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**FISHERIES INSHORE NEW ZEALAND SUBMISSION ON:
“PROTECTING SOUTH ISLAND HECTOR’S DOLPHINS”**

1. Thank you for the opportunity to respond on the consultation “Protecting South Island Hector’s Dolphins”.
2. This submission is presented in the joint names of Fisheries Inshore New Zealand Ltd and Southern Inshore Fisheries Management Co.
3. Independent submissions may be made by stakeholders and inshore fishing operators. Those submissions may provide differing opinions on the measures proposed. This submission does not override the views of those submitters.
4. Any queries should be directed to Tom Clark of Fisheries Inshore New Zealand.

Fisheries Inshore New Zealand

5. Fisheries Inshore New Zealand Limited (FINZ) is the Sector Representative Entity for inshore finfish, pelagic and tuna fisheries in New Zealand. Its role is to deal with national issues on behalf of the sector and to work directly with and on behalf of its quota owners, fishers, committees and affiliated Commercial Stakeholder Organisations (CSOs). As part of that work, it also works collaboratively with other industry organisations and Sector Representative Entities, Seafood New Zealand, Te Ohu Kaimoana, Fisheries New Zealand (FNZ) and the Department of Conservation (DOC).
6. We are committed to sustainable utilisation of our fisheries and any wider fishing activity while supporting the conservation and sustainability of wider marine biodiversity. Key outputs of FINZ include the development of, and agreement to appropriate policy frameworks, processes, and tools to assist the sector to minimise our impacts on the associated marine ecosystems and work positively with other fishers and users of the marine space where we carry out our harvesting practices.
7. FINZ represents 80% by value and volume of the inshore finfish, pelagic and tuna fisheries of New Zealand.
8. The role our stakeholders play is to provide the team of 5 million New Zealanders access to the fisheries resources from the inshore waters. We catch the fish for those New Zealanders who have not the time, the expertise or the resources to catch their own fish. Those New Zealanders have the right to consume their fish. Our stakeholders make that possible. Those stakeholders are also members of their local communities providing employment opportunities and drawing services from and providing services to those communities.

Southern Inshore Fisheries Management

9. Southern Inshore Fisheries Management Co. (Southern Inshore) represents 104 inshore fishstocks throughout the Fisheries Management Areas 3,5,7 & 8. In addition to representation and advocacy for shareholders the Company also invests in annual research projects, for additional monitoring of key stocks, over and above the cost recovery process.
10. Southern Inshore is an associate of Fisheries Inshore New Zealand (FINZ) which is the sector representative entity (SRE) generally representing inshore finfish.
11. Southern Inshore work closely with FINZ on regional and national matters. The proposal for additional measures, area closure and the move away from a capture response framework to a reduction plan is of concern.

Commitment to Reduce Impacts

12. Fishers are committed to reducing dolphin deaths to the lowest practical level. No fisher wishes to capture or harm a Hector's dolphin – they are not a competing prey nor are they known to poach fish from our catch.
13. Many fishers already deploy additional mitigation initiatives to reduce the chance of a capture. These initiatives include dolphin pingers and dolphin deterrent devices, reduced net heights and avoidance of areas where female and young dolphins are known to occur.
14. The industry has provided Operating Procedures for fishers. These highlight the risks of fishing to the dolphins and provide advice as to how to mitigate the risk.
15. Every vessel operating in the area frequented by Hector's dolphins has a Protected Species Risk Mitigation Plan on board, constructed by the skipper and the Department of Conservation Liaison Officer. Those plans contain the specifics of mitigation used by the vessel and are assisted by reference to regulated measures and mitigation standards. The plans are reviewed annually and updated as appropriate.
16. Industry is of the opinion that the protection measures under the Fisheries Act provided to minimise fishing risk to the dolphins are in excess of that which is required to allow the dolphins to thrive and that the use of blunt protection measures such as spatial closures have been far more detrimental to fishers than need be.
17. These measures have been imposed even though population numbers are increasing and there are huge gaps in our knowledge as regards the underwater diving profile of the dolphins, their behaviour around vessels and fishing gear and the effectiveness of dolphin deterrent devices currently on the market.
18. There are technologies available such as deterrent devices to mitigate dolphin by-catch. Industry has repeatedly but unsuccessfully sought research into the effectiveness of dolphin deterrent devices to mitigate dolphin interactions. Research resources have been directed elsewhere to research demographics or historical captures. We consider the priority in research should be to research options to reduce the immediate capture threat.

Our Submission in Brief

19. Additional protection measures were implemented in 2021 to achieve the desired population outcome for Hector's dolphins attaining 90% of the carrying capacity with 95% certainty.
20. There are no reasons to believe that the combined measures to minimise fishing risk are insufficient to ensure the population outcome is not achieved as a result of fishing interactions.
21. No additional measures to reduce residual fishing risk are required.
22. We do not support the proposed trawl restrictions on headline height or trawl speed.
23. We do not support the closure of the Banks Peninsula area to set netting.

24. We support the concept and content of the By-Catch Reduction Plan.

Background

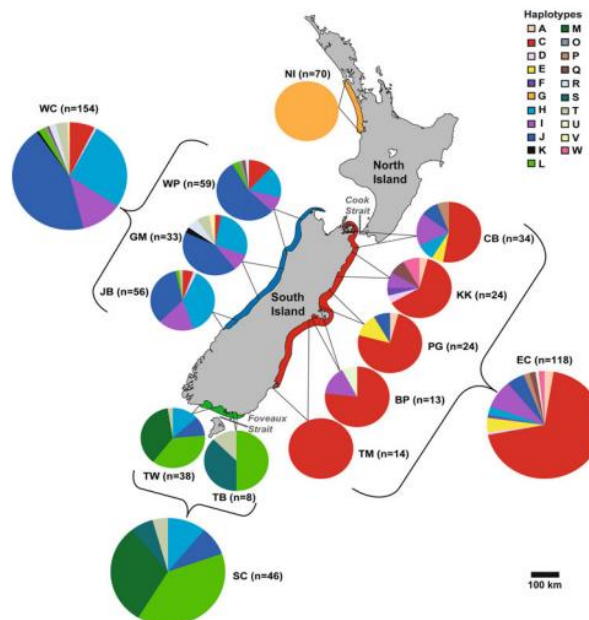
25. In October 2020, regulations that implemented additional restrictions on fishing to further protect the Hector's dolphin in the north, east and south coasts of the South Island commenced. These measures aimed to reduce fishing risk to a level where the stated population outcome for Hector's dolphins of 90% of the carrying capacity with 95% certainty could be achieved.
26. The population outcomes set for the sub-populations were based on 80% of the carrying capacity as against 90% for the wider whole population objective.
27. Extensive set net closures were implemented lifting the area closed to setnetting to 16,525km² and the area closed to trawling to 6,988 km². Those measures were considered sufficient to achieve the population desired outcomes.
28. In his decision letter, the Minister referred to an intent to consult on an industry-based by-catch response process and additional trawl and setnet risk reduction measures. This is that further consultation.
29. The combination of a 90% target with 95% certainty provides a higher mean outcome than 90% as approved by Ministers. In plain speak, the 90% level must be achieved 95% of the time. In the normal circumstances, a target of 90% would allow for the outcome being below 90% for 50% of the time and above 90% of the time but on average the 90% target would be achieved. By requiring the outcome to be above the target 95% of the time and only 5% below means that the long-term mean achieved will be over 94%. The level of certainty raises the average population percent.
30. The scientific analyses available to inform the Hector's dolphins Threat Management Plan (TMP) stated that a population outcome of 50% of the carrying capacity was sufficient to achieve a sustainable population. This level is best practice internationally. The decision to set a population outcome of 90% far exceeds the sustainability requirements of section 9 of the Fisheries Act. The need for additional high levels of certainty only serves to reinforce the disparity with the Act's baseline requirement for 50%.
31. The TMP failed to provide critical information in that it did not provide a population trajectory. Despite having the inputs necessary to provide a trajectory and indicate whether the population was growing, stable or declining, the TMP provided simplistic, non-conclusive comparisons of population surveys that used different methodologies and different survey platforms. FINZ provided an analysis based on modelling the future trajectory of the Hector's dolphin population using the demographic parameters used within the TMP modelling. That analysis indicated that the Hector Dolphin population was under the existing levels of population and with the risk mitigation measures in place at that time already growing at a rate that would achieve the 90% population outcome within an acceptable timeframe. The additional 2020 measures were simply not needed and by corollary no further measures are needed now.
32. With the fishing risk mitigated, if the Hector 's dolphin population does not meet the population outcome, it would more likely be as a consequence of other factors such as toxoplasmosis, other diseases or other anthropogenic factors.
33. While the population of Hector's dolphins (HDO) around the South Island shows some genetic variation, it is essentially the same genetic population. For Hector's dolphin management purposes, FNZ and DOC have divided the East Coast sub-population into five local populations, the boundaries being based on areas of low dolphin density.
34. The table below includes the estimated HDO 2019 population, the Population Sustainability Threshold (*the maximum number of human-induced deaths that could occur while achieving the associated population outcome*) and the estimated number of deaths of Hector's dolphins, with the 2020 measures in place.

| HECTOR'S DOLPHIN FISHERIES RISKS | | | |
|-------------------------------------|----------------------|-------------------------------------|-------------------------------------------------------|
| Sub-Population and Local Population | Estimated Population | Population Sustainability Threshold | Estimated Deaths Mean (95% confidence interval) |
| North Coast | Unknown | n/a | n/a |
| East Coast | 9,198 | 45.99 ¹ | 17.42 (7.43 – 33.65) |
| - Cloudy Clifford | 522 | 5.2 ² | 0.45 (0.16 - 0.92) |
| - Kaikoura | 761 | 7.6 ² | 7.47 (4.32 – 12.72) |
| - Banks Peninsula | 4,506 | 45.1 ² | 2.14 (0.56 – 4.65) |
| - Timaru | 2,726 | 27.3 ² | 5.23 (1.47 – 11.22) |
| - Otago | 638 | 6.4 ² | 2.12 (0.89 – 1.84) |
| South Coast | 313 | 1.6 ¹ | 0.92 (0.35 – 1.84) |
| West Coast | 5,500 | 25.9 ¹ | 5.09 (1.43 – 10.78) |

Footnotes: 1 Sub-population with a PST based on 90% of carrying capacity
2 Local population with a PST based on 80% of carrying capacity

35. The local populations appear arbitrary when compared to the only material available on the genetic structure of Hector's dolphins¹ as below.

Fig. 1 Distribution (shaded coastline) and mitochondrial control region haplotypes (360 bp) for the Maui's dolphin (NI); regional populations of the Hector's dolphin: East Coast (EC), West Coast (WC), South Coast (SC); and local populations of the Hector's dolphin: Cloudy Bay (CB), Kaikoura (KK), Pegasus Bay (PG), Banks Peninsula (BP), Timaru (TM), Westport (WP), Greymouth (GM), Jackson Bay (JB), Te Waewae Bay (TW), Toetoe Bay (TB). EC and WC sample sizes include additional samples collected from unknown local populations within each region



31. The diagram provides clear evidence of genetic-based subpopulations existing on the west coast, east coast and south coast of the South Island but does not support in any way the

¹ Hamner, R.M., Pichler, F.B., Heimeier, D. *et al.* Genetic differentiation and limited gene flow among fragmented populations of New Zealand endemic Hector's and Maui's dolphins. *Conserv Genet* **13**, 987–1002 (2012). <https://doi.org/10.1007/s10592-012-0347-9>

assertion that the South Island Hector's dolphins should be considered to have eight distinct local populations that require management on that basis. Low population densities occur as a consequence of inappropriate habitat for Hector's dolphins and do not indicate a barrier to genetic interchange. The decision to label and manage Hector's dolphins on a smaller local population basis is an artificial construct more than a scientifically based classification. Management of the dolphins on those reduced spatial units may require localised management interventions that are inappropriate and not necessary to meet the population outcomes for the wider regional sub-population. We see the recognition that the local populations are not genetically distinct as the rationale for setting East Coast local population outcomes at 80% while retaining the East Coast sub-population outcome at 90%. In essence, the distribution of dolphins within the eight local populations is less material than ensuring the wider genetically differentiated East Coast subpopulation meets the overall population goal – that it plainly does.

32. The consultation document sets out the estimates of the mean number of expected deaths and the 95% confidence interval for the subpopulations – see above table. The table indicates that in all areas, the estimated number of mean deaths is lower than the PST, the maximum number of human-induced deaths that could occur while achieving the population outcome. The table also indicates that the estimated deaths at the 95th confidence interval might exceed the PST for Kaikoura and South Coast. It should be recognised that the population outcome is a cumulative process – it is the sequence of gains in the population that shows over time that it is above the target – any single year may be a gauge of speed towards the goal but not whether the goal is attained. The proposal however does not allow for this cumulative total and does not recognise any positive difference between the PST and the actual number of deaths to be carried forward into future PSTs. As a consequence, in any year where deaths are lower than the PST, the Hector's dolphin population will increase at a faster rate than assumed in the population outcome analysis.

Fisheries Act Provisions

33. Section 15 of the Fisheries Act provides the Minister with powers to implement measures where appropriate to mitigate risks to protected species. The Minister may set a limit on fishing-related mortality. It follows that the Minister may implement measures to ensure that any limit on fishing-related mortality is not exceeded. As the Court has clarified section 15 does not provide an unfettered power to impose additional measures beyond those that are reasonable to achieve the desired outcome.
34. In the 2021 decisions, the Minister determined appropriate fishing-related mortality limits for Hector's dolphins and implemented measures to ensure those limits were not exceeded. In the absence of any proof that the 2021 measures were not effective, it is not open to the Minister to implement new additional protection measures that would further restrict fisheries activities.
35. Fisheries New Zealand's own assessments of the risks and the measures confirm the absence of any requirement to take further action to ensure the mortality limits are not exceeded.
36. We note and share the aspirational goal to reduce the number of dolphins being caught towards zero and would welcome assistance of the Crown to achieve that outcome. However, Fisheries Act regulatory powers cannot be used to go beyond the legislated threshold to require that specific outcome.

No Need for Further Protection

37. Against that policy and factual background, the basic assumption underpinning this consultation is that additional protection measures are required. That assumption is inappropriate and incorrect.
 - the population outcomes, already attained and that will continue to be provided by the existing measures, far exceeds the level required by the Fisheries Act
 - the sub-populations are arbitrary subdivisions not based on biology
 - the population is continuing to grow
 - the level of estimated deaths as a result of fishing is lower than that allowable to achieve the population outcome.

38. There is simply no need for any more restrictions on fishing to ensure the sustainability of the Hector's dolphin population.

The Proposal

39. The proposal is effectively three separate proposals:
- By-catch Reduction Plan – containing processes following captures of any Hector's dolphins.
 - Trawl Gear Restrictions – containing proposals to limit the headline height and tow speed for trawling.
 - additional Set-Net closure – the existing 4nm closure between Goat Point to Snuffle Nose, Banks Peninsula, to be extended to 12 nm
40. These can be considered as independent proposals.
41. While not part of the consultation, Fisheries New Zealand has prioritised the South Island setnet and trawl fleet for the placement of cameras which are scheduled to be in place by in early 2023. That will assist in monitoring of captures and the By-Catch Reduction Plan. While we may see value in such monitoring, we cannot agree to cost recovery of the costs at this stage. We refer you to our comments on the implementation of cameras and heir cost recovery in our submission on that specific consultation.
42. Fisheries New Zealand has also proposed more regular public reporting of any dolphin captures or deaths.
43. In addition, Fisheries New Zealand has sought any research proposals that might be assist in the management of the dolphins.
44. Fisheries New Zealand is recommending adoption of the By-catch Reduction Plan and the Set-net Closure.

Our Comments

45. As outlined above, we see no reason to provide additional measures to protect the dolphins that will impact on the current level of commercial fishing activity.

The Evaluation Criteria

46. Fisheries New Zealand has provided the criteria against which their proposals should be evaluated.
47. We are concerned by the reference to subpopulations in criterion 1. As noted previously, the subpopulations chosen are not genetically based, they are artificial constructs based on dolphin densities. It is not appropriate to manage to that population unit under the Fisheries Act. We consider the criterion should refer to the West Coast, East Coast and South Coast subpopulations for which genetic differences can be verified.
48. Criterion 2 refers to avoiding localised depletion. The density of dolphins in any location is the outcome of many environmental factors and perhaps some anthropogenic factors. The term depletion usually refers to the outcome of a deliberate activity and could be construed as being fishing by-catch. That some areas may be associated with a de-population cannot be construed necessarily as an adverse outcome and as such is not an appropriate criterion.
49. We would add a further criterion that would assess the evidential underpinning as the base of the proposal.
50. Notwithstanding the above comments, we can commend Fisheries New Zealand for at least providing criteria against which the proposal options can be assessed.

By-Catch Reduction Plan

51. The proposal is based on a Fishing-Related Maximum Limit (FRML) – the maximum annual number of fishing mortalities based on the population and demographics of the Hector dolphin

that will allow the population objective of 90% of the carrying capacity to be achieved with 95% certainty. While our comments on the level of goal still apply, that approach is consistent with the provisions of the Fisheries Act.

52. However, setting the FRML to achieve an objective of 90% of the carrying capacity for each of the local populations is inconsistent with the Government decision that local populations should achieve only an 80% objective. The consultation document gives no justification for replacing the Government decision of 80% with a 90% outcome. Accordingly, we submit that the FRMLs for Banks Peninsula and Timaru should be increased to their respective levels at an 80% population outcome.
53. Capture response processes are planned for both individual vessel and regional captures. The nature and content of the capture response will escalate with increasing capture levels. The individual vessel will have Protected Species Risk Management Plans (PSRMPs) and these set out the processes that relate to improving mitigation used by the vessel involved and are based on voluntary responses. For regions, as captures reach thresholds (25%, 50% and 75% of the FRML), Fisheries New Zealand will work with fishers to identify and introduce improved mitigation for the fleet to consider, with the Minister having the right to introduce additional measures if considered necessary to protect the population outcome.
54. We are not averse to the proposition proposed and consider it to have considerable merit in making industry accountable for the management of the residual risk to the dolphins and in advancing the industry's desire to reduce the number of captures and deaths.
55. We have discussed the concept widely with the fishers and parties involved and have found overwhelming support for the concept. On the basis of that support, we have progressed with the development and implementation of the structure below based on the concepts of the consultation.

| Role | Proposed | Duties |
|------------------------|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Programme Co-ordinator | Southern Inshore Fisheries Management | <ul style="list-style-type: none"> • Overall direction and management • Principal contact point • Liaison with Fisheries New Zealand /DOC at programme level • Convene/chair regular meetings with regional co-ordinators • Attend AEWG and HDO forums • Convene annual review • Comms role to members • Contribute to DOC strategic science advisory group for MDO |
| Regional Co-ordinators | North Coast | <ul style="list-style-type: none"> • Convene and chair regional by-catch response meetings as necessary • Coordinate and collaborate with Programme Coordinator • Liaison with Fisheries New Zealand /DOC at regional level • Review by-catch reports • Lead regional mitigation initiatives • Fisher communications |
| | West Coast | |
| | Kaikoura | |
| | Banks Peninsula | |
| | Timaru | |
| | Dunedin | |
| | South Coast | |
| Fishers | As many as possible | <ul style="list-style-type: none"> • Prepare PSRMPs and fish in compliance • Provide all by-catch reports • Assist Liaison officers with detail of by-catch circumstances • Amend mitigation as appropriate • Attend regional by-catch response meetings as appropriate • Consider enhanced mitigation initiatives |

56. There are a number of options available that could be considered if a reduction in risk levels is required. These would relate to the sector responsible for the captures.
57. For the trawl sector, options might include:
- use of deterrent devices
 - not setting or hauling when substantial numbers of dolphins are present
 - the binding of nets on setting
 - lowering headline heights
 - reducing trawl speeds
 - displacement of fishing activity to areas of lower density and lower risk
 - suspension of fishing activity.
58. For the setnet sector, the options might include:
- use of deterrent devices
 - not setting or hauling when substantial numbers of dolphins are present.
 - lowering headline heights
 - displacement of fishing activity to areas of lower density and lower risk
 - suspension of fishing activity.
59. The choice of any additional protection measures for the commercial vessels will be the decision of the local commercial fishers. Whether they are adopted or not will be a voluntary decision of each vessel operator. Any new vessels entering the area will be advised by industry if there are any additional mitigation measures considered advisable while fishing in the regions.
60. We note that the By-Catch Reduction Plan fails to refer to actions to be taken in respect of captures attributed to the recreational sector. It is not for commercial fishers to determine appropriate responses – that is the role of Fisheries New Zealand in the absence of any recreational fishing entity. However, we would expect that any need to address a response to a by-catch attributable to the recreational sector will not impinge on the commercial sector and vice versa.
61. We note the absence of capture reduction targets in the proposal. We recognise that some parties may well seek to criticise the plan for the absence of such targets. Our experience with such targets is that, while they may be initially aspirationally determined, they are regarded subsequently as operational benchmarks to be achieved, with calls for additional measures to ensure their achievement. The Government has set an aspirational population outcome to be achieved and that any calls for lower capture targets should be dismissed.

The Proposed Trawl Measures

62. Fisheries New Zealand has proposed that a maximum trawl speed of 2.5 knots and a maximum headline height of 1 metre for trawl nets be considered. It does not recommend the introduction of those measures.
63. We cannot support the introduction of additional protection measures for trawl fisheries for the following reasons:
- a. There is no need for the additional protection as discussed above
 - b. The efficacy of the measures proposed
 - c. The technical inability to enforce measures
 - d. The impact on fishers
64. As discussed previously, there is no need for additional protection measures to be implemented.
65. There is no research to support any contention that a low trawl speed reduces the prospect of a capture occurring. The proposition arises from a simple analysis of the few trawl captures known to have occurred. Given the relative speeds of dolphins and trawlers, there would seem on an a priori basis that there should be little credence that a trawler is likely to capture a dolphin while trawling. We would suggest there are other factors behind the captures.

66. We have some doubts as to how Fisheries New Zealand would monitor and enforce any measure relating to vessel speed. The fisher operates on the water and records his speed as through the water – that is his measure and his operational context – the fisher sets his engine to achieve that speed through the water; that means different revs depending on whether running with or against the current. MPI’s GPR system records a different speed that reflects speed over the seabed. Depending on where the fisher is operating, the tidal and current flow of the water will either add to or decrease the apparent speed of the vessel and he will adjust his speed accordingly to the speed required to catch his target fish species. As a consequence, MPI cannot monitor or enforce any measure of this nature without having undue and unintended impacts on fishers’ ability to catch their fish.
67. Equally, we consider there would be issues for MPI in enforcing the height of a net. The current regulation provides for measurement of the height at the wing and the manufacturing intent. While a net may be measured on land and may be manufactured to operate in a certain manner, how it operates on the seabed under trawl activity is uncertain.
68. Fishers have been generally agreeable to the use of low headline nets within the 4 nm area as it has suited them in the fish they target in that area. However, the wider application of restrictions such as low headline nets and low trawl speeds in the areas proposed would have significant economic impacts on the fishing and fishing related sector, as outlined in the consultation paper.
69. Our analysis of fishing activity supports the estimates provided in Table 8 of the supporting information paper².

Table 8 Percentage of trawl effort and value at high and low headline heights and fast and slow trawl speeds (percentages may not sum to 100 percent due to rounding) in the proposed east coast South Island trawl gear restriction areas.

| Headline Height | Trawl Speed | Percentage of Effort | Percentage of Revenue |
|-----------------|---------------|----------------------|-----------------------|
| Low (≤1m) | Slow (≤2.5kn) | 41.0% | 21.7% |
| Low (≤1m) | Fast (>2.5kn) | 19.9% | 18.4% |
| High (>1m) | Slow (≤2.5kn) | 5.0% | 4.7% |
| High (>1m) | Fast (>2.5kn) | 34.1% | 55.2% |

70. We note that increased monitoring by observers and cameras is planned for the trawl sector. Any by-catch events should be detectable and should provide a more robust assessment of the possible impact of trawling on the Hector’s dolphin population. With the level of protection already in place for the dolphins, we consider there should be no additional measures until there is evidence available that the level of impact precludes the population outcomes from being achieved.
71. We note that Fisheries New Zealand’s own assessment of the proposed trawl restrictions against their own criteria on pages 18 (East Coast South Island) and 23 (South Coast South Island) of the supporting information document confirms there are no grounds for the implementation of additional protection measures in the trawl sector under the Fisheries Act.

² [Protecting South Island Hector’s dolphins Supporting Information: Further consultation on fisheries measures \(mpi.govt.nz\)](https://www.mpi.govt.nz/protecting-south-island-hector-dolphins-supporting-information-further-consultation-on-fisheries-measures/)

Table 12 East coast South Island – Option analysis against the status quo.

| Criteria | Option 2 Bycatch reduction plan | Option 3 Trawl gear restrictions | Option 4 Set net closure |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|----------------------------------------|-----------------------------|
| Relevant local population | All | Banks Peninsula and Timaru | Banks Peninsula |
| Criterion 1: Does the option effectively reduce the fisheries risk to a level that enables the subpopulation to recover to a size that is no more than 10 percent lower than what it would be if there was no fisheries impact? | Not applicable* | Not applicable* | Not applicable * |
| Criterion 2: Does the option prevent or avoid localised depletion? | Likely | Not applicable * | Not applicable * |
| Criterion 3: Is the option responsive to changes in fisheries risk (spatial and temporal)? | ✓ | ✗ | ✗ |
| Criterion 4: Does the option encourage industry to shift to better fishing practices to avoid dolphin captures? | ✓ | ✗ | ✗ |
| Criterion 5: Does the option allow fishers to choose the most effective mitigation measure(s) for their operation? | ✓ | ✗ | ✗ |
| Criterion 6: Does the option minimise the impact (including cost) on fishers to the extent possible? | Uncertain | Partial | ✗ |
| Socioeconomic impact (est. annual revenue loss) | Unknown** | \$1.29 – 1.79M | Commercially sensitive |

* East coast subpopulation objective and local population objective for Bank Peninsula and Timaru have been met.

** Costs will be informed by decisions and associated costs of the rollout of on-board cameras (e.g. levels of footage review) but will also be dependent on fishers' individual actions to avoid bycatch, the liaison programme, and whether FRMLs are approached or exceeded resulting in further voluntary or regulatory measures on fishers.

72. We cannot support the imposition of additional trawl measures that are unnecessary, technically unenforceable, are needlessly detrimental to the industry and have no validity under the Fisheries Act.

Additional SetNet Closure

73. Fisheries New Zealand has proposed and recommends that the existing 4nm closure between Goat Point and Snuffle Nose on Banks Peninsula should be extended to 12 nm.

74. There is little setnet activity in the area.

75. We note that Fisheries New Zealand's own assessment of the proposed setnet restrictions against their own criteria on pages 18 of the supporting information document confirms there are no grounds for the implementation of additional protection measures in the Banks Peninsula area as shown in the table above.

76. We note that increased monitoring by observers and cameras is planned for the setnet sector. Any by-catch events should be detectable and should provide a more robust assessment of the possible impact of setnetting in the area on the Hector's dolphin population. With the level of protection already in place for the dolphins, we consider there should be no additional measures until there is evidence available that the level of impact precludes the population outcomes from being achieved.

77. We cannot support the imposition of an additional setnet closure that is unnecessary, needlessly detrimental to the industry and has no validity under the Fisheries Act.

Monitoring and Review

78. In addition to the protection measures implemented from 1 October 2020, Fisheries New Zealand has increased the level of monitoring of the inshore setnet and trawl fleet operating in the north, east and south coasts by the placement of observers for 2020/21 and 2021/22 and has prioritised the fleet for the implementation of cameras in 2023. We are unsure as to the level of scanning of camera footage that is planned for this fleet but submit it should reflect the level of sustainability risk. Given the FRMLs and the expected level of captures, we would expect

higher monitoring levels in the North and South Coasts and Kaikoura region than in the remaining areas.

79. We consider that increased monitoring is appropriate for a duration of say 5 years while the efficacy of the 2021 measures is established. In the event that by-catch levels are less than the FRMLs, the increased monitoring should be scaled back to that required for general operational verification levels which we consider to be around 30% of activity.
80. We would also support regular reviews of the by-catch performance and the response process. Prior to any additional protection measures, we consider it would be necessary for Fisheries New Zealand to update abundance estimates and verify the need for additional protections to achieve the desired population outcomes. The existence of captures would not be a reason for additional protection unless the sustainability threshold (the FRML) was exceeded. To that end, we would expect Fisheries New Zealand to ensure regular updates of abundance be provided at intervals of no less than 5 years. Should there be any indication of a decrease in abundance or research indicate changes in demographic characteristics, we would expect Fisheries New Zealand to undertake appropriate research to verify the downturn and investigate the causes.
81. We agree that Fisheries New Zealand and DOC should provide regular reports as to the captures of any dolphins. In addition to any captures being reported, the levels of fishing activity and levels of monitoring should be reported to provide some context to the risk to the dolphins. We consider the report should be issued quarterly irrespective of whether any captures have occurred or not.

Research

82. As indicated earlier we are concerned that research is being focused on inappropriate issues.
83. Insofar as the behaviour of dolphins is concerned, the dive profile of Hector's dolphin is a critical missing fact in understanding the risk of fishing to dolphins. We have no robust information as to the diving capability of a dolphin, including their frequency of dives, diurnal pattern of diving, duration of time, the depth of dive, the foraging zone, the diving rate and time on the seabed. All those factors are material to understanding and assessing the risk to Hector's dolphins.
84. By way of contrast, we have that information for a range of seabirds and other marine mammals but not for the dolphins which are purportedly the marine species most at risk from commercial fishing. Better understanding of the nature and source of risk would allow for a robust review of dolphin protection measures which to date have been based almost solely on the exclusion of fishers.
85. Of particular concern is the apparent unwillingness of Crown organisations to research the efficacy of dolphin deterrent devices currently available on the market. Notwithstanding the devices have been available for the past decade and the undoubted success of such devices in reducing interactions with dolphins in the jack mackerel fishery, research proposals by industry for the devices to be tested have been declined for no particular strategic reason. Instead, funds cost recovered from industry under the Fisheries and Conservation levies have been applied to topics of less strategic and less conservation benefit. A number of fishers have acquired and deployed the devices on their own initiative. We consider it urgent that the Crown fund research into the efficacy of the devices and, in the event that they are shown to be effective in deterring the presence of Hector's dolphins, the Crown should assist fishers to deploy such units.
86. Of even greater import to the health of Hector's dolphin population is an effective programme to reduce the impact of toxoplasmosis on it. The risk assessment highlighted the single greatest risk to Maui and Hector's dolphins is toxoplasmosis. The measures enacted under the Fisheries Act to mitigate the risk from fishing related activities and the sacrifice of fisher's livelihoods would be in vain if the toxoplasmosis risk is not appropriately addressed.
87. While the Department of Conservation has produced a toxoplasmosis plan, it is limited to researching transmission paths rather than taking immediate practical steps to reduce the known transmitter - cats. We acknowledge that cat management is politically a sensitive topic but to exclude feral cat populations from the Predator Free programme is grossly negligent in respect of the Department's obligation to New Zealand to protect its natural heritage. We support additional resources being provided to the Department to assist them to manage feral

cat populations not only for the sake of the dolphins but for all endemic wildlife in New Zealand. There is no terrestrial dwelling native species that is immune to the adverse effects of a cat population.

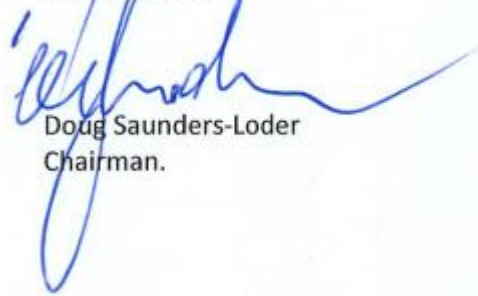
88. We see no justification in the Government proposing additional needless mitigation measures on fishing while not addressing toxoplasmosis as the prime residual risk to the dolphins.

Best Regards



Laws Lawson
Chairman
Fisheries Inshore New Zealand

Best Regards,



Doug Saunders-Loder
Chairman.