Te Ohu Kaimoana's Response to Fisheries New Zealand and the Department of Conservation's the Proposed Threat Management Plan for Hector's and Māui Dolphins

Te Ohu Kaimoana

Contents

Executive Summary

1. Te Ohu Kaimoana is committed to the conservation of marine mammals at both the species and subspecies level. We are particularly concerned that human-related impacts pose a threat to the ongoing existence of Māui dolphins.

2. The consultation document to update the Threat Management Plan (the Plan) provides options to manage the threats of Hector's and Māui dolphins. Unfortunately, the options proposed do not provide meaningful conservation benefits for the dolphins. This is particularly the case for Māui dolphins. If implemented as proposed, some of the options will have a devastating effect on inshore fishing communities and those who depend on them.

3. An inevitable consequence of the proposals will be to undermine the ability of Iwi Māori in affected areas to enjoy the benefits of their traditional relationship with various fish species. These rights are guaranteed by the Treaty of Waitangi. Undermining this relationship will have consequent effects on Māori customary practices and commercial impacts, both of which support Māori identity.

4. The risk to dolphins posed by commercial fisheries has been managed through a carefully designed combination of restrictions, monitoring and research which began in 2003. The effectiveness of this approach is evidenced by the population trajectories showing fishing has a negligible effect on dolphin populations.

5. The Plan only proposes options to further reduce residual risk that has been attributed to fisheries. In our view these options go beyond the requirements of the Fisheries Act. But Cabinet have been advised they can be implemented through regulations made under the Act. If the already low risk posed by commercial fishing is to be further reduced, a targeted "bottom up" approach would be an effective way of achieving that. This approach includes using all available tools and applying them vessel by vessel.

6. The primary threat with the biggest impact on dolphin populations is the viral cat disease toxoplasmosis. This is just one of many threats that originates on land and gets into the marine environment through waterways. Although land-based threats were identified in the current (2008) version of the Threat Management Plan, there has been no direct action to mitigate their impacts on dolphins.

7. After more than a decade of inaction on the land-based, the focus of mitigation should not be placed on fishing, including commercial fisheries. We support a more holistic approach that involves active steps to address degraded habitat and restore health to Tangaroa.

8. The scientific process leading up to the development of the Plan was robust and inclusive. However, the interpretation of the science into options was only done by government agencies and the scientific analysis seems to have been misinterpreted. This type of process also detracts from partner relationships that Te Ohu Kaimoana and Iwi expect according to Te Tiriti o Waitangi.

9. The spatial risk assessment has been used inappropriately for Māui dolphins and, in our view, has generated a "phantom risk". This phantom risk suggests closures of fisheries in places that Māui dolphins do not inhabit. Therefore, any fishing restrictions in these places would have no benefit for the dolphin population, but come at increased cost to Iwi, individual fishers, and the wider communities which they support.

10. The focus on fisheries risk is understood to come from the petition from Sea Shepherd to ban the import of New Zealand caught fish. Sea Shepherd alleged that Māui dolphins were endangered by fishing. This petition was rejected; however it has led to unwarranted support from non-fishing entities to severely restrict fishing activity across the entire West Coast of Te Ika a Māui.

11. In addition:

a) The commercial impacts of further restrictions run far deeper than fishers and extend into the communities they live in. There has been no suggestion of any form of assistance to those who may lose their livelihoods. These livelihoods will be lost with no added conservation benefit for dolphins. Loss of livelihood will be particularly destructive for whānau Māori. On that basis, we can only support option one (status quo). If the Crown would like to take additional steps to manage what is already a low risk to Māui dolphins, then we are willing to work collaboratively to develop a 'bottom up' approach to achieve this.

b) Further spatial restrictions will almost entirely curtail Māori access to customary fisheries through either the pātaka system or through alternative authorisations issued by kaitiaki.

12. The social, cultural and economic impacts of the proposed options have not been adequately understood nor assessed. The Government's own scientific analysis undertaken in the lead-up to the development of the Plan does not support the options put forward and, as a result, the options are fundamentally flawed.

Noho ora mai rā,

Dion Tuuta
Te Mātārae - Chief Executive
Te Ohu Kaimoana

Introduction

13. This document outlines Te Ohu Kaimoana's response to the proposals for an updated Hector's and Māui Dolphin Threat Management Plan (the Plan). Our statutory role in the matter relates to our responsibility to protect the rights and interests of Iwi in the Deed of Settlement and assist the Crown to discharge its obligations under the Deed and the Treaty of Waitangi[1]. We are guided by the principles of Te Hā o Tangaroa to achieve our purpose which we explain in more detail on page 11. We do not intend for this response to derogate from or override any response or feedback provided independently by Iwi, through their Mandated Iwi Organisations (MIOs) and/or Asset Holding Companies (AHCs).

14. We work on behalf of 58 MIOs, who represent all Iwi throughout Aotearoa. Asset Holding Companies (AHCs) hold Fisheries Settlement Assets on behalf of their MIOs. The assets include Individual Transferable Quota (ITQ) and shares in Aotearoa Fisheries Limited which, in turn, owns 50% of the Sealord Group.

15. In addition to our statutory role, MIOs have approved our Māori Fisheries Strategy and three-year strategic plan. The Strategy has as its goal "that MIOs collectively lead the development of Aotearoa's marine and environmental policy affecting fisheries management through Te Ohu Kaimoana as their mandated agent". We play a key role in assisting MIOs to achieve that goal.

16. The main focus of this response is on the Plan. However, we are unclear how the proposals in the document relate to the requirements of the Fisheries Act. The Act requires fishing effects to be avoided, remedied or mitigated where long-term viability or maintaining biological diversity is threatened. In our view:

a) fisheries risks to the dolphins are already being managed to ensure their long-term viability.

b) the primary threat, of land-based disease, is not being addressed at all by the options in the Plan.

17. We have a genuine concern that the proposed options are not providing conservation benefits for the dolphin populations but will have severe negative impacts on individual and whanau's livelihoods. The scientific analyses of the dolphin populations show that fisheries effects have been managed to a level that deems its impact negligible. We consider the proposed options 2-4 unnecessary and contradictory to best available information and to go beyond the requirements of the legislative framework.

[1] Our purpose, set out in section 32 of the Maori Fisheries Act, is to "advance the interests of iwi, individually and collectively, primarily in the development of fisheries, fishing and fisheries-related activities, in order to:
(a) Ultimately benefit the members of iwi and Maori generally; and
(b) Further the agreements made in the Deed of Settlement; and
(c) Assist the Crown to discharge its obligations under the Deed of Settlement and the Treaty of Waitangi; and
(d) Contribute to the achievement of an enduring settlement of the claims and grievances referred to in the Deed of Settlement."

18. We agree every effort should be made to avoid human-induced mortality of Hector's and Māui dolphins. While we don't consider the proposed statutory closures are required, there is more that can be achieved by working from the "bottom-up" with Iwi and affected fishing sectors. This kind of approach will be more enduring and effective than broad sweeping closures. We would welcome a face to face discussion with policy advisers to map out this alternative approach.

Our view of the proposed options

19. The Plan contains three and four options for Hector's and Māui dolphins respectively to manage the effects of set netting and trawling. Here we summarise our view of those proposed options and the consultation document.

20. Option 1, for both Hector's and Māui dolphins, proposes the status quo with additional monitoring, which includes areas closed to set nets and trawling in core dolphin habitat. We consider this is the only option proposed that properly fits within the scope of the Fisheries Act, based on the Act's purpose. All other options propose extensive additional closures to both fishing methods with negligible conservation benefit.

21. The Plan is a non-statutory document intended to manage all human threats. But the measures proposed to manage fisheries risks are to be implemented under the Fisheries Act. That means they must be consistent with the purpose of the Act. In our view the proposals are not consistent with the Act and must be "untangled" from the non-statutory Threat Management Plan.

22. The Plan proposes population objectives. These have been set with no scientific basis and are value based. The objectives have two components:

a) the percentage of the unimpacted population

b) the level of certainty of achieving that outcome.

We support the comprehensive chapter on population objectives provided by Fisheries Inshore New Zealand in their submission.

23. The Plan provides estimates of the level of fishing mortality that may be allowed and still achieve the objective with a high level of certainty. These estimates form the population sustainability threshold (PST). The government is consulting on population and fisheries objectives under the Plan.

24. The government has proposed further spatial management measures under the Fisheries Act to achieve this population sustainability threshold. This proposal does not align with the Fisheries Act, which contains its own thresholds of "long-term viability" and "biological diversity". The requirements to ensure long-term viability and maintain biological diversity have already been met through existing measures, so additional statutory measures are not required. Further measures to meet the non-statutory objective should be developed as part of a "bottom-up" process under the Plan.

Our reasons

25. **Proposed options for change do not benefit dolphins but significantly impact fishing communities**
Aside from option one, the proposed options for further managing fisheries will:

a) have negligible conservation benefit for the dolphins

b) go further than required under the Fisheries Act

c) have adverse consequences for Iwi and the commercial and recreational sectors

d) take a blunt approach to managing a very small risk. Residual fishing risk can be managed in a much more targeted way.

26. **Strenuous efforts have been made to manage fishing risk**
Since 2003 strenuous efforts have been made to manage fishing threats led by industry. These include area closures to set netting and trawling between New Plymouth and Manganui Bluff off Te Ika a Māui, along with extensive closures on Te Waipounamu. These have totaled 8,000 and 15,000 square kms of trawl and set net closures respectively. The closures have been complemented by observer coverage of commercial fishing activity in the surrounding areas.

27. **Action to address the threat of toxoplasmosis is overdue**
The 2008 Threat Management Plan identified toxoplasmosis as a threat to the dolphins – particularly Māui dolphins. A proposed action plan should have been developed at that time. The current day relative threat of toxoplasmosis in relation to fishing is recognised in the paper considered by Cabinet prior to the release of the proposals:

While toxoplasmosis is likely to be a threat to some subpopulations of Hectors dolphins, it is a matter of the utmost urgency for the Māui dolphins, which face a real threat of extinction even if the very small residual risk from fishing is eliminated entirely (para 67).

28. **The release of the Plan is premature**
During the Plan development process we engaged with the scientific working groups and stakeholder forums. The discussions were restricted to the research and methodology of the risk assessment. There was no information provided on the results or the subsequent interpretation of the risk assessment. Fisheries New Zealand and the Department of Conservation unilaterally interpreted the research to revise the current Plan. There was no opportunity for us to input on the need for additional measures or their scope.

29. The Plan was released by Fisheries New Zealand and the Department of Conservation without any prior consultation with us. Both agencies should have worked with us to talk through the implications of the proposals before releasing a consultation document. The unilateral formation of proposals is not consistent with a meaningful Treaty relationship.

30. The timing to release the Plan may have been related to a petition to the National Marine Fisheries Service by Sea Shepherd[2], lodged on 6 February 2019. Sea Shepherd asserted that the mortality of Māui dolphins incurred by fishing was at an unsustainable level and therefore, export of seafood products caught in Māui habitat should be banned. The National Oceanic and Atmospheric Administration analysed and rejected the petition on 18 June 2019 on the basis that:

a) New Zealand has in place an existing regulatory program to reduce Māui dolphin bycatch.

b) Through its 2019 risk assessment, New Zealand evaluated the effectiveness of this regulatory program in meeting bycatch reduction targets defined as the PST.

c) Based on the 2019 assessment, New Zealand is now proposing additional regulatory measures which, when fully implemented, will likely further reduce risk and Māui dolphin bycatch below Potential Biological Removal level (PBR)[3].

31. The risk to dolphins from fishing – especially Māui dolphins – is already negligible. Additional measures, such as the use of cameras and modification of fishing gear, will reduce this risk even lower. The release of the Plan coincides with the implementation of electronic reporting, global position reporting (ER/GPR) and followed an announcement on the imposition of cameras on 28 boats in the area. Fishers are welcoming new monitoring and reporting technology, but the issue they have is whether or not to invest at present. Fishers are already under pressure to implement these new requirements before the impacts of the Plan on their operations are known.

32. **Fisheries Act obligations and principles appear to have been overlooked**
We are particularly concerned to note that the cabinet paper seeking approval to release the document confirms that the proposals to manage fishing will be considered under the Fisheries Act, yet there is no analysis of the options against the Act itself. Instead, the paper notes that:

Decisions made about the objectives, and management actions to achieve them under the Fisheries Act 1996, will essentially determine the balance between minimising human-induced mortality and providing for use of fisheries.

We are extremely concerned with this approach. The measures to achieve the objectives – as they relate to fishing risks – should be shaped by the purpose and principles of the Fisheries Act. It then follows that management actions should be developed in light of the balance required by the Fisheries Act, rather than the other way around.

33. In our view, the Plan fails to analyse the proposals against the Fisheries Act, so they are not robust. The impacts of the proposals on the affected parties have not been fully taken into account. A "bottom up" approach would not only have generated better information but would also have built greater support for viable solutions.

[2] Sea Shepherd Legal, Sea Shepherd New Zealand Ltd., and Sea Shepherd Conservation Society.
[3] Potential Biological Removal. The maximum number of animals (excluding natural mortalities) that can be removed annually from a stock while allowing this stock to reach or maintain a sustainable population level.

34. **More targeted measures will address the residual risks of fishing**
The very small residual risk to the dolphins from fishing can be addressed through more targeted non-statutory measures, such as: vessel management plans; innovation of new fishing methods and mitigation practices; and research and monitoring.

35. To further explain the basis of our main concerns and recommended approach, our response elaborates on the following:

a) Tikanga Māori that form the basis of our advice

b) Key requirements of the Fisheries Act

c) Lack of alignment between the vision and goals of the Plan and what is appropriate for a threat management plan

d) Our understanding of population objectives, sustainability thresholds and certainty

e) Our concerns about the proposals to manage the effects of fishing on the dolphins

f) Restoring the health of Tangaroa.

Our advice is based on tikanga Māori

36. Iwi/Māori have a unique and lasting connection with the environment. Our challenge is to ensure that this connection is maintained. Te Hā o Tangaroa kia ora ai tāua (the breath of Tangaroa sustains us) is an expression of a Māori World View. It contains the principles we use to analyse modern fisheries policy, and other policies that may affect the rights of Iwi under the Deed of Settlement. Te Hā o Tangaroa kia ora ai tāua is outlined in Figure 1[4].

37. In essence, Te Hā o Tangaroa kia ora ai tāua highlights the importance of humanity's interdependent relationship with Tangaroa to ensure our mutual health and wellbeing.

38. Protection of the reciprocal relationship with Tangaroa is an inherent part of the Māori Fisheries Settlement agreed by Māori and the Crown in 1992. The fundamental purpose of the Settlement was the sustenance of Māori identity through the full range of benefits that fisheries provides. This was inherent in the fundamental guarantee of Article 2 of Te Tiriti o Waitangi.

39. The Settlement is an important and relevant part of modern fisheries management for Aotearoa. Māori rights in fisheries can be expressed as a share of the productive potential of all aquatic life in Aotearoa's waters. Māori rights are not just a right to harvest, but also to use the resource in a way that provides for their social, cultural and economic wellbeing.

[4] MIO as referred to in The Maori Fisheries Act 2004: in relation to an iwi, means an organisation recognised by Te Ohu Kai Moana Trustee Limited under section 13(1) as the representative organisation of that iwi under this Act, and a reference to a mandated iwi organisation includes a reference to a recognised iwi organisation to the extent provided for by section 27.

40. The Fisheries Act complements and supports Te Hā o Tangaroa kia ora ai tāua. Our ability to maintain a reciprocal relationship with Tangaroa depends in part upon appropriate implementation of the Act.

41. Te Hā o Tangaroa kia ora ai tāua does not mean that Māori have a right to use fisheries resources to the detriment of other children of Tangaroa such as dolphins and other marine life. It speaks to striking an appropriate balance between people and those we share the environment with. If fishing activities could be demonstrably proven to be the major threat to Māui and Hector's dolphins, then Te Ohu Kaimoana and Iwi would support additional measures. In this instance we consider the balance has swung too far to the detriment of people without material benefit to the dolphins.

Figure 1: Te hā o Tangaroa kia ora ai tāua *(next page).*

TE HĀ O TANGAROA KIA ORA AI TĀUA

WHAKAPAPA

Māori descend from Tangaroa and have a reciprocal relationship with our tupuna

HAUHAKE

Māori have a right and obligation to cultivate Tangaroa, including his bounty, for the betterment of Tangaroa (as a means of managing stocks) and support Tangaroa's circle of life

TIAKI

Māori have an obligation to care for Tangaroa, his breath, rhythm and bounty, for the betterment of Tangaroa and for the betterment of humanity as his descendants

KAI

Māori have a right to enjoy their whakapapa relationship with Tangaroa through the wise and sustainable use of the benefits Tangaroa provides to us

The concept of "Te Hā o Tangaroa Kia Ora Ai Tāua" underpins the work of Te Ohu Kaimoana.

This statement means "*the breath of Tangaroa sustains us*" and refers to the ongoing Māori relationship with Tangaroa – including his breath, rhythm and bounty.

Recognising our ongoing interdependent relationship acknowledges the Māori worldview that humanity is descended from Tangaroa and all children of Ranginui and Papatuanuku. We are part of the ongoing cycle of life.

The concept of 'Te hā o Tangaroa kia ora ai tāua' is underpinned by whakapapa, tiaki, hauhake and kai.

Whakapapa recognises that when Māori (and by extension Te Ohu Kaimoana as an agent of iwi) are considering policy affecting Tangaroa we are considering matters which affect out tupuna – rather than a thing or an inanimate object.

We recognise that as descendants of Tangaroa, Iwi Māori have the obligation and responsibility to Tiaki – care for our tupuna so that Tangaroa may continue to care and provide for Iwi.

Our right and obligation of hauhake (cultivation) is underpinned by our tiaki obligations and responsibilities to Tangaroa. Ultimately our right to kai – to enjoy the benefits of our living relationship with Tangaroa and its contribution to the survival of Māori identity – depends upon our ability to Tiaki Tangaroa in a meaningful way.

Te Hā o Tangaroa underpins our purpose, policy principles and leads our kōrero every time we respond to the Government on policy matters. It is important to us that the Government understands the continuing importance of Tangaroa and recognises the tuhonotanga that Maori hold as his uri.

All decisions and advice offered by Te Ohu Kaimoana on fisheries is underpinned by this korero to ensure the sustainability of Tangaroa's kete for today and our mokopuna yet to come.

The options for fisheries management should be based on Fisheries Act obligations and principles

42. Part B of the Plan sets out "Proposals for sustainability measures under the Fisheries Act 1996". This raises several important questions about the proposed options:

a) What is the effect of the process and proposed options on the Deed of Settlement?

b) Do the proposed options strike the right balance between sustainability and utilisation?

c) Are the proposed measures sufficient to ensure the long-term viability of the dolphins? Do they fall short or go too far?

d) What is the quality of the information used to develop the options and how has it been interpreted?

e) What action is really necessary to avoid, remedy or mitigate the effects of fishing on the dolphins?

43. **The Deed of Settlement should be protected**
The Fisheries Act is to be interpreted, and decision-makers must act in a manner consistent with:

the provisions of the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992[5].

The Settlement Act enacts the provisions of the Deed of Settlement signed by Māori and the Crown to resolve Māori claims to fisheries. The Settlement involved:

a) allocation of commercial fishing assets, including quota, to iwi

b) implementation of a regime for management of customary non-commercial fishing by kaitiaki.

44. At the time settlement was reached, Māori accepted that:

a) the quota management system was an appropriate system for managing commercial fishing

b) their fishing rights would be subject to a framework that ensured sustainability.

However, they did not accept that the value of their rights, or their traditional cultural practices which those rights support, should be undermined by measures that go further than what is necessary to sustain fisheries and the wider aquatic environment. To do so would undervalue their ongoing relationship with Tangaroa.

[5] Section 5(b) of the Fisheries Act 1996

45. **Sustainability and utilisation must be balanced**
The purpose of the Fisheries Act is:

to provide for the utilisation of fisheries resources while ensuring sustainability

This purpose means there must be a balance between ensuring sustainability and providing for utilisation, even when decisions are made about sustainability measures. In relation to protected species, the Act requires sufficient action to ensure long-term viability and to maintain biodiversity. This needs to be considered in the context of the obligation to provide for utilisation of fisheries resources. In our view, a fair balance isn't achieved by delivering a consultation document that has been considered by Cabinet without the benefit of a Regulatory Impact Assessment.

46. Action taken to provide protection beyond a level necessary to achieve the purpose of the Act cannot be defined as a "sustainability measure".

47. **Long-term viability of species is a requirement**
The Fisheries Act's environmental principles require decision-makers to take into account several matters:

(a) associated or dependent species should be maintained above a level that ensures their long-term viability:

b) biological diversity of the aquatic environment should be maintained:

(c) habitat of particular significance for fisheries management should be protected[6].

48. The measures proposed beyond Option 1 are not "sustainability measures" as they go further than required under the Act. Maintaining the species of dolphins - *Cephalorhynchus hectori* - above a level that ensures their long-term viability is a key consideration under the Act. However, the purpose of the Act must also guide how high above that level a management objective should be set. Fishing is being managed to ensure that *Cephalorhynchus hectori* (which includes the subspecies *Cephalorhynchus hectori hectori* and *Cephalorhynchus hectori maui)* is maintained above a level that ensures its long-term viability.

49. Efforts to manage the impacts of fishing on the sub-species *Cephalorhynchus hectori hectori* and *Cephalorhynchus hectori maui* are important in light of the need to take into account the principle that "biological diversity of the aquatic environment should be maintained". In our view the risk to this being achieved is not related to fishing.

[6] Section 9 of the Fisheries Act 1996

50. **Decisions for managing the effects of fisheries should be based on the best available information**
The information principles in the Fisheries Act require decision-makers to take into account the following:

(a) decisions should be based on the best available information

(b) decision makers should consider any uncertainty in the information available in any case

(c) decision makers should be cautious when information is uncertain, unreliable, or inadequate

(d) the absence of, or any uncertainty in, any information should not be used as a reason for postponing or failing to take any measure to achieve the purpose of this Act[7].

51. In the lead up to the release of the Plan, we participated in the risk assessment process facilitated by Fisheries New Zealand and the Department of Conservation. The process was supported by a spatial risk assessment, based on modelling ideal dolphin habitat. The habitat model was overlaid by information on dolphin presence and fishing activity. Modelling of this kind provides a useful basis for identifying dolphin presence on a large scale, as well as areas requiring further investigation. However, the accuracy of predicting dolphin density deteriorates with smaller population numbers. This limitation was expressed in the supplementary document to the Plan. Despite its inaccuracy, the spatial modelling has been used to determine fishing risk in supposed Māui dolphin habitat and subsequently translate this into management options.

52. **A careful assessment of the way data informs modelling is needed, particularly if the outputs are uncertain**
Some of the information on dolphin presence is inaccurate and the Act requires decision makers to take this into account when developing management options. Decision-makers should consider the effect of their decisions not only on sustainability but also on the positive obligation to provide for utilisation.

53. **The demographic model suggests that the risk related to commercial fisheries is already managed to appropriate levels**
Additional measures to restrict commercial fisheries are shown to have negligible conservation benefit. The demographic model suggested that removal of all fishing had a negligible effect and did not change population trajectories. Other threats are driving the population trajectories of these dolphins.

54. **Best available information suggests that toxoplasmosis is the most significant threat to Māui and Hector's dolphins**
We acknowledge there is uncertainty on the actual impact of toxoplasmosis. However, even the lowest estimate is significantly greater than the residual fishing risk. Modelled population projections for Māui dolphins show that unless toxoplasmosis is significantly reduced within five years, the population will decline to zero. This decline occurrs even when fishing risk was completely removed from the model.

[7] Section 10 of the Fisheries Act 1996

55. **Information on social, economic and cultural impacts is inadequate**

The Plan provides an estimate of economic loss that could occur as a consequence of implementing further restrictions. This estimate is only based on the sale of fish. There is no acknowledgement of the economic linkages to employment, infrastructure and physical assets such as vessels or processing sites. The analysis focusses on the difference between total revenue of set netting and trawling. This approach is crude as it fails to identify the effects of the proposals on people whose business may be lost entirely. This will have a detrimental effect on whānau Māori in particular. There is no acknowledgement of fishing being a part of community through economic chains to other service providers such as mechanics, engineers and wholesalers. The information provided in the Plan and the supplementary document is not sufficient for us to provide a better analysis.

56. **There is an absence of information about dolphin population status and trends**

The spatial risk assessment provides a coarse scale view of the distribution of risks from fishing. The Plan has not clarified the current status of the dolphins' population health and assumes a decline. Research on these matters was not requested for Hector's dolphins as part of the Plan review and leaves a critical gap in our knowledge for decision making. The population trajectories for Māui dolphins were contracted and completed as part of the review. However, they were not provided in the Plan.

57. **Measures under the Fisheries Act are limited to the effects of fishing**

The Act enables the Minister of Fisheries, after consultation with the Minister of Conservation, to:

take such measures as he or she considers are necessary to avoid, remedy, or mitigate the effect of fishing-related mortality on any protected species[8].

Court proceedings relating to sea lion interactions with the squid fishery analysed this provision[9]. Of particular importance, the Court found that a Minister has discretion as to what is an appropriate measure to manage the effects of fishing. However, the Minister may only take measures which he considers necessary to avoid, remedy or mitigate adverse effects of fishing on protected species.

58. The analysis required to identify where the Fisheries Act can support the various options is lacking. The failure to provide a Regulatory Impact Analysis to assist Cabinet understand the suitability of various options is, in our view, a major oversight.

[8] See Section 15

[9] *Squid Fishery Management Company Ltd V Minister of Fisheries* [2004] NZCA (22 March 2004); *Squid Fishery Management Company Limited v Minister of Fisheries & Anor* [2004] NZCA 132 (7 April 2004)

The language of the vision and goals is vague

59. The Plan has proposed the following vision statement, long-term goal and mid-term goal respectively:

    New Zealand's Hector's and Māui dolphin populations are resilient and thriving throughout their natural range.

    Hector's and Māui subpopulations are thriving or increasing, supported by an enduring, cohesive and effective threat management programme across New Zealand.

    Ensure known human-caused threats are managed within levels that allow subpopulations to thrive and recover

60. The use of the word "thriving" in the proposed vision statement is not measurable and can only be assessed subjectively. These types of visions and goals are not helpful in guiding policy decisions on the basis that they are not scientifically quantifiable, time bound or constrained by upper or lower limits. There is no clear indicator to distinguish when the goal has been met.

61. The purpose of threat management plans is to manage the impacts people may have on a species or population, so their long-term viability is not undermined. It is not about managing the dolphins themselves. The Plan's mid-term goal is more appropriate although still requires a measurable and time-bound constraint. In our view, a more useful vision statement would be:

    The total impact of human-caused threats is managed to ensure the long-term viability of Hector's and Māui dolphin populations.

    This alternative vision statement is more focussed on the problem and the matters the Plan can address. It would also underpin a holistic approach to managing human-induced impacts. An assessment of all human impacts would lead to far more rational decisions and help focus remedial effort.

Māui Dolphins

The population management objective for Māui Dolphins is appropriate as an aspirational objective for the Plan

62. The Plan proposes a management objective of 95% of the unimpacted population for Māui dolphins. Māui dolphins are vulnerable due to their low abundance. There are only 63 adult dolphins remaining. They form one geographical population within a restricted area with an assumed historical trend of population decline. In this case the objective for the Plan seems reasonable, but it requires all impacts to be managed in order to be achieved.

63. The Plan proposes the population objective should be met with 95% certainty for fisheries impacts. Given the extremely low population and high exposure to other threats, it is appropriate to be highly certain that fisheries effects are not exacerbating a decline. This supports an objective of 95% of the potential population with 95% certainty to the Plan. However care needs to be taken in translating that to a regulatory approach under the Fisheries Act.

64. The portrayal of objectives in the Plan is misleading as it suggests that the population objective of 95% can be achieved through fisheries management measures. However, recovery to this level requires management of all impacts.

65. Part B of the Plan then moves to proposals for sustainability measures under the Fisheries Act based on its proposed fisheries objective. The Plan states that in order to achieve the fisheries objective, risk needs to be reduced by 50%. The current fisheries mortality was estimated in the spatial risk assessment to be 0.11 per year with 50% certainty. This estimate increases to 0.24 per year if 95% certainty is required. This analysis of risk is based on the spatial modelling of 63 adult Māui dolphins against habitat criteria and fisheries effort. The model has been applied inappropriately to Māui dolphins.

66. We disagree with this interpretation of the scope of both the Plan and the Act. The same objective can be met in many ways over different time frames without inflicting undue stress on individuals, whānau and their communities. The approach taken in the Plan is blunt and cannot be delivered through sustainability measures under the Act. Further action to implement the Plan to reduce fisheries risk should be done using a "bottom-up" approach. This would neglect the reality that we need to go beyond the Fisheries Act to achieve the desired outcomes.

Best available information suggests the risks of fishing are very low

67. **The risk to Māui dolphins of current fishing activity is very low due to the sustainability measures that have already been put in place**

    Since 2003, the government and industry have implemented restrictions on set nets and trawls in certain areas of Māui dolphin habitat. They have also increased observer coverage and other monitoring. From 1995/96 to now, there have been no observed captures of Māui dolphins in set net or trawl fisheries. Hence the best estimates of current commercial fishing mortalities do not exceed the levels that would cause further decline of the population.

    The level of fishing effort, and risks have all declined since 1992/93. This suggests current fisheries measures are already effective in avoiding any fisheries-related mortality.

68. **There have been no incidents since the current measures have been put in place – it is not clear what is justifying further closures**

    During a regional meeting a government official said that "decent observer coverage that showed no interactions" would eliminate the need for further constraint. There has been 100% coverage from Waiwhakaiko to Hawera with no sightings over 1000 fishing days, yet this area is proposed for closure. We consider that this statement demonstrates a prejudice that fishers are guilty until proven innocent. And that despite strenuous efforts and conservation measures, fishing is still being targeted on the basis that it can be regulated.

69. **Models need to be interpreted appropriately**
The modelling carried out as part of the risk assessment is based on characteristics of ideal Māui dolphin habitat. The modelling incorporated habitat variables of turbidity and ahuru (a prey species) to generate dolphin distribution. The model has an overall poor fit and is three times as likely to be wrong about a prediction as it is to be right[10].

70. The model was developed using Hector's dolphin data. It provided a generally adequate representation of high-density populations, but its accuracy declined when applied to sparse and small populations. The supplementary document noted this limitation. However, the model has been used regardless. It simply applies the same approach as that used for Hector's dolphin and assumes it can represent Māui dolphin distribution. The misuse of the model becomes quite apparent when comparing the proposed spatial closures with the resulting reduction of risk. The model distributes 63 dolphins as permanent residents from Cape Reinga to Cape Egmont [Figure 2]. This is patently untrue and misleading as dolphins do not reside in all of this area. Hence the resulting risk assessment creates phantom risk. It requires vast areas of closures along the entire West Coast of the North Island to reduce a phantom risk.

71. **Managing the risk associated with Māui dolphins predicted by habitat modelling is inaccurate and does not provide conservation benefits**
A Fisheries New Zealand scientist presented the spatial risk assessment at the South Island Stakeholder Forum and stated that "without accurate maps of animal distributions and threat distributions, risk cannot be spatially described." Although our estimate of fisheries risk distribution is accurate, we do not have the same accuracy for the distribution of Māui dolphins. Therefore, we do not accept the risk to dolphins is realistic in the following areas:

a) Cape Reinga to Maunganui Bluff – no sightings

b) Outside 12 nautical miles – one anomalous sighting

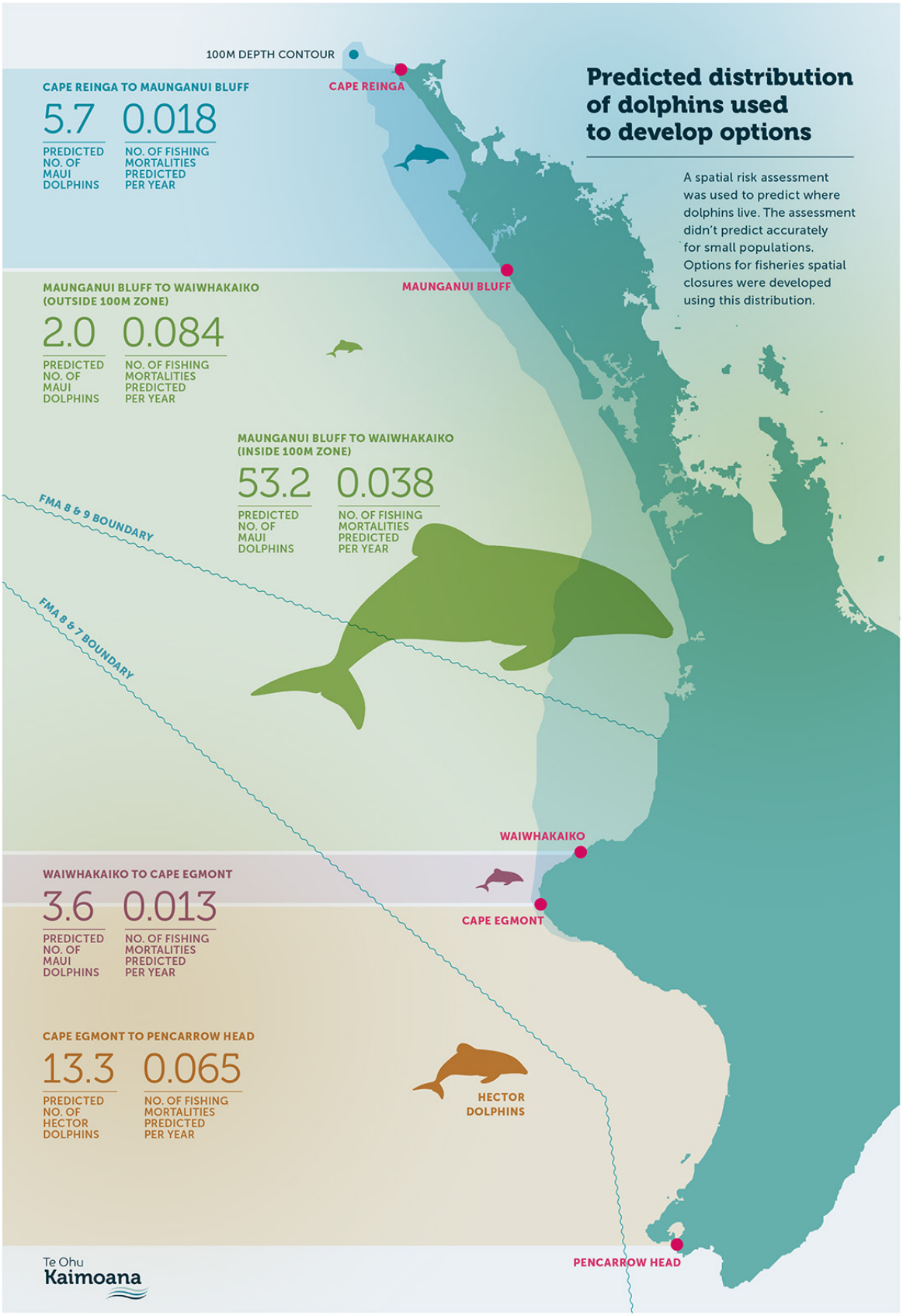
c) Inside harbours – shown to be negatively correlated with mud (reference)

d) Waiwhakaiko to Cape Egmont – no observations over 1000 fishing days

e) Cape Egmont to Pencarrow Head – transition zone of Hector's dolphins

[10] The model explains 24% of variation, that is, where dolphins are likely to be 24% of the time.

Figure 2: Predicted distribution of Māui dolphins along the West Coast of Te Ika a Māui



72. **Hector's dolphins have been added to the "risk" level for Māui dolphins**
The risk assessment placed 13 permanent resident Hector's dolphins between Cape Egmont and Pencarrow Head (Wellington). However, in reality, Hector's dolphins in this area are transitory and uncommon. The fisheries mortality associated with these dolphins has been added to the total mortality of Māui dolphins. These 13 Hector's dolphins have not been included in the Māui population to calculate the PST. This means the 13 dolphins aren't included in the Māui dolphin population analysis, but the risk associated with them is being applied to the population. Therefore the application of the model inappropriately overestimates fisheries mortality to the Māui dolphin population.

73. Although a map of distribution was provided in the consultation document, it is inadequate in terms of informing the reader where the model was predicting dolphins and in what abundance. The map lacks a scale of dolphin density and is not related to risk. We have generated a simplified map (Figure 2) that we consider better describes what the habitat model predicts and to highlight its inaccuracies. Thirty two percent of the predicted dolphins are in places where they have not been observed. And 17 percent of predicted dolphins are Hector's dolphins. Hence, we do not accept the model as a justification for further fisheries closures to protect Māui dolphins.

74. **Removal of phantom risk from areas not inhabited by Māui dolphins leads to a better representation of existing fisheries risk**
Using all our knowledge about Māui dolphins when interpreting the model allows for a more conscientious analysis of the current fisheries risk to dolphins. Given the very small population of Māui dolphins, it is important that our conservation measures are properly focussed on areas where they will make a difference. By refocussing the risk assessment, a more targeted approach to reducing fisheries risk is possible.

75. Fisheries Inshore New Zealand have provided a comprehensive analysis of the spatial risk assessment in their submission on the proposals. We support the content of their submission regarding the consultation process and use of the spatial risk assessment.

Options 2 – 4 go further than necessary to ensure the long-term viability of the dolphins

76. **Further removal of fishing activity will have negligible conservation benefit**
The review's modelling of the population trajectory for Māui dolphins shows that removal of all fishery risk would not cause the population to recover. The risk assessment shows that current level of fisheries risk is allowing the population to recover to 95% of its unimpacted level. This reflects the effectiveness of the measures that have been put in place to protect Māui dolphins from commercial fisheries risk. This deficiency highlights the disconnect between the science review and the Plan.

77. The problem definition is not well setout in the document is unclear. It doesn't analyse how far current measures are effective in managing the different threats. Existing measures have been in place for many years and need to be better analysed.

a) In the mid-1990s, Codes of Practice and closed areas were put in place by a fisheries stakeholder group to reduce fishing-related risks to Hector's dolphins.

b) During 2000-2003, additional measures were put in place by a fisheries stakeholder group. These measures minimised the interaction between commercial set net fishing activity and North Island Hector's dolphins. They included a closed area (proposed to be implemented by regulation), gear restrictions, mitigation measures and a log book programme to gather further information.

c) In 2007 a Threat Management Plan was developed. Additional set net and trawl restrictions in dolphin habitat were implemented to significantly reduce risk.

d) In 2012 a dolphin was caught off Cape Egmont and reported by the fisher. Despite being unable to discern the subspecies, the Māui dolphin portion of the Threat Management Plan was updated and increased monitoring was put in place. There have been no observed sightings or captures since this time.

e) All set net effort surrounding the restricted area in Taranaki has been observed since 2014 at a cost of over $1million, with 1000 fishing days observed and no captures or sightings of Cephalorhynchus species.

f) In 2016, fishing companies Moana and Sanford developed a Māui dolphin protection plan, which put in place a transition plan for both companies to enhance dolphin-safe measures by 2022. From 2016 to now, Moana vessels have had cameras operating in those areas deemed as Māui habitat in their protection plan. This was to ensure that in the event a dolphin mortality was reported, they could be reassured that it was not associated with their fishing operations.

g) In November 2019, there will be 100% observer and digital monitoring of set net and trawl vessels operating in statistical areas 40-46 (see Appendix 2). These areas cover known Māui habitat (with a considerable buffer zone).

78. Our assessment of the masures that have been put in place is that they have been effective in eliminating any incidental mortality of Māui dolphins from fishing related activity. The ongoing monitoring means that participants in the fishery remain alert to any risk and are able to adapt to new insights into dolphin behaviour.

Options 2 – 4 do not strike the right balance between sustainability and utilisation

79. Options 2 – 4 fail to achieve the purpose of the Act. Such a heavy-handed approach will affect the utilisation opportunities but isn't necessary to ensure the long-term viability of the dolphins or maintain biodiversity.

80. **The proposed closures have potentially devasting consequences for Māori fishers and Iwi**
The proposed spatial closures will adversely affect entire fishing communities. Quota for affected

stocks will be devalued. Settlement quota for inshore stocks was allocated to Iwi based on their coastline. This means spatial restrictions directly remove an Iwi's ability to utilise those assets within their takiwā. As these assets are non-transferrable, unnecessary closures will affect their identity, degrade the value of their assets and affect their relationship with Tangaroa.

81. The proposals will lead to:
- Loss of local industries
- Loss to fishers of fishing grounds and local fish processors
- Loss of value to Iwi and other quota holders
- Loss of pātaka with Egmont Seafoods and Ocean Pearl.

As we have already pointed out, the proposals contain an inadequate analysis of the economic, social and cultural impacts, which do not reflect the extent of the losses that will be experienced by Iwi and fishing communities.

82. The proposed measures will have a negative effect on the ability for kaitiaki to issue customary authorisations for set netting across the entire West Coast of Te Ika a Māui. Notwithstanding that the proposed options do not actually prevent kaitiaki from issuing customary authorisations for fish caught using set nets, it does create negative perceptions about customary fishing by those restricted from fishing in the area. The existence of commercial and recreational closures generates a controversial arena for kaitiaki. Closing areas that have no evidence of Māui dolphin existence unnecessarily prevents the ability to carry out customary practices without incurring a highly negative reaction from the public. This is prejudicial towards legitimate Māori customary practices.

83. **The pātaka system enables Iwi in Taranaki to exercise their rights to manage customary non-commercial fishing for sustenance and to manaaki their manuhiri**
These pātaka use commercial vessels to catch fish on customary authorisations, which provide kaimoana for hui and tangi. Such arrangements have provided a beneficial means for contemporary exercise of customary rights. The proposals place these pātaka at risk by closing the primary fishing grounds to those commercial companies that supply kaimoana to Iwi and hapū. Since 2009 Iwi along the Taranaki coast have operated pātaka systems with the support of Egmont Seafoods and Ocean Pearl. Since the pātaka were established, over 49 tonnes of fish has been harvested and distributed to around 2000 hui and tangi. There is only one licensed fish receiver in the Taranaki region, if restrictions forced them to close this would extinguish the pātaka system for the Iwi of Taranaki. The effect would further flow on to all other commercial operators in the area. In doing so these restriction work against the Crown's responsibility to give effect to the rangatiratanga of Iwi in regard to their customary fisheries as anticipated in the 1992 Deed of Settlement.

84. **The proposed closures effectively diminish the ability for Māori to exercise their customary rights**
Without the ability to authorise set net fishing and the pātaka system, the quantity of fish available for hui and tangi will be greatly diminished.

85. Although the consultation document signals the impact the measures may have on the inshore fleet, there is a lack of detail. There is also no information to signal any type of assistance to the

potential 250 affected fishers (North and South Island) who may lose their livelihoods. This is about a quarter of the inshore fishing fleet. Section 308 of the Fisheries Act does not protect the Crown from compensation where measures are not required to ensure sustainability. Yet there is no doscission in the consultation document on compensation.

86. We endorse the detailed economic analysis of the impacts on commercial sector as a consequence of these proposals as provided by Fisheries Inshore New Zealand in their submission.

There are more effective and targeted ways of reducing residual fisheries risk to Māui dolphins

87. **Although the risk of fisheries threats has already been managed to meet the proposed objective, Iwi are supportive of further reducing risk**

    To ensure the relationship Iwi have with Tangaroa is maintained we support a holistic and evolutionary approach to threat management. For this to occur we consider a more focussed and less emotive vision and objectives be developed.

88. The first step could be to redraft the vision and objectives of the Plan to make it clear we are managing threats not dolphins.

    Vision: *The total impact of human-caused threats is managed to ensure the long-term viability of Hector's and Māui dolphin populations*

    Objective*: The total impact of all human-caused threats are managed to allow the Māui dolphin to increase to a level at or above 95 percent of the unimpacted population.*

    Under this approach, the risk assessment would be reviewed to assess the total level of all human impacts on the Māui population. Then the greatest threats to the population can be determined and measures developed to meet the objective.

89. It is clear that the main threat to be addressed is toxoplasmosis. The options proposed in the Plan provide no sense of what action is needed to meet this threat. It is hard to determine what will be done and how risk will be reduced to the levels proposed. After 12 years of inaction the Plan has only proposed to make a plan.

90. We appreciate it is difficult to address the risk posed by toxoplasmosis. The development of a Toxoplasmosis Action Plan and a workshop to refine research would be a good start. However, action to reverse or reduce the degradation of the marine environment will also be necessary to ensure the vision is met. Poor habitat quality puts the population under stress and means that dolphins are more prone to death as a result of toxoplasmosis.

91. The Plan proposes to develop a Toxoplasmosis Action Plan over the next six months. We propose that a plan to manage future fisheries-related threats (which are much lower) be developed over the same timeframe. Importantly, we endorse using a "bottom up" approach. This would enable all fishers to buy in to the solutions agreed on.

A better option to reduce risk

92. A more targeted approach would involve development of vessel management plans for risk reduction. This would be vessel, fishery and area-specific, involving all tools available to managers and operators. These could include:

a) Assistance to transition out of the relevant fisheries for those who wish

b) Innovation of new methods and mitigation options

c) Research into the dolphins and targeted monitoring to increase our understanding of the dolphins

d) Potential for increased spatial restrictions in the core habitat

e) Planning towards the next Threat Management Plan review by identifying knowledge gaps and the role for additional monitoring.

93. We note the implementation of cameras for monitoring fisheries on the West Coast will be in effect from 1 November 2019. This will be complemented with 100% observer coverage (Table 1). The costs of the first element will be met by the Governement, while industry will be required to absorb the additional costs of the latter. But in compensation they will deliver 100% certainty over fishery interactions with Māui dolphins.

Hector's Dolphins

The population management objective for Hector's Dolphins goes beyond the scope of the Act

94. The Plan proposes a management objective of 90% of the unimpacted population for Hector's dolphins. It proposes the population objective should be met with 95% certainty for fisheries impacts. This generates parameters of 90% population with 95% certainty around the fisheries objective.

95. Given the relatively high abundance and indicated population status, we consider this target to go beyond the scope of the Fisheries Act. The long-term viability of Hector's dolphins is not at risk from fisheries. With this in mind the current spatial restrictions are close to achieving this objective, including for all subpopulations. Any residual risk can be further managed, and the objective met and maintained by a "bottom up" approach. This would be a more affective way of meeting an objective that goes beyond statutory requirements.

Best available information suggests the risks of fishing are very low

96. The risk to Hector's dolphins from current fishing activity is very low due to the measures that have already been put in place. Fisheries related protection for Hector's dolphins began in the mid-1990s through codes of practice and closed areas implemented by industry. Since 2007, the government has implemented restrictions on set nets and trawls across the Hector's dolphin habitat. The best estimates of current commercial fishing mortalities do not exceed the levels that would cause further decline of the population. The level of fishing effort, estimated deaths and risk have all declined since 1992/93. This indicates the effectiveness of current fisheries measures in meeting statutory requirements. However we are supportive of improving current mitigation practices.

97. **Observer coverage planned for 2020 will increase certainty around fisheries risk**
Table 1 sets out the planned observer coverage for setnet and trawl under the fisheries levy funded Conservation Services Programme. The coverage in South Coast South Island doesn't specifically state a priority for Hector's dolphins. However statistical area 030 covers all of Te Wae Wae Bay and a considerable buffer zone of this area known to be the core area for the South Coast South Island sub-population. There is potential to extend the East Coast set net observer programme to include statistical areas 022 and 018 (Timaru and Kaikoura). Targeting should be done with a focus on vessels with the highest fishing effort.

98. The programme for small inshore trawl covers the South Island from Seddon around the East to Fiordland. A focus of observer effort for areas 030 and 020 (Te Wae Wae Bay and Banks Peninsula) should be added to this programme as part of the Plan. These areas of higher density dolphin populations are the most appropriate for determining a more accurate estimate of trawl catchability. The current estimate is highly uncertain therefore this information would be an improvement to our understanding of fisheries risk.

Table 1: Hector's dolphins - observer coverage planned for the set net fishery (See Appendix 1 for a map of New Zealand's statistical areas)

Method	Area	Statistical Area	% of effort	Season	Total number of days	Priority
Setnet	East Coast South Island Otago	024, 026	65	Oct-Mar	241	Capture rate & interactions of South Island Hector's dolphins & hoiho.
	East Coast South Island Banks Peninsula	20	65	Oct-Mar	80	Capture rate & interactions of South Island Hector's dolphins & hoiho.
	South Coast South Island	025, 027, 029, 030	65	Oct-Mar	231	Capture rate & interactions of hoiho, white pointer shark & other protected species.
	West Coast North Island	040, 041, 042, 045, 046	100	All year	178	Information on distribution & possible captures of Māui dolphins
Small Inshore trawl	East / South Coast South Island	018, 020, 022, 024-027, 029, 030	10	All year	350	Rate of seabird captures, audit and assess mitigation techniques, & gather information to inform cryptic mortality estimates.

99. We note that the setnet and trawl interactions with dolphins across the top of the South Island do not pose a material risk of by catch. This is reflected by the lack of proposals to have observer coverage on fishing vessels.

100. **Population modelling indicates the population is increasing**

The total population of Hector's dolphins is predicted to be stable or increasing. Scenarios were run with and without fishing mortalities and both scenarios show an increasing population. This model also tested the scenarios for the Hector's sub-populations. These were all shown to be increasing with the exception of West Coast South Island. A comparison of the scenarios with and without fishing mortality indicates that fishing is not suppressing this population. Aerial surveys of the West Coast South Island population do not support the decline predicted by the model. This highlights the problems with adhering to model predictions without ground truthing.

101. **Population status information was not conducted prior to the release of the consultation document**

Fisheries Inshore New Zealand commissioned a scientist to run population trajectory scenarios for Hector's dolphins to inform the Plan. The same scientist was commissioned by Fisheries New Zealand to run the same model for Māui dolphins within the review process. This information is vital to evaluating the effectiveness of current measures and deciding what needs to be done to update the Plan. The Stakeholder Forums raised the importance of population trajectories in decision making processes. We do not understand why this information has not been available to support decision making.

102. We support the description of population trajectories Fisheries Inshore New Zealand described in their submission.

Options 2 – 3 go further than necessary to ensure the long-term viability of the dolphins

103. The Hector's dolphin population is increasing under current arrangements. The long-term viability of these dolphins is already secure and no further statutory measures are needed to meet this requirement. However, we fully endorse further "bottom-up" efforts to achieve the objectives of the Plan.

104. If further measures are desired for Hector's dolphins, then decision makers need to consider more finely targeted approaches than use of spatial exclusion zones. Further monitoring and targeted research of the sub-populations is required to identify key area of risk.

Options 2 – 3 do not strike the right balance between sustainability and utilisation

105. We consider options 2 – 3 fail to achieve the purpose of the Act. Sustainability and utilisation are already well balanced as the long-term viability of these dolphins is secure. We consider any further restrictions to fishing will cause an imbalance that goes beyond the purpose of the Act.

106. In considering the current measures, population status and associated risk to Hector's dolphins, the options put forward seem to us to be unnecessarily severe. Further, they have bee developed in isolation to Te Ohu Kaimoana and the wider fishing industry. The lack of commitment to a collaborative process has reduced the level of buy in.

Reducing residual fisheries risk to Hector's dolphins

107. **Hector's dolphins are a key to protect Māui dolphins**
In order to address threats and reduce the impacts, we need to understand the dolphins to help us define the threats. The Māui dolphin population is far too small to research for this purpose. This was made apparent during the spatial risk assessment process. Analysing higher density Hector's populations can fill key knowledge gaps. That would help us understand how we can improve the state of the Māui dolphin population and how to continually improve management of threats. For example:

a) innovation of new methods and mitigation approaches can be trialled in Hector's habitat to test its efficacy

b) research into dolphins and targeted increased monitoring of fisheries. Fisheries risk can be better estimated through targeted observer coverage in Hector's habitat.

108. **Fisher and dolphin behaviour is not random and provides ways to manage risk**
Understanding dolphin behaviour will inform the need for changes to fisheries management. Gaining better knowledge on dolphin's behaviour can inform fishers on how they can better deploy their gear. For example, in the case of hoiho, set netters can set at night as hoiho do not forage at this time. This kind of temporal avoidance is a valuable contribution to threat reduction.

109. Our preferred approach for managing Hector's dolphin populations is the same as stated in our Māui dolphin section. A plan developed through a bottom up approach will be the most effective way to reduce residual risk to dolphins and support our fishing communities.

Returning health to Tangaroa

110. **The health of Tangaroa is at risk in Hector's and Māui dolphin habitat**
The 2008 Threat Management Plan identified concerns about the health of Tangaroa. However, options to restore the health of Tangaroa are missing from the Plan. Instead the Plan takes a light touch towards impacts that require a cross agency approach.

111. The 2008 Threat Management Plan identified many threats to the marine environment and their link to Hector's and Māui dolphins. For example, habitat degradation is having a severe impact on our marine environment, particularly in coastal environments. Coastal environments provide numerous ecosystem functions and services. These delicate environments are threatened by pollution in the form of sediment, nutrient and chemical run off, solid pollution such as plastics, and by climate change. Increasing numbers of pollutants are discharged into the coastal marine environment particularly near urban areas with growing populations. We need a more integrated approach based on ki uta ki tai (mountains to the sea).

112. **Disease is the major threat to both Hector's and Māui dolphins**

Diseases such as toxoplasmosis and brucella are a significant threat to Māui and Hector's dolphins. This is highlighted in the estimated annual deaths from toxoplasmosis being the major cause of mortality. Toxoplasmosis is spread through cat faeces and is a threat to biodiversity in countries that do not have native cats. Toxoplasmosis is not unique to New Zealand and is found in the United States, with its presence in Hawaii, known to deterimentally affect their marine mammals and bird species. New Zealand has also reported the toxoplasmosis death of a kiwi and a kaka. There is a general lack of knowledge about this threat, however we know it affects immune system suppressed animals the most. This means that females who are pregnant are most at risk as the body naturally suppresses its immune system during gestation.

113. **Despite the government identifying these issues 12 years ago, nothing appears to have been done to mitigate the impacts of these threats**

Maintaining the mauri of Tangaroa in turn maintains our mauri. Non-fisheries related impacts on Tangaroa also need to be addressed. The plan avoids such issues despite its commitment to integrate mātauranga Māori.

114. The Cabinet paper supporting the release of the Plan states:

"We consider that threats from tourism, oil spills, vessel traffic, coastal development, pollution, sedimentation and climate change are already appropriately managed through the existing regimes. We do not therefore propose to consult the public on any addition options to these threats[11]."

It is not clear from the information provided in either the Cabinet paper or in the Plan, whether other agencies (such as regional councils) are doing anything that will benefit the dolphins. The risk assessment shows that fisheries effects are a very small proportion of the overall mortality incurred by the dolphin populations. Hence it would be expected that a multi-agency approach would be developed to address risks.

The spatial risk assessment was unable to map the distribution of these other sources of risk. However, this does not mean the risk does not have a very real effect. For Tangaroa, the degradation of the marine habitat is ongoing and cumulative. Action is overdue.

[11] Paragraph 19 of the Cabinet paper for Protecting our Hector's and Māui dolphins

115. **Holistic management supports mātauranga Māori**

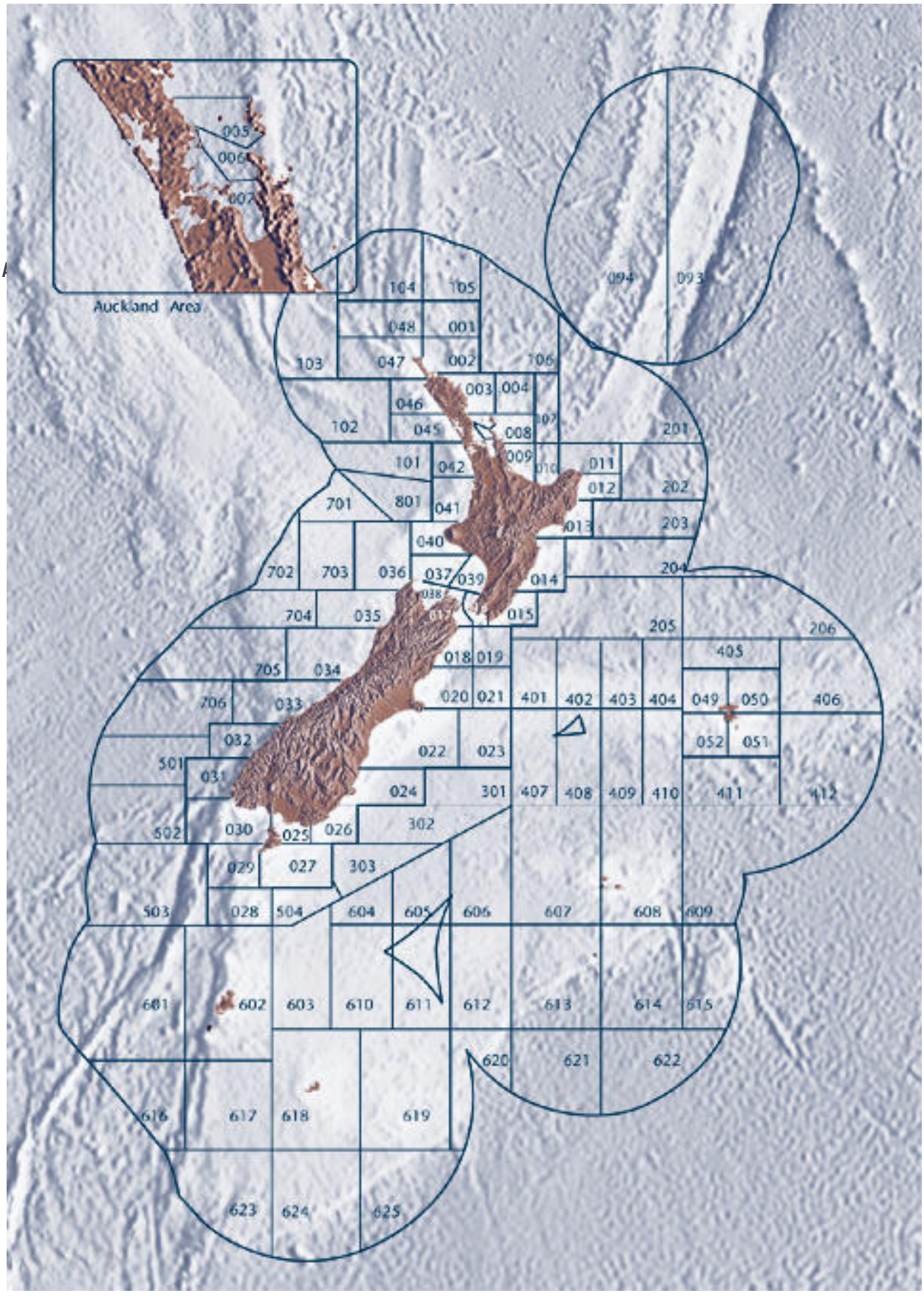
The Plan proposes a medium-term goal "Understand how tangata whenua wish to exercise kaitiakitanga of Māui and Hector's dolphins". It is still unclear how the goal will be met by the Plan. We find the statement made in the Cabinet paper disregards mātauranga Māori values and concepts around holistic management.

116. **Within Te Āo Māori, threats to Tangaroa are considered holistically, not in isolation**

The Plan ignores the activities that adversely affect Tangaroa and therefore the Māui dolphin. The Plan should take a more integrated approach and consider the effects of marine degradation on the dolphins and map out a process to deal with them.

117. **By ignoring the threats to Tangaroa, the government is undermining the ability of Māori to be kaitiaki**

Māori descend from, and have a reciprocal relationship, with Tangaroa. Caring for Tangaroa underpins Māori's right to hauhake (cultivation). Removing Māori fishing rights removes the Iwi right to benefit from their whakapapa relationship to Tangaroa as guaranteed by article 2 of Te Tiriti o Waitangi. Te Ao Maori whakapapa to Tangaroa is underpinned by obligations and responsibility as kaitiaki. By diminishing the importance of the numerous non-fishing related threats to the marine environment, the government is taking away initiatives, opportunities and funding that would enable Māori and the wider community to care for Tangaroa's health. The Plan fails to address known non-fishing threats to dolphins and instead removes the right of Māori to benefit from their whakapapa relationship with Tangaroa through the act of harvesting fish in a manner which does not threaten other species. This removal will affect the ability of Māori to care for their tupuna and act as kaitiaki.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