

15 May 2017

Mr L Sanson  
Department of Conservation  
PO Box 10 420  
Wellington 6143

Dear Mr Sanson

**COMMENTS ON THE PROPOSED CONSERVATION SERVICES PROGRAMME  
FOR 2017/18**

1. These comments are provided by Fisheries Inshore NZ Ltd and the Deepwater Group Ltd in respect of the draft Conservation Services Programme (CSP) Annual Plan 2017/18 released for consultation on 14 April 2017. Comments have been made on both broad management matters and specific project details.

**Fisheries Inshore New Zealand Limited**

2. Fisheries Inshore NZ Limited (FINZ) represents 80% by value and volume of the inshore finfish, pelagic and tuna fisheries of New Zealand. It was formed in November 2012 as part of the restructuring of industry organisations. Its role is to deal with national issues on behalf of the sector and to work directly with and behalf of its quota owners, fishers and affiliated Commercial Stakeholder Organisations (CSOs). As part of that work it will also work collaboratively with other industry organisations and SREs, Seafood New Zealand, Ministry for Primary Industries (MPI) and Department of Conservation.
3. Its key outputs are the development of, and agreement to appropriate policy frameworks, processes and tools to assist the sector to more effectively manage inshore, pelagic and tuna fishstocks, to minimise their interactions with the associated ecosystems and work positively with other fishers and users of marine space where we carry out our harvesting activities.
4. FINZ works closely with other commercial stakeholder organisations that focus on regional and operational issues, including the Northern Fisheries Management Stakeholder Company Ltd and Southern Inshore Fisheries Management Company, which are the mandated organisations for the management of the regional fishstocks as well as Deepwater Group Ltd where there is overlap in issues.

**Deepwater Group Limited**

5. Deepwater Group Limited (DWG) is a non-profit organisation that represents the interests of quota owners who collectively own more than 96% of the deepwater quota. DWG works in partnership with the MPI to ensure that New Zealand gains the maximum economic yields from their deepwater fisheries resources, managed within a long-term sustainable framework.

6. DWG's vision is for New Zealand to be recognised as having the best managed deepwater fisheries in the world.
7. They represent participants in New Zealand's major deepwater commercial fisheries, including hake, hoki, jack mackerel, ling, orange roughy, oreos, scampi, southern blue whiting and squid. Shareholders of Deepwater Group hold around 96% of the entire deepwater fish quota in New Zealand.

## **PRINCIPLES OF THE CONSERVATION SERVICES PROGRAMME**

8. We first address the legal and conceptual issues relating to the CSP programme. We have consistently raised issues relating to:
  - a. the interpretation of conservation services;
  - b. the legality of the CSP programme;
  - c. the definition of adverse effects;
  - d. the risk classes;
  - e. the absence of strategic plans for protected species; and
  - f. the research plan.
9. We have yet to receive either an informative written response or a discussion and engagement on these matters (see Appendix I for a summary of recent submission content).
10. We are not able to let the matter go unresolved and seek dialogue with DOC on this as a matter of urgency and prior to the proposed 2017-18 CSP Programme and levies being determined.

## **LEGISLATIVE SCOPE OF CONSERVATION SERVICES**

11. Conservation services are defined in Section 2 of the Fisheries Act 1996 (the Act) as follows:
  - a. *research relating to those adverse effects on protected species;*
  - b. *research on measures to mitigate the adverse effects of commercial fishing on protected species; and*
  - c. *the development of population management plans under the Wildlife Act 1953 and the Marine Mammals Protection Act 1978.*
12. Section 262 of Act which applies to conservation services confines the services that can be cost recovered to those provided:
  - a. *to manage or administer the harvesting or farming of fisheries resources; and*
  - b. *to avoid, remedy or mitigate a risk to, or an adverse effect on, the aquatic environment.*
13. In Section 1.3 of the CSP Strategic Plan, the scope of CSP is defined as being restricted to the consideration of those projects that are, by definition, conservation services as defined in Section 2 of the Act. That definition refers to services in relation to the adverse effect of commercial fishing on protected species. The Act defines "effect" to include both actual and potential effects but does not define what constitutes an "adverse effect". Equally, the CSP strategic statement does not contain a definition of adverse effect. Industry has repeatedly sought a definition of "adverse effect" in order to clarify what constitutes a conservation service. But the matter has been assiduously avoided and CSP has merely quoted the

definition of effect from the Act. Avoiding clarification and definition of adverse effect does not provide operational certainty for the Act.

14. The definition of adverse effect needs to be seen in the context of the Act and the Purpose in Section 8 – to provide for utilisation while ensuring sustainability, and the Environmental principles in Section 9 – that includes maintaining protected species above a level that ensures their long-term viability. Adverse effect can then be considered as a negative impact on the long-term viability of a protected species. As indicated by the definition of effect in Section 2 of the Act, the risk of an adverse effect cannot be a minor risk – it needs to be a substantive risk of an adverse effect occurring in the future. On the continuum of risk, the definition of effect in the Act places the interpretation closer to an effect will happen rather than an effect that might happen.
15. An adverse impact on an individual is not synonymous with an “adverse effect” on a species.
16. To understand the context for CSP activities requires an understanding of the roles and responsibilities of DOC more generally, CSP and MPI. DOC is the manager of New Zealand’s natural heritage and, just as it accepts responsibility for the sustainability and management of terrestrial and avian species under the Natural Heritage appropriation, so too it has that same responsibility for marine species. Activities required for the management of protected marine species should be funded from the Natural Heritage appropriation. Conservation services is defined in the Act and is confined to any adverse effects posed by commercial fishing on protected species. MPI has a wider role in respect of the effects of fishing or fish farming on the aquatic environment, as contained in the definition of fisheries services in Section 2 of the Act. As protection measures are enacted and the effects on protected species are reduced so as not to be adverse, the need for conservation services should decrease. That is the objective and the measure of success of the programme.
17. The Act sets up a hierarchy that determines whether, and the extent to which, a service can be subject to cost recovery. This hierarchy consists first of the statutory definition of conservation services in Section 2, then the cost recovery principles in Section 262 and then the Fisheries (Cost Recovery) Rules 2001 (the Rules).
18. The cost recovery principles and the Rules cannot be used as the sole justification for recovering the costs of protected species research. The starting point for the determination that a project can be cost recovered must be Section 2. If a proposed research project does not meet the statutory definition of a conservation service, it simply cannot be a conservation service and cannot be cost recovered.
19. Any view that the wording of the Rules alone provides justification for cost recovery is incorrect. Being contained in subordinate legislation, the Rules cannot extend the definition of conservation services set out in the primary legislation – the Act. The Rules are to give operational effect to the principles in the Act. To the extent that provisions in the Rules seek to widen the scope of cost recoverable services or provide a cost recovery mechanism contrary to the principal Act, those provisions are “ultra vires”.
20. In recent years, DOC appears to have seen conservation services as a mainstream funding opportunity to be utilised by DOC for meeting its natural heritage obligations for any marine protected species activity. We have sought information on the wider inputs of DOC into the management of marine protected species but no information has been forthcoming.

21. We raised the absence of adverse effect in CSP projects previously with the Office of the Auditor General. The Audit Office reports of December 2002 and February 2005 re-enforced our view that adverse effect or risk thereof needed to be demonstrated by CSP for activities to be eligible for conservation services and cost recovery. In our submissions on CSP programmes, we have consistently identified projects where an adverse effect or risk thereof has not been demonstrated by CSP (see Appendix I for a summary of recent submission content). Nevertheless, CSP has continued with the projects and continued to cost recover from the fishing industry.
22. With the CSP budget accommodating what should be DOC mainstream funded projects, MPI has adopted a role of funding protected species research at the expense of funding for its fisheries activities. In the current 2017/18 proposals, MPI has included projects to:
  - a. identify the factors affecting NZ sea-lion pup survival;
  - b. characterise and quantify non-fishing threats on Hector's and Maui dolphins;
  - c. research the demographic parameters for at-risk seabirds as identified by the Risk Assessment; and
  - d. undertake population specific modelling of adult survival of at risk seabird species.
23. Those projects do not have a nexus to fishing and should more properly be undertaken by DOC in the absence of fisheries-driven adverse effects. However the projects are funded, there should be no cost recovery from commercial fishing.
24. There are occasions where, because of:
  - a. the public good;
  - b. the need for research into protected species to be undertaken; or
  - c. the inability of CSP to access appropriate funding from elsewhere in the DOC appropriations,

industry has consented to fund some projects from CSP funding which would not otherwise be eligible. That might or might not include an industry contribution. We believe that DOC is underfunded relative to its conservation obligations in the Natural Heritage area and see the consent to fund non-qualifying protected species research from the CSP allocation as being a complementary contribution to DOC's appropriations. However any concession to fund such projects is made on a "without prejudice" basis to the legality issues discussed earlier and does not constitute an alternative interpretation of the legislated provisions.

25. MPI has initiated a "First Principles" review of cost recovery. We are unaware of whether DOC has contributed to or been engaged in that review. Industry has serious concerns as to the quality of the review outputs and engagement processes to date. However, MPI have signalled that they will be seeking to document existing processes and review the cost recovery rules in the context of the First Principles review. It would be beneficial if DOC and the seafood industry were able to provide an agreed position in respect of cost recovery of conservation services to the MPI review. We would welcome urgent discussions on that matter.

#### **ABSENCE OF STRATEGIC POPULATION MANAGEMENT PLANS**

26. In previous submissions, we have noted the absence of strategic plans for the management of protected marine species. The current plan for seabirds is dated from 2010 and has not been updated with more recent research.

27. We do not consider Threat Management Plans constitute plans for the strategic management of protected species. Nor do we consider Population Management Plans as defined in the Marine Mammals Protection Act to be appropriate for the management of marine species. Both focus on threats, the Population Management Plans only on fishing-related threats.
28. Strategic plans should state the vision, the biology of the species, the issues facing the species, the strategic outcomes sought for the species and the monitoring and management settings appropriate for the management of the species. The strategic plan may give rise to:
  - a. a monitoring and management framework for the species;
  - b. a recovery plan that identifies actions to be taken and sets performance targets for the recovery;
  - c. a Threat Management Plan that defines how the threats facing the species will be addressed;
  - d. a research plan for both biological factors and threats; and
  - e. annual Operational Plans, detailing annual services required.
29. While such documentation would underpin DOC and CSP activity, it would also provide an opportunity for interested parties to meet and discuss and hopefully come to a common agreement on the future management of the species.
30. There appears to have been no progress to develop such plans even for those species acknowledged to be at significant risk. For example, no DOC/CSP plan has been developed for the black petrel which has consistently emerged as the seabird most at risk from New Zealand fishing. It has been left to other organisations and groupings of interested parties to establish action plans and plan strategic initiatives.
31. The only Threat Management Plans developed by DOC have been in respect of the Maui and Hector dolphins and the New Zealand sea lion, those plans being triggered by the need for more urgent management action rather than a DOC initiative to improve the management of those protected species.
32. The absence of such strategic plans is recognised in the recently released Threatened Species Strategy. We support the thrust contained in that strategy and are willing to participate as deemed appropriate.

**CLASSIFICATION OF RISK**

33. In our submission of last year, we objected to the definition of the classes of risk – very high, high, medium, low, and negligible – which are being used to justify management action. We have raised this matter with CSP and wish to have it discussed in the context of defining the legitimate scope of CSP activities.
34. The seabird risk assessment uses the current definitions:

<b>SEABIRD RISK CLASSIFICATIONS</b>		
<b>Classification</b>	<b>Median Risk Limit</b>	<b>Upper 95% Confidence Interval Limit</b>
Very high	Above 1	Above 2
High	Above 0.3	Above 1

Medium	Above 0.1	Above 0.3
Low	n/s	Above 0.1
Negligible	n/s	Less than 0.1

35. Our concerns with the classification relate to the thresholds for “high” risk and those below that class. We cannot agree or support that a median threshold of 0.3, which effectively requires a three-fold increase in the annual potential fatalities (APF) before impacting on the sustainability and long-term viability of the species, can be said to constitute a high risk. Where Level 3 assessments have been undertaken it has been shown that APFs are pessimistic. Equally, a setting that requires mortality rates to rise tenfold cannot be characterised as medium risk.
36. We recognise that the existing risk scores are established with a constant recovery factor but that alternative settings might be more appropriate for some species from a management perspective. Those settings would naturally arise from any management strategies and statements for the species. As noted earlier, those management statements/strategies/plans have not been prepared for protected marine species.
37. This matter was discussed in some detail at the 15 March Seabird Risk Assessment meeting and all parties agreed the need for management settings for some species. We have seen no progress to date on this matter and have not been advised that CSP has accepted the need for such settings. Such settings would be a fundamental outcome of any population plan.
38. In their summary of responses to submissions on possible projects, CSP indicated they had retained the risk classes contained in the MPI-commissioned risk assessment as a matter of consistency for 2017/18 but will revert to the risk scores for the future.
39. It is not the use of risk classes that is inappropriate to management of protected species. It is the settings currently used in those classifications that are inappropriate. Risk classes are inherently appropriate where there is a need to manage a multitude of species and identify management priorities. However appropriate settings for classes can only come from an informed consideration of the status of the population and some formulation of strategic objectives for the species. That necessitates the consideration of management plans as advanced earlier in this submission.
40. CSP’s assertion that taxa with a 95% confidence level risk score of 0.1 is at risk of an adverse effect from commercial fishing is clearly inappropriate. The species with that risk score have median scores of 0.04, that is the estimated annual potential fatalities attributable to commercial fishing are only 4% of the expected annual population increase additional to that required to ensure a growing sustainable population. In simple terms, in the absence of other human-induced risks, commercial fishing will need to increase the potential fatality rate by 25 times before the long-term sustainability and growth capacity of the seabird population would be compromised. That cannot be said to be likely or realistic and would far exceed the fatality rate from even an un-mitigated fishery. It needs to be noted that the existing risk assessment process produces conservative estimates of the risk, that is, a likely over-estimate. The degree of conservatism in the assessment reduces with the reduction in uncertainty of estimates of the population and mortalities.
41. Even at a recovery factor of 0.1, many of the species have a zero probability that the Annual Potential Fatalities will exceed Potential Biological Removal. To consider that such taxa are at risk of an adverse effect from commercial fishing and are within the mandate of conservation

services activity cannot reasonably be said to be consistent with Section 2 of the Act. That is a consideration that must be made in the context of the Fisheries Act.

42. We note CSP's assessment of seabirds at risk makes no reference to Level 3 risk assessments undertaken for a range of taxa including Antipodean albatross, black petrel, and Westland petrel. We also note that none of those assessments found that commercial fishing poses a material risk to the sustainability of the taxa. As a general principle, a Level 3 fully quantitative risk assessment will supersede any semi-quantitative Level 2 assessment. Where Level 3 assessments exist, in accordance with the information principles contained in Section 10 of the Act, they should be recognised as best available information and must be used in preference to the Level 2 assessments.
43. We note that CSP has commissioned what appears to be a set of alternative risk assessments. The first of these reports related to albatross.<sup>1</sup> We understand a review of petrels is underway. We wrote to CSP on 9 February 2017 with our queries as to the purpose of the programme and our concerns as to the quality of the research.
44. Sixteen experts were approached to complete the survey. Nine experts failed to participate. Of the 96 questions asked, 18 questions were answered by only one person, 36 questions by two people, 31 questions by three people, 10 questions by four people and one question by five people. No questions were answered by every respondent and no respondent answered every question. Given that there were scientific results available for most of the parameters from prior research and the paucity of the responses, we doubt that the results of this analysis are statistically robust and are not a replacement for scientifically-based parameters.
45. In respect of the threats, the participants were provided with a list of threats and were asked to select the threats that "if not actively managed, would result in a change in conservation status over the next 20 years". Needless to say, being an assessment of at-sea threats, fishing in its various forms was identified as the principal threat. We note for reference that the list of potential threats included many that cannot be characterised as "at-sea" including impacts at nest sites, disease, and other predators. Listing of the threats as undertaken in this analysis does not identify the significant residual risks to seabird populations and should not be used. Risks to seabirds from commercial fishing are managed and are mitigated. To ask respondents to identify threats that "if not actively managed" would have conservation threat status changes, is frankly a pointless exercise. We find the report problematic in that on page 11 the report states "respondents were not asked to rank threats, or to quantify the potential impacts of the threats" but on page 6 the report notes that the survey responses will be used to prioritise evaluation of the threats, implying management credibility is being given to the survey outputs.
46. We sought information as to why the research was being undertaken and how the information would be used. We received no formal or detailed response to that letter. We do not see the report as being a replacement for the semi-quantitative L2 risk assessment or the L3 assessments and, to be frank, we see no value to be gained from the project and attach no credibility or significance to the results.

#### **INDIRECT EFFECTS OF FISHING NOT PROVEN**

47. The indirect effects of fishing activity on marine seabird and mammal species and, in particular, dietary impacts are becoming widely advocated as a source of concern and the

---

<sup>1</sup> Evaluating threats to New Zealand seabirds" by E Abraham, R Yvan and K Clements, 2016, Report for the Department of Conservation

basis for research proposals. However, we have yet to see any robust or authoritative research linking fishing activity and dietary impacts that substantiate the claims. To the contrary, there are documented examples where alternative hypotheses such as the linkage to the Southern Oscillation and weather and climate events have been reviewed and supported.

48. There are a number of papers on that topic including, inter alia:
  - a. James A. Mills et al. *The impact of climate fluctuation on food availability and reproductive performance of the planktivorous red-billed gull *Larus novaehollandiae scopulinus**, *Journal of Animal Ecology* 2008, **77**, 1129–1142;
  - b. RJM Crawford, PS Sabarros, T Fairweather, LG Underhill, and AC Wolfaardt. *Implications for seabirds off South Africa of a long-term change in the distribution of sardine*. *African Journal of Marine Science* Vol. 30 , Iss. 1,200;
  - c. Great Barrier Reef Marine Park Authority Commonwealth of Australia. *Seabirds and shorebirds in the Great Barrier Reef World Heritage Area in a changing climate* [electronic resource]: a workshop report. Great Barrier Reef Marine Park Authority Commonwealth of Australia 2008;
  - d. Zwolinski, J., and D. Demer (2012). *A cold oceanographic regime with high exploitation rates in the northeast Pacific forecasts a collapse of the sardine stock*, *Proc. Natl. Acad. Sci. U. S. A.*, 109, 4175–4180; and
  - e. Robinson, W. M. L., Butterworth, D. S., and Plaga'nyi, E'. *Quantifying the projected impact of the South African sardine fishery on the Robben Island penguin colony*. – *ICES Journal of Marine Science*, doi: 10.1093/icesjms/fsv035.
49. DOC has previously recognised the impact of weather and oceanographic events on seabird populations as seen in this 2010 DOC media release <http://www.doc.govt.nz/news/media-releases/2010/unusual-weather-conditions-causing-mass-deaths-among-seabirds/>.
50. The literature indicates that the weather patterns of the recent past, may be having significant effects on the productivity and availability of many small pelagic fish species and krill species that are the principal diets of many seabirds and marine mammals.
51. We note that the “*Discussion paper on New Zealand sea lion pup mortality: causes and mitigation*” by Roe W, Roberts J, Michael S, Childhouse S, 6 June 2014” identifies the following factors that may **indirectly** affect sea lion pup mortality:
  - a. *Changes in ocean climate and factors that affect the abundance of preferred prey species;*
  - b. *Shifts in prey availability at maternal foraging grounds, maternal diet, foraging efficiency, milk quality/quantity supplied to the pup;*
  - c. *Changes in the age structure of breeders; and*
  - d. *Others.*
52. Nowhere does the document attribute the indirect effects to commercial fishing. Instead, it advocates research into wider matters, such as disease and pup mortality, to “*complement the existing work on fisheries interactions and hopefully contribute to halting and reversing the decline of this species*”.

53. The work of Robinson (2015)<sup>2</sup> closed with the following word of caution:  
*“Perhaps, the main guidance emanating from this work is to caution that marine ecosystem interactions are not necessarily straightforward, so that the temptation to jump to such conclusions before conducting careful and desirably quantitative analyses should be avoided”.*
54. We reject the claim that an adverse effect exists from indirect fishing effects. There is no evidence for such a linkage but there is evidence as to the impact of other factors to explain nutritional stress. The predominance of La Nina conditions in New Zealand in recent years would appear to be the likely cause for any nutritional stress in New Zealand marine protected species.
55. Accordingly, we oppose such projects into indirect effects as proposed this year for sea lions and seabirds being undertaken as conservation services or being cost recovered.
56. We have spent millions over the past five years to ensure the L2 and L3 risk assessments produce robust estimates of direct risk for commercial fishing. Those assessments indicate that the risk of commercial fishing to seabirds and marine mammals is lower than previously believed with only a limited number of species assessed as being at significant risk.
57. We have no desire to now embark on expensive research to prove that fishing does not pose adverse effects on seabirds through indirect effects. The Government Auditor’s reports in 2002 and 2005 required CSP to demonstrate the likelihood of adverse effects or the risks of such effects before cost recovery was warranted. There is no such evidence to support the CSP claims of indirect effects.
58. However, if DOC considers that such projects are appropriate and necessary to underpin their management of seabirds and marine mammals, then it is entirely appropriate that they should fund the research from the appropriation to Natural Heritage or find alternative funding for the research.

#### **THE SEABIRD MEDIUM TERM RESEARCH PLAN 2017**

59. The 2017 seabird medium term research plan (MTRP) was used to inform the development of the 2017/18 CSP programme.
60. There are references within the project details that the key components of the research described in the 2017 MTRP were identified and prioritised by the CSP RAG. The MTRP is a CSP-developed document, prepared without reference to or discussion with the group or consideration of the role of DOC and CSP. If CSP wish to have the endorsement of the RAG, then it needs to be formally discussed and adopted by the RAG. Otherwise the document should be attributed only to CSP or DOC.
61. The MTRP adopts the Richards and Abraham 2017 risk assessment<sup>3</sup> as being the guiding basis for the plan but then imports the methodology from earlier iterations of the Seabird risk assessment.
62. The plan includes research activities for:

---

<sup>2</sup> Robinson, W. M. L., Butterworth, D. S., and Plaga’nyi, E’. Quantifying the projected impact of the South African sardine fishery on the Robben Island penguin colony. – ICES Journal of Marine Science, 2015 doi: 10.1093/icesjms/fsv035.

<sup>3</sup> 2017 Risk Assessment in preparation.

- a. 17 seabird taxa that have a risk ratio with the 95% confidence interval greater than 0.1;
  - b. 13 seabird taxa that had a risk status of low to high in the previous 2015 assessment<sup>4</sup> but have been reassessed as negligible risk in the 2017 assessment; and
  - c. 5 taxa where Rowe<sup>5</sup> identified a moderate to high risk from commercial fishing methods other than those analysed in the L2 risk assessment.
63. CSP asserts that all 35 species fit within its mandate and are eligible for CSP funding.
64. Industry absolutely rejects that proposition. As discussed in earlier paragraphs, the scope of CSP is constrained by the definition of Conservation Services in the Fisheries Act. The risk classification used by CSP to identify seabirds at risk for research activities has been discussed earlier in this submission and dismissed as being appropriate.
65. The inclusion of a seabird species or a research programme in the MTRP does not, of itself, confirm the research should be a conservation service or eligible for cost recovery. Inclusion in the CSP and cost recoverability is determined by consistency with the provisions of the Act.

#### **CSP APPROACH TO PROGRAMME**

66. At the CSP RAG meeting, in response to stakeholders querying how funds would be allocated, CSP indicated it was not prepared to allocate the funding based solely on the priority scoring. Rather CSP indicated a preference to spread the available funds over a range of interaction, population and mitigation projects based on an allocation to each of those activity areas and the priorities within those areas. No rationale was provided for this.
67. We disagree with the CSP approach to spread work across the wide range of project areas. In line with CSP's mandate to reduce adverse effects, we consider that funds should be allocated to priority species, irrespective of the spread between activity areas.
68. Given the objective of CSP, we consider that projects which result in immediate reductions of protected species mortalities should be favoured over long-term population research and that research into mitigation of impacts is preferable to long-term population research and that funding can only be allocated to projects where there is a strong nexus with adverse effect unless industry is willing to support the project.
69. We are concerned that the absence of a strategic plan for the management of marine protected species does not provide strong guidance as to the allocation of available funds. We were also concerned at the quality of the proposals presented by CSP for consideration.

---

<sup>4</sup> Richards Y; Abraham E R 2015 Assessment of the risk of commercial fisheries to New Zealand seabirds, 2006-07 to 2012-13, New Zealand Aquatic Environment and Biodiversity Report no 162.

<sup>5</sup> Rowe S 2013 Level 1 risk assessment for incidental seabird mortality associated with fisheries in New Zealand's Exclusive Economic Zone, DOC Marine Conservation Services Series 10, Department of Conservation Wellington 58 p.

### *The Case for Antipodean Albatross Research*

70. We believe that the RAG discussions on Antipodean albatross highlighted these deficiencies.
71. CSP proposed a programme to collect information on adult survival and estimate the size of the population. A population estimate of white-chinned petrels and Northern giant petrels would be undertaken at the same time. The project ranked 11<sup>th</sup> in the CSP scoring.
72. Antipodean albatross rank 10<sup>th</sup> in the latest seabird risk assessment and had a recent Level 3 risk assessment released in early February 2017. That assessment indicated that Antipodean albatross population was expected to continue to decline as a result of negative demographic factors and in particular was not sensitive to mortalities related to New Zealand commercial fishing.
73. The CSP project proposal made no reference to the report or its findings and sought only to continue the previous management approach as well as “add in” other work which, whilst of interest to some parties, is not CSP relevant work. Scientists at the CSP RAG meeting spoke to the proposal and indicated that nutritional reasons appeared to underlie demographic changes and there was a possible capture mortality problem outside the NZ EEZ. We would have expected that the risk assessment findings to have guided CSP in determining an appropriate research programme for Antipodeans and a higher ranking for research for the species. We further note that the recently released Threatened Species Strategy includes Antipodean albatross as being within the list of 50 species for priority attention.
74. In its responses to comments received from CSP RAG members on the draft projects, CSP commented that “*Proposal not included in Draft CSP Annual Plan 2017/18 as falls largely outside the scope*”. No greater detail was provided as to the reason Antipodean albatross fall outside the scope of CSP. Inasmuch as the research for Antipodean albatross may show the issues facing Antipodean albatross are not related to New Zealand-based commercial fishing, that is not unlike other seabird and marine mammal species for which DOC seeks to fund research from within the CSP budget.
75. We understand DOC is seeking to fund population research and the use of tracking devices from alternative funding sources. Given the position of the species and the wider public interest, it would have been acceptable to industry to fund the project from the CSP programme but without any cost recovery. That would be on a “without prejudice” basis to our position that such research is not legally a conservation service.

### *Marine Mammal Research*

76. We also note the absence of any research proposals in respect of:
  - a. Maui and Hector’s dolphins, notwithstanding the TMPs being due for review in 2018 and the iconic nature of those species in the New Zealand aquatic environment; and
  - b. Common dolphins which had a risk score of over 1 in the recent Marine Mammal Risk Assessment.
77. We note that MPI has traditionally funded all research into dolphins, notwithstanding DOC’s role as managing New Zealand’s natural heritage and protected species and DOC being the sponsor of the Maui Research Advisory Group. We note that the Maui Dolphin 5 Year

Strategy and Research Plan<sup>6</sup> was published in June 2014 but the proposed CSP programme makes no mention of Maui or Hector dolphin research.

78. We have been advised by MPI that the work being considered by MPI for 2017/18 includes the characterisation and quantification of non-fishing threats on Hector's and Maui dolphins and risk assessment to support review of the Hector's and Maui dolphin TMP and research into the demographic parameters for at-risk marine mammals as identified by the Marine Mammal Risk Assessment (common dolphins). As noted earlier, we do not consider these projects to be acceptable within the concept of fisheries services and they should be undertaken by either DOC or CSP.

## **SUBMISSIONS ON PROPOSED PROJECTS**

79. We provide comments on the projects grouped according to those we would support, additional projects we would support and those projects we do not support. We include in the following submissions our assessment as to whether the projects are validly within the scope of conservation services, whether they contain sufficient conservation merit to warrant discretionary funding from the CSP allocation, whether there would be any cost recovery for such projects or whether the project should be removed from the programme.
80. Where we have indicated discretionary support for a project, that is more appropriately not within the scope of conservation services, to be funded from CSP, that recommendation is on a "without prejudice" basis to our issue as to the legality of such projects.

### **Supported Projects**

#### INT2017-01 Observing commercial fisheries

81. We support the continuation of an observer programme, at least until any alternative or more likely complementary electronic monitoring option has proved effective. Monitoring of the protected species interactions is essential to obtaining a robust estimate of the level of risk imposed by commercial fishing. While the risk may not be adverse, monitoring the level of interactions is critical to assessing the level of risk. For that reason, industry supports monitoring of interactions. Monitoring should however be focused on the activities where risk is perceived to be significant or uncertain.
82. Given the initiatives to implement vessel risk mitigation plans in the inshore trawl, surface and bottom longline sectors, we would wish to see an active observer programme in those fleets to report on fleet performance and identify any remaining issues with protected species mitigation. We recognise the need for greater monitoring of the West Coast North Island trawl fleet, particularly for interactions with Maui dolphins. The northern fleets have proved receptive to electronic monitoring and we propose that electronic monitoring should be used for that fleet. The availability of electronic monitoring for trawl operations will assist CSP and MPI to evaluate the efficacy of EM for that fleet.
83. We do not consider continued observer monitoring of the Taranaki setnet fleet to be warranted or appropriate. Over 1,000 days of fishing have been observed with no Maui or Hector dolphins seen or captured. In addition to the absence of dolphins, the practicality of a vessel sighting and following a dolphin while awaiting the arrival of a DOC vessel with a

---

<sup>6</sup> <http://www.doc.govt.nz/Documents/conservation/native-animals/marine-mammals/mauis/maui-dolphin-five-year-strategy-and-research-plan.pdf>.

biopsy dart gun precludes any reasonable prospect of obtaining a biopsy sample. The programme is ineffective and does not provide a justifiable return on scarce resources.

#### INT2017-03 Identification of Marine Mammals, Turtles and Protected Fish

84. We consider that, while photographs may be able to establish the species, necropsy analysis of the captured animals can provide additional information critical to understanding the population and the mitigation of any fishing related risks.
85. In view of the risk assessment indicating an absence of adverse effect or risk thereof to most marine mammals, the level of cost recovery should be lower than 100%. Industry supports the continuation of this programme and voluntarily agrees to full cost recovery on the basis the information generated significantly informs the management of the species necropsied.
86. We do however seek some indication of whether CSP considers there to any merit in the retention on board and the landing of any additional small protected species, particularly Hector or Maui dolphins, where observers are not present on vessels and retention of the body is currently illegal.

#### POP2017-01 Seabird population – Chatham Islands

87. We note the purpose of this project is to complete the 2016/17 population survey by surveying the Sisters for Northern Buller's albatross and Northern Royal Albatross. The project arose as a consequence of bad seas preventing the research team from being able to land on the Sisters in 2016/17. The costing of the project indicates that there is no allowance for use of a helicopter to achieve access. In the absence of a helicopter and previous failures to gain access, the project needs to have a contingency option and/or better planning.
88. In respect of contingency options, we note that a recent article discusses the use of satellite images to provide seabird population surveys for the Chatham Islands (<http://www.bbc.com/news/science-environment-39797373>). That survey has already provided a robust estimate of the population on the Sisters. We therefore query why this project needs to be progressed. Alternatively, we would ask if there is any reason to believe that the Sister's population does not reflect the same abundance trend as the remaining colonies. If it does not, the Sister's populations could be estimated on the basis of previous surveys.
89. Neither of these birds have a risk score and profile that identifies an adverse risk from commercial fishing. For the reasons discussed earlier in this submission, the project does not legally meet the definition of a conservation service and accordingly should be removed from the draft CSP programme.
90. However, industry can see conservation merit in obtaining a population estimate for the Northern Buller's and Northern Royal albatross and accordingly would permit the project to be funded from the CSP programme but without cost recovery.

#### POP2017-03 Salvin's Albatross - Bounty Islands

91. Salvin's albatross ranks as the seabird with the second highest risk score but has significant uncertainty in respect of both population and demographic variables and incidental capture estimates.
92. Recent abundance surveys of the Bounty Island population have provided conflicting estimates from aerial and ground surveys. The divergence needs to be resolved to ensure

integrity in future results. This will reduce the uncertainty in current abundance estimates. We also note the need for greater information on the foraging and at sea movements of Salvin's albatross. This will enable industry to better address mitigation options to reduce the catch of Salvin's albatross.

93. We support this project as a conservation service with associated cost recovery but would prefer to see a higher level of deployment of reliable and robust tracking devices to obtain a more robust pattern of at sea movements. Those tracking devices are related to management information for the species and should be paid for by the Crown.

#### POP2017-04 Auckland Islands Seabird Research

94. Gibson's albatross currently have the 8<sup>th</sup> highest risk score and white capped albatross the 7<sup>th</sup> highest. Both have a median risk score of around 0.34 and a 95% confidence interval of 0.2 to 0.6. The risk scores at lower more appropriate recovery factors indicate some risk to the long term viability of the populations for commercial fishing. Whether the level of risk constitutes an adverse effect is uncertain from the information available.
95. Accordingly, the project qualifies as a conservation services project with cost recovery.
96. The key focus of the project is to obtain re-sight data to provide robust estimates of survival rates for the species. Population estimates are a secondary objective. Given the recent declines in abundance of Gibson's albatross and the levels of uncertainty in the population of both species, the need for population estimates is more important than the re-sighting data.
97. We note that the aerial survey data collected in 2015/16 and 2016/17 has not been analysed and that the planned MPI research project to analyse the data will not proceed in 2017/18. If additional data is to be collected for 2017/18, then the scope for the project needs to be extended to include the analysis of the 2017/18 and previous data. There is no point in obtaining data and not analysing it, particularly where there are concerns as to the long term prospects for the species.
98. We consider the budget for this project should be increased to include aerial support for the white capped albatross abundance survey and the analysis of all outstanding survey data.

#### POP7 Sea-Lion Auckland Island Pup Count

99. Research presence is required at the Auckland islands to undertake a pup count and sufficient mark-recapture effort to continue to support the risk assessment model. Researchers can also undertake a pup rescue programme if required and collect material to assess the impact of klebsiella and other diseases.
100. The New Zealand sea-lion was assessed in the recent marine mammal risk assessment as having a median risk of approximately 0.1 and an upper 95% confidence interval of approximately 0.2. The Level 3 risk assessment undertaken for the sea lion TMP review indicated that commercial fishing was not in isolation resulting in an adverse effect on sea lions.
101. New Zealand sea-lions cannot be considered to be at an adverse risk from commercial fishing. For the reasons discussed earlier in this submission, the project does not legally meet the definition of a conservation service and accordingly should be removed from the draft CSP programme.

102. However, we recognise the conservation value of the project and would be prepared to allow the project to be funded from the CSP programme providing the cost recovery level is no more than 50% of the cost.

#### MIT2017-01 Protected Species Liaison

103. While the implementation of vessel mitigation plans on the surface longline fleet has been completed, we would like to see the programme continue for the next 2 years to ensure that the programmes are implemented appropriately on vessels and an outreach process is available for vessels in the event of significant seabird captures. Although focused initially on seabird mitigation, we see value in extending the scope of the programme to include mitigation plans for turtles and sharks. We have become aware that the turtle captures may be more extensive than understood but that release procedures are less than optimal. We would welcome the opportunity to further extend the programme into that additional area mostly by the delivery of practical line cutters for quick and safe release of hooked or entangled turtles.

104. Industry, through FINZ and Southern Inshore Fisheries Management Ltd – SIFMC) has undertaken a programme to install vessel mitigation plans on all South Island trawl vessels less than 28m LOA. We would like to see that programme extended to provide an outreach facility for fishers and to extend the same programme into North Island trawl fishers. We would expect to work with the East Coast North Island fleet where we have an ongoing strong relationship with the fishers and then extend into the northern area in later years. We recognise that the risk posed to seabirds from trawlers based on observer monitoring is significantly lower than in other trawl fleets but would support the programme on the basis of completeness and the wider protected species coverage of the programme.

105. Our preference would be to have all liaison officers operating under one joint programme rather than having the bottom longline activity undertaken as a separate project.

106. While the project includes a setnet component, we see that as premature until a characterisation of setnet activity has been undertaken. Setnetting is not a homogeneous activity but has a wide range of targets, localities, practices and threat profiles. Consideration of mitigation and implementation of measures requires the context to be researched and any mitigation tailored to the risk and nature of fishing. Some characterisation work needs to be undertaken as a separate pre-requisite to any setnet liaison officer activity. However, we do not see the characterisation project as being an integral component of or consistent with the thrusts of the liaison programme. FINZ will support and contribute to such work in conjunction with DOC and MPI in the coming year with a view to understanding the nature and extent of the fisheries and overlap with protected species of concern. From there a rational and effective LO programme can be generated dealing with the identified sectors within the method in a substantive but relevant way.

107. The experience of the last year has demonstrated the benefits of having liaison projects managed and provided by personnel with industry experience, linkages and credibility. We wish to discuss with CSP the possibility of contracting industry services under a Memorandum of Understanding with DOC/MPI set objectives and KPIs rather than a tender process. This would necessarily report back to either DOC or MPI such that interested parties can be confident of the programme's delivery. We have been disappointed by the performance of other liaison officer projects and prefer to see an industry sponsored and provided approach to this programme.

108. We view this project as being of significant conservation and fishing value and support cost recovery of the project.

#### **PROJECTS NOT SUPPORTED**

109. We are unable to support the following proposed programmes. In most cases, the absence of an adverse effect or the risk thereof disqualifies the projects from being considered for funding as conservation services. For some projects, whilst we might see value in the outcomes for protected species management purposes, we consider they ought to be funded from the wider DOC appropriation for Natural Heritage.

#### INT2017-02 – Supporting the Utility of Electronic Monitoring

110. While we support the need for an evaluation plan for the efficacy of electronic monitoring for CSP purposes, we cannot support the project as proposed.

111. Given that the functionality and performance standards for electronic monitoring systems have yet to be defined, we consider it is premature for the development of tools and training materials in 2017. We note that CSP has re-specified the project to limit its scope in 2017/18 to be a review of training and instructional materials. In the absence of greater details on the capacity and capability of the electronic monitoring to be implemented in New Zealand, such a project would still appear premature.

112. We would also have concerns that the party contracted to undertake the evaluation and development of monitoring processes could be conflicted by later being a provider of electronic monitoring systems or a provider of monitoring resources.

113. Given the general results of the seabird and marine mammal risk assessments, we see no nexus of this project with adverse effect on protected species. The development of in-house training and development of staff is an ongoing business function and is not a cost recoverable project.

114. Our preferred approach would be for CSP to use its own resources to compile the information from international organisations. When the electronic monitoring systems have been sufficiently specified to enable training routines to be developed and any potential conflicts of interest to be identified, then CSP should look to tender the project. We see no need for that in this year.

#### POP2017-02 Indirect Effects of Fishing on New Zealand Sea lions

115. The project objectives are:

- a. analyse and process a range of opportunistic and historic diet samples; and
- b. characterise the effect of diet on sea lion demographics at the Auckland Islands between 2000 and 2006.

116. The project description indicates that a comparison with fishing activity in the period will be provided. That is the only reference to fishing in the project description.

117. The New Zealand sea lion threat assessment identified nutritional stress could be a significant factor in population declines of New Zealand sea lion populations through its impacts on productivity and survivorship. This project is to use the scat samples available to review that hypothesis. The project does not seek to link dietary change to fishing effort.

118. There is no evidence to support any assertion that fishing imposes an adverse indirect effect on sea lions. This project will not focus on or prove that link.
119. For the reasons provided earlier in this submission, the project does not legally meet the definition of a conservation service.
120. We consider that there are more pressing issues to address in respect of New Zealand sea lions, such as Klebsiella and the survival of pups, and funds should be allocated to those matters in priority to investigating any historic changes in sea lion diets. We cannot support any use of CSP funding for this project.
121. Accordingly, the project should be removed from the draft CSP programme and CSP should seek funding from alternative sources such as the DOC Natural Heritage appropriation.

#### POP2017-06 Indirect Effects on seabirds in North East North Island

122. Three reports were presented to the working group on 16 March 2017:
  - a. Freya Hjorvarisdottir - fisheries relevant to Buller's shearwater and red-billed gull prey availability in North Eastern North Island - Draft Report;
  - b. Peter Frost - Population Status and trends of selected seabirds – draft report; and
  - c. Chris Gaskin - Procellariiformes associating with shoaling fish schools - northern New Zealand - Draft Report.

Freya Hjorvarisdottir - fisheries relevant to Buller's shearwater and red-billed gull prey availability in North Eastern North Island - Draft Report

123. The paper appears to be a characterisation of the fish-stocks which have relevance to the availability of seabird prey in north eastern North Island. However, we are concerned with the quality of the paper and consider the paper is nothing more than a speculative opinion piece:

- a. based on assertions with a lack of references to research to support them;
- b. not giving credence to other potential drivers to changes in availability of prey species; and
- c. lacking objectivity and in doing so demonstrating a biased approach to the matter.

124. The paper is in general very simplistic and focused on only one aspect. It consists of extracts from the stock assessment plenary, does not contain additional analyses as to fishing activity and does not contain all the relevant material from the Plenary. The assertions as to the indirect effects of fishing and the underlying presumption that any decrease in the number of “boil-ups” results from reduced numbers of predatory fish are baseless.

Peter Frost - Population Status and trends of selected seabirds

125. This report focuses on the non procellariiform seabirds that are associated with shoaling fish schools, eg. gannets, red-billed gulls, terns and shags. The aims of the project were:
  - a. To identify the breeding sites for these species in the northern half of the North Island, from Cape Egmont on the west to East Cape in the east;
  - b. To collate the available information on population numbers and any trends through time, both at individual sites and overall within the region of interest, over at least the past 75 years;

- c. To summarise what is known about each species' breeding biology—timing of breeding cycle, incubation shifts and length and chick rearing period—and what is known about the birds' diet during chick rearing; and
- d. To assemble any other relevant information on the diet and foraging ecology of these species.

126. The report focuses on those objectives and recognises that there are many factors likely to be impacting on the abundance of seabirds, including climatic variations; availability of prey; competition with commercial fisheries; added mortality caused by fishing gear, pollution, and alien invasive predators; habitat degradation; and human disturbance. The presentation noted that there is little by way of reliable population monitoring that allows trends to be identified based on a consistent data series. The report advocates for monitoring of populations, monitoring foraging patterns and improving knowledge of diets.

Chris Gaskin - Procellariiformes associating with shoaling fish schools - northern New Zealand

127. The Gaskin report provides the same information as the Frost report but for Procellariiformes – the shearwaters and the petrels.

128. The recommendations are similar to the Frost report.

129. The Frost and Gaskin reports indicate that the causes of variations in seabird populations are complex, uncertain and no particular factor can be ascribed to be dominant. Neither paper identified fishing as imposing a significant indirect effect on the seabird populations.

Additional Information

130. We have contacted fishers and processors who fish for anchovies, pilchards, sprats and other bait fish species and for kahawai, trevally and kingfish, the fish species at interest in the review. Those discussions indicate that there have been significant changes in the availability of the bait species, possibly connected with the Southern Oscillation phases, and changes to the coastal, harbour, gulf and estuary habitats used and frequented by the baitfish.

131. The abundance of baitfish appears to have decreased in the prolonged La Nina weather conditions of recent years. The decline appears to be dependent on the length of the La Nina phase - the longer the phase the more significant the decline. There appears to be recruitment issues with smaller fish becoming less common in catches. Fishers have noted the reduction in boil-ups but attribute it to decreased abundance of baitfish rather than decreases in pelagic fish such as trevally, kingfish and kahawai and a change in baitfish behaviour to avoid habitat changes. Catches have reduced since 2000 and catches are currently around 250 tonnes, approximately 10% of the TACC.

132. The impact of La Nina weather is reflected in the Plenary statement on pilchards:

*“Pilchard is abundant in some New Zealand regions. However, it is unlikely that the biomass is comparable to the very large stocks of pilchard (sardine) in some world oceans where strong upwelling promotes high productivity. It is more likely that the New Zealand pilchard comprises abundant but localised coastal populations, comparable to those of southern Australia. They appear to be adaptable feeders, able to utilise food items from organic detritus through phytoplankton to zooplankton. East Northland is a region where under neutral to El Niño conditions moderately productive upwelling predominates, but in La Niña years downwelling and oceanic water incursion will limit recruitment and may affect adult condition and survival.*”

*In those regions of the world where small pelagic fishes are particularly abundant and have been well studied, there is often a reciprocal relationship between the stock size of pilchard and anchovy, as well as great variability in their overall abundance. Many pilchard/anchovy fisheries have undergone boom and-bust cycles. “*

133. We recognise that the availability of baitfish and krill is vital to the health and wellbeing of seabirds and seabird populations and may reflect in poor breeding success and reduced adult survival. However, there is no basis for any assertion that commercial fishing is posing an adverse indirect effect on the seabirds.
134. We consider that there are more important marine conservation issues that the funding could be applied to and we cannot therefore support the project. We believe it should be removed from the CSP programme.

#### POP2017-07 Age and Growth of Protected Corals

135. The project seeks to develop a methodology to determine the age and growth characteristics of key New Zealand cold water corals. The project description asserts such corals are at high risk from fishing activity.
136. Existing research by NIWA indicated there was significant spatial overlap between fishing activity and cold water coral habitat but also predicted there were substantial areas of suitable habitat across the EEZ outside of the historic trawl footprint<sup>7</sup>. The research does not confirm that commercial fishing poses an adverse effect on cold water corals.
137. This project was proposed for 2016/17 but was considered of lower priority and did not proceed.
138. For the reasons discussed earlier in this submission, the project does not legally meet the definition of a conservation service and does not sufficient merit to funded from the CSP allocation. Accordingly, the project should be removed from the draft CSP programme.

#### MIT2017-02 Characterisation and development of offal management for small vessels

139. While we recognise that offal and small fish are an attractant for seabirds to fishing vessels, most small New Zealand trawl vessels are known to treat the disposal of offal with care so as not to place seabirds at risk. Notwithstanding the low observer rates for coastal trawling and the conservative nature of the seabird risk assessment, the seabird risk assessment indicates that coastal trawl activities per se do not pose an adverse effect or risk thereof for seabirds. For those reasons, the project is not a valid conservation service.
140. We note that the report by G Parker<sup>8</sup> for the Southern Seabirds Solution Trust summarises options for offal management in the New Zealand fleet and notes that offal management is widespread in the fleet..
141. We are in the process of establishing vessel management plans for the South Island inshore trawl fleet and in 2016 have covered approximately 88% of that fleet. Under MIT2017-01, it is our intention to ensure that all coastal vessels implement Vessel mitigation Plans and that

---

<sup>7</sup>Refined habitat suitability modelling for protected coral species in the New Zealand EEZ, Owen Anderson, Di Tracey, Helen Bostock, Mike Williams, Malcolm Clark, NIWA, December 2014

<sup>8</sup> Parker, GC 2017. Stocktake: status of development of mitigation measures applicable to New Zealand Commercial Fisheries. Report to Southern Seabird Solutions Trust by Parker Conservation, Dunedin

all VMPs for the coastal trawl fleet include sections on the management of offal and fish being returned to the sea.

142. For 2017 and 2018, we favour the implementation of existing mitigation measures on all vessels as a priority over further research. If the current measures are shown by observer monitoring to be inadequate or are capable of significant improvement, then we would review the offal management options. However, we do not support that research at present. It is simply neither needed nor appropriate.
143. We oppose the project on the absence of adverse effect and cannot support the project as being a worthy investment of either Crown or industry funds. Accordingly, the project should be removed from the draft CSP programme.

#### MIT2017-03 Characterisation and Mitigation of Protected Species Interactions in the Inshore Trawl Fishery

144. The project seeks to characterise the nature and extent of protected species interactions and to provide recommendations as to whether the level of current mitigation is adequate and whether alternative mitigation methods could be recommended. CSP has indicated that the focus will be on cetaceans rather than seabirds.
145. The project description identifies the high levels of uncertainty relating to captures of protected species by inshore trawl vessels. While there has been observer monitoring in a number of fisheries such as the ECSI and the ECNI trawl fleet, observer monitoring of the fleet has historically been at low levels. The 2016/17 and 2017/18 observer programmes provide for a higher coverage of inshore trawl activity than has been the historical pattern.
146. Until better information is available on the coastal trawl fleet and its interactions with protected species, a robust characterisation or an estimate of the extent of interactions cannot be undertaken.
147. In the absence of observer records to inform the semi-quantitative risk assessment, the marine mammal risk assessment methodology provides for the use of conservative assumptions as to vulnerability. The evolution of the seabird risk assessment has indicated that well-informed risk scores are significantly lower than scores based on assumptions. That the seabird and marine mammal risk assessments do not result in high risk scores under conservative vulnerability assumptions bodes well for a more favourable outcome when the level of information improves.
148. The absence of high risk assessment scores indicates that the coastal trawl sector does not pose an adverse effect or risk to protected species. There is no pressing urgency to undertake a review of the efficacy or need for improvements.
149. Any assessment as to whether the level of current mitigation and residual risk to protected species should be based on the risk assessments currently undertaken. We see no practical or robust methodology that could otherwise be employed in this project to arrive at a robust estimate of the efficacy of existing mitigation and the need for additional mitigation. To that extent, we regard the second objective for the project to be unnecessary.
150. This project appears to have no bounds as to the extent of protected species to be assessed. We have spent the past decade and millions of dollars addressing the measurement of risk, the mitigation of fishing related threats and the implementation of measures on vessels. Characterising the nature and extent of protected species interactions and assessing the efficacy of existing mitigation measures is a substantial project well beyond the perceived

funding level of \$30,000. If the project is to provide any value within that budget, the scope and, in particular, the protected species will need to be constrained.

151. We consider this project is unnecessary and a better conservation outcome would be achieved by promoting the implementation of vessel management plans on the inshore fleet and better monitoring of interactions. If as a consequence of additional monitoring and future risk assessments the coastal inshore trawl fleet is shown to pose an adverse effect to protected species, further initiatives would be warranted at that time.

## **EXISTING PROJECTS**

152. For completeness, we comment on the value and cost recoverability of existing projects.

### INT2015-03 Identification and storage of cold water corals

153. While we do not object to the need for the corals to be identified and appropriately stored, we oppose the recovery of the costs from industry. As noted earlier in respect of Project 2017-07, research has shown that fishing does not pose an adverse effect on cold water corals and there is no justification for cost recovery of the project.

### INT2016-02 Identification of seabirds captured

154. Although we note that the majority of seabirds captured are not at adverse risk from commercial fishing, we see value in the outputs of this project and support both the project in concept and cost recovery of the project.

155. We would like to see a report from DOC on the adequacy of photographic recording by observers and any strategic information on the potential for DNA to aid ID.

### POP2015-02 Flesh-footed shearwater

156. Flesh footed shearwater are one of the highest scoring seabirds in the risk assessment and the project should better inform the risk assessment.

157. We do not oppose the project or its cost recovery.

### POP2016-05 Yellow-eyed Penguin

158. We opposed this project and continue to oppose the project.

159. While yellow eyed penguins are locally a popular iconic species, the risk assessment continues to indicate that the species are not adversely impacted by fishing activity. That assessment is based on increasing levels of observer monitoring of the setnet sector. Additional observer monitoring is planned for 2017/18 to measure the level of interactions and direct effects.

160. Disease and land-based threats continue to be the major issues for this species on the NZ mainland.

161. The project focuses on foraging patterns and the impact of fishing induced benthic habitat modification. We can see merit in obtaining the foraging patterns of yellow eyed penguins since that information can be used by the commercial fishing fleet to implement practices to reduce or avoid interactions.

162. However, we cannot see value in the second objective of indirect effects. The project will not review the effects and will only focus on how such effects might be measured. In essence, the provider is being given funding to establish a priori grounds for further research whilst not providing any tangible research outputs.

163. We cannot support the project and propose it be removed from the programme. The project should be funded from alternative sources and the levies taken in 2016/17 be refunded to industry.

MIT2016 -01 Protected Species Newsletter

164. We have opposed this project since its inception and continue to be opposed to the project.

165. There are no indications that the newsletter has had any penetration into the fishing sector nor is well received as an informative communication nor is perceived to have any conservation value.

MIT 2016-02 Entanglement of whales in pot/trap lines

166. This project was opposed by industry on the basis that there is no adverse effect or risk thereof to any whale species from pot/trap lines and that the rock lobster industry has a Whale-Safe programme in place to mitigate the risk to whales.

167. Our opposition to the project continues.

**Summary**

168. If a strict adverse effect test was applied to the proposed 2017/18 CSP programme as per the Act’s provisions, the only projects that would qualify as conservation services would be:

<b>Project</b>	<b>Total</b>	<b>Cost recovered</b>
POP2015-02 Flesh-footed shearwater	\$89,914	\$44,907
POP2017-03 Salvin’s Albatross	\$134,721	\$67,361
POP2017-04 Auckland Islands Seabirds - Gibson’s and White-capped albatross	\$101,041	\$50,520
<b>Total</b>	<b>\$325,676</b>	<b>\$162,788</b>

169. In addition to the above, some elements of the observer programme, INT2016-02 Identification of seabirds captured and INT2017-03 Identification of marine mammals captured would also qualify but those elements are relatively minor components of the overall activity.

170. However, industry recognises that many other projects have conservation merit and should be undertaken to assist the management of the protected species. We also recognise that DOC would be unable to find alternative funding for those programmes in 2017/18 given that appropriations are by now reasonably firmed. As indicated earlier, industry would be willing to support funding of some projects from the CSP appropriation, with or without an industry contribution as determined by industry and on a “without prejudice” basis to the industry’s position on the legality of the CSP programme. We recognise that such a policy is contrary to the Act but provides a pragmatic approach to funding conservation needs and would only be

supported if DOC and the industry could enter a meaningful dialogue on the future scope and funding of research for marine protected species.

171. Noting the above approach is without prejudice to our position we submit the 2017/18 CSP programme should concentrate the effort on the following short-term strategic issues:

- a. Identification of captures protected species;
- b. Implementing effective vessel mitigation plans on all inshore bottom, surface longline, trawl and setnet vessels;
- c. Establishing a strategic approach to the management and development of a Threat Management Plan for wandering albatross (Antipodeans and Gibson’s);
- d. Resolving the conflicting population estimates for Salvin’s;
- e. Continuing sea-lion pup counts and mark re-sight effort comparable to previous work;
- f. Preparation of material for the upcoming review of the Maui and Hector’s dolphin Threat Management Plan; and
- g. Addressing uncertainty in the common dolphin risk score noting there has been a significant reduction in capture rates in the JMA fleet since industry directly addressed the issue.

172. Our preference for the 2017/18 CSP programme would be as follows:

<b>Project</b>	<b>Description</b>	<b>Estimated Cost</b>	<b>Cost Recovery Level (page)</b>
INT2015-02	Identification and storage of cold water corals	\$44,907	0
INT2016-02	Identification of captured seabirds	\$89,914	100
INT2017-01	Observing commercial fisheries – for inshore focus on SLL and inshore trawl	\$1,146,645	100
INT2017-03	Identification of Marine Mammals, Turtles and Protected Fish	\$16,840	100
POP2015-02	Flesh Footed Shearwater	\$89,914	50
POP2016-05	Yellow Eyed Penguin	\$28,067	50
POP2017-03	Salvin’s Albatross - Bounty Islands	\$175,000	38
POP2017-05	Auckland Island Sea Lion Pup Count	\$112,268	25
POP2017-04	Auckland Island seabird research	\$101,041	50
MIT1	Protected Species Liaison Project – BLL, SLL and inshore trawl	\$157,125	100

with the remainder of the budget to be allocated to the Auckland Island seabird project (provision of helicopter and analysis of results), Antipodean albatross research or Maui/Hector’s dolphin research.

173. We consider that the above research programme would have more beneficial conservation outcomes than that proposed initially by CSP.

## **Appendix 1 – Previous Submission Content**

### 2016-17

Generic Issues raised:

- Scope of Conservation services
- Failure to demonstrate adverse effect
- Interpretation and use of risk assessments
- Shift of focus to indirect effects
- Agency responsibilities for protected species – DOC vs CSP vs MPI

Projects Opposed for Lack of Adverse Effect:

- Components of the observer programme;
- INT2016-03 post release survival great white sharks
- INT2016-04 indirect effects of commercial fishing on shearwaters and red-billed gulls
- POP2016-03 Updated basking shark by-catch review
- POP2016-09 Cetacean habitat suitability modelling project
- POP2016-05 Yellow eyed penguin foraging and indirect effects
- MIT2016-02 Entanglement of whales in pot/trap and setnets

Projects Opposed as Outside Scope Conservation Services

- POP2015-01 Black Petrel

### 2015/16

Issues Raised

- Definition of conservation services;
- Cost recoverability of CSP activities
- Absence of Adverse Effect;
- Lack of Strategic Approach

Projects Opposed for Lack of Adverse Effect:

- INT 2015-01 WCNI Trawling for Maui dolphin interactions
- INT2015-02 Identification of Marine Mammals, Turtles and Protected Fish
- INT2015-03 Identification tools for Marine Mammals, Turtles and Protected Fish
- INT2015-04 Identification of cold water corals
- POP2015-13 Sea-lion
- POP2015-06 Marine Reptiles -literature review interactions
- POP2015-07 Supporting genetic analysis of protected fish species

Projects Opposed as Outside Scope Conservation Services

- POP2015-01 Black Petrel Abundance
- POP2015-02 Flesh footed Shearwater abundance
- POP2015-04 Northern Buller's albatross – taxonomic review
- POP2015-07 Supporting genetic analysis of protected fish species

### 2014/15

Generic Issues raised:

- Absence of Adverse Effect;
- Cost Recoverability of conservation services;
- Agency responsibilities for protected species – DOC vs CSP vs MPI

Projects Opposed for Lack of Adverse Effect:

- Observers WCNI trawl
- INT2013-03 Identification of Marine Mammals, Turtles and Protected Fish
- POP 2014-01 Sea lion project
- POp2014-02 -6White chinned petrels
- POP2014-02-7 Burrowing petrels
- MIT Protected Species By-catch newsletter

Projects Opposed as Outside Scope Conservation Services

2013/14

Generic Issues raised:

- Absence of Adverse Effect;

Projects Opposed for Lack of Adverse Effect:

- POP2012-02 Sea Lions

Projects Opposed as Outside Scope Conservation Services

2012/13

Generic Issues raised:

- Absence of Strategic Plan alignment
- Absence of Adverse Effect
- Cost Recoverability of Projects
- Agency responsibilities for protected species – DOC vs CSP vs MPI
- Poor prioritisation of Expenditure

Projects Opposed for Lack of Adverse effect

- POP2012-01 and POP2012-02 Sealions
- POP2012-05 White capped albatross
- POP2012-08 Pitt Island Shags
- MIT 2012-03 Mitigation Techniques in Set Net Fisheries

Projects Opposed as Outside Scope Conservation Services

- POP2012-04 Campbell Island and grey-headed albatross