

TE OHU  
KAIMOANA

The logo graphic consists of three stylized, horizontal, wavy lines in a dark blue color, positioned below the text 'KAIMOANA'.

Submission on the Department of Conservation's and Ministry  
of Fisheries' *Hector's and Maui's Dolphin Threat Management  
Plan – draft for public consultation*

from

Te Ohu Kaimoana

the Maori Fisheries Trust

24 October 2007

## **Introduction**

This submission responds to the draft Hector's and Maui's dolphin threat management plan (TMP) released for consultation by the Ministry of Fisheries (MFish) and Department of Conservation (DoC) on 29 August 2007.

This submission is from Te Ohu Kai Moana Trustee Limited (Te Ohu Kaimoana) – the corporate trustee for Te Ohu Kai Moana trust, which was established under s.31 of the Maori Fisheries Act 2004.

The purpose of Te Ohu Kai Moana Trust is to advance the interests of iwi individually and collectively, primarily in the development of fisheries, fishing, and fisheries-related activities, in order to:

- ultimately benefit the members of iwi and Maori generally,
- further the agreements made in the Deed of Settlement and to assist the Crown to discharge its obligations under the Deed of Settlement and the Treaty of Waitangi, and
- contribute to the achievement of an enduring settlement of the claims and grievances referred to in the Deed of Settlement.

In carrying out its role, Te Ohu Kaimoana works actively with iwi organisations who have received or who will receive fisheries assets under the Settlement. We also work actively with the wider fishing industry and participate in industry organisations to protect the interests of iwi and Maori as the beneficiaries of the Settlement.

This submission sets out matters of concern to Te Ohu Kaimoana and iwi about the proposals in the TMP. It does not, however, seek to undermine in any way any submission that you may receive from individual iwi or any iwi collectives. Nor does it remove any obligations on the Ministry of Fisheries or Department of Conservation to consult with iwi/Maori and other stakeholders in the appropriate fashion. In addition to this submission, we have also participated in the development of the New Zealand Seafood Industry Council's (SeaFIC's) submission that we support and with which we associate. Similarly, we support the submissions on the proposal that have been made by Ngati Ruanui and the Treaty Tribes Coalition.

## **Structure of Submission**

This submission is presented in 4 parts:

- Part 1 details our overall summary including our proposed solution
- Part 2 details our concerns about a number of aspects of the TMP
- Part 3 details our analysis of the IPP section of the TMP
- Part 4 provides our commentary on the Marine Mammal Sanctuary section of the TMP

Any queries concerning this submission please contact Tania McPherson or Craig Lawson at this office.

Naku noa na

Craig Lawson  
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## Part 1 Overall summary of submission and proposed solution

### Summary

It is important to all iwi and Te Ohu Kaimoana that the long-term viability of both Maui's and Hector's dolphin populations are maintained through long-term programmes that cost-effectively manage the risk to the dolphin populations.

Te Ohu Kaimoana has considerable difficulties with the proposals set out in the TMP, as well as the process involved in developing them, including the Ministry of Fisheries Initial Position Paper (IPP) and the Marine Mammal Sanctuaries (MMS).

Our difficulties include:

- inadequate consultation with iwi, inadequate consideration of the Treaty and the Fisheries Settlement
- the quality of information provided
- that critical information is lacking from the document
- a number of particular concerns with the IPP
  - Potential Biological Removals
  - Concentration on historical mortalities rather than efficacy of current controls
  - Treatment of risk
  - Impacts of proposed options on iwi commercial use
  - Impacts of proposed options on customary non-commercial use
  - Imposition of additional fisheries measures before the end of the 2007 calendar year

Our analysis suggests that the current fishing controls – both regulatory and voluntary – are managing the risks to the dolphin populations within levels that assure the long-term viability of these populations. The analysis for each population suggests that, contrary to the tone of the proposals, fishing does not currently pose an unacceptable risk to the long-term viability of the Maui's and Hector's dolphins.

This means that additional controls under the Fisheries Act, as well as establishing or extending marine mammal sanctuaries are not needed to manage the risk from fishing to within acceptable safe limits for each dolphin population. If measures are imposed we consider that these are unwarranted to protect the dolphin populations.

The additional measures are not needed to reduce the risk to dolphins to safe levels. We oppose these as they will impose unnecessary substantive restrictions on the ability of iwi and hapu to use the fisheries settlement assets – both commercial and non-commercial – as well as unnecessarily restricting other commercial and recreational fishers.

The only aspects requiring urgent action by Ministers is the commissioning of key fundamental research into the distribution, and abundance of each dolphin population as well as more detailed information on range of activity, seasonal and diurnal patterns as well as data on the age, sex and health information for each population.

As the TMP proposes separate programmes of action are required for each dolphin population. Regional fora involving the Ministry of Fisheries and the Department of Conservation working with iwi, commercial fishing groups and recreational fishing groups should be established. Those fora should then jointly agree and implement any additional measures that might be required as a result of the research to

minimise possible interactions of fishers with dolphins for each area where there are significant concentrations of dolphins.

### **Proposed Solution: Quality Information and Cooperation**

As stated above, Te Ohu Kaimoana considers it important that effective programmes are put in place to ensure the long-term viability of both Hector's and Maui's dolphins.

This will not be a short-term programme. Coherent and cohesive actions will be required for decades. For the individual populations of these dolphins to survive and thrive long-term, there must be a durable strategy for each population based on robust information and cooperative commitment of all participants. All sectors that pose risks – direct and indirect – must take ownership and be involved.

The actions under each strategy need to address the different situations that affect the different populations. For the correct actions to be taken, two ingredients are the key to achieving the over-all goal:

- Good information; and
- Commitments from all to develop, implement, monitor, review and modify effective actions over time.

This will require considerable political leadership at all levels. New Zealanders as a whole do not respond positively to a system that is based only on regulations and penalties. Experience shows that, over time, such programmes are either ignored or subverted.

The analysis of the current situation suggests that there is no immediate crisis and there does not need to be further measures imposed in the short term on the fishing industry. However, ongoing performance at least at the level of recent years will need to be sustained. This means there can be no complacency because in the absence of sustained performance additional controls may be needed.

To gain the greatest support from the broadest number of participants, any strategy must involve all participants in establishing and reviewing the programme and it needs to provide incentives for joint work. Regional fora involving the Ministry of Fisheries and the Department of Conservation working with iwi, commercial fishing groups and recreational fishing groups should be established.

We are optimistic that each region will be able to develop a suite of solutions that safely manage the risks for that dolphin population just as the regional fishing industry responded to problems in Canterbury when it became obvious that their fishing practices were inadequate. There are a range of positive options that could provide for mutually compatible solutions. However, these will require leadership and ownership by all. If agreement cannot be reached between fishing sectors or groups using different methods, it would need to be understood that the Minister would act to contain risk levels that assure the long-term viability of dolphin populations.

The development of those options must be based on much better information on the populations of dolphins themselves. Ministers need to commission research into distribution and abundance (including the spatial and temporal patterns of dolphin habitat use for particular populations along with information on their health).

Given the current estimates for Maui's dolphins, Te Ohu Kaimoana suggests that this is the highest priority. We propose that in addition to aerial surveys to estimate the abundance and distribution, survey methods should include the use of satellite tags on approximately 12 Maui's dolphins at least twice in the first year. It is suggested that these electronic tags are placed on at least four dolphins in three parts of known Maui's dolphin range including:

- Northern close to Kaipara Harbour
- Mid – in zone between Manukau Harbour and Port Waikato
- Lower in zone between Tongaporutu and Mokau

It should be noted that DOC's own research off Banks Peninsula (reported on pp 29) indicates that such tagging has no detrimental effects on the dolphins. It would provide significant new information to help manage any interactions between these dolphins and fishers in particular but also other marine users.

Provided the peer review for SCSI is completed immediately and it concludes that the range for the abundance for that population is as foreshadowed in officials' FAP to the Minister in 2006, we consider that the next highest priority for population research is to update the abundance estimates for the ECSI.

The data obtained from this priority research should be provided to a regional forum for each population. Each forum should be tasked to develop agreed programmes of action that would seek to minimise interactions with dolphins.

It is proposed that the data is used to develop risk profiles for each population (including parts of its range where there are significant differences) and method of fishing. Using this information it is suggested that proposals be developed to minimise unsafe interactions and ensure that PBR limits are not exceeded. This could be by resource partitioning (fishing where dolphins are not present), or by using techniques that minimise interactions, or by seasonal closures if the PBR limit is exceeded. The options could include:

- full year closures of areas (voluntary initially but through regulation after several years if requested by fishers) where there are high concentrations of the population of dolphins all year round;
- seasonal closures where the data indicates significant variations in distribution through the season;
- short-term adjustments, for example, stand-down periods with no fishing where and when there are indications that dolphins are present in locations where they were not expected – this information may come from feedback from other fishers or from satellite tags;
- extending the use of the voluntary code developed and used by SEFML, including trialling of pingers by set netters on WCNI;

Fishing would be allowed to continue subject to at least the current levels of controls and any additional measures where the forum agrees these are warranted to cost-effectively ensure the annual mortalities overall for the population will remain below the PBR for that particular dolphin.

In addition, we would expect to continue with the existing observer programmes but, through the direct cooperation of all the participants in these programmes, achieve a greater level of observations than previously practiced. This could involve cost-

sharing between Government and forum participants to trial electronic monitoring on a representative sample of vessels for each region.

We would also recommend that as part of these regional strategies additional actions are taken to encourage sightings of dolphins to be reported by all marine users regardless of whether it is a passive or active interaction. This information will assist in further developing the abundance and distribution patterns. This could include awareness programmes and the development of systems that make it easy to report sightings such as websites and 0800 numbers.

As stated above iwi and Te Ohu Kaimoana want to see a long-term threat management plan that all sectors own and make a success. We appreciate that the research set out in our proposal will take time – this is proposed, not to stall for time, but to be able to better focus actions by all participants.

We can commit to this course of action and we will be urging all iwi and fishers to positively contribute to the development of regional strategies. Our proposals are based on the fact that in all the dolphin populations, the recent performance of fishers under current controls has not exceeded the PBR for that population and is therefore not endangering the species.

We consider that these regional forums should be established immediately and begin to consider and implement approaches that would further minimise any dolphin deaths. We are willing to assist in the development of these fora.

We want to signal that it is critical that current controls continue for each of these areas and that the same (or better) levels of performance must continue to be reached until those controls are reviewed and adjusted as a result of the research. Those adjustments should then ensure that the programmes for each fishing method within the region obtain safe levels based on the latest abundance and distribution data.

To encourage the continued attainment of the current safe performance while the research is being undertaken, we propose that the Minister of Fisheries continue the current controls in ECSI. For the other populations the Minister should establish similar interim controls that allows him to close particular parts of the region to particular methods for the remainder of the fishing year should the PBR for the dolphin population involved be exceeded in any year.

## **Part 2 General Concerns**

### **It is important to effectively manage all risks to Hector's and Maui's dolphins**

It is important to all iwi and Te Ohu Kaimoana that the long-term viability of both Maui's and Hector's dolphin populations are maintained through effective actions.

Iwi and Te Ohu Kaimoana expect the government to promote and undertake reasonable programmes of action that will protect and maintain populations of Maui's and Hector's dolphins at levels that ensure their long-term viability.

The Minister of Conservation declared that Hector's dolphins were a threatened species in 1999 and the dolphins were subsequently re-classified as "nationally endangered" in 2003. The document states that this means that South Island Hector's dolphins face a very high risk of extinction in the wild. Maui's dolphins are classified as nationally critical.

For Ministers to have taken this action implies acceptance of responsibility on behalf of the country to ensure that long-term programmes would be undertaken to achieve appropriate cost-effective management of any threats.

Te Ohu Kaimoana has considered the TMP from the perspective that cohesive long-term action will be required across a range of sectors to ensure viability of each population. The TMP needs to set out the key action programmes that will be sustained over time along with any supporting conditions necessary for success.

An effective programme will require a significant investment over time by government departments and other participants. All programmes will require quality information and analysis. Action programmes will need to be adapted to changing circumstances in each population based on results.

Te Ohu Kaimoana has considerable difficulties with the proposals set out in the TMP, as well as the process involved in developing them. Given the deficiencies, we are not confident that an effective TMP will result from this process.

### ***Inadequate consultation with iwi, inadequate consideration of the Treaty of Waitangi and the Maori Fisheries Settlement***

Te Ohu Kaimoana considers that the processes followed and analysis to date does not give due recognition to the Treaty and the Fisheries Settlement. This is particularly surprising given that the Marine Mammals Protection Act is one of those listed under the schedules of the Conservation Act, which means that the requirements of the latter apply to the administration of the MMPA. Section 4 of the Conservation Act requires the Crown to give effect to the principles of the Treaty of Waitangi. As spelt out by the Courts this means, inter alia:

- a requirement to consult in good faith, and
- a duty of active protection

In addition, the Fisheries Act contains several references to the rights established by iwi/Maori in the Fisheries Settlement including the need to provide for input and participation.

We are unaware of MFish or DoC making particular efforts to consult with iwi directly over the TMP even though a number of the options will have a significant impact on the ability to use the assets and rights granted under the Settlement. Given the scale of measures set out in the TMP, along with the flow-on effects that reductions in access to fish will have for both commercial and non-commercial purposes, these proposals will have significant and perhaps debilitating impacts on most if not all iwi that about the West Coast of North Island and all iwi in the South Island, but particularly Ngai Tahu.

We strongly disagree with the implications arising from the statements regarding Section 5 of the Fisheries Act on page 60 of the report. The statements imply that because the TMP considers sustainability measures, and these apply generically to all commercial fishers, no issues arise with respect to the Fisheries Settlement.

The Settlement is set out in statute to be “full and final”. Iwi will always hold the Fisheries Settlement – while there is an ability to sell within the “iwi” pool, there is a legislated bar on selling to a broader market. This legislated bar was put in place to ensure the Settlement endures.

The final settlement has responsibilities for both parties – for it to have enduring value both partners must make efforts to advance the agreements that were the basis of the Settlement. In the case of the Fisheries Settlement that was for enduring rights to continue fishing on a sustainable basis.

Te Ohu Kaimoana and iwi consider that the Crown has ongoing responsibilities as spelt out by the Courts to provide active protection to the Settlement and not impose policies that would devalue it unnecessarily

This does not mean that there can be no change but it does mean that careful consideration of the effect on the Fisheries Settlement is needed for any change and that this can only be justified if it is needed to achieve sustainability of fisheries (in the widest sense as required by the Fisheries Act). In the absence of such a justification, explicit agreement by iwi is needed before there can be any attenuation of the Settlement.

In calling for this consideration we are not trying to make a case that would have the quota held by iwi treated differently to other quota. Rather we are reminding the Crown that when dealing with issues that impact on quota, any changes should be to the minimum necessary to achieve the sustainability measures because the Crown has a responsibility to

- maintain the quality of the QMS (for the incentives it provides for sustainable management) and
- maintain and further the Settlement (with quota being the currency of the Fisheries Settlement).

It does not have an unchecked ability to implement measures without proper justification.

While Te Ohu Kaimoana has particular responsibilities with respect to the commercial assets created by the fisheries settlement, we consider it essential that the commercial and non-commercial aspects of the Settlement are implemented in a cohesive fashion.

## ***Quality of information provided***

We consider that the material provided in the document is deficient:

### *Problem definition*

It is critical to the TMP that there is a clear problem definition. We do not consider that the document clearly articulates this. From our reading of the document and participating in discussions with officials we understand that the underlying intent is to manage human interactions such that human-induced mortalities do not exceed the Potential Biological Removal (PBR) for the particular population. We consider the use of PBR with its safety limits later in this submission but the calculated PBR is directly in proportion to the current estimates of each population. The critical test of whether the measures are successful is to know whether the abundance of each dolphin population is increasing or decreasing over time.

### *Lack of fundamental science or poor science*

A first step to managing interactions between human activity and species is to gain good knowledge about the population over time. There needs to be regular distribution and abundance surveying using consistent methods to develop a good knowledge of the status of the populations.

The document does not report that the establishment and change to the threat classifications arose from a review of this critical information by DoC. Nor does it set out that subsequently there have been extensive efforts to establish these critical figures. On the contrary, it reports repeatedly that currently there is an acute shortage of quality information on both Maui's and Hector's dolphins.

Unfortunately it indicates that currently there remains no urgency in gaining better quality information on dolphins

- on page 215 it states that currently there is no government-funded research being undertaken on Hector's and Maui's dolphins;
- on page 219 it reports that DOC has already committed their funding for priority research and will not be undertaking any research on dolphins in 2008-09.

The document notes that research on dolphins is expensive and this is undoubtedly true. However, for the public to have any confidence that long-term programmes will maintain the viability of Maui's and Hector's dolphins there will need to be regular abundance surveys over time using consistent methodologies.

We understand that there is a body of research on Hector's dolphin, which is largely restricted to South Island waters. This research shows that dolphin numbers are about 7,270 (range 5,303 – 9,966) and has been genetically divided into 3 separate populations.

However, these estimates have been derived from a series of boat-based and aerial surveys that are not directly comparable. Officials now favour aerial methods and we understand that use of this technique has resulted in revising the numbers of Hector's Dolphins on WCSI from 3000 to 5300.

While the figure of 89 is given for the population of the SCSI Hector's dolphins based on a single boat transect line surveys in 1998-99, we understand that a more recent boat survey was undertaken in 2004. While this more recent work is being peer

reviewed, officials note that the numbers are likely to substantially exceed the earlier figure. Maps 15 and 16 suggest that this could be expected. Te Ohu Kaimoana considers that the expected range should have been provided to readers along with the cautionary note that it is still subject to peer review. We would note that this practise is used in other sections of the report where data (that is still subject to peer-review) is provided. Also officials have previously provided an estimate for this population of 330 to 650 to Ministers in 2006.

For the ECSI the population estimate is 1790 and this estimate is based on boat line transect surveys in the late 1990s. Given that officials suggest the need for further management proposals, the time interval since the last surveys and the preference for aerial surveys, we consider that an aerial survey of ECSI Hector's dolphins is an urgent priority.

We understand that while the research on Hector's dolphins means that its general ecology is well understood, in contrast, there is an absolute paucity of information on Maui's dolphin, which is estimated to have a total population size of 111 individuals (95%CI = 48-252). This estimate was based on a series of three surveys (one boat, two aerial) each of which used different methods and were therefore not comparable. The most comprehensive aerial survey was flown during 2004 in two time blocks covering January and June-July. We understand that this was insufficient time to cover the coast from Maunganui Bluff south to New Plymouth with any real certainty.

In addition the lack of other detailed research means the total extent of the range of Maui's dolphins along with their seasonal and diurnal movements is largely unknown. We understand that to cover this shortfall, some researchers have extrapolated behaviours exhibited in Hector's dolphins around Banks Peninsula to Maui's dolphins, a genetically and geographically separate subspecies living in a totally different marine environment. This is not a sound basis for developing a TMP.

### ***Critical information is lacking from the document***

The High Court has noted that consultation should be a reality, not a charade. Although there are no universal legal requirements as to form, the Court found that essential elements of genuine consultation should include:

- sufficient information provided to the consulted party, so that they can make intelligent and informed decisions
- sufficient time for both the participation of the consulted party and the consideration of the advice given, and
- genuine consideration to that advice, including an open mind and willingness to change

While Te Ohu Kaimoana has had some involvement with this issue we do not consider that a period of seven weeks is sufficient to allow us to fully understand the proposals and their impacts particularly with some key material not being provided.

Te Ohu Kaimoana considers that prior to undertaking consultation and certainly well before submissions needed to be lodged, officials should have provided additional material that is significant to an improved understanding of the issues.

This material includes

- the stated review of PBR that MFish and DOC indicate has been commissioned,

- the NIWA modelling of the relative performance of the proposed options for set nets, and
- the socio-economic analysis by Aranovis.

While we understand that this material will be provided to Ministers, we consider that it should also be provided to submitters for their comment prior to Ministers making decisions if the standards for consultation set down by the High Court are to be met.

As stated previously in this submission, this TMP will require consistent action over a very long period if it is to succeed. It will require positive and effective actions by fishers and other participants in the marine environment to take ownership of the need for 'a duty of care'.

Given this (and our analysis that suggests the current fishing controls are resulting in the risk from fishing for each dolphin population are being held at safe levels), the success of the TMP will not be endangered by the loss of a few weeks now to ensure all parties better understand the problems and can therefore own the solutions. Rushing measures through that are not well-understood, but could have huge impact on fishers however, could jeopardise the climate of cooperation that will be needed for long-term success.

We would note that the TMP proposes measured responses developed over time to all other identified human-induced threats to these dolphins. With the current measures for fisheries achieving safe risk levels we do not consider this to be an unreasonable request.

### ***Particular Concerns with the IPP proposals***

In addition to the general concerns above that apply to the document as a whole, there are a number of concerns that apply to the IPP measures.

Te Ohu Kaimoana is concerned with a number of parts of the analysis in the documents. These include:

- incorrect values used for PBRs for Maui's and SCSI Hector's dolphins,
- too much concentration on historical mortalities rather than the efficacy of current controls,
- the treatment of risk in document
- the impact on the proposed options on iwi commercial use
- the impact on the proposed options on customary non-commercial use
- the imposition of additional fisheries measures before the end of the 2007 calendar year

### **Some Potential Biological Removal (PBR) values are incorrect**

As Te Ohu Kaimoana understands it, the PBR provides an estimate of a maximum number of animals that can be removed from a population (not including natural mortalities) while still allowing that stock to reach or maintain its optimum sustainable value. It is not the number at which a stock declines to extinction.

We also understand that this technique was developed to act not as an annual threshold to immediately constrain other activities but more as a target to be

achieved over time and, where it is not, to trigger a consideration of alternative management proposals that will have less impact over the longer term.

The value that is calculated can never be zero – although for very low population numbers it could be much less than 1 per year. Even when that is the case the population can still thrive, if there are repeated years where there are no human induced mortalities.

The analysis in the document states that the PBR is zero in two cases – Maui’s dolphin and Hector’s dolphin SCSl population. This is incorrect. While the PBR may be a low number that is less than 1 per year, it can never be zero.

For Maui’s dolphin, where the current estimate of the population is 111 we understand that the figure should be 0.2 or 1 every 5 years but not zero as stated.

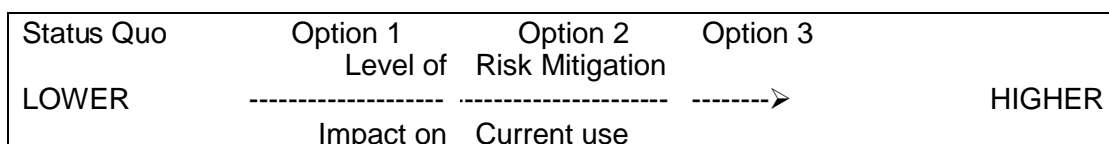
For the South Coast South Island where the report states the population to be 89 (based on the early surveys), the report again states that the PBR needs to be zero. Again this is incorrect because it cannot be zero. It will no doubt be a low number for that population size. However this could be expected to increase (even though it will still be a low number) if the population range for this Hector’s population increases to be 330 -650 as per officials advice in their FAP to the Minister of Fisheries in 2006.

Too much concentration on historical mortalities rather than the efficacy of current controls

Te Ohu Kaimoana is concerned that the document repeatedly reports the number of mortalities over a long period rather than examining and analysing the performance under the most recent set of restrictions, or looking at mortality trends associated with management measures. We consider that readers would have been able to offer better feedback on the range of options if the documents had reported more clearly on an analysis of the performance of the current controls compared with target values that should be met. Such analysis would have provided the reader with a more accurate picture of how the current management measures are performing.

Treatment of risk

The IPP on page 66 sets out (in what is stated to be a matrix) a graphic that depicts a range of risk mitigation and impact on current use.



The document uses the concept of relative risk levels characterising Option 3 having the highest level of risk mitigation but also acknowledges that this will have the greatest impact on restricting the level of current use.

Te Ohu Kaimoana has several concerns with this model – particularly when it is coupled with lack of detail of what the actual impact will be on users. We consider that this picture gives a distorted view of the options being proposed. First it suggests that the status quo has little to no risk mitigation and imparts no cost on current users. Both these conclusions are incorrect. Secondly, it suggests that the

options involved are part of a steady and almost equal progression. A detailed look at the actual options proposed shows that this is not the case. Thirdly, it conveys no information to the decision-maker on what the actual (absolute) level of risk mitigation is for each option and how this measures against defined thresholds to ensure viable dolphin populations. Our analysis suggests that for all the dolphin populations the status quo set of controls is resulting in the current level of mortalities being less than the PBR, indicating effective performance of measures. The information on options does not make this clear – nor do they indicate how much lower the risks are to the viability of dolphin populations for increasing costs of impacts. We consider that this is necessary. To assist their decision-making Ministers should be informed of the actual benefit cost ratios for different options.

#### Impact on the proposed options on iwi commercial use

Te Ohu Kaimoana has not been able to undertake a detailed analysis of the impacts of the different options for the different dolphin populations. We are grateful for the work that SeaFIC has done to set out an analysis of the expected impact on quota owners and fishers should Ministers decide to impose these options. We endorse that analysis.

Most of the species affected by the proposed measures are quota species that were introduced into the QMS in 1986. As such, iwi will receive 10% of that quota and for the Settlement as a whole, the impacts set out by SeaFIC for Options 2 and 3 will be substantial. However, at an individual iwi level these impacts will likely be even greater. This is because the species involved are all shallow water and classified under the Settlement as inshore. In most cases for iwi on the west coast of the North Island and for all iwi in the South Island, inshore quota represents a substantial share of the settlement assets that iwi will receive. In a number of cases inshore quota represents as much as 75% of the Settlement assets that will be transferred to those iwi. The benefits that iwi will receive from the Settlement is from sales of ACE for these fish and this will be severely limited for a number of these inshore species, having a substantive effect on income. As noted above, the timeframe given for consideration of the TMP has been such that we have not been able to undertake a detailed analysis of the potential effects of each of these proposals on iwi.

#### Impact on the proposed options on customary non-commercial use

The document notes that it is not intended that there be any additional regulatory controls on customary fishing. The document suggests that the proposals will have no effect on customary fishing because the proposed measures do not directly change any of the customary regulations.

*“Customary fishing under the authority of the Kaimoana Customary Fishing Regulations or Regulation 27 of the Amateur Fishing Regulations will be unaffected by any measures implemented to manage the effects of fishing on Maui’s dolphins. (Page 91)*

This is highly unlikely for several reasons:

- It is more probable that if iwi are convinced that restraint is needed, there will be no authorisations granted by kaitiaki – indeed the document indicates that it is intended that the Ministry of Fisheries will work to create this climate. *“MFish will work with Tangata Tiaki/Kaitiaki to raise awareness of the issues associated with*

*set netting and Maui's dolphins, and support non-issuance of authorisations for set netting in areas where Maui's dolphins are present."*

- Iwi are integral to the community in which they live – they would not want to create disharmony by operating to a different set of controls particularly in relation to an iconic species as this will undermine the relationships they have developed with their communities. Set net and trawl bans on other stakeholders will morally bind customary fishers to also not use these methods. This will mean that current practices will not continue.
- A number of iwi in areas affected by the proposed measures obtain customary non-commercial kai not just from direct fishing by individuals but also by sourcing it from commercial vessels that fish the area. The proposed measures (either to restrict particular methods or to exclude fishing from areas) will mean that there will be no customary kai available using commercial vessels. This will then mean either that few, if any, of the fish currently provided will be available directly or the iwi involved will need to rely on the manakitanga of iwi outside the area affected to be able to provide kai at appropriate occasions.
- If iwi seek to gain customary non-commercial kai from other areas through manaki, this places an added burden on the other iwi resources and will have impacts on its availability.

Given the scale of measures being contemplated taken together we consider the measures proposed for Options 2 and 3 for each region will have a significant impact on customary fishers for the iwi directly affected and for neighbouring iwi.

The document also suggests that it may be possible that imposing restrictions on amateur fishers may lead to an increase in the authorisations granted by kaitiaki. This seems to suggest that (though there has never been an incident with customary fishers and Maui's dolphins) customary fishers would be less responsible than others and would continue fishing where there are restrictions on others because of potential dolphin interactions. Te Ohu Kaimoana does not accept this suggestion or expect that this would occur – for the reasons stated above, it is expected that adoption of measures would substantially reduce the level of take. In summary this means that iwi and hapu will have substantive reductions in the take of important species in the Settlement.

#### Imposition of additional fisheries measures before the end of the 2007 calendar year unjustified

We have significant concerns about the proposal that the Minister will use the gazetting process to institute additional controls before the end of the year. While we consider that the more robust process of developing regulations as being preferable, we do not oppose the use of these processes in appropriate circumstances.

However, given our analysis that current fisheries controls are satisfactorily managing the risks to Maui's and Hector's dolphins such that fishing related mortalities for all populations are below the PBRs for those populations, Te Ohu Kaimoana does not consider this to be appropriate.

No urgent action is needed to reduce risk from fishing to satisfactory levels and the types of measures foreshadowed in the IPP will, as the SeaFIC analysis has shown, have substantive effects on fishers and quota owners including iwi. Given this we consider that should Ministers decide that they wish to impose additional measures, these should follow the standard procedure for bringing in regulations under the Fisheries Act.

The only urgent action that is justified to Ministers is to commission research into Maui's and Hector's dolphins.

#### **Part 4 IPP analysis**

In this part we consider each of the IPP proposals for each population of dolphin.

##### **1. West Coast North Island Maui Dolphin**

###### ***Population estimates***

The Maui dolphin population is estimated at 111 individuals with a 95% confidence interval and a range of 48 to 252. The source of this estimate is based on Slooten, E. surveys conducted between 2004 and 2006 using different methods.

###### **Distribution information**

We note that the IPP material records that 75% of sightings of Maui's dolphins are within 1 nm in the summers and that the maximum distance that Maui's dolphins have been recorded offshore in sightings is 3.1nm in summer and 3.3nm in winter.

We would also note that the furthest south recent sightings have been for Maui's dolphins is Tongaporutu.

###### **POD soundings in harbours**

The document quotes the use of PODs as one of the pieces of evidence that Maui's dolphins penetrate further into a number of harbours than there have been verified sightings. To date, the information acquired via the pods placed in two of the northern harbours has been quite equivocal and, by and large, has not been supported by visual verification. We understand that contrary to suggestions that Maui's dolphins have a signature set of dolphin clicks, in fact the frequency of sounds overlap with other dolphin species and in some cases these other species of dolphins were sighted at the time of soundings. We do not consider that this provides verification that Maui's dolphins have penetrated the Manukau Harbour beyond the existing controls. The report notes that PODs in Kaipara and Raglan Harbours have not detected sounds with the Maui frequency range.

Iwi have indicated in discussions that though their members have fished in the harbours for extensive periods of time (decades) none have sighted Maui's dolphin within the harbour. It has been suggested that dolphins do not use these harbours, probably because access to all but the Manukau Harbour is impeded by long-shore bars with ever shifting entrances.

###### ***Potential Biological Removal (PBR)***

As noted previously the document states that the PBR must be zero. This is plainly incorrect. It can never be zero although it may approach this in practical effect. We understand that earlier analysis had established that the PBR for Maui's dolphins based on these figures is calculated at 0.2 or 1 every five years.

### ***Mortality estimates***

Historically the DOC incident database lists:

- 40 total Maui mortalities since 1921
- 17 reported Maui's dolphin mortalities since 1988 (page 72)
- Only 2 mortalities confirmed as related to fishing activity or net entanglement (page 72)
- No reported mortalities of Maui's dolphins from trawling on WCNI over any period

Recently (since the implementation of the 2003 set net ban in this area) there have been:

- four reported mortalities (two of unknown cause and two from natural mortality) and
- zero have been attributed to fishing (page 73 and 194)

### ***Problem?***

There have been no reported mortalities since the implementation of the current 2003 set net ban. This means that the current management measures are safely managing fishing risks to Maui's dolphins as the level of mortalities (0) is less than the PBR – the level that a population can still reach or maintain its optimum population. Additional measures are not needed to achieve safe levels. The current performance does not threaten the long-term viability of Maui's dolphins.

### ***Recommendation and other comments on IPP proposals***

The performance of all fishing methods since the current controls were introduced in 2003 has resulted in no human induced mortalities from fishing since that time. This is obviously less than the PBR of 0.2.

Given the lack of any substantive evidence that there are / have been any Maui's dolphins in West Coast harbours other than the Manukau – and no conclusive evidence that these dolphins have been beyond the harbour area already subject to controls – Te Ohu Kaimoana does not consider there is any justification for extending controls in WCNI harbours.

With satisfactory performance from the existing controls from set nets and no verified evidence showing Maui's dolphins beyond 4 nm, Te Ohu Kaimoana considers there is no justification for extending the ban from 4nm out to 12 nm.

With Maui's dolphins spending the vast majority of its time within 1 nm (the mandatory non-trawl zone for almost the full coastline for the Maui range) it is not surprising that there have been no reported mortalities of Maui's dolphins at any time from trawling. The observer coverage has also verified lack of interactions of any kind. Given this we consider there is no justification for extending trawl closures.

The analysis by SeaFIC shows the level of impact on fishers from the various options. The impacts from Options 2 and 3 are substantial and will result in significant losses to fishers and quota owners where there is no significant additional gain to Maui's dolphins with the current controls already resulting in no fishing mortalities.

## **2. East Coast South Island Hector's Dolphin**

### ***Population estimates***

The east coast South Island Hector's dolphin population is estimated at 1790 individuals with a 95% confidence interval and a range of 1246 to 2843. Approximately 900 are found around in Banks Peninsula with relatively high densities also in Clifford and Cloudy Bays and between Cape Campbell and Oamaru.

This estimate is based on boat line transect surveys in the late 1990s. There have been no recent surveys. Aerial surveys are now favoured – where this was done on the West Coast SI, this resulted in a significant increase in the estimated abundance.

The paper states that this population is generically distinct from other populations but also records that genetic analysis suggests some movement of individuals between the ECSI and WCSI populations.

Genetic studies by Pichler (2002) are referenced as evidence that there has been a decline in abundance with a significant decline in at least part of its range. However, it also notes there is a high level of uncertainty of the extent of decline as there were no systematic surveys of abundance before 1984-85.

Potential Biological Removal (PBR) analysis calculated at 2 to 4 deaths each year (not including natural mortalities) and if the default input value is increased to 0.5, the PBR becomes 13 per year.

### ***Mortality estimates***

Historically the DOC incident database lists:

- 161 total Hector's mortalities since 1988
- though only 25 of these mortalities can be confirmed as related to fishing activity (set net, trawler or rock lobster pot entanglement)

Since the implementation of the 2002 set net mortality limit of three dolphins per year in Canterbury set net area from 1 October to 30 September the MALFiRM control has not been invoked.

Since 2002 there have been 15 total mortalities related to fishing (but not more than three in any one year).

### ***Problem?***

Since the implementation of the current 2002 set net ban and the adoption by industry of a number of additional voluntary measures, the number of fishing related mortalities does not exceed the range for the PBR. This indicates that the risks to ECSI Hector's dolphin population are effectively managed by the current measures and the long-term viability of this population is not threatened. It is well below the upper estimate that would result from using a PBR of 13.

### ***Recommendation and comment on measures***

With the current controls both mandatory and voluntary and with the level of mortalities attributed to fishing not exceeding the PBR range for ECSI Hector's dolphins, Te Ohu Kaimoana considers there is no justification for extending

restrictions on commercial set netting or trawling on the east coast of the South Island beyond what currently exists.

This is based on the most recent estimate of population abundance which was developed based on boat surveys in 1999. Te Ohu Kaimoana recommends that an aerial survey be undertaken for this Hector's dolphin population.

The analysis by SeaFIC shows the level of impact on fishers from the various options. The impacts from Options 2 and 3 are substantial and will result in significant losses to fishers and quota owners where there is no significant additional gain to this Hector's dolphin population. The current controls - voluntary and mandatory – are already resulting in fishing mortalities being within the range that would allow this Hector's dolphin population to reach or maintain its optimum sustainable value.

### **3. South Coast South Island Hector's Dolphin**

#### ***Population estimates***

The South Coast South Island Hector's dolphin population is estimated at 89 individuals with a 95% confidence interval and a range of 36 to 218. The source of this estimate is based on a single study conducted between 1998 and 1999, which involved a single boat-based line transect survey. The boat could not get close to shore.

As noted earlier there is a more recent study of dolphins in Te Waewae Bay in 2004 which has indicated numbers substantially exceeding 89. The report notes that due to the lack of peer review, the results are not available. Maps 15 and 16 show the densities. As we have noted earlier, officials have identified this range to be 330 to 650 animals.

Genetic studies indicate no evidence of decline and no evidence of inbreeding. The report notes genetic analysis suggests some movement of individuals between the SCSi and WCSi populations

#### ***Potential Biological Removal (PBR)***

As noted earlier the report erroneously states that the PBR must be zero.

At a population level of 89 it would be very low - approx one human induced mortality every 5-6 years.

At the higher population estimates the PBR would be in range 0.4 to approx 1.0 and higher if a default value is used.

#### ***Mortality estimates***

Historically the DOC incident database lists:

- Nine reported mortalities since 1988 of these:
- zero deaths have been confirmed as related to fishing
- although one is listed as a probable entanglement.

### ***Problem?***

Even with the low PBR for this Hector's dolphin population, with no reported mortalities the current fishing control measures are effective at mitigating the risks to this dolphin population and its long-term viability is not threatened.

### ***Recommendation and comment on measures***

With the sustained record of mortalities attributed to fishing being less than the PBR for SCSI Hector's dolphins, Te Ohu Kaimoana considers there is no justification for extending restrictions on commercial set netting or trawling on the south coast of the South Island beyond what currently exists.

Te Ohu Kai Moana recommends that the peer review process for the review of the more recent abundance survey be completed urgently.

The analysis by SeaFIC shows the level of impact on fishers from the various options. The impacts from Options 2 and 3 are substantial and will result in significant losses to fishers and quota owners where there is no significant additional gain to this Hector's dolphin population with the current controls already resulting in no fishing mortalities.

## **4. West Coast South Island Hector's Dolphin**

### ***Population estimates***

The Hector's West Coast South Island population is estimated at 5388 individuals with a 95% confidence interval and a range of 3613 to 8034 (page 170). Densities are higher in:

- Karamea to Punakaiki (including Buller Bay)
- Okarito Lagoon to Arnott Point and
- Neils Beach to Jacksons Bay (map 19, page 169)

The source of this estimate is based on Slooten et al 2004 stratified line transect aerial surveys over for periods since 1998.

Genetic studies confirm no detectable decline in recent abundance. The report notes genetic analysis suggests some movement of individuals between the WCSI and both SCSI and ECSI populations.

### ***Potential Biological Removal (PBR)***

The report notes that the PBR for the WCSI dolphin population suggests that 7-12 deaths per year can occur without preventing the population from increasing in size. It further notes that this estimate would increase to 38 if the recovery factor default value of 0.5 is used.

### ***Mortality estimates***

Historically the DOC incident database lists:

- 116 total Hector's mortalities since 1988 and of these

- 17 reported Hector's dolphin mortalities have been confirmed as related to fishing activity (page 72)

### ***Problem?***

The PBR has never been exceeded indicating that the risks to WCSI Hector's dolphin population from fishing are being effectively managed by the current measures and the long-term viability of this population is not threatened. All the signals are that this population is in a healthy state.

### ***Recommendation and comment on measures***

With the sustained record of mortalities attributed to fishing being less than the PBR for WCSI Hector's dolphins, Te Ohu Kaimoana considers there is no justification for extending restrictions on commercial set netting or trawling on the West Coast of the South Island beyond what currently exists.

The analysis by SeaFIC shows the level of impact on fishers from the various options. The impacts from Options 2 and 3 are substantial and will result in significant losses to fishers and quota owners where there is no significant additional gain to this Hector's dolphin population because the current controls already resulting in a level of fishing mortalities over time that is significantly less than the PBR over time.

## **Part 5 Marine Mammal sanctuaries**

The section deals with proposals for marine mammal sanctuaries in Part III of the document between pages 200 – 214. The document states some objectives for marine mammal sanctuaries:

- To protect key sites in New Zealand waters of significance to Hector's dolphins including the subspecies Maui's dolphin;
- To maintain or restore the distribution and abundance of Hector's dolphins, including the subspecies Maui's dolphin, in New Zealand waters;
- To achieve self-sustaining populations of Hector's dolphins, including the subspecies Maui's dolphin, throughout their natural range;
- To significantly reduce or eliminate human related threats to Hector's and the subspecies Maui's Dolphin throughout their natural range.

There is no explanation of the reasons for those objectives or the consequences. There is no commentary that provides the reader with an explanation of how a marine mammal sanctuary can deliver these objectives. Based on our understanding of what is proposed, we do not consider that the establishment of marine mammal sanctuaries as proposed in the document will achieve these objectives.

### ***Controls within sanctuary***

The document is not clear what the controls will be within the sanctuary. The document notes that the proposed measures to cover fishing activities are set out in Part II of the document and that these will be considered by the Minister following consultation with the Minister of Conservation.

It states that the Ministry of Fisheries and the Department of Conservation have a preference for putting in place consistent measures over the range of dolphins for compliance and effectiveness reasons. It notes that this will mean the proposed measures will cover the geographical areas which overlap with the preliminary proposals for marine mammal sanctuaries.

It notes that of the options in Part II, DOC has a preference for the range of measures that reduce the likelihood of fishing related mortality to the lowest level possible as DOC considers this to be most consistent with the intent of the MMPA and the objectives for the proposed MMS.

We understand this statement – which is repeated for each MMS – to be spelling out a number of preferences by officials.

The first is that if fishers are to be controlled that this should be via controls under the Fisheries Act, irrespective of whether the fishing is being controlled within a Marine mammal sanctuary or is outside a sanctuary. Te Ohu Kaimoana agrees with this – the Fisheries Act is the appropriate Act to control fishing activity – provided those controls fit within the purpose of the Fisheries Act.

If the Fisheries Act is used, then it will be these controls that are providing the protection to the Hector's and Maui's dolphins and not the Marine Mammal Sanctuaries. If the only controls are those applied through the Fisheries Act, officials should not claim to the public that the MMS will achieve the objectives set out in the document.

We also understand that the statement means that DOC want to see the Minister of Fisheries apply Option 3 proposals within each of the proposed marine mammal sanctuaries.

We expect that the Minister of Fisheries will make his decision after consultation with the Minister of Conservation based on his judgment as to whether additional controls (whether for Options 1 2, or 3) are justified under the Fisheries Act after considering the dolphin mortalities over the recent period when fishers are subject to the extensive current controls.

What the document does not make clear is what officials are proposing, in the event that the Minister of Fisheries decides not to apply Option 3 (or other) controls to the areas covered by the proposed marine mammal sanctuaries. If it is intended that the Minister of Conservation will develop similar levels of controls under the MMPA, this should have been stated for the public to respond.

We understand that if the Minister of Conservation is to develop proposals for marine mammal sanctuaries and those proposals will impose additional controls on fishers beyond those imposed under the Fisheries Act, such additional controls would require the concurrence of the Minister of Fisheries. We would be grateful for clarification on both these matters.

#### *Location and extent of sites*

The document notes that the sites for marine mammal sanctuaries are proposed for their importance to regional populations of Hector's and Maui's dolphins. It states that the sites represent significant dolphin habitat and are areas of strongholds for Hector's dolphins and cover the whole range and buffer zone for Maui's dolphins. It also states that the areas proposed represent each of the geographically separated

and genetically distinct Hector's populations – except the West Coast South Island. However, elsewhere in the document there are references that state that the genetics for Hector's dolphins on WCSI, ECSI and SCSI suggest some movement of individuals between these populations (pp 39, 43, and 45).

Beyond these statements in Part III, the paper provides no explanation for the suggested locations for these sanctuaries or their size. We understand that these were sited by DOC officers based on their experience of local concentrations of dolphins; but the document does not state this nor offer any evidence that would justify the basis for the areas.

No reason is given for making the outer limit of the proposed marine mammal sanctuaries for Maui's dolphins and for Hector's dolphins at Clifford and Cloudy Bay and at Banks peninsula out to 12 nautical miles.

No reasons are given for the different approach between Hector's and Maui's dolphins. No explanation is given as to why a buffer zone is needed or what the extent of that buffer zone is.

As noted earlier in this paper Te Ohu Kaimoana considers that the risks of fishing related mortalities are being satisfactorily managed by the sets of extensive controls that are already in place for the various dolphin populations. Based on current information and performance we do not consider that the current level of fishing related mortalities threaten the long-term viability of the various dolphin populations.

Te Ohu Kaimoana therefore does not support the creation of any new sanctuaries or extension to the existing sanctuary off Banks peninsula. The creation of such sanctuaries will only create an expectation from the public that additional measures apply within those zones.

In the event that Ministers wish to proceed with a sanctuary for Maui's dolphin we would offer the following comments. Te Ohu Kaimoana considers that the proposed boundaries for the Maui's dolphin marine mammal sanctuary proposal are not justifiable. The proposal:

- sets the seaward limit at 12 nautical miles
  - this contrasts with survey information that states the maximum distance Maui are seen from shore is 3.1 nm in summer and 3.3 nm in winter; and
  - while the paper later notes that an aerial survey indicates Maui may move further out no distance is given and this is from work that is not peer reviewed
- sets the southern sanctuary boundary well south of where there has been any sightings of Maui's dolphins for more than 30 years;
- includes harbours in the MMS where there have been no sightings of Maui's dolphins;
- extends the MMS in harbours where there have been sightings (and now have prohibitions based on those sightings) well beyond those areas and into regions where there have been no sightings.

The boundaries of a proposed sanctuary for Maui's are meaningless until a reasonable understanding of the dolphin's movements is achieved through surveying using satellite tagging. Dolphins will not expand their range into an area simply because it is marked on a map.

We set out elsewhere in this submission that there needs to be substantial research begun immediately on the abundance and distribution of Maui's dolphins (including the spatial and temporal patterns of dolphin habitat use for particular populations along with information on their health). Prior to that work being completed and the results known, we do not consider that there is any basis for defining realistic boundaries of any MMS and at present there remains no justification for a MMS for Maui's dolphins.