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# National Plan of Actions-Seabirds 2020: Implementation Plan

Acronyms and abbreviations are listed at the end of this implementation plan.

**Table 1: Government-led activities** 

Objective	Year 0 (July 2019 – Jun 2020)	Year 1 (July 2020 – June 2021)	Year 2 (July 2021 – June 2022)	Years 3 and 4 (July 2022 – June 2024)
Governance and manage	ement			
Cross-Objective work driven by NPOA	<ul> <li>Update Seabird Implementation Plan for 2020/21 (and out years)</li> <li>Hold Seabird Advisory Group meetings at least twice each year to monitor the implementation of NPOA-Seabirds 2020 and to update the implementation plans and monitoring plans (monitoring plans for 2019/20 are included as an annex to this implementation plan).</li> <li>Develop Annual Reporting template in consultation with Seabird Advisory Group</li> </ul>	<ul> <li>Publish Seabird Annual Report (reporting on 2019/20 Implementation Plan)</li> <li>Use the Annual Report for 2019/20 to update the Seabird Implementation Plan for 2021/22.</li> <li>Hold Seabird Advisory Group meetings at least twice each year to monitor the implementation of NPOA-Seabirds 2020 and to update the implementation and monitoring plans.</li> </ul>	<ul> <li>Publish Seabird Annual Report (reporting on 2020/21 Implementation Plan)</li> <li>Use the Annual Report for 2020/21 to update the Seabird Implementation Plan for 2022/23.</li> <li>Hold Seabird Advisory Group meetings at least twice each year to monitor the implementation of NPOA-Seabirds 2020 and to update the implementation and monitoring plans.</li> </ul>	- Publish Seabird Annual Reports (reporting on 2021/22 and 2022/23 Implementation Plan)  - Update Implementation Plan for 2023/24  - Hold Seabird Advisory Group meetings at least twice each year to monitor the implementation of NPOA-Seabirds 2020 and to update the implementation and monitoring plans.  - Initiate review of NPOA-Seabirds 2019 in 2023
Objective 1: All New Zealand commercial fishers are using practices that best avoid the risk of seabird bycatch enabled by appropriate regulations	- Audit existing Protected Species Risk Management Plans against Mitigation Standards - Report on at-sea audits of adherence to Protected Species Risk Management Plans - Implement Risk Management Plans in FMA 2, FMA 3, FMA 5, and FMA 7 set net fisheries (more detail can be found in DOC CSP Annual Plan) - Update Bottom Longline Seabird Mitigation Circular (refer to existing circular) - Report capture and capture rate data for the previous year - Review and update approach to setting bycatch rate reduction	- Audit existing Protected Species Risk Management Plans against Mitigation Standards - Report on at-sea audits of adherence to Protected Species Risk Management Plans - Review and update Mitigation Standards as required - Report capture and capture rate data for the previous year - Review and update mitigation regulations as appropriate	- Audit existing Protected Species Risk Management Plans against Mitigation Standards - Report on at-sea audits of adherence to Protected Species Risk Management Plans - Review and update Mitigation Standards as required - Report capture and capture rate data for the previous year - Review and update mitigation regulations as appropriate	- Audit existing Protected Species Risk Management Plans against Mitigation Standards     - Report on at-sea audits of adherence to Protected Species Risk Management Plans     - Review and update Mitigation Standards as required     - Report capture and capture rate data for the previous year     - Review and update mitigation regulations as appropriate
	targets with input from the Seabird Advisory Group  - Workshop on incentivising seabird bycatch mitigation			

Objective	Year 0 (July 2019 – Jun 2020)	Year 1 (July 2020 – June 2021)	Year 2 (July 2021 – June 2022)	Years 3 and 4 (July 2022 – June 2024)
Objective 2: Practices that effectively avoid risk of seabird bycatch are supported and promoted to recreational and customary non-commercial fishers	<ul> <li>Publish the results of the 2017/18 Recreational Panel Survey in the 2019/20 Seabird Annual Report</li> <li>Analyse the results of the 2017/18 Recreational Panel Survey and use the findings to prioritise outreach activities for recreational fisheries (FNZ INS AOP).</li> <li>Initiate project to understand the nature and extent of seabird interactions with recreational fisheries (DOC-tbc)</li> <li>Characterise the interactions of recreational fisheries with seabirds.</li> </ul>	- Develop a strategy for avoiding seabird bycatch in recreational fisheries and incorporate into Seabird Implementation Plan		
Goal 2: Healthy Seabird I	Populations			
Direct effects of New Zea	aland fishing do not threaten seabird populations			
Objective 3: Research, monitoring and management actions are prioritised for seabird populations of particular concern and their risk ratios reduce	- Identify seabird species of particular concern (FNZ/DOC, with input from SAG), and report this in the Seabird Annual Report for 2019/20  - Identify monitoring priorities and needs for species of particular concern:  Specific actions for species currently identified as being of particular concern include:  ➤ Antipodean albatross  Working Group  Population monitoring (DOC)  Satellite tracking (DOC/FNZ)  Electronic Automated Reporting System (See Research ZBD2019-11)  ➤ Yellow-eyed penguins (Hoiho)  Te Kawa o Hoiho (Threat Management and Recovery Plan) (multi-agency)  Population monitoring (DOC)  Tracking (DOC)  Review governance structure approach for hoiho after  Te Kawa o Hoiho is published.  ➤ Black Petrel  Working Group (FNZ/DOC)  E-monitoring trials (FNZ)  Population monitoring (FNZ)  Distribution studies	- Report updated risk ratios for relevant seabird populations (AEBAR)  - Clearly identify additional priority research or management action, including review of mitigation to prevent seabird deaths near breeding colonies, including important feeding estuaries  - Update Implementation and Monitoring Plans with planned research and monitoring activities		
Objective 4: The estimated number of fishing-related deaths of all seabird populations is less than the average number between 2014/15 - 2016/17	- Document 'reference' fishing-related deaths for each seabird population (FNZ AOPs)	- Report fishing-related deaths for each seabird population (AEBAR/risk assessment)	- Report updated fishing-related deaths for each seabird population (AEBAR/ risk assessment)	- Report updated fishing-related deaths for each seabird population (AEBAR/ risk assessment)

Objective	Year 0 (July 2019 – Jun 2020)	Year 1 (July 2020 – June 2021)	Year 2 (July 2021 – June 2022)	Years 3 and 4 (July 2022 – June 2024)
Goal 3: Research and Inf	formation fectively manage fisheries impacts on seabirds is	continuously improved		
Objective 5: Research is undertaken to improve bycatch mitigation across sectors, especially those without effective mitigation (note: mitigation may include spatial and temporal closures)  Objective 6: Monitoring	Trial the feasibility of an underwater baitsetter (FNZ/DOC)     Review the factors that contribute to seabirds getting caught in trawl nets in deepwater fisheries (FNZ)      Review the forms and data collection methods used by	- Review the forms and data collection methods used	- Review the forms and data collection methods	- Review the forms and data collection
programmes for New Zealand commercial fisheries are designed and implemented to provide statistically robust information to assess progress towards the NPOA-Seabirds 2020's objectives	observers to make sure they are appropriate to support the NPOA-Seabirds 2020  - Document monitoring objectives and needs based on risk assessment outputs. Include as Annex to Implementation Plan.  - Continue the Black Petrel Electronic Monitoring project for the 2019/20 summer (FNZ)  - Review the footage collected by the 2018/19 Black Petrel Electronic Monitoring Project (FNZ)	by observers to make sure they are appropriate to support the NPOA-Seabirds 2020  - Continue the Black Petrel Electronic Monitoring project for the 2020/21 summer (FNZ)  - Review the footage collected by the 2019/20 Black Petrel Electronic Monitoring Project (FNZ)	used by observers to make sure they are appropriate to support the NPOA-Seabirds 2019  - Continue the Black Petrel Electronic Monitoring project for the 2021/22 summer (FNZ)  - Review the footage collected by the 2020/21 Black Petrel Electronic Monitoring Project (FNZ)	methods used by observers to make sure they are appropriate to support the NPOA-Seabirds 2019  - Continue the Black Petrel Electronic Monitoring project for the 2022/23 summer (FNZ)  - Review the footage collected by the 2021/22 Black Petrel Electronic Monitoring Project (FNZ)
Objective 7: Observation and monitoring methods are researched, developed, and implemented across all sectors	<ul> <li>Implement the updated protected species interaction form used by observers (FNZ)</li> <li>Roll-out mandatory use of electronic reporting and geospatial position reporting by all commercial fishers (FNZ)</li> <li>Trialling innovative electronic monitoring systems for small vessels (DOC)</li> <li>Complete trials of the efficacy of electronic monitoring for seabird captures in inshore fisheries (FNZ).</li> </ul>			
Objective 8: A research programme provides information to reduce uncertainty in estimates of risk to seabirds from fishing	- Spatial distribution modelling of at-risk seabirds in New Zealand commercial fisheries (FNZ)  - Distributional study of Antipodean Albatross using satellite reporting GPS tags (FNZ)¹  - Aerial survey of white-capped albatross on the Auckland Islands (FNZ)  - Black petrel population monitoring and distribution study (FNZ)  - Multi-threat risk assessment for yellow-eyed penguin (Hoiho) (FNZ tbc)	- Workshop on Seabird Risk Assessment to increase stakeholder understanding, explicitly agree population stabilisation or recovery objectives, and update implementation plan as required		

<sup>&</sup>lt;sup>1</sup> https://docnewzealand.shinyapps.io/albatrosstracker/

Objective	Year 0 (July 2019 – Jun 2020)	Year 1 (July 2020 – June 2021)	Year 2 (July 2021 – June 2022)	Years 3 and 4 (July 2022 – June 2024)		
Goal 4: International eng	agement					
New Zealand actively en	New Zealand actively engages internationally to promote measures that reduce impacts on New Zealand seabirds					
Objective 9: The risk to New Zealand seabirds from fisheries outside the New Zealand EEZ is assessed and communicated to international organisations, governments and other stakeholders	- Updated southern hemisphere risk assessment presented to relevant RFMOs  CCSBT ERS (May 2019)  WCPFC Scientific Committee (August 2019)		- Updated southern hemisphere risk assessment presented to relevant RFMOs (FNZ tbc)			
Objective 10: New Zealand advocates for the development, adoption, improvement, and uptake of seabird conservation measures	- Support adoption of safe release guidelines at WCPFC (Scientific Committee August 2019, Commission December 2019 tbc)  - Support update of seabird conservation and management measure at SPRFMO (tbc)	- Propose listing of Antipodean albatross on CMS Appendix II at the CMS Conference Of the Parties 13				
Objective 11: New Zealand actively works bilaterally, multi-laterally, and with international organisations to build capacity to reduce the risk to New Zealand seabirds	<ul> <li>Continue Pacific capacity development programmes</li> <li>Collaboration with Chile under NZ-Chile Seabird Arrangement</li> <li>Collaboration with Ecuador under DOC- INP (Ecuador) Seabird Arrangement (DOC)</li> <li>Deliver Pacific Seabird work plan</li> </ul>					
Cross-Objective work dr	iven through other processes					
	- Research on indirect effects  - Implementation of digital monitoring programme  - Fisheries Change Programme	Operational implementation of electronic monitoring to increase available information in key inshore fisheries.      Integrate seabird monitoring objectives into prioritisation process for digital monitoring rollout for inshore fisheries.	- Integrate seabird monitoring objectives into prioritisation process for digital monitoring rollout for inshore fisheries.	- Integrate seabird monitoring objectives into prioritisation process for digital monitoring rollout for inshore fisheries.		

### Table 2: Non-government organisation (NGO-led activities)

Activities by non-government	ivities by non-government organisations will be added as information becomes available					
	Year 0 (July 2019-Jun 2020)	Year 1 (July 2020 – June 2021)	Year 2 (July 2021 to June 2022)	Years 3 and 4 (July 2022 to June 2024)		
Southern Seabirds Solutions Trust  Deepwater Group Ltd	- Investigate ways to mitigate the risk of seabirds getting caught in trawl nets in deepwater fisheries (Southern Seabird Solutions Trust/Industry)					
Fisheries Inshore New Zealand						

Table 3: Research plan

Research Needs/Gaps	- Update of population model for Southern Buller's (last updated in 2016)			
Tentative Research Plan	Year 0 (July 2019-Jun 2020)	Year 1 (July 2020 – June 2021)	Year 2 (July 2021 to June 2022)	Years 3 and 4 (July 2022 to June 2024)
Fisheries New Zealand lead	<ul> <li>- PRO2019-01: Preparation and documentation of a standardised linked database</li> <li>- PRO2019-02: Maintenance of protected species capture website</li> <li>- PRO2019-09: Spatial distribution modelling of at risk seabirds in New Zealand commercial fisheries</li> <li>- PRO2019-10: Refine SEFRA model parameterisation for at risk protected species</li> <li>- PSB2019-01: Estimation of total captures of seabirds using standardised estimation methods</li> <li>- PSB2019-02: Distributional study of Antipodean Albatross using satellite reporting GPS tags</li> <li>- PSB2019-04: Black petrel population monitoring and distribution study</li> <li>- PSB2019-06: Review of footage collected from the 2018/19 Black Petrel Electronic Monitoring Project</li> <li>- PSB2019-07: Continuation of the Black Petrel Electronic Monitoring Project for the 2019/20 summer</li> </ul>	- PSB2020-01: Research into demographic parameters for at-risk seabirds (species tbc) - PSB2020-02: Modelling of factors affecting capture rate of at-risk protected species (focus tbc) - PSB2020-03: Cryptic mortality of seabirds - PSB2020-04: Review of inputs to the seabird risk assessment - PRO2020-06: Update spatial risk assessment tool	- PSB2021-01: Research into demographic parameters for at-risk seabirds (species tbc) - PSB2021-02: Modelling of factors affecting capture rate of at-risk seabirds - PSB2021-03: Cryptic mortality of seabirds - PSB2021-04: Seabird risk assessment	
	<ul> <li>PSB2019-08: Feasibility trial of underwater baitsetter</li> <li>PSB2019-09: Aerial survey of white-capped albatross on the Auckland Islands</li> <li>ZBD2019-11: Development of the Electronic Automated Reporting System (EARS)</li> </ul>			
Department of Conservation ead	<ul> <li>POP2017-03: Salvin's albatross: Bounty Islands population project (1 year remaining of 2 year project)</li> <li>POP2017-04: Seabird population research: Auckland Islands (1 year remaining of 3 year project)</li> <li>POP2018-02: Hoiho population and tracking project (1 year remaining of 2 year project)</li> </ul>	- POP18- 04 Flesh-footed shearwater: Population Monitoring - POP19-04 Southern Buller's albatross: Snares/Tini Heke population project - POP19-05 Southern Buller's albatross: Snares/Tini Heke population project	- Population estimates: Snares Salvin's albatross Flesh-footed shearwater Snares Southern Buller's albatross Antipodean albatross Mainland yellow-eyed penguin Antipodes Northern giant petrel Antipodes White-chinned petrel	

- POP2018-04: Flesh-footed shearwater: Population - If	INT2019-02: Identification of seabirds captured Antipodes Grey petrel	
Monitoring (2 years remaining of 3 year project) in	New Zealand Fisheries	
- POP2019-02: Fish shoal dynamics in North-eastern New -M	MIT2019-03: Lighting adjustments to mitigate	
·	gainst deck strikes / vessel impacts	
- POP2019-03: Antipodes Island seabirds research (1 year		
project)		
- POP2019-04: Southern Buller's albatross: Snares/Tini		
Heke population project (3 year project)		
- POP2019-06: Spotted shag population review		
-INT2018-03: Improvement in observer photograph protocols		
and photograph curation		
- INT2019-02: Identification of seabirds captured in New		
Zealand Fisheries		
- INT2019-06: Post-release survival of seabirds		
-MIT2017-01: Protected species liaison project		
-MIT2018-01: Protected species engagement project		
-MIT2019-03: Lighting adjustments to mitigate against deck		
strikes / vessel impacts		
MIT2019-04: Optimum batching interval for discharge		
management on vessels in the scampi fishery		
manayement on vessels in the scampinishery		

#### **List of Abbreviations and Acronyms**

AEBAR	Aquatic environment and biodiversity annual report	FINZ	Fisheries Inshore New Zealand
AOP	Annual Operational Plan	FNZ	Fisheries New Zealand
CCSBT	Commission for the Conservation of Southern Bluefin Tuna	FNZ DW	Fisheries New Zealand Deepwater Fisheries Management Team
CMS	Convention on the Conservation of Migratory Species of Wild Animals	FNZ HMS	Fisheries New Zealand Highly Migratory Species Fisheries Management Team
СОР	Conference of the Parties	FNZ INS	Fisheries New Zealand Inshore Fisheries Management Team
CSP	Conservation Services Programme (administered by Department of Conservation)	INP	Instituto Nacional de Pesca (Ecuador)
DOC	Department of Conservation	MFAT	Ministry of Foreign Affairs and Trade
DWG	Deepwater Group Ltd	RFMO	Regional fisheries management organisation
ERS	Ecologically related species	SAG	Seabird Advisory Group
		WCPFC	Western and Central Pacific Fisheries Commission

## Annex 1. Monitoring plan for the 2019/20 financial year

Table 4. Observer sea day plan for 2019/20

Fishery	Key fisheries covered	Expected % Effort Observed	Planned Seadays
Other categories			
High risk vessels		100	50
Medium risk vessels		30	50
CCAMLR	High seas	100	263
SPFRMO Trawl	High seas	100	500
SPRFMO Bottom Longline	High seas	10	50
SPRFMO Exploratory Bottom Longline	High seas	100	180
PSH trials - Inshore			200
Compliance			100
Other Categories total			1,393
Highly Migratory Species		20	460
Domestic tuna surface longline - East Coast	Southern bluefin tuna	20	160
Domestic tuna surface longline - West Coast	Southern bluefin tuna	20	160
Surface longline - WCPFC (High Seas)	WCPFC	10	10
Domestic surface longline - East coast	Bigeye/swordfish tuna		150
Domestic surface longline - West coast	Bigeye/swordfish tuna		55
Albacore troll	Albacore tuna		70
Total Highly Migratory Species			605
Inshore			
Set net (WCNI) + Snapper Bottom Longline (SNA 8)	Snapper, Trevally, Gurnard (SNA 8, TRE 7, GUR 8)	100	175
Trawl WCNI - Traditional trawl	Trevally, Snapper, Gurnard (TRE 7, SNA 8, BUR 1)	100	650
SNA 1 trawl– Precision Seafood Harvesting	Snapper (SNA 1)	100	105
SNA 1 trawl - standard (no Precision Seafood Harvesting)	Snapper (SNA 1)	100	105
Set net SCSI	School shark, rig (SCH 5, SPO 3)	100	175
Set net ECSI - Otago	School shark, rig (SCH 3, SPO 3)		125
Bottom longline - Snapper	Snapper (SNA 1)		385
Bottom longline – Bluenose/Hapuka	Bluenose, Hapuka (BNS 1, HPB 1)		35
Trawl - ECSI	Barracouta, Red cod, Tarakihi (BAR 1, RCO 3, TAR 3)		250
Total Inshore	Barracouta, Red Cod, Tarakini (BAR 1, RCO 3, TAR 3)		<b>2,005</b>
Deepwater / Middle Depth		100	100
Southern blue whiting	Southern blue whiting (SBW 6I, 6B)	100	400
Squid	Squid (SQU 6T, SQU 1T)	100	1,250
Training			1,600
Vessel specific conversion factor			30
North Island Deepwater trawl	Orange roughy, alfonsino (ORH 1, 2A, 2B, 3A, BYX 2, 3)		100
Chatham Rise Deepwater trawl	Orange roughy, oreo (ORH 3B, OEO 4, 3A)		300
Sub-Antarctic Deepwater trawl	Orange roughy, oreo (ORH 3B, OEO 1, 6)		120
West Coast Deepwater trawl	Orange roughy (ORH 7A)		100
West Coast North Island trawl	Jack mackerel, blue mackerel, barracouta (JMA 7, EMA 7, BAR 7)		250
West Coast South Island trawl	Hoki, hake, ling (HOK 1, HAK 7, LIN 7)		650
West coust south island trawi	Hoki, hake, ling, jack mackerel, barracouta, silver	+	050
Chatham Rise Middle Depth trawl	warehou (HOK 1, HAK 4, LIN 3, 4, JMA 3, BAR 1, 4, SWA		650
	3, 4) Hoki, hake, ling, barracouta, white warehou (HOK 1,		
Sub-Antarctic Middle Depth trawl	HAK 1, LIN 5, 6, BAR 5, WWA 5B)		500
Hoki Cook Strait trawl	Hoki (HOK 1)		150
WCSI Hoki-Inside the line trawl	Hoki (HOK 1)		150
Scampi trawl	Scampi (SCI 1, 2, 3, 4A, 6A)		450
Ling Bottom longline (all vessel sizes)	Ling (LIN 3-7)		400
Total Deepwater / Middle-depth			7,100
			44
Total Planned Seadays			11,102