries were there is uncertainty in information.
- **o**) the Minister should set the minimum TACC for KAH10 to protect the rare northern species of kahawai (*Arripis xylabion*).
- **p**) the best estimate of sustainable yield for all New Zealand is 6900 tonnes and that the package of recommendations made here would lead to TACs and TACCs as follows:

QMA	Tonnage to allow for	Tonnage to allow for	Tonnage to allow for	Commercial Allowance	Total
	Customary	Recreational	Other Mortality	TACC	TAC
KAH1	1000	2000	22	430	3452
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Totals	1855	3707	62	1276	6900

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Appendix 1

OBSERVATIONS ON CORRELATION BETWEEN KAHAWAI BIOMASS AND POPULATION OF BARRACOUTA IN THE CAPE BRETT TO BREAM TAIL AREA NORTHLAND

My name is Evan Daysh. Between the mid 1970s and 1982 I was Commercial Fishing out from Whangarei.

I moved to Dunedin in 1983 and returned to Whangarei in 1989 and have operated a Charter Boat Business since then.

Before 1983 I can clearly remember vast schools of Kahawai in every harbour, bay and estuary in our area. These were accompanied by huge flocks of terns and red-billed gulls.

Barracouta were a rare catch in our area in those days and confined only to the winter months.

During the six or seven years I was away, commercial fishing interests decimated Kahawai population and by 1991 the large schools of Kahawai had disappeared entirely from most of the previously high density areas, the population of terns was also down by about 50%. By 1992 barracouta were becoming common during the winter months but always disappeared when the water temperatures reached 18 degrees.

In the 12 years since the barracouta population has exploded and have become acclimatized to warm water and are now quite happy in 22 degree water.

They now infest the entire ocean from the beach out to the deep hapuku grounds.

It is my belief that Kahawai and feed on the same food and the destruction of the Kahawai stock during the 1980's has allowed barracouta to fill the vacant niche in the food chain.

However our local Kahawai population is slowly recovering. I have recently witnessed some schools of large adult Kahawai.

These breeding fish need protection from purse seiners and ring netters for at least another 5 - 10 years to allow the stocks to fully regenerate.

The huge numbers of barracouta are a nuisance to all fishermen both recreational and commercial and I feel that if the Kahawai stock was allowed to fully recover it would compete with and hopefully restore the original balance.

An increase in the Kahawai biomass should also promote an increase in the tern population.

These are my personal observations but I am positive that if the Ministry were to canvass experienced Charter Boat Skippers on the Northland Coast, they would verify my assessment.

It would be a criminal waste of resource to give Kahawai quota to fishing companies that are able to target entire schools.

Put Kahawai on quota by all means but limit it to a by-catch only for another 5 - 10 years.