In the High Court of New Zealand
Auckland Registry **CIV2005-404-4495**

Under Part I of the Judicature Amendment Act 1972

In the matter of an application for review

between

The New Zealand Recreational Fishing Council Inc, and New Zealand Big Game Fishing Council Inc

Plaintiffs

and

Minister of Fisheries

First Respondent

and

The Chief Executive of the Ministry of Fisheries

Second Respondent

and

Sanford Limited, Sealord Group Limited, and Pelagic & Tuna New Zealand Limited

Third Respondent

Affidavit In Reply of Richard Owen Boyd

Affirmed 18th **October 2006**

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I, **Richard Owen Boyd** of Wanaka, a fisheries scientist and consultant, solemnly and sincerely affirm that:

Purpose

1. I have the qualifications and experience set out in my affidavit of 31 August 2005.

2. The purpose of this further affidavit is to comment on certain matters raised in the affidavits of the Second and Third Respondents and on handwritten comments made by the Minister of Fisheries on a document obtained from the Ministry through informal discovery.

3. I acknowledge that I have read the Code of Conduct in Schedule 4 of the High Court Amendment Rules 2002 and I agree to comply with it.

4. I have read the following affidavits filed on behalf of the First, Second and Third Respondents in these proceedings:

   Affidavit of Paul Starr dated March 2006;

   Affidavit of Ross Winstanley dated March 2006;

   Affidavit of Vaughan Hilton Wilkinson dated May 2006;

   Affidavit of Peter Robin Todd dated 26 May 2006;

   Affidavit of Kevin James Sullivan dated 12 July 2006.

   Affidavit of D H Benson Pope dated 4 October 2006

Affidavit of Paul Starr

5. At paragraph 44 of his affidavit Paul Starr states that as the Minister's primary source of stock status and yield advice was based on a single stock, therefore his most reasonable option was to set the overall yield based on this analysis and to allocate yields between stocks based on the best estimate of the proportional distribution of catch.

6. As I stated in my first affidavit it would have been more appropriate for the Minister to have assessed the risks associated with the assumption that there is only one national kahawai stock. Scientific information on the biological stock structure of kahawai is uncertain and while tagging studies suggest some movement between areas which could be interpreted as indicating a single nationwide biological stock, most

tagged kahawai do not move from the area of tagging.[1] A significant proportion of the historical commercial purse-seine kahawai catch has come from the area established as KAH1. This is also the area in which recreational fishers have voiced the greatest concerns about the abundance of kahawai. Allocating the yields between kahawai areas based on a proportional distribution of past catches as the Minister has done, may increase the risk to the sustainability of kahawai within certain areas if there are separate biological stocks or sub stocks of kahawai.

Affidavit of Vaughan Wilkinson

7. At para 160.5 of his affidavit, Vaughan Wilkinson refers to a statement in brackets at the end of para 4.3 of my second affidavit. At para 4.3, I stated;

> 'The apparent large increase in the recreational catch in 1999 and 2000 in Figure 1 is a consequence of a change in method for estimating recreational harvest and, in my opinion, should be considered as un-substantiated until new research ... becomes available.'

8. Vaughan Wilkinson uses this statement in support of his thesis that recreational harvest estimates used by the Ministry were implausibly high. None of the statements in para 4.3 of my second affidavit refer to the plausibility or implausibility of any of the harvest estimates.

9. To clarify my earlier statement, I was referring to the recreational harvest shown for the years 1999 and 2000 in the graph in Figure 1 of the 2004 FAP, compared to the recreational harvest estimates derived for 1996 derived from the previous national marine recreational fishing survey in 1996.[2] It is the apparent magnitude of the change in harvest levels between the 1996 and the 1999 and 2000 surveys that I consider un-substantiated. This is because of differences in methodology between the surveys. I deal further with this matter below where I comment on para 16 of the affidavit of Peter Todd.

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[1] Wood, B.A., Bradstock, M.A. and James, G.D, 1990: Tagging of kahawai *Arrippis trutta* in newz 1981-94. Newz Fisheries Technical Report No. 19. 16p.

[2] In now re-examining the graph at the top of page 461 of the FAP, I see that it appears to contain an error, but this does not affect my evidence. The error is that Figure 1 shows no recreational harvest at all for the year 1998. This is clearly not a possibility.

Affidavit of Peter Todd

10. At para 8 of his affidavit, Peter Todd notes that the Ministry has undertaken extensive research in respect of non-commercial fisheries in recent years and in support of that statement, attaches a Chronology of Research to his affidavit containing a list of more than 100 research projects that he states have been undertaken for non-commercial fisheries since 1997-98. This statement is not entirely accurate as a number of the projects listed in the Chronology of Research were withdrawn by the Ministry and have never been undertaken.

11. It is evident in the Chronology of Research produced by Peter Todd that very few of the non-commercial projects that have been undertaken were directed into the status of kahawai stocks or the recreational kahawai fishery. Given the known national significance of kahawai as the second-most frequently harvested recreational species, longstanding recreational concerns about the kahawai resource and declining catch rates, and the Ministry's acknowledged uncertainty about the status of kahawai stocks, I would have expected the Ministry to have placed a higher priority on research into this species and in particular research specifically aimed at addressing issues raised by the recreational sector in relation to kahawai.

12. The affidavit of Peter Todd at para 16 notes the conclusion of the MRFTWG, of which I was also a member, that the harvest estimates from the 1996 survey were unreliable due to a methodological error. In fact, the effect of the 1996 error would be to underestimate the recreational harvest. Regardless of the effect of the error, the 1996 estimates were therefore considered unreliable. Any apparent increase (or change) in the kahawai harvest between that survey and the later surveys may therefore not be real. The point I am making here is in relation to the magnitude of any change in the harvest estimates, rather than the size of any of the harvest estimates.

13. In his affidavit at paras 16 and to 17, Peter Todd discusses the conclusions that had been reached from the national recreational fishing surveys in 1999/2000 and 2000/2001 after reviews and further technical evaluations. He finishes para 17 by stating that the information that was used was the best available at the time the advice on kahawai was prepared. I agree with Peter Todd's statement that the information was the best available at that time.

14. There was (and still is) considerable uncertainty and debate about the reliability of the 1999/2000 and 2000/2001 recreational harvest estimates. In spite of qualifications that have been attached to those estimates, the national surveys provide the only information on recreational harvests for the majority of fish stocks. There was no other scientific information available on which to base estimates of recreational harvest.

15. The Marine Recreational Fisheries Working Group (MRFWG) did identify a number of what appeared to be implausibly high recreational harvest estimates for many species in QMA2, including kahawai, in the 1999/2000 survey results. As the lead person for Kingett Mitchell Ltd who undertook the 1999/2000 and 2000/2001 national marine recreational fishing surveys, I was responsible for examining the reasons for this with our subcontractors and reported this to the Ministry and the MRFWG. The MRFWG was concluded that a small number of very avid fishers were included in the diary survey in 1999/2000 and this had an undue effect on the harvest estimate for QMA2. In the 2000/2001 follow-on survey, the harvest estimates for QMA2 fell considerably. Subsequent discussions at the MRFWG was that the 2000/2001 survey results for QMA2 appeared to be more reasonable. I also note that at paras 92 and 93 of the 2004 FAP, the Ministry used the 2000/2001 recreational harvest estimates for KAH2 and KAH3 as it considered the 1999/2000 implausibly high. This accords with my recollection of MRFWG discussions.

16. At para 35 of his affidavit for the Third Respondents, Paul Starr notes the advice of the Marine Recreational Fisheries Technical Sub Group (MRFTSG) that the estimates of recreational catch from the 1999/2000 and 2000/2001 surveys may be implausibly high for some species. At para 36, Paul Starr states that kahawai cannot be excluded from this statement. However, Starr does not indicate which estimate (if any) should be used as an alternative to the 1999/2000 and 2000/2001 survey results.

17. What is clear in both the affidavits of Peter Todd and Paul Starr is that there has been detailed examination of the recreational harvest estimates from the national marine recreational fishing surveys. The estimates are sensitive to a number of key assumptions and many consider the estimates to be unreliable. However, these were (and remain) the only recreational kahawai harvest estimates available for most stocks. In my opinion they were the best scientific information

available to the Ministry at the time the Ministry provided its advice to the Minister in 2004 and 2005.

18. At para 23, Peter Todd refers to a Draft Medium Term Research Plan that is attached to his affidavit as Exhibit E. Peter Todd states that overall, the Ministry has undertaken extensive research in respect of recreational fisheries. In my opinion, this statement does not accurately capture the scope of the research that the Ministry has undertaken on recreational fisheries. Section 4 of Todd's Exhibit E indicates the three main areas of recreational fisheries research. These are recreational harvest estimates, managing recreational harvests and research on fisheries in discrete areas. While I do not question the importance and usefulness of these three areas of research, they have a narrow ambit, all being aimed at estimating and managing harvests to ensure sustainability. Without an understanding of the values that recreational fishers place on the fishery, ensuring sustainability alone may not address recreational needs or interests. For example, the Ministry's research does not enquire into a number of topics of particular significance to providing a satisfactory recreational fishery. These include enquiring into what catch rates provide a reasonable fishing experience, whether recreational fishers prefer to catch fewer large fish or more small fish, and how can management best achieve these sorts of outcomes.

Affidavit of Kevin Sullivan

19. At para 24 of his affidavit, Kevin Sullivan states that kahawai are considered to form one stock based on tagging studies. In para 25 he indicates that although the kahawai is considered to form one New Zealand wide stock, kahawai stocks have been defined as separate units for management purposes. Kevin Sullivan indicates that to achieve sustainability goals, the resource should be treated as one stock and it would generally be appropriate to make the same variations to the TACs for each stock. In my opinion, this conclusion is valid only if there is reasonable certainty that there is one nation wide biological stock. I do not believe this certainty exists.

20. I noted in my first affidavit that it is not certain whether kahawai form one nation wide stock or whether there are a number of separate stocks. The possibility that there may be more than one kahawai stock or a number of sub stocks is referred to in the Annexures to the affidavit of Vaughan Wilkinson marked VW-1. I refer to Papers from the Workshop

to review fish stock assessments for the 1987-88 New Zealand fishing year where it states;[3]

> 'Kahawai have been managed as a New Zealand wide stock; however, recent tagging information indicates that, though there is biologically one stock, there may be several substocks.'

21. And in the Recommendations from the Fishery Assessment Plenary, May 1989[4] where it states;

> 'Kahawai is currently managed as one stock around New Zealand. Further analysis of the kahawai tagging database may reveal whether separate substocks exist and also the extent of the movement between areas.'

22. To my knowledge, no further analysis of the kahawai tagging database has ever been undertaken by the Ministry in order to assess whether separate stocks or sub stocks of kahawai do or do not exist. In his first affidavit, John Holdsworth notes that kahawai tagging studies have shown limited movement of most recaptured fish. The limited movement of kahawai between areas indicates that it is possible there are a number of separate stocks or sub stocks throughout New Zealand. There is no universally accepted definition of what constitutes a "stock" in fisheries science and there are many problems in defining in scientific terms just what constitutes a stock. The definitions in use in the scientific literature range from populations with reproductive isolation between them (usually with geographic separation and a genetic difference), to populations with extensive gene flow and few geographical barriers. At a practical or administrative level, a stock is frequently a fisheries management construct to manage a population of fish in a particular area separately from populations in other areas in order to ensure sustainability within a particular part of the range of the species. This accords with the definition in the 1996 Fisheries Act. This is a conservative approach because splitting populations for management (in the absence of full knowledge about stock boundaries) has fewer risks than the opposite approach.

23. A number of quota management stocks were defined when kahawai were introduced into the quota management system and I agree that

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[3] At page 4 of the Annexure VW1.
[4] At page 14 of the Annexure VW1.

decision was appropriate.[5] In my opinion, subsequently treating the kahawai resource as a single New Zealand wide population by making the same variations to TACs for each quota management stock risks undoing the benefits of the earlier decision. This is especially so when there is no evidence that the Ministry considered any alternative approach to varying the TACs except to treat kahawai as a single nation wide biological stock and to vary all TACs by equal proportions. This approach was adopted even though there is a long history of concern by recreational fishers that kahawai abundance has declined and mostly in KAH1.

24. At para 29, Kevin Sullivan states that recent catch levels of kahawai appear to be sustainable based on the available evidence. Sustainability by itself (e.g., B_{MSY}) does not necessarily meet recreational needs, such as providing reasonable catch rates and catches of large kahawai. In fisheries science terms, depletion is a term that is usually synonymous with over-exploitation or a reduction in biomass to a level below B_{MSY}. However, recreational fishers may use depletion to describe resource abundance that does not provide a satisfactory fishery. Issues affecting recreational fishers may be poor catch rates or a catch comprised mainly of small fish. Recreational catch rates may be low because for some species, recreational fishing methods may not be very efficient, even where the population is sustainable at or above B_{MSY}.

25. At para 30, Kevin Sullivan states that theoretically the reduction in total extractions over time is likely to have resulted in the stock increasing in abundance. I agree. However, the words 'over time' need to be put into context. Until the commercial purse seine fishery developed in the 1970s, kahawai stocks were only lightly exploited throughout New Zealand. Until that time, anecdotal evidence suggests that there was a healthy recreational fishery and abundant kahawai stocks. There will have been a large reduction in kahawai biomass from a near virgin stock size to much lower levels as a result of the development of the purse seine fishery and large commercial harvests since the 1970s. A reduction in biomass is the most likely cause of the decline in recreational kahawai catch success reported by recreational fishers since the 1970's. The reductions in total kahawai extractions and any increase in abundance referred to by Kevin Sullivan are comparatively

[5] Fisheries (Declaration of New Stocks Subject to Quota Management System) Notice (No 2) 2003.

recent. Current commercial harvests are still much larger than prior to the development of the purse seine fishery. These recent catch reductions are unlikely to have restored biomass to the much higher levels that existed prior to the purse-seine fishery, although they have probably resulted in some increase in biomass.

Minister of Fisheries' Handwritten Notes

26. Informal discovery of Ministry records has occurred following the commercial fishers counterclaim. This has discovered some handwritten notes made by the former Minister of Fisheries. These are contained at the end of a paper from the Ministry of Fisheries to the Minister dated 1 May 2001 on the subject of recreational fishing rights. A copy is attached as exhibit **A**. The Minister's signature appears with the date 3/5/01 under which he has made handwritten notes addressed to 'Dylan'.

27. After some initial comments on the quality of the paper, the Minister made the following observations:

> '1. In general, where recreational and commercial exist the superior technology of the latter (& the different mindset) leads me to suggest that the CPUE (if you like) considered ideal by each sector is different. That raises problems with the requirement to "utilise" which leads to BMSY as the holy grail. Spatial allocation solutions exist in s311, but excluding commercial fishing is the only (& blunt) instrument. Therefore should we manage eg SNA1 above BMSY? Or put in more fencelines & manage SNA1A (Hauraki Gulf) above BMSY. My thoughts here are understandably a bit loose.
>
> 2. Some species (kahawai/kingfish) might be recreational only. Certainly this could be economically much more efficient given the prospective future value of a "sea salmon charter" industry. I kind of notice the absence of that kind of argument.'

28. In my opinion, the Minister's comments are perceptive. The very different expectations and values commercial and recreational sectors place on fisheries resources mean that a single management target (B_{MSY}) may frequently fail to simultaneously meet the needs of both groups. In respect of kahawai, it is possible that managing to achieve B_{MSY} could provide the best outcome (maximum economic yield) for the commercial sector, but maintaining the biomass at that level may not achieve a satisfactory kahawai catch per unit effort (CPUE) for the

recreational sector. Although managing to a target above B_{MSY} would mean a lower sustainable yield from the resource, there would be greater numbers of kahawai in the sea. There should also be more large fish in the population. A population above B_{MSY} should therefore result in a higher CPUE for both recreational and commercial fishers and more large fish in the catch. As the Minister points out, the commercial sector employs superior technology. Therefore it is more able to effectively harvest the resource at a lower biomass than the recreational sector.

29. I also note the Minister's observation that some species might be recreational only. The Minister indicates he noticed the absence of that argument.

30. In my experience, the Ministry frequently adopts a narrow or fixed policy approach in its consideration to allocation between the sectors. The Minister has picked up on this weakness in the paper. The narrow approach of the Ministry is also evident in its stated preference for a claims based allocation model and the use of proportional allocation between sectors in its approach to kahawai in the 2004 FAP. It is also evident in an apparent lack of understanding that managing to provide a reasonable recreational fishery may in some cases require policies that provide a certain quality of catch, not just a quantum of catch, or that some species might be best managed as recreational only.

31. I believe that it is logical for the recreational sector to expect that the Ministry of Fisheries would at least give serious consideration to alternative policy approaches and discuss these in detail with sector groups. I did not seen any evidence in the 2004 FAP that the Ministry gave serious consideration to adopting alternative approaches in giving its policy advice on kahawai. However, I note that in the 2005 FAP, the Ministry addressed a much wider range of considerations in discussing management options for kahawai although it continued to indicate a policy preference for proportional reductions to recreational allowances if a lower TAC was set.

Affidavit of the Hon D H Benson Pope

32. At paragraph 85 the Minister notes advice given to him in annex 1 to the IPP 2005. At paragraph 85.6 the Minister refers to advice he received that the recreational harvest had likely remained reasonably constant over the mid-1980s to mid-1990s and increased from 1996 to 2000. This was in response to submissions by the recreational sector that

recreational catches had declined. I have very carefully considered the advice to the Minister given in paragraphs 459 to 462 of the FAP. I do not consider that this advice to the Minister is scientifically sound. There were no surveys to estimate recreational harvest prior to 1991. All estimates of recreational harvest prior to 1991 are assumed, for the purpose of the preliminary simulation modeling of kahawai stocks by Dr Elizabeth Bradford in 1996, and updated by her in 1997. As I have explained elsewhere, any apparent "increase" in recreational catch from 1996 to 2000 may be a result of changes in survey methodology, rather than a real increase.

33. At para 86 of his affidavit, the Minister states:

> 'Many of the individual circumstances concerning each fisheries management unit were inherently taken into account by my TAC decisions in 2004, which reflected recent catch history.'

34. It is not clear from this statement exactly how, if at all, the use of recent catch history takes into account the individual circumstances of each fisheries management unit (I presume by the words 'each fisheries management unit' the Minister is referring to each kahawai quota management area). The statement fails to state just how (or whether) the individual circumstances of each stock were indeed individually addressed. Although the Minister begins the above statement with the qualification 'Many', I am unaware of any individual stock circumstances in any of the kahawai quota management areas that would be addressed by the use of catch history. Matters common to all quota management areas clearly would be addressed by adopting catch history. I refer to the economic impacts on industry and the fact that the relative catch of sectors would not be altered. However, these are not matters concerning the sustainability of the stock, which I presume is the principal basis for the determining the level at which a TAC is set.

35. In his affidavit of 26 August 2005, John Holdsworth notes in paras 15.1 to 15.12 many of the consequences of using catch histories as the basis for TAC setting. The effects include a continued concentration of catches in the most heavily exploited area (KAH1), where there has been a long concern by recreational fishers about the status of the kahawai stock. Catch history as the basis for TAC decisions would not address this individual circumstance in KAH1, in comparison to other areas where catch history was also used but there is less concern from recreational fishers. In fact, the effect of using catch history across the

board risks entrenching any depletion of stocks that may exist in a particular quota management area. While scientific information on the sustainability needs of particular stocks may be limited, Holdsworth notes that there was information on recreational catch rates and anecdotal information on KAH1.

AFFIRMED by **RICHARD OWEN BOYD** at Wanaka this 13th day of October 2006 before me:)

A Solicitor of the High Court of New Zealand

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MINISTRY OF FISHERIES
Te Tautiaki i nga tini a Tangaroa

MINISTRY OF FISHERIES
BUSINESS GROUP PTS - Ho
CORRESPONDENCE No 35196
SUBJECT FILE REF 1/3/7
DRAFTED BY D. SMES
CLEARED BY
SENT TO MINISTER'S OFFICE 1.5.2001

1 May 2001

Minister of Fisheries

cc Associate Minister of Fisheries

This is the paperwriting marked "**A**" mentioned and referred to in the annexed Affidavit of **Richard Owen Boyd** affirmed at Wanaka this 18th day of October 2006 before me:

A Solicitor of the High Court of New Zealand

RECREATIONAL FISHING RIGHTS

Purpose

1 The purpose of this paper is to describe the current nature of recreational fishing rights and how they are used. It also describes the threats to the quality of recreational fishing that any policy reform could address.

PART I: Current recreational fishing rights

2 The basic legal right underpinning recreational fishing is an access right to go fishing in the sea for personal use. That is, it entitles a member of the public to fish in all areas as long as they abide by the rules and that area is not explicitly excluded by law.

3 The legal access right does not confer any particular quality of fishing. While the right to go fishing is clear, the law does not protect any particular level of take or catch rate.

4 Therefore a number of other statutory processes are important in defining the quality of fishing. These are:

- The setting of a collective recreational share of the fishery;
- The participation process;
- The spatial allocation process.

Individual access and use right

5 In statutory law there is a right for any person to go fishing in the sea for personal use. It is an access and use right which can be exercised by any individual member of the public.

6 At common law everyone has the right to take fish in tidal waters of all rivers, estuaries, and the EEZ, unless they are interfering with exclusive rights or are prohibited by statute.[1]

[1] This paper makes no statement regarding the nature of rights prior to 1983.

7 The most recent statutory limitation is the Fisheries Act 1983[2] which exempts any person taking fish, aquatic life, or seaweed from the sea from the requirement to obtain a permit[3], so long as they do not do so for sale and subject to any limitations the Crown may impose. This legislation limits any prior rights that may have existed in common law.

8 The limitations on this right are that any fishing must be in accordance with the amateur fishing regulations. The amateur regulations describe the conditions under which the public access right can be exercised.

9 The fishing regulations set daily bag limits, size limits, restrict fishing methods, and impose area and seasonal closures. The bag limits are not transferable (ie they can only be exercised by the person doing the fishing[4]), nor can they be accumulated over time (ie if the bag limit is not caught in any one day the remainder cannot be added to a future day's catch).

10 The public right to go fishing applies to anyone who is currently in New Zealand—neither residents nor tourists require any form of authorisation to go fishing in the sea, provided that they do not sell the catch and abide by the amateur fishing regulations.

11 The public right of access to the fishery for personal use can be eroded only by legislative and regulatory change that specifically excludes public fishing access. Nevertheless a strong access right offers no guarantee that the exercise of the right will result in the fishing opportunities or experiences desired by the public fishers.[5]

12 The law does not protect any particular level of take or catch rate associated with the public right to go fishing. However the legislation requires that fisheries are managed sustainably, so that fish resources are not being depleted over time. There is, however, no guarantee that the fish will be located in an area that is easily accessible by the public, or that their abundance or size reflects the desires of the fishing public.

Collective share of the fishery

13 Under section 21 of the Fisheries Act 1996 (and section 28D of the Fisheries Act 1983) the Minister of Fisheries allows for recreational fishing interests when making decisions about the Total Allowable Commercial Catch (TACC) in QMS fisheries.[6]

14 The 'allowance' made for non-commercial fishing interests (including both recreational and customary fishing) is a collective share of the fishery. For the recreational sector the collective share is not necessarily protected in law from re-allocation to other harvesting sectors. The Minister is able to vary the allowance each year, provided he or she has taken into account all relevant considerations.

15 The customary allowance has protection under the principles of the Treaty of Waitangi Fisheries Claims Settlement Act. The duty of active protection means that the Crown must ensure that Maori retain sufficient non-commercial share of the allowable take to meet their needs subject

[2] Until October 2001 when s89 of the FA96 comes into force. Public fishing is currently allowed through s62 of the FA83 and this is effectively the same as s89 of the FA96.
[3] Fishing for sale requires a fishing permit under s89. Maori customary non-commercial fishing requires a customary permit under the customary fishing regulations.
[4] An exception to this is the case of a special permit granted to disabled persons allowing another person to take their amateur bag limit.
[5] Similarly, among commercial fishers the ITQ right confers no guarantee of a particular catch rate or profit level.
[6] For non-QMS fisheries, the Minister must have regard to section 21 when setting a commercial catch limit.

to sustainability. (Wai 22 – Muriwhenua fisheries report 1986 para 11.3.7).

16 However there is nothing to prevent the recreational allowance (relative share) being reduced over time to accommodate the needs of other sectors, provided that the Minister took into account all relevant matters in reaching a decision. It follows that regulatory restrictions, such as bag limits or area closures, would be altered to match (at least roughly) the expected public take to its collective allowance.

17 The commercial share (TACC) also has some level of protection in law. The Minister has discretion to alter the relative shares within any particular fishery. However, the Crown is not protected under section 308 of the Fisheries Act 1996 against civil proceedings to claim damages when a TACC is set in a manner that reduces the commercial share in favour of the non-commercial share (i.e. the shares are re-allocated).

18 The Minister is protected against claims against a TACC reduction that arises from sustainability concerns. Since the TACC setting section of the Fisheries Act 1996 have not yet been commenced, there is no case law on the nature of the protection to the commercial share of the fishery contained in s308.

Participation Process

19 'Participation rights' refer to the rights to participate in decision-making processes that affect the management of the fishery. Under the Fisheries Act 1996, the Minister or Chief Executive is required to consult prior to making a range of statutory fisheries management decisions.

20 The wording in s12(1)(a) and s21(2) *is '...the Minister shall consult with such persons or organisations as the Minister considers are representative of those classes of persons having an interest [...] including [...] recreational interests.*

21 There is no formal mandated group that the Minister must consult with. Who the Minister chooses to consult with is discretionary at present and may vary on a case by case basis.

22 Developing regulations regarding the management of a fishery will, over time, have a significant influence on the nature and evolution of recreational fishing rights. The rules that define the right to go fishing, such as the different bag limits and closed areas, come about through a process of consultation.

23 Therefore the strength of the right over time is dependent, to a large extent, on the degree of organisation of local recreational fishing interests. If local fishing interests are well represented then regulations will evolve to reflect the value that the public places on their local fishing access and quality.

Spatial Allocation Process

24 'Spatial rights' refer to rights to exclude others from fishing in specific areas or rights to allow particular persons to fish in specific areas and set the conditions of such fishing. That is, owners of spatial rights can determine who has access to go fishing in particular places.

25 For recreational fishers, a form of spatial right is conferred via s311 of the Fisheries Act 1996. Under s311 areas may be closed to commercial fishing or commercial fishing methods for the purpose of improving recreational fishing. The exercise of this right is limited to situations

where:

- low recreational catch rates are attributable to the effect of commercial fishing in the area, and
- the conflict between recreational and commercial fishers has not been able to be resolved without creating a new grievance.

26 The process of dispute resolution (Part VII) and demonstration of adverse effects (section 311) is what gives rise to the 'spatial right'.

27 Tangata whenua have strong spatial rights within mataitai reserves set up under the customary fishing regulations. In mataitai, tangata whenua cannot prohibit non-commercial fishing, but they are able to set conditions of public access that replace the amateur regulations.[7] (Customary fishing in a mataitai requires a permit.)

28 In commercial fisheries, quota holders and permit holders in limited access fisheries also have a form of spatial right. Only the owners of fishing permits for particular areas are able to fish commercially in those areas. However they have no specific rights to exclude non-commercial fishers from the fishing grounds.[8]

PART II: Use of recreational fishing rights

29 In 1999-2000 a national survey of marine recreational fishing was carried out.[9] Results from this survey indicate the nature and extent of the exercise of recreational fishing rights.

30 Recreational fishing encompasses four main activities:

- fishing in the sea from a boat;
- fishing in the sea from the shore;
- underwater spear fishing; and,
- shellfish gathering from the sea.

31 The most prevalent technique is fishing from a boat as 68% of fishers have fished in the sea from a boat.

32 655,000 households, or 51% of all New Zealand households, had at least one member who participated in one or more of these activities in a twelve-month period ending in September 1999.

33 New Zealand recreational fishers made an estimated 14 million fishing trips in the 1999 year at an average of 13 trips per fisher. The most intensive users are Maori and Pacific Islanders who average 17 trips per fisher while the least intensive were those of Asian descent who averaged only 9.

34 The geographic spread of fishing trips is not uniform. The area from Waikato north contains three quarters of a million fishers, representing 55% of the total New Zealand recreational fishing

[7] Tangata Kaitiaki/Tiaki are able to make bylaws to regulate non-commercial fishing. Public consultation is required and the by laws are approved by the Minister of Fisheries. By laws must apply equally to all individuals.
[8] In theory the dispute resolution procedures could be used to consider a dispute in which commercial fishers claim that recreational fishers are having an adverse effect on commercial fishers.
[9] 1999-2000 National Recreational Marine Fishing Telephone Survey: Research Progress Report for MFish Research Project REC1998-03 (Unpublished)

effort. Auckland has the single largest concentration of fishers with 393,000, which is more than twice any other region.

35 The effort amongst recreational fishers is not uniform. 16% of fishers made more than 21 trips per year and accounted for 61% of the total trips. 24% of fishers made 1 to 2 trips per year and only accounted for 3% of trips.

PART III: Threats to recreational fishing rights

36 There are two possible categories of threats to recreational fishing rights:

- The area that the public can fish in might be reduced by new legislation.
- A range of factors might reduce the quality of fishing in a given area.

These two types of threat are discussed below.

Threats to the public access right

37 Threats to the public access right are a result of spatial exclusion by law. Laws designed to satisfy the demand for other uses might exclude public access rights for fishing. Other uses may be extractive or non-extractive.

38 There is competition for space from non-extractive uses such as marine reserves and marinas. Currently the Marine Reserves Act is used to exclude fishing from areas for the purposes of scientific study. The RMA is used for coastal planning and consents for various non-extractive uses.

39 The range of purposes for marine reserves may expand as a result of the current review of the Marine Reserves Act. In any case, as demand grows, it is likely that other statutory measures designed to meet the demand for non-extractive uses will be implemented or used more frequently (eg under the RMA).

40 Other extractive uses such as aquaculture are also competing for space. New technologies and increasing prices for these products will mean an increasing demand for space to be set aside in areas traditionally open to recreational fishing access.

41 Not all spatial rights granted for these purposes necessarily exclude recreational fishing however. Aquaculture for example may provide opportunities to fish for some species even though a marine farm is present on the surface.

42 To ensure that the public access right to fish for personal use is not unduly affected in the pursuit of other objectives it will become increasingly necessary to ensure that local recreational fishing interests are well represented.

43 Local information and management expertise will be necessary to maintain the quality of fishing in reduced areas and maximise the range of benefits derived from coastal resources. It will become increasingly necessary to prioritise recreational fishing objectives at a local level. To address the increasing uses of coastal space it is necessary to know what recreational fishers value most highly.

Threats to the quality of recreational fishing

44 Threats to the quality of recreational fishing can be a result of competition for the fisheries resources. These might result from intra-sector competition (within recreational sector) or inter-sector competition (between sectors).

45 Recreational fishing quality is also threatened by degradation of the ocean ecosystem by factors other than fishing such as pollution and sedimentation that reduce the productivity of the fishery.

46 Threats also arise from the process to manage fisheries. Management that does not explicitly target recreational objectives or provide for their needs could also reduce recreational fishing quality.

47 Other threats arise from environmental factors such as weather patterns. The potential failure of the fisheries management framework is also a potential threat. This could arise from a lack of knowledge or information about a particular fishery, or through unexpected events. These threats can not be directly influenced by the nature of the right or its management however.

Intra-sector competition

48 One threat to recreational fishing quality arises through a reduction in the availability of fish due to an increased overall recreational take or effort in a given area. Recreational fishing pressure in a given area might increase for any number of reasons, including:

- increasing population or concentration of population in particular areas leading to an increase in the number of fishers;
- new types of fishing methods and target species;
- increasing real disposable income;
- increasing technological development leading to more efficiency in recreational fishing;
- increasing market price of fish leading to increased take for consumption;
- other changes in demographics including age and ethnic profiles.

49 Not all recreational fisheries face the same pressures. Over time some may face declining recreational fishing effort, while other fisheries may face acute pressure from recreational fishing. Examples of acute recreational fishing pressure are blue cod in the Marlborough Sounds and snapper in the Hauraki Gulf. High value species such as rock lobster and paua are also facing significant recreational pressure.

Inter-sector competition

50 In many key recreational fisheries, commercial and customary fishing may compete for the same fish. Most inshore fisheries have some degree of rivalry between sectors—what is taken by one sector reduces what is available to be taken by other sectors.

51 The total commercial take is capped through the process of setting a TACC. Commercial fishing will not therefore impact on the collective share of the fishery that the recreational right entails. Commercial fishing should not threaten the overall sustainability of the fishery because the Minister would act to reduce the commercial take.

52 Localised fishing impacts may still occur as commercial fishing effort may vary in any particular area. The threat to recreational fishing quality is therefore due to the potential for

commercial fishers to cause local depletion in important recreational areas. This would include the threat of commercial effort varying to dissipate any gains made by recreational effort restriction.

Impacts of other activities

53 Poor management of the effects of activities on the land can lead to accelerated sedimentation, degradation of water quality, or excessive water abstraction, often with a disproportionately high impact on productive coastal waters. Intensification of land use, either through coastal residential development or changing agricultural land use in key river catchments, may aggravate the current situation.

54 The impact of poor management practices on the land affect fishers from all sectors with an interest in coastal fisheries.

Management Structure

55 An objective of sustainability does not necessarily provide for the objectives of recreational fishers on its own. Recreational fishers are more likely to be concerned with local abundance of particular fish. Overall sustainability is necessary for this but it is not sufficient on its own.

56 Within the current management framework there is not necessarily any local representative group who can prioritise the objectives of local recreational fishing interests. Therefore the knowledge of local recreational fishing needs may be strong or weak in any given situation.

57 Where local representation of interests is weak it is likely to limit the opportunities for enhancement and protection of the recreational fishing right. This would be a result of a failure to fully articulate or know the local needs. It could also lead to limited opportunities to undertake fisheries management measures, or influence land management controls, to enhance recreational fishing.

58 If gains, made through recreational limitations on catch, are dissipated by changing patterns of commercial fishing effort then there is no incentive to modify behaviour to enhance the fishery. The ability to generate binding local agreements is therefore important in determining the quality of fishing.

Conclusions

59 The nature of the legal right of access to the fishery is clear. However, it is subject to significant change through time and there is no guarantee that these processes will not erode the right of access or the quality of recreational fishing.

60 The key threats to recreational fishing are new uses for ocean space, which may exclude recreational fishers and local depletion caused by a number of factors including changing patterns of recreational and commercial fishing.

61 The lack of an exclusive management focus on recreational fishing interests means that the processes that may affect the access right will not necessarily take into account the impact on recreational fishers. It will also mean that opportunities for enhancement of recreational fishing may be lost.

Recommendation

62 It is recommended that you:

a) **Note this discussion paper**

Dylan James
for Chief Executive

Hon Pete Hodgson
Minister of Fisheries

3/5/01

Dylan. This is a bloody good paper. Its good to get sense a comprehensive problem destruction. That said, I've made a couple of comments in the text & would like to offer up the following bits & scattered logic.

1. In general, where recreational & commercial exist the superior technology & the latter (& the different mindset) leads me to suggest that the CPUE (bycatch) considered ideal by each sector is different. That raises problems with the requirement to "utilise" which leads to Binsy as the holygrail. Spatial allocation solutions exist in s311, but excluding commercial fishing is the only (& blunt) instrument. Therefore should we manage eg SNA1 above Binsy? Or put in more boundaries & manage SNA1 & (Kawakawa) above Binsy. My thoughts here are undoubtedly a bit loose

2. Some species (kahawai / tarakihi) might be recreational only. Certainly this could be economically much more efficient given the prospective future value of a "sea salmon ~~farm~~ charter" industry. I kind of noticed the absence of that argument.

PEH