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Minister of Police
Minister of Fisheries
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B20-0346

Tēnā koe

Hector's and Maui dolphin Threat Management Plan – Fisheries Measures

I write to inform you of my decisions on new fishing rules following a joint review of the Hector's and Māui dolphin Threat Management Plan (TMP) between Fisheries New Zealand and the Department of Conservation in 2019. I consider these new rules necessary to avoid, remedy, or mitigate the effect of fishing-related mortality on Hector's and Māui dolphins. I intend for the new rules to take effect from 1 October 2020.

Attached to this letter are details of the new measures in each region and my rationale for them. The regulations will provide finer detail on the measures and I anticipate they will be publically notified at least 28 days before they take effect. In summary the new rules will:

- extend existing, and create new, areas that prohibit the use of commercial and recreational set-nets in both the North Island and South Island, which will address the main fisheries risk to both Māui and Hector's dolphins;
- extend the closure to trawl fishing within the central Māui dolphin habitat zone;
- put in place a fishing-related mortality limit of one Māui or Hector's dolphin within the Māui dolphin habitat zone;
- prohibit the use of drift nets in all New Zealand waters; and
- enable the use of commercial ring nets in existing set-net prohibition areas within west coast North Island harbours, as this is a fishing method that poses a low risk to these dolphins.

In reaching my decisions, I gave careful regard to the legislative provisions of the Fisheries Act 1996 (the Act). In particular, I gave careful regard to the provisions about fishing-related mortality of marine mammals (s 15), the purpose and principles of the Act (ss 8, 9, and 10), and to kaitiakitanga (s 12).

I consider the new measures necessary to manage the fisheries-related risk to the dolphins, but I also recognise the current circumstances in which these decisions are made. They are unique in my view and warrant providing some support to fishers primarily focused on helping them transition to more environmentally friendly fishing methods.

Consequently, I have also decided to put in place wellbeing and transition support to help industry operators that are particularly impacted by the above measures. Further information is outlined below under *Wellbeing and Transition Support*. There is no obligation for the Crown to provide financial support when making sustainability decisions, but I recognise our country is facing an unprecedented challenge in supporting businesses and families through the COVID-19 pandemic.

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Revising the Hector's and Māui dolphin Threat Management Plan

This Government is committed to protecting and ensuring the long-term survival of Hector's and Māui dolphins. The review of the TMP ensures that the vision and goals in the TMP remain relevant and effectively represent Government and societal views of how we manage human-induced threats to these protected species and their long-term viability. It also ensures that we are on track towards these goals by reviewing new research and monitoring information to assess the effectiveness of the measures in place.

Population Outcomes

The Minister of Conservation and I were determined to make this new TMP much clearer in terms of what success will look like. To this end our officials consulted with tangata whenua and stakeholders to develop a revised vision, goals, population outcomes for each subspecies and supporting objectives to underpin the TMP. We have agreed on a strongly aspirational, but achievable, revised plan that is underpinned by the following population outcomes:

- *Hector's dolphins: Human impacts are managed to allow each subpopulation to increase to a level at or above 90 percent of the maximum number of dolphins the environment can support.*
- *Māui dolphins: Human impacts are managed to allow each subpopulation to increase to a level at or above 95 percent of the maximum number of dolphins the environment can support.*

I considered a range of different population outcomes, from 50 to 95 percent of the maximum number of dolphins the environment can support, and how these outcomes would inform my assessment of fisheries risk. I recognise that the higher the outcome the lower the allowable level of human-induced mortality. The lower the level of human-induced mortality allowable, the higher the impacts on use of marine resources that may pose a risk of dolphin mortality. However, I believe the agreed population outcomes are appropriate given:

- my, and this Government's, desire to minimise the level of human-induced mortality to protected species;
- my desire to be cautious where information on impacts, population size, and distribution remains uncertain;
- the small number of Māui dolphins, their risk of extinction, the importance of maintaining their long-term viability, and my desire to rebuild the population as quickly as possible;
- the larger population of Hector's dolphins, but my desire to prevent fragmentation between local and sub- populations; and
- the importance of maintaining biodiversity, including within and between species genetic diversity.

These outcomes put a clear line in the sand. We want to be certain that the populations of these important animals are thriving, and that the risks to them that we have control over are being well-managed. We also want the management outcomes to be clear so that performance against them can be measured, and the Government and agencies responsible for implementing and managing these impacts are held to account.

To support our desire for more transparency and accountability, the Minister of Conservation and her department will set up a North and South Island iwi and stakeholder group, which will have independent oversight of the management of these important species. The iwi and stakeholder groups will be responsible for reporting to the Minister of Conservation and myself annually on performance of the plan and the measures in place and putting forward ideas for any changes they consider important to improve effectiveness.

Managing the risk of fishing-related mortality

In 2002, the protected species Hector's dolphins was identified as two subspecies – the Hector's dolphin and the Māui dolphin. The Act sets out the environmental principles that must be taken into account when exercising my powers, including that the biological diversity of the aquatic environment should be maintained. In this case this is achieved by managing risk separately to both subspecies of dolphin, and the genetic diversity within each subspecies across their subpopulations. Under the revised TMP, I have agreed to fisheries management objectives to ensure that dolphin deaths arising from fisheries threats do not cause localised depletion, nor create substantial barriers to dispersal or connectivity between subpopulations.

To have confidence that the desired population outcomes will be achieved, all human-induced threats must be effectively managed. Within that we need to be confident that fishing impacts are being managed appropriately.

Section 15 of the Act enables me to put in place measures that I consider necessary to avoid, remedy, or mitigate the effects of fishing-related mortality on protected species, and such measures may include setting a limit on fishing-related mortality. To inform my decisions on what is necessary, I have agreed to a fisheries management objective that dolphin deaths arising from fisheries threats do not exceed population sustainability thresholds set to achieve the applicable population outcome with 95 percent certainty.

I recognise that I have discretion across a range of inputs as to how I assess and treat fisheries risk (e.g. desired population levels and level of confidence). In this case I am agreeing to high population outcomes. I have also agreed to require a very high level of certainty that the measures I put in place will manage fishing effects to the extent I want them to. I recognise that in choosing this approach, the measures required will be more extensive and will constrain use more than a lower threshold/population outcome would. I believe this is reasonable for the reasons that follow.

The population outcomes reflect the Government's and my view of desired outcomes for this species. While all human-induced threats to the population must be managed effectively, fishing has been *the*, and remains at least *a*, major cause of human-induced mortality. Given the susceptibility of these dolphins to certain fishing gear, I believe we must be very confident that fishing measures will be effective in achieving the desired fishing-related objectives. Without this certainty the desired outcomes will simply not be achieved. The fishing industry can then say, with justification, that they are doing everything they need to do to ensure the dolphin populations and subpopulations are able to thrive. The focus can then go on management of other human-induced threats, which of course must be managed equally well to ensure success.

The courts have already determined that a precautionary approach is open to me in relation to managing the effects of fishing-related mortality on protected species. But I recognise this is not a blank cheque. The measures I put in place can be, and are, only those I consider necessary. I recognise people's livelihoods are at stake and there are real impacts on local communities where fishing has historically and continues to play an important part.

In deciding on this approach, I have carefully considered the impact on use from submissions, independent analyses, and advice from officials. I have looked carefully at a range of alternative outcomes and confidence levels, and I understand the different trade-offs between use, impact, and cost available to me. I have tried to minimise the social, cultural and economic impacts of my decisions by focusing on methods and areas where the best available information indicates the fisheries risk is greatest. Set-net fisheries are estimated to be responsible for 85% of current fisheries risk to the dolphins. A kilometre of set-net in a particular location is about 20 times more likely to result in a dolphin death than a single inshore trawl event in the same location.

The time it has taken me to reach the decisions outlined in this letter indicates the extent of my deliberations, which were very much focused on these trade-offs. However, after review of all of the available information, I believe that bold and ambitious measures are required now to define success and move the populations of these dolphins to target levels.

Decision-making

Uncertainty in information

I have made my decisions using the best available information. I also recognise the uncertainty in that information and the role that it plays in how I weigh whether there is a need for action, what that action may be, and its impact.

For example, there has been considerable debate about the spatially explicit risk assessment model, including its development, the methods underpinning it, the uncertainty and potential bias associated with the input and outputs, and how its conclusions may inform my decision-making. I am well aware it is a model and relies on the quality of information going into it, and has its limitations. But I am also confident that it has undergone rigorous independent scientific review and has been shown to be robust. The advice I received is also explicit in the type of information the model has not been able to take into account at this time (e.g. how different gear set ups of the same fishing method may pose a different level of risk), which provides me with confidence that areas of uncertainty in assessing risk have been appropriately highlighted to me.

There has also been debate about the estimated socioeconomic impacts of the range of measures that were proposed, and how I may use that information in making my decisions. The socioeconomic methodology used by Fisheries New Zealand was externally peer reviewed and found to be robust. Fisheries New Zealand also sought independent assessment of socioeconomic impacts at a national, regional, and in some cases local community level in response to submissions. All of these analyses broadly agreed that there would be significant impacts resulting from these measures.

I note the uncertainty in the socioeconomic information, particularly, that we simply do not know the extent to which industry can adapt to the changes. The advice from my officials and from external providers has been clear on areas of uncertainty in the data, the models, and the outputs from those models, which has allowed me to weight that information appropriately in my decision-making.

I have considered all the available information to make my decisions (including sightings, necropsy information, observer data, socioeconomic analyses and submissions). I am convinced that we need to be cautious and take further steps to reduce risk of fishing-related Hector's and Māui dolphin deaths.

Kaitiakitanga

I gave careful regard to kaitiakitanga as exercised by tangata whenua in accordance with tikanga Māori. I have had particular regard to the views put forward by tangata whenua in submissions on the review of the TMP as a whole, and the measures that were consulted on. I acknowledge the role of tangata whenua as kaitiaki, which requires them to strike an appropriate balance between the use of a resource, and the impact of use on those that we share the environment with. I also recognise tangata whenua's interdependence with the marine environment, and how its use provides for their social, cultural and economic wellbeing.

I acknowledge the impacts that my decisions will have on Māori rights and interests in the affected fisheries, and I have sought to put in place measures that will achieve the objectives for the dolphins with the least impact.

I note the concerns raised on how modern day customary fishing is provided for in some areas, and the interrelationship with commercial operators. I also note the views of some that further measures to protect the dolphins are not required, that the dolphins are already sufficiently protected, and/or that any action taken should be targeted towards alternative tools like gear modification, improved research and monitoring, and/or focused on non-fishing related threats like toxoplasmosis.

I want to be clear that tangata whenua may still authorise customary fishing to be carried out by non-commercial and commercial fishers, with or without a fishing vessel, using any type of fish gear or method, in any of the areas that are affected by my decisions on set-netting and trawl closures.

Notwithstanding the above, I am aware of the potential impact of my decisions on pātaka as an important primary source of fish to provide for the social and cultural wellbeing of the Māori community. This is supported by commercial set-net operators harvesting on behalf of iwi under customary authorisation to supply the pātaka, and local licensed fish receivers that provide for its storage. I recognise that pātaka in Taranaki is currently enabled and supported by the commercial fishing industry in that area, who will be impacted by the set-net measures in particular.

I have directed Fisheries New Zealand to work with local iwi in the affected regions to identify, consider and support more broadly any opportunities to address the potential effects on Māori customary practices and commercial impacts. In the Taranaki region this may include, but is not limited to, working with iwi and the commercial sector to identify and put in place alternative means to continue to provide for pātaka. I understand that some commercial operators that will be affected by the measures have already begun to transition to other methods (e.g., some expansion in the trawl fishery and some limited use of longline). These adaptations are not without their challenges, but my hope is that the transition package will support this work already underway, and assist other affected fishers to consider wider options around alternative harvest methods so that they continue to operate.

I also acknowledge the concerns about the impact from further fisheries measures on iwi quota, and the view that further measures will devalue this quota, thereby undermining the Deed of Settlement. The value of Settlement quota is achieved primarily through the sale of annual catch entitlement (ACE). I consider that the measures I am progressing are unlikely to result in a significant impact on ACE value for most fishstocks. However, I note that for a small number of stocks that are primarily caught using set-net in the areas to be closed, this may result in a short-term reduction in ACE prices as the industry adjusts. Nonetheless I consider my decisions necessary, and hope that the availability of ex gratia transitional support may assist fishers in

trialling and deploying new or alternative fishing technologies that are both dolphin-friendly and enable continued harvest of these fishstocks.

Socioeconomic impacts

In considering socioeconomic impacts, I am not seeking to arrive at a number of dolphins that can be sustainably "harvested" and enable utilisation to that threshold. Thinking associated with sustainability of a harvestable species is inappropriate to apply to a protected species. Rather, I am seeking to determine what is necessary to avoid, remedy or mitigate the effects of fishing-related mortality on the dolphin populations.

Socioeconomic factors are one of the things I take into account when determining the necessity and method of intervention. As a matter of policy I have sought to minimise the impacts on use, but not at the expense of allowing the effects of fishing-related mortality on the population and/or sub-population that I consider necessary to manage. I recognise that the tools we have available currently to reduce risk with a high degree of certainty are blunt. The closures do allow other methods of fishing that do not pose a significant risk to the dolphins to still be used. This provides an opportunity to invest in innovation to develop approaches that allow fishing but avoid dolphin mortality.

Wellbeing and Transition Support

The new fishing closures, while necessary, will have a substantial socioeconomic impact on some fishers and communities. Fisheries New Zealand estimates the costs of my decisions to be $5.6 million in annual revenue loss, and the total economic impact of these measures over a 5-year period to fall between $29.3 and $70 million.

Fisheries New Zealand undertook detailed analyses of the estimated economic costs of the measures proposed in consultation, which included two independent regional assessments, as well as an independent review of the overarching economic impact assessment methodology by the New Zealand Institute of Economic Research. It was very important for me to understand the impacts of the measures that were consulted on, on fishers and their communities.

I empathise with everyone who will be impacted by the new rules, and have sought to mitigate the impacts on fishers where possible. I consider my decisions strike an appropriate balance between the protection of Hector's and Māui dolphins and the continued use of fisheries resources.

I am pleased to announce a multimillion dollar ex gratia transition support package to those fishers and licensed fisher receivers (LFRs) that are particularly affected by these new fisheries closures. The Crown is under no obligation to compensate fishers for implementing sustainability measures. However, I believe it is just to provide ex gratia payments to help those most severely impacted within the industry to adapt, given current circumstances. These circumstances include the measures I consider necessary to effectively restrict the level of fisheries-related mortality to close to zero for the critically endangered Māui dolphin, and the broader economic challenges due to the COVID-19 pandemic facing the country.

The criteria for eligibility will be available via Fisheries New Zealand's webpage www.fisheries.govt.nz/dolphintmp

Further Consultation: South Island set-net and trawl

Some of the submissions received during public consultation raised issues or concerns around effort displacement, alternative fishing measures to manage risk beyond the blunt use of area closures, and development of a framework that is more collaborative with industry to achieve reductions in dolphin captures.

I see an opportunity for industry to take a pro-active approach in the South Island where the risk around the more abundant Hector's dolphins is less, and gives us more scope for innovation. I want to discuss a different approach using technology that better combines the use of fisheries resources with managing the impacts of fishing, encouraging the development and use of new approaches while providing transparency over the level of impact from fishing. I see an opportunity for industry to take the lead through this process and with support develop ways to reduce the mortality of dolphins from fishing towards zero.

The proposals below will inform discussions with tangata whenua as part of input and participation, and with industry and environmental groups to explore their costs, benefits, and how they may be operationalised to inform a formal public consultation later this year.

Effort displacement and set-net risk

The set-net measures I am progressing for the east coast South Island are highly likely to achieve the fisheries objective for that subpopulation. However, a number of submissions raised concerns about the risk of displaced set-net effort around Banks Peninsula. If significant amounts of set-net effort shifts into new areas from the closures, this may result in risk displacement rather than the expected risk reduction.

I propose to consult on a measure to address that spatial gap by extending the commercial and recreational set-net closures further around Banks Peninsula. Consultation is required because this measure was not included in options discussed with the public previously.

Trawl fishing measures

After considering submissions and the scientific assessment of the risk of fishing-related deaths from trawling in the South Island, I consider this risk to be largely managed under the current trawl restrictions. However, I think these restrictions should be reviewed to ensure they are effective, enforceable and avoid the possibility of trawl-related mortality.

Consequently, I propose to consult on the expanded use of trawl gear restrictions (low tow speed and low height of trawl net) in high-dolphin-density areas in the South Island. Trawl gear restrictions could either be required for an area, or required as a measure under the proposed management approach to fishing-related capture events (next section).

Response to a fishing-related capture event in the South Island

I want to explore a new management approach in the South Island in the event of a capture in areas not closed to set-net or trawl fishing. A capture-response management approach would provide a novel incentive framework designed to encourage individual vessels/operators to avoid all bycatch of Hector's dolphins. Every capture and fishing death of a dolphin will receive attention and a response at a vessel/vessel-operator specific level, and provide an avenue for fishers to adapt their practices (e.g. through gear innovation). Through this approach I want to achieve a year-on-year reduction in fishing-related capture rates towards zero over time.

Applying fishing-related mortality limits within each local population area and/or subpopulation will also be considered, and would enable the Minister of Fisheries to take appropriate action (such as closing a fishery/area) in response to fishing-related captures (dead or alive) to ensure that the limits to achieve the overarching TMP objectives are not exceeded.

Rollout of on-board cameras in the South Island

To ensure the proposed management approach is effective, a substantive level of camera monitoring would be required. To support this new framework, I intend to consult on a significant expansion of the Crown-funded on-board camera programme to cover inshore fishing vessels using trawl and set-net within Hector's dolphin habitat.

Addressing non-fisheries threats

My decisions sit alongside other outcomes of the TMP review recently announced by the Minister of Conservation. See www.doc.govt.nz/our-work/protecting-species/protecting-marine-species/our-work-with-maui-dolphin/hectors-and-maui-dolphin-threat-management-plan/review/

Together this package of fishing and non-fishing related measures demonstrate the Government's commitment to managing the range of human-induced threats to the Hector's and Māui dolphins where necessary.

Yours sincerely

Hon Stuart Nash
Minister of Fisheries

Appendix One: Rationale for my decisions

West Coast North Island

For Māui and Hector's dolphins off the west coast North Island my decisions cover recreational and commercial set-netting, trawling, commercial ring netting, and involve the use of a fishing-related mortality limit.

Recreational and commercial set-netting

I have decided to:

- create a new commercial and recreational set-net closure out to 4 nautical miles (nm) offshore between Cape Reinga and Maunganui Bluff;
- extend the commercial and recreational set-net closure between Maunganui Bluff and the Waiwhakaiho River (New Plymouth) from 7 nm to 12 nm offshore;
- extend the commercial and recreational set-net closure between the Waiwhakaiho River (New Plymouth) and Hawera from 2 nm to 7 nm offshore;
- create a new commercial and recreational set-net closure out to 4 nm offshore between Hawera and Wellington; and
- extend the commercial and recreational set-net closures further into the Manukau Harbour to Taumatarea Point in the north and Matakawau Point in the south within the harbour.

Map 1 shows the new set-net closure areas.

Trawling

I have decided to extend the existing trawl closure between Maunganui Bluff and Pariokariwa Point further south to the Waiwhakaiho River (New Plymouth), and to 4 nm offshore from Maunganui Bluff to the Waiwhakaiho River. Map 2 shows the new trawl closure area.

Commercial ring netting

I decided to allow commercial ring netting within set-net prohibition areas within the west coast North Island harbours as an alternative method able to avoid Māui dolphins. This will finally resolve the interim relief that has been in place for commercial ring net fishers within the Manukau Harbour since 2008.

Commercial ring netting has been described to the Courts and I expect the new rules to reflect this description to ensure the activity clearly provides for a fisher that is actively involved throughout the fishing activity. That is, the net should be attended and operated at all times.

Fishing-related mortality limit

I have also decided to put in place a fishing-related mortality limit of one dolphin (*Cephalorhynchus spp.*) within the Māui dolphin habitat zone that extends from Cape Reinga to Cape Egmont.

The fishing-related mortality limit applies to any capture (dead or alive) of a Māui or Hector's dolphin in this area. This is for a few reasons:

- while most dolphins present within the habitat zone have been identified as Māui dolphins, Hector's dolphins are known to reside among them;
- the vulnerability of a Māui or Hector's dolphin to a capture is the same, so if a Hector's dolphin was caught in the Māui habitat zone that signals to me that the risk to the Māui dolphin requires further action; and
- given above, and in the event that the dolphin is released alive, or the body of a decease dolphin is not retained for necropsy, I want to be clear that I will consider further measures irrespective of the subspecies identification.

The action that will be taken in the event of a capture will depend on the circumstances of the event. I will not predetermine what fishing methods may be impacted or across what spatial area. The intention of putting in place the fishing-related mortality limit is so that action can be taken quickly if necessary.

West Coast North Island – rationale for my decisions

Given the very small number of Māui dolphins that remain there is a high likelihood of extinction should the population decline further. I note that some submissions put forward a view that the Māui dolphin population is increasing (largely based on an increase in the mean estimate of dolphins from 55 to 63 between 2011/12 and 2015/16). Because both estimates are uncertain, it is not possible to tell whether the population has increased, stabilised, or continues to decline. Regardless of recent trends, the Māui dolphin population is very small and remains highly vulnerable to any human-induced mortality.

I understand the concerns raised in some submissions: that the dolphins do not venture outside of current protection areas, that many people have never seen these dolphins in their area (including fishers that have spent many decades of fishing on the water), the dolphins that may be present are Hector's and not Māui dolphins, or the view that recent monitoring has shown there are no interactions with fishing. However, a lack of sightings is not unexpected given the very low number of dolphins that remain. Even in areas where the dolphins are most commonly found, sightings can be rare.

The broader evidence shows that Māui and/or Hector's dolphins do sometimes move outside the current set-net and trawl closures areas, albeit infrequently, and this is supported by sightings, acoustic detections, and recovered beach cast carcasses. We know these dolphins can range further and there is evidence of their historical distribution up to Northland and as far south as Wellington. The evidence shows that the dolphins at least occasionally travel, or have previously been found, outside the existing set-net closure into areas where they may be exposed to set-net entanglement. The presence of Hector's dolphins with genetic links to the South Island shows that these dolphins can move great distances, although such behaviour is considered exceptional rather than common. And we know that given the very small number of Māui dolphins remaining that the likelihood of interactions with fishing are estimated to be rare, not common.

I consider it appropriate to be cautious, to ensure that the measures in place reduce fisheries risk to a very low level, and that they extend across areas of potential

habitat and their historical distribution, to help enable their recovery. The current fisheries measures for Māui dolphins are not sufficient to meet the TMP objectives. To achieve these I need to effectively restrict the allowable level of fisheries-related mortality to close to zero.

I recognise that large gains in risk reduction have occurred through measures that are already in place. The existing set-net and trawl closures have provided significant protection to Māui dolphins from fishing. The information shows that the dolphins are primarily distributed inside the existing set-net closure area. I also note that there are no confirmed fishing-related mortalities of a Māui dolphin outside the existing set-net and trawl closure areas, and no reported or observed fishery interactions with a Māui or Hector's dolphin off this coastline since 2012.

The measures I am progressing today provide for more marginal reductions in risk compared to the size of the closures and significant costs that will be incurred. However, I consider these measures necessary to achieve the high degree of certainty that the likelihood of fishing-related mortality will be close to zero.

While the lack of observed fishing-related captures provided me some comfort, the critical issue that I had to consider was whether the risk of future fishing-related mortality was acceptable given the objectives and degree of certainty I want (regardless of whether a mortality has been reported from an area/method). I consider the level of risk to be unacceptable, but have sought to mitigate the socioeconomic impact of these measures as much as possible by focusing on restricting the method that poses the greatest risk (set-net) in the areas where best available information indicates the remaining risk of fishing-related mortality is highest.

I have decided to not progress with full closures of the harbours to set-net, but will progress with a small extension within the Manukau harbour to remove that concentrated effort along the boundary, not far from where there have been public sightings. I recognise the importance of the harbours to customary, recreational and commercial fishers, and consider that the lack of sightings of dolphins in these areas (given the high level of activities across a range of sectors) provides weight that any dolphin presence within the inner harbours is likely to be rare. That being said, I support continued research to better understand whether the dolphins use these areas to inform future reviews of the TMP.

Trawl fishing poses a much lower risk to Māui dolphins compared to set-net. As such I do not consider it necessary to put in place trawl closures across the same spatial scale as set-net. However, trawl activity overlaps with the Māui dolphin distribution, and the dolphins are susceptible to capture within trawl nets. I do consider a targeted approach to remove the highest level of trawl risk within the central Māui dolphin habitat zone to be warranted. While the likelihood of an interaction is low I consider a precautionary approach is warranted given I must consider the combined level of fisheries risk from both set-net and trawl. Targeting further trawl measures in the area of highest risk out to 4 nautical miles offshore provides the added confidence I desire to ensure the overarching fisheries objectives will be achieved.

Southern transition/potential habitat zone

In the southern habitat zone (south of Cape Egmont), I note that there does not appear to be a resident population at this time. However, we know that Hector's and/or Māui dolphins are occasionally present and/or transit through this area, and when doing so are exposed to a high level of fisheries risk. This risk is largely driven by the exposure to set-net activity, which will now be prohibited. In particular, the area between Hawera and Wellington represents one of the highest recreational set-net risk areas in the country (the other being within Tasman and Golden Bay in the South Island).

I did consider whether to provide an exemption to allow recreational and commercial fishers targeting butterfish using set-nets to continue to operate in this area. Butterfish habitat is generally considered unfavourable habitat to dolphins, and the risk assessment model estimated that allowing commercial butterfish set-net activity would have a negligible difference in overall risk. However, I had to weigh that against the fact that butterfish set-net activity is not without risk, and has in the South Island resulted in Hector's dolphin captures in areas deemed unfavourable habitat to the dolphins.

I consider a very low level of risk of fishing-related mortality to be acceptable. I want to avoid the effect that fishing-related mortality would have on dolphins present in this area. This means implementing measures where mortality may not have occurred to date, but where I consider there is an unacceptable risk – given the best available information – of mortality occurring in the future.

North Coast South Island – new fisheries measures

For Hector's dolphins off the north coast South Island I decided to prohibit commercial and recreational set-netting within Tasman Bay and Golden Bay to 4 nautical miles offshore between Farewell Spit and Cape Soucis (Raetihi). The new set-net closure applies to harbours, estuaries, and inlets within those points.

Map 3 shows the new set-net closures.

North Coast South Island – rationale for my decisions

Very little is known about the Hector's dolphins within Golden and Tasman Bay. There is uncertainty of the number of Hector's dolphins that reside in the area and how they are distributed, but the risk assessment shows that the dolphins present are exposed to a high degree of risk from fishing. I consider it necessary to take measures to manage this fisheries risk given the potentially low population size, and the need to protect localised populations of the dolphins. I also note that the dolphins here are particularly exposed to fisheries risk given the minimal restrictions in place on set-net and trawl activities.

Set-nets are much more likely to catch a Hector's dolphin than trawl nets, and pose a much higher risk to this population. Recreational set-net effort is considered to be particularly high along this stretch of coast, and I consider it poses an unacceptable level of risk. The set-net measures are targeted to where the dolphins are most often concentrated in this area close to shore. While I note that the dolphins do range further offshore I consider that addressing commercial and recreational set-net risk

out to 4 nautical miles offshore will largely address the risk that fishing in this area may pose to the dolphins.

I propose further measures be explored as part of a supplementary consultation process that would address this remaining risk and collect much improved information to help us better understand the dolphin population and fisheries risk in Golden and Tasman Bays. These details are summarised in my letter under *Further Consultation: South Island set-net and trawl*.

South Coast South Island – new fisheries measures

For Hector's dolphins off the south coast South Island, I have decided to extend the existing set-net closures within the whole of Te Waewae Bay out to ten nautical miles offshore between Sandhill Point and Wakaputu Point.

Map 3 shows the new set-net closures.

South Coast South Island – rationale for my decisions

I have decided to put in place further closures on the use of set-net within Te Waewae Bay given a set-net is roughly 20 times more likely to result in a dolphin death than a single inshore trawl in the same location.

While there is residual risk from trawl fisheries in Te Waewae Bay, that risk is not well understood and it is not clear that closures are necessary to manage that risk. In particular, I understand that greater than 90% of the trawl effort in Te Waewae Bay is conducted by vessels operating their nets with low headline heights, which anecdotally is believed to reduce the likelihood of catching dolphins. I note that this has not been scientifically tested yet, and so was not included in the information that informed estimates of trawl risk within the risk assessment model.

I do consider it is necessary to manage the risk that trawl poses. However I do not believe that closures are necessary to manage that risk at this time, particularly with respect to the significant socioeconomic impact that closures would have on the local fishing community.

I propose to manage trawl risk with a range of new measures, as for Golden and Tasman Bays, that would both reduce risk and collect much improved information to help us better understand the Hector's population and fisheries risk in Te Waewae Bay. Further details are summarised in my letter under *Further Consultation: South Island set-net and trawl*.

East Coast South Island – new fisheries measures

For Hector's dolphins off the east coast South Island I have decided to extend the existing set-net closures off the east coast South Island in three key areas (refer to Map 3):

- Kaikōura: extend the commercial set-net closure as per the community proposed boundaries during consultation, with no change to the current 4 nm recreational closure;
- Pegasus Bay: extend the commercial and recreational set-net closures to encompass Pegasus Bay approximately 19 nm offshore southeast from the headland east of Motunau Beach offshore and then southwest to a point 7 nm offshore from Goat Point;
- Canterbury Bight to Timaru: extend the commercial and recreational set-net closures from Snuffle Nose southwest to 12 nm offshore across the Canterbury Bight to just south of Timaru to the existing 4 nm offshore boundary.

East Coast South Island – rationale for my decisions

Set-net fisheries comprise by far the greatest fisheries risk to Hector's dolphins off the east coast of the South Island. My decisions reflect that.

The scientific risk assessment suggests that risk is sufficiently managed by set-net closures alone, except possibly in Kaikōura. In Kaikōura, deep-water set-nets are anecdotally believed to be less likely to catch dolphins than shallower set-nets, though this has not been scientifically tested and so was not included in the information that informed the estimates of fisheries risk.
I consider that it is necessary to do more to manage risk from fisheries in Kaikōura. However, it is not clear to me that extensive set-net closures are necessary to manage that risk, particularly with respect to the significant socioeconomic impact that closures would have on the local Kaikōura community.

I have accepted the local community proposal for slightly extended commercial set-net closures around the Kaikōura Canyon, and I propose to manage the residual risk that will still remain after those closures are implemented with a range of new measures that do not require immediate closure [refer to *Further Consultation: South Island set-net and trawl*].

For the rest of the east coast South Island, the fisheries objectives are expected to be met with my decisions on set-net closures. However, given concerns regarding displaced fishing effort possibly causing risk to increase above acceptable levels in the areas that will remain open, I consider that more needs to be done to manage the residual risk from fisheries. I am proposing to consult on the potential set-net effort displacement around Banks Peninsula and whether the set-net closure should be extended further, which will be subject to a further consultation.

I am also proposing to consult on a much broader management framework that will enable us to work closely with fishers to better understand interactions, reduce captures, and enable fishing to continue and evolve while ensuring that it does not adversely affect Hector's dolphins populations. Refer to *Further Consultation: South Island set-net and trawl*.

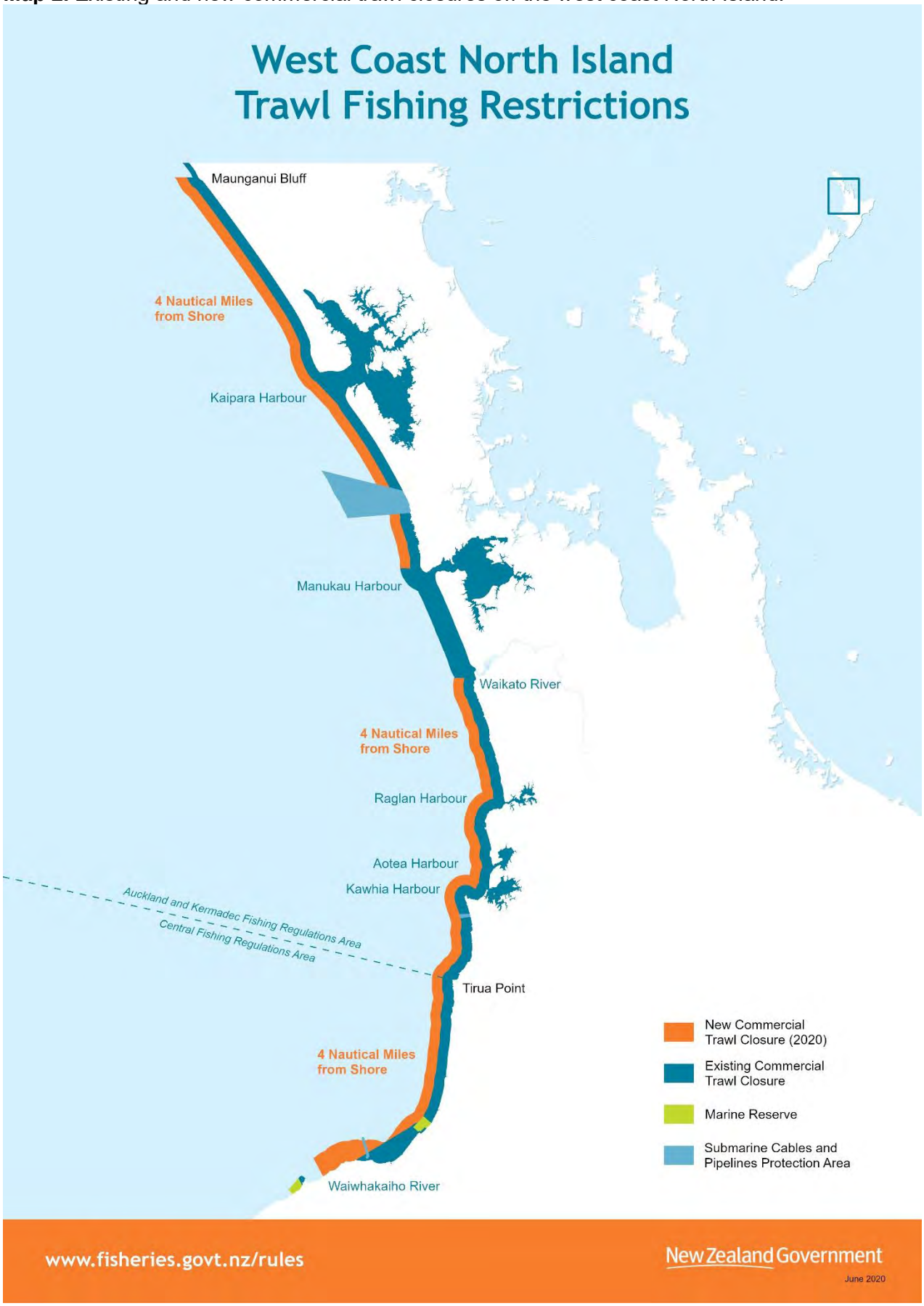
Drift netting – All New Zealand waters

There have been longstanding concerns that the use of drift nets in New Zealand waters poses a risk to Hector's and Māui dolphins, as well as many other protected species. While there is legislation that prohibits the use of drift nets greater than one kilometre in all New Zealand waters, nets less than that length could be used. The method is not particularly common, but the risk these nets pose if lost, and their general indiscriminate nature of what they can catch, I consider to be unacceptable.

As such I have decided to prohibit the use of drift nets in all New Zealand waters, irrespective of size and irrespective of whether they are attached or tethered to any vessel. Given the very low level of use of these nets already in New Zealand waters, I consider that a ban will have little impact on providing for the use of fisheries resources.

Map 1. Existing and new commercial and recreational set-net closures off the west coast North Island.

Map 2. Existing and new commercial trawl closures off the west coast North Island.



Map 3. Existing and new commercial and recreational set-net closures in the South Island.