



23 June 2017

Dr Shelton Harley Chief Scientist Ministry for Primary Industries PO Box 10420 Wellington

COMMENTS ON FISHERIES RESEARCH SERVICES FOR 2017/18

Dear Shelton,

1. Thank you for the project outlines of the proposed fisheries research services for 2017/18. In the absence of other consultation opportunities to comment on the proposed research projects, we have taken this opportunity to record our views.

The Submitters

Fisheries Inshore New Zealand

- 2. Fisheries Inshore New Zealand Limited (FINZ) represents 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 on behalf of its quota owners, fishers and affiliated Commercial Stakeholder Organisations (CSOs). As part of that work it also works collaboratively with other industry organisations and Sector Representative Entities (SREs), Seafood New Zealand, Ministry for Primary Industries (MPI) and the 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 now represents HMS fisheries and those in Area2 and has included comments from other inshore commercial fishing representative bodies, including Northern Inshore and Southern Inshore.

Deepwater Group

- 5. Deepwater Group Limited (DWG) is a non-profit organisation that works in partnership with the Ministry for Primary Industries to ensure that New Zealand gains the maximum economic yields from its deepwater fisheries resources, managed within a long-term sustainable framework.
- 6. Their mission is to optimise the sustainable economic value of our deepwater fisheries. DWG's vision is to be recognised as the best managed deepwater fisheries in the world.

General Comment

Research Funding

- 7. Industry is concerned at the long term reduction in the expenditure levels for fisheries science and the increasing proportion of the appropriation allocated to control and enforcement aspects of the Ministry. Whereas in 2004, the appropriation for science formed approximately 42% of the fisheries appropriation and enforcement and compliance 32%, those percentages have now reversed with enforcement increasing to 42% and science falling to 30%. The science appropriation has effectively remained constant in dollar amounts during the period. With increases in the cost of science, the commitment to investing in fisheries has fallen by over 30% in real terms since 2004. With the implementation of IEMRS, Ministry expenditure on control and enforcement activity will increase to be over 50% of the MPI fisheries appropriation.
- 8. We request MPI review the distribution of its appropriation and shift funds from its control functions to its investment activities.
- 9. MPI's role as resource manager of New Zealand's fisheries resources is becoming secondary to MPI's role as a regulator of the use of those fisheries resources. While there is an acknowledgment that there is potential growth in the value add component of fisheries, there is also significant potential to increase product volumes. That volume increase is being restrained by the inability to research fishstocks and then review the allowable catch levels. Many stocks have had no review of their catch levels since being introduced into the QMS; many stocks have no defined management frameworks or harvest settings and even highly targeted stocks are subject to infrequent review.
- 10. Over 300 of the QMS stocks have a gross annual revenue of less than \$100,000 per annum and an investible annual surplus of less than \$2,000. Industry has lobbied for research into fisheries assessment methodologies appropriate for those low value stocks. While some progress had been achieved by the Ministry in establishing a research programme to address the management of such stocks, it appears that the Low Information Stocks Programme (LISP) was then incorporated into the wider Future of our Fisheries initiative. Since then, all communication on the programme has ceased. We are unable to determine whether the programme will continue as planned by MPI.
- 11. We would like to discuss the priorities of the programme with you in the hope that we might be able to progress that important field of research.

Lack of Adverse Effect

- 12. We have previously stated our view as to the validity of the Fisheries (Cost Recovery) Rules 2001 (the Rules). Since cost recovery is under current review by MPI, we take the opportunity to restate our views and opposition to the validity of levies based on the current regulations.
- 13. The Rules can only be valid to the extent that they enable the principles within the Act to be implemented, are consistent with and do not seek to modify those principles or extend the definitions beyond those contained in the empowering sections of the Fisheries Act 1996.
- 14. Fisheries and Conservation Services are defined in section 2 of the Act and are wider in scope than the activities defined in section 262 which sets out the recoverability of fisheries and conservation activities. The fact that an activity is a Fisheries or Conservation Service as defined by the Fisheries Act does not imply that the activity may be cost recoverable. For a service to be cost recoverable, it must first be assessed against and pass the thresholds contained in in Sections 2 and 262 of the Act and then be considered under the Cost Recovery Rules for the levels of cost recovery. If a service is inconsistent with the definitions in section 2 and principles in section 262, it must be presumed that the activity is not cost recoverable. It is not valid that the Rules are used solely to determine cost recoverability and the Section 262 principles are set aside.
- 15. Many projects contain elements of general public and industry interest. That joint interest needs to be reflected in the level of cost recovery sought by MPI.

- 16. Cost recoverability of research is limited under the principles of the Act to those projects to research adverse effects or the risk thereof. Adverse effect is not defined in the Act but in view of the environmental principles can only be viewed as detrimental to the long term viability of the aquatic environment. The examples of risk in the Act indicate that the risk must be material, not insignificant. Where adverse effect or material risk thereof cannot be demonstrated, there are no grounds for cost recovery. That approach was confirmed by the Government Auditor in respect of their 2002 and 2005 reviews of CSP activity.
- 17. It is our view that a number of past and current services that have been subject to cost recovery do not meet the statutory definitions in section 2 of the Act, and/or are inconsistent with the cost recovery principles in section 262 of the Act. In respect of fisheries research services, we submit that aquatic environment research into population demographics, abundance and dietary structures are undertaken in the general public interest of protected species management and in the absence of adverse effect are not cost recoverable.
- 18. We refer you to our more detailed submissions of 22 June 2016 on MPI cost recovery levies and our submission of 15 May 2017 on the CSP programme.
- 19. We submit that the Crown has unlawfully levied the industry for these services. Our view is that, in the absence of adverse effect, MPI's current cost recovery proposals continue that unlawful activity.

Lack of Strategic Approach

- 20. We appreciate that you are endeavouring to establish an appropriate consultation programme for all fisheries research and, while the deepwater, shellfish, and highly migratory species fisheries have effective systems in place, work still needs to be done in the inshore finfish and aquatic environment fields. We support your moves to progress those processes.
- 21. Our submission opposes a number of the projects proposed for aquatic environment research for lack of strategic value. We believe that stems from the lack of a strategic direction for aquatic environment research and the apparent unwillingness of the Crown generally to accept research findings that the risk to the aquatic environment from commercial fishing is lower than that perceived. Too many projects persistently attempt to prove a level of impact that simply does not have substance or continue previous research approaches without factoring in more recent findings. The absence of a strategic plan for aquatic environment research results in the research programme lacking context and rationale.
- 22. We have previously expressed our concern that MPI had extended its scope of research to include management of protected species in isolation of any fisheries context. Protected species management is the domain of the Department of Conservation and to the degree commercial fishing poses an adverse effect, aspects of DOC activity may be cost recoverable under the CSP programme. There are limits to the scope of MPI's interests in respect of the aquatic environment and a nexus to fishing activity needs to exist.
- 23. With risk assessments in place, we submit that it is timely for MPI to undertake a strategic review of the impacts of commercial fishing and make definitive decisions as to the relevant issues for future aquatic environment research and present a strategic plan for such research.

Black Petrel Research

24. In this year's MPI and CSP research plans, there are four black petrel research projects to be funded – a cost of \$203,000 – and a significant observer programme in the snapper trawl and bluenose bottom longline fisheries (a cost of \$525,000). Three of the projects relate to demographic research and the fourth to factors affecting the capture rate of black petrels.

- 25. In addition to the above projects, CSP has a Liaison Officer programme targeting the bottom longline fishery which catches some black petrels. That programme is levied for a further \$40,000 and has been running for the past three years.
- 26. We are concerned that there appears to be no planned research strategy for the black petrel and research is proceeding on every topic possible rather than a structured programme. We are aware that a Black Petrel and Flesh Footed Shearwater Action Plan has been prepared but the scope of that plan is limited to fisheries impacts and does not address wider research needs. We request that, before this research on black petrels is commissioned, DOC and MPI establish a Black Petrel Strategic Plan and a Research Strategy, that provides a logical and appropriate context for black petrel population research.
- 27. Cost recovery of 50% is sought for the three demographic projects and 100% for the capture factors. Cost recovery for black petrel related work in 2017/18 is estimated to total over \$760,000, notwithstanding research indicating that the population of black petrels is increasing and that commercial fishing in New Zealand waters does not pose an adverse effect or risk thereof for black petrels. Section 262(c) of the Fisheries Act provides cost recovery can only be sought where commercial fishing poses an adverse effect or risk thereof. We therefore oppose the cost recovery of any black petrel research.

Comments on Particular Projects

- 28. We include comments on particular projects.
- 29. Last year we opposed a number of research projects proposed by MPI. Our views on those projects remain unchanged.

RCO2017-01 Fishery characterisation and management procedure review for RCO2 and RCO3

- 30. We are concerned with both the cost and the content of this project. The performance of the management procedure has been severely and significantly compromised by the decision-making processes subsequent to the scientific analysis of in-season catch. Decisions have been so late that industry has been unable to act on the increased TACCs negating any benefits of the process. It is unclear as to how the scientific performance of the process can be evaluated when the performance has been compromised by the delays and inefficiencies of the processes to implement the scientific recommendations.
- 31. We submit that any analysis of the science is pointless, until and unless the wider processes are themselves reviewed. Accordingly, the scope of the review should include the management processes for such stocks. That is a fisheries management issue beyond the purview of the research programme.
- 32. The two stocks had different frameworks on their introduction:
 - a. RCO2 was introduced with no reduction in the TACC and there has been only one in-season increase since its introduction in 2011; and
 - b. RCO3 was introduced with a 63% reduction to the average catch of the previous 5 years -the TACC has been increased once in the 9 years of operation.
- 33. The maintenance of a low TACC with little headroom requires an annual process to establish an effective TACC. Given that RCO2 and RCO3 are not sole target stocks in themselves, commercial interest in the stocks is always limited and the fishery is not pressed to the allowable maximum. There is little sustainability risk to the species from the fishing activity. The ongoing cost of a survey and decision rule imposes costs out of proportion to that sustainability risk.
- 34. We submit that the management process should be amended to provide for a higher TACC with headroom to accommodate say 90% of expected catches and less frequent in-season reviews with such reviews being undertaken only on request of quota-holders.

- 35. We cannot support the project in its current form and would prefer to see a review of the management processes. That review may be considered to be within the scope of the "Future of our Fisheries" review process currently underway and may well not proceed until decisions are made as to which components are to proceed.
- 36. Until the management processes are reviewed, we see no value in reviewing the efficacy of the scientific methodology.

INS2017-01 In-season TACC adjustment calculations for FLA3, RCO2, and RCO3

37. While we support the capability for in-season adjustments and have made comments under RCO2017-01 for the need for a review of the decision-making processes, we believe that in-season reviews should only be undertaken when fishers and quota-holders believe stock abundance warrant such a review. This would prevent research funds being needlessly spent when no increase was likely.

PRO2017-01A Research into the demographic parameters for at-risk seabirds as identified by the Risk Assessment (black petrels)

- 38. We oppose the cost recovery of this project.
- 39. As stated in the project description:

"Categorisation of seabirds as being at high risk based on the results of the level-2 risk assessment can come about from genuinely high fishing-related mortality or poor information. The 2013 NPOA-seabirds has targets to reduce the risk categorisation for seabirds currently assessed to be at high or very high risk from commercial fishing. This project provides for research to better understand population size and demographics of the black petrels. Estimated risk levels and uncertainty, and therefore potentially the risk category, may be reduced where the high risk categorisation comes from poor information. Black petrel is the species estimated to be at most risk from commercial fisheries but there is considerable uncertainty in this estimate because of uncertainty about capture rates in longline fisheries, adult survival, population size and distribution. This project will address the latter three uncertainties. Importantly there seems to be a disagreement between some of the results of the risk assessment, population monitoring and modelling in that more captures are predicted than could be explained given the trends seen at the major colony."

- 40. Commercial fishing activity has been well observed and there is no evidence that commercial fishing in New Zealand waters poses an adverse risk to the long-term sustainability of the population. It is known that only a low percentage of banded chicks return as breeders but also known that juvenile black petrels are not caught in New Zealand waters. The problem of sustainability lies elsewhere than New Zealand commercial fishing activity.
- 41. Since this project is confined to the demographic uncertainties, we oppose any recovery of the costs of this work. Fishing has already incurred significant past and current costs to disprove the notion that fishing poses an adverse effect or risk thereof to these birds. The project seeks to investigate the demographics of the population to provide greater certainty as to the population and address the disagreement between the risk assessments and population monitoring at the nesting sites.
- 42. We note that this project has the same objectives and project content as PRO2016-01A, which was levied in 2016/17 and is to be levied for a further \$30,000 in 2017-18.

PRO2017-01B Research into the demographic parameters for at-risk seabirds as identified by the Risk Assessment (Southern Buller's/Snares)

43. The project description states:

"Southern Buller's albatross have been the focus of one of the longest studies of seabirds in New Zealand. Demographic studies at three study colonies on The Snares have been undertaken annually since 1992. Long term datasets such as this one are very useful, particularly given albatross are long lived. This dataset has shown an increasing population size until 2005 with fluctuations in population size in recent years.

Objective 1

- 44. The continuation of the population monitoring for the southern Buller's on The Snares would allow extension of the monitoring of population size, adult survival and age at first reproduction.
- 45. This project is essentially justified by the need to maintain a long term monitoring of the population, not the investigation of fisheries impacts on the population. The most recent risk assessment estimated a risk score of 0.39; 95% (95% c.i.: 0.22-0.66) for Southern Buller's. Furthermore, the most recent quantitative stock assessments for Southern Buller's albatross have concluded that the risk to the long-term viability of the population from fisheries is small.
- 46. In the absence of material adverse risk to the Southern Buller's population from commercial fishing, there is no justification for cost recovery of the project.

PRO2017-05A Population specific modelling of adult survival of black petrels

- 47. While the black petrel remains the seabird with the highest risk assessment score, research has indicated that the issue lies other than with New Zealand commercial fishing. We have discussed the cost recovery of black petrel research earlier in this submission.
- 48. We oppose any cost recovery of this research.

PRO2017-06 Characterisation of yellow eyed penguin / fishery interactions

- 49. While yellow-eyed penguins are an iconic species and the population is declining from known threats such as disease, poor quality habitat and terrestrial and marine predation, it is premature to assert that commercial fishing is having either a direct or indirect effect on the species. The most recent risk assessment for seabirds estimates a mean risk score of approximately 0.2 with a 95% confidence interval of 0.06 to 0.45. That does not constitute an adverse risk to the species.
- 50. With an intensive observer programme planned for set net activity in yellow eyed penguin territory for 2016/17 and 2017/18, we consider that any characterisation would be better informed by awaiting the outcomes of that monitoring.
- 51. We have objected strongly to the research project planned by CSP in respect of indirect effects of fishing. That research focuses on foraging patterns, the impact of fishing induced benthic habitat modification and the indirect effects of fishing. 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.
- 52. You will be aware that industry, MPI and DOC are already involved in a process to understand any impacts of fishing on yellow-eyed penguins with a view to establishing processes and codes of conduct to mitigate the risk to the penguins from fishing.
- 53. We do not support the project and propose it be removed from the programme.

PRO2017-08C Research into the demographic parameters for at-risk marine mammals as identified by the marine mammal risk assessment (sea lions)

54. PRO2017-08C is essentially a population project to assess the impact of environmental changes on the sea lion population and, in particular, on the reproductive performance of the sea-lions.

- 55. We note that there is significant overlap between this project and the CSP project POP2017-02 Indirect Effects of Fishing on New Zealand sea lions. The CSP project focuses on dietary change and its impacts on inter alia reproductive performance and to that extent overlaps this project.
- 56. We submit that there is a need to co-ordinate any work being undertaken and evaluate whether further research is going to progress our understanding of the linkages to a sufficient degree to inform the recovery of the New Zealand sea lion population. While population research such as this project is undoubtedly informative to the management of the sea lion population, we disagree that the research will materially assist the recovery of the population and the funds being used here would achieve better conservation value if addressing the Klebsiella issue.
- 57. The project description notes that "available evidence suggests that direct fisheries mortality is not the primary driver of the observed population decline". This research seeks to evaluate the impact of environmental factors but, without any direct reference to the role of fishing, we see no grounds for any cost recovery of the project.

PRO2017-12 Hector's and Maui Dolphin Multi-Threat Risk Assessment to support review of the TMP

- 58. We support the need for additional research to inform the 2018 review of the Maui and Hector's Dolphin TMP.
- 59. We support the need for a multi-risk threat assessment, particularly for the Maui dolphins as we have little confidence in the Currey 2012 "expert" panel assessments. However, we are concerned that the scope of Objective 1 is too extensive and will not yield results in the time available.
- 60. We strongly support the objective to revisit the spatial distribution of Maui dolphins as the basis for the semi-quantitative risk assessment. Having been present at the Currey risk assessment when the distribution was recommended, we have no confidence that the spatial distribution as used in the semi-quantitative risk assessment approximates the actual space used by Maui dolphins. In particular, the risk assessment uses a distribution that:
 - a. extends into the Raglan, Aotea and Kawhia harbours, when that was not intended by the Currey panel and is not supported by available evidence,
 - b. extends to Whanganui, when the best available evidence from research sightings extends the known current range to Mokau; and
 - c. extends to 12 nm offshore when Maui dolphins have not been reliably sighted at that distance.
- 61. Given the limited spatial coverage that can be achieved by a T-POD, we are extremely doubtful that the deployment of the T-PODs by DOC will yield any useful information as to distribution patterns of Maui dolphins. Equally, we are not confident that using Hector dolphin density gradients or habitat preferences will assist to predict the distribution pattern of the less numerous and more compacted Maui Dolphin population.
- 62. We strongly recommend that a risk assessment be undertaken based on reliable research sightings and the existing Currey distribution be set aside. Any assessment should also incorporate the significant observer coverage over recent years. The distribution should use the current closures in respect of harbours, a northern limit to Maunganui Bluff, a southern limit to Pariokariwa Point and a seaward limit of 12 nm for the area between Manukau Harbour and Raglan Harbour and 7 nm outside that area.

PRO2017-15 Use of innovative tag technology to examine foraging patterns of seabirds and association with fishing vessels

63. New Zealand has invested millions of research dollars into estimating the impact of commercial fishing to seabird populations and arrived at the general conclusion that commercial fishing does not pose an adverse risk on those populations.

- 64. We see no reason why the Crown should seek to prove the efficacy of new technology that might result in an alternative methodology to measure foraging time spent in the vicinity of fishing vessels. To prove the efficacy of the technology lies with the provider of the technology, not the Crown. Once proven, the Crown might seek to use the technology but it is not the role of the Crown to prove the efficacy of the technology.
- 65. We cannot support this project.

PRO2017-19 Factors affecting capture rate of black petrels and flesh-footed shearwaters

- 66. We discussed earlier the excessive level of research on black petrels in the absence of a strategic research plan. This is yet another project to which that criticism applies. Monitoring of interactions with New Zealand commercial fishing fleets indicated that the New Zealand fleet does not impose an adverse effect on black petrels. Other factors are responsible for the poor level of juvenile survival.
- 67. We see no need for this research at this time. The fisheries which capture black petrels are already subject to significant mitigation measures and it is only in the circumstances where that mitigation is proven ineffective that additional research such as this project should be undertaken. We see no reason for the urgency for the project other than black petrels being the bird of favour.