

Meeting: Conservation Services Programme Research Advisory Group

Date: 7th March 2022 **Time:** 9:30 am - 3:00 pm

Place: Microsoft Teams Meeting

Chair: Katie Clemens-Seely (<u>kclemens@doc.govt.nz</u>)

Attendance: Di Tracey, Jenny Beaumont, Brit Finucci, Jaret Bilewitch, Diana Macpherson, Emma

Jones, Savannah Goode, David Thompson, Peter Marriott, Malcolm Clark, Darren Parsons, Owen Anderson, Richard O' Driscoll (NIWA), Chris Gaskin, Edin

Whitehead (NNZST), Barry Weeber (ECO), Rosa Edwards (FINZ), Aaron Irving (DWG), Phil Heath, Josh van Lier, William Gibson, Ian Tuck (MPI), Simon Childerhouse (Cawthron Institute), Graeme Taylor, Lyndsey Holland, Katie

Clemens-Seely, Shannon Weaver, Clinton Duffy, Hendrik Shultz, Kat Manno, Tiffany Plencner, Laura Boren, Karen Middlemiss, Johannes Fischer, Kath Walker (DOC), James Bell (Victoria University of Wellington), Carol Scott (Southern Inshore Fisheries Mgmt.), Denham Cook (Pelco NZ Ltd), James Robertson (RLIC).

Apologies: Peter Frost (Independent), Ashley Rowden (NIWA), Igor Debski (DOC), Trudi

Webster (Yellow-eyed penguin trust), Janice Molloy (Southern Seabirds), Graham

Parker, Kalinka Rexer-Huber (Parker Conservation).

Introduction

Mihi, Karakia

Overview of CSP - scope, research planning, timelines, and research prioritisation Discussion around camera rollout process in regard to CSP

SC I agree with Barry. This is especially true, the largest part of the CSP budget is the observer programme and it needs robust discussion.

LH This year we are planning observer coverage as per usual with FNZ with similar coverage levels and the cameras rollout is a separate process.

Discussion around initial prioritisation scoring, and a perceived lack of transparency due to the lack of provision of the breakdown scores

Discussion around stakeholders submitting rankings prior to RAG for DOC to take into consideration for initial prioritisation

BW Agree more transparency in scoring required

Discussion around the new process of releasing the project longlist

SC Sharing the long list was excellent. Thanks for that.

Discussion around prioritisation and budgeting for the 3 groupings of INT, POP, and MIT.

DT Are these indicative costs not including travel to the sub-antarctic islands?

KCS The travel costs are incorporated into the project budgets. Where two or more projects occur on same island there will be shared cost savings.

SC No Hectors and Maui dolphin population projects put forward

KCS We do have a list available of research occurring under the TMP that we can share BW I support Simons comments and could the HMD TMP be made available online? KCS This was finalised and made online last week I believe [link shared in chat].

SC I am concerned about the lack of mitigation projects undertaken through CSP as this is what

can make a real difference to reducing bycatch

Discussion around scoring of mitigation projects

BW These mitigation proposals are on technical fixes more so than spatial/temporal closures and we need to be more considerate of how those approaches fit into mitigation as they can be equally, if not more, effective?

Discussion around mitigation and management with spatial/temporal closure fitting in to the latter

KM Mitigation is more so around 'back of the boat' approaches

SC The MIT projects seem to be the poor cousin of the three [INT/POP/MIT], comparing budgets. We need to do better at getting more mitigation projects in. CSP conducts a lot of review papers, and these should be reviewed for future direction. Should look to our industry colleagues to identify potential areas given they have the most experience in this area and more broadly seek international input from mitigation researchers overseas.

SW A collation of previous research could be a component of a mitigation medium term research plan and we do communicate internationally on the mitigation front. What I see is that mitigation projects take a lot of time and testing to ensure that they are ready to be considered for inclusion in.

Question around how CSP balance the projects within each of the INT/POP/MIT groups **KCS** We rank within each theme (i.e., there isn't a combined long list).

KM Also it is worth pointing out that once ranked within each group, the top five do not necessarily all go forward this preliminary process just gives us an idea of where things sit. **GT** The programme needs to balance with other work we fund within DOC and contributions from other agencies.

Discussion and scoring of projects

CSP RAG	Proposal	Comments
		BW How do you see risk assessment for corals happening? What assumptions are made in any risk assessment are key. I have questions around the whole risk assessment approach and its usefulness in reducing impacts on protected species.
		KCS There has been a pilot risk assessment previously.
		LH Yes, there would be a scoping phase of this project to make sure there was enough data available for the process. Better data now available so a stocktake is required. A note that coral projects rank high due to data deficient threat status being ranked highly.
		Discussion around risk assessment methodology, that is, as yet undecided.
INT-11	Risk Assessment for Protected Corals	AI DWG support this project, only comment we had was around objective, it should firstly be around conservation gains and fisheries management, coral research prioritisation being a secondary objective.
		MC Important to separate risk assessment from risk management. DOC should consider here is how adequately they can address both of these things.
		SC Corals are of course cool, very poorly understood and with large bycatch issues. I note that 5 of the top 7 ranked projects in the INT section were on corals. Lyndsey provided a good reason for that. However, I wonder why there hasn't been a better balance of projects spread across the full range of spp. and groups.
		LH A lot of that was driven by the threat status criterion as we discussed, note that we will be balancing projects that go ahead across the four main PS groups and across the three research themes (INT, POP, MIT).
	Determining the resilience of the black	BW Is this project in regard to pot fishing?
INT-9	coral <i>Antipathella fiordensis</i> to fisheries impacts	LH Yes that's correct, and potentially trawling (e.g., for blue cod).
INT-2	Identification of seabirds captured in New Zealand waters	WG Supportive of this continuing.
		Discussion around the storage of physical specimens and how they are used
INT-3	Identification and storage of cold-water coral bycatch specimens	DM Deposited into the NIWA Invertebrate Collection for curation and they are made available for coral research as requested.
	7 · · · · · · · · · · · · · · · · · · ·	Discussion around wording in project proposal in regards to observer training

		LH We can look to improve the wording.
		BW How does this fit with other projects MPI has done over the years? I am just wondering how it all fits together.
		LH There are some links with this project and other MPI work. There has been work on coral density, abundance etc. previously and CSP have an ongoing project to add abundance estimates, but there are novel approaches with this proposal that would be of value.
		AI We should consider lack of information on unfished areas. Most info we have is on the Chatham Rise, we're keen to see some baseline info collected from other areas so the project can be done once we have the information to do this.
	Impact of fishing on the ecosystem	LH That sounds sensible, and we would be happy to scope this further.
INT-6	services provided by deep-sea corals in the New Zealand region	MC The idea is to look at UTF habitats on CR and that at least gives you unfished/fished and closed areas to give you an idea of whether this approach is useful for wider use.
		AI Refine the objective to be clearer.
		LH We will take that onboard thanks.
		MC The last sentence of the project summary does make it clear. It is maybe a bit too nested within the more aspirational goal of the project going forward at a larger scale.
		SG In our proposal the guiding CSP objective is actually objective D, which is to understand "the nature and extent of indirect adverse impacts of commercial fishing" as the project would focus on effects of fishing on services corals provide, rather than the coral species themselves.
	Observed marine mammal sightings database	SC Really good to see this project in there, supportive. One thought for the future is how to make this information available.
INT-4		SW Yes, we will consider how best to visualise this data.
		SC It would be better if the observer data was integrated with all the other marine mammal data, and it all was available online.
INT-10	Documenting cryptic coral diversity in fisheries bycatch	DM This is a good example of how coral specimens collected in project INT-3 are used for other projects.
INT-7	Post-release survival of spine-tailed devil ray taken as incidental bycatch in the New Zealand skipjack tuna purse seine fishery	JvL FNZ is supportive of this and should be higher in ranking, if it doesn't make the cut could it be streamlined into 2 years so it still happens. It fits NPOA sharks work, upcoming sharks risk assessment, and info on better handling is important, so big support from FNZ

		CD Yes possible but captures and fishing effort can be sporadic.
		EJ Great to see this project listed and support.
		Discussion around ray release processes
		BF Supportive of all comments, there's also ongoing student work that can fit in. For clarification where is the cost of tags included in the budget?
		CD We have approximately 10 tags currently, so the second year is the bulk of tag costings.
		DC Industry support if deemed priority. Needing some flexibility due to ray interactions being unpredictable.
	Investigate and characterise the behaviour	CS Haven't we investigated pingers previously? And why Kaikoura? There aren't many fishers there and this will have a cost to them. I'd support this being ranked lower down.
INT-8	of Hector's dolphins around set nets at	BW This isn't pingers, its passive acoustic monitoring.
	Kaikōura	SC I am unsure about the value of this project and it being in the right location. The chance of getting valuable data will be quite low.
	Pelagic foraging seabirds in the wider Hauraki Gulf region	CG This project should rank higher, what we are looking at through this is much wider than just seabirds and relates to ecosystem effects on megafauna, and the purse seine fishery. Gannets should be added to the species of focus for this project as they consume fish commercially targeted.
		KM Looking to pull together all research we have done so far and have a workshop to discuss how to progress further.
		WG Will this be considering recreational extraction as well?
INT-5		KM Under CSP recreational fishing isn't part of the remit.
		DC Industry do not see a link between commercial extraction and indirect effects -and why is there such a heavy focus on purse seine fisheries? There needs to be further discussion.
		GT There certainly are known declines of seabirds (e.g., massive declines in red-billed gulls and white-fronted terns) in this area that are known to primarily surface feed and forage over fish schools, so we think there is a link between fishing pressure in this area and population declines.
		BW Supportive of the project, objective wording around at-sea captures needs editing
POP-2	Black Petrel research	GT We will look to amend the wording to better reflect the project for that specific objective and avoid any confusion. (e.g., live capturing birds – not part of fisheries takes)

POP-1	Flesh-footed shearwater additional proposed research	No comments.
POP-16	Deep sea protected coral reproduction study	AI To what extent is this a CSP project? LH We consider the outputs important for risk assessments. In a data gathering period for corals. AI I understand that it just seems a little tenuous in its applicability to CPS objective E. SG Reproductive data is necessary to understand the impacts and recovery potential. AI I think this requires some further discussion. It doesn't seem directly applicable to CSP, seems more research oriented. KCS Would you support its current ranking? AI We can submit comments in writing. MC The pilot risk assessment identified a lack of reproductive knowledge so does feed very much into the RA and into objective E. AI We are not saying this isn't important I am just unsure if it is applicable to CSP. LH That's feedback we can consider, as bycatch relevant to CSP we do know that trawling impacts corals and that they have no recoverability, and these data can give a better indication of their vulnerability and feed into productivity parameters in risk assessments. We have funded some reproduction work via bio18 crown funding previously. JB "Improved understanding of reproductive and dispersal capacity" is a stated gap in the CSP Medium-Term Research Plan.
POP-21	Into the Unknown: Cataloguing decades of undocumented protected coral specimens	BW I would prefer to see this ranked higher. AI I am unsure about its applicability to CSP again. AI POP 16 and 21, Interesting project proposals that look to address gaps in information however their direct application to CSP objectives (e.g., E) is highly questionable and perhaps out of scope. (e.g., POP 21 - It is difficult to deduce population levels and susceptibility with a taxonomic and (historic?) distribution project objective. Di T Identification of protected coral species projects contribute more widely to our knowledge of the spatial distribution of the various protected coral taxa – and are very useful for habitat modelling studies we can expand from the fisheries by-catch data, expand our knowledge and fill data gaps.
POP-6	Northern Buller's albatross	WG Since those GLS can last multiple years, are they reused?

		GT Yes, data downloaded and redeployed for a 2 nd year. Some that didn't download properly so will be returned to the supplier to download but around 40-50 were redeployed.
POP-8	Northern royal albatross	WG It would be great for DOC to progress this work.
POP-3	Westland petrel additional proposed research	WG FNZ supportive.
POP-4	Auckland Island seabird research: Gibson's and white-capped albatross	DT I'm surprised that POP-4 and POP-7 ranked so low, they should be higher up the ranking will submit written comments on this. Querying the scoring of this project. Cost of subantarctic research is inherently expensive that shouldn't be impacting the ranking. KCS Subantarctic research can be as expensive as some other CSP research. It may not rank highly in cost-effectiveness but will rank higher in other categories such as leverage. WG FNZ aerial census study has white capped covered, so this project could focus on Gibson's. DOC to discuss with FNZ to avoid overlap. BW A lot of subantarctic work that hasn't gone ahead in the last couple of years, is there commitment to make sure this goes ahead this year? Discussion around subantarctic research constraints over the past 2 years and what DOC is doing to improve work in this area BW Question around where the fate of, and decisions regarding, subants funding are documented. KCS Mainly through the CSP annual research summaries and website reports Discussion around CSP vs Bio18 funding streams and how Bio18 money was re-prioritised in recent years due to constraints in delivering subantarctic research. SC I agree with David that POP-4 and POP-7 should be ranked higher and that it is surprising that they are so low. Without seeing the underlying numbers, it is hard to comment on why it appears so low. JF While these seabirds are of high interest, they do score comparatively low on the seabird risk assessment (i.e., compared to Black Petrel) which is one of the main points of consideration. This is partially caused (particularly for Antipodean Albatross) that bycatch occurs largely outside of the EEZ. BW We are concerned about the risk assessment and the approach. DT Yes, but all seabirds rank lower than black petrel for risk - POP-4 and POP-7 could rank higher (not highest) for lots of other reasons. Given the scoring in the example provided I'd like to understand why this score is so low.

		WG Is this factoring in diseases?
POP-19	Auckland Islands New Zealand sea lions	LB The CSP specific project is focussed on fisheries interactions, that doesn't mean we aren't proposing to do disease related work, but this would occur under the TMP. SC Supportive of this project, SQU6T operational plan requires a pup count to be undertaken annually. This is just one component of a much larger programme under the TMP. AI DWG support this project. Objective could be reworded to reflect some of today's comments. KM Laura and I can look into the wording on that objective.
POP-7	Antipodean Island seabird research: Antipodean albatross + white chinned petrel	BW This project should be a higher priority. GT This is due to Johannes's comment earlier about Antipodean albatross bycatch primarily occurring outside of EEZ. AI Should objective 2 be made objective 1 instead? GT Yes that could be done. DT AA bycatch outside of EEZ yes but this also applies for other seabird species. WG For mortality out of zone MPI have two risk assessments (Southern hemisphere and albatross) underway to capture this.
POP-11	Otago and Foveaux shags	WG FNZ support inshore seabird work.
POP-12	Spotted shag	WG Has there been tracking done on this species? GT I am not aware of tracking in the South Island region, but their threat status has changed. JF Tracking has been done on the Hauraki gulf spotted shags, but not as far as I know off the SI. CG GPS tracking has been done on Hauraki Gulf spotted shags (Matt Rayner), but would that budget allow for tracking? KM That would be the intention yes. Note: This project does not include GPS tracking work, it involves aerial census and detailed surveys of colonies in the Marlborough Sounds
POP-15	Hutton's shearwater	CS What effect did the earthquake has on the population? GT Yes there was a big reduction to the population due to landslides from the earthquake. CS Is this project too premature then? GT Population assessment has been done previously, this project is focussed on their use

	<u> </u>	I ca · · ·
		of the marine environment.
		CS Just wanting to make sure there is enough birds to do this project.
		GT There is a sufficient number of birds left at the study site that would be suitable for assessing at sea behaviour.
		WG Confirming MPI has undertaken this work (population census in the mountain
		colonies).
		KM Should 'recreational' be removed from one of these objectives.
		CS Background context around MPI work would be useful in the project description.
	Campbell Island Seabird Research:	SC It seems like a cheap project unless there is significant co-funding? If it goes ahead would this need to be reconsidered?
POP-20	Southern Royal Albatross, Grey-headed albatross	GT This is planning to cost share with sea lion work so can be achieved at a lower cost compared with other standalone subants projects.
		Discussion around threat status of Southern royal albatross
		DT I find it strange that this ranked so low.
	Grey petrel	JF Low risk score and hard to leverage this project with other seabird work so those things combined lead to the scoring. It is a winter nester on a remote island.
POP-14		BW Should be a point where if no research has been done on a species for some time it should be pushed up the list for consideration.
		KM Data deficient species are always a problem and where we could look to other funding to ensure work goes ahead.
		AI Is the focus of this project on small vessels.
MIT-8	Longline hauling mitigation devices	TP Yes small longline vessels and building on a previous project that was conducted.
	Understanding drivers and barriers to mitigation uptake in small vessel bottom longline	WG Small vessel BLL has seen the biggest reduction in bycatch over time.
		BW Given its an inshore fishery and low observer coverage it may be quite hard to make
		that statement?
		WG I am including camera effort, combined with observers, coverage is about 40%.
MIT-7		TP More information gathering needed to address aspects of the NPOA-seabirds.
		CS Could liaison officers be collating this information instead? They are the people on the ground already via the liaison project.
		TP I coordinate the liaison programme and like to think it's going well. There has been an initiative to align practices with the mitigation standards in the NPOA seabirds. This project could inform the LP and show areas where work could be targeted using a

		framework that explains overall perspectives in a qualitative study rather than individual LO anecdotes.
		KCS We can make note of this and discuss if capacity towards social research is something that fits the scope of the Liaison Programme.
		RE It would be beneficial to first summarise the results from social research for the SLL fleet and identify whether there are any obvious crossovers in barriers for mitigation uptake between those fleets too, so if this project progresses it doesn't start from scratch. i.e., we can use what we have learnt from the SLL fleet and apply it here?
		TP The final SLL social research project report is on the CSP website, but we welcome any feedback for how we can better refine the proposed MIT-7 project.
MIT-12	DOC Coral Symposium 2022/23	AI DWG think this is a good idea as a MIT project and as a logical next step to the gaps workshop. This should be more mitigation oriented and objective 3 is out of scope as getting into management space.
		LH Agree more refining needed for this project, it is widely scoped for CSP but there is also potential for some crown funding.
MIT-4	Bait retention as a driver to mitigation use in the surface longline fishery	WG Comment previously provided on longlist- data collection could be undertaken via the observer programme.
1*11 1-4		TP Confirmed that this project has been scoped as a desk-top study and will review existing data.
MIT-1	Large trawl vessel warp mitigation	WG FNZ previously completed work similar to this in AEBR 266. Would need 4 years of current observer coverage to detect a significant difference.
		TP Confirmed that this project has been scoped as a desk-based exploratory study.
MIT-10	Light mitigation	CG It would be worthwhile surveying the fleets again to see the types of lights used again as we are around 2 years on now. I am unsure of the value of continuing land-based work further, should focus on vessel-based trials. Light attraction is a bigger problem than just with fishing vessels, beyond scope of CSP, is there wider funding via DOC available to address this issue?
		CS If you didn't get enough data last time, why do you think you will get more this time round?
		JF Improved methodology could lead to better results.
		JF I am not sure the on-land testing needs to be removed from this project proposal.
		CG The land-based work was to test different lights at seabird colonies, but it was really

		hard to get accurate responses.
MIT-11		SC I'm not an economist but this kind of approach has been tested internationally -i.e., looking at economic drivers that work to reduce bycatch (e.g., carbon trading, FRMLs in SQU6T).
	Economic Aspects of Bycatch Reduction	WG This is an interesting approach, and we would be happy to put DOC in touch with our chief economist. BW The definition of economics is really wide, and rather implies financial gain – it needs discussion.
2.6700	Inshore trawl warp mitigation	CS Is there a mitigation method or is this another scoping exercise?
MIT-2		KCS We will have to get back to you on that one.
MIT-5	Weak hook trials in the surface longline	SC Disappointing that overseas trails haven't worked so well - is there any reports detailing this?
	fishery	SW I think trials have just stalled or stopped so no write up as yet, but I will have a look into this.

Further feedback

The Chair called for any additional feedback, in writing to be emailed through to csp@doc.govt.nz, by 20 March 2022