

Chair
Cabinet Economic Growth and Infrastructure Committee

Ministerial Decisions Relating to Measures to Mitigate Human-Related Threats to Maui's Dolphins

Proposal

1. This paper informs Cabinet of the decisions of the Minister for Primary Industries and Minister of Conservation (Ministers) on the review of the Maui's dolphin component of the review of the Hector's and Maui's dolphin Threat Management Plan (TMP).

Executive Summary

2. The endemic Maui's dolphins are critically endangered. They face a range of human-related threats. A comprehensive TMP was set in place in 2008 with the intent to review it approximately every five years.
3. In January 2012, a Maui's or Hector's dolphin was caught in a commercial set net off Cape Egmont, Taranaki. A new population abundance estimate for Maui's dolphins was released in March 2012, estimating the number of Maui's dolphins over one year of age to be 55. This most recent abundance estimate is consistent with Maui's dolphin having a very small population size and suggests the population is still declining and at risk of extinction.
4. The new research also estimates the Maui's dolphin population can sustain one human-induced mortality every 10 to 23 years without impacting on its ability to rebuild to its optimum sustainable population size.
5. In light of this new information, in March 2012 the review of the Maui's dolphin component of the Hector's and Maui's dolphin TMP (the Maui's Review) was brought forward from 2013.
6. While the Maui's Review was undertaken, interim fisheries protection measures were implemented for the Taranaki coast prohibiting set net fishing from Pariokariwa Point to Hawera out to two nautical miles. The interim measures also imposed mandatory observer coverage in this area on all set net fishing vessels from two to seven nautical miles.
7. To inform the Maui's Review, an independent risk assessment of human impacts on Maui's dolphins was conducted by world-leading and domestic scientists. The expert risk assessment panel estimated that fishing, particularly set net and commercial trawl fishing, represented 95% of the risk to Maui's dolphins from human-induced mortality.
8. The Minister for Primary Industries is responsible for implementing fishing-related measures under the Fisheries Act 1996 (Fisheries Act) to avoid, remedy or mitigate the effects of fishing-related mortality on any protected species, and the Minister of Conservation is responsible for protecting marine mammals under the Marine Mammals Protection Act 1978 (MMPA) from human-induced threats.
9. In order to ensure the long-term viability and recovery of Maui's dolphins throughout their natural range, measures will be implemented to encompass the range of human-induced

threats to the dolphins. These will include fishing-related measures, non-fishing-related measures, and a Maui's dolphin advisory group and forum.

10. Existing fishing-related prohibitions will remain in place, including the interim measures introduced in 2012 in Taranaki. Additionally, measures to improve information on Maui's dolphin distribution, and interactions with existing set net and trawl activity, will be put in place.
11. In the event of a fishing-related mortality of a Hector's or Maui's dolphin off the WCNI, the Minister for Primary Industries may utilise the emergency measures provisions of the Fisheries Act. Section 16 enables the Minister for Primary Industries to use a Gazette Notice to close an area or prohibit the use of particular methods in an area, if he is satisfied that there has been a serious decline in the abundance or reproductive potential of a species. Emergency measures can allow time to implement more permanent measures, if required.
12. Non-fishing-related measures will include implementing a process to incorporate the Code of Conduct for Minimising Acoustic Disturbance to Marine Mammals from Seismic Survey Operations ("the Code") by reference under section 28 of the MMPA as a mandatory standard. This will create greater consistency in protection for Maui's dolphins and other marine mammals from seismic survey operations throughout New Zealand Fisheries Waters (e.g. the EEZ and Territorial Sea). The Code would be incorporated by reference following a review of the Code scheduled for 2014. Industry is aware of this proposal and broadly supportive of consistent regulation of seismic surveying.
13. A new voluntary code of conduct will be developed with the inshore boat racing community in order to minimise the potential for boat strike at both events and during practicing.
14. A multi-stakeholder Maui's dolphin Advisory Group will be established in order to provide a collaborative and proactive means of supporting research, communicating information and aiding community and stakeholder involvement in managing the recovery of Maui's dolphins.
15. In addition to the above, there is a separate proposal to vary the West Coast North Island Marine Mammal Sanctuary to prohibit commercial and recreational set netting from a specified area in north Taranaki. This proposed variation is addressed in a separate Cabinet Paper also being considered at this Committee meeting and will be announced at the same time as the Maui's Review.
16. All decisions and an implementation plan are intended to be announced on Monday 25 November 2013. These measures will be implemented by agencies from 2014. Any regulatory amendments to give effect to these decisions will be subject to normal Cabinet Committee processes.
17. In addition to announcements on the Maui's Review and the proposed variation to the marine mammal sanctuary, the timeline for undertaking the review of the Hector's dolphin component of the Hector's and Maui's dolphin TMP (the Hector's Review) has also been reconsidered, particularly in light of what information is currently available to inform this review.
18. The government is investing significantly in gathering information to inform the Hector's Review. For example, the Ministry for Primary Industries is investing approximately \$1.2 million (approximately 50% cost recovered from the fishing industry) to assess the abundance and distribution of Hector's dolphins and interactions with fishing. This work included both summer and winter aerial surveys to assess the abundance and distribution of the Hector's dolphin population on the east coast of the South Island. The preliminary results from this study suggest the abundance of Hector's dolphins is likely to be higher than

previously estimated. This may reflect a difference in methods used and areas surveyed rather than population growth.

19. These are preliminary results and a complete peer review is still to be completed. Nevertheless, the results are encouraging and it is considered the Hector's Review can be postponed to 2018 at which point both the Hector's and Maui's dolphin components of the TMP could be reviewed together. However, should any new information become available that suggests an earlier review is warranted, the review could be brought forward.
20. Maui's dolphins are classified as 'nationally critical' by the New Zealand Threat Classification System and 'critically endangered' by the International Union for the Conservation of Nature (IUCN) which includes Maui's dolphins on their red list. Accordingly, the protection measures outlined for Maui's dolphins in the revised TMP are likely to be subject to intensive international scrutiny and New Zealand will need to be well-positioned to defend its approach in relevant international fora.

Background

21. The endemic Maui's dolphins are critically endangered. Best available information indicates there are approximately 55 individuals over the age of one year old. This abundance estimate is based on a boat-based genetic mark-recapture survey. The previous estimate of 111 in 2006 was acquired through a different methodology (i.e. aerial survey). While these two estimates are not directly comparable because of the difference in methodology, they confirm that the population is very small and at risk of extinction. Their current core range extends between Kaipara Harbour and Raglan off the west coast of the North Island (WCNI). The marginal limits of their range may extend to Maunganui Bluff in the north, and Whanganui in the south.
22. Maui's dolphins are classified as 'nationally critical' by the New Zealand Threat Classification System and 'critically endangered' by the International Union for the Conservation of Nature (IUCN) which includes Maui's dolphins on their red list. In addition, the IWC Scientific Committee has expressed its "extreme concern" about the long-term survival of Maui's dolphins and recommended the adoption of a precautionary approach and immediate action (including restrictions on set net fishing) to address ongoing threats. It is estimated Maui's dolphins can sustain only one human-induced mortality every 10 to 23 years without impacting on the population's ability to rebuild to its optimum sustainable size.
23. Maui's dolphins are closely related to the endangered Hector's dolphins. The Maui's and Hector's dolphins form the two subspecies of the *Cephalorhynchus hectori* species. Hector's dolphins primarily live around the South Island. Evidence shows that Hector's dolphins are also present off the WCNI from time-to-time. The subspecies are visually indistinguishable. Subspecies identification can only be determined by genetic testing or detailed analysis of skull morphology.
24. In 2008, in response to the public and government concern over the effect of human-induced mortality on the Hector's and Maui's dolphins, government approved a comprehensive set of measures developed under the Hector's and Maui's dolphin TMP. The TMP was developed jointly by the (then) Ministry of Fisheries (now MPI, which is responsible for managing fishing-related threats to protected species under the Fisheries Act) and DOC (which is responsible for protecting the dolphins under the MMPA). For the purposes of the TMP, it was agreed by the then Ministers that fishing restrictions will be considered under the Fisheries Act, which at the time had stronger penalties and more capability for enforcement.
25. The TMP covers a range of measures to mitigate the impacts of human-induced risks to each subspecies, as well as ongoing research priorities. The measures include various set net and trawl restrictions across New Zealand covering some 15,000 square kilometres. The area covered by fishing restrictions has increased by 500% since 2003. The TMP also

introduced multiple Marine Mammal Sanctuaries (MMS) with restrictions on seismic surveying and, in the West Coast North Island MMS, mining. The TMP was originally due for review in 2013.

26. In January 2012, a Maui's or Hector's dolphin died in a commercial set net off New Plymouth. Immediately after capture, the animal was returned to the sea by the fisher. This precluded the ability for conclusive genetic testing to establish whether the animal was a Maui's or a Hector's dolphin.
27. In response, interim fisheries protection measures were implemented for the Taranaki coast prohibiting set net fishing from Pariokariwa Point to Hawera out to two nautical miles. The interim measures also imposed mandatory observer coverage in this area on all set net fishing vessels from two to seven nautical miles. The Maui's Review was also brought forward to 2012.
28. The status of the planned Hector's Review in 2013 was not affected by these decisions.

Comment

29. Options for the Maui's Review were developed in August and September 2012. The options covered a spectrum of possible actions, and were informed by a scientific risk assessment. The risk assessment panel comprised domestic and international cetacean (whale and dolphin) and risk assessment experts, and was chaired by the Royal Society of New Zealand.
30. The risk assessment identified a range of human-induced threats to Maui's dolphin. These threats included risks from fishing, boating activity, oil and gas exploration, seabed mining, and tourism. Chief amongst these threats was fishing, particularly commercial, recreational and customary set net, and commercial trawl, which the risk assessment estimated represented 95% of all human-induced mortalities. A report of the risk assessment was published and made available through the DOC and MPI websites.
31. The options developed for the Maui's Review consultation fell into three main categories – fishing-related measures; non-fishing related measures; and research priorities. More than 70,000 submissions were received on the Maui's Review. Approximately 500 unique submissions were received from organisations and individuals. Approximately 4200 form or petition generated submissions had original content added to the standard text of the petition and required analysis. The remaining submissions were unaltered forms or petitions. The majority of submissions favoured additional restrictions on human activity within the full range of Maui's dolphins.
32. Submissions and departmental advice were considered from December 2012 to the present.
33. It has been decided to implement a number of measures to mitigate human-induced threats to Maui's dolphins and to implement a forum to support research into future management of the dolphins. Summaries of these measures and respective delegated legislative authorities are presented in Appendix 1.
34. The current set net and trawl restrictions under the Fisheries Act, including the interim measures introduced in 2012 in Taranaki, will remain. Additionally, a greater focus will be placed on gathering more certain information on dolphin presence and interaction with existing set net and trawl fishing activities through increased observer coverage. A map showing the fishing-related restrictions for the protection of Maui's dolphins is attached as Appendix 2.

35. A range of measures that will provide increased protection to Maui's dolphins from non-fishing related activity have also been decided upon.
36. These include managing the potential impact from seismic surveying. Currently seismic surveying is a permitted activity in the EEZ (12-200 nautical miles) under the Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2012 (EEZ Act), as long as the activity complies with the Code of Conduct for Minimising Acoustic Disturbance to Marine Mammals from Seismic Survey Operations (the Code). However, in the Territorial Sea (0-12 nautical miles) the Code is a voluntary measure, whilst within some marine mammal sanctuaries seismic survey activities are regulated under the MMPA.
37. In order to remedy this fragmented and potentially confusing regime, it is intended to regulate all seismic survey activities within the EEZ and the Territorial Sea (including marine mammal sanctuaries) by incorporating the Code by reference under a regulation pursuant to Section 28 of the MMPA. Any regulatory changes necessary to make the Code mandatory under the MMPA will be undertaken with targeted consultation, including with survey proponents, and will be subject to normal Cabinet processes.
38. The Code was developed with considerable stakeholder input, including the input of signatories to the Code. In implementing the Code, survey proponents identified areas for improvement. Some of these have been incorporated into a revised 2013 version of the code. The 2013 version will be enacted shortly and a full review of the code is planned for 2014 prior to any regulatory change. This review will be undertaken with considerable input from stakeholders who were involved in previous versions of the Code.
39. DOC will work with the inshore boat racing community and local councils to develop a Code of Conduct for the inshore boat racing circuit. It is recognised that some mitigation measures are in place for racing. However, there is potential for impact to dolphins from boat strike during race practice. This Code of Conduct would develop mitigation measures for both racing and practicing, and also look at increased mitigation for critical areas in the Maui's dolphin habitat via voluntary spatial or seasonal restricted areas.
40. MPI and DOC will begin the implementation of these decisions immediately upon completion of any necessary Cabinet processes.
41. Ministers recognise that the protection of the Maui's dolphin is complex and of interest to a wide range of stakeholders, organisations and Treaty Partners. Successful management of the sub-species will be greatly enhanced through increased collaboration and shared funding on issues including research, monitoring and surveying, engagement and education. Several parties, including industry representatives, have expressed an interest in participating and contributing to future Maui's dolphin conservation work.
42. In order to capture this interest, Ministers will direct officials to establish a multi-stakeholder Maui's Advisory Group. This group will serve the purpose of assisting to better prioritise, plan and fund future research, monitoring and engagement strategies to achieve the government's Vision Statement:

"Hector's and Maui's dolphins should be managed for their long-term viability and recovery throughout their natural range."
43. The Maui's Advisory Group would broadly consist of a wider stakeholder forum and a science sub-group. The stakeholder forum would help develop what the information needs are as well as how results can feed into a wider engagement strategy. This group would consist of national and local government agency representatives, whānau, hapū and iwi, relevant industry (e.g. fishing and mining), ENGO's, and science providers. The science sub-

group would prioritise and guide how the research is undertaken. The science sub-group would consist of both international and domestic experts in the relevant fields.

44. There is significant international interest in Maui's dolphins and New Zealand's approach to their conservation and management. In September 2012, the IUCN General Assembly urged New Zealand to:

a. Urgently extend dolphin protection measures, with an emphasis on banning gill net and trawl net use from the shoreline to the 100 metre depth contour in all areas where Hector's and Maui's dolphins are found, including harbours,

b. To increase immediately the level of monitoring and enforcement with an emphasis on requiring 100 percent observer coverage on any gill net or trawling vessels allowed to operate in any part of the range of Hector's and Maui's dolphins until such bans can be implemented; and

c. To report such action and monitoring and enforcement results.

45. In addition, the IWC Scientific Committee in June 2013 agreed the following:

*a. The Committee **agrees** that management measures must be precautionary. If any fisheries with the potential for bycatch were to remain active within the range of Maui's dolphins, 100% observer coverage would maximise the chance of identifying any bycatch and providing information that might trigger immediate further area closures.*

*b. In conclusion, the Committee **reiterates** its extreme concern about the survival of Maui's dolphin given the evidence of population decline, contraction of range and low current abundance. The Committee agrees that the human-caused death of even one dolphin in such a small population would increase the extinction risk for this subspecies.*

*c. The Committee therefore **recommends** that rather than seeking further scientific evidence, the highest priority should be given to immediate management actions that will lead to the elimination of bycatch of Maui's dolphins. This includes full closures of any fisheries within the range of Maui's dolphins that are known to pose a risk of bycatch of small cetaceans.*

*d. The Committee **commends** the New Zealand Government on its initial and interim measures to protect Maui's dolphins. However, the Committee **emphasises** that the critically endangered status of this sub-species and the inherent and irresolvable uncertainty surrounding information on small populations require the immediate implementation of precautionary measures. Ensuring full protection of Maui's dolphins in all areas throughout their habitat, together with an ample buffer zone, will minimise the risk of bycatch and maximise the chances of population increase.*

46. For these reasons the measures taken by New Zealand in the revised TMP are likely to be subject to intensive international scrutiny in relevant international fora and New Zealand will need to be well-positioned to defend its approach.

Immediate Response to Fishing Mortality

47. After the January 2012 mortality, approximately six months passed before additional measures were introduced. In the event of a further Maui's dolphin mortality, it is important that the Government can act quickly and decisively. The Minister for Primary Industries considers it necessary to have measures in place to avoid, remedy or mitigate fishing-related risks while further advice is developed.

48. The emergency measures provisions of the Fisheries Act enable the Minister for Primary Industries to use a Gazette Notice to close an area or prohibit the use of particular methods in an area, if satisfied that there has been a serious decline in the abundance or reproductive potential of a species. This may be done immediately or once an investigation into a mortality is complete.
49. Immediately following a mortality, DOC and MPI would initiate an investigation of the incident, including arranging for necropsy to determine cause of death and DNA sampling to determine if the dolphin is a Maui's or Hector's dolphin. The investigation is estimated to take a maximum of four weeks to confirm subspecies and cause of death.
50. When the Minister for Primary Industries decides to implement emergency measures will depend on the exact circumstances of the case and the nature of the evidence. However, he can act even if information is uncertain. For example, he could choose to implement emergency measures pending completion of an investigation. Before implementing any s 16 emergency measures, he must undertake consultation to the extent reasonably practicable in the circumstances, with representatives of the classes of persons with an interest in the stocks or area concerned. This includes Maori, environmental, commercial and recreational interests.
51. Emergency measures can be put in place for an initial period of up to three months and may be extended a single time up to a maximum of nine months if the Minister for Primary Industries is satisfied they are required. This would allow for other, more permanent measures to be implemented if the dolphin was confirmed to be a Maui's dolphin, including further regulatory changes if required.
52. Emergency measures have not been used before and may be subject to legal challenge. The Minister for Primary Industries may consider whether other regulatory or non-regulatory measures may also be required in the future to improve the ability to respond to a fishing-related mortality of a Maui's dolphin. Any regulatory changes would be subject to normal Cabinet processes.

Variation of the existing West Coast North Island Marine Mammal Sanctuary Notice

53. Due to concerns about the future viability of the critically endangered Maui's dolphin population, in September 2013, the Minister of Conservation notified his intention to vary the West Coast North Island Marine Mammal Sanctuary Notice to *prohibit commercial and recreational set net fishing between two and seven nautical miles offshore between Pariokariwa Point and the Waiwhakaiho River, Taranaki*. This process is separate to the Maui's Review and is addressed in a separate Cabinet paper.

Hector's dolphin research and review of the Hector's dolphin component of the TMP

54. Several multi-year projects are underway or planned to improve information about Hector's dolphin abundance and distribution, and interactions between fishing and the dolphins. This information is sought to assist in decision making. One such project is examining the abundance and distribution of Hector's dolphins off the east coast of the South Island. Preliminary results from both summer and winter aerial surveys have been presented to a government-facilitated scientific working group for peer-review. The preliminary findings suggest the population is likely to be larger than previously believed (with a summer range between 6,300-13,100 and a winter range between 5,200 and 10,600), though it is noted that some members of the working group have an issue with the methodology and findings.
55. MPI has initiated a fully independent external review of this east coast South Island study in line with the Ministry's 2011 Research and Science Information Standard. This is standard

practice for work that is novel, complex or contentious. Final results are expected before the end of 2013.

56. Given the preliminary results of the east coast South Island survey, and government intention to undertake similar work for other Hector's dolphin populations, Ministers have decided to postpone the Hector's Review until 2018. Should information become available through further research that warrants an earlier review of the TMP, the Hector's Review would be brought forward.

Consultation

57. Under the Conservation Act 1987, and all the Acts listed in its First Schedule (which includes the MMPA), the views of tangata whenua must be taken into account. Iwi, especially those across the area of the proposed sanctuary extension, have a particular interest in Hector's and Maui's dolphins as they are considered a taonga species.
58. Iwi throughout the west coast of the North Island were sent letters and consultation documents about the TMP. In addition, coastal iwi along the west coast received phone calls by local District Offices (previously Area Offices) offering face to face meetings and/or follow up telephone discussions should further information be required. Details of the meetings and various submissions received from whānau, hapu and iwi were included in the summary of submissions provided by DOC in Dec 2012.
59. Section 12 of the Fisheries Act requires consultation with interested and affected stakeholders on changes to fishing-related measures. That consultation occurred from September to November 2012.
60. Section 15(2) of the Fisheries Act requires the Minister for Primary Industries to consult with the Minister of Conservation on fishing measures related to protected species. That consultation occurred on 11 December 2012, and on 11 April, 27 May, 15 July, and 7 August 2013.
61. The following agencies have been provided a draft of this paper for comment or information: Ministry of Business and Innovation and Employment, Te Puni Kōkiri, Ministry for Foreign Affairs and Trade, Ministry of Transport, Maritime New Zealand, the Department of the Prime Minister and Cabinet, and Treasury and have been consulted.

Financial Implications

62. There are no direct financial implications arising from this paper. Implementation of the measures (e.g. thorough future regulatory changes) may have financial implications as outlined in Appendix 1 and in the attached Regulatory Impact Statement (Appendix 3).
63. Observer coverage is normally cost-recovered from industry. The Minister for Primary Industries has decided that in the Taranaki region from Pariokariwa Point to Hawera, MPI will continue to meet the costs of observer coverage on set net vessels from within existing baselines. Those measures will be reviewed in 2015-2016. MPI estimate the costs range between \$0.3 and \$0.5 million per annum.

Human Rights

64. The proposals in this paper do not raise any issues in relation to the New Zealand Bill of Rights Act 1990 or the Human Rights Act 1993.

Legislative Implications

65. There are no legislative implications arising directly from this paper. MPI and DOC will give effect to the measures decided by Ministers as set out in Appendix 1. Any notices or regulations to give effect to these decisions will be subject to the usual Cabinet Committee processes, as applicable.

Regulatory Impact Analysis

66. The draft Regulatory Impact Analysis for this paper is attached as Appendix 2. A joint Quality Assurance (QA) team from the Department of Conservation and the Ministry for Primary Industries have reviewed the Regulatory Impact Statement (RIS) prepared by the two agencies. As this is a noting paper, this RIS has been prepared as a draft with the intention that final iterations will be developed as the regulatory changes required to implement each measure go through normal Cabinet processes. Taking that into account, the QA team consider that further work is required on the RIS before it will meet quality standards. The QA team will review the updated RIS to follow the results of further analysis and any additional or new information that is available.

Publicity

67. Ministers will be announcing their decisions on Monday 25 November 2013. The decisions are unlikely to satisfy industry or environmental groups. The fishing industry or environmental groups may instigate a legal challenge to Ministers' decisions.
68. This issue is likely to receive considerable local, national and international public and media attention following announcement of the decisions. As indicated by the high volume of public submissions on the proposal from outside of New Zealand, there is also substantial international interest in New Zealand's management of protected species, particularly with respect to Maui's dolphins and interactions with the fishing industry, including from the International Union for the Conservation of Nature (IUCN), the International Whaling Commission, and environmental conservation organisations.
69. This interest implies significant reputational risk to New Zealand based on the outcome of these decisions which will need to be managed accordingly. MPI and DOC, in consultation with MFAT in light of the international interest, will develop media strategies to support Ministers' announcements and proactively address any concerns which are raised about management of Maui's dolphins. New Zealand will also need to be well-positioned to defend this approach in relevant international fora (e.g. IUCN, IWC).
70. Officials will notify key stakeholders and will post final advice papers on websites.

Recommendations


71. The Minister of Conservation and the Minister for Primary Industries recommend that Cabinet:

1. **note** that the Maui's dolphin is a critically endangered endemic subspecies with a known current core range extending along the west coast of the North Island between Kaipara Harbour and Raglan, but the limits of that range may extend to Maunganui Bluff in the north, and Whanganui in the south;
2. **note** that a review of the Maui's dolphin component of the Hector's and Maui's dolphin TMP was completed in December 2012 and took into account best available information on human-induced threats and distribution of Maui's dolphin and considered if further management action was necessary;
3. **note** that it has been decided to implement a range of measures to mitigate human-induced threats to Maui's dolphins, including measures to address fishing-related threats (under the Fisheries Act) and non-fishing-related threats; briefly these include;
 - a. implementing a process to incorporate the Code of Conduct for Minimising Acoustic Disturbance to Marine Mammals from Seismic Survey Operations by reference under section 28 of the Marine Mammals Protection Act 1978 as a mandatory standard;
 - b. establishment of a voluntary Code of Conduct with the inshore boat racing industry;
 - c. establishment of a collaborative Maui's dolphin Advisory Group to prioritise and coordinate research and engagement;
 - d. fisheries restrictions implemented under the Fisheries Act 1996;
 - e. putting in place extensive fisheries monitoring coverage; and,
 - f. improving information on Maui's dolphin distribution and set net activity.
4. **note** that New Zealand's approach to Maui's dolphins will be of significant interest internationally including at fora such as the IWC and IUCN, and New Zealand will need to be positioned to defend its approach.
5. **note** that a separate decision to vary the West Coast North Island Marine Mammal Sanctuary to prohibit commercial and recreational set netting from a defined area off the north Taranaki coast is the subject of a separate cabinet briefing.
6. **note** that it is intended to publicly announce all decisions on Monday 25 November 2013;
7. **note** that Maui's dolphins are a contentious issue and that while a media strategy will be in place to support the joint Ministers' announcements, there is a possibility that some groups may challenge the decisions;
8. **note** that in light of the preliminary results of an aerial survey off the east coast of the South Island suggesting there are more Hector's dolphins than previously believed, and with further surveys planned for other Hector's dolphin populations, it has been decided to postpone the Hector's dolphin component of the TMP until 2018; this review may be brought forward if new or improved information necessitate an earlier review.



Hon. Nick Smith
Minister of Conservation

7 / 11 / 2013



Hon. Nathan Guy
Minister for Primary Industries

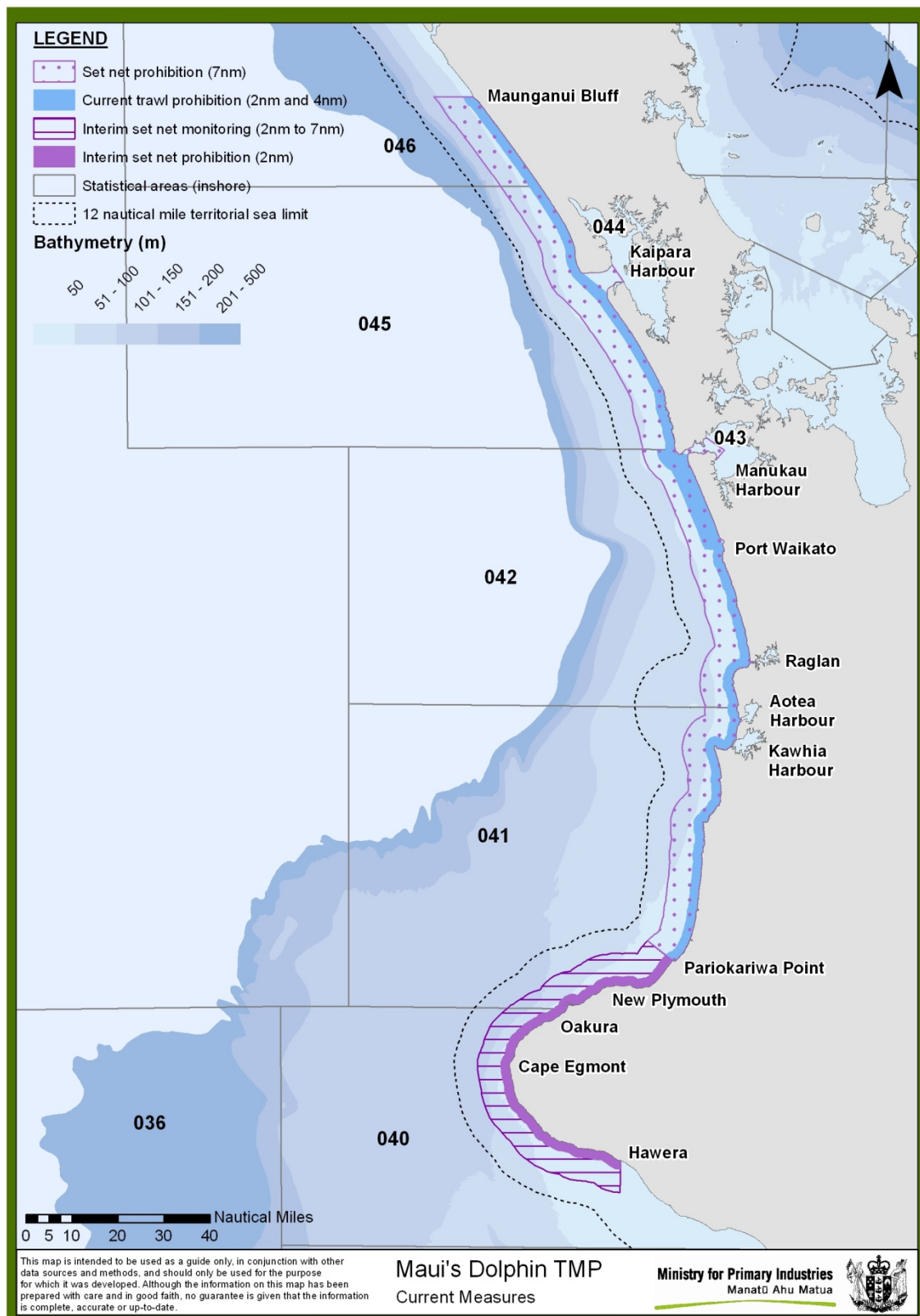
7 / 11 / 2013

Appendix 1: Package of protection measures the Minister of Conservation and the Minister for Primary Industries have decided to implement.

Measure	Purpose	Economic costs/loss
<p>Commercial and Amateur Set Netting (off the WCNI - Taranaki): Keep existing management, including the interim measures to:</p> <ul style="list-style-type: none"> retain the commercial and amateur set net prohibition between zero and two nautical miles offshore from Pariokariwa Point to Hawera; prohibit the use of commercial set nets between two and seven nautical miles offshore from Pariokariwa Point to Hawera without an observer onboard. <p>The interim measures would be reviewed in 2015-2016 to inform management going forward.</p>	<p>Managing the risk to Maui's dolphins in the inshore area (out to two nautical miles) where the January 2012 mortality occurred, and the alongshore range based on the maximum travel distance recorded for Maui's dolphins. Gathering more information on dolphin presence in the area. One-hundred percent observer coverage between two and seven nautical mile areas offshore will provide independent monitoring and reporting of fishing interactions with, or sightings of Hector's and/or Maui's dolphins beyond two nautical miles.</p>	<p>Industry impacts: <i>Annual Revenue</i> \$339,280 <i>Annual Value Add</i> \$569,991 <i>Capitalised future value</i> \$1,911,267</p> <p>Crown impacts: <i>Observer coverage</i> \$315,480 - \$526,000 per year</p>
<p>Commercial and Amateur Set Netting (WCNI Harbours):</p> <ul style="list-style-type: none"> Keep existing commercial and amateur set net restrictions Amend the regulations to allow commercial ring netting in the Manukau Harbour where the set net ban applies, with restrictions on the length and height of ring nets, time and duration of deployment. Improve information on Maui's dolphin distribution and set net activity in the west coast North Island harbours, with a focus in the Manukau Harbour. 	<p>Allowing for commercial ring netting (which is considered a lower risk activity) in the area where set net activity is currently prohibited in the Manukau Harbour. Improving information in two areas:</p> <ul style="list-style-type: none"> Maui's dolphin use of the WCNI harbours, with a focus in the Manukau Harbour; where commercial and amateur set net activity is occurring in the harbours. 	<p>Industry estimates an economic gain of ~\$200 000 per year.</p> <p>Information costs to be confirmed and will be determined by research programme design.</p>
<p>Commercial Trawling:</p> <ul style="list-style-type: none"> Keep existing management for trawl, and Put in place extensive monitoring coverage in the commercial trawl fishery between two and seven nautical miles offshore from Maunganui Bluff to Pariokariwa Point. 	<p>Increasing the level of monitoring coverage in the inshore trawl fishery to:</p> <ul style="list-style-type: none"> reduce the uncertainty in the risk trawling poses to Maui dolphins while enabling trawling to continue, and provide robust information to inform assessment of the level of interaction between trawl activity and the Maui's dolphin population. 	<p>Industry impacts: <i>Monitoring coverage</i> 25% coverage = \$294,500 per year Full coverage = \$1,176,000 per year</p>

<p>Seismic Survey: Regulate seismic surveying by incorporation of the Seismic Surveying Code of Conduct 2012 by reference under section 28 of the Marine Mammals Protection Act (MMPA) as a mandatory standard. This would apply in Territorial waters, EEZ and within the Marine Mammal Sanctuaries.</p>	<p>Management of risk to Maui's dolphins from seismic surveys by making the Code of Conduct - developed with input from stakeholders – mandatory in all New Zealand fisheries waters.</p>	<p>Cost to industry has been accepted by industry as part of development of the Code of Conduct.</p>
<p>Inshore Boat Racing (WCNI): Develop Code of Conduct for inshore boat racing off the west coast of the North Island. As a part of the Code, investigate seasonal or area specific restrictions on racing in sensitive areas.</p>	<p>Management of risk to Maui's dolphins from inshore boat racing by use of a voluntary Code of Conduct to be developed with input from all relevant stakeholders.</p>	<p>Costs will be identified as part of development of the Code of Conduct. Costs are likely to be low.</p>
<p>Maui's Dolphin Multi-stakeholder Advisory Group: Develop and implement a strategic, collaborative advisory group for engaging interested parties (National and local government, industry, ENGO's, tangata whenua and science providers) in prioritisation and funding of future conservation research on Maui's dolphins.</p>	<p>To manage the recovery of Maui's dolphins via: An annual strategic planning process with central and local government, industry, Treaty Partners and stakeholders to ensure a strategic, integrated approach to mitigating the impacts of human activities on Maui's dolphins; An annual research planning process to direct research priorities where they will provide the most benefit for Maui's dolphins; An engagement strategy to support implementation of outcomes from the planning processes, focused initially on options developed during consultation. This should also include development of a domestic and international communications strategy, to convey messaging about the government response.</p>	<p>Around \$30,000 pa split across agencies for organising and administering of meetings.</p>

Appendix 1: Current fishing related restrictions for the protection of Maui's dolphin on the West Coast of the North Island.



Map 1: Current set net and trawl restrictions and prohibitions off the west coast of the North Island shown with the relevant inshore statistical reporting areas (40 – 46).

Regulatory Impact Statement

Maui's dolphin Threat Management Plan

Agency Disclosure Statement

This Regulatory Impact Statement has been prepared jointly by the Department of Conservation and the Ministry for Primary Industries.

It provides an analysis of options to reduce the threats to Maui's dolphins from human activities, including set net fishing, seismic surveying, and vessel strike, as well as a means for prioritising future research efforts. The intention is to provide for the protection of Maui's dolphins from a range of human induced impacts which moves towards fulfilling the objectives of the Maui's dolphin Threat Management Plan.

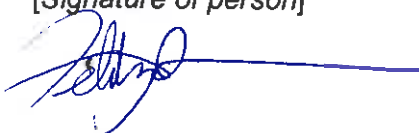
The analysis uses information from a scientific risk assessment on the impacts of human induced threats to Maui's dolphins, and from consultation undertaken for the Maui's dolphin portion of the Hector's and Maui's dolphin Threat Management Plan. Where economic impact assessments are not available for other potentially impacted industries these were assessed qualitatively within the discussion document.

Felicity Lawrence
Deputy Director-General
Science and Capability

James Stevenson-Wallace (MPI)
Director Fisheries Management

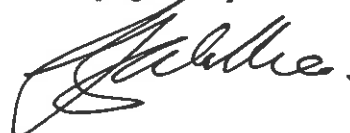
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Status Quo

1. Hector's and Maui's dolphins are endemic to New Zealand and are considered to be one of the world's rarest dolphin species. They were gazetted in 1999 as a threatened species under the Marine Mammals Protection Act 1978 (MMPA).
2. Maui's dolphins face a range of human-related threats which include fishing, boat strike, seabed mining, acoustic disturbance (e.g. seismic surveying), construction, coastal development, pollution, marine tourism, marine farming and climate change
3. In 2008 a number of measures to manage human-related threats to Hector's and Maui's dolphins were put in place under the Fisheries Act 1996 (Fisheries Act) and the MMPA as part of the development of the Hector's and Maui's dolphin Threat Management Plan (TMP).
4. The boundaries for the current Marine Mammal Sanctuary were based on the best available information at the time on the furthest offshore sightings of Hector's or Maui's dolphins, and the northern and southernmost sightings or strandings of Maui's dolphins. Oakura Beach was designated as the southern boundary for the Sanctuary in 2008 based on a group of public sightings and a stranding that occurred at or near Oakura Beach.
5. In January 2012, a Maui's or Hector's dolphin was caught in a commercial set net just north of Cape Egmont, Taranaki, outside the area of the current sanctuary. That has reinforced ongoing concerns that areas used by Maui's dolphin may not have any protection in place.
6. Shortly after the Cape Egmont incident, MPI and DOC hosted an independent risk assessment of human impacts on Maui's dolphins conducted by world-leading and domestic scientists. The expert risk assessment panel estimated that fishing, particularly commercial, recreational and customary set net and commercial trawl fishing represented 95% of the risk to Maui's dolphins from human-induced mortality. The panel also estimated that non-fishing related activities posed residual risk that could exceed the maximum number of human-induced mortalities the Maui's population could sustain.
7. The new abundance estimate for the Maui's dolphin population is 55 Maui's dolphins over one year of age. That confirmed the high risk of extinction for the species.
8. The new research also estimated the level of human-induced mortality that would be likely to prevent recovery of the population or cause extinction. The experts estimated that Maui's dolphin population can sustain one human-induced mortality every 10 to 23 years without impacting on its ability to rebuild to its optimum sustainable population size.
9. The scientific work done and expert assessment of that within DOC and MPI has resulted in a conclusion that there is a high risk that the current levels of protection will be inadequate to prevent extinction, and an even higher risk that recovery will not be achieved within a reasonable timeframe.
10. The government's Vision Statement for the management of Hector's and Maui's dolphins includes:

*"Hector's and Maui's dolphins should be managed for their long-term viability and recovery throughout their natural range."*DOC administers the MMPA, which makes

provision for the protection, conservation and management of marine mammals within New Zealand and within New Zealand fisheries waters.

11. DOC administers the MMPA, which makes provision for the protection, conservation and management of marine mammals within New Zealand and within New Zealand fisheries waters.
12. MPI administers the Fisheries Act. The purpose of the Fisheries Act is to provide for the utilisation of fisheries resources while ensuring sustainability.
13. A range of measures have been put in place under those statutes to increase the protection of the dolphins.
14. In light of the January 2012 dolphin mortality and revised population estimate a review of the Maui's dolphin component of the Hector's and Maui's TMP was called for by previous Ministers.
15. While the review was undertaken, the previous Minister for Primary Industries considered it necessary to manage the residual risk to Maui's dolphins from set net activity in the Taranaki area. Interim measures were put in July 2012 that:
 - Prohibit commercial and amateur set netting from Pariokariwa Point to Hawera out to two nautical miles, and
 - Prohibit commercial set netting from Pariokariwa Point to Hawera between two and seven nautical miles offshore unless an observer is onboard.

Protection Measures under the Marine Mammals Protection Act:

Marine mammal sanctuary

16. In 2008, the then Minister of Conservation established the West Coast North Island Marine Mammal Sanctuary (MMS) to manage the risk of other human-induced mortality from non-fishing sources. The current MMS is approximately 1,200,086 hectares and covers 2,164 km of coastline from Maunganui Bluff in Northland to Oakura Beach in Taranaki. Within the MMS there are restrictions on seabed mining activities and acoustic seismic surveying is regulated.
17. The potential threats to dolphins from seismic surveying include hearing damage or loss, death, as well as indirect effects such as masking prey. Briefly, the regulations regarding seismic surveying require proponents of surveys to:
 - notify their survey one month in advance to the Director-General in order to liaise with local DOC offices regarding mitigation measures for marine mammals;
 - have two marine mammal observers on board looking for marine mammals and specifying when operations need to delay or shut down due to marine mammals in the vicinity;
 - employ passive acoustic monitoring (PAM) when operating at night-time or in poor visibility to detect marine mammals, and;
 - provide a report and data relating to marine mammal sightings following the survey.

Protection Measures under the Fisheries Act:

Set net restrictions and prohibitions

18. Commercial and amateur set netting is prohibited from Maunganui Bluff to Pariokariwa Point between zero and seven nautical miles offshore, inside the entrances of the Kaipara, Manukau, and Raglan Harbours, and around the Port Waikato river mouth. The areas closed to set net were put in place to help avoid Maui's dolphin entanglements. This required information on where dolphins and set net fishing co-occur.
19. The introduction of these boundaries began in 2003 (set net ban out to four nautical miles) and the most recent extension of the set net prohibition (prior to the interim measures) was out to seven nautical miles in March 2011. Combined, the area covered by bans on set netting to avoid Maui's dolphin mortality have increased by more than 152% between 2003 and 2012. Almost 6,000 square kilometres off the west coast of the North Island is closed to set net activity.
20. The boundaries of the set net closed areas were based on scientific research concerning the range of Maui's dolphins. The TMP noted that while there had been occasional, public sightings of either Hector's or Maui's dolphins south of the currently closed areas, there had been no recent verified sightings in this area. The public sightings were considered to represent isolated and infrequent occurrences. The then Minister of Fisheries decided that Taranaki was unlikely to be part of the Maui's dolphin current range.

Commercial trawling prohibitions

21. Commercial trawling is prohibited between zero and two nautical miles offshore between Maunganui Bluff and the Manukau Harbour, and Port Waikato to Pariokariwa Point. Between the Manukau Harbour and Port Waikato, trawling is prohibited between zero and four nautical miles offshore. The restrictions were put in place in 2008 to manage the risk that trawlers in this area could catch Maui's dolphins. Trawling is also prohibited in defined areas including: Kaipara Harbour, Manukau Harbour, Hokianga Harbour, Waikato River Mouth, Raglan Harbour, Aotea Harbour, and Kawhia Harbour. The area covered by trawling restrictions has increased from 0 in 2003 to more than 1,700 square kilometres in 2012.

Problem definition

22. Extinction would be contrary to that vision and New Zealand's accepted biodiversity objectives. It would also be likely to damage New Zealand's international reputation, given the high profile of the species. There could be flow-on effects of that reputation impact for the tourism sector, particularly the dolphin and whale watching part of the sector.
23. Ministers therefore determined that options to improve levels of protection should be assessed to determine whether the risk of extinction could be further lowered.

Objectives

24. Two objectives were used in the analysis:

1. The need to improve the effectiveness of dolphin conservation and management; and
2. The need to minimise and appropriately distribute the costs of achieving those improvements.

Options analysis

The broad levels of change analysed

25. A wide range of potential changes to individual measures were analysed. Four possible levels of change, which would involve packages of measures, were assessed. The specific components of packages at these levels were also assessed. Options that involved a reduction in existing protection measures were not analysed given that the scientific advice indicated that the status quo is under- rather than over-protecting the dolphins.

26. Four broad levels of changes were identified and assessed:

Option 1: Status quo

The status quo combines regulatory and non-regulatory measures. The key measures are:

- The West Coast North Island Marine Mammal Sanctuary within which seabed mining activities and acoustic seismic surveying is regulated
- Prohibition of commercial set netting in defined locations
- Prohibition of commercial trawling in defined locations

Those measures include ones put in place in 2008, and those put in place as interim measures in July 2012, subject to further work to determine whether they are required.

The status quo is set out in more detail above.

Option 2: improved monitoring of existing measures

- No change to the measures under the status quo, including retention of interim measures.
- Improved monitoring to allow better measurement of their effectiveness.

Option 3: improved monitoring and strengthening of some existing measures

Strengthen the measures already in place in relation to activities such as mining, fishing, tourism, landuse activities, to make them more effective in achieving dolphin protection. No extension of those measures into areas where they do not currently apply.

Option 4: improved monitoring, strengthening of some existing measures, extending the geographic extend of some existing measures

As option 3, but with some measures extended to cover additional areas with the dolphin's likely range.

Analysis against objectives

Will the level of change allow the dolphins to recover to a non-threatened status and avoid loss of resilience within the populations?

Option	Effectiveness in allow dolphin recovery
Status quo	Insufficient monitoring to accurately measure effectiveness. Expert panel concluded that high risk of extinction still remained.
Improved monitoring	Will fill some information gaps, but would not increase effectiveness.
Plus strengthening of existing measures	Would improve effectiveness within the core areas. Would not address impacts on dolphins within other areas.
Plus geographic extension	Would reduce the risk to dolphins when outside the core area. The extent of risk remaining would depend on the relationship between the extensions and dolphin movements.

27. The most recent research on Maui's dolphin has found that:

1. The population is critically endangered. That threat classification reflects the fact that the population is very small (55 individuals) and is declining.
2. The population can only sustain 1 human-induced mortality every 10-23 years if recovery is to occur.

28. There are significant gaps in knowledge about the effectiveness of the current measures. This is because of low levels of monitoring, and the inability of monitoring to detect all mortality and other effects.

29. In relation to fisheries, low levels of independent bycatch monitoring by observers means that the level of interaction between trawling and commercial set nets and Maui's dolphins outside the closed areas under the management framework (pre-interim measures) cannot be determined with certainty. Limited monitoring results in uncertainty around catch rates of Maui's dolphins in set net and trawl gear (including any geographical and seasonal variations in catch rates) and consequently the effectiveness of the closed area is unknown.

30. Fishers are required by law to report any dolphin entanglement. However, MPI cannot be certain that fishers always see and report all fishing-related mortalities. Consequently, the reported fishing-related mortalities may be underestimates and, as such, MPI cannot determine with certainty the extent of actual Maui's dolphin mortalities caused by fishing.

31. Measuring of effectiveness for a very small population of animals with natural population growth rates (1.8% per annum – 1 new individual in the population each year at current population size) is very difficult. It is unlikely that an increase in population as a result of improved protection measures would be detected for at least two decades. Assessment of current measures has therefore been based on expert views about likely effectiveness, rather than measures of effectiveness.

32. Given the high risk of extinction, the scientific advice is that the only management approach that will give reasonable assurance of success is one that eliminates or

minimises all potential causes of mortality. Strengthening measures is therefore seen as likely to increase overall effectiveness.

33. A Hector's or Maui's dolphin died in a commercial set net outside the areas subject to fisheries controls under the pre-2012 regime. Research has not been able to rule out the possibility that Maui's dolphins are using areas outside those that are covered by protection mechanisms. While the possibility of a Maui's dolphin being killed while outside their core range is low, given the scientific advice on the level of mortality that needs to be achieved, the effect of a mortality in the non-core area would be unacceptable.

- **Are the costs minimised and fairly distributed?**

34. This will depend on the detailed design of the strengthened measures and geographic extensions. The proposed option has been specifically designed to achieve this objective, as far as practicable given the effectiveness requirements.

35. MPI and DOC hosted an independent risk assessment of human impacts on Maui's dolphins conducted by world-leading and domestic scientists. The expert risk assessment panel estimated that fishing, particularly commercial, recreational and customary set net and commercial trawl fishing represented 95% of the risk to Maui's dolphins from human-induced mortality. The panel also estimated that non-fishing related activities posed residual risk that could exceed the maximum number of human-induced mortalities the Maui's population could sustain.

36. That advice would support a distribution of costs/contribution across all industries that have a potential effect, but with high cost measures for lowering the risks of fishing activities being more readily justified than high cost measures on other industries.

37. Creation of an advisory group will support stakeholder input into the long term implementation and adjustment of measures, allowing relative costs to be recognised in that work.

Identification and analysis of specific change options

38. Because of the wide range of measures already in place, and the large number of activities that potentially affect dolphins, there were numerous options for changes to the status quo. These included changes to the current controls on potentially impacting activities, improvements in monitoring, and new research.

39. DOC and MPI also sought feedback on a potential annual planning and review process to provide a transparent and more systematic procedure for determining future research and monitoring requirements for Hector's and Maui's dolphins. This framework could include the establishment of a research and monitoring advisory group to make recommendations and/or identify the key information needs to answer the management questions and priorities for each agency.

40. The options for each type of measure were separately analysed. The results of that analysis are summarised in the attached tables. The following sections set out the conclusions of the RIS author given that analysis.

41. Consultation was undertaken on options, and information on the results of that consultation are summarised below.

Improve monitoring and research

- Improving the response to **disease effects** on dolphins. Table 13. All options identified would contribute value and have minimal costs.
- Improving **collaboration in research, monitoring and engagement**. Table 14. Only one option was identified. The author recommends that this be considered in agency business planning.
- Put in place extensive **monitoring coverage in the commercial trawl fishery** between 2 and 7 nautical miles from Maunganui Bluff to Pariokariwa Point. Table 17. While the costs are significant, the additional information provided would allow restrictions on trawling to be refined over time. Such refinement may significantly reduce the long term cost of dolphin protection for the industry.

Strengthening of existing measures

- Increase the effectiveness of controls on **seismic surveying** within the sanctuary. Table 3. Options with potentially higher effectiveness were considered to have unjustifiably high costs on the affected industry given the information available on risks to the dolphins. Industry has already agreed to comply with the Code and incorporate the additional costs (around <1-4% of total operational costs for a typical survey programme).
- No change to the measures relating to **mining** were identified as warranted. There is no active mining at present, and no direct information on effects in New Zealand. This activity could be re-assessed in future as information became available.
- Address impacts of **marine mammal tourism operations** that may affect the dolphins. Table 5. The analysis identified improvements in permit conditions and industry compliance as being potentially useful and of minimal cost. With appropriate information provision, voluntary compliance with good practice is expected to be high, minimising the costs of active enforcement.
- Improve the effectiveness of **marine pollution management**. Table 7. Non-regulatory options were identified. All had minimal costs, and are therefore appropriate elements in a package.
- Improve **Resource Management Act implementation in relation to land-based and coastal activity** effects on dolphins. Table 8. Non-regulatory options were identified and analysed. These are all considered to have potential merit, and could be undertaken as part of wider RMA or dolphin work. The potential use of greater central government direction to councils was identified at a late stage of the process. Options related to that are not covered in the table, but could be implemented as appropriate as part of broader RMA work (e.g. in reviews of the NZ Coastal Policy Statement, National Policy Statement on Freshwater Management).
- Managing impacts on dolphins from **high speed recreational boating activities** (notably thundercat racing), **other recreational boating and surf life saving events**. Tables 9, 10, 11. Non-regulatory options were identified. A code of conduct for high speed boat racing would have a moderate cost, but the risks posed by that sector were assessed to be very high. Other options had minimal costs.

- **Reducing risks from scientific research.** Table 12. Non-regulatory options, focused on improving implementation of current regulations and research prioritisation, were identified and analysed. All had minimal costs.
- **Improvements in controls on commercial and amateur set netting.** Tables 15 and 16. A range of options for both within and outside harbours were identified and assessed. The recommended approaches were considered by MPI to represent an appropriate balance between achievement of the two objectives, given the high cost of the most effective options.
- **Improve effectiveness of commercial trawling controls.** Table 17. A range of options were identified and assessed. All would improve effectiveness, but also had very high costs. Given the level of conflict between the two objectives, the author did not identify them as recommended parts of a package.
- **Providing for effective emergency measures.** Section after tables. The current regulatory arrangements were considered effective, although there may be legal risks associated with their use.

Extend measures into areas not currently covered

- **Extend the sanctuary.** Table 2. The analysis concluded that the costs of this would depend on the particular limitations imposed as part of the sanctuary. Those limitations were assessed in other tables. An option that would improve effectiveness was identified.
- **Extend the effectiveness of controls on seismic surveying to be consistent within New Zealand fisheries waters.** Table 3. The preferred option was requiring that all activities within the sanctuary, Territorial waters and the EEZ be consistent with the Code of Conduct. Options with potentially higher effectiveness were considered to have unjustifiably high costs on the affected industry given the information available on risks to the dolphins. Industry has already agreed to comply with the Code and incorporate the additional costs (around <1-4% of total operational costs for a typical survey programme).
- **Extend mining controls.** As for strengthening.
- **Reduce the impacts of commercial shipping.** Table 6. The analysis concluded that risks from small vessels were far higher than those from large commercial vessels. Given their cost, none of the options were identified as warranting implementation in the short term at least.

Consultation

42. On 24 September 2012, DOC and MPI released a consultation document for seven weeks of public consultation. Tangata whenua, stakeholders from the amateur, commercial, and environmental sectors and the general public were invited to make written submissions. The document was published on the MPI and former fisheries external websites, the DOC external website, and stakeholder letters were sent to persons and organisation with an interest and/or affected by the proposals contained in the document.

43. Groups and individuals were encouraged to make formal, written submissions regarding the options for mitigating threats by email, and by post. There was also an online form via the DOC website, for submission on non-fishing related threats.
44. MPI also participated in targeted engagement with various stakeholders and public meetings, which included representatives from tangata whenua, the fishing industry, non-commercial fishing interests, and ENGOS.
45. In addition, DOC used its regional networks throughout the west coast of the North Island to notify whānau, hapū and iwi partners and community stakeholders of the consultation process. It was indicated that DOC officials would be available to meet with interested parties if required, to clarify any issues that may arise from the consultation process. As a result DOC held 13 meetings during the consultation period with Māori, industry, environmental NGOs, community groups and the public.
46. Submissions closed on 12 November 2012¹. Submissions were received from the full range of stakeholder groups. Most submissions listed below were received by both agencies (Refer Table 1).

Table 1: Submissions received by DOC and MPI

Submission Source	DOC (# received)	MPI (# received)
Greenpeace petition	17554, 719 with additional comments	18388
NABU petition (online and mail form)	14880, 2952 with additional comments	14892, 2936 with additional comments
Forest & Bird (Type 1 & 2)	231, 106 with additional comments	228, 97 with additional comments
Green Party online submission	364, 73 with additional comments	353, 30 with additional comments
Maui's Last Stand (Type 1 & 2)	236, 57 with additional comments	308, 64 with additional comments
DOC online survey	119, 60 with additional comments	-
Let's Face It visual petition	4818	4818
Christine Rose Petition (Maui's & Hector's Dolphin Education/Action Inc.)	51	51
One Voice France	74	42
Individuals or stakeholder organisations	225	369

¹ Consultation on the TMP discussion document is not was statutory process. In light of this, as many stakeholders expressed difficulties meeting the submission deadline, while agencies did not officially extend the consultation period, both DOC and MPI continued to accept and acknowledge late submissions as they came in.

Other ²	31504	31441
TOTAL	70 056, of which 4224 contained original content requiring analysis	70 976

Key points raised in submissions to DOC

47. A comprehensive analysis of submissions was undertaken and provided to the Minister of Conservation along with advice on consultation process. Key messages DOC received on proposed non-fishing related options include the following:

- a. Almost all submissions recommended further protection for Maui's dolphins.
- b. The most common suggestions for protection included: extension of the WCNI Marine Mammal Sanctuary, elimination of net fishing, and prohibitions on mining, seismic surveying, and petroleum exploration and drilling.
- c. Submitters generally wanted protection throughout the range of Maui's dolphins, though there is little agreement on what ought to be considered the limit to this range.
- d. The most common range stated was from the shore out to the 100 metre depth contour from Maunganui Bluff to Hawera, including harbours, as this is more closely aligned to the historic range and would allow protection if the population grows.
- e. Other submitters were firm in their opinion that the range should only be considered the core range of confirmed sightings (i.e., the current WCNI MMS), as restrictions in other areas do not accomplish the objective of protecting dolphins.
- f. Stakeholders from extractive industries (mining, fishing, petroleum) expressed a desire to participate in protection and recovery of Maui's dolphin population numbers while still accommodating commercial activity.
- g. These stakeholders submitted a wide range of proposals for reducing the risk to dolphins from their operations, including changes in fishing practices, use of pingers, observer programmes, seasonal exclusion zones, and other practical measures.

Key points raised in submissions to MPI

48. A comprehensive analysis of submissions was undertaken and provided to the Minister for Primary Industries along with advice on consultation process. Key messages MPI received on proposed fishing-related options include the following:

² Letters from WWF New Zealand and International were sent directly to Hon. John Key between August and November 2012 and were being noted as part of public feedback received on the review of the TMP.

- a. Most of the submissions supported increasing protection measures for the Maui's dolphin and doing so by extending the bans on set net and trawl activity. Most expressed support for a general fishing ban, with some specifying a set net and trawl ban out to the 100 m depth contour, within the harbours and the provision of a corridor between the North and South Islands.
- b. Some submitters supported retaining current management measures considering that there was no new information to support the proposed extensions or that the information was uncertain or unfairly balanced towards the detriment of the fishing industry.
- c. Representatives of the fishing industry opposed any additional management options that would result in any increase in spatial restrictions or exclusion to the set net or trawl fisheries but were supportive of additional measures aiming at improving the information on where activity occurs and how the effort is distributed, the use of mitigation tools and changes to fishing behaviour or practices.

Agency consultation

49. This Regulatory Impact Statement was circulated to the following agencies for comment: Ministry for Business, Innovation and Employment, Ministry of Transport, Maritime New Zealand, Te Puni Kōkiri, and Ministry of Foreign Affairs and Trade. No significant comments were raised and minor ones were incorporated into the final draft.

Implementation plan

50. Ministers intend to make announcements regarding the decisions and an implementation plan imminently. These measures will be implemented by agencies in 2013-2014.
51. This RIS accompanies a joint Cabinet paper which notifies the Minister of Conservation and Minister for Primary Industries intended package of measures to manage human-related threats to Maui's dolphins.
52. Any further regulatory amendments to give effect to Minister's decisions will be subject to normal Cabinet Committee processes in the coming months.
53. Any non-regulatory measures will be implemented as a part of business planning by agencies in the coming year.

Monitoring, evaluation and review

54. Monitoring the effectiveness of protection measures implemented for Maui's dolphins is difficult due to the small population size. The population has the potential to increase at a rate of 1.8% per annum, in the absence of human-induced mortality. This equates to one dolphin per year at their current population size. Therefore when dealing with small

populations such as Maui's dolphins, it could take several years to detect population change³.

55. However, DOC and MPI still consider monitoring of the population and the interaction with human activities is critical to understanding the potential risk to the dolphins from these activities. DOC and MPI propose the following three methods would contribute to better monitoring of the population, and the evaluation and review of implemented protection measures.

Advisory Group

56. DOC and MPI recognise that the protection of the Maui's dolphin is complex and of interest to a wide range of stakeholders, organisations and Treaty Partners. Successful management of the species will be greatly enhanced through increased collaboration and shared funding on issues including research, monitoring and surveying, engagement and education. Several parties, including industry representatives, have expressed an interest in participating and contributing to future Maui's dolphin conservation work.

57. The Maui's research, monitoring and advisory group will serve the purpose of assisting to better prioritise, plan and fund future research, monitoring and engagement strategies to achieve the government's Vision Statement:

"Hector's and Maui's dolphins should be managed for their long-term viability and recovery throughout their natural range."

58. The Advisory group would broadly consist of a wider stakeholder forum and a science sub-group. The stakeholder forum would help develop what are the information needs as well as how results can feed into a wider engagement strategy. The science sub-group would prioritise and guide how the research is undertaken.

Observer Coverage

59. MPI considers that where management measures do not eliminate risk, monitoring is required to verify the effectiveness of the chosen management action. The greater the residual risk, the greater the imperative for increased monitoring.
60. Monitoring allows for an analysis of Maui's dolphin interactions with fishing activities in areas where the distribution of the dolphins and fishing overlap. Monitoring does not reduce the risk to Maui's dolphins but does reduce the uncertainty in the level of risk the activity poses to the population and identifies the highest risk areas and activities.
61. Such information will help MPI assess the effectiveness of existing fishing-related management measures and whether more mitigation measures are required to avoid, remedy or mitigate the adverse effects of those threats.
62. MPI's recommendations for observer coverage are included in the Conclusions and Recommendations table.

³ E.g. Jaramillo-Legorreta et al. 2007 estimate it would take 25 years of annual surveys to detect a 4% increase in population size for vaquita, another critically endangered small cetacean. This example may not be directly applicable to Maui's dolphins but gives an indication of how difficult it is to detect change in small populations.

Emergency measures

63. In the event of a further Maui's dolphin mortality, it is important that the Government can act quickly and decisively. So, the Minister for Primary Industries considers it necessary to have measures in place to immediately avoid, remedy or mitigate fishing-related risks while further advice is developed.
64. The emergency measures provisions of the Fisheries Act enable the Minister for Primary Industries to use a Gazette Notice to close the area or prohibit the use of particular methods in the area, if he is satisfied that there has been a serious decline in the abundance or reproductive potential of a species. He may do this immediately or once an investigation into a mortality is complete.
65. Immediately following a mortality, DOC and MPI would initiate an investigation of the incident, including arranging for necropsy to determine cause of death and DNA sampling to determine if the dolphin is Maui's or Hector's dolphin.
66. Emergency measures would allow for interim protection while current protection measures are reviewed.
67. Emergency measures have not been used before and may be subject to legal challenge. The Minister for Primary Industries is considering whether other regulatory or non-regulatory measures may also be required to improve the ability to respond to a fishing-related mortality of a Maui's dolphin. Any regulatory changes will be subject to normal Cabinet processes.

Summary of Information in Maui’s dolphin TMP Regulatory Impact Statement

1. DOC and MPI tables for options considered as part of the review of the Threat Management Plan are presented below.

- a. The economic impact assessment will vary between the tables. For some activities economic data is not readily available, the cost cannot be currently assessed or there is no economic cost associated with the proposed option. For options where this information is not available the costs are addressed in a qualitative manner.
- b. Costs, benefits, and additional risks or comments are addressed in regards primarily to Objective 2. It is difficult to quantify how much each option might improve the viability of the Maui’s dolphin, however, it is assumed that by reducing risk their long-term viability could be enhanced.
- c. There are a number of non-regulatory options proposed for non-fishing-related protection measures that are associated with increased engagement with external parties. DOC is already investigating ways to implement these. Where work is underway this is highlighted in the “additional comments” field of the table.
- d. DOC and MPI also consulted on a research, monitoring and advisory group to better prioritise, plan and fund future research, monitoring and engagement strategies. Where non-regulatory options could be addressed through this group this is highlighted in the “additional comments” field of the table.

Non-fisheries options presented by the Department of Conservation in the Review of the Threat Management Plan

Table 2: Options to extend the West Coast North Island Marine Mammal Sanctuary			
Options	Cost benefit analysis		
	Benefits	Costs	Risks
Option 1 <i>Status quo:</i> No variation to the sanctuary boundaries:	Neutral	Neutral	A tool is not in place to protect Maui’s dolphins through their natural range
Option 2 Vary the marine mammal sanctuary boundary to: South to Hawera and offshore to 12 nautical miles	A tool is in place to allow for protection of Maui’s dolphins through their natural range	The cost to the Crown of implementing a variation is negligible. A variation to the boundary of the Sanctuary on its own, without restrictions designated carries no cost to industry.	A variation on its own would provide little additional protection and would need to be done in conjunction with specific restrictions addressed in tables (D2 and D3).

Table 3: Options to reduce the risk to Maui's dolphins from seismic surveying. For more detail on the pros and cons of these options see section 7.5.3 of the Threat Management Plan

Options	Cost benefit analysis				Additional Comments
	Benefits	Costs	Risks	Any other impacts?	
Option 1 <i>Status quo:</i> Reliance on the Code of Conduct and the existing MMS regulations	Neutral	Industry costs: Neutral Implementation/Compliance Costs: Neutral	Residual risk would remain to the dolphins in areas where the Code is voluntary and may not be adhered to	Potential for confusion for industry having two different management regimes, one mandatory and one voluntary.	With the incorporation of seismic surveying as a permitted activity under the EEZ legislation, this adds another management regime to the mix.
Option 2 (A,B) Maintain the current MMS boundaries, and A) Variation of the legal restrictions on seismic surveying within the MMS to be consistent with the Code of Conduct, or B) Prohibit seismic surveying within the MMS	Improved consistency and clarity in management regimes	Industry costs: Neutral Implementation/Compliance Costs: Minimal	Residual risk would remain to the dolphins in areas where the Code is voluntary and may not be adhered to (e.g. south of Oakura)	This would improve consistency between monitoring regimes, but would not eliminate all of the complexities for survey proponents as EPA would implement the EEZ regs and DOC would implement the MMS.	
	Removes the risk of impacts to dolphins from seismic surveying	Industry costs: High Implementation/Compliance Costs: Minimal			This was considered to be unwarranted given the low risks of negative impacts if seismic surveying was monitored properly through the provisions of the Code and MMS regulations.
Option 3 (A,B,C) Extend the current MMS boundaries consistent with Table D1, and A) Extend the existing legal restrictions on seismic surveying within the MMS B) Variation of the legal restrictions on seismic surveying within the MMS to be consistent with the Code of Conduct C) Prohibit seismic surveying within the MMS	Increases the area in which restrictions on seismic surveying are mandatory	Industry costs: Neutral Implementation/Compliance Costs: Minimal	Residual risk would remain to the dolphins in areas where the Code is voluntary and may not be adhered to (e.g. south of Hawera)	Potential for confusion for industry having two different management regimes, one mandatory and one voluntary.	Provides for increased protection, but leaves inconsistency between management regimes
	Increases the area of protection and provides for increased consistency	Industry costs: Neutral Implementation/Compliance Costs: Minimal	Residual risk would remain to the dolphins in areas where the Code is voluntary and may not be adhered to (e.g. south of Hawera)		Provides for greater consistency and stronger regulations within the MMS with minimal cost
	Increases the area of protection where the activity and potential threat is removed	Industry costs: High Implementation/Compliance Costs: Minimal			This was considered to be unwarranted given the low risks of negative impacts if seismic surveying was monitored properly through the provisions of the Code and MMS regulations.
Option 4 Develop stand alone regulations under the MMPA to regulate seismic surveying	Provides for increased consistency in management regimes and increases the area of protection as the regulations would apply throughout NZ Fisheries Waters	Industry costs: Minimal Implementation/Compliance Costs: Minimal			Industry has already committed to meeting the additional compliance costs associated with the seismic survey Code of Conduct, which would form the basis of any stand alone regulation. These costs are considered reasonable, being of the order of <1-4% of total operational costs for a typical survey programme. (Recommended Option)
Option 5 (additional) Prohibition of petroleum mining (this could be implemented in addition to one of the options 1-4 above)	Removes an additional activity from the range of Maui's dolphins	Industry costs: High Implementation/Compliance Costs: Minimal		This could have flow on effects to proponents who have permits for exploratory and prospecting permits as these would lose their value if active petroleum mining was prohibited	Given the relatively low levels of activity within the five years of the Threat Management Plan, this option is considered unnecessary at this time.

Table 4: Options to reduce the risk to Maui's dolphins from seabed mineral exploitation. For more detail on the pros and cons of these options see section 7.5.4 of the Threat Management Plan

Options	Cost benefit analysis				Additional Comments
	Benefits	Costs	Risks	Any other impacts?	
Option 1 <i>Status quo:</i> No change in the MMS	Neutral	Industry costs: Neutral Implementation/Compliance Costs: Neutral	Residual risk would remain to the dolphins in areas where there are no restrictions on seabed mining	Neutral	
Option 2 (A,B,C) Maintain the current MMS boundaries, and Variation to extend the current mining restrictions to; A) 4 nm offshore B) 7 nm offshore C) depth contour offshore limit	Removes the risk to Maui's dolphins throughout more of their range	Industry costs: Minimal Implementation/Compliance Costs: Neutral	Residual risk would remain to the dolphins outside of 4 nm	Industry costs would be low in the first five years as there is minimal active seabed mining planned, however, the impact could be greater in the future	A restriction on seabed mining within the sanctuary could mean a cost to the two proponents in loss of investment in the exploration and prospecting stages as they are unable to continue to active mining. As any restrictions on seabed minerals exploitation would not necessarily cover the full extent of the MMS, the actual impacts on stakeholders would depend on the extent of spatial overlap with any proposed operations within the MMS.
	Removes the risk to Maui's dolphins throughout more of their offshore range	Industry costs: Minimal Implementation/Compliance Costs: Neutral	Residual risk would remain to the dolphins outside of 7 nm	Same as above	Same as above
	Removes the risk to Maui's dolphins throughout the majority of their offshore range, and is consistent with recommendations from international groups (IWC, SMM)	Industry costs: Moderate Implementation/Compliance Costs: Neutral	Residual risk would remain to the dolphins in areas where the 100m depth contour is inside 12 nm	Same as above	Same as above
Option 3 (A,B,C,D) Extend the current MMS boundaries consistent with Table D1, and Variation to extend the current mining restrictions to A) 2 nm offshore B) 4 nm offshore C) 7 nm offshore D) depth contour offshore limit	Removes the risk to Maui's dolphins throughout more of their southern range	Industry costs: Minimal Implementation/Compliance Costs: Minimal	Residual risk would remain to the dolphins outside of 2 nm	Same as above	Same as above
	Removes the risk to Maui's dolphins throughout more of their southern and offshore range	Industry costs: Minimal Implementation/Compliance Costs: Minimal	Residual risk would remain to the dolphins outside of 4 nm	Same as above	Same as above
	Removes the risk to Maui's dolphins throughout more of their southern and offshore range	Industry costs: Minimal Implementation/Compliance Costs: Minimal	Residual risk would remain to the dolphins outside of 7 nm	Same as above	Same as above
	Removes the risk to Maui's dolphins throughout the majority of their range, and is consistent with recommendations from international groups (IWC, SMM)	Industry costs: Moderate Implementation/Compliance Costs: Neutral	Residual risk would remain to the dolphins in areas where the 100m depth contour is inside 12 nm	Same as above	Same as above
Option 4 (additional) Moratorium on active mining for a 5 year duration of the TMP (this could be implemented in addition to one of the options 1-3 above)	Removes an additional activity from the range of Maui's dolphins	Industry costs: High Implementation/Compliance Costs: Minimal	Neutral	Neutral	The time bounded nature would allow for exploratory and prospecting work to continue in conjunction with research focussed on identifying and mitigating risks to Maui's dolphin associated with seabed mining.
Option 5 Code of Conduct for seabed minerals exploitation	Minimises potential risks posed to dolphins from the activity through development of a voluntary code of conduct	Industry costs: Minimal Implementation/Compliance Costs: Moderate to High	Neutral	Neutral	Voluntary codes are considered advantageous as they develop mitigation measures through a collaborative process which will enhance levels of compliance

Table 5: Options to reduce the risk to Maui's dolphins from commercial marine mammal tourism. For more detail on the pros and cons of these options see section 7.5.5 of the Threat Management Plan					
Options	Cost benefit analysis				Additional Comments
	Benefits	Costs	Risks	Any other impacts?	
Option 1 <i>Status quo:</i> No regulatory change	Neutral	Neutral	Protection from tourism is reliant on Standard Operating Procedures for permitting processes under the Marine Mammal Protection Regulations	Potential for increase in permit applications if people are restricted from other activities that are prohibited.	
Option 2 Moratorium under the MMPA	Removes the risk of impacts from tourism within a specified area for a set time frame	Industry costs: Neutral Implementation/Compliance Costs: Moderate - this cost would include implementation of the moratoria, compliance as well as the required research prior to the review of the moratoria			This option is for a set time frame, generally three years and then reviewed following research on the current level of tourism in the area. There is no current tourism targeting Maui's dolphins in the area.
Option 3 Restrictions within the MMS	Removes the risks of impacts from tourism within the MMS until such time as the Minister of Conservation would chose to remove the restriction	Industry costs: Neutral Implementation/Compliance Costs: Minimal – implementation via Gazette notice			
Option 4 (additional) Increased engagement and compliance	This option helps to reduce the risk of opportunistic viewing which Options 2 and 3 are not able to address on their own. It could be applied on its own (e.g. with Option 1) and would still have a benefit by improving compliance with the MMPR s3 regarding behaviour around marine mammals, which applies to the general public as well as commercial operators.	Industry costs: Neutral Implementation/Compliance Costs: Minimal	Protection from tourism is reliant on Standard Operating Procedures for permitting processes under the Marine Mammal Protection Regulations	Potential for increase in permit applications if people are restricted from other activities that are prohibited.	

Table 6: Options to reduce the risk to Maui's dolphins from Commercial Shipping. For more detail on the pros and cons of these options see section 7.5.6 of the Threat Management Plan					
Options	Cost benefit analysis				Additional Comments
	Benefits	Costs	Risks	Any other impacts?	
Option 1 <i>Status quo:</i> No additional measures	Neutral	Neutral	Residual risk remains to dolphins from the potential of large vessel strike within their range	A potential indirect impact of commercial shipping is also the risk of hazard substance spills, however, options to reduce the risk to dolphins from spills are addressed in the following table (D6).	
Option 2 PSSA – designation as a Particularly Sensitive Sea Area	Reduces the risk of vessel collision with Maui's dolphins within a designated area.	Industry costs: Minimal: There could be some increase in indirect costs due to reduced speeds etc. Implementation/Compliance Costs: Moderate	Residual risk might remain in the area, but is significantly reduced through behavioural changes such as reduced speeds.		Indirect costs could increase as a result of reduced speeds, however, these are expected to be limited due to the limited geographical area in question.
Option 3 ATBA – designation as an Area To Be Avoided	Removes the risk of vessel collision with Maui's dolphins within a designated area.	Industry costs: Moderate: There could be some increase in indirect costs due to needing to avoid the area and go outside 12 nm Implementation/Compliance Costs: Moderate			

Table 7: Options to reduce the risk to Maui's dolphins from marine spills – NON REGULATORY OPTIONS
A range of options could be implemented together. For more detail on the pros and cons of these options see section 7.6.2 of the Threat Management Plan

Options	Cost benefit analysis			Additional Comments
	Benefits	Costs	Risks	
Option 1 <i>Status quo:</i> No additional action taken	Neutral	Neutral	Reliance on the existing MNZ New Zealand Marine Oil Spill Strategy to mitigate risks to dolphins	
Option 2 Using AIS for vessel related compliance purposes and to reduce risk of accidents that could cause spills in Maui's dolphins range	Reduce the risk of maritime incident and reduce the probability of hazardous substance spills.	Industry costs: Moderate: initial set up for industry that are not currently using AIS Implementation/Compliance Costs: Moderate: initial set up		This is the option that has the greatest chance of removing risk vs. improving response to an incident. DOC has a role in the project team with Customs to review the upcoming AIS contract.
Option 3 DOC involvement with Oil Pollution Advisory Committee	A role in OPAC would ensure that response planning takes into account Maui's dolphins and is more proactive/preventative	Industry costs: Neutral Implementation/Compliance Costs: Minimal: within DOC routine operations	Does not remove the risk of an incident but improves response to an incident	DOC is already investigating
Option 4 DOC involvement with Massey University Oiled Wildlife Response team	Improves response to incidents so minimises overall impact to dolphins	Industry costs: Neutral Implementation/Compliance Costs: Minimal: within DOC routine operations	Does not remove the risk of an incident but improves response to an incident	DOC is already investigating

Table 8: Options to reduce risk to Maui's dolphins from land-based activities and coastal development. – NON REGULATORY OPTIONS
A range of options could be implemented together. For more detail on the pros and cons of these options see section 7.6.3 of the Threat Management Plan

Options	Cost benefit analysis			Additional Comments
	Benefits	Costs	Risks	
Option 1 Maui's dolphins considered in resource consent applications	All of the proposed options hold benefits in increasing awareness and consideration of Maui's dolphins in various coastal planning processes. Any difference between the benefits of each of these proposed options is negligible. It is worth noting that implementation of multiple options will increase the potential benefits.	There could be additional costs associated with resource consent application approval and compliance processes. However, measures to offer further protection to Maui's dolphins from land-based effects are consistent with routinely applied measures to minimise environmental degradation. Therefore, implementation costs are considered to be minimal.	Residual risk still remains in the range of Maui's dolphins, as these options do not remove activities, but provide for reduction of impact.	DOC is currently investigating implementation through normal operational procedures. In addition, research around the impact of land-based activities on Maui's dolphins can be addressed through the proposed Maui's dolphin research, monitoring and advisory group.
Option 2 Engagement with Territorial Authorities and Regional Councils				
Option 3 NZCPS and CMS revision to take account of Maui's dolphins				
Option 4 RMA process awareness Ensuring teams responsible for consent processing are aware of the potential impacts of proposed activities on Maui's dolphins				
Option 5 Liaison regarding pollution Identify sources of pollution that could threaten Maui's dolphins and promote appropriate controls to the administering bodies				

Table 9: Options to reduce the risk to Maui's dolphins from Thundercat racing – NON REGULATORY OPTIONS
A range of options could be implemented together. For more detail on the pros and cons of these options see section 7.6.4.1 of the Threat Management Plan

Options	Cost benefit analysis				Additional Comments
	Benefits	Costs	Risks	Any other impacts?	
Option 1 Soft-start concept Gradually building up noise levels prior to an event to give dolphins the opportunity to leave the area	All of the proposed options hold benefits in increasing awareness and consideration of Maui's dolphins in the inshore boat racing circuit. Any difference between the benefits of Options 1, 3, and 4 is negligible. However, Option 2 which addresses practice areas will hold the greatest benefit to the dolphins as small recreational craft singly operating at high speeds within the Maui's dolphin range is where the greatest risk lies. It is worth noting that implementation of multiple options will increase the potential benefits, multiple options could be implemented through a Code of Conduct with the industry.	Industry costs: Moderate Implementation/Compliance Costs: Moderate Implementation of a Code of Conduct takes some resourcing in the set up from both Industry and the Crown. Compliance costs should be minimal, as development of a Code in a collaborative process should encourage industry buy-in to the Code.	Residual risk still remains in the range of Maui's dolphins, as these options do not remove the activity, but they reduce the chance of an interaction.	Social costs: If restrictions are put in place spatially or temporally for practicing, this could have a social impact, if people have to postpone practicing or travel further to a designated area. However, this cost is likely to be minimal if appropriate measures are worked through in a collaborative framework.	Recommended Option. Recreational vessel traffic was considered by the Risk Assessment panel to have a direct or indirect impact on Maui's dolphins and has a 48.7% likelihood of exceeding the PBR. Practicing was also considered to be higher risk than the events themselves as observers and other mitigation measures are not in place for practicing. Therefore a Code of Conduct with the inshore boat racing industry could effectively reduce the potential risk to Maui's dolphins both during events and practice sessions.
Option 2 Specified practice areas and times					
Option 3 Posting of observers to look out for Maui's dolphins					
Option 4 Aerial observation of area prior to race start to ensure no dolphins are in the area					

Table 10: Options reduce the risk to Maui's dolphins from Surf life saving events – NON REGULATORY OPTIONS
A range of options could be implemented together. For more detail on the pros and cons of these options see section 7.6.4.2 of the Threat Management Plan

Options	Cost benefit analysis			Additional Comments
	Benefits	Costs	Risks	
Option 1 Ongoing engagement with surf life saving clubs looking at educational options	All of the proposed options hold benefits in increasing awareness and consideration of Maui's dolphins during surf life saving events circuit.	Industry costs: Minimal Implementation/Compliance Costs: Minimal	Residual risk still remains in the range of Maui's dolphins, as these options do not remove the activity, but they reduce the chance of an interaction when an event is underway.	DOC is currently investigating implementation through normal operational procedures.
Option 2 Utilising observers during competitions and/or training events to look out for Maui's dolphins				

Table 11: Options to reduce the risk to Maui's dolphins from recreational boating – NON REGULATORY OPTIONS
A range of options could be implemented together. For more detail on the pros and cons of these options see section 7.6.4.3 of the Threat Management Plan

Options	Cost benefit analysis				Additional Comments
	Benefits	Costs	Risks	Any other impacts?	
Option 1 Promotion and enforcement of the MMPR	All of the proposed options hold benefits in increasing awareness and consideration of Maui's dolphins by the recreational boating community.	Industry costs: Neutral (not industry related) Implementation/Compliance Costs: Minimal	Residual risk still remains in the range of Maui's dolphins, as these options do not remove the activity, but they reduce the chance of a negative interaction between a boat and a dolphin.	Social costs: There could be some perceived social costs in changing behaviour around marine mammals; however, behavioural modifications do not restrict the public from seeing the dolphins. Therefore, DOC considers this cost negligible and the potential negative perception can be reduced through effective engagement.	DOC is currently investigating implementation through normal operational procedures. Better advocacy could also be addressed through the proposed Maui's dolphin research, monitory and advisory group.
Option 2 Development of appropriate advocacy tools to support community engagement work					
Option 3 Targeted advocacy over summer months when recreational boaters are most active					
Option 4 Working with other agencies to effectively engage the target audience					

Table 12: Options to reduce the risk to Maui's dolphins from Scientific Research – NON REGULATORY OPTIONS				
A range of options could be implemented together. For more detail on the pros and cons of these options see section 7.6.5 of the Threat Management Plan				
	Cost benefit analysis			Additional Comments
Options	Benefits	Costs	Risks	
Option 1 Regular engagement and training with scientists and DOC staff regarding best practice techniques for use on Hector's and Maui's dolphins	All of the proposed options hold benefits in reducing the risk to Maui's dolphins from various research methods. Additionally, these options have an added benefit in that they would contribute to improving the research that is undertaken on Maui's dolphins, both in terms of ensuring priority is given to those projects that will contribute most to improved management of the species and ensuring the robustness of the research proposed.	Industry costs: Minimal Implementation/Compliance Costs: Minimal There could be additional costs associated with more rigorous permit application approval processes, as well as operational costs associated with Option 1, however, DOC consider the costs of these to be minimal and the associated benefits would outweigh the potential increase in costs.	Residual risk could remain with some research proposals, however, risk mitigation would be considered prior to the granting of a permit and if the risk was deemed too great, then it is unlikely a permit would be granted.	Many of these options can be addressed through the proposed Maui's dolphin research, monitoring and advisory group. Any that are not picked up as core goals implemented by that group, DOC will investigate implementing as a part of their normal operational procedures.
Option 2 Ensuring anyone undertaking research is appropriately qualified				
Option 3 Strict adherence to current legislation and standard operating procedures are followed				
Option 4 Developing stricter risk assessment protocols regarding permit processing				
Option 5 Research undertaken is guided by research priorities and research planning processes				
Option 6 Any research granted a permit must be able to demonstrate clear benefits for the population and the gains must outweigh the risks				

Table 13: Options to reduce the risk to Maui's dolphins from Disease – NON REGULATORY OPTIONS				
A range of options could be implemented together. For more detail on the pros and cons of these options see section 7.6.6 of the Threat Management Plan				
	Cost benefit analysis			Additional Comments
Options	Benefits	Costs	Any other impacts?	
Option 1 Ongoing necropsy of Maui's dolphins found beachcast to determine incidence of disease including, <i>Toxoplasma gondii</i>	Increased knowledge of the origin of disease within the Maui's dolphin's population. This knowledge would allow for appropriate mitigation to be developed and implemented in a cost effective and efficient manner. This knowledge is required before implementing mitigation measures, as that could result in a cost that does not actually reduce risk to Maui's dolphins.	There is minimal cost to stakeholders, the greatest cost being the financial undertaking of the research.		DOC has renewed its contract with Massey University and added an element to test for <i>Toxoplasma gondii</i> in all Hector's/Maui's carcasses received for necropsy.
Option 2 Research to understand the origin of <i>Toxoplasma gondii</i> , the impacts of it on the population, and whether there are ways to mitigate against it				DOC has contributed funding to a project to better understand the origin of <i>Toxoplasma gondii</i> Further work on this option could be addressed through the proposed Maui's dolphin research, monitoring and advisory group.
Option 3 Engagement with stakeholder groups to raise awareness and encouraging safe practices to minimise the occurrence of <i>Toxoplasma gondii</i> getting into waterways and the sea	Implementation of effective mitigation measures to reduce the chance of disease from an anthropogenic origin in the Maui's dolphin population.	Industry costs: Neutral (no associated industry) Implementation/Compliance Costs: Minimal	Social costs: There could be some perceived social costs in changing behaviour to reduce the occurrence of <i>Toxoplasma gondii</i> in the marine environment. DOC considers this cost negligible and the potential negative perception can be reduced through effective engagement.	This option could be addressed through the proposed Maui's dolphin research, monitoring and advisory group.

Table 14: Options to improve collaboration in research, monitoring and engagement. – NON REGULATORY OPTIONS				
For more detail on this option see section 8.1 of the Threat Management Plan				
	Cost benefit analysis			Additional Comments
Options	Benefits	Costs	Any other impacts?	
Option 1 Develop and implement a strategic, collaborative advisory group for engaging interested parties (National and local government, industry, ENGO's, tangata whenua and science providers) in prioritisation and funding of future conservation research on Maui's dolphins.	Involvement of stakeholder groups into the research and monitoring planning process. The ability for greater transparency in the research process, and development of a robust prioritisation procedure to ensure that research being undertaken is fit for purpose.	There would be an additional cost for the set up of the group, this would be addressed through Agencies business planning of operations. Additional funding would be for the cost of the research.	Minimal – however, results of research could lead to the requirement of reviewing current management measures.	This option would encompass a number of the options addressed above. This would also allow for industry sponsoring research and also encouraging tangata whenua, and community groups to be more active in both undertaking the research and getting messages out to the wider public.

Fisheries regulatory and non-regulatory options considered by the Ministry for Primary Industries in the Review of the Threat Management Plan

Assessment of Impact of Options	Benefits	Costs	Risks	Other considerations
Table 15: Commercial and Amateur Set Netting (off the WCNI - Taranaki)				
<p>Option 1 (recommended) – <i>Status quo</i>: Keep existing management, including the interim measures to</p> <ul style="list-style-type: none"> ▪ retain the set net prohibition between 0 and 2 nautical miles offshore from Pariokariwa Point to Hawera; ▪ retain the prohibition on the use of commercial set nets between 2 and 7 nautical miles offshore from Pariokariwa Point to Hawera without an observer onboard. 	<p>Reduces the risk to Maui's dolphin in the inshore area where the January 2012 mortality of a Maui's or Hector's dolphin occurred.</p>	<p><i>Commercial impact (costs are notional as the measures have been in place for 15 months)</i></p> <ul style="list-style-type: none"> ▪ Annual Revenue Loss \$339,280 ▪ Annual Value Add Impact \$569,991 ▪ Capitalised Future Value Impact \$1,911,267 <p>Observer costs are borne by the Crown</p> <p><i>Crown Impacts:</i></p> <ul style="list-style-type: none"> ▪ Observer Coverage \$315,480 - \$526,000 per year 	<p>Residual risk would remain for any dolphins that travel further offshore than two nautical miles</p>	<p><i>Fishing impact</i> – Prohibits commercial and amateur set net activity in the area where a Maui's or a Hector's dolphin was accidentally killed in January</p> <p><i>Non-commercial impact</i> - The value of recreational set net fishing is unable to be quantified. Recreational fishers have and would be impacted as they are less likely (or able) to set net beyond two nautical miles from shore or travel further south to continue to set net. These impacts may result in additional costs being incurred</p> <p><i>Customary impact</i> - while current management measures and those proposed don't impose restrictions on Maori customary fishing, MPI did receive comment from some iwi representatives that they were reluctant to issue customary permits to enable set netting given the bans in place on commercial and recreational set net fishers. They noted this was impacting on local iwi being able to provide for their people</p>
<p>Option 1b - Amend the interim measures to:</p> <ul style="list-style-type: none"> ▪ prohibit set net between 0 and 2 nautical miles offshore from Pariokariwa Point to Hawera from 1 October to 31 May; ▪ prohibit set net between 0 and 2 nautical miles offshore from Pariokariwa Point to Hawera from 1 June to 30 September, excluding the area between Bell Block and Cape Egmont provided an observer is onboard, and within that area <ul style="list-style-type: none"> • place restrictions on the length and height of set nets • limit setting and hauling of set to daylight hours ▪ prohibit the use of commercial set nets between 2 and 7 nautical miles offshore from Pariokariwa Point to Hawera all year round without an observer onboard. 	<p><i>Commercial impact:</i></p> <ul style="list-style-type: none"> ▪ Annual Revenue Gained \$58,532 ▪ Annual Value Add Gained \$98,334 ▪ Capitalised Future Value Gained \$293,016 	<p><i>Crown impacts:</i></p> <ul style="list-style-type: none"> ▪ Observer Coverage \$315,480 - \$526,000 per year 	<p>Increase residual risk to Maui's dolphins, should they be present, in the area in comparison to the <i>status quo</i>.</p> <p>Residual risk would remain for any dolphins that travel:</p> <ul style="list-style-type: none"> • further offshore than two nautical miles or • within the 0 to 2 nautical mile offshore area between Pariokariwa Point and Bell Block from 1 June to 30 September <p>Shifts the balance of sustainability and utilisation toward greater utilisation</p>	<p><i>Non-commercial impact</i> - The value of recreational set net fishing is unable to be quantified. No allowance for recreational fishers to access the proposed area as commercial fishers. Recreational fishers have and would be impacted as they are less likely (or able) to set net beyond two nautical miles from shore or travel further south to continue to set net. These impacts may result in additional costs being incurred</p> <p><i>Customary impact</i> - as above in option 1</p>
<p>Option 2 - Keep existing management, and put the interim measures in place via regulation to:</p> <ul style="list-style-type: none"> ▪ retain the set net prohibition between 0 and 2 nautical miles 	<p>Reduces the risk to Maui's dolphin in the inshore area where the January 2012</p>	<p><i>Commercial impacts (costs other than observer coverage are notional as the measures have been in place for 15 months):</i></p>	<p>Residual risk would remain for any dolphins that travel further offshore than two nautical miles</p>	<p><i>Fishing impact</i> – Prohibits commercial and amateur set net activity in the area where a Maui's or a Hector's dolphin was accidentally killed in January</p>

Assessment of Impact of Options	Benefits	Costs	Risks	Other considerations
<p>offshore from Pariokariwa Point to Hawera;</p> <ul style="list-style-type: none"> prohibit the use of commercial set nets between 2 and 7 nautical miles offshore from Pariokariwa Point to Hawera without an observer onboard. 	<p>mortality of a Maui's or Hector's dolphin occurred.</p>	<ul style="list-style-type: none"> Annual Revenue Loss \$339,280 Annual Value Add Impact \$569,991 Capitalised future value Impact \$1,911,267 <p>Observer costs are borne by the Industry</p> <ul style="list-style-type: none"> Observer Coverage \$315,480 - \$526,000 per year 		<p><i>Commercial impacts</i> - Observer coverage costs being shifted to industry rather than being Crown funded</p> <p><i>Non-commercial impact</i> - The value of recreational set net fishing is unable to be quantified. Recreational fishers have and would be impacted as they are less likely (or able) to set net beyond two nautical miles from shore or travel further south to continue to set net. These impacts may result in additional costs being incurred</p> <p><i>Customary impact</i> - as above in option 1.</p>
<p>Option 3 - Keep existing management, and</p> <ul style="list-style-type: none"> Extend the set net prohibition between 0 and 4 nautical miles offshore from Pariokariwa Point to Hawera; Prohibit the use of commercial set nets between 4 and 7 nautical miles offshore from Pariokariwa Point to Hawera without an observer onboard. 	<p>Reduces the residual risk to Maui's dolphins from set net activity</p> <p>Reduces the risk to Maui's dolphin out to four nautical miles offshore, which (based on offshore distribution information in other areas of the WCNI) is where Maui's and/or Hector's dolphins are most frequently observed</p>	<p><i>Commercial impacts:</i></p> <ul style="list-style-type: none"> Annual Revenue Loss \$646,425 Annual Value Add Impact \$1,085,994 Capitalised Future Value Impact \$3,649,399 <p>Observer costs are borne by the Industry</p> <ul style="list-style-type: none"> Observer coverage likely to be less than \$315,480 - \$526,000 per year 	<p>Residual risk would remain for any Maui's dolphin that is present and travels offshore beyond four nautical miles</p>	<p><i>Commercial impacts</i> - 6-8 commercial fishers directly impacted, plus quota holders that any observer coverage would be cost-recovered from</p> <p><i>Non-commercial impact:</i></p> <ul style="list-style-type: none"> The value of recreational set net fishing is unable to be quantified. However, it is likely that Option 3 would remove virtually all recreational set net activity in the region MPI considers the increased costs in travelling further afield (particularly offshore beyond four nautical miles) would make the activity cost-prohibitive. Recreational vessels are generally smaller and there would likely be logistical and safety issues preventing them from doing so. Fishers will be required to change their fishing method, which could change the costs associated with being able to continue to recreationally fish <p><i>Customary impact</i> - as above in option 1</p>
<p>Option 4 - Keep existing management and extend the set net prohibition between 0 and 7 nautical miles offshore from Pariokariwa Point to Hawera.</p>	<p>Reduces the residual risk to Maui's dolphins from set net activity</p>	<p><i>Commercial impacts:</i></p> <ul style="list-style-type: none"> Annual Revenue Loss \$918,677 Annual Value Add impact \$1,543,377 Capitalised future value impact \$5,271,194 		<p><i>Commercial impacts</i> – the increase of the spatial area prohibited would result in a greater financial impact on industry</p> <p><i>Non-commercial impact</i> - MPI considers it would be very difficult for recreational fishers to utilise some fisheries to the extent they currently do when set netting. Catches of some of those species will probably decrease, and opportunities to continue to access those species would depend on the uptake of alternative methods that enable them to continue fishing</p> <p><i>Customary impact</i> - as above in option 1</p>
<p>Option 5 - Extend the set net prohibition out to the 100 m depth contour from Maunganui Bluff to Whanganui.</p>	<p>Reduces the residual risk to Maui's dolphins from set net activity</p>	<p><i>Commercial impacts:</i></p> <ul style="list-style-type: none"> Annual Revenue Loss \$1,872,803 Annual Value Add impact \$3,146,310 Capitalised future value impact \$12,320,979 		<p><i>Commercial impacts</i> – the increase of the spatial area prohibited would result in a greater financial impact on industry</p> <p><i>Non-commercial impact</i> - as above in option 4</p> <p><i>Customary impact</i> - as above in option 1</p> <p>Although the spatial closure may be more restrictive than required based on the likelihood of an interaction given the low population size, offshore distribution and level of set net activity</p>

Assessment of Impact of Options	Benefits	Costs	Risks	Other considerations
Table 16: Commercial and Amateur Set Netting (WCNI Harbours)				
Option 1 - <i>Status quo</i> : Keep existing management	Nil	<i>Commercial impact</i> - Nil as the measures are already in place	No reduction in residual risk of Maui's dolphin entanglement with set nets	Nil
Option 2 - Keep existing management and improve information on dolphin distribution and set net activity in the west coast North Island harbours, with a focus in the Manukau Harbour.	Increased knowledge to better inform assessment of dolphin distribution and use of Manukau harbour and potential interactions with set net vessels	Research and monitoring costs to be determined – would require input from research advisory group	Not mitigation of the risk of Maui's dolphin entanglement with set nets	Nil
Option 2b (recommended) - Keep existing management for set netting, and <ul style="list-style-type: none"> Allow commercial ring netting in the Manukau Harbour where current set net restrictions apply (under specified conditions), and Improve information on dolphin distribution and set net activity in the west coast North Island harbours, with a focus in the Manukau Harbour. 	Likely to provide economic benefits to commercial fishers Increased knowledge to better inform assessment of dolphin distribution and use of Manukau harbour and potential interactions with set net vessels	Research and monitoring costs to be determined – would require input from research advisory group	Not mitigation of the risk of Maui's dolphin entanglement with set nets	<i>Non-commercial impact</i> - Allowing commercial fishers back in the closed area to ring net could remove some of the fishing pressure in the inner part of the harbour and provide some resources to the recreational fishers.
Option 3 - In addition to existing management for set netting: <ul style="list-style-type: none"> Extend the existing set net ban in the entrance of the Manukau Harbour further into the harbour. Improve information on dolphin distribution and set net activity in the west coast North Island harbours, with a focus in the Manukau Harbour. 	Reduces the residual risk to Maui's dolphins from set net activity Increased knowledge to better inform assessment of dolphin distribution and use of Manukau harbour and potential interactions with set net vessels	<i>Commercial impacts:</i> <ul style="list-style-type: none"> Annual Value Impact \$390,942 Capitalised Future Value Impact \$920,337 Research and monitoring costs to be determined – would require input from research advisory group	Residual risk would remain for any Maui's dolphin that travels further into the harbour beyond the proposed extended set net ban boundary. Residual risk also remains for any Maui's dolphin that travels beyond the current set net closures in the Kaipara, Raglan or Kawhia harbours.	<i>Commercial impacts</i> - 20 – 30 commercial fishers directly impacted <i>Non-commercial impact</i> <ul style="list-style-type: none"> The value of recreational set net fishing is unable to be quantified. MPI cannot determine the extent of the impact on recreational set net fishers operating near the entrance of the Manukau Harbour. MPI consider fishers targeting rig are likely to be most affected by this option. People who normally fish in the area will have to travel to fish so fishing costs may increase, and any shift in commercial effort may result in increased competition between commercial and recreational fishers in a smaller area.
Option 4 - Prohibit set net activity in all west coast North Island harbours.	Greatest level of protection for the Maui's dolphins Reduces the residual risk to Maui's dolphins from set net activity	<i>Commercial impacts:</i> <ul style="list-style-type: none"> Annual Revenue Loss \$2,170,282 Annual Value Add impact \$3,646,074 Capitalised future value impact \$8,685,833 	Given the high level of uncertainty in Maui's dolphin distribution in and/or use of the harbours, a complete closure may result in significant economic impacts that outweigh the effectiveness of the measure	<i>Commercial impacts</i> - 20 – 30 commercial fishers directly impacted <i>Non-commercial impact</i> - MPI considers it would be very difficult for recreational fishers to utilise some fisheries to the extent they currently do when set netting. Catches of some of those species will probably decrease, and opportunities to continue to access those species would depend on the uptake of alternative methods that enable them to continue fishing Although the spatial closure may be more restrictive than required based on the likelihood of an interaction given the low population size, offshore distribution and level of set net activity

Assessment of Impact of Options	Benefits	Costs	Risks	Other considerations
Table 17: Commercial Trawling				
Option 1 - <i>Status quo</i> : Keep existing management.		<i>Commercial impact</i> - Nil as the measures are already in place	No mitigation of the risk of entanglement with trawl nets	
Option 2 (recommended) - Put in place extensive monitoring coverage in the commercial trawl fishery between 2 and 7 nautical miles offshore from Maunganui Bluff to Pariokariwa Point.	Increased knowledge to better inform assessment of dolphin distribution and potential interactions with trawl vessels	<i>Commercial impacts - Monitoring:</i> <ul style="list-style-type: none"> ▪ Estimated Annual Cost \$294,500 ▪ Estimated Cost Year 1 (25% coverage) \$294,500 ▪ Estimated Cost Year 2 \$588,050 ▪ Estimated Cost Year 3 \$882,550 ▪ Estimated Cost Year 4 (100% coverage) \$1,176,100 	No mitigation of the risk of entanglement with trawl nets	
Option 3 <ul style="list-style-type: none"> ▪ Extend the trawl ban from 2 to 4 nautical miles offshore from Kaipara Harbour to Kawhia Harbour. ▪ Put in place extensive monitoring coverage in the commercial trawl fishery between 2 and 7 nautical miles offshore from Maunganui Bluff to Pariokariwa Point. 	Higher level of protection for the Maui's dolphins Reduces the residual risk to Maui's dolphins from trawl activity Increased knowledge to better inform assessment of dolphin distribution and potential interactions with trawl vessels	<i>Commercial impacts:</i> <ul style="list-style-type: none"> ▪ Annual Revenue Loss \$685,642 ▪ Annual Value Add impact \$1,151,880 ▪ Capitalised future value impact \$4,038,460 <i>Monitoring:</i> <ul style="list-style-type: none"> ▪ Estimated Annual Cost \$294,500 ▪ Estimated Cost Year 1 (25% coverage) \$294,500 ▪ Estimated Cost Year 2 \$588,050 ▪ Estimated Cost Year 3 \$882,550 ▪ Estimated Cost Year 4 (100% coverage) \$1,176,100 	Risk of entanglement with trawl gear would remain outside the area of the closure	
Option 4 - Extend the trawl prohibition between 0 and 7 nautical miles offshore from Maunganui Bluff to Hawera.	Higher level of protection for the Maui's dolphins Reduces the residual risk to Maui's dolphins from trawl activity	<i>Commercial impacts:</i> <ul style="list-style-type: none"> ▪ Annual Revenue Loss \$4,593,773 ▪ Annual Value Add impact \$7,717,539 ▪ Capitalised future value impact \$28,561,654 		
Option 5 - Extend the trawl prohibition out to the 100 m depth contour from Maunganui Bluff to Whanganui.	Higher level of protection for the Maui's dolphins Reduces the residual risk to Maui's dolphins from trawl activity	<i>Commercial impacts:</i> <ul style="list-style-type: none"> ▪ Annual Revenue Loss \$9,422,689 ▪ Annual Value Add impact \$15,830,118 ▪ Capitalised future value impact \$59,245,418 		Although the spatial closure may be more restrictive than required based on the likelihood of an interaction given the low population size, offshore distribution and level of trawl activity

Table 18: Conclusions and Recommendations Table

Measure	Purpose	Reason for support
<p>Commercial and Amateur Set Netting (off the WCNI - Taranaki) – Option 1: Keep existing management, including the interim measures to:</p> <ul style="list-style-type: none"> • Retain the commercial and amateur set net prohibition between zero and two nautical miles offshore from Pariokariwa Point to Hawera; • Prohibit the use of commercial set nets between two and seven nautical miles offshore from Pariokariwa Point to Hawera without an observer onboard. <p>The interim measures would be reviewed in 2015-2016 to inform management going forward.</p>	<p>Managing the risk to Maui's dolphins in the inshore area (out to two nautical miles) where the January 2012 mortality occurred, and the alongshore range based on the maximum travel distance recorded for Maui's dolphins.</p> <p>Gathering more information on dolphin presence in the area.</p> <p>One-hundred percent observer coverage between two and seven nautical mile areas offshore will provide independent monitoring and reporting of fishing interactions with, or sightings of Hector's and/or Maui's dolphins beyond two nautical miles.</p>	<p>Using a qualitative assessment MPI considers a spatial closure out to 2 nautical miles will manage the risk to Maui's dolphins in the inshore areas where the January mortality occurred. However, a two nautical mile boundary does not cover the Maui's dolphin known offshore distribution.</p> <p>Observer coverage will provide independent monitoring and reporting of fishing interactions with, or sightings of Hector's and/or Maui's dolphins beyond two nautical miles.</p>
<p>Commercial and Amateur Set Netting (WCNI Harbours) - Option 2:</p> <ul style="list-style-type: none"> • Keep existing commercial and amateur set net restrictions • Amend the regulations to allow commercial ring netting in the Manukau Harbour where the set net ban applies, with restrictions on the length and height of rings nets, time and duration of deployment. • Improve information on Maui's dolphin distribution and set net activity in the west coast North Island harbours, with a focus in the Manukau Harbour. 	<p>Allowing for commercial ring netting (which is considered a lower risk activity) in the area where set net activity is currently prohibited in the Manukau Harbour.</p> <p>Improving information in two areas:</p> <ul style="list-style-type: none"> • Maui's dolphin use of the WCNI harbours, with a focus in the Manukau Harbour; • where commercial and amateur set net activity is occurring in the harbours. 	<p>This option will not mitigate risk of Maui's dolphin entanglement with set nets, but will improve information on the nature and extent of any risk posed by set net activity within the WCNI harbours.</p> <p>Given ring netting involves deployment of a net for a short period of time and is under constant supervision, MPI considers this method may provide an alternative fishing method that is capable of avoiding, remedying or mitigating the effects of fishing on Maui's dolphins.</p>
<p>Commercial Trawling – Option 2:</p> <ul style="list-style-type: none"> ○ Keep existing management for trawl, and ○ Put in place extensive monitoring coverage in the commercial trawl fishery between two and seven nautical miles offshore from Maunganui Bluff to Pariokariwa Point. 	<p>Increasing the level of monitoring coverage in the inshore trawl fishery to:</p> <ul style="list-style-type: none"> • reduce the uncertainty in the risk trawling poses to Maui dolphins while enabling trawling to continue, and • provide robust information to inform any assessment of the level of interaction between trawl activity and the Maui's dolphin population. 	<p>MPI considers the level of monitoring coverage in the inshore trawl fishery needs to be increased to provide robust information to inform any assessment of the level of interaction between trawl activity and the Maui's dolphin population. Option 2 balances the need to reduce the uncertainty in the risk trawling poses to Maui's dolphins, by gathering more certain information on dolphin presence and potential interactions with trawl nets, while enabling trawling to continue.</p>
<p>Seismic Survey: Regulate seismic surveying by incorporation of the Seismic Survey Code of Conduct 2012 by reference under section 28 of the Marine Mammals Protection Act (MMPA) as a mandatory standard. This would apply in Territorial waters, EEZ and within the Marine Mammal Sanctuaries.</p>	<p>Management of risk to Maui's dolphins from seismic surveys by making the Code of Conduct 2012 - developed with input from stakeholders - mandatory.</p>	<p>Currently the Seismic Survey Code of Conduct is mandatory in the EEZ (12-200 nautical miles), by reference under the EEZ Act 2012. However, in the Territorial sea (0-12 nautical miles) it is a voluntary measure, whilst within some marine mammal sanctuaries seismic survey activities are regulated under the Marine Mammals Protection Act 1978. Incorporation by reference under the Marine Mammals Protection Act to regulate all seismic survey activities within the EEZ (including the Territorial sea and marine mammal sanctuaries) would improve consistency in regulations, provide clarity to the industry, and is achievable with minimal cost.</p>
<p>Inshore Boat Racing (WCNI): Develop Code of Conduct for inshore boat racing off the west coast of the North Island. As a part of the Code, investigate seasonal or area specific restrictions on racing in sensitive areas.</p>	<p>Management of risk to Maui's dolphins from inshore boat racing by use of a voluntary Code of Conduct to be developed with input from all relevant stakeholders.</p>	<p>DOCs preferred option is to work with the inshore boat racing community and local councils to develop a Code of Conduct for the inshore boat racing circuit, which could encompass some or all of the four options proposed for this activity. It is recognised that some mitigation measures are in place for racing. However, there is potential for impact to dolphins from boat strike during race practice. This Code of Conduct would develop mitigation measures for both racing and practicing, and also look at increased mitigation for critical areas in the Maui's dolphin habitat via voluntary spatial or seasonal restricted areas.</p>

<p>Maui's Dolphin Multi-stakeholder Advisory Group:</p> <p>Develop and implement a strategic, collaborative advisory group for engaging interested parties (National and local government, industry, ENGO's, tangata whenua and science providers) in prioritisation and funding of future conservation research on Maui's dolphins.</p>	<p>To manage the recovery of Maui's dolphins via:</p> <p>An annual strategic planning process with central and local government, industry, Treaty Partners and stakeholders to ensure a strategic, integrated approach to mitigating the impacts of human activities on Maui's dolphins;</p> <p>An annual research planning process to direct research priorities where they will provide the most benefit for Maui's dolphins;</p> <p>An engagement strategy to support implementation of outcomes from the planning processes, focused initially on options developed during consultation. This should also include development of a domestic and international communications strategy, to convey messaging about the government response.</p>	<p>Successful management of the species will be greatly enhanced through increased collaboration and shared funding on issues including research, monitoring and surveying, engagement and education. Several parties, including industry representatives, have expressed an interest in participating and contributing to future Maui's dolphin conservation work.</p> <p>Establishment of such a group would encompass many of the non-regulatory options that involve research, monitoring and engagement, and do so in a collaborative and transparent manner.</p>
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Emergency measures

1. In the event of a further Maui's dolphin mortality, it is important that the Government can act quickly and decisively. So, the Minister for Primary Industries considers it necessary to have measures in place to immediately avoid, remedy or mitigate fishing-related risks while further advice is developed.
2. The emergency measures provisions of the Fisheries Act enable the Minister for Primary Industries to use a Gazette Notice to close the area or prohibit the use of particular methods in the area, if he is satisfied that there has been a serious decline in the abundance or reproductive potential of a species. He may do this immediately or once an investigation into a mortality is complete.
3. Immediately following a mortality, DOC and MPI would initiate an investigation of the incident, including arranging for necropsy to determine cause of death and DNA sampling to determine if the dolphin is Maui's or Hector's dolphin.
4. Emergency measures would allow for interim protection while current protection measures are reviewed.
5. Emergency measures have not been used before and may be subject to legal challenge. The Minister for Primary Industries is considering whether other regulatory or non-regulatory measures may also be required to improve the ability to respond to a fishing-related mortality of a Maui's dolphin. Any regulatory changes will be subject to normal Cabinet processes.