CSP Annual Plan 2016/17 Summary of Submissions

List of Submitters

Submitter	Shown in Comment Summary as:
Simon Childerhouse (Blue Planet Marine)	BPM
Jim Roberts (NIWA)	NIWA
Deepwater Group Limited & Fisheries Inshore New Zealand jointly	DWG & FINZ
Sanford Limited	SL
West Coast *Te Tai o Poutini* Conservation Board	WCTPCB
Yellow-Eyed Penguin Trust	YEPT
Forest & Bird	F&B
NZ Rock Lobster Industry Council	NZ RLIC
World Wildlife Fund New Zealand	WWF

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PART A: General comments

Submitter	Submission	DOC response
WWF	Due to the extremely vulnerable state of the Māui dolphin population, the government should be working to remove fishing related threats to Māui dolphins from their entire habitat. Express the importance of identifying effective pathways to support the fishing fleet on the West Coast North Island to either move out of Māui habitat, or transition to dolphin safe fishing methods. Consider that this work could fit within the Conservation Services programme.	DOC and MPI jointly administer the Hector's and Māui Dolphin Threat Management Plan which aims to holistically manage threats.
DWG&FINZ	CSP will be aware that wider fisheries services cost recovery is under review and CSP cost recovery will be included in that review.	CSP is engaged in supporting MPI undertake this review.
DWG&FINZ & SL	Any activities to be appropriate for protected species management, but that fall outside the Fisheries Act definition of "adverse effects" should be undertaken by DOC, and do not fall under Conservation services as defined in the Fisheries Act. Some services that DOC seeks to fund through cost recovery are not cost recoverable under section 262 of the Fisheries Act as they do not meet the definition of conservation service. The inclusion of an activity in conservation services does not automatically make the cost of that activity cost recoverable by the industry, in all instances, an adverse effect must be demonstrated and the decision must be consistent with section 262.	DOC considers that all projects in the Annual Plan meet the relevant statutory definitions and criteria for a conservation service, with rationale further outlined in the CSP Strategic Statement 2015. DOC considers the application of cost recovery principles and rules on a project by project basis, and in some cases DOC does not seek cost recovery for some CSP projects.

DWG&FINZ	While adverse effect is not defined in the Fisheries Act, the term needs to be viewed in the context of the long-term viability of protected species. Industry concludes that an adverse effect occurs only when there is a decrease in, or a compromising of, the long-term viability of a protected species population. If DOC has an alternative position on this matter, they need to advise on the basis for that position.	DOC considers adverse effects to be as described in the CSP Strategic Statement which was developed as part of a multi stakeholder process over several years. For clarification the scope of the CSP includes actual and potential adverse effects on protected species arising from direct or indirect effects of commercial fishing and arising from activities associated with commercial fishing including: i. any temporary or permanent effect; ii. any past, present, or future effect; iii. any cumulative effect which arises over time or in combination with other effects -regardless of the scale, intensity, duration, or frequency of the effect; iv. any potential effect of high probability; and v. any potential effect of low probability which has a high potential impact.
DWG&FINZ & SL	Risk assessments are increasingly being used to assess the direct effects of fishing on various species. “Feeding the machine”, to address apparent data issues and achieve greater precision in assessments, has become more determinative of research programmes rather than the risk assessments contributing to an informed discussion of the real research needs. These conservative risk assessments often use historical data and were not intended to drive research. • It is necessary for L2 seabird risk assessments to be recognised as pessimistic and whilst giving a	While risk assessments provide a tool for the relative prioritisation of research and management, DOC does not use them to define adverse effect. DOC does not consider that it is appropriate to limit population research to those species designated very high and high risk in the Level-2 seabird risk assessment. Rather, DOC takes guidance from multiple information sources (including relevant level-3 risk assessments) as outlined in the CSP Strategic Statement 2015. DOC also notes that current risk assessments have been based on the direct effects of a limited number of fisheries, and wider considerations, including potential indirect effects, inform

	reasonable and useable hierarchy of risk and priority, overplays actual population impacts. A failure to consider and address these matters will impose unnecessary and unwarranted costs on commercial fishing. • We would expect CSP cost recovery to be applicable only to its activities in the top risk species class where adverse effect is demonstrable. Should CSP wish to undertake projects related to species with lesser risk status, the project should not be cost recovered. • Where level 3 risk assessments have been undertaken, and indicate that commercial fishing is not having an adverse effect on a protected species, there should be no cost recovery of further CSP activity on that species.	research planning in CSP.
WCTPCB	In general, support the Conservation Services Programme (CSP). Overall, the structure of the programme is significantly improved compared with previous CSP programmes and provides a clear and logical process.	Noted.
SL & DWG&FINZ	The plan ignores electronic monitoring (EM) as a cost effective alternative to human coverage. Industry recognises that electronic monitoring is not suitable for all monitoring and observer functions but should be employed where the focus is the recording of protected species interactions.	EM is advancing in a number of areas and DOC has funded projects investigating the effectiveness of EM for protected species interaction monitoring in the past which has shown that such systems show promise, however, are subject to limitations. DOC representatives remain closely involved in the scoping and development of EM systems for relevant monitoring tasks and while no EM projects are specifically mentioned, DOC remains open to the delivery of certain monitoring objectives through EM systems.

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DWG&FINZ	CSP is placing increasing reliance on indirect effects of commercial fishing to support its research activities and cost recovery.	The indirect effects of commercial fishing had always fallen within the scope of the CSP. All CSP projects are focussed on achieving the CSP objectives.
WWF	With regards to New Zealand Sea Lions – there are some very important research gaps that are not addressed in CSP plan. These include: 1) The need to improve our understanding of the efficacy of SLEDs, and 2) the need to improve understanding of the indirect effects of fishing on food availability and population demographics.	The efficacy of SLEDs has been the subject of extensive investigation over time. Whilst DOC maintains an interest in the efficacy of any mitigation device, limited avenues for further testing of SLEDs were identified. The indirect effects of fishing and food availability on population demographics also remains an area of concern for DOC and the future investigation of such areas will be dependent upon the recommendations laid out in the sea lion TMP and advice received from the CSP Research Advisory Group.

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PART B: Comments specific to INT2016-01 – Observing commercial fisheries

Submitter	Submission	DOC response
General Comments		
WCTPCB	The Board strongly supports observer coverage for the inshore fisheries as there is inadequate continuous data of by-catch from these fisheries.	Noted.
YEPT	This project is supported overall by the Trust. Recommended that the percentage of observer effort coverage be noted in the Annual Plan for each of the areas.	Noted, indicative percentages have been added.
YEPT	Recommended that all marine mammal and all seabird by-catch is recorded, not just the species set out in the objective for each of the areas.	Noted, all protected species interactions are fully documented as a priority in observer coverage.
WWF	Recommend that MPI improve vessel location reporting by requiring all fishing vessels working inside Māui habitat to install and operate a centralised Vessel Monitoring System in order to address the significant delay in the notification of vessel location on the WCNI. Although vessels are required to pro-actively report where they are planning to fish a week in advance, it is concluded that real-time automatic vessel location monitoring will more efficiently provide the information required to implement existing observer coverage commitments, and circumvent issues of human-error and accuracy.	As noted in the submission, vessel monitoring systems fall under the remit of MPI who are in the process of developing such options.
F&B	Conclude that observer rates are only of sufficient levels for very few fisheries to be able to detect changes in by-catch rate from one year to the next, or even over 3 years. Recommend cross checking with all very high, high and medium risk species to make sure observer coverage will be sufficient to detect changes in by-catch rates in those fisheries that contribute the most risk.	Planning of observer coverage levels always considers the ability to detect changes in bycatch rates. In part this is informed by an MPI commissioned sensitivity analysis to investigate appropriate levels of coverage. This work has previously been presented to the Aquatic Environment Working Group.

		Ability to deliver against planned coverage has always been a complex issue and mechanisms to facilitate this are constantly being developed.
SL	Industry believes that projects aimed at the development of standards for implementation, ongoing monitoring of SNA1 and to review the efficacy of VMS are an excessive cost for something that has no clear end use on a group of quota owners who are already footing a hefty monitoring/research bill and who are expected to contribute at least 50% towards a major upcoming tagging programme.	Observer coverage is planned jointly between both MPI and CSP in order to maximise the utility of any observer coverage. For clarity the CSP primary focus of coverage in SNA1 is the quantification of black petrel and flesh-foot shearwater captures and the informing of effective mitigation strategies.
Setnet – East Coast South Island/Otago (EC SI), South Coast South Island (SC SI) and West Coast North Island (WC NI)		
F&B	Pleased to see increased proposed effort on setnets in Otago, Southland, Stewart Island and Fiordland to look for possible interactions with penguins. Concerned that a 65% coverage will not be sufficient to detect captures.	Noted, coverage levels have been planned specifically to achieve the objectives of quantification of bycatch levels.
WCTPCB	EC SI: Strong support. Concerned that this will only be for seabird mitigation and does not include marine mammals. In addition, there is no indication of monitoring for the white-flippered little blue penguin.	All protected species interactions are fully documented as a priority in observer coverage. Any mitigation utilised by fishers vessel is also fully documented by observers.
DWG&FINZ	The observer projects for EC SI, SC SI and WC NI set net fisheries should be scheduled at a lower level of observing, consistent with the ability to deliver services. Conclude that the previous observer activity and risk assessments do not support a contention of adverse effect, thus industry does not support the programme.	Planning of observer coverage levels always considers the ability to detect changes in bycatch rates. In part, this is informed by an MPI commissioned sensitivity analysis to investigate appropriate levels of coverage. This work has previously been presented to

		the Aquatic Environment Working Group. Ability to deliver against planned coverage has always been a complex issue and mechanisms to facilitate this are constantly being developed.
Small inshore trawl – West Coast North Island (WC NI), West Coast South Island (WC SI), East /South Coast South Island (ESC SI) and North-east North Island (snapper target) (NE NI)		
SL	NE NI: Trident systems have regularly reported on SNX by-catch, the move-on rule and VMS efficacy since the latter half of 2014. Unclear why observers need to go to sea to do this work, and what new information they can add to the Trident reports.	Observer coverage is planned jointly between both MPI and CSP in order to maximise the utility of any observer coverage. For clarity the CSP primary focus of coverage in SNA1 is the quantification of black petrel and flesh-foot shearwater captures and the informing of effective mitigation strategies. While EM options show potential for monitoring of certain factors, CSP is not currently confident that they are an effective tool for the monitoring of seabird bycatch in trawl fisheries.
SL	NE NI: Conclude that it is unclear why there is need for further coverage to estimate capture rates of black petrel as seabird and black petrel capture rates on trawl vessels are already well understood as they would have been reported over the last three years as part of the Minister's SNA1 directive.	Black petrels remain the most at-risk seabird species from commercial fisheries. Inshore trawl in NENI contributes significantly to this risk with ongoing captures occurring. Therefore ongoing and improving mitigation and monitoring efforts are needed to demonstrate a reduction in capture rates.

SL	WC NI: Advocate for the use of cameras in this fishery as observer coverage has been difficult to achieve in the previous two years.	While EM options show potential for monitoring of certain factors, CSP is not currently confident that they are an effective tool for the monitoring of seabird bycatch in trawl fisheries.
WWF	Support the increase in proposed observer coverage for inshore trawl. Ideally there would be 100% coverage; however, the proposed increase to 75% coverage will be a significant improvement.	Noted.
DWG&FINZ	WC NI: No adverse effect is demonstrable but voluntarily supported if there will be camera coverage for MDO and protected species captures.	This project is delivered as a Ministerial directive driven out of the Māui Dolphin Threat Management Plan (TMP).
DWG&FINZ	The WC SI and EC SI Observer projects are supported as proposed, but would prefer camera coverage.	While EM options show potential for monitoring of certain factors, CSP is not currently confident that they are an effective tool for the monitoring of seabird bycatch in trawl fisheries.
DWG&FINZ	NE NI: Not supported. Conclude that MPI needs to discuss the need with the SNA1 commercial group	MPI and DOC consider the independent verification of the efficacy of EM for both commercial catch and protected species bycatch to be critical to the informing adequate fisheries management.
F&B	Query how the observer project for North East North Island snapper fisheries related to the current roll-out of cameras on inshore trawl vessels?	EM is advancing in a number of areas and DOC has funded projects investigating the effectiveness of EM for protected species interaction monitoring in the past which has shown that such systems show promise however are subject to limitations. DOC representatives remain closely involved

		in the scoping and development of EM systems for relevant monitoring tasks and while no EM projects are specifically mentioned, DOC remains open to the delivery of certain monitoring objectives through EM systems.
Danish Seine – North-east North Island		
DWG&FINZ	Not supported. Conclude that MPI needs to discuss the need with the SNA1 commercial group	Internationally significant bycatch risks have been identified from seine fisheries and the collection of adequate baseline monitoring data remains a priority for CSP.
Bottom Longline – North-east North Island (Bluenose target) (BLL-BNS) and North-east North Island (Snapper target) (BLL-SNA)		
SL	BLL-SNA: Unclear what additional information is required around the efficacy of mitigation methods as this is a problem that has been well researched and largely resolved.	Black petrels remain the most at-risk seabird species from commercial fisheries. Longline fisheries NENI contributes the highest portion to this risk with ongoing captures occurring, with a number of multiple capture events. Therefore ongoing and improving mitigation and monitoring efforts are needed to demonstrate a reduction in capture rates. CSP strongly disagree that the issue of seabird bycatch has been resolved in the SNA BLL fishery.
DWGFINZ	BLL-SNA & BLL-BNS: Supported as proposed, but camera coverage would be the preferred option.	Noted.

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F&B	BLL –BNS: Express the importance of including all vessel types and suggest that refusal to allow observers should result in some sort of penalty	Delivery of representative observer coverage has been an ongoing and complex issue and mechanisms to facilitate this are constantly being developed.
F&B	It is recommended that observers use colour banding to verify predictions of survivorship for birds released alive.	This has been investigated as an option pending adequate development of protocols which do not jeopardise animal welfare.
F&B	BLL-SNA: Suggest that there may need to be some adjustment to the objectives of the observers to monitor/compare the effectiveness of cameras with observers.	Noted.
Offshore Fisheries		
F&B	Concerns about if the proposed increase in observer coverage for scampi, southern blue whiting and squid trawl will be sufficient to detect changes in by-catch rate in subsequent years. Conclude that addressing the risk effectively may enquire much higher levels of observer coverage than proposed.	Planning of observer coverage levels always considers the ability to detect changes in bycatch rates.
F&B	Suggest that more resources must be put in to achieving levels of observer coverage that are going to enable us to meet our objectives under the NPOA-Seabirds.	Planning of observer coverage levels always considers the ability to detect changes in bycatch rates. The objectives of the NPOA are directly considered in the planning of coverage levels- particularly in fish risk fisheries.
WCTPCB	Strongly supported. However, it is noted that the recording of times of by-catch is still not a required output of this programme, which may help in by-catch mitigation for seabirds such as the little blue penguin.	Noted, as clarification, times of protected species captures are recorded by observers, though may not be reported on in all studies.
WCTPCB	Conclude that the increase in “total days” for West Coast deep water trawl fisheries is fully supported. On the other hand, it is disappointing that the West Coast middle depth trawl fisheries has had a reduction from 1500 “total days” in the 2015/16 CSP annual plan to 1200 in the 2016/17 CSP annual plan.	Noted, the reduction was part of resourcing trade-offs to maximise data collection across all fisheries.

PART C: Comments specific to other projects

Submitter	Submission	DOC response
2.2 Identification of marine mammals turtles and protected fish captures in New Zealand fisheries		
WCTPCB & YEPT	Fully support the project	Noted.
2.3 Identification and storage of cold-water coral bycatch specimens		
BPM	Concerns about where and how the genetic samples are being stored and if they are available to the public upon request.	Adequate storage facilities will be a requirement for the successful provider of these services. Genetic samples will be available upon arrangement. The project description has been clarified
YEPT	Continuation of this multi-year project is fully supported.	Noted.
2.4 Identification of seabirds captured in New Zealand fisheries		
DWG&FINZ	Voluntary support for the ongoing monitoring of the level of risk although notes that not all seabirds are at adverse risk from commercial fishing.	Only dead seabirds retrieved from commercial fishing vessels will be processed by this project.
F&B	Concerns about potential loss of important information, such as data on sex, age and breeding status, if not all seabirds are brought in for necropsy.	Concerns are noted and DOC continues to monitor the effectiveness of photographic identification versus necropsy in order to ensure that trade-offs are appropriate for management.
WCTPCB &	This project if fully supported.	Noted.

YEPT		
2.5 Post release survival of white pointer sharks in New Zealand setnet fisheries		
DWG&FINZ	Industry contends that there is no proof that it has an adverse effect on the white pointer shark population, a species that in addition, has very low risk assessment score. It is also noted that there is no description of what sample size or predicted effort is needed for robust results and even if described, low number of captures indicate that the research is not likely to yield reliable or indicative data. Contend that the project is not relevant to the management of marine protected species and does not support cost recovery, further research could possibly be support if adverse effect can be demonstrated.	DOC considers that all projects in the Annual Plan meet the criteria of a conservation service, as outlined in the CSP Strategic Statement 2015. While risk assessments provide a tool for the relative prioritisation of research and management DOC does not use them to define adverse effect. DOC disagrees with the contention that the Level 1 chondrichthyan risk assessment identified white sharks as having a very low risk score as no such categories were used. Of protected fish, white-pointer sharks had a relatively high risk, which prioritises this work. As part of the re-scoping of the project following initial consultation, the scope of the project has been narrowed to provide characterisation of interactions and provide recommendations on appropriate sample size and feasibility of any sPAT tagging work.
WCTPCB & YEPT	Fully support the project	Noted.
2.6 Indirect effects of commercial fishing on Buller's shearwater and red-billed gulls		
DWG&FINZ	The absence of any demonstrated risk of adverse effect from the commercial fishing activity means this project should not be cost recovered. In addition, Buller's shearwater has a very low risk ratio and red-billed gulls are not a protected species, given that there are more pressing issues that need to be addressed this project should not be undertaken at all.	Project is crown funded and not cost recovered. Both Buller's shearwaters and red-billed gulls are absolutely protected under the Wildlife Act 1953. Current fisheries risk assessments only consider direct effects

		and thus not relevant to prioritising investigation of indirect effects.
F&B, WCTPCB & YEPT	Fully support the project	Noted.
3.1 Flesh-footed shearwater: Various locations population project		
WCTPCB & YEPT	Fully support the project	Noted.
3.2 Seabird population research: Chatham Islands 2016-17		
DWG&FINZ	Supported but adjust stocks to remove SQU1J. Need for a general review before the plan is finalised. General concerns: • Population estimates for range of species but not all species are at high risk. • Concerned that existing datasets, e.g. Chatham albatross, are not yet analysed and yet further field work is proposed to collect more information. • Concern revolving anecdotal reports of ongoing harvesting of albatross pre-fledges chicks at sites in this region.	DOC agrees a meeting to discuss stock allocation will be productive. • This project is guided by the CSP Seabird Plan 2016. As defined in that plan, all species are at medium/moderate or higher risk. A multiple species approach provides substantial cost savings. • Where possible existing data sources will be utilised • Harvesting of pre-fledged chicks at sites is outside of the scope of the CSP Annual Plan
NZ RLIC	Consider that objectives 5 and 6 do not meet the statutory definition of “conservation services” due to the absence of any demonstrated risk of adverse effect from the rock lobster industry on the populations of Pitt Island and Chatham Island shags. Consider these objectives should be removed from the CSP annual plan.	DOC considers that all projects in the Annual Plan meet the criteria of a conservation service, as outlined in the CSP Strategic Statement 2015.
F&B	Good to see this work going ahead as previously planned. For the Chatham Island shag, it will be important for the researcher to also take the opportunity to assess what on-	Noted, land based threats are outside of the scope of CSP. Options for further researching will be considered through

	going risks there are to these populations from land-based causes.	other sources of funding.
WCTPCB & YEPT	Fully support the project	Noted.
3.3 Seabird population research: Auckland Islands 2016-17		
DWG&FINZ	Consider that not all species in the project are at high risk. Question the motive for this work as there seems to be a lack of acknowledgement of information from other long-term demographic studies and other extant yet unanalysed data. Could voluntarily support the project, but not for the pursuit of more demographic data for white-capped albatross.	This project is guided by the CSP Seabird Plan 2016. As defined in that plan, all species are at medium/moderate or higher risk. A multiple species approach provides substantial cost savings.
F&B, WCTPCB & YEPT	Fully support the project	Noted.
3.4 Updated basking shark bycatch review		
DWG&FINZ	No adverse effect is demonstrable in respect to basking sharks, thus cost recovery is not possible. If an adverse effect is demonstrated, further research could be supported. Also noted that basking sharks have a lower risk assessment score than many QMS stocks.	DOC considers that all projects in the Annual Plan meet the criteria of a conservation service, as outlined in the CSP Strategic Statement 2015. As noted for white sharks while risk assessments provide a tool for the relative prioritisation of research and management the DOC does not use them to define adverse effect. In the Level 1 chondrichthyan risk assessment, of protected fish, basking sharks were identified as having the highest risk score which prioritises this work.
WCTPCB & YEPT	Fully support the project	Noted.

3.5 Cetacean habitat suitability modelling		
BPM	Recommendation that it will be confirmed with NIWA that the output from the project will be 100% publically accessible.	Noted, this will be clarified.
DWG&FINZ	Industry contends that the project could be voluntarily supported, and further research could be supported if an adverse effect is demonstrated. However, concerned about the fact that no Marine Mammal Risk Assessment (MMRA) results or reports have yet been published.	DOC considers the development of spatial distribution a vital element of understanding, and thus informing measures to avoid, remedy, or mitigate cetacean bycatch, and notes the concerns over delays in delivery of the planned MPI MMRA. DOC notes concerns over time-lines for delivery of this work and has therefore selected to solely crown fund the contributions for 2016/17. This contribution will ensure that data is developed into a suitable format for use in the habitat modelling and expedite outputs of the wider project.
YEPT	Fully support the project	Noted.
3.6 Yellow-eyed penguin foraging and indirect effects		
DWG&FINZ	No rationale that commercial fishing poses an adverse effect on the species. In the absence of that evidence, the project should not be cost recovered and in fact given more pressing issues, should not be undertaken at all.	DOC considers that all projects in the Annual Plan meet the criteria of a conservation service, as outlined in the CSP Strategic Statement 2015. In particular, a review of relevant information (Ellenburg and Mattern 2012, commissioned by CSP) is cited in the project description.
YEPT	Yellow-eyed penguins are currently in decline and facing a suite of threats. Penguins are also important as an indicator species, they are a top predator in the marine environment, and so can effectively represent the ecological health of the overall system. The Trust is keen to see research on yellow-eyed penguins funded, in particular work in the marine environment which is of current concern. Our insight into the impacts of commercial fishing on yellow-	Noted.

	eyed penguins is also poorly understood. The direct impact of commercial fishing on penguin is somewhat easier to measure than indirect effects but this does not mean that we should ignore indirect impacts. Any research which sheds light on the foraging behaviour of penguins in the marine environment and the effects of fishing would be very well received and would increase the available knowledge critical for the management of this endangered and protected species.	
F&B & YEPT	Fully support the project. Essential to inform our understanding of the multitude of issues which seem to be affecting YEPs to in order to inform conservation management of this protected species.	Noted.
WCTPCB	Fully support the project	Noted.
3.7 Salvin's albatross Bounty Islands: methodology development		
DWG&FINZ	As Salvin's are the highest risk albatross species and represented in incidental captures in a number of fisheries, developing and agreeing a long term practicable methodology to monitor this population is required. The industry supports DOC undertaking the work but it should not be cost recovered.	DOC notes the industry's support for the project. DOC considers this project meets the criteria of a conservation service, as outlined in the CSP strategic statement 2015.
F&B	Conclude that it is important to know as soon as possible what the population trend is likely to be as this species is so highly bycaught. Express concerns that it will take another year to agree on the methodology used and suggest that it would be possible to exchange expert opinions and agree on the methodology to get the work done this summer.	Concerns over the delay are noted however re-scoping of this project was based on outcomes of Research Advisory Group discussion to ensure that any methodologies are robust and appropriate. In particular the breeding season of this species requires field work in October, which is very early in the financial year, and DOC considers it impracticable to develop a methodology and conduct the research in 2016/17.

WCTPCB & YEPT	Fully support the project.	Noted.
3.8 New Zealand Sea Lion: Auckland Islands pup count		
BPM	Concern is expressed as to the reduced budget (60%) for the coming year and the reduced field season length. Little rationale provided for the proposed reduction and not clearly detailed which parts of the programme will be dropped and which will be retained. Questions whether even a reduced field season may be possible for the proposed budget, as the major cost is vessel charter and these costs are unlikely to be reduced. In addition, this option might create a hole in the long-term data set, which could limit our understanding on the impacts of fisheries and other factors on NZSL.	Any sea lion research planned within the scope of the CSP Plan will draw synergies with other sea lion research priorities, such as disease monitoring that will come out of the TMP. Officials are cognisant of this and have designed a modular field season plan which can address the primary fisheries related data needs while remaining flexible enough to accept additional research components. Maintaining the integrity of the time series of data will be a major consideration to planning.
BPM	Is DOC considering funding any additional New Zealand sea lion research from internal or other sources?	As noted in the project proposal, supplementary objectives such as disease monitoring and pup survival estimates could be considered as part of the outputs of the sea lion Threat Management Plan. Any additional work on New Zealand sea lions will be coordinated to maximise logistical and funding synergies.

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BPM	DOC decision on this project is the complete opposite approach to the agreement at the CSP RAG meeting on the 25 February 2016 that the pup count only was a low priority project that was inadequate to answer the questions that need to be answered. DOC has given little or no indication why this approach was chosen. Suggests that the status quo project should be at its previous funding levels, but the proportion paid by fishing industry should be modified due to recent modelling work providing indications that the cause of decline in NZSL is now more broadly attributed across a range of possible contributors rather than fisheries being solely responsible.	DOC believes that the pup count project will provide necessary information for fishery management, and appropriate cost recovery has been applied. Supplementary objectives such as disease monitoring and pup survival estimates could be considered as part of the outputs of the sea lion Threat Management Plan. All work on New Zealand sea lions will be coordinated to maximise logistical and funding synergies.
BPM	Recommends a multi-year contract is used to cover this project as the need for work is unlikely to change in the short to medium term. It would also reduce burdens of securing permitting of the research, which would also be multi-year, and would align with other work that DOC has already committed to through other internal funding (e.g. PhD funding on disease).	Noted, this will be considered for future years as part of wider monitoring plans for New Zealand sea lions driven by the Threat Management Plan.
NIWA	The plan states that additional non-CSP funds will be allocated to conduct additional research in accordance with science requirements identified by the TMP, but these are not described in the draft plan.	These additional, non-CSP, aspects elements will be refined as part of a wider sea lion research planning process once funding streams are confirmed.
NIWA	It is important to get some clarification as to the proposed start date of the project as it will influence the number of dead pups counted and hence the total count. Recommends keeping the pup count methodology consistent with previous years.	Confirmed start date for the field season will be dependent on any additional objectives which will be refined as part of a wider sea lion research planning process once funding streams are confirmed.

		Maintaining the integrity of the time series of data will be a major consideration to planning.
DWG&FINZ	Industry contends that it does not have an adverse effect on the sea lion population and thus DOC should not levy industry for the project. Suggest that it is important to await the finalisation of the TMP before any decisions are made.	DOC considers that all projects in the Annual Plan meet the criteria of a conservation service, as outlined in the CSP Strategic Statement 2015. DOC has taken into consideration the pending release of the TMP for consultation. However, regardless of the actions that may be progressed by the TMP, pup count data is required for fisheries management. Awaiting the finalisation of the TMP will also jeopardise the time series of data and fisheries management.
WCTPCB	This project is fully supported. However, no indication that there will be any investigation of potential disease processes in this population, which may contribute to the decrease in the under 2-year old population. Suggest that "mark and recapture" programme should include sampling for the future DNA analysis to establish if there are inbreeding populations, which will reduce the breeding capacity.	Noted, this will be considered for future years as part of wider monitoring plans for New Zealand sea lions driven by the Threat Management Plan. Widening of project objectives to include mark recapture can be investigated as part of a wider sea lion research planning process once funding streams are confirmed.
YEPT	Fully support the project.	Noted.
4.1 Seabird bycatch reduction (small vessel longline fisheries) – This project was consulted as part of the 2015-16 CSP plan		
WCTPCB & YEPT	Fully support the project.	Noted.
F&B	Fully support the project; however, concerns are expressed about the strategic offal discharge and "floaters" on the bluenose lines. Suggest that there should be a focus on retaining unused baits and reducing offal discharge and	Noted, these specific points can be discussed during the review of the previous year's outputs by the Technical Working Group, which will in turn direct refinement for the coming year's approach.

	consider if it would be possible to use weights on the floater hooks to resolve that issue.	
4.2 Small vessel seabird mitigation project – This project was consulted as part of the 2015-16 CSP plan		
WCTPCB & YEPT	Fully support the project.	Noted.
4.3 Protected species bycatch media		
DWG&FINZ	Industry supports the cost recovery of the reprint of identification tools, but does not support the cost recovery of the newsletter and believe that the newsletter is not valued as most fishers are unaware of its existence and not sufficiently interested to download it.	DOC notes the support for the reprint of the identification tools. DOC has reviewed uptake by fishers and hard copy material is delivered to fishers. DOC considers that all projects in the Annual Plan meet the criteria of a conservation service, as outlined in the CSP Strategic Statement 2015.
WCTPCB	This project is fully supported. It is recommended that the circulation of the Newsletter be extended to Conservation Boards and conservation groups with an interest in sea mammal and seabird conservation.	Noted.
YEPT	Fully support the project.	Noted.
4.4 Entanglement of whales in pot/trap lines and setnets and a review of potential mitigation methods		
DWG&FINZ	Project is not supported as no adverse effect is demonstrable. As a consequence, no cost recovery is possible.	DOC considers that all projects in the Annual Plan meet the criteria of a conservation service, as outlined in the CSP Strategic Statement 2015.
NZ RLIC	Conclude that the project rationale relies on flawed proxies for adverse effects as the adverse effect in question cannot be on an individual bird or mammal of a protected species, but must be an adverse effect at the level of a species or	DOC considers that all projects in the Annual Plan meet the criteria of a conservation service, as outlined in the CSP Strategic Statement 2015.

	population. Industry believes that the project does not meet the statutory definition of "conservation services" and does not qualify as a legally valid CSP project, and should therefore be removed from the CSP annual plan.	
NZ RLIC	Concern is expressed that the project description makes no mention of the whale mitigation programme that the rock lobster industry has been developing and implementing over many years: • Whale_Safe – comprises a booklet containing detailed information about cetacean movements and behaviour, species identification manual, and advice how to set gear to avoid entanglements. • Ocean_Snap – Warning protocol to alert lobster fishermen that whales are on the move. It is a generic electronic recording and reporting tool backed up by a data base which runs as an app on standard smartphone technology. Conclude that the rock lobster industry is already fully aware of the risk of whale entanglement, has commissioned and continues to seek internationally-respected expertise on managing cetacean interactions, and is actively avoiding and mitigating the risk of entanglement. The desktop study proposed is redundant.	The revised project makes specific mention of Ocean_Snap as a data resource which can be reviewed as part of the project along with any other relevant data sources.
WCTPCB & YEPT	Fully support the project.	Noted.

FISHERIES INSHORE NEW ZEALAND

Committed to Healthy Oceans; Sustainable Fisheries

deepwater group

26 April 2016

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

Dear Mr Sanson

DRAFT CONSERVATION SERVICES PROGRAMME 2016/17

1. Thank you for the opportunity to consult on the draft Conservation Services Programme (CSP) for 2016/17.

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, Area 2 Inshore Finfish Management Company 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.

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 their deepwater fisheries resources, managed within a long-term sustainable framework.

6. Their mission is to optimise the sustainable economic value of our deepwater fisheries. Their vision is to be recognised as 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.

Our Concerns

8. Our concerns in this matter relate to:
    a. The failure to demonstrate adverse effects or risk of adverse effect;
    b. The failure to use latest information available; and
    c. The failure to evaluate existing data and information.

Failure to Demonstrate Adverse Effect

9. We have raised this matter for at least the last decade and have yet to see the Department formally and properly address the issue. The proper interpretation and application of the legislative intent for CSP underlies industry's submissions and concerns with the CSP programme. CSP will be aware that wider fisheries service cost recovery is under review and CSP cost recovery will be included in that review.

10. We request that you provide a fulsome response to the issues raised to ensure FINZ understands DOC's perspective and to allow FINZ to consider its options to resolve this issue.

Legislative Scope of Conservation Services

11. In general, industry has no issue with the principles of cost recovery as set out in section 262 of the Fisheries Act. The principles provide a well-balanced rationale for cost recovery and are related to the interests of the commercial fishing sector as both a beneficiary and risk exacerbator. The CSP programme specifically relates to the adverse effects on protected species, posed by commercial fishing.

12. Section 2 of the Fisheries Act defines conservation services as outputs in relation to the adverse effects of commercial fishing on protected species. While conservation services are defined in section 2 of the Act to include:
    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,

    section 262 of the Fisheries Act applies to both fisheries and conservation services and 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. It is thus possible that some services that DOC seeks to fund through cost recovery are not cost recoverable under section 262 as they do not meet the definition of a conservation service in section 2 of the fisheries Act. . It is not sufficient for DOC to seek to recover its costs merely because that work relates to a protected species and DOC undertakes an activity in respect of that species. In all instances, an adverse effect must be demonstrated and the decision must be consistent with section 262.

14. The 2002 review by the Office of the Controller and Auditor General under section 18 of the Public Audit Act 2001 [1] concluded that DOC needed to "*provide clear justification of the relationship between a research project and the effects of commercial fishing on the particular protected species, and the levy associated with the research*" p10 of that report. In discussion of the matter, the report refers to the need for evidence, rather than beliefs or assertions. In order for cost recovery to be justified, a transparent and informed case needs to exist that an adverse effect exists. Cost recovery is not otherwise justified.

15. While adverse effect is not defined in the Fisheries Act, the term needs to be viewed in the context of the long-term viability of protected species. That analysis must be based on the impact on the population, not an individual within that population. Our position is that an adverse effect occurs only when there is a decrease in, or a compromising of, the long term viability of a protected species population. If DOC has an alternative position on this matter, they need to advise that position and the basis for that position.

16. While we accept and endorse the principles of cost recovery as legislated in the Fisheries Act, we cannot accept the legality of some provisions of the Fisheries (Cost Recovery) Rules 2001. As secondary and enabling legislation, the rules cannot extend cost recoverability to activities beyond the scope and nature of the provisions in the Fisheries Act, the primary legislation. To do so is ultra vires.

17. For this reason, the definition of "Research relating to the protected species population" contained in the regulations is invalid in that it seeks to validate research required or carried out in the interests of effective management of protected species – a reflection of the general public interest in population management, rather than demonstrating an adherence to the adverse effect criterion.

18. For this reason, we also consider the cost recovery formulae as set out in items 2 and 3 the Schedule to the Cost Recovery Regulations are invalid. Cost recoverability relates to adverse effect from commercial fishing. in some cases the effect of human intervention may not be adverse, for example the risk to common dolphins, bottlenose dolphins, fur seals, may be assessed as negative but since none of those species are subject to an adverse effect (in Fisheries Act terms) from human intervention or more particularly from commercial fishing, cost recovery of any DOC research expenditure on those species is not legal.

19. There may be occasions where there are no adverse effects from commercial fishing but industry might wish to voluntarily support the funding of projects in the wider public interest. These are consented to on a specific basis and should not be taken as precedent setting.

<u>Use of Risk Assessments</u>

20. In the context of protected species management in New Zealand, risk assessments are increasingly being used to assess the direct effects of fishing on seabirds, sharks, marine mammals and corals. New Zealand uses a mixture of qualitative Level 1, semi-quantitative Level 2 and quantitative Level 3 risk assessments in respect of protected species. Risk assessments can serve to identify the level of risk to species from NZ commercial fisheries, the principal components of the risk, the sector assessed to be generating the risk and the components of the model to which the risk measure is most sensitive. These outputs can contribute to planning research activity. While we support a risk-based analysis, we are

[1] Department of Conservation, Administration of the Conservation Services Programme, December 2002

concerned that the risk assessments must be used in an informed and purposive manner, recognising the fundamentals and limitations of the risk assessments.

21. However, the risk assessments have tended to become the focus of research programmes. "*Feeding the machine*", to address apparent data issues and achieve greater precision in assessments, has become more determinative of research programmes rather than the risk assessments contributing to an informed discussion of the real research needs.

Risk Assessments – Seabirds

22. A semi-quantitative Level 2 risk assessment providing a comparison of estimated mortalities and Potential Biological Removals (PBRs) has been undertaken for protected seabirds. This is supplemented by a number of Level 3 risk assessments for species with significant concerns and sufficient data to support higher definition evaluation.

23. We submit that the L2 seabird assessment provides very conservative (pessimistic) estimates of risk in that it:
    a. is fitted to data on captures, not fatalities, and thus provides an inflated assessment of the risk to seabirds from commercial fishing especially where as in some instances more than 50% of birds are released alive;
    b. uses scalars for multiplying up captures to account for cryptic (unobservable) captures. Thus with the last two processes, one trawl net captured bird released alive results in two fatalities in the risk assessment
    c. is based on N_{MIN} as against N even where accurate census data are available;
    d. uses conservative assumptions for vulnerability where they are not specifically estimated from observed data;
    e. is based on historical data and may not adequately reflect the impact of recent management measures in reducing fatalities or captures and current level of residual risk; and
    f. fails to incorporate the outcomes of Level 3 population modelling where this has been undertaken.

24. We submit that the risk assessment methodology needs to address the above factors as a matter of urgency. It is also necessary for the L2RA to be recognised as pessimistic and whilst giving a reasonable and useable hierarchy of risk and priority, overplays actual population impacts. This is demonstrated for example by the L3 Assessments of Southern Buller's albatross (Snare's population[2]) and Westland petrels[3] which whilst listed as high and very high risk in the L2RA are not deemed to be with more detailed analyses. A failure to consider and address these matters will impose unnecessary and unwarranted costs on commercial fishing.

25. We have raised with the Department the need to review the risk definitions used in the L2 semi-quantitative seabird risk assessment reports. Those definitions are critical to the interpretation of the risk assessments. In our opinion, the risk definitions used are very conservative to the point of being misleading. The methodology provides:
    a. estimates of the risk with an "r" or recovery factor of 1,

[2] D.Fu, P.Sagar, The 2014 demographic assessment of the Snares Islands population of Southern Buller's albatross (*Diomedea bulleri bulleri*) New Zealand Aquatic Environment and Biodiversity Report No. 165 March 2016

[3] Susan M. Waugh et al,, Modelling the demography and population dynamics of a subtropical seabird and the influence of environmental factors, Ornithological Society Volume 117, 2015, pp. 147–164

b. 95% confidence intervals about those estimates, and
c. supplementary analyses with "r" equal to 0.5 and 0.1.

26. The current risk definitions are as follows:

RISK CATEGORIES - SEABIRDS		
Class	**Range of Median Ratio of APF to PBR**	**Confidence Limit**
Very High Risk	Median > 1	Upper 95%c.i. > 2
High Risk	0.3 < median <1	1<Upper 95%c.i. < 2
Medium	0.1 < median <0 .3	0.3<Upper 95%c.i. < 1
Low		Upper 95%c.i. > 0.3

27. Our concerns relate to the definitions for high, medium and low and in particular to the use of the 0.3 and 0.1 thresholds and the failure to recognise the extremely conservative nature of the risk assessment methodology.

28. We have no significant problem with the thresholds for the top risk class. However, we cannot agree that a seabird species can be defined as being at "high risk" when the estimated median mortality rate will need to be increased by a factor of three times before the PBR is exceeded or a species could be at "medium risk" when the estimated median mortality rate will need to be increased by a factor of ten times before the PBR is exceeded. The description of the risk is disproportional to the increase required in the median mortality rate to exceed the PBR.

29. The key point in this analysis is that the categorisation of risk cannot be equated to an adverse effect just through the application of the risk class description. The existence of an adverse effect must be assessed in the context of the fisheries Act and while the Seabird Risk Assessment can usefully inform that process, the risk category cannot be determinative of an adverse effect..

30. We are aware of your contention that the risk assessment does not utilise an appropriate recovery factor for every species and in particular for those species that have been depleted. It is not correct to say that the risk assessment uses a recovery factor of 1 and omit any discussion of the impact of the calibration factor (ρ) and the use of N_{MIN}. Those inputs mean that this assessment deals with a "recovery factor" differently but no less effectively than a traditional PBR approach by adjusting the calculation of the maximum growth rate and total population size and ensuring that the population goals are met in the presence of environmental uncertainty. The primary estimates of the risks to seabirds provided with "r" set at 1 and the confidence levels for that estimate can be used as reliable but conservative indicators of the level of direct risk posed by the commercial fishing sector.

31. Any definition of risk needs to take into account the generally conservative nature of the current methodology and would need to be re-assessed if the methodology is significantly modified, particularly in respect of captures vs mortalities. A re-consideration of those thresholds is warranted and can be tested and calibrated against existing L3 assessments.

32. We would expect CSP cost recovery to be applicable only to its activities in the top risk species class where adverse effect is demonstrable. Should CSP wish to undertake projects related to species with lesser risk status, the project would not be cost recovered.

33. Furthermore, where Level 3 risk assessments have been undertaken, and indicate that commercial fishing is not having an adverse effect on a protected species, there should be

no cost recovery of further CSP activity on that species, notwithstanding the simplified L2 risk assessment indicator. That is not to say that DOC in its wider role as protected species manager should not undertake such research into the species as it deems appropriate for its species management role. That is entirely appropriate and is a matter for DOC to decide. However, that work should not be cost recovered from the commercial fishery and should be funded outside the CSP programme.

Risk Assessment – Marine Mammals

34. While PBRs have been estimated for Maui and Hector's dolphins and significantly more sophisticated model exists for sea lions (with international review), we are still awaiting the overdue provision of the semi-quantitative L2 risk assessment for marine mammals. We have long held reservations that a L2 assessment would not be possible for those mammals where demographic and distributional data are not available. We understand the Marine Mammal Risk Assessment is to be presented to the Aquatic Environmental Working Group on 31 May 2016.

35. With respect to Maui dolphins, we attach no credibility to the 2012 Currey risk assessment [4]. We maintain our assertion that the expert panel was biased in their estimation of risk, the information presented was incomplete, the distribution map of dolphins incorrect, the process was poor, the assessments of risks was not properly justified and the overall standard of the assessment was low.

Risk Assessment – Chondricthyans

36. A Level 1 risk assessment for sharks, rays and skates has been published[5]. The Shark Assessment panel commented that "*The panel allocated intensity scores across the full range (1–6), based on fisheries capturing taxa over time periods ranging from decadal to daily, and over a spatial distribution ranging between less than 1% to greater than 60% of their range. No consequence score greater than 4.5 was allocated (out of a maximum possible of 6) because available information did not suggest that commercial fishing is currently causing, or in the near future could cause, serious unsustainable impacts (the description of a score of 5 for total consequence)*."

37. We submit that there can be no assertion that commercial fishing poses an adverse effect or risk thereof to sharks, rays, skates and Chimaera species and therefore DOC cannot recover the costs of related research.

<u>Increasing Reliance on Indirect Effects</u>

38. We note that CSP is placing an increasing reliance on indirect effects of commercial fishing to support its research activities and cost recovery. For example, in the proposed programme, there are two projects targeting indirect effects:

    a. INT2016-04-04 Indirect Effects of commercial fishing on Buller's shearwater and red-billed gulls; and

    b. POP2016-05 Yellow-eyed penguin foraging and indirect effects.

[4] Currey, R.J.C.; Boren, L.J.; Sharp, B.R.; Peterson, D. 2012: A risk assessment of threats to Maui's dolphins, Ministry for Primary Industries and Department of Conservation, Wellington. 51 p

[5] Ford, R.B.; Galland, A.; Clark, M.R.; Crozier, P.; Duffy, C.A.J.; Dunn, M.R.; Francis, M.P., Wells, R. (2015). Qualitative (Level 1) Risk Assessment of the impact of commercial fishing on New Zealand Chondrichthyans. *New Zealand Aquatic Environment and Biodiversity Report No. 157.* 111 p.

39. While the first project is not proposed to be cost-recovered in that Buller's shearwater has a risk ratio effectively of 0 and red-billed gulls are not protected species, the second project is 50% cost recovered with yellow-eyed penguins having a risk ratio of 0.23, a c.i. of 0.1 and 0.6. At a recovery factor of 1.0, that corresponds to a 0.4% prospect of the risk ratio exceeding 1.0. at a recovery factor of 0.5, the prospect of the risk score exceeding 1.0 was 0.8%. Such a low probability of impact cannot reasonably constitute an adverse effect and as such the costs cannot be recovered.

40. The focus of both these projects is to assess using correlation or spatial overlap methods whether there are any grounds to assert indirect effects from fishing and then develop research projects which might further investigate any causal relationships. In neither instance is there any rationale and evidence that commercial fishing poses an adverse effect on the species. In the absence of that evidence, neither project should be cost recovered and in fact given more pressing issues should not be undertaken at all.

Responsibilities for Protected Species Interactions

41. We see the management of protected species interactions in the provisions of Fisheries Act, the Wildlife Act and the Marine Mammals Protection Act as being:
    a. The monitoring and verification of fisheries interactions with protected species is a general fisheries management role, and may involve a number of tools, including statutory reporting requirements and the work of the observer programme, both established under the Fisheries Act. The appropriate approach in particular fisheries is best addressed in Fisheries Plans;
    b. If those interactions are not deemed to have an adverse effect on a protected species, no conservation service activity is permitted under the Fisheries Act in respect of those interactions.
    c. If DOC can demonstrate that commercial fishing is having an adverse effect, they may under the conservation services programme:
        i. initiate research into those effects if the effects are considered adverse and such a course of action is appropriate to defining management or mitigation of the effect;
        ii. initiate research into mitigation of the adverse effects; or
        iii. prepare a population or threat management plan.

    However any such research must be related to the adverse effects of commercial fishing. It is the wider fisheries management responsibility under the Fisheries Act to implement and monitor appropriate measures.

Use of Electronic Monitoring

42. The plans for monitoring of protected species interactions are focused solely on the use of observers. We consider that monitoring should also take advantage of the benefits of electronic monitoring where it is suitable. Electronic monitoring offers the possibility of cost savings, continuous and comprehensive monitoring and the absence of health and safety issues.

43. Electronic monitoring is not suitable for all monitoring and observer functions but should be employed where the focus is the recording of protected species interactions. We recognise that observers placed on vessels for that purpose may also undertake other observer functions which could not be provided if electronic monitoring was to be used. Thus the deployment of EM needs to be objective(s) based, relevant to data required and able to

collect said data, and considers all other aspects of other data requirements and possibilities. Put simply, use EM where it can deliver robust information and it makes sense to do so.

PART II THE CSP 2016/17 ANNUAL PLAN

44. It is against the above framework that we provide our comments on the projects contained in the draft plan for CSP activities for 2016/17.

45. While we can support aspects of the plan, we cannot support the plan in toto. We do not believe the programme constitutes an effective and efficient spend of Crown and industry resources towards the better conservation of marine protected species. We have proposed alternative projects where we consider the proposed CSP draft plan is not preferred.

46. We have previously proposed that greater resources be applied to the implementation of protected species mitigation on the inshore and HMS fleets (e.g. training, outreach, improved tools). We would again advocate expenditure should be transferred to such projects rather than the projects as proposed by DOC.

Comments on Proposed Projects

47. The following table contains comments on the proposed observer coverage and specific projects. We have indicated those projects which we believe have merit to be implemented, and those which could be cost recovered.

48. We have not provided comments on the fishstocks for cost recovery in this submission but seek the opportunity to work through that matter directly around the table. Misallocation of costs has been an ongoing bugbear every year and a thorough reconciling of rationale and de-bugging the process would reduce friction and improve costs falling where costs should lie. We would prefer to work directly with CSP on the allocation to stocks once the projects have been finalised.

Programme	Observer Days	Stocks	Industry assessment
Setnet ECSI	There has been previous observer coverage from 2007 to 2015, which recorded a low level of captures of protected species. Commercial setnet fishing does not pose an adverse effect risk to any of the species in consideration – Hector dolphins, yellow-eyed penguins, fur seals and shags. Reliable Hector dolphin capture rates have been obtained from previous observer activity. The recent delivery rate for inshore observers is less than 25% of levied totals. Placement problems in recent past have not been overcome.		While the project should be scheduled at a lower level of observing consistent with the ability to deliver services, the previous observer activity and the risk assessments do not support a contention of adverse effect. Industry does not support the programme
Setnet SCSI	The SCSI setnet fishery has had previous observer coverage from 2006 to 2009 and recorded low captures of protected species. Commercial setnet fishing does not pose adverse effect risk to any of the species in consideration – white pointer sharks, Hector dolphins, yellow-eyed penguins, Fiordland penguins, bottlenose dolphins, fur seals and shags. The recent delivery rate for inshore observers is less than 25% of levied totals. Placement problems in recent past have not been overcome.		While the project should be scheduled at a lower level of observing consistent with the ability to deliver services, the previous observer activity and the risk assessments do not support a contention of adverse effect. Industry does not support the programme
Setnet WCSI	Over four and a half year's coverage, no Hectori dolphins have been sighted or captured. Continued observer activity not productive. Electronic monitoring could reduce the cost to Government		Not supported
Trawl WCNI	Previous observation of the inshore trawl sector has not demonstrated an adverse effect to Hectori dolphins. However the Maui population is at such high risk that monitoring is voluntarily supported by industry. Electronic monitoring would provide more cost effective coverage.		No adverse effect but voluntarily supported if camera coverage for MDO and protected species captures.
Trawl WCSI	Mitigation being deployed but the risk of interactions with white-capped and Salvin's albatross warrant monitoring.		Support as proposed but camera coverage would be the preferred option
Trawl ECSI	Mitigation being deployed but interactions with white-capped and Salvin's albatross warrant monitoring.		Support as proposed but camera coverage would be the preferred option
Trawl NENI Snapper	Companion to electronic monitoring programme. Focus on Black Petrel and SNX. .		The proposal is not supported and MPI needs to discuss the need with the SNA1 commercial group.
Danish Seine NENI	Focus on Black Petrel and SNX . An adverse effect is demonstrated by the risk assessment.		The proposal is not supported and MPI needs to discuss the need with the SNA1 commercial group
BLL - BNS	Focus on black petrel. An adverse effect is demonstrated by the risk assessment		Support as proposed but camera coverage would be the preferred option
BLL - SNA	Focus on Black Petrel and SNX. An adverse effect is demonstrated by the risk		Support as proposed but camera coverage would be the preferred

	assessment.		option

NEW RESEARCH PROPOSALS			
Proposal	**Title**	**Comments**	**Cost Recovery**
INT2016-02	Identification of seabirds captured in New Zealand fisheries	Needed to identify species for capture estimates – observers unable to conclusively identify in field. Not all seabirds captured are assessed to be at adverse risk from commercial fishing. However, we consider this to be a relevant project.	While not all seabirds are at adverse risk from commercial fishing, we voluntarily support the ongoing monitoring of the level of risk.
INT2016-03	Post release survival of white pointer sharks in New Zealand setnet fisheries	The low risk assessment score indicates that fishing is not posing an adverse effect on this species. Prior research indicates only 17 WPS were caught in setnets over a twenty year period. The low number of captures mean the research is not likely to yield reliable or indicative data. DOC has not described what sample size (and predicted effort) will lead to robust result. We do not see the project as relevant to the management of marine protected species. Not relevant	We do not support cost recovery of the project but could support further research if an adverse effect can be demonstrated.
INT2016-04	Indirect effects of commercial fishing on Buller's shearwater and red-billed gulls	The risk assessment demonstrates no adverse effect on Buller's shearwater (APF 10, PBR 14,800) or red-billed gulls. It is difficult to understand priority being given to this project regardless of funding source. We do not see this research as relevant	Not to be cost recovered
POP2016-01	Seabird population research: Chatham Islands 2016-2017	Population estimates for range of species but not all species are at high risk. 50% cost recovered. Concerned that existing datasets eg Chatham albatross are not as yet analysed and yet further field work proposed to collect more information. Also concerned at anecdotal reports of ongoing harvesting of albatross pre-fledge chicks at sites in this region. The research is relevant.	Support but adjust stocks to remove SQU1J (see general comment above regarding allocation of costs to fishstocks and need for general review before this plan finalised).
POP2016-02	Seabird population research: Auckland Islands 2016-2017	Population estimates for range of species but not all species are at high risk. 50% cost recovered. Pursuit of demographic data for whitecapped albatross (Plan A) is a waste of resources. The complete lack of acknowledgement of information from other long term demographic studies (eg black petrel, Southern Buller's and Westland petrel, and other extant yet unanalysed datasets (eg Chatham albatross) calls into question the motive for this work. Whitecapped census data should continue to be collected	While we can voluntarily support the project, we cannot do so for the pursuit of more demographic data for whitecapped albatrosses.
POP2016-03	Updated basking shark bycatch review	While a protected species, commercial fisheries do not pose an adverse effect (RA score 13.5 – lower than QMS stocks). Reviewed in 2012. International literature review. We view the research as being relevant to fisheries.	We do not support cost recovery of the project but could support further research if an adverse effect can be

			demonstrated.
POP2016-09	Cetacean habitat suitability modelling project	NIWA project already part funded from MPI –however we have not yet seen the MMRA results or the report which would allow us to understand whether a distribution problem exists. NIWAs work on TTR saw them achieving good fits when they tuned the analyses to existing distributions. Used 7 environmental variables but gave false positives. The bulk of the project seems to be a consolidation of distribution data of cetacean sightings rather than a predictive model of distribution. Risk of adverse effect to a limited number of species.	We can voluntarily support the project and could support further research if an adverse effect is demonstrated
POP2016-05	Yellow-eyed penguin foraging and indirect effects	YEP has low L2RA risk (score0.23 with c.i. 0.1-0.6). New tracking data on foraging patterns – useful. No rationale or evidence of adverse effect	We support DOC undertaking work but not cost recovered.
POP2016-06	Salvin's albatross: Bounty Islands methodology development	Salvin's are the highest risk albatross, least tractable and affordable to study (logistics) and represented in incidental captures in a number of fisheries. Developing and agreeing a long term practicable methodology to monitor this population is required. Relevant.	We support DOC undertaking work but not cost recovered.
POP2016-07	New Zealand Sea Lion: Auckland Islands Population Project- Pup count only	No adverse effect from commercial fishing. DOC should not levy industry for 2016-17 and await finalisation of NZSL TMP. Then discussions with all Govt departments and parties can occur to determine work required based on TMP outputs and with resourcing a part of those discussions. Neither DOC nor MPI are proposing a disease study of any consequence yet preliminary TMP work suggest this as high priority.	We support the need for ongoing sea lion monitoring and research based on the TMP. This may not need to be annual but pup counts, demographic data and disease data will be integral to future understanding and management under the TMP.
MIT2016-1	Protected species bycatch media	A composite programme with: 1. Newsletter not valued, most fishers unaware and not sufficiently interested to download. Not supported 2. Identification tools – reprint –supported with cost recovery Not relevant in current form	We do not support either project or cost recovery.
MIT2016-02	Entanglement of whales in pot/trap lines and setnets and a review of potential mitigation methods	No adverse effect	We do not support either the project or cost recovery.

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The Director General of Conservation
Department of Conservation
PO Box 10 420
WELLINGTON

27 April 2016

Dear Sir

Submission to: DRAFT Conservation Service Programme Annual Plan 2016/17

F&B appreciates the opportunity to provide some brief comments on seabird aspects of this draft plan.

Congratulations to the CSP team for a well put together annual plan.

2.1 & 2.1.1 Observing Commercial Fisheries.

An additional factor that should be taken into account when planning observer coverage relates to the objective under the NPOA-Seabirds to set target bycatch reduction rates. One of the issues we found in the SAG group (Capture Rates Reduction Targets Working Group) when looking at this objective was that observer coverage rates were only of sufficient level for very few fisheries to be able to detect changes in bycatch rate from one year to the next or even over 3 years. It is particularly important for those fisheries that interact with species identified at commercial risks of very high, high and moderate, that effort is made to ensure that observer coverage in those fisheries will be sufficient to detect improvements in bycatch rates, so that we can actually set bycatch rate reduction targets. We recommend cross checking with all very high, high and medium risk species to make sure observer coverage will be sufficient to detect changes in bycatch rates in those fisheries that contribute the most risk.

Proposed observer projects. Good to see some increased proposed effort on set nets in Otago, Southland, Stewart Island and Fiordland to look for possible interactions with penguins. However I am not convinced that even a 65% coverage will be sufficient to detect captures and that as for the West Coast of the North Island to detect dolphin captures there is a proposal to have 100% observer coverage, this should be the case for set nets in the south as well.

West Coast South Island - Good to see this project here. Agree that Salvin's are a likely risk for this fishery despite recent questions about the identification of this species in bycatch here! Inshore

trawl on it's own is sufficient to contribute to the very high risk to Salvin's albatross (latest iteration of the risk assessment)

Snapper Trawl – NE North Island. How is this project related to the current roll-out of cameras on inshore trawl vessels?

Bottom longline – Bluenose – good to see an estimate of 50% coverage proposed and intention to spread spatially and temporally, especially given very low coverage in 2014/15 – just 2.41% in AKE, and only birds caught – although just 2 were black petrel. It will be important to include all vessel types and refusal to allow observers should result in some sort of penalty. How will observers be evaluating the likely fate of birds released alive? This has received a lot of discussion in recent years. Banding has been one potential method of verifying predictions of survivorship. Where has this idea got to? I still think colour banding would be useful as there are many people out on the Hauraki Gulf during the summer who could record presence of colour banded birds, including fishermen.

Snapper bottom long line – Again – good to see target observer coverage of 300 days – but it is essential to make sure this target is met and also met spatially and temporally. I am hoping that our (BPWG) efforts with Dave Turner will result in cameras also being deployed on some or all of these vessels this year so that there may need to be some adjustment to the objectives of the observers to monitor/compare the effectiveness of cameras with observers.

2.1.2 Offshore fisheries. Will the proposed increase in observer coverage to 20% for scampi, southern blue whiting and squid trawl be sufficient to detect changes in bycatch rate in subsequent years? All of these fisheries as well as hoki contribute substantially to risk to NZ's albatrosses. Addressing this risk effectively may require much higher levels of observer coverage than proposed.

It is clear that we have insufficient observer time to enable us to effectively manage our fisheries for bycatch in NZ. Despite best of intentions observers get diverted to perceived more high priority tasks and our ability to meet observer targets is often compromised. While we accept that this may at times be due to the unwillingness or inability of fishing vessels to have observers, we do not find this an acceptable reason. If a vessel is on the water catching quota species can potentially interact with protected species then they have a legal obligation to accept observers and if they can't or won't, then they shouldn't be allowed to fish until they do. We suggest that more resources must be put into achieving levels of observer coverage that are going to enable us to meet our objectives under the NPOA-Seabirds. This may require increasing funding into this area to translate into more observers.

2.4 Identification of seabirds captured in NZ fisheries.

While we understand the logic for not returning all seabirds for necropsy, we continue to advocate for this to happen so that the best identification of birds can be achieved – many photos are still not good enough to enable this to happen. Furthermore there is a loss of potential data on age, sex and breeding status of birds which may contribute to understanding more about the risk to each species across NZ.

2.6 Indirect effects of commercial fishing on Buller's shearwater and red-billed gull

Great to see this project here to gather preliminary information on the potential impacts to these species. We strongly support this project going ahead and hope it may lead in the future to a more in depth study, such as by a doctoral and post -doctoral student.

3.2 Chatham Island birds. Good to see this work going ahead as previously planned. For the Chatham Island shag species it will be important for the researchers to also take the opportunity to assess what on-going risks there are to these populations from land-based causes.

3.3 Auckland Islands seabirds. Again – good to see these projects going ahead and support their implementation.

3.6 Yellow-eyed penguin foraging and indirect effects.

This is another high priority indirect impacts study. Fully support this project going ahead. It is essential to inform our understanding of the multitude of issues which seem to be affecting YEPs to gather information on the potential impacts of trawling on biogenic habitats, but equally to understand how important these habitats are for YEP's.

3.7 Salvin's albatross. I am assuming that because we want to get an estimate of the population trend that we would want to use the same methodology for the survey as was used by Baker *et al* 2014. However we understand there were issues with the number of non-breeding birds present so the recommendation was to undertake the survey earlier in the breeding season. I am not sure why this will take another year to agree on the methodology, when we really need to know ASAP what the population trend is likely to be as this bird is so highly bycaught. Can we just not agree on a methodology by an exchange of emails and get this work done this summer? Or is this delay necesasry due to lack of funds from industry this year?

4.1 Seabird bycatch reduction Liaison Officers. This work appears to be progressing well and we certainly support its continuance and indeed extension into other fleets and for subsequent years.

There are also some issues raised in the LO report which are of some concern to us. I'm not aware that there has been an opportunity to discuss this report yet? One resolves around 'strategic offal discharge', although the report does suggest that caution is required when using this technique. It has been used specifically in the Hawaiian SLL fishery, but there is evidence that it causes more problems than it resolves. A focus on retaining unused baits and trying to reduce offal discharge is likely to be the best long term solution.

There was also the issue around 'floaters' on the bluenose lines and I wonder whether the use of weights at the hook would resolve this issue, preventing the baits from floating up? It would be useful to have an opportunity to discuss on-going bycatch issues with the LO's, possibly at the BPWG meetings.

Also mentioned under this project is the potential extension into recreational/ charter sector – something that F&B, through BirdLife International has been doing in combination with SSST, by employing Emma Cronin. Our funding for this project is now nearly finished and we are seeking funding support through some other mechanism – such as central government (DOC or MPI).

Karen Baird

Regional Coodinator BirdLife International Marine Programme

F&B Seabird Advocate.

Comments regarding proposed research for POP2016-07 (New Zealand Sea Lion: Auckland Islands pup count) as outlined in DRAFT - Conservation Services Programme Annual Plan 2016/17

Jim Roberts (NIWA), April 2016

The plan outlines the research approach for conducting the NZ sea lion pup count at the Auckland Islands. Additional non-CSP funds will be allocated to conduct additional research in accordance with science requirements identified by the TMP, but these are not described in the draft plan. It is noted that the field season will be shorter.

The pup count (POP2016-17)

This project will conduct a pup count at the Auckland Islands over a shorter field season. I recommend keeping the pup count methodology consistent with previous years. The start date of the field season will influence the number of dead pups counted and hence the total count. It would be good to get some clarification as to the proposed start date.

Non-CSP research

I am not sure when the opportunity will come to comment on field research in addition to the pup count, so I will do this now even if it is not covered funded by CSP.

Resighting effort

No mention is made of resighting effort, but I hope that this will be continued in the coming field season. It is vital for disentangling the demographic causes of changing pup count. Again, it is preferred that a similar methodology is followed to recent field seasons, so that there is a similar annual probability of seeing a breeder/non-breeder if present at the rookery. This should be a major consideration for the design of a curtailed field season.

Biometric data

There is also no mention of pup/adult measurements. Regardless of recommendations stemming from the TMP I suggest that pup mass and standard length are collected at the date of flipper tagging as per recent field seasons. Where lactating females are sedated for any study it would be really useful to collect mass length information, collect, blood, tissue, whisker samples, log samples taken and make the data & log available to prospective researchers.

Disease observations

Clearly there are still major uncertainties, which will be picked up by other commenters. Principal among these is mortality after the field season has ended. We are still only diagnosing a small fraction of the estimated first year of pup mortality (~60% of all pups born in recent years) and this was a shortcoming of the TMP risk assessment. The curtailed field season will not help in this respect and I wonder if there might be an opportunity to collect some observations later in the nursing/weaning period, ie during a short winter visit?

Scats & regurgitates

I suggest that these are collected as per previous seasons with a focus on collecting a large volume of samples at Dundas. This is the largest population and we have not sampled here since the 1990s despite putative rookery differences in foraging distribution from satellite telemetry of lactating females. I strongly recommend picking up samples at Dundas and increasing the sample size where possible given probable changes in prey abundance around the Auckland Islands in recent years. We also stopped picking up regurgitates a few years back and I think it would be advantageous to resume this. We also have a poor grasp of seasonal diet, ie what to sea lions eat late in the season when the pups are much bigger? Another informative activity for a potential winter trip.

Logging of field data

My understanding is that the TMP will recommend the collation of historical field data going back to the 1970s (including biometric/biological field data). There are current efforts to consolidate these data in to one place. I think this work should consult with the current field biologists, so that a protocol for submitting and storing new field data (including biometrics) can be optimised. Where possible these additional observations should be linkable to the demographic dataset, i.e. linked to mark ID or sealion ID (in database maintained by Dragonfly).

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Introduction

1. The NZ Rock Lobster Industry Council (NZ RLIC) welcomes the opportunity to submit on the Draft Conservation Services Programme (CSP) Annual Plan 2016/17.

2. The NZ RLIC is an umbrella organisation for the nine commercial stakeholder organisations, known as CRAMACs, operating in each of the rock lobster (CRA) management areas of New Zealand. CRAMAC membership comprises CRA quota owners, processors, exporters, and fishermen in each region. All nine CRAMACs hold a significant majority mandate of CRA quota shares owned in the regions.

3. Our submission focuses on the two projects with potential implications for commercial rock lobster fisheries – i.e., POP2016-01 *Seabird population research: Chatham Islands 2016-17* and MIT2016-02 *Entanglement of cetaceans in pot/trap lines and setnets and a review of potential mitigation methods*. However, our comments also have wider relevance to the strategic context in which CSP projects are planned and delivered.

POP2016-01 Seabird population research: Chatham Islands: 2016-17

4. POP2016-01 is a seabird population research project. The research objectives include estimating the size of the breeding population of Pitt Island shags (Objective 5) and Chatham Island shags (Objective 6).

5. NZ RLIC considers that POP2016-01 Objectives 5 and 6 do not meet the statutory definition of "conservation services" and should therefore be **deleted** from the CSP Annual Plan.

6. The definition of conservation services in section 2 of the Fisheries Act 1996 is tightly constrained. Outputs of conservation services must be related to the adverse effects of commercial fishing on protected species. Only two types of services are recognised – a) research and b) the development of a population management plan. Research outputs must relate to either a) adverse effects of commercial fishing on protected species or b) measures to mitigate adverse effects of commercial fishing on protected species.

7. In order for protected species population research to be a conservation service, there must be reasonable justification[1] to conclude that either commercial fishing is having an adverse effect on a protected species, or there is a reasonable risk of an adverse effect on the species from commercial fishing.

8. Lack of information on protected species population parameters is not equivalent to a reasonable risk of an adverse effect and does not justify including a project in the CSP Annual Plan. Justification must be framed in terms of adverse effects on a protected species from commercial fishing. In the case of rock lobster fisheries and Chatham Island and Pitt Island shags, no such justification has been provided.

9. The importance of justifying all CSP projects in relation to adverse effects was reinforced by the Office of the Auditor General in their 2002 report on the CSP. The Auditor General's report is as relevant today as when it was written – the legal framework governing the CSP has not changed. The Auditor General recommended that DOC should provide clear justification of the relationship between a research project and the effects of commercial fishing on the particular protected species, including by demonstrating:

    - The current or potential adverse effect that commercial fishing has on the protected species population;
    - The extent of that effect; and
    - How the research relates to that current or potential adverse effect, or measures to mitigate that effect.

10. None of these requirements have been fulfilled in relation to POP2016-01 Objectives 5 and 6. The project "rationale" provides no evidence of actual adverse effects or reasonable risk of an adverse effect on populations of Pitt Island or Chatham Island shags from rock lobster fishing. Instead, it simply references other DOC strategic documents, none of which provide evidence of an adverse effect or a reasonable indication that there may be an adverse effect. The referenced documents include:

    - The CSP Strategic Statement, which contains significant and pervasive errors of legal interpretation and application as to the valid scope of conservation services;[2]
    - The CSP Seabird Plan 2016, which was prepared by research scientists based on inadequate strategic guidance on the legal scope of conservation services; and
    - The National Plan of Action Seabirds, which states that "*historical captures of shags in pot fisheries have been reported from the Chatham Islands, but based on fisher interviews this is reported by WMI [2012] as having been mitigated by changes in pot design*".[3]

[1] Based on the best available information, as required in the information principles in section 10 of the Fisheries Act.
[2] See NZ RLIC submission on CSP Strategic Statement, March 2012.
[3] [WMI 2012] is Wildlife Management International (WMI). 2012. Shag interactions with commercial rock lobster pot and trap fishing methods in the Chatham Islands. Unpublished report held by the Department of Conservation, Wellington. 24p.

11. The previous CSP project on Chatham Island and Pitt Island shags (referenced in the NPOA Seabirds) found no evidence that commercial fishing is having an adverse effect on the shag populations.[4] Of the 22 current and former fishermen interviewed for the project, nine reported catching between 1-5 Pitt Island shags during their entire fishing career and none reported catching Chatham Island shags. All reported bycatch occurred at least five years ago and most over ten years ago. All fishermen considered that the current pot design and baiting method has completely eliminated shag bycatch. For further research, the report's author recommended in-depth studies on the breeding ecology, foraging behaviour and range of Chatham Island and Pitt Island shag "*aimed at* ***determining the cause of population decline*** *in these species and mitigating against these*" (our emphasis).

12. NZ RLIC accepts that population studies, including bird counts and behavioural research, may be important for the management of threatened populations. However, a seabird census cannot possibly *"determine the cause of population decline*" – it can merely confirm a decline that has already been detected. Neither can the census inform any conclusions about whether, or the extent to which, commercial fishing is having an adverse effect on shag populations. Pitt Island and Chatham Island shags are potentially vulnerable to numerous threats, including invasive animal and plant pests at offshore island colonies, feral cats and weka, wild and domesticated dogs, roaming sheep, cattle and pigs in parts of Pitt and Chatham Island that are suitable for shag breeding colonies, and visitor impacts at nesting colonies.[5]

13. We do not oppose DOC undertaking population studies to learn more about the effective management of risks to protected species such as Chatham Island and Pitt Island shags – but not under the auspices of the CSP. If the proposed population census is undertaken it should be as Crown-funded public good research. A population project can only be included in the CSP Annual Plan if it evolves to the stage of assessing the adverse effects of commercial fishing on a protected species. POP2016-01 Objectives 5 and 6 are a long way from that point and – based on the outputs of DOC's own research in INT2011-02 – are unlikely ever to reach it.

MIT2016-02 Entanglement of cetaceans in pot/trap lines and setnets and a review of potential mitigation methods

14. MIT2016-02 is a desk-top study on the entanglement of cetaceans in various types of fishing gear including pot lines.

15. NZ RLIC considers that MIT2016-02 does not meet the statutory definition of "conservation services" and should therefore be **deleted** from the CSP Annual Plan.

16. As with POP2016-01, MIT2016-02 has not been, and cannot be, justified on the basis of adverse effects of rock lobster fisheries on cetacean populations. The project "rationale" relies entirely

[4] Bell, M 2012. Shag interactions with commercial rock lobster and trap fishing methods in the Chatham Islands. Research report to the Department of Conservation [INT 2011-02]

[5] Taylor, Graeme A. Action plan for seabird conservation in New Zealand. Part A, Threatened seabirds. Wellington, N.Z. Department of Conservation, Biodiversity Recovery Unit, 2000.

on flawed proxies for adverse effects such as spatial overlap between humpback whale migration routes and rock lobster fishing activity and a predicted increase in the number of whale entanglements as a result of increasing numbers of cetaceans. NZ RLIC emphasises that:

- Spatial overlap between commercial fishing activity and a protected species population is not evidence of an adverse effect and nor is it necessarily indicative of a reasonable risk of an adverse effect; and
- Reported incidents or interactions between commercial fishing activity and a protected species are not evidence of an adverse effect and nor are they necessarily indicative of a reasonable risk of an adverse effect.

17. No evidence of an adverse effect (or even of a reasonable risk of an adverse effect) on cetacean populations from rock lobster fishing is provided. In fact, the project description makes it clear that any threat to cetacean populations posed by rock lobster fisheries is unknown as the project aims to "*determine whether or not the current level of risk warrants … improved mitigation*" and to recommend mitigation options "*if the risk to whales was deemed significant*". As with the flawed proxies identified above, lack of information on risk is not evidence of an adverse effect and nor is it necessarily indicative of a reasonable risk of an adverse effect.

18. We also remind the Department that, in order to qualify as a legally valid CSP project, the adverse effect in question cannot be just on an individual bird or mammal of a protected species, but must be an adverse effect at the level of a species or population. The Fisheries Act definition of conservation services assumes the presence of adverse effects on species, not individuals. In addition, those aspects of the Wildlife Act 1953 and Marine Mammals Protection Act 1978 that address fishing-related mortality operate at the level of a species or population (e.g., population management plans and maximum allowable levels of fishing related mortality).

19. The broader context of the Fisheries Act also reinforces the significant scale of adverse effects that are under consideration. For instance, the purpose refers to avoiding, remedying or mitigating any adverse effects of fishing on ***the aquatic environment*** (section 8), and the environmental principles refer to maintaining associated or dependent species above a level that ***ensures their long-term viability*** and maintaining ***biological diversity*** (section 9). The reference to maintaining the long-term viability of associated or dependent species (which includes protected species) provides a threshold level for considering when an effect might be adverse – i.e., when the effect of commercial fishing on a protected species population prevents the long-term viability of the population from being maintained.

20. It is simply not credible to suggest that rock lobster fishing is jeopardising the long-term viability whale populations – or, to adopt the Vision of the CSP Strategic Statement, compromising the

protection and recovery of whale populations[6] – especially as whale sightings are reportedly increasing in the areas where rock lobster fishing takes place.

21. Furthermore, the project description makes no mention of the comprehensive whale mitigation programme that the rock lobster industry has been developing and implementing over many years. This omission is careless and disappointing as NZ RLIC has previously supplied DOC with full documentation on ***Whale_Safe***.

22. NZ RLIC's *Whale_Safe* programme builds on a local initiative developed by the CRA 5 Rock Lobster Industry Association in order to assist all pot and trap fishermen to avoid and/or mitigate the risk of entanglements. *Whale_Safe* comprises a booklet containing detailed information about cetacean movements and behaviour, a sequence of photos and illustrations to enable identification of the different cetacean species, and advice on how to set gear to avoid entanglements. The material in the booklet was commissioned from Dr Martin Cawthorn who is regarded internationally as an expert on cetacean biology and behaviour.

23. An important aspect of *Whale_Safe* is a forward warning protocol to alert lobster fishermen that whales are on the move. The forward warning system makes use of *Ocean_Snap* – a generic electronic recording and reporting tool backed up by a data base – which runs as an app on standard smartphone technology. *Ocean_Snap* is a secure system for fishermen to take digital photos of all types marine incidents including whale, dolphin and seabird sightings or strandings as well as unusual vessel activity, fish thieving, or maritime hazards. It includes detailed mapping of individual observations together with time and date, a species identification function, and links to information relevant to the report submitted by a fisherman. In the case of whale observations *Ocean_Snap* has the facility to immediately distribute email and/or SMS messages to every lobster fisherman in the general area of the reported observation.

24. The point is that the rock lobster industry is already fully aware of the risk of whale entanglements, has commissioned and continues to seek internationally-respected expertise on managing cetacean interactions, and is actively avoiding and mitigating the risk of entanglement. The desktop study proposed in MIT2016-02 is redundant.

Summary and way forward

25. POP2016-01 Objectives 5 and 6 and MIT2016-02 should be deleted from the CSP Annual Plan. Neither of the projects has been, or reasonably can be, justified on the basis of the adverse effects on protected species populations posed by rock lobster fishing. As the projects do not meet the statutory criteria for conservation services, we need not comment on the proposed allocation of project costs.

[6] We note that this "Vision" has no basis in the statute as references to the "protection and recovery" of protected species go beyond the Fisheries Act requirement to ensure the long-term viability of associated or dependent species.

26. NZ RLIC wishes to emphasise the rock lobster industry's willingness to continue to proactively avoid, remedy or mitigate any adverse effects of our fishing activities on protected species populations. To that end NZ RLIC:

    - Is continuing to work with the CRA 6 Industry Association to ensure that interactions between the Chatham Island rock lobster fishery and shags remain at levels that will not have an adverse effect on shag populations – including through the implementation and refinement of our Seabird Interaction Code of Practice (which is a world first for seabirds in any pot or trap fishery); and
    - Is continuing to refine and implement *Whale_Safe* and the *Ocean_Snap* technology for use in rock lobster and other inshore fisheries.

27. In our view, conservation outcomes are best served by the rock lobster industry working together with the Department and other interested parties (such as MPI and ENGOs) on these and other practical initiatives that directly reduce any impacts that our activities may have on protected species. This is a better use of the Department's and industry's time, money and resources than counting seabirds, paying for desktop reviews of matters that we are already well aware of, or getting bogged down in legal debates about the point at which an observed interaction becomes an adverse effect on a protected species population.

Yours sincerely

NZ Rock Lobster Industry Council

Executive Officer

27 April 2016

SANFORD SUBMISSION ON CONSERVATION SERVICES PLAN 2016 - 2017

Thank you for the opportunity to comment on your draft Conservation Services Plan (**CSP**). We welcome an opportunity to sit down together and talk through some of your proposed projects – so that we better understand what your concerns are and, so we are more able and open to take on board the learnings that come flow from the research.

Sanford has contributed to and is supportive of the Fisheries Inshore and Deepwater submission also lodged on the CSP plan. We echo their concern that an increasing number of CSP projects seem to be justified on the back of very conservative risk assessments. These assessments use historical data and were not intended to drive research. They are often out of date and have not taken into account the significant commitments made by quota owners and vessel operators into bycatch mitigation techniques or new technologies.

This submission formally records our objection to several proposed inshore North Island projects, which in our view need more through consideration and industry consultation, specifically:

- WC NI inshore trawl (350 days)
- SNA1 trawl (150 days)
- NE NI BLL SNA1 (300 days)
- SNA1 Danish seine (100 days)

In the lead up to lodging this submission we requested more information from MPI and DOC, while some answers were given there was insufficient detail provided to resolve our doubts. Sanford therefore requests an opportunity for industry representatives to meet with MPI and DOC officials to discuss these projects, we believe that either we are already delivering or it would be possible to deliver on many of the CSP objectives in more cost efficient and, useful ways.

FMA1, SNA 1
In total a proposed 550 days of additional observer cover

Trawl vessels catching more than 5 tonne of snapper in FMA 1 have become increasingly monitored following a Ministerial directive in 2013 that required first 25%, then 50% then 100% observer cover. Observers were taken off other inshore programmes to ensure that this project delivered on its planned days. The cost of this cover has been met by the SNA1 quota owner.

In 2015 the Minister agreed to an industry request to move from human to 100% electronic monitoring on the trawl fleet and signed a three year service agreement with Trident Systems for a monitoring programme that will cost in excess of $1 million. 100% of this cost will be met by the quota owner. Working towards this goal, since January 2016 cameras have been installed on 100% of the SNA1 trawl fleet.

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The 2016-17 CSP plan now proposes an additional 150 days of new human observer cover on the SNA1 trawl fleet to monitor the efficacy of the electronic cover already in place, we believe this is excessive and duplicates a proven process.

Back in the 2014-15 the CSP plan included a FMA1 (snapper one) project to monitor the industry led snapper agreements including developing monitoring standards, monitoring the move-on rule and monitoring the efficacy of VMS. In 2014-15 SNA1 quota owners were levied 600 days for this research. The target days were met and included a technical EM advisory meeting. To date there has been little tangible progress towards developing the EM standard and, the need for one in our view is likely now surpassed with the appointment of Dean Baigent's role (from our discussions with him, we don't think he is asking for research). We note that the minutes from the MPI technical review 'standards' workshop have not yet been published despite the group making a series of recommendations. Now the current CSP proposes two new projects, NE NI trawl (150 days) and NE NI Danish seine (100 days) for the development of standards for implementation ongoing monitoring of SNA1 and to review the efficacy of VMS. This appears an excessive cost for something which has no clear end use on a group of quota owners who are already footing a hefty monitoring/research bill and who are expected to contribute at least 50% towards a major upcoming snapper tagging programme.

During this same time, from the latter half of 2014 onwards Trident Systems has regularly reported on SNX bycatch, the move-on rule and VMS efficacy – by vessel, by method and by fleet. These reports have been provided to fishers, discussed in workshops (several with MPI staff present) and presented under scrutiny to the Northern Inshore working group. Trident analysis was done on land, to a science standard. It is unclear why MPI observers need to go to sea to do this work and, what new information (if any) they can add to these already comprehensive, data rich reports.

We urge you to sit down with us for a conversation – there is a need for the Ministry, the Department of Conservation and Trident Systems to sit with SNA1 Commercial and discuss what is already being monitored and reported on and where (and if any) gaps exit before these CSP projects are locked down.

Furthermore, given the extensive human observer cover on the SNA1 trawl fleet over the last four years it is unclear why there is a need for further human observer cover to estimate capture rates of black petrel across the trawl fleet (a further 150 days is proposed split 50:50 between DOC and MPI) – surely seabird and Black petrel capture rates on trawl vessels are already well understood as they would have been reported over the last three years as part of the Minister's SNA1 directive.

WC NI (trawl)

This is an ongoing CSP proposal for 350 days split 50:50 between DOC and MPI for the purposes of assessing Maui dolphin capture and as a secondary purpose to observer the nature of warp strikes and spatial distribution of seabirds and marine mammals.

We note that observer cover on this project in the previous two years has been difficult to achieve. We continue to advocate for the use of cameras in this fishery. The nature of warp strikes on this fleet is already well understood and has been the subject of several earlier CSP projects.

NE NI (BLL snapper target)

The CSP proposal is for 300 days split 50:50 between DOC and MPI (levied on SNA1) for the purposes of i) estimating capture rates of black petrel ii) review of mortality of live-releases survival and iii) efficacy of mitigation methods (focus Black petrel)

We are unclear what additional information is required around the efficacy of mitigation methods on the BLL fleet. This was a problem that has been well researched and largely resolved – the solution includes a four year investment into seabird liaison officers who have prepared 41 vessel specific seabird management plans and visited vessels both wharf side and while fishing.

While we are aware of a discussion currently occurring with Southern Seabirds Black Petrel Working Group and MPI around the use of electronic monitoring across the BLL fleet to monitor seabird captures, we urge for there to be a conversation with quota owners about the cost of this project, the need and the best way to deliver it.

Sincerely

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For Sanford Limited

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Simon Childerhouse – Submission for CSP plan 2016/17

Email Number 1

- **Project INT2015-3** – Question about the storage provisions for genetic samples collected from bycaught species. Where and how are they being stored and are these samples available to the public upon request?
- **Project POP2016-3** – I note that this project is intended to provide part funding to the NIWA cetacean habitat suitability modelling project. This is an excellent idea but I would recommend that DOC confirm that the output from that NIWA project will be 100% publically accessible including all the groomed data and models as this is not always the case with projects that are partly internally funded by NIWA.
- **Project POP2016-7** – I note that a shorter field season than has been previously undertaken is being proposed for 2016/17 but little rationale has been provided for this reduction in field season length. It would be useful to understand why this change is being proposed especially in light of the ongoing discussions around the TMP. Undertaking a count at Figure of Eight Island will be subject to logistical constraints but perhaps this should rather be budgetary constraints as given the survey has been undertaken there for the last 20 years there are no real logistical constraints. I note that the budget for this item has been reduced by 60% from $250k to $100k for the coming year which represents a significant reduction in funding. It would be useful to clearly detail which parts of the programme are proposed to be dropped and which will be retained so an objective decision can be made about the reduced budget and whether the programme can meet the stated requirements of CSP and what will be the implications for the long term data series. I would also question whether even a reduced field season may be possible for the proposed budget as the major cost is vessel charter and these costs are unlikely to be reduced as at least two trips will be required regardless of the length of the field trip. It would also be useful to understand the broader context of the CSP work and, in particular, whether DOC are considering funding any additional NZSL research from internal or other sources. I also think that it is useful to recognise that recent modelling work by Roberts et al (2014) and others have provided some indications that the cause of the decline in NZSLs is now more broadly attributed across a range of possible contributors rather than fisheries being solely responsible. This could lead to a reconsideration of the proportionate allocation of any monitoring project between Fisheries and DOC. I would also like to state a potential conflict of interest with this project as BPM have been the successful contractor on this project for the last 4 years.

Email Number 2

Since sending in a submission on the DRAFT CSP Annual Plan, I have found some additional supporting material that has helped somewhat but have attached some additional material which should be added to my original submission please.

Project POP2016-7

- I note that in minutes of the CSP RAG meeting on 25 February 2016 there were the following comments:
  - POP-8.1 – It was agreed that NZSL Auckland Islands population project (Status quo) had an agreed priority of **HIGH**
  - POP-8.2 – Auckland Islands population project (Pup count only) was given a **LOW** priority as it was "*considered inadequate to answer the questions that we need answered*"
- I also note that document that outlines DOC responses to CSP RAG meeting it says:
  - POP-8.1 – "*Not included in the Draft CSP Annual Plan 2016/17. See POP-8.2*"
  - POP-8.2 – "*Modified scope project to estimate pup production is included in Draft CSP Annual Plan 2016/17 as POP2016-07. Additional monitoring and associated research will be delivered through the NZSL Threat Management Plan (yet to be finalised)*"
- Furthermore, my understanding is that the Draft TMP has not yet been released for public consultation and it appears that the timetable for that is uncertain with no guarantee that a final document it will be approved in time to guide research and funding for the 2016/17 NZSL season.

The DOC response to POP-8.1 and POP-8.2 are completely at odds with the RAG agreements and in fact have taken the complete opposite approach with little or no indication of why. A more logical and consistent approach would be retain the NZSL monitoring project at its previous funding level (the "status quo" option in POP-8.1 as agreed by RAG) and modify the proportion paid by fishing industry to say 50% (which is also consistent with other project allocations e.g. POP2015-02, POP2016-02). This would ensure that the full project goes ahead jointly funded by DOC and Industry without the necessity of an approved TMP guiding additional research and funding. In the event that a TMP is approved and available to guide research for the 2016/17 season, then DOC may choose to allocate additional funds to whatever priorities have been identified and are not meet by project POP-8.1.

While I can see some possible merit in following the POP-8.2 option plus some addition funding confirmed later, my concern would be that if the TMP fails to be approved in time, then it is highly likely that we will be stuck with a "pup count only" option as that is all that has been budgeted for and we would lose vital information on demographics, disease, etc. which would set us back in our understanding of the NZSL. By proceeding with the option POP-8.1, we are guaranteed a full and complete field season and won't have a hole in the 20+ year data set which will limit our ability to understand what impacts fisheries and other factors are having on NZSL.

If DOC has already approved additional internal funds to supplement POP-8.2 into a larger project (more like POP-8.1) then I would be more comfortable with CSP only proceeding with something along the lines of POP-8.2. However these funds would have to publicly confirmed and committed to by DOC prior to the approval of the 2016/17 Annual Plan and we have seen no sign of this. In the

absence of this commitment, POP-8.1 or an identical approach to the 2015/16 CSP project should be undertaken.

Hope these are useful and, as always, happy to chat about them. Grateful if you can confirm receipt of my two submissions please.

Regards

Simon

Email Number 3

Hi CSP once again,

I haven't had any response to my previous two emails but have managed to chat to Kris Ramm who was helpful in explaining some issues. Please find some additional comments on the DRAFT CSP Annual Plan 2016/17. All my comments relate to project POP2016-7.

1. This project has been ongoing for more than 20 years but is still being offered as an annual contract despite it being offered as a multi-year contract when DOC was undertaking the work inhouse. It would strongly recommend a multi-year contract is used to cover this project as the need for the work is unlikely to change in the short to medium term. This would significantly reduce workloads for project and contract management for DOC, allow the successful contractor to invest, develop and maintain capacity to undertake the work, reduce burdens of securing permitting of the research (which could also be multi-year) and would align with other work that DOC has already committed to through other internal funding (e.g. PhD funding on disease)
2. Advice from Kris Ramm was that the final size of the programme for the 2016/17 has yet to be confirmed but is likely to comprise CSP funded and DOC funded components that would provide for cost-effective synergies between the two components. This is a good idea but it is not possible to usefully assess the overall programme of work without having details of each component and confirmation that they will go ahead. As a result is difficult to comment usefully on the CSP component as if the DOC component will pick up all the other work then that may be fine but if it does not, then there will be large gaps in the programme. I would recommend that a programme similar to that undertaken in the 2015/16 season be included in the Plan for 2016/17 but that the industry funding only be say 50% of the total programme. This would provide clear guidance that the wider work programme would be going ahead but that that industry would only be asked to fund the component that was directly relevant to the risk that they pose.
3. The draft plan provides very little detail of exactly what will be done. This needs to be made completely explicit in the plan but I would recommend the following components as undertaken in 2015/16:
    a. Standardised pup production counts at all Auckland Island colonies (SB, DD, SEP, F8) in mid-January
    b. Tagging and microchipping of all live pups at SB colony [This would represent a change from last season when only 50% of pups were tagged] F8 must be counted and not excluded as the Draft Plan appears to indicate
    c. Tagging of 400 pups at DD colony

d. Weighing and measuring 100 pups at SB & DD on the day of the mark-recapture [Measuring is a new suggestion which was done in 2015/16 for the first time] and as many pups as possible at F8 colony
e. Resighting effort [i.e. to conduct a five week period of resighting previously marked animals at Enderby Island] to allow for the continued collection of demographic information
f. Collection of diet samples throughout the season to maintain existing collection
g. Autopsy of dead pups to determine cause of death
h. Continuation of the provision of ramps at colonies to prevent pups dying in holes. Additional new ramps could be installed on Dundas Island which will require some additional support

4. I don't believe that the project, even as specified in its present limited form, is achievable for the indicative budget provided. I would draw CSP's attention to the following issues:
   a. the vessel Tiama will not be available for the coming season and that charter costs are there likely to be considerably higher than in previous years
   b. it is not clear if Helicopter transport of the team to Dundas Island will be available for the coming season and if not alternative transport will need to be considered
   c. the last time that a short field season (with only pup counts and tagging) was undertaken was in 2012/13 (POP2012-01) and the indicative budget at that time was $150k

Good luck with your deliberations and feel free to call me to discuss any of the issues I have raised in my three emails.

Regards

Simon

West Coast Tai Poutini
Conservation Board

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Attn: Board Support Officer

SBC-14-04-02

26 April 2016

csp@doc.govt.nz

Draft Conservation Services Programme Annual Plan 2016/17 Submission on behalf the West Coast *Te Tao o Poutini* Conservation Board

Background.
The West Coast Conservation Management Strategy (CMS) was prepared by the West Coast *Te Tai o Poutini* Conservation Board (WCTPCB) to establish objectives for integrated conservation management, which applies to all lands and waters' administered by the Department of Conservation and is in accordance with section 17D of the Conservation Act (1987).

With regard to the marine environment, the Department of Conservation has specific responsibilities for management of marine mammals and sea birds both within the 12 mile nautical limit and the 200 mile exclusive economic zone (EEZ), while the control of the adverse effects of fishing is the Ministry of Fishing responsibilities (CMS p72). It is noted in the CMS that currently there is a lack of knowledge and information relating to species, habitats and threats to marine ecosystems. This current lack of information is a concern to the WCTPCB as the accurate assessment of commercial fishing interactions and their long-term impact with marine mammals and sea birds, as well as the ocean floor ecology cannot be fully assessed when there is a lack of adequate baseline information.

West Coast threatened and endangered species.
The CMS has a comprehensive audit of marine mammal and sea bird species associated with the West Coast. Of these the following are listed as either endangered or vulnerable using the IUCN classification.

- Yellow-eyed penguin
- Snares crested penguin
- Fiordland crested penguin
- Westland petrel
- Cooks petrel
- Pied shag
- Hutton's shearwater
- Diomedea species
- Various tern species

In addition the West Coast hosts a variety of sea mammals.

- Southern elephant seal
- New Zealand fur seal
- New Zealand sea lion
- Hectors dolphins
- Humpback, Sperm and Southern Right whales.

Basis of the submission.
The WCTPCB, in general, supports the Conservation Services Programme (CSP) however there is concern relating to the lack of Observer coverage of fishing activity on the West Coast of the South Island (FMA7). Overall the structure of the programme is significantly improved compared with previous CSP programmes and provides a clear and logical process.

2.0 Interaction Projects.

2.1 *Observing commercial fisheries.*
Project Code: INT2016-01
This is supported overall and support is also given for the additional duties indicated on page 9 for the Observers. The Board strongly supports observer coverage for the inshore fisheries as there is inadequate continuous data of by-catch from these fisheries.

2.1.1 *"Inshore" Fisheries: Joint DOC-MPI Inshore Observer Programme.*
There is strong support for the observer project relating to the East Coast South Island, Otago (statistical area 024, 026) set net monitoring. However, there is no indication of monitoring for the white flippered little blue penguin.

While the proposed observer project for the "Small Inshore Trawl" West Coast South Island (statistical area 030-036) is fully supported it is disappointing to note that this will only be for sea bird mitigation and does not include sea mammals. There is no figure in the column for this project for 'Percentage Effort".

Overall the Board all the proposed "Inshore Observer Projects 2016/17.

2.1.2 *"Offshore Fisheries.*
This programme is strongly supported, however it is noted that the recording of times of by-catch is still not a required output of this programme, which may help in by-catch mitigation for sea birds such as the little blue penguin.

The increase in 'Total Days' for West Coast Deep Water Trawl fisheries from the 2015/2016 CSP Annual Plan is fully supported, however it is disappointing that the West Coast Middle Depth Trawl Fisheries has had a reduction from 1500 'Total Days" in the 2015/16 CSP Annual Plan to 1200 in the 2016/17 CSP Annual Plan.

2.2 *Identification of marine mammals, turtles and protected fish captured in New Zealand fisheries.*
Project Code: INT 2015-02
This project is fully supported.

2.3 ***Identification and storage of cold-water coral by-catch specimens.***
Project Code: INT 2015-03
This project is fully supported.

2.4 ***Identification of seabirds captured in New Zealand fisheries.***
Project Code: INT 2016-02
This project is fully supported.

2.5 ***Post release survival of white pointer sharks in New Zealand fisheries.***
Project code: INT 2016-03
This project is fully supported.

2.6 ***Indirect effects of commercial fishing on Buller's shearwater and red-billed gulls.***
Project Code: INT 2016-04
This project is fully supported.

3.0 Population Projects.

3.1 ***Flesh-footed shearwater: Various locations population project.***
Project Code: POP 2015-02
This project is fully supported.

3.2 ***Seabird population research: Chatham Islands 2016-17.***
Project Code: POP 2016-01
This project is fully supported.

3.3 ***Seabird population research: Auckland Islands 2016-17.***
Project Code: POP 2016-02
This project is fully supported.

3.4 ***Updated basking shark by-catch review.***
Project Code: POP 2016-03
This project os fully supported.

3.5 ***Cetacean habitat suitability modeling.***
Project Code: POP 2016-09
This project is fully supported.

3.6 ***Yellow-eyed penguin foraging and indirect effects.***
Project Code: POP 2016-05
This project is fully supported.

3.7 ***Salvin's albatross Bounty Islands: methodology development***
Project Code: POP 2016-06
This project is fully supported.

3.8 ***New Zealand Sea Lion: Auckland Island pup count.***
Project Code: POP 2016-07

This project is fully supported, however there is no indication in this project that there will be any investigation of potential disease processes in this population of by-catch, which may contribute to the decrease in the under 2-year old population. As there will be a 'mark and recapture' programme this should include sampling for future DNA analysis to establish if there are inbreeding populations, which will reduce the breeding capacity.

4.0 Mitigation Projects.

4.1 ***Seabird by-catch reduction (small vessel longline fisheries).***
Project Code: MIT 2015-01
This project is fully supported.

4.2 ***Small vessel seabird mitigation project.***
Project Code: MIT 2015-02
This project is fully supported.

4.3 ***Protected species by-catch media.***
Project Code: MIT 2016-01
This project is fully supported. It is recommended that the circulation of the Newsletter be extended to Conservation Boards and conservation groups with an interest in sea mammal and sea bird conservation.

4.4 ***Entanglement of cetaceans in pot/trap lines and set nets and a review of potential mitigation methods.***
Project Code: MIT 2016-02
This project is fully supported.

Appendices.
The two Appendices are clear and well set out. The budget and observer allocation figures provide a transparent process between the Crown and commercial fisheries.

Thank you for the opportunity to make a submission on this programme.

Yours sincerely

Michael Legge (Dr)
Chair
West Coast *Tai Poutini* Conservation Board

WWF New Zealand

Dear CSP team,

Thank you for the opportunity to comment on the Conservation Services Annual Plan 2016/17. WWF New Zealand would like to make some general comments and some specific recommendations.

General comments

With regards to Maui dolphins - due to the extremely vulnerable state of the Maui dolphin population, the Government should be working to remove fishing related threats to Maui dolphins from their **entire habitat**: from Maunganui Bluff to Whanganui River Mouth, within harbors, and out to the 100m depth contour.

An important aspect of the Government's work to save Maui dolphins should be to research and identify effective pathways to support the fishing fleet on the West Coast North Island to either move out of Maui habitat, or transition to dolphin safe fishing methods (e.g. long lining). We consider that this work could fit within the Conservation Services Programme.

With regards to New Zealand Sea Lions - there are some very important research gaps that are not addressed in the CSP plan. These include: 1) the need to improve understanding of the efficacy of SLEDs, and 2) the need to improve understanding of the indirect effects of fishing on food availability and population demographics (health of sea lion populations e.g. pup survival). This work may be better placed in the Threat Management Plan research programme, however we will highlight these important gaps for you here also.

WWF recommends Government prioritise research to improving knowledge about efficacy of SLEDs.

- We don't have very good knowledge of how many sea lions are coming in contact with trawl nets and SLEDs (interactions and strike rate). According to Thompson et al (2013) and MPI (2014) - estimates of the number of interactions has become increasingly uncertain – with the most recent interaction estimates being effectively 'unbounded' (MPI, 2014, p42).
- We don't know if the SLEDs are masking the mortality rate by allowing drown seal lions to fall out of the SLED escape hole during hauling (Row and Meynier, 2012). There is no evidence that the hoods are effective at containing dead animals.
- We don't know the rate of survival once sea lions leave the SLED or net (Robertson and Chilvers 2011). It is possible that some sea lions exceed their dive limit and drown before reaching the surface after escaping from either the SLED or the front of the net. Such sources of 'cryptic mortality' are presently "unquantified and are not reflected in the estimated overall survival rate of encounters with trawls" (MPI, 2014, p43).

WWF recommends that the Government prioritise research to improve knowledge about the indirect effects of fishing, and move towards being able to quantify the threats/risks (and hence better manage them). This will require more research on:

- demographic effects of food limitation, and
- how availability of particular species impacts demographics.

Specific comments - regarding the Inshore Trawl observer programme (p. 18 of the Draft CSP Annual Plan 2016/17).

We support the increase in proposed observer coverage. We note that over the last two years only 13% of fishing days were observed in the trawl fishery 2-7 nautical miles, and only 18% in the 2-12 nm and 2-20 nm areas of the West Coast. Ideally there would be 100% coverage, however the proposed increase to 75% coverage will be a significant improvement.

WWF NZ recommends that MPI improve vessel location reporting to observer team and compliance by requiring all fishing vessels working inside Maui habitat (defined above) to install and operate a centralised Vessel Monitoring System. We consider that MPI should cover the cost of the technology and installation.

This recommended action will address the significant delay in the notification of vessel location on the WCNI which was an important issue identified at the Maui Dolphin Research Advisory Group (2nd November 2015). The MPI observer services representative at the MRAG meeting identified that it can take up to 3 months for information about vessel location to get through the system to inform the observer team about which vessels might require observers.

We understand that efforts to address this issue are already under way, through requiring vessels to pro-actively report where they are planning to fish a week in advance. However, we feel that real-time automatic vessel location monitoring will more efficiently provide the information required to implement existing observer coverage commitments, and circumvent issues of human-error and accuracy.

References

- Ministry of Primary Industries (MPI), 2014, Aquatic Environment and Biodiversity Annual Review, 2014 – Summary of environmental interactions between the seafood sector and the aquatic environment.
- Robertson and Chilvers, (2011), The population decline of the New Zealand sea lion *Phocarctos hookeri*: a review of possible causes. *Mammal Review*, 41:253-27
- Row, W.D., and Meynier, L., 2012, Review of necropsy records for by caught New Zealand sea lions (Phocarctos hookeri), 2000–2008

We would like to opportunity to talk with you further about these points, and are happy to provide any additional information or analysis. Please let us know if these recommendations are helpful or if there are other forums that we should be making these points in.

Many thanks,

Amanda

Draft Conservation Services Programme Annual Plan 2016/17
Submission on behalf the Yellow-eyed Penguin Trust

27 April 2016

Background

The Yellow-Eyed Penguin Trust was formed in 1987 and is focused on the conservation of the yellow-eyed penguin (*Megadyptes antipodes*) over its entire range. The Trust owns and manages land for penguin breeding habitat at 6 key locations in the South Island, and undertakes or supports conservation work at 40 other South Island sites, around Stewart Island, and on the sub-Antarctic offshore islands.

The Trust's work involves:

- **Habitat restoration**: Conservation of yellow-eyed penguin breeding habitats, including planting, fencing, stock exclusion, and associated maintenance.
- **Predator control**: bait and trap control of introduced predators e.g. mustelids, cats, possums.
- **Science and research:** A variety of research projects have been undertaken and supported to learn more about the penguins and help improve the effectiveness of our work. The Trust has now employed a full-time scientist to provide technical support and scientific advice, particularly in relation to potential impacts in the marine environment.
- **Nursery**: The Trust has its own plant nursery specialising in native plants for revegetating penguin habitats.
- **Education:** The Trust provides information on penguin conservation to the public, and advocates for the penguins' ongoing protection.
- **Collaboration**: Given the geographical range of the species and the types of habitats the penguins use, successful conservation is dependent on government agencies, NGOs, private landowners, tourism operators, fishing interests and volunteers. The Trust works with all of these interests.

The endangered yellow-eyed penguin is an iconic marine species and one of rarest penguin species in the world. The mainland population in recent decades has fluctuated between 400-600 breeding pairs, and on the sub-Antarctic Auckland and Campbell Islands there are an estimated 1200 breeding pairs. The sub-Antarctic and mainland populations are genetically distinct, so need to be treated as two separate populations.

There has recently been a dramatic sustained decline in the number of yellow-eyed penguin nests on mainland New Zealand over multiple seasons. The minimum number of breeding yellow-eyed penguin pairs around the mainland this summer was estimated to be *c.* 200; the lowest number since 1990. Several events affecting adult and juvenile mortality have transpired over the last 4 years, including: a mass mortality due to exposure to an unknown toxic agent; delayed moult and starvation of adults, juveniles and chicks; fatal injuries of adults and juveniles assumed to be caused by barracouta; and bimodal outbreaks of avian diphtheria.

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A suite of threats in addition to these recent events have the potential to impact on the yellow-eyed penguin population. Introduced land mammals, for example, predate upon penguins or their eggs including mustelids, dogs and cats. Habitat loss can also affect nesting, and loss of shade can lead to overheating. Bycatch of yellow-eyed penguins has been documented in commercial and recreational setnets and the potential exists for bycatch in other fishing gear. Fishing may also have indirect effects on penguins, for example, seafloor disturbance and disruption of marine foodwebs.
The cumulative effect of these major events and other impacts have had a significant effect on the recruitment of juvenile birds into the population and this now raises serious concerns for the long-term productivity and sustainability of the population.

Apart from their biodiversity significance, mainland penguins are very important in terms of their tourism and economic value to the local economy. Economist Professor Clem Tisdell (University of Queensland) demonstrated that the value of nature-based tourism relying primarily on the yellow-eyed penguin on the Otago Peninsula returned $100 million annually to the Dunedin economy.

General feedback

We thank you for the opportunity to make a submission on the Draft Conservation Services Programme Annual Plan 2016/17.

Yellow-eyed penguins are currently in decline and facing a suite of threats. Penguins are also important as an indicator species, they are a top predator in the marine environment, and so can effectively represent the ecological health of the overall system.

The Trust are keen to see research on yellow-eyed penguins funded, in particular work in the marine environment which is of current concern. It is likely that there are many factors at play which are leading to the present decline only some of which are known. Our current understanding of the changes and drivers in the marine environment and their impact on penguins is limited. It is likely that ecosystem wide fluctuations (e.g. El Nino) and other more localised events such as modification of habitat have an influence on the marine food web and thus the penguins' prey. Our insight into the impacts of commercial fishing on yellow-eyed penguins are also poorly understood. The direct impact of commercial fishing on penguin is somewhat easier to measure than indirect effects but this does not mean that we should ignore indirect impacts.

Any research which sheds light on the foraging behaviour of penguins in the marine environment and the effects of fishing would be very well received and would increase the available knowledge critical for the management of this endangered and protected species.

Individual project feedback

2.0 Interaction Projects

2.1 Observing commercial fisheries (Project Code: INT2016-01)

This project is supported overall by the Trust, in particular the monitoring, recording and reporting of all interactions of protected species (including yellow-eyed penguins) with fishing operations. Support is also given for the additional duties indicated for the observers (page 9) which will help to inform mitigation and other projects relevant to the impact of fisheries. The Trust supports observer coverage for fisheries as there is currently inadequate data on bycatch. It is recommended that the percentage of observer effort coverage be noted in the Annual Plan for each of the areas, for example, inshore trawling in the East /South Coast South Island area does not detail the percentage effort. If observers are to be posted on vessels it is also recommended that all marine mammal and all seabird bycatch be recorded, not just the species set out in the objective for each of the areas.

2.2 Identification of marine mammals, turtles and protected fish captured in New Zealand fisheries (Project Code: INT 2015-02)
Continuation of this multi-year project is fully supported.

2.3 Identification and storage of cold-water coral by-catch specimens (Project Code: INT 2015-03)
Continuation of this multi-year project is fully supported.

2.4 Identification of seabirds captured in New Zealand fisheries (Project Code: INT 2016-02)
This project is fully supported.

2.5 Post release survival of white pointer sharks in New Zealand fisheries (Project code: INT 2016-03)
This project is fully supported.

2.6 Indirect effects of commercial fishing on Buller's shearwater and red-billed gulls (Project Code: INT 2016-04)
This project is fully supported.

3.0 Population Projects

3.1 Flesh-footed shearwater: Various locations population project (Project Code: POP 2015-02)
This project is fully supported.

3.2 Seabird population research: Chatham Islands 2016-17 (Project Code: POP 2016-01)
This project is fully supported.

3.3 Seabird population research: Auckland Islands 2016-17 (Project Code: POP 2016-02)
This project is fully supported.

3.4 Updated basking shark by-catch review (Project Code: POP 2016-03)
This project is fully supported.

3.5 Cetacean habitat suitability modeling (Project Code: POP 2016-09)
This project is fully supported.

3.6 Yellow-eyed penguin foraging and indirect effects (Project Code: POP 2016-05)
This project is fully supported by the YEPT. As benthic foragers yellow-eyed penguins are reliant on a healthy and un-impacted seafloor to support their prey species. Foraging is directly related to the breeding success of penguins, with studies showing that in years of poor breeding success, birds are more likely be travelling further to forage. Information on the foraging distribution of penguins and of the indirect impacts of commercial fishing is extremely valuable for informing conservation management of this protected species.

3.7 Salvin's albatross Bounty Islands: methodology development (Project Code: POP 2016-06)
This project is fully supported.

3.8 New Zealand Sea Lion: Auckland Island pup count (Project Code: POP 2016-07)
This project is fully supported.

4.0 Mitigation Projects

4.1 Seabird by-catch reduction (small vessel longline fisheries) (Project Code: MIT 2015-01)
Continuation of this multi-year project is fully supported.

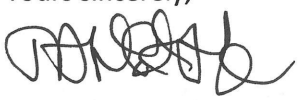
4.2 Small vessel seabird mitigation project (Project Code: MIT 2015-02)
Continuation of this multi-year project is fully supported.

4.3 Protected species bycatch media (Project Code: MIT 2016-01)
This project is fully supported.

4.4 Entanglement of cetaceans in pot/trap lines and set nets and a review of potential mitigation methods (Project Code: MIT 2016-02)
This project is fully supported.

Thank you once again for the opportunity to make a submission on this programme.

Yours sincerely,



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