

28 May 2018

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

Dear Mr Sanson

**COMMENTS ON THE PROPOSED CONSERVATION SERVICES PROGRAMME
FOR 2018/19**

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 2018/19 released for consultation on 27 April 2018. 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 Sector Representative Entities (SREs), Seafood New Zealand, Fisheries New Zealand (FNZ) and Department of Conservation (DOC).
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 owners of deepwater quota. DWG works in partnership with FNZ 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 trusted 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 90% 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. We are not able to let the matters go unresolved and seek dialogue with DOC on this as a matter of urgency.

LEGISLATIVE SCOPE OF CONSERVATION SERVICES

10. To understand the context for CSP activities requires an understanding of the roles and responsibilities of DOC, FNZ and more specifically CSP.
 - a. 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.
 - b. 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.
 - c. Conservation services is defined in the Act and is confined to any adverse effects posed by commercial fishing on protected species. only activities attributable to the adverse effects of fishing can be funded from CSP levies.
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 that 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. 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).
17. 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.
18. 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”.
19. 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.

20. With the CSP budget accommodating what should be DOC mainstream funded projects, FNZ has adopted a role of funding protected species research at the expense of funding for its fisheries activities. In the 2018/19 proposals, FNZ has included projects to:
 - a. review habitat use and spatial distribution of Antipodean Albatross; and
 - b. characterise and quantify non-fishing threats on yellow-eyed penguins.
21. 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, if the projects are approved and funded, there should be no cost recovery from commercial fishing.
22. There are occasions where industry has consented to fund some projects from CSP funding which would not otherwise be eligible. Those projects have been funded on the basis of:
 - a. the public good;
 - b. the need for research into protected species; or
 - c. the inability of CSP to access appropriate funding from elsewhere in the DOC appropriations,

That might or might not include an industry contribution. We have submitted for some years that DOC's marine species activity has been significantly underfunded relative to its conservation obligations in the Natural Heritage area. We view our 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. With the increased appropriation to DOC's Natural Heritage activities, we expect to see an increase of funding for marine species research.

23. FNZ 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, FNZ 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 FNZ review. We would welcome urgent discussions on that matter.

ABSENCE OF STRATEGIC MANAGEMENT PLANS

24. In previous submissions, we have noted the absence of strategic plans for the management of protected marine species. This includes an overall strategy for protected species management and species specific management plans. The absence of those strategic plans does not allow for stakeholder engagement on the strategic approaches and fails to provide strategic contexts of the research projects.
25. Discussions with the new Director, Aquatics Group, leave us hopeful of fundamental change and improvement in respect of the strategic management of the marine protected species area. We welcome more discussions on strategic directions and processes for this area.

26. We draw to your attention the involvement of research providers in the process to develop the research programme. While the providers may contribute their views as to what might be appropriate for future research, we would expect the final decisions to be made relevant to the management of the aquatic protected species. We do not expect research providers ,

Overall Strategic Plan

27. While CSP operates a planning and prioritisation process, the process is a pro forma process that seeks to justify the CSP perspective but fails to allow for stakeholders to engage and discuss the strategic and operational context that sets the wider context for the CSP programme. Notwithstanding protected species existing in a wider context of environmental and habitat change, there has been no process or identification as to the drivers for population decline or discussion as to the general operational approach to reviewing wider impacts. Recovery or future trajectories for protected species populations can only be considered on the basis of understanding the drivers of change and modelling populations taking into account those drivers. With needing a nexus to fishing, CSP might consider such issues to be outside their sphere of interest. However, CSP operates as part of the wider DOC Marine Threats division.
28. While the Climate Change Adaptation Working Group was established in 2016 and funding provided for research, we are unaware of any work being undertaken by DOC to assess the impact of climate change on protected species. After years of researching fishing for protected species population changes, researchers are now more commonly pointing to climate and environmental change as the drivers. Yet, we appear to have no DOC or CSP programmes dedicated to researching those effects. The movement in protected species populations reflects changes in environmental conditions, natural and anthropogenic. Only once the natural impacts are understood can the anthropogenic impacts be understood.
29. DOC has focused its CSP activities into three streams: population research; interaction research and mitigation research. While not disagreeing with that split, we wish to see a strategic statement developed as to the operational intent for those streams, one that would allow for stakeholders to engage on and agree with an operational model.
30. For example, the approach to the population component seems to be to track populations of a selected set of species. We are not convinced that monitoring a wide range of populations is necessary, sentinel species could be identified and population monitoring confined to those species as exemplars. We could more readily agree to such a strategy than the present strategy of monitoring populations particularly since CSP continues to focus on monitoring the abundance and demographics of species that have been demonstrated not to be at adverse risk. In the population stream, it would also be appropriate for DOC to identify those species which it considers meet the adverse effects threshold test, undertake fully quantitative risk assessments and incorporate that outcome into CSP or DOC operations as appropriate.
31. In the interaction stream, we are concerned to see the development of tools and procedures being cost recovered as research to measure and understand the impacts of interactions.
32. We are concerned that CSP continues to research mitigation options and new technology in preference to supporting proper implementation of known effective mitigation measures.

Only when the current suite of mitigation measures have been implemented and proved inadequate should CSP research alternative novel measures.

33. DOC needs to identify where mitigation is inadequate to address impacts and provide stakeholders with a programme that clearly identifies the direction of travel and priorities. Without those wider strategic processes in place, the CSP project appears ad-hoc, unfocused and irrelevant to achieving conservation benefits.
34. The CSP programme is fundamentally concerned with achieving conservation benefits by identifying and implementing effective mitigation for protected species adversely affected by commercial fishing. If that is not the fundamental goal, we would wish to know what the goal is. If it is the goal, then CSP needs to revisit their programmes and re-align their programme to that goal. Many of the current projects do not align directly to that goal.

Species specific Management Plans

35. The lack of species specific management or recovery plans further obfuscates the value of the programme. Research plans can only be seen in the context of a management or strategy plan. Those are absent for most protected species. The current plan for seabirds is dated from 2010 and has not been updated with more recent research.
36. 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 strategic management of marine species. Both focus on threats, the Population Management Plans only on fishing-related threats.
37. Strategic plans should state the vision, the population objectives, 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.
38. 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.
39. 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.

40. 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. We note that a threat management plan may be developed for yellow-eyed penguins but understand there is some uncertainty as to the content and nature of the plan.
41. 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.
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.

INDIRECT EFFECTS OF FISHING NOT PROVEN

43. 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 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.
44. 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. 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. Crawford, R.J.M., Sabarros, P.S., Fairweather, T., Underhill, L.G. and Wolfaardt, A.C. 2008 *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 (2008) *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. 2015 *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.
45. 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/>. There have been numerous comments as to large numbers of little blue penguin deaths this year.

46. 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.
47. We note that the discussion paper by Roe et al (2014) on New Zealand sea lion pup mortality: causes and mitigation¹ 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.
48. 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”.
49. The work of Robinson (2015)² 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”.
50. 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.
51. 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.
52. We have spent millions over the past five years to ensure the L2 and L3 risk assessments produce 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.
53. 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.
54. 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

¹ Roe W, Roberts J, Michael S, Childerhouse S (2014) *Discussion paper on New Zealand sea lion pup mortality: causes and mitigation*

² Robinson, W. M. L., Butterworth, D. S., and Plaga’nyi, E’ 2015, *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.

should fund the research from the appropriation to Natural Heritage or find alternative funding for the research.

THE SEABIRD MEDIUM TERM RESEARCH PLAN 2017

55. The 2017 seabird medium term research plan (MTRP) was used to inform the development of the 2017/18 CSP programme.
56. 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.
57. The MTRP adopts the Richards and Abraham 2017 risk assessment³ as being the guiding basis for the plan but then imports the methodology from earlier iterations of the Seabird Risk Assessment.
58. The plan includes research activities for:
 - 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 assessment⁴ but have been reassessed as negligible risk in the 2017 assessment; and
 - c. 5 taxa where Rowe⁵ identified a moderate to high risk from commercial fishing methods other than those analysed in the L2 risk assessment.
59. CSP asserts that all 35 species fit within its mandate and are eligible for CSP funding.
60. 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.
61. 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 ALLOCATION OF FUNDING

62. At previous CSP RAG meetings, 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.

³ 2017 Risk Assessment in preparation.

⁴ 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.

⁵ 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.

63. 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.
64. 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.

PROTECTED SPECIES LIAISON PROJECT – POSITIVE ACTION

65. Industry considers this to be the priority project for CSP in 2018/19 and 2019/20.
66. Industry has committed to the implementation of protected species risk mitigation plans on all inshore vessels by the end of 2020. Such vessels constitute a significant share of the risk to marine protected species but there is no mitigation strategy for the fleet. The inshore fleet is very diverse in nature and in the level of risk created by fishing activities. A regulated approach, as per the bottom long-line sector, has failed to provide appropriate and adequate mitigation for a diverse fleet which might range from vessels of 5 metres in length and vessels of 25 metres in length employing the same fishing method but without generating the same level of risk presumed in current regulatory approaches.
67. Industry has noted the success of the deepwater mitigation approach of fleet operational procedures, vessel specific plans and monitoring and review and the success of the liaison officer programme where it has been implemented in the inshore fleet. It intends to build on the successes of those programmes to address protected species mitigation in the inshore fleet. Liaison officers (LOs) are the primary resource to liaise with vessel operators and to implement plans on vessels.
68. FINZ, DOC and FNZ are committed to achieving effective mitigation in the inshore fleet by 2020. That will require a stronger programme management approach than has been present in the existing LO programmes and a higher level of funding than allocated to date or as planned for 2018/19.
69. There are some 459 vessels in the inshore fleet with 130 primarily trawl, 214 set-net, 73 bottom long-line, 35 surface long-line and 18 Danish seine vessels. Risk mitigation plans have already been completed for some long-line and trawl vessels. Excluding those vessels for which plans exist covering all their fishing activity, to achieve the FINZ goal, 419 plans will need to be implemented in the next 2½ years. It should be remembered that, while there may be 214 set-net vessels, 156 of those vessels are small vessels operating in harbours targeting flatfish spp. and mullet for which the preparation of risk mitigation plans should be simple, relative to all other plans.
70. The current SLO programme is focused on the appointment of fishery-specific LOs with \$35,000 allocated in each year to the surface long-line (SLL), bottom long-line (BLL), inshore trawl(TR) and setnet (SN) fisheries. A proportion of the method funding will go to fund a programme co-ordinator. Progress in implementing vessel-specific programmes to-date has been mixed. While vessel plans were implemented on all SLL vessels in 2016/17, after 3 years of effort 39 BLL plans have been implemented and no trawl plans have been implemented as yet in 2017/18.
71. The decision to implement plans on all vessels by 2020 necessitates a re-think of the implementation strategy. Whereas LOs have been appointed on a method specific basis,

most vessels operate with more than one fishing method. If the current implementation approach was used, the fishers would face implementing separate plans for each fishing method and having a relationship with multiple LOs. The approach would also incur significant costs in travel and accommodation to move the LOs between ports.

DIVERSITY OF INSHORE FLEET							
Degree of Exclusivity ⁽¹⁾	BLL	DS	SLL	SN	TR	Total	Percentage of Fleet Total
	Number of vessels						
Exclusively	16	5		51	5	77	17%
Almost exclusively	8			22	6	36	8%
Predominantly	16	3	1	54	21	95	21%
Mixed	33	10	23	87	98	251	55%
Fleet Total	73	18	24	214	130	459	

(i) The degree of exclusivity is measured by the percentage of trips; exclusively is only one method, almost is between 95% and 100%; predominantly 75%-95% and; mixed less than 75%.

72. It is proposed to change the implementation model to a port/regional based approach with LOs responsible for a vessel and implementing a comprehensive plan for their vessels. They will therefore need to be competent in developing mitigation for all fishing methods. The table below groups the vessels by ports.

LOCATION AND METHOD OF VESSELS						
Area	BLL	DS	SLL	SN	TR	Grand Total
Northland	15	4	2	40	6	67
Auckland	14	2	1	82	5	104
Bay of Plenty	12	7	12	35	9	75
East Coast North Island	10	0	4	9	22	45
West Coast North Island	9	0	0	15	4	28
Nelson, Marlborough	5	3	5	11	23	47
West Coast, South Island	4	0	0	0	10	14
Kaikoura/Canterbury	3	2	0	12	10	27
Otago	1	0	0	5	32	38
Southland	0	0	0	4	9	13
Vessels	73	18	24	213	130	458

73. We will need to consider how many LOs would be needed and how we would aggregate the regions to form an LO region. We can still maintain a priority implementation on a regional basis. In 2018/19 that would include Southland, Otago and Canterbury, Northland, Auckland and Bay of Plenty. We have scheduled a joint discussion between FINZ, DOC and FNZ on 6th June to discuss the implementation plan in more detail.

74. Notwithstanding that detail not being available, it is apparent that the funding requirement to achieve the plan will be more than the current budget of \$130,000 for 2018/19. We recommend that the budget based on implementing some 200 vessel specific plans in 2018/19 be set at \$250,000 for 2018/19. We would prefer that the budget be cost recovered across all the major inshore finfish targets. This would accommodate any change in the implementation programme. We would also wish to see the programme funded on an ongoing basis to allow for implementation by the end of 202. Any annual unspent funding should be transferred to the following year.
75. The appointment of the LOs to implement the programme is vital to the success of the programme. We are disappointed with the performance of the programme to date and consider DOC needs to revisit the appointment terms and conditions for the LOs. We would like to be involved in that process.

SUBMISSIONS ON PROPOSED PROJECTS

76. 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.
77. 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.
78. We have commented only on new 2018/19 projects. Refer to our 2017/18 submission for comments on prior year projects.

SUPPORTED PROJECTS

INT2017-01 Observing commercial fisheries

79. The role of the observer differs between the sectors. The deepwater sector uses observers to undertake both monitoring and scientific sampling of catch. In the inshore sector, scientific sampling on small vessels is often impractical and programmes are more focused on monitoring, in particular, for protected species interactions. At the same time, placement of observers on those small vessels is difficult to achieve. Digital monitoring may provide an alternative effective option.
80. We support the continuation of an observer programme, at least until any alternative or more likely complementary electronic monitoring (EM) 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. 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.
81. Given the initiatives to implement vessel risk mitigation plans in the inshore fleets, 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.

82. 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 FNZ to evaluate the efficacy of EM for that fleet.
83. The Canterbury trawl fleet has been assessed as posing a significant threat to Salvin's albatross populations. We support monitoring of that fleet to obtain more robust estimates of risk.
84. The Otago/Southland setnet fleet has been implicated in the recent decline of the Mainland yellow-eyed penguin population. While we do not support that assertion, further monitoring of that fleet is appropriate to obtain a robust estimate of the risk to the penguins.
85. Over 1,200 days of fishing in the south Taranaki area 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 biopsy dart gun precludes any reasonable prospect of obtaining a biopsy sample. While the programme has provided robust information to inform the Maui dolphin TMP review, we consider the programme is ineffective in respect of the biopsy objective and does not provide a justifiable return on scarce resources. Any continuation of the programme should be re-visited as a consequence of the TMP review.

INT2018-02 Trialling EM systems for small vessels

86. The existing black petrel (BP) electronic monitoring (EM) project has already demonstrated the use of cameras for monitoring seabird captures. This addresses the primary focus of this project. This project was led by industry and is a voluntary measure.
87. Whilst we support the trialling of electronic monitoring systems we cannot agree that such projects should be cost recovered from industry. The BP work demonstrates that industry initiatives are addressing this. If government wish to do such projects it should be done in conjunction with industry.
88. The current proposal does not provide for a collaborative approach. If considered a government initiative, then the development and trialling of new technologies and processes should be acknowledged as a departmental "business as usual" proposition and should not be cost recovered.
89. Government has made the decision that it will implement digital monitoring for some, or all, of the fleet. In that sense, this project does not assess the efficacy of digital monitoring for fisheries management purposes or recording adverse effects but seems more related to proving the capability of systems for small vessels, particularly those less than 7m with no continuous power systems. It is up to the suppliers of such equipment to prove the capacity and capability of their systems and not for DOC as purchaser to fund that proof of capability.
90. We note that CSP intend to focus this research in set-net vessels based around Otago/Southland and in doing so provide additional coverage of yellow-eyed penguin interactions. Our information on vessels of that size in Otago/Southland indicates that there is only one tender on a set-net vessel which would meet the vessel characteristics. While that vessel operates in Otago/Southland waters, it does not operate the tender near yellow-eyed penguin foraging or colony sites. If DOC wanted to test the capability of such equipment being suitable for vessels with no continuous power supply, DOC would need to

focus its trialling on the trailer borne set-net fleet operating in northern NZ harbours. These are not within yellow-eyed penguin territory.

91. DOC needs to establish what objective it seeks to achieve – trialling of systems for small vessels or improving monitoring coverage levels in yellow-eyed penguin territory. We could support additional coverage of fishing activity in yellow-eyed penguin territory as a cost recovered conservation service but not trialling of small vessel systems per se. In either case, voluntary assistance from industry will be required since DOC has no power to require vessels to carry such equipment. DOC will therefore need to liaise with fishers to execute the programme. A number of fishers have expressed an interest in volunteering to trial the systems. We will work with DOC to progress the trial but maintain our belief that the trial should not be cost-recovered.

INT2018-04 Collection of data and samples from by-caught basking sharks

92. We recognise the wider scientific benefits that might arise from the research project and to that extent, can support the project in principle but cannot support the project is within the ambit of conservation services or should be cost recovered.
93. To obtain the scientific benefit of the project, the processes and procedures will need to be pragmatic and voluntarily accepted by industry. There can be no compulsion on fishers to comply with the procedures. Any tools or procedures developed for data collection and sampling must be practical and safe and have sufficient precision to be of scientific value. Permits for retention of material will be required for the fleet to operate such procedures. Training and education of skippers and crew and processes for the return of the sampled material will need to be established.

POP2018-02 Auckland Islands Sea Lion Pup Count

94. We support this project but consider that the project should not be cost recovered.
95. The TMP review established that impacts other than fishing, e.g. disease and oceanic conditions change, were primarily responsible for the decline in the sea lion population and that the impact of fishing activity will play only a minor role in the future viability of the sea lion population. The absence of fishing constituting a significant risk to the long term viability of the sea lion population does not support cost recovery of the project. That the pup count is used to project sea lion abundance and sea lion abundance is critical to the establishment of fisheries impact limits equally does not support cost recovery. In view of the low impact of fishing on the population and the low number of actual mortalities relative to the limits, there is no need to set fisheries impact limits.

96. We have continuing problems with the absence of funding for a helicopter to address the efficacy of the project (including collecting other data such as white-capped albatross census data). The Deepwater Group has previously lobbied for additional funding (from a variety of sources) for helicopter support but we consider that it is unacceptable to rely on this.

POP 2018-01 Improved habitat suitability modelling for protected corals in New Zealand waters

97. We recognise that updating the predictive models as substantive new information becomes available is important. However, this support is caveated on that:
 - a. this project is not cost recovered, as this is a routine exercise required to understand the nature and extent of protected corals and habitats, and

- b. there is substantive new information available to warrant an update at this time.
98. We are concerned that there appears to be little new information available since the last update to expect any substantive change in the models. There is four years of additional observer data since the last update but the trawl footprint does not vary significantly each year. Instead the annual trawl footprint has been decreasing since the early 2000s with less than 1% of the EEZ trawled annually, so this does not help with advancing an understanding of coral distributions in unsampled areas and improving these models.
99. It would be useful for government to invest in establishing baseline information in areas that have not previously been sampled. We are aware of a similar project that FNZ have contracted to more comprehensively sample the Chatham Rise benthos in order to increase the certainty of species-distribution and habitat suitability models. It would appear that these projects have similar objectives and cross over so we would encourage DOC and FNZ to consult with each other on this, and to establish if and how these projects should be integrated.
100. The recommendation (output 3): 'Recommendations for any future research required to further improve the estimation of risk to protected corals from commercial fishing' should be removed as it is too broad and unconnected with this project. It should be replaced with outputs to:
- a. evaluate how much this project has improved the accuracy and reliability of habitat modelling especially with respect to protected corals and;
 - b. Recommend options for future improvements in the methodology.

POP 2018-06 Protected coral connectivity in New Zealand

101. We recognise the wider scientific benefits that might arise from the research project and to that extent, can support the project in principle but cannot support the project is within the ambit of conservation services or should be cost recovered.
102. The threat from fisheries to cold water corals is low and there has been no extension of the trawl footprint to suggest the risk has increased, as noted above the annual trawl footprint has been decreasing since the early 2000s and is less than 1% of the EEZ.
103. A coral literature review has already been contracted by DOC, which we support. This includes reviewing and summarising information in regard coral connectivity, so Objective 1 is already being carried out.
104. In regard to 'black corals', which this project proposes to specifically assess, a recent analysis for all HOK, HAK, LIN, SWA and WWA target tows within the EEZ showed only 6kg of black coral had been observed in the last five years, this equates to around 1kg per year. Similarly, for all ORH and OEO target tows within ORH3B ESCR, ORB3B NWCR and ORH7A 16kg had been observed in the last five years, on average this is 3kg per year. In total, that is around 4kg per year. This is also for all black corals, not individual species, so if reported at a species level this would comprise an even smaller fraction of that total amount. There is no justification for cost recovery of this project.
105. We request a discussion with DOC on what species might be more usefully assessed for fisheries management purposes.

PROJECTS NOT SUPPORTED

106. 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.

INT2018-03 Development of observer photograph protocols and curation

107. We cannot support this project being funded from conservation levies or being cost recovered. The development of business protocols and processes is a DOC “business as usual” business process. We recognise that there may be benefits to CSP in efficiency terms but fail to see the contribution to research of adverse effects.

108. We note that DOC must hold photographs of other wildlife and vegetation and must hold those in a curation process. We see no reason why a separate process would be developed for aquatic environment photographs.

INT2018-05 Updated analysis of Spine-tailed Devil Ray post release survival

109. We cannot support this programme as a conservation service. It does not address an adverse effect and while it might provide some scientific value, the contribution appears to be minimal. The project will use data from 9 additional sPAT tags placed on rays since 2014. It is unclear as to whether the project is assessing the benefits of better release procedures as recommended in the 2014 report⁶, presuming those recommendations were discussed with and implemented by the fleet or merely to analyse data because the data exists.

110. We have strong reservations that the project will provide substantive new information, additional to that already known, on the factors driving by-catch and post-release survival. The 2014 report provided recommendations for safer release procedures. We see no reason to replicate the work previously undertaken. Furthermore, we have no reason to believe that the release procedures in the 2014 report were implemented. It is unclear whether this project will provide any benefits worth purchasing.

111. If there is an issue with post release survival, DOC would do better to engage with purse seine vessel operators to implement improved release procedures.

POP2018-04 – Flesh-footed Shearwater – Population Monitoring

112. We cannot support this project and cannot support cost recovery.

113. While flesh-footed shearwater is assessed to be the third highest ranking bird, the risk score (0.67) is sufficiently low enough to indicate that fishing does not pose an adverse effect to the long term viability of the species.

114. The assessment indicates that the principal sources of uncertainty in the assessment relate to the low levels of observer coverage in the trawl fleet. The level of uncertainty in the population demographics is low. The appropriate management response for flesh-footed shearwaters is to increase observer coverage to reduce the uncertainty of the fatalities estimate, not to obtain new population estimates.

115. We have concerns that DOC continue to focus research on monitoring the abundance and demographics of species that are assessed to be at significant risk, well beyond the point to

⁶ Francis, M.P., (2014) *Survival and depth distribution of spinetail devilrays (Mobula japanica) released from purse-seine catches*, NIWA

establish an adverse effect exists and well beyond the point when the focus should switch to mitigating the risk. While continuing population research may yield scientific benefits, it will do little to generate conservation benefits or mitigate the risk to provide conservation value.

116. The information available in reports suggests that the species is at or near carrying capacity and that future growth of numbers is limited by competition for nesting space.

117. If the assessment is correct as to the estimate of and uncertainty of captures, greater conservation value would be achieved by implementing effective risk mitigation plans on vessels and then increasing monitoring to confirm the level of captures.

POP2018-05 Westland Petrel population estimate

118. We cannot support this project and cannot support cost recovery of the project.

119. We recognise Westland petrels are the 4th highest ranking species in the risk assessment. The assessment indicates that the principal sources of uncertainty in the assessment relate to the low levels of observer coverage in the trawl fleet. The level of uncertainty in the population demographics is low, reflecting the high information levels for the species. The appropriate management responses for Westland petrels are to ensure that appropriate risk mitigation measures are operating on all vessels and to increase observer coverage to reduce the uncertainty of the fatalities estimate, not to obtain new population estimates.

120. The recent work of Waugh et al 2015 found that the variability in Westland petrel abundance was largely a result of ocean productivity, not fishing impacts.

121. We view this as another project where DOC seeks to monitor the population from CSP funding without due cause.

MIT2018-01 Protected Species bycatch media

122. We have opposed this project for many years and continue that opposition

123. The project has little penetration and support by fishers. The 2016/17 progress reports identifies that on average only 39.4% open the electronic newsletter (the main format provided for dissemination). It is notable that the information provided only records the number that open the email and provides no information on effectiveness of the messaging.

124. The 2016/17 progress report provides no indication as to how effective this work is. This is a communications exercise and does not fall under CSP. Industry is committed to working with government to continue education and awareness programmes outside of the CSP cost recovery process. This will ensure cost effective communications are provided with true measurables provided as to their efficacy.

125. We do not support the inclusion of the preparation of an updated identification guide for sharks and seabirds in this project. We opposed the update of that material as a conservation service and object to it proceeding this year.

MIT 2018-02 Haul Mitigation for small longline vessels

126. We have reviewed the recommendations of project MIT2015-02 and consider that the dangler should be adopted and implemented in preference to researching further options.

MIT2018-03 Setting Mitigation for small longline vessels

127. We cannot support the project as currently specified.

128. We consider there is a need to address the mitigation for small longline vessels in that the current regulated regime is not entirely appropriate for the small long-line vessels. However we do not consider that testing and contributing to the development of line setter devices is a conservation services to be cost recovered.

MIT2018-04 Options For Temporal And Spatial Management Of Key Fisheries

129. The identification and evaluation of temporal and spatial management tools for the management of fisheries is a complex matter that requires a far greater understanding of the fisheries and environmental impacts than can be garnered for this project. We see the project as an unsubtle attempt to pre-empt the Hoiho TMP process. The risk assessment process will include an identification and quantification of the threats facing hoiho and an evaluation threat management measures should they be considered appropriate. We see no reason why CSP should be seeking advice on such measures in advance of any determination that set-netting constitutes an adverse effect for hoiho.

130. Neither the seabird risk assessment nor the recent observer coverage of the Otago/Southland setnet fleet supports the proposition that setnetting poses a risk to the long term viability of the hoiho population.

131. This project seeks management advice as to options and is not contained within the context of conservation services.

Summary

132. If a strict adverse effect test was applied to the proposed 2017/18 CSP programme as per the Act's provisions, few projects would qualify as conservation services.

133. 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 2018/19 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.

134. Noting the above approach is without prejudice to our position we submit the 2018/19 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

135. Our preference for the 2018/19 CSP programme would be as per the following table, with the remainder of the CSP budget unspent. The intent of the programme is to derive conservation benefits, not to ensure the budget is spent:

Project	Description	Estimated Cost	Cost Recovery Level (%)
INT2016-02	Identification of captured seabirds	\$89,413	100
INT2017-01	Observing commercial fisheries – for inshore focus on SLL and inshore trawl and inclusion of ECSI trawl	\$1,000,000	100
INT2017-03	Identification of Marine Mammals, Turtles and Protected Fish	\$16,765	100
INT2018-01	Trialling EM systems for small vessels	\$55,883	50
INT2018-04	Collection of samples from basking sharks	\$22,353	0
POP2017-04	Auckland Island seabird research	\$100,590	50
POP2017-06	Indirect effects on seabirds in north-east North Island	\$44,707	0
POP2018-02	Hoiho population and tracking project	\$67,060	50
POP2018-03	Auckland Island sea lion pup count	\$111,767	10
POP2018-01	Improved habitat suitability modelling for protected corals	\$60,000	10
POP 2018-06	Protected coral connectivity in New Zealand	\$40,000	10
MIT2017-01	Protected Species Liaison Project – BLL, SLL and inshore trawl	\$250,000	100
TOTAL		\$1,758,538.	