

National Plan of Action – Seabirds 2020

Reducing the incidental mortality of
seabirds in fisheries



Fisheries New Zealand

Tini a Tangaroa



Department of
Conservation
Te Papa Atawhai

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Fisheries New Zealand, PO Box 2526, Wellington, 6140

Email: brand@mpi.govt.nz

Phone: 0800 00 83 33

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Executive Summary

New Zealand is a centre of seabird biodiversity: of an estimated 346 seabird species, there are approximately 145 species that use New Zealand waters, and 95 species that breed in New Zealand. Many of these species' activities overlap with fishing, which can lead to the bycatch¹ of seabirds. *The National Plan of Action – Seabirds 2020 Reducing the incidental mortality of seabirds in fisheries* (NPOA Seabirds 2020), outlines the New Zealand Government's ongoing commitment to reducing bycatch of seabirds in our fisheries.

The NPOA Seabirds 2020, like its predecessors, stems from a recommendation made in the UN (United Nations) Food and Agriculture Organisation's *International plan of action for reducing incidental catch of seabirds in longline fisheries* (IPOA-Seabirds) in 1999.²

The NPOA Seabirds 2020 is New Zealand's third iteration of a national plan of action. New Zealand has embarked on a programme of transformational change in our fisheries management to ensure that our fisheries are world-leading in their sustainability and environmental performance. At the end of this period, we expect to have significantly increased monitoring and more responsible, low-impact fishing practices.

In recognition of this path to change, this NPOA Seabirds 2020 focuses on education, partnering to find innovative solutions to bycatch mitigation, and ensuring that all fishers know how and are taking all practicable steps to avoiding seabird bycatch.

In five years, monitoring capabilities will have expanded and we will have better information on seabird populations and how to avoid captures. This will allow for more direct management, including consideration of mortality limits or other approaches as appropriate. We also expect that we will have a better understanding of seabird populations and behaviours, which will help us to identify other ways that we can ensure the long-term viability of our seabird species.

This NPOA Seabirds 2020 establishes the framework that the Department of Conservation (DOC) and Fisheries New Zealand will use to work together on seabird initiatives.

The NPOA Seabirds 2020's vision is **New Zealanders work towards zero fishing-related seabird mortalities.**

Guided by this vision, the NPOA Seabirds 2020 has four goals:

1. *Avoiding bycatch* — effective bycatch mitigation practices are implemented in New Zealand fisheries
2. *Healthy seabird populations* — direct effects of New Zealand fishing do not threaten seabird populations or their recovery
3. *Research and information* — information to effectively manage direct fisheries effects on seabirds is continuously improved
4. *International engagement* — New Zealand actively engages internationally to promote measures and practices that reduce impacts on New Zealand seabirds

Each goal has objectives to be achieved within the next five years. We will report on our progress towards these objectives in a Seabird Annual Report, and will use the information it contains to set the following year's priorities in a Seabird Implementation Plan. After five years, we will review the achievements and challenges of the NPOA Seabirds 2020.

The Seabird Advisory Group (comprising representatives from government agencies, key stakeholder groups and tangata whenua) will meet periodically to monitor and help implement the NPOA Seabirds 2020, and to consider new or arising matters related to the impacts on seabirds from fisheries.

¹ Bycatch is defined as fishing-related incidental capture or mortality.

² <http://www.fao.org/3/x3170e/x3170e02.htm>

Introduction



Purpose

The NPOA Seabirds 2020 sets out the New Zealand Government's commitment to reducing fishing-related captures and associated mortality of seabirds. It explains the rationale for the plan and then sets out what the plan intends to achieve, how the plan will be implemented and how its achievements will be measured and reviewed.

The NPOA Seabirds 2020 should be read alongside the *National Plan of Action – Seabirds 2020 Supporting document*.³

Origins

In 1999, the Food and Agriculture Organisation of the UN developed the International Plan of Action for reducing the incidental catch of seabirds in longline fisheries (IPOA-Seabirds).

The IPOA-Seabirds resulted from increasing awareness about seabirds being incidentally captured during fishing activity. The awareness stemmed from the United Nations Convention on the Law of the Sea 1982 (UNCLOS); the 1995 United Nations' Fish Stocks Agreement; and the FAO's Code of Conduct for Responsible Fisheries.

As a nation with particularly diverse and abundant seabirds, New Zealand has a responsibility to act in accordance with the IPOA-Seabirds' objectives: the NPOA Seabirds 2020 outlines how New Zealand will do this.

The NPOA Seabirds 2020 is New Zealand's third iteration of a national plan of action. It builds on the achievements of the NPOA Seabirds 2004 and NPOA Seabirds 2013, and responds to lessons learnt from implementing these plans.

The IPOA-Seabirds focuses on the impacts of longline fishing; however, New Zealand's NPOA Seabirds 2020, and previous iterations, include all fishing sectors, and fishing methods used, in New Zealand.

Section 2 of the *National Plan of Action – Seabirds 2020 Supporting document* provides more information about the history of the NPOA Seabirds 2020.

³ <https://www.fisheries.govt.nz/dmsdocument/40658-national-plan-of-action-seabirds-2020-supporting-document>



Scope

The NPOA Seabirds 2020 covers:

1. all seabird species absolutely or partially protected by the New Zealand Wildlife Act 1953 (New Zealand seabirds)
2. commercial, recreational and customary non-commercial fisheries in waters under New Zealand fisheries jurisdiction
3. direct effects of fishing
4. all areas where New Zealand seabirds are caught (waters under New Zealand fisheries jurisdiction, high seas and other jurisdictions).

The NPOA Seabirds 2020 does not include actions to improve seabirds' conservation status by reducing threats at their breeding sites or other non-fishing threats. However, the NPOA Seabirds 2020's actions may take such threats species or populations may face into account when considering the extent of the risks from fishing. For example, where seabirds face a significant risk from other human-related activity, their level of incidental deaths from fishing may need to be less than their population could otherwise sustain.

To focus on the direct effects of fishing on seabirds, the NPOA Seabirds 2020 will not address the indirect effects of fishing on seabirds. However, as these indirect effects may significantly impact on seabird populations, they need to remain a focus for Fisheries New Zealand and DOC's seabird research and management activities.



Background

New Zealand Fisheries Management

Under the United Nations Convention on the Law of the Sea 1982 and its associated agreements, New Zealand has international obligations regarding the conservation and management of the living resources in its Exclusive Economic Zone (EEZ). With other states, New Zealand also has obligations regarding the conservation and management of the living resources in the high seas. In both cases, these include the obligation to take into account the effects of activities on associated or dependent species, such as seabirds.

New Zealand marine fisheries are managed under the Fisheries Act 1996 and associated regulations. The Fisheries Act 1996 includes the responsibility to 'avoid, remedy or mitigate any adverse effects of fishing on the aquatic environment'.⁴ Associated or dependent species should also be maintained above a level that ensures their long-term viability.⁵ These legal obligations affect how we manage fishing interactions with seabirds.

Seabirds

Diversity

All seabirds feed over the open sea at some time during their lifecycle. New Zealand seabirds have diverse biology, ecology and behaviour. Approximately 145 seabird species use New Zealand waters. This includes about 95 that breed in New Zealand with over one third of these endemic to New Zealand, meaning that they don't breed anywhere else in the world. Figure 1 shows the number of breeding and resident seabird species in New Zealand.

Seabirds range dramatically in size: from storm petrels (the smallest group of seabirds in the world that weigh less than 50 grams) to great albatrosses (the largest seabirds in the world that weigh up to nine kilograms and have a wing span of three metres or more).

Distribution

The geographic distribution of New Zealand seabirds varies greatly. Some live, breed and forage relatively close to land (such as the little blue penguin); others travel vast distances (some shearwaters migrate to Alaska; several species of petrel and albatross visit waters off the coast of Chile, Peru, and Ecuador; and royal albatross fly around the world above the southern oceans).

New Zealand's many islands, including the sub-Antarctic Islands, are important breeding areas for seabirds. Predator-free offshore islands are particularly important for seabirds that breed here; for many species they are their only known breeding sites. In addition to seabirds that breed in New Zealand, some species visit New Zealand only to feed in our waters.

⁴ Section 8 of the Fisheries Act 1996.

⁵ Section 9 of the Fisheries Act 1996.

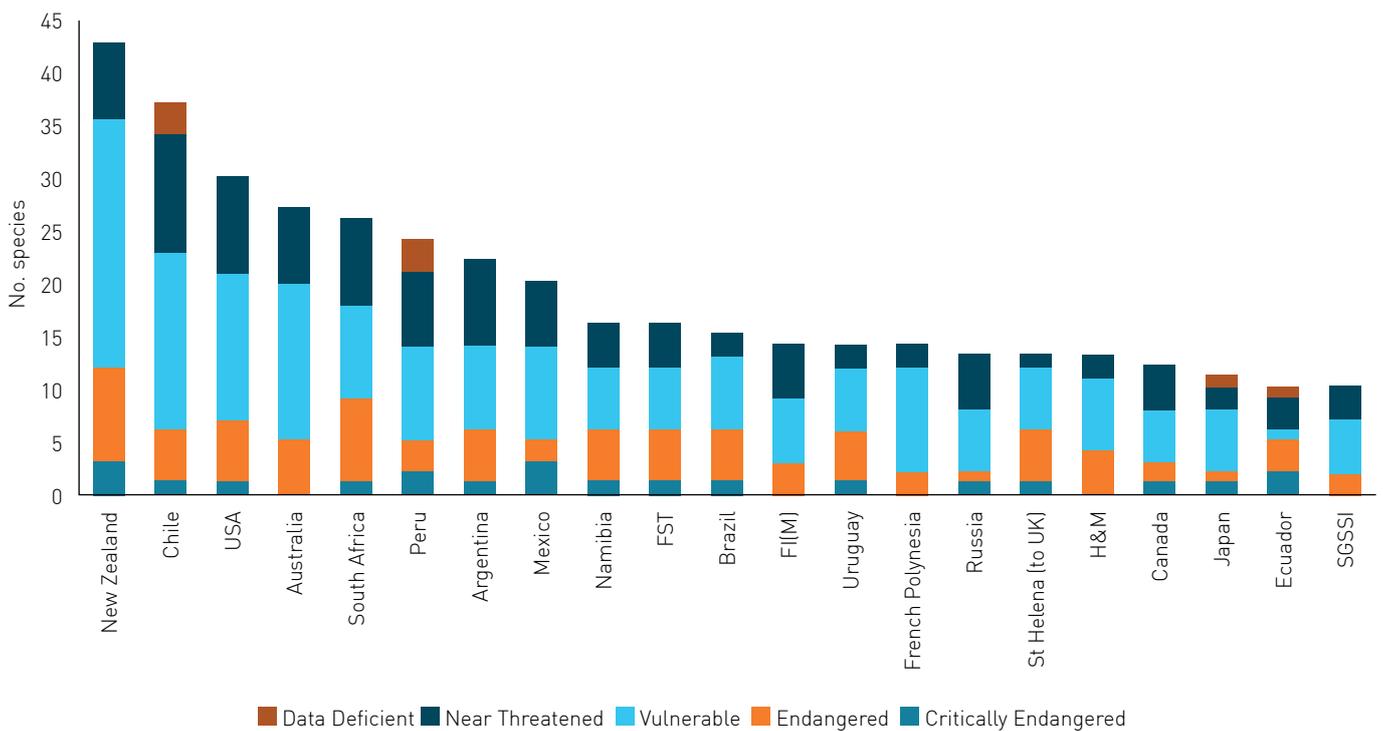
Susceptibility

Despite New Zealand being such an important area for seabirds, they face many threats in addition to interactions with fisheries. These include predators (introduced land-based mammals and other birds), disease, fire, weeds, loss of nesting habitat, competition for nest sites, coastal development, human disturbance, commercial and cultural harvesting, volcanic eruptions, pollution, plastic and marine debris, oil spills and exploration, heavy metals or chemical contaminants, and global sea and air temperature changes.

Different species of seabirds have different biological characteristics (such as diving ability, agility, size, sense of smell, eyesight and diet) and foraging traits (such as foraging range; and aggression, boldness or shyness they display towards fishing activity). These differences affect the threats they face from fishing operations, and how susceptible they are to interactions with, and capture in, fishing operations.

Seabirds' reproductive traits and their longevity can influence a population's ability to sustain or recover from human-induced mortality. Most seabirds are long lived; many live to 20 years old, with some albatross known to live for 45 years or more. Many seabirds start to breed when they reach between three and six years old. Some start breeding earlier (such as gulls and terns that start breeding when they're two years old), while others start much later (such as albatrosses that don't start to breed until they're aged between eight and fifteen years old). Many species lay only one egg per year (including all albatross and petrels), and some breed only every two years (for example, Antipodean and Gibson's albatrosses).

Figure 1: The number of breeding and resident seabird species in all International Union for the Conservation of Nature threat-ranking categories, except least concern,⁶ 2012



Notes

1. FST is French Southern Territories
2. SGSSI is South Georgia and South Sandwich Islands
3. FI(M) is Falkland Islands/Malvinas
4. H&M is Heard Island and McDonald Islands

Section 3 of the **National Plan of Action – Seabirds 2020 Supporting document** provides more information about the state of New Zealand seabird populations.

⁶ Croxall, J. O., Butchart, S. H. M., Lascelles, B., Stattersfield, A. J., Sullivan, B., Symes, A., & Taylor, P. (2012). Seabird conservation status, threats and priority actions: a global assessment. *Bird Conservation International*, 22, 1–34.

Science

Understanding how seabirds and fisheries interact, and what impact this has on seabird population trends, is an ongoing challenge.

New Zealand uses the spatially explicit fisheries risk assessment (SEFRA) method to estimate the risk that fisheries pose to protected species, including seabirds, and to prioritise intervention based on risk levels to different populations.

SEFRA assesses the risks to seabird populations from direct incidental mortality caused by New Zealand commercial fisheries. SEFRA combines biological information about a seabird population (such as its population size and growth, and its breeding data) and compares this with an estimate of the potential number of fishing-related deaths to calculate the risk of fisheries having an unsustainable impact on the population.

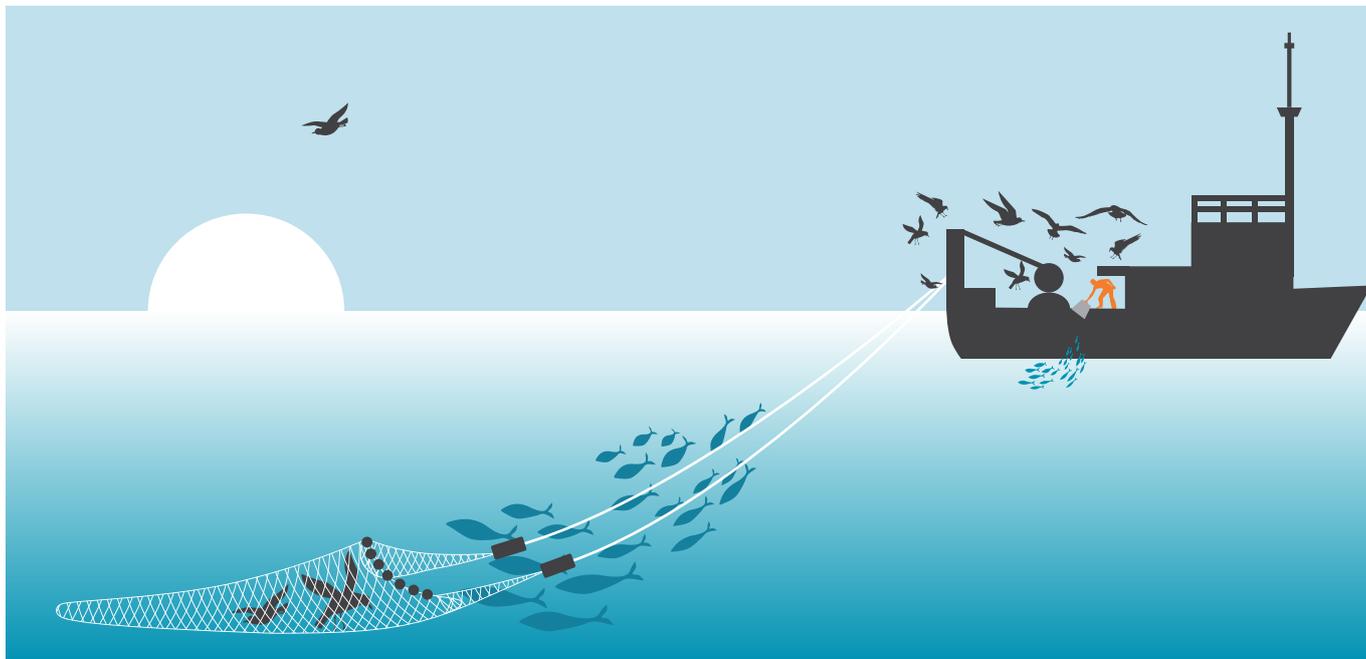
Ongoing population monitoring and biological assessment inform the seabird risk assessment. For seabird species of particular concern, or for species where the data is available, species-specific population models or multi-threat risk assessments may also be used to inform management actions.

Section 4 of the *National Plan of Action – Seabirds 2020 Supporting document* provides more information about interactions between seabirds and New Zealand fisheries, and the SEFRA method. Information is also available from DOC's website⁷ and in Fisheries New Zealand's *Aquatic Environment and Biodiversity Annual Review 2018: A Summary of the Environmental Interactions between the Seafood Sector and the Aquatic Environment*.⁸



7 DOC's Conservation Services Programme monitors the impact of commercial fishing on protected species, studies species populations and looks at ways to limit bycatch. Information on this programme is available at www.doc.govt.nz/our-work/conservation-services-programme

8 The Ministry for Primary Industries. (2018). Aquatic environment and biodiversity annual review 2018: a summary of environmental interactions between the seafood sector and the aquatic environment. Retrieved from <https://www.mpi.govt.nz/dmsdocument/34854-aquatic-environment-and-biodiversity-annual-review-aebar-2018-a-summary-of-environmental-interactions-between-the-seafood-sector-and-the-aquatic-environment>



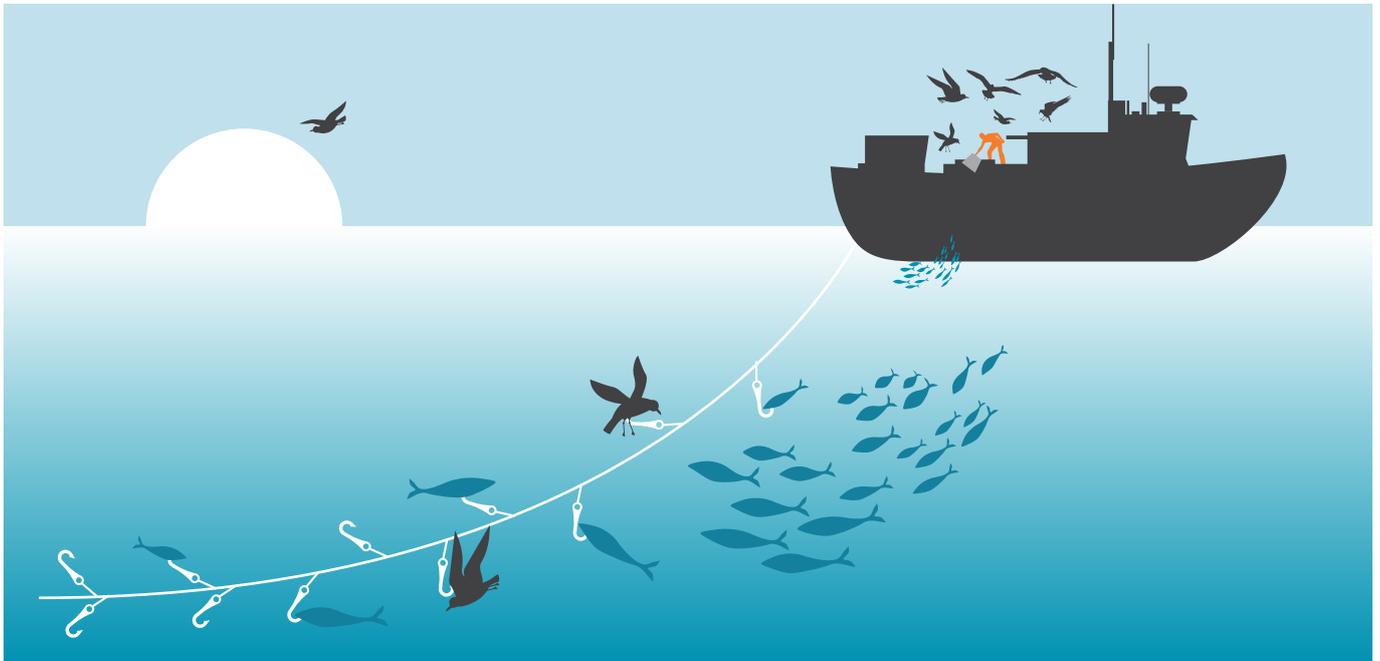
Fisheries

Trawl

Trawling involves using cables called warps to tow a net (or nets) at depth behind a vessel. Seabirds are attracted to trawl vessels to feed on material released by the vessel (fish waste and offal) or try and seize trapped fish from the net while it is on the surface.

The warps and the trawl net itself are the two main components of trawl gear where there is the greatest risk of interaction with seabirds. Trawl nets generally only pose a risk to seabirds when the net is on or near the surface (while the gear is being deployed or retrieved). Seabirds can collide with the warps at any time the warps are in the water.

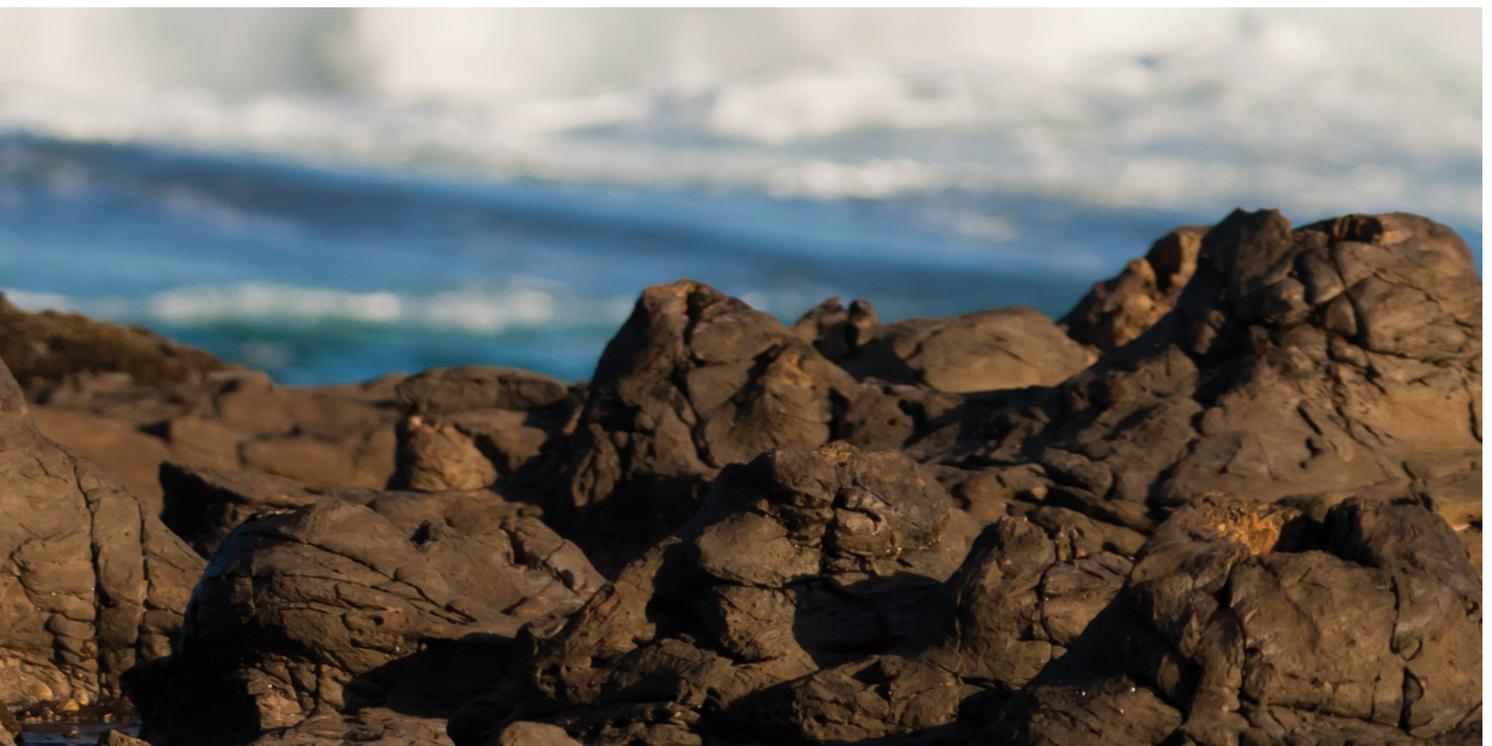




Longline

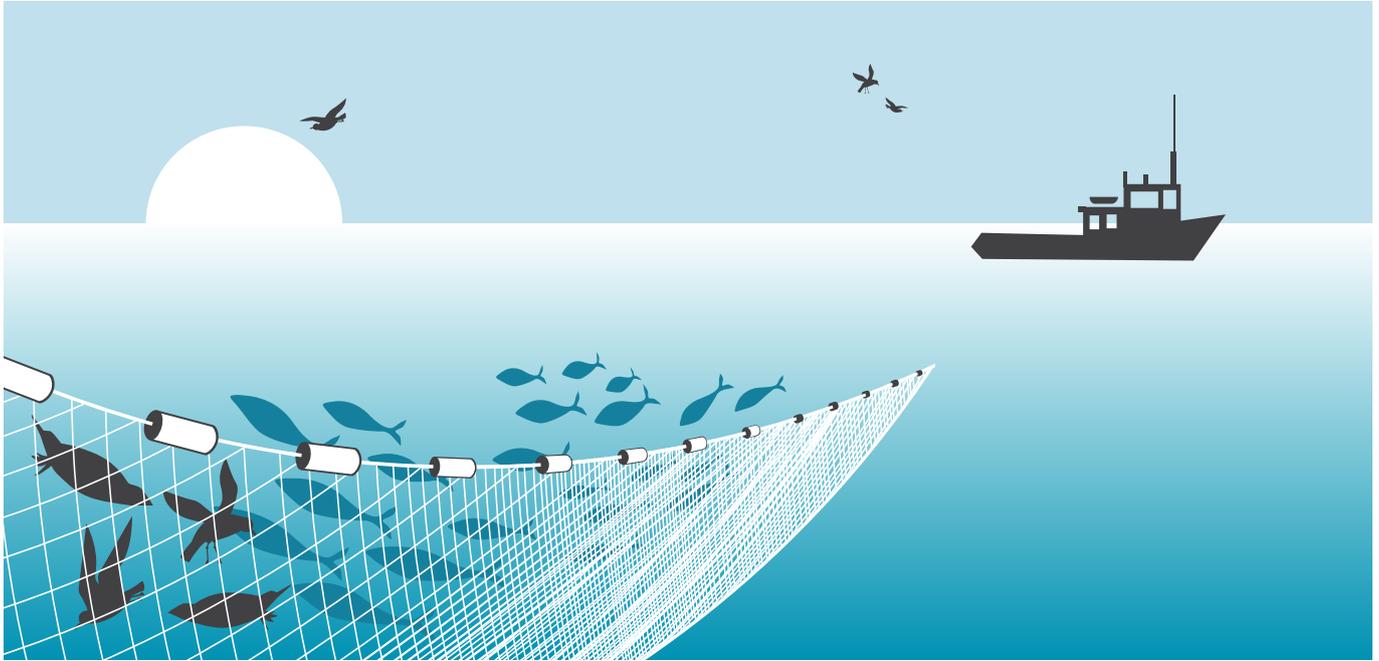
There are two categories of longline fishing. Surface (pelagic) longlining uses gear suspended from the sea surface with floats; bottom (demersal) longlining uses gear sunk to the seabed using weights. Surface longline gear is used to target species such as tuna and swordfish in the upper 100–200 metres of the water column, whilst bottom longline gear is used to target species such as snapper and ling in waters up to 600 metres deep.

Seabirds can be attracted to longline vessels by discharged offal and baits. Seabirds can get caught on baited hooks during the setting or soak of longlines, and less frequently, hauling of longlines.



Setnet

Set nets (also known as gill nets) present a threat to diving seabirds (e.g. penguins, shags and petrels) due to the risk of seabirds becoming entangled, and subsequently drowning, in the nets whilst foraging for food. Depending on the seabird species and how the nets are fished, captures can occur during deployment (setting or hauling) or soaking (whilst the gear is fishing). Nets deployed overnight close to breeding colonies are considered to pose the greatest risk to seabirds, particularly penguins as they often transit to and from colonies at dawn and dusk.



Section 4 of the *National Plan of Action – Seabirds 2020 Supporting document* provides more information about commercial fisheries.

Bycatch Mitigation

Many different approaches are available to mitigate against the bycatch of seabirds in fisheries. These range from changing fisher behaviour and practices on the boat (to attract fewer birds), to using devices that scare birds away from vessels or create barriers between birds and high-risk areas. The operational practices of vessels and fisheries vary widely, as do seabirds' distribution and behaviours. Therefore, a range of mitigation practices are needed to suit specific vessels, fisheries and seabirds.

Mitigation practices can be, and are, required by regulation. However, non-regulatory measures are also an important component of effective mitigation. As an example, DOC's Protected Species Liaison Project and Deepwater Group Ltd's environmental liaison officer programme involves liaison officers who share information across fisheries and help fishers to develop and implement the best mitigation practices for their fishery operations.

International organisations, and agreements that focus on seabirds, provide guidance on mitigation practices to reduce the incidental capture and associated mortality of seabirds in fisheries. For example, New Zealand is a signatory to the Agreement on the Conservation of Albatross and Petrels (ACAP).⁹ ACAP is a multilateral agreement that seeks to conserve albatrosses and petrels by coordinating international activity to mitigate known threats, including from fishing, to their populations.

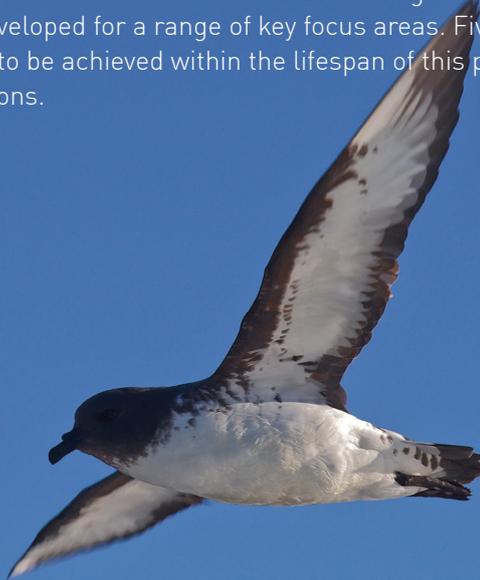
Section 5 of the *National Plan of Action – Seabirds 2020 Supporting document* provides more information about mitigating bycatch in commercial fisheries.

⁹ Further information about ACAP is available from <https://acap.aq/>

Vision, Goals and Objectives

New Zealand has a comprehensive reporting and management system in place to ensure the active management of the impacts of fishing on seabirds, but there is room for improvement. The following vision, goals and objectives have been developed to provide direction to improve the management of the impacts of fishing on seabirds over time.

The vision of the NPOA Seabirds 2020 sets out the desired future state for the management of the impacts of fishing on seabirds. Underlying this, goals have been developed for a range of key focus areas. Five year objectives are aligned to each of the goals, which are intended to be achieved within the lifespan of this plan, but it is acknowledged that some may flow through to subsequent versions.



Our Vision

New Zealanders work towards zero fishing-related seabird mortalities

Goals



Avoiding Bycatch

Effective bycatch mitigation practices are implemented in New Zealand fisheries



Healthy Seabird Populations

Direct effects of New Zealand fishing do not threaten seabird populations or their recovery



Research and Information

Information to effectively manage direct fisheries effects on seabirds is continuously improved



International Engagement

New Zealand actively engages internationally to promote measures and practices that reduce impacts on New Zealand seabirds

Objectives

The NPOA Seabirds 2020's goals will be achieved through 11 measurable objectives.

<p>Avoiding Bycatch Effective bycatch mitigation practices are implemented in New Zealand fisheries</p>	<p>1. Ensure all New Zealand commercial fishers are using practices that best avoid the risk of seabird bycatch, enabled by appropriate regulations</p> <p>2. Practices that effectively avoid risk of seabird bycatch are supported and promoted to non-commercial fishers</p>
<p>Healthy Seabird Populations Direct effects of New Zealand fishing do not threaten seabird populations or their recovery</p>	<p>3. Research, monitoring and management actions are prioritised for seabird populations of particular concern¹⁰ and their risk¹¹ ratios reduce</p> <p>4. The number of fishing-related mortalities is decreasing towards zero¹²</p>
<p>Research and Information Information to effectively manage direct fisheries effects on seabirds is continuously improved</p>	<p>5. Research is undertaken to improve bycatch mitigation across sectors, especially where there are high bycatch rates and no known effective mitigation (note: mitigation may include spatial and temporal closures)</p> <p>6. Monitoring 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</p> <p>7. Observation and monitoring methods are researched, developed and implemented across all sectors</p> <p>8. A research programme provides information to reduce uncertainty in estimates of risk to seabirds from fishing across all sectors</p>
<p>International Engagement New Zealand actively engages internationally to promote measures and practices that reduce impacts on New Zealand seabirds</p>	<p>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</p> <p>10. New Zealand advocates for the development, adoption, improvement, and uptake of seabird conservation measures¹³</p> <p>11. New Zealand actively works bilaterally, multi-laterally, and with international organisations to build capacity to reduce the risk to New Zealand seabirds</p>

10 'Particular concern' means all those species identified through both risk assessment (species categorised at High or Very High risk) and review of other data (e.g. population monitoring indicating a significant population decline), and taking into account threat status.

11 The risk ratio is the ratio between the mortality of a species across all fisheries and an estimate of mortality that the species' population can encounter and remain stable at or above a defined management target. Ratios above 1 indicate that mortality may exceed that needed to reach the management target.

12 It may not be possible to measure a reduction for species that have low estimated numbers of fishing-related deaths.

13 The term 'conservation measures' is intentionally broad, so that a wide range of options to avoid, remedy or mitigate adverse effects of fishing on seabird populations can be considered.

Measuring Performance

This section explains which measures will be used to monitor progress towards each of the NPOA Seabirds 2020's objectives.





Goal 1: Avoiding Bycatch

Effective bycatch mitigation practices are implemented in New Zealand fisheries

Table 1 lists the performance measures that will be reported on annually to measure progress towards the two objectives of the Avoiding Bycatch goal.

Section 6 of the *National Plan of Action – Seabirds 2020 Supporting document* provides information about the current status of all performance measures.

Table 1: Goal 1 objectives and performance measures

Objective 1		Ensure all New Zealand commercial fishers are using practices that best avoid the risk of seabird bycatch, enabled by appropriate regulations
Performance measures (inputs)		
1	Proportion of each relevant fishing fleet with vessel-specific protected species risk management plans for seabird capture mitigation (target: 100 percent)	
2	Proportion of vessel-specific protected species risk management plans that meet the Mitigation Standards and regulations for the relevant fishery (target: 100 percent)	
3	Rate of adherence to vessel-specific protected species risk management plans (based on available monitoring data) (target: 100 percent)	
4	Regulations and Mitigation Standards are reviewed, updated, and developed to reflect the best available information (target: annual review)	
Performance measures (outputs)		
5	Number of fisheries that have enough information to set reduction targets (target: increasing)	
6	Rates of seabird capture relative to agreed reduction targets (where enough information is available) (target: decreasing in line with reduction targets)	
7	Number, and proportion, of compliance inspections that assess compliance against the relevant regulations.	
Objective 2		Practices that effectively avoid risk of seabird bycatch are supported and promoted to non-commercial fishers
Performance measures		
8	Outreach is directed to non-commercial fishers and measured by: <ol style="list-style-type: none"> the number of social media hits for seabird-related outreach campaigns (target: increasing) the amount of seabird-awareness material and mitigation guidance that is distributed (target: increasing) the proportion of registered amateur charter vessel operators who have been provided with material and mitigation guidance (target: 100 percent) new seabird-awareness material and mitigation guidance available in Te Reo Māori and other languages 	
9	The number of organisations involved in messaging and geographical areas covered (target: increasing)	
10	Information that is available to understand seabird captures and the use of bycatch mitigation measures in non-commercial fisheries (target: increasing)	
11	Increased use of mitigation practices and safe handling techniques amongst non-commercial fishers (based on available data) (target: increasing)	



Goal 2: Healthy Seabird Populations

Direct effects of New Zealand fishing do not threaten seabird populations or their recovery

Table 2 lists the performance measures that will be reported on annually to measure progress towards the two objectives of the Healthy Seabird Populations goal.

Table 2: Goal 2 objectives and performance measures

Objective 3	Research, monitoring, and management actions are prioritised for seabird populations of particular concern ¹⁴ , and their risk ratios reduce
Performance measures	
12	Research and/or management actions are undertaken specifically for species or populations of particular concern (target: 100 percent of identified populations of particular concern)
13	Level of uncertainty in risk assessment outputs (target: decreasing)
14	Risk ratios for seabird populations of concern (target: decreasing)
Objective 4	The number of fishing-related mortalities ¹⁵ is decreasing towards zero
15	Estimated fishing-related deaths, from the seabird risk assessment, relative to the average number of fishing-related deaths between 2014/15 and 2016/17 (target: decreasing for all species)



14 'Particular concern' means all those species identified through both risk assessment (species categorised at High or Very High risk) and review of other data (e.g. population monitoring indicating a significant population decline), and taking into account threat status.

15 Fishing-related fatalities is the estimate of the number of seabird deaths caused by fishing from the risk assessment (FRD). FRD includes cryptic mortalities and unobserved fishing effort.



Goal 3: Research and Information

Information to effectively manage fisheries impacts on seabirds is continuously improved

Table 3 lists the performance measures that will be reported on annually to measure progress towards the four objectives of the Research and Information goal.

Table 3: Goal 3 objectives and performance measures

Objective 5	Research is undertaken to improve bycatch mitigation across sectors, especially where there are high bycatch rates and no known effective mitigation (note: mitigation may include spatial and temporal closures)
Performance measures	
16	Number of mitigation practices assessed
17	Number of mitigation practices improved, where applicable
18	Number of fisheries without available or known effective mitigation (target: decreasing)
Objective 6	Monitoring 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
Performance measures	
19	Monitoring objectives and needs are documented and updated annually, informed by the risk assessment and species conservation concern
20	Monitoring coverage across all fisheries (target: increasing)
21	Uncertainty in risk assessment arising from limited monitoring data (target: decreasing)
22	The Fisheries New Zealand monitoring plan, and the plan's rationale, is published annually
Objective 7	Observation and monitoring methods are researched, developed and implemented across all sectors
Performance measures	
23	New observation and monitoring methods (including e-monitoring) are incorporated into monitoring programmes, analyses, and reporting
24	Update and improve observer and fisher reporting requirements to enable effective analysis of bycatch and mitigation use as necessary
25	Proportion of commercial fishers reporting mitigation use (target: 100 percent by 2022)
Objective 8	A research programme provides information to reduce uncertainty in estimates of risk to seabirds from fishing across all sectors
Performance measures	
26	Uncertainty in risk assessment due to limited biological data (target: decreasing)
27	Uncertainty in risk assessment due to limited information about the nature of fishing interactions with seabirds (such as vulnerability and cryptic mortality) (target: decreasing)



Goal 4: International Engagement

New Zealand actively engages internationally to promote measures and practices that reduce impacts on New Zealand seabirds

Table 4 lists the performance measures that will be reported on annually to measure progress towards the three objectives of the International Engagement goal.

Table 4: Goal 4 objectives and performance measures

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
Performance measures	
28	A fisheries risk assessment for seabirds is completed and updated to incorporate data for New Zealand seabirds caught outside the New Zealand EEZ
29	New Zealand's information on compliance with seabird measures is shared with relevant flag states, CCAMLR ¹⁶ , and Regional Fisheries Management Organisations
30	New Zealand actively engages with governments and fishing industries whose vessels create the greatest risk to New Zealand seabirds
31	New Zealand actively facilitates data sharing (relevant to New Zealand seabirds and fishing) between relevant international organisations, governments and stakeholders
Objective 10	New Zealand advocates for the development, adoption, improvement, and uptake of seabird conservation measures
Performance measures	
32	Where possible, meeting reports from CCAMLR and Regional Fisheries Management Organisations show that seabird matters, including new conservation measures, have been considered
33	Where possible, conservation measures from relevant fora consider the risk to seabirds from fishing
34	New Zealand carries out compliance checks for all high seas vessels visiting New Zealand ports, where appropriate, consistent with port state measures, and in keeping with the relevant Regional Fisheries Management Organisation rules and conservation and management measures
Objective 11	New Zealand actively works bilaterally, multi-laterally, and with international organisations to build capacity to reduce the risk to New Zealand seabirds
Performance measures	
35	Active and effective programmes, including mitigation research and outreach, are in place, or completed, that build the capacity of governments and other stakeholders in fisheries that create risks to New Zealand seabirds
36	New Zealand supports small-island developing states in developing and implementing NPOA Seabirds, as necessary.

¹⁶ CCAMLR is the Commission for the Conservation of Antarctic Marine Living Resources.

Implementation

NPOA Seabirds 2020

Fisheries New Zealand and DOC are committed to achieving the NPOA Seabirds 2020's objectives. Their specific priorities for the next five years will be guided by the multi-year Seabird Implementation Plan. This will be regularly updated through an annual planning and review process.¹⁷

The New Zealand commercial fishing fleet has diverse operational practices. Likewise, when seabirds interact with fishing operations, different species display different behaviours. Therefore, applying rigid 'one-size-fits-all' seabird bycatch mitigation strategies may produce suboptimal results. Tailoring strategies to specific operational situations is critical to reducing the risk of seabird capture. A number of tools are used to avoid bycatch, including both legislative requirements and collaborative approaches such as liaison programmes. Mitigation Standards, closely aligned to international best practice, have been developed to provide clear guidance and expectations around vessel-specific risk management plans.

Annual review of the implementation and effectiveness of Mitigation Standards will be used to inform the development of regulatory measures, where required, to ensure the objectives of the NPOA Seabirds 2020 are met.

Each year, Fisheries New Zealand and DOC will review what actions have been taken, and what progress has been made against the NPOA Seabirds 2020's objectives. The results of this review will be published in a Seabird Annual Report and inform actions that need to be taken the following year. These actions will be transferred to the multi-year Seabird Implementation Plan, and will guide the work for the following year.

The Seabird Annual Reports, multi-year Seabird Implementation Plan and research plan will be presented each year to the Seabird Advisory Group. This group will monitor and help to implement the NPOA Seabirds 2020.



¹⁷ <https://www.mpi.govt.nz/protection-and-response/sustainable-fisheries/managing-our-impact-on-marine-life/seabirds>

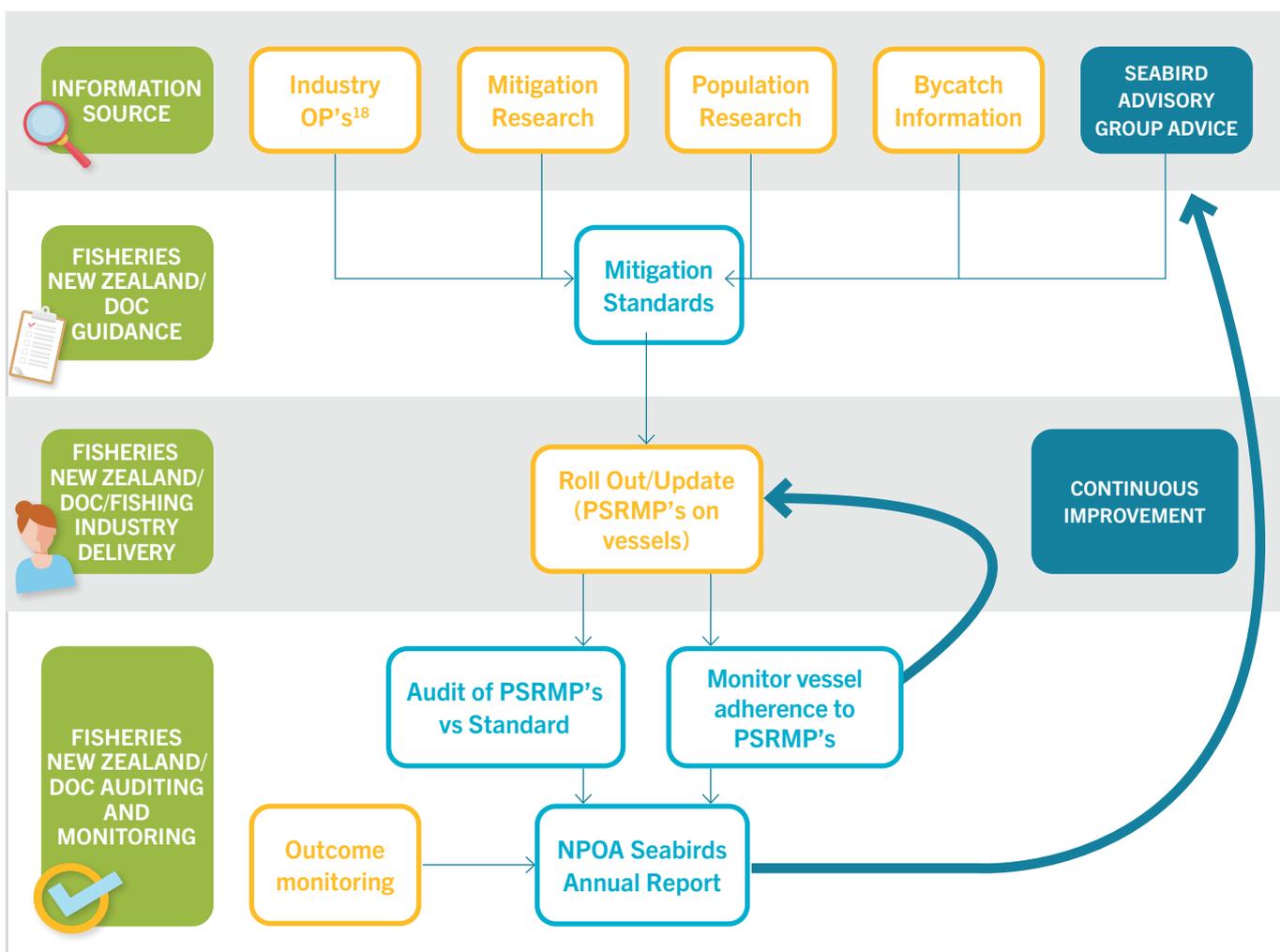
Mitigation Standards

Where fishing poses risks to seabirds, effective bycatch mitigation practices must be used if the NPOA Seabirds 2020's objectives are to be achieved. A risk management programme, based on defined Mitigation Standards, will be implemented to ensure effective bycatch mitigation practices are used.

Government-set Mitigation Standards document what is required of effective mitigation practices. The mitigation practices used on each vessel will be outlined in a protected species risk management plan (PSRMP), or similar document. Each vessel operator is responsible for developing this plan with support from government or industry contracted liaison officers.

DOC and Fisheries New Zealand will maintain a database of PSRMPs and audit a representative sample of PSRMPs regularly to check they are consistent with the relevant Mitigation Standards. They will also monitor the number of vessels that are adhering to their PSRMPs where at-sea data is available (via Fisheries New Zealand observers or other monitoring) and report on adherence annually. Annual statistics on seabird captures will be used to estimate how effective the bycatch mitigation practices have been.

Section 5 of the *National Plan of Action – Seabirds 2020 Supporting document* provides more details on how the Mitigation Standards will be implemented and audited.

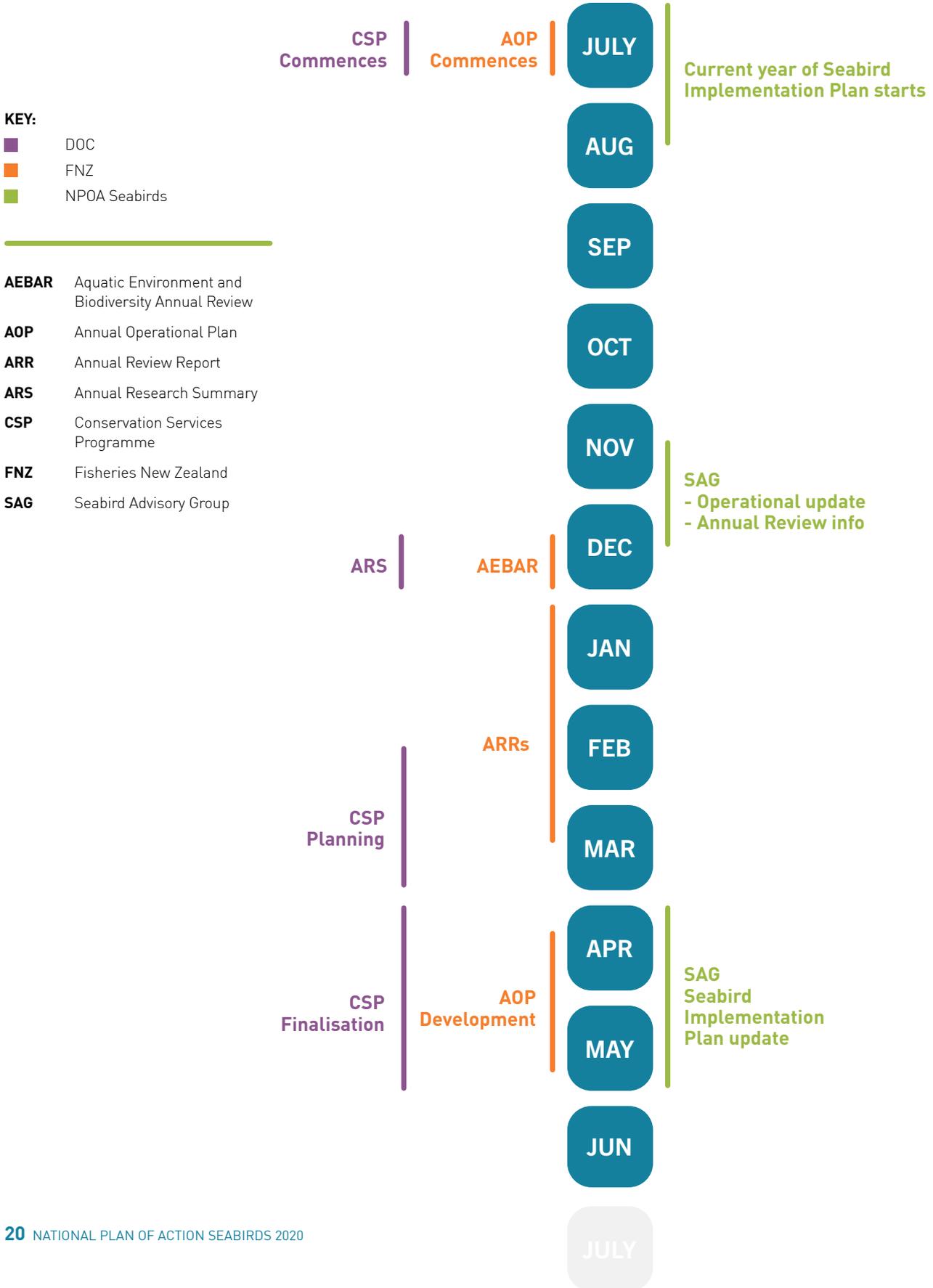


18 Industry OPs are fleet-wide Operational Procedures that are developed by the industry in collaboration with Fisheries New Zealand and DOC that set out mandatory mitigation measures and other strategies the fleet has agreed to implement. More information on Operational Procedures is available in the *National Plan of Action – Seabirds 2020 Supporting document*.

Review

The NPOA Seabirds 2020 will be reviewed after five years. The review will assess whether the objectives have been met and, to what extent, the objectives and longer-term goals are still relevant or need to be changed. The review will also assess how effective the NPOA Seabirds 2020's implementation processes have been.

NPOA Seabirds review process



Glossary



Term	Description
ACAP	Agreement on the Conservation of Albatross and Petrels
Bycatch	Fishing-related incidental capture or mortality
Captures	Interchangeable with bycatch
Conservation/ management measures	Measures that define the regulatory framework of regional fisheries management organisations and the Commission for the Conservation of Antarctic Marine Living Resources
Fishing-related fatalities	The estimate of the number of seabird deaths caused by fishing (from the seabird risk assessment)
Particular concern	Species considered to be at High or Very High risk in the seabird risk assessment, or those identified through some other process (e.g. population monitoring indicating a significant population decline), and taking into account threat status
PSRMP	Protected species risk management plan
Risk ratio	Ratio between the mortality of a species across all fisheries (from the seabird risk assessment) and an estimate of mortality that the species' population can encounter and remain stable at or above a defined management target
SEFRA	Spatially explicit fisheries risk assessment

