

## Submission to the Department of Conservation on “REVIEW OF THE MAUI’S DOLPHIN THREAT MANAGEMENT PLAN – CONSULTATION PAPER” (NOVEMBER 2012)

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### INTRODUCTION

1. Straterra<sup>1</sup> welcomes the opportunity to submit on the Maui’s Dolphin Threat Management Plan review<sup>2</sup>. This paper summarises and assesses the various threats to the dolphin, and proposes options for managing these threats.
2. At issue for the New Zealand minerals sector – within the current and historical range of the Maui’s dolphin - is the potential to prospect for, explore, and develop offshore ironsands resources. Straterra agrees that such activities must be consistent with reasonable and effective measures to manage environmental effects, including threats to the Maui’s dolphin.
3. In preparing this submission, Straterra has consulted extensively with affected members, namely, Trans-Tasman Resources Ltd, and consultancy firm Resource and Environmental Management Ltd. It is our shared belief, based on our current knowledge, that seabed minerals activities can be carried out in ways that are compatible with measures to manage threats to Maui’s dolphin.
4. It is noted that the value of the economically-recoverable offshore ironsands resource is potentially very significant in the New Zealand minerals context, as presented in the TTR submission. As a result, significant investment has been attracted to New Zealand. It is noted that the costs of activities include the costs of all environmental management, including in relation to Maui’s dolphin and other marine mammals.
5. Straterra submits that measures for managing the threats to the Maui’s dolphin must be based on science and evidence. We contend this is lacking in the case of seabed minerals activities. That argues for great care in developing measures for managing these threats, in ways that safeguard the dolphin, while not adversely affecting environmentally-responsible investment in New Zealand.
6. Straterra would welcome further discussion with officials as the TMP is developed.

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<sup>1</sup> Straterra represents by 90 % by value of NZ minerals production, exploration, research, services, and support <http://www.straterra.co.nz/About+Straterra>

<sup>2</sup> Department of Conservation Maui’s dolphin web pages <http://www.doc.govt.nz/mauisconsultation>

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## EXECUTIVE SUMMARY

7. The effects, if any, of seabed minerals activities on the Maui’s dolphin are largely or entirely unknown, to any degree of certainty.
8. Information is, therefore, of paramount importance to resolve the unknowns and develop suitable methods for managing threats, however, is costly to obtain.
9. If companies are to be required to fund information gathering, they need to be enabled to do so, in order to undertake their activities within appropriate environmental constraints. An appropriate context is the RMA consent process, where the process is well established, and where there is a high degree of rigour. The safeguard for the dolphin and society is that mining activities cannot occur until consents, with conditions, are obtained. In the case of permitted activities, the effects are no more than minor, and there are standard conditions attached, e.g., seismic surveys must follow the DOC Code of Conduct.
10. A Maui’s dolphin code of conduct developed between officials and industry, with the participation of other stakeholders, would also be of value, for the dolphin, and all concerned.
11. Moratoria and prohibitions are disincentives to investment, and their uncritical use will lead to less, not more research into dolphin threat management. Such measures are likely to

disincentivise minerals investment in New Zealand, in the absence of knowledge on whether or not seabed minerals activities are compatible with Maui's dolphin threat management.

## RECOMMENDATIONS

12. Straterra recommends the Department of Conservation to:

- a) Note that Straterra's submission concerns only activities in relation to seabed minerals prospecting, exploration and mining;
- b) Agree that there is insufficient evidence specifically on seabed minerals activities posing a threat or otherwise to the Maui's dolphin;
- c) Agree that the first step in managing seabed minerals activity-related threats is to obtain more information, particularly on the areal extent of the current dolphin population;
- d) Agree that the resource consent process under the Resource Management Act 1991 provides an appropriate forum or mechanism for information to be obtained by mining applicants, and rigorously tested and challenged;
- e) Note that no mining activities can occur until resource consents are obtained, and that, currently, there is no offshore ironsands mining in New Zealand;
- f) Agree in addition to Rec. (d) that the Department and industry should develop a code of conduct for all seabed minerals activities, to provide for the management of any threats to Maui's dolphin;
- g) Agree that a moratorium on seabed minerals activities would be inappropriate because it would terminate current interest and investment, and discourage the gathering of information, with no obvious or demonstrated benefits for the Maui's dolphin, and would be unnecessary in light of Recs. (d) – (f);
- h) Agree that additional prohibitions on seabed minerals activities are inappropriate for the same reasons given in Rec. (g);
- i) Agree that it is unnecessary at this stage to extend the marine mammal sanctuary to Hawera, noting that this option could be kept under permanent review, subject to confirmed evidence of the presence of Maui's dolphins along Taranaki coasts; and

- j) Notwithstanding Recs. (g) and (h), agree that it may be appropriate to maintain a prohibition on seabed minerals activities out to 2nm within the existing marine mammal sanctuary area.

## DISCUSSION

### Scope of submission

13. Straterra's submission addresses only seabed minerals prospecting, exploration and mining-related threats to the Maui's dolphin. The key resource is ironsands (plus vanadium and titanium byproducts). Straterra accepts these activities must be considered a potential or actual threat, even if it is revealed they have few or no effects, and must be considered in the context of measures to manage threats.
14. We note below that no credible evidence has been presented in the consultation paper or accompanying material to demonstrate or evaluate the nature and extent of these threats, if they are threats.

### Lack of evidence

15. The risk assessment made by the panel of experts drew principally on Thompson (2012)<sup>3</sup>, which is:
- Described by the author, Kirsten Thompson, to be a rough first draft<sup>4</sup>;
  - Has not been subjected to a thorough, independent peer review;
  - Is unpublished by the contractor, the Department of Conservation; and
  - Contains many errors of fact and interpretation<sup>5</sup>.
16. On the above, Thompson (2012) cannot be used as a basis for making any deductions or expressing any opinions about seabed minerals activities. On this topic, the risk assessment must be considered null and void. The consultation paper characterises the threats posed by seabed minerals activities in a negative, unfair and unscientific way.

### Way forward

17. The consultation paper (page 7) acknowledges: "the nature and extent of human-induced threats in Maui's dolphin is still highly uncertain, due to gaps in available information". In that context, the Department of Conservation and the Ministry of Primary Industries believe a

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<sup>3</sup> Thompson (2012) [http://www.lostwaves.org/uploads/7/3/1/3/7313878/mauis\\_and\\_mining\\_docdm-9353541.pdf](http://www.lostwaves.org/uploads/7/3/1/3/7313878/mauis_and_mining_docdm-9353541.pdf)

<sup>4</sup> Refer to the TTR submission

<sup>5</sup> Ditto

“combination of tools” will be needed to manage threats to the dolphin, to achieve an “integrated approach”. We note the wide range of options proposed for managing threats.

18. Straterra agrees with the above approach and rationale, noting - as stated - that the threats of seabed minerals activities to the dolphin are unknown to any acceptable level of certainty. Indeed, these activities may well have little or no effect on the dolphin. As yet, we do not know one way or the other, and that is the key issue to address when developing threat management measures.

**What is known about Maui’s dolphin in relation to seabed minerals activities**

19. During all of TTR’s work off the South Taranaki coast, and, despite the presence of marine mammal observers on TTR-contracted vessels for the entire time, not a single Maui’s or Hector’s dolphin has been sighted<sup>6</sup>. Indeed, very few marine mammals were sighted - all of them common dolphins.

20. TTR’s vessels have also spent many days at sea between Awakino and Kawhia, and, despite having keen observers on board, sighted no Hector’s or Maui’s dolphins.

21. Considerable seismic data acquisition work undertaken by the offshore petroleum industry over many years, in particular since 2006 when the first DOC Code of Conduct covering acoustic disturbance was promulgated, has found likewise<sup>7</sup>.

22. Recent reports of government observers aboard Taranaki fishing vessels similarly report that after “hundreds of hours at sea and travelling thousands of kilometres they still hadn’t seen any Maui’s or Hector’s dolphins”<sup>8</sup>.

23. From the consultation paper, there is no evidence of the existence of Maui’s dolphin south of Kawhia or Raglan since 1989. Rather, the evidence is overwhelmingly that the dolphin today inhabits the coastal waters between Kawhia and Kaipara Harbours. The question remains whether a likely maximum distance from shore is 2 nautical miles, 4nm, 7nm, or the distances from shore above a specified depth contour.

24. On that basis, seabed minerals activities outside of where Maui’s dolphins exist would lead, currently, to no interactions with the dolphin.

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<sup>6</sup> Refer to the TTR submission

<sup>7</sup> View also the PEPANZ submission

<sup>8</sup> <http://www.stuff.co.nz/taranaki-daily-news/news/7896615/No-sign-of-dolphins-after-4-months>

25. Between Kawhia and Kaipara, however, there is the potential for interactions. Much study remains to be done to quantify the effects of these.
26. That said, we do know that the effect of seismic surveying activity employed in ironsands prospecting is very low, to the extent that the 2012 DOC Code of Conduct<sup>9</sup> considers it to be Level 3, for which the Code specifies no requirement for any measures to be taken. Notably, Thompson (2012) fails to refer to the Code of Conduct, and nor does the expert panel risk assessment. That is a significant omission.

**Need for information**

25. The inescapable conclusion is that more information is needed on likely interactions between seabed minerals activities and the Maui's dolphin, where they exist in the same place, *before* reasonable measures can be developed and implemented for threat management. To do otherwise would be unreasonable and unnecessary. We note a recent GETS tender on behalf of the Ministry for Primary Industries seeking to better define the areas inhabited by Hector's dolphins, their numbers and "productivity", which is a laudable initiative (noting our understanding that this will be carried out along the East Coast of the South Island).
26. The forum for collating and assessing information in relation to a proposed activity is the resource consent process under the Resource Management Act 1991. Out to 12nm from shore, a company such as TTR will need to develop assessments of environmental effects (AEEs) for their proposed activities, where these are likely to have effects that are more than minor, and that consideration would include Maui's dolphin.
27. The AEE would explore the environmental effects of, e.g., disturbing the seafloor, at various scales and depths below surface; changes to ecologies, and recovery rates; sediment dispersal in the water column; noise of activities; and the physical presence and deployment of vessels and equipment. TTR has yet to complete its studies, however, believes that all of these effects are manageable, from the dolphin threat management perspective, and agrees that this needs to be shown.
28. Under the RMA, the science and other evidence prepared by the company may be tested and challenged at a hearing, with the possibility of cross-examination and presentation of other

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<sup>9</sup> DOC Code of Conduct <http://www.doc.govt.nz/publications/conservation/native-animals/marine-mammals/code-of-conduct-for-minimising-acoustic-disturbance-to-marine-mammals-from-seismic-survey-operations/>

evidence. There is provision for appeal on merit to the Environment Court, and on points of law to the High Court. This is rigorous, and appropriate.

#### **Arguments against a moratorium**

29. Turning to the proposed policy options for managing seabed minerals activities threats, the option of a **moratorium** on seabed mining for the next five years should be struck out for several reasons:

- It sends a strong deterrent signal to investment in New Zealand, and could spell the end of ironsands permit holders, of which there are several. That would be an extreme and totally unnecessary outcome in view of:
  - the lack of adequate information on the effects, if any, of activities on the dolphin, and how any threats might be managed; and
  - existing legislation provides the forum and process to ensure that any mining proposal will be accompanied by a risk (and mitigation) assessment that will be thoroughly tested;
- Once a moratorium is in place, the perception is that this will be very difficult to remove - especially considering that during the five years proposed for the moratorium it is unlikely there will be any demonstrable difference in the Maui's dolphin population - reinforcing the strong negative signal to investment;
- A moratorium is a disincentive for companies to fund research into the effects of their activities on the environment and, in particular, on the dolphin – no ironsands interest would be in a position to raise capital to invest, or part-invest in such research with a moratorium in place, and without that industry commitment, other investment would be very unlikely; and
- It is a negative approach to managing the threats to the Maui's dolphin, especially considering that the threats other than fishing are inadequately known at this stage, and is at odds with the Government's desire to work constructively with the relevant interests.

#### **Other policy options**

30. That leaves a number of zoning options, a code of conduct option, and a “do-nothing” option, which relies on the well-understood and transparent integrity of the current environmental regimes.

31. Starting with **zoning**, at issue is which distance from shore to choose, among 2nm, 4nm, or 7nm, or a depth contour, and, in addition, whether or not to extend the marine mammal sanctuary as far as Hawera.
32. It is noted that Figure A2.5 of Appendix A of the risk assessment of threats to the Maui's dolphin shows an expected low density of Maui's dolphin any further out to sea than around 5nm from shore, and a decreasing expected density towards the South Taranaki Bight.
33. From about New Plymouth south, the expert panel's assessment is that there are around 0.0005 dolphins per square nautical mile. Assuming that the dolphins travel no more than 5nm from shore, that estimate converts into one dolphin for every 400nm (740km) of coastline south of New Plymouth. That equates to a very low number of dolphins.
34. The difficulty with a depth contour is that within the current and historical range of Maui's dolphin, the gradient is relatively steep off the Waikato coastline, and relatively shallow off the South Taranaki coastline. The behaviour of the dolphin may well be different in each setting, in which case a depth contour would be a blunt instrument. As previously noted, Maui's dolphins have not been recorded at distances from the Taranaki coast, where the 100 m depth contour extends out to the Maui gas field. The same argument could be mounted for the fixed distance from shore options.
35. From Figure A2.5 of the risk assessment, it is also noted that the Maui's dolphin is expected to move according to their distance from shore, rather than following the depth contour.
36. Accordingly, the 5nm (9.3km) distance line could be chosen, certainly within the known current range of the dolphin (Kaipara Harbour – Kawhia Harbour), within which it may be appropriate to implement measures in relation to seabed minerals activities. Such measures would not necessarily include prohibitions. An alternative would be to require companies to show, via the resource consent process, that they are able to manage the effects of their activities in an acceptable way, if they are to operate in dolphin habitat. That would be an informed, rigorous and fair approach to seabed minerals activities. The existing 2nm prohibition could remain.
37. Beyond Kawhia and Kaipara, it is not clear that any further measures are required, for the reasons already advanced in this submission. Perhaps, the current 2nm prohibition should remain, however, should not be extended (i.e., as far as Hawera), unless new information comes to light on dolphin distribution.

38. Note that off South Taranaki, any seabed mining would most likely occur from 6.5nm (12km) to 20.5nm (38km) offshore, although there may well be mineable ironsand resources further inshore at places. Note also that there is no offshore ironsands mining currently. Much work remains to be done to determine whether or not a viable mine can be developed.
39. The marine mammal sanctuary could be extended as far as Hawera, noting that it could take many decades or centuries for the Maui's dolphin population to expand back into this region, even in the best-case scenario. On that basis, there is no hurry to take action on this policy option, however, it is one that could be kept permanently under review.
40. As an additional measure, to apply everywhere within the area of interest, a **code of conduct** should be developed in consultation with industry, on the basis of evidence, to ensure best-practice for seabed prospecting, exploration and mining of ironsands.
41. A code of conduct offers a good opportunity for engagement between government and industry, as well as with other interests, and provides for a constructive approach to managing the threats to Maui's dolphin. It is also an opportunity to expand the concerns for Maui's dolphin to other marine mammals, in due course. The development of a code must be based on sound science that describes the habits and whereabouts of the dolphin.
42. The 2006 and latterly the 2012 process for promulgating the seismic Code of Conduct, and the mutually-agreed outcomes from those processes, provide an excellent example of what can be readily achieved, and how fully it will be given effect to and complied with.
43. These considerations dovetail with the suggestion that the resource consent process is a very good mechanism of discovering what the effects of seabed minerals activities might be, in a context in which funding can be raised by companies to obtain that information.