TEN GOLDEN RULES FOR COASTAL TRAWLING TO SAVE PROTECTED SPECIES

1. Ensure your vessel has onboard:
    a. The vessel's Protected Species Risk Management Plan (PSRMP),
    b. The Coastal Trawling Operational Procedures, and
    c. A map of areas where trawling is prohibited.

2. Hold all fish waste immediately before or during shooting/hauling and batch discharge away from the path of warps if/when towing.

3. Always have fit & proper bird scaring device/s onboard.

4. Always deploy mitigation devices if there is any risk to seabirds (when birds are present or when discharging fish waste near warps).

5. Ensure the warps are not overly greased; all warp splices are 'wrapped'; any sprags are removed or 'whipped'; and warp splices are not near the water's surface.

6. Minimise time trawl gear is at/near the surface. Where possible, conduct gear maintenance/repairs while net is on board.

7. Remove stickers from net before shooting especially small fish and squid.

8. Reduce unnecessary deck lighting

9. Crew know and follow safe handling procedures for captured animals (dead or alive)– return protected species to sea quickly and treat with care.

10. Report all protected species captures by ERS or in the Nonfish Protected Species Catch Return (NFPSCR) logbook and send to FishServe. **It is illegal not to report.** Report protected species trigger level captures to Liaison Officer.

For support phone your local Liaison Officer.

TEN GOLDEN RULES

NON-FISH OR PROTECTED FISH SPECIES (NFPS) CATCH REPORTS

1. The Fisheries (Reporting) Regulations 2017 require reporting of **all** NFPS captures (dead or alive). It is an offence to fail to report.

2. All permit holders and skippers must know the law and be able to file an NFPS catch report using their vessel's Electronic Reporting system.

3. Fisheries New Zealand observers file their own NFPS catch reports, but this does NOT mean the vessel's obligation to report has been removed.

4. *Captures* means that the NFPS has become fixed, entangled, or trapped in such a way that it cannot move freely or free itself from any part of the fishing gear. (includes for example tori lines and paravanes)

5. *Deck strikes* means seabirds injured or dead from colliding with the vessel, or any that need crew assistance to leave the vessel because they are disoriented.

6. Treat all animals with respect and care (dead or alive).

7. Return all NFPS to the sea promptly and carefully unless required to be kept on board by a Fisheries New Zealand observer.

8. Unauthorised retention or any further interference with protected species is an offence under the Wildlife Act 1953.

9. If unsure of the species name (NFPS code) use the generic codes provided.

10. E-logbook Users Instructions and Codes can be found here: https://www.fisheries.govt.nz/dmsdocument/37982-Fisheries-E-logbook-Users-Instructions-and-Codes-Circular-2019

Non-Fish or Protected Fish Species Catch Report - Summary Information

(from Fisheries New Zealand Electronic Catch and Position Reporting Guide July 2019)

You must complete an NFPS Catch Report if there is an interaction with the following by the vessel or gear during a trip:

- Birds;
- Marine mammals (e.g. New Zealand fur seal);
- Marine reptiles (e.g. turtles);
- Protect fish species (e.g. basking shark, great white shark, manta ray, black spotted grouper);
- Selected benthic organisms (corals, sponges, and bryozoans).

You will be prompted for more information about how the capture happened if a seabird is taken during trawling or surface or bottom longlining.

You must take care when choosing codes where there is a group option and a specific option so that you do not accidentally report an organism twice.

If there is more than one NFPS capture during an event, they will all be recorded on the same NFPS Catch Report.

The NFPS Report must be completed and provided at the same time as the Fish Catch Report, if it occurs as part of a fish catch event.

If the capture happens while you were not actually fishing (e.g. while steaming), the NFPS Catch Report will be a standalone report, i.e. it will not be linked to a Fish Catch Report and must be completed and provided to FishServe before the end of the day on which you became aware of the capture.

Online resources to assist you with NFPS identification

- The DOC website has material on coastal and deep water seabird species. Guides include MPI reporting codes and are available in multiple languages: doc.govt.nz/ our-work/conservation-services-programme/csp-resources-for-fishers/a-fishers-guide-to-new-zealand-seabirds/
- A fuller set of invertebrate NFPS material is available at: fs.fish.govt.nz/Doc/23020/AEBR_86.pdf.ashx
- A coral guide is available at doc.govt.nz/Documents/conservation/marine-and-coastal/fishing/coral-id-guide-updated.pdf

North Island Coastal Trawler

Operational Procedures for Protected Species Risk Management

Version 2.1 August 2021

FISHERIES INSHORE NEW ZEALAND

Contents

Disclaimer: This document has been produced to serve as a guide to the fisheries regulations relevant to commercial inshore trawl fishing operations for use by the industry. This is not intended to be used as a substitute to any statutory, regulatory and/or non-regulatory requirements for inshore trawl fishing. Before acting in reliance, either wholly or partially, on any information contained in this document, readers should seek advice as to how current legislation, rules and regulations may affect their interests. It is the duty of the operator to know and understand the current regulations that apply.

MPI has stated that at-sea inspections will become more directed as a result of the availability of GPR data. Make sure you know what you need to meet legal requirements on protected species mitigation measures and reporting. Please contact your Liaison Officer for support if you need assistance.

Background, Rationale and Purpose

Background and Rationale

The North Island coastal vessels (under 28 m LOA targeting inshore stocks) trawl fishery has had observed captures and risk assessments of seabirds that require a structured approach to mitigation of that risk.

The characteristics of coastal trawl fishing which increase the risk of incidental captures of seabirds are:

- warps towing from blocks outboard of the vessel hull
- extended periods during which the gear is on or near the surface
- feed attraction from high levels of fish waste - offal and discards
- fishing grounds and seasons in some areas with high seabird numbers.

All protected species with observed captures in this fishery are of significant importance to the community and some are rare (i.e. have very small and/or threatened populations). The Government will be responsive in ensuring that undue impacts are not occurring on these species. It is in the best interests of this fleet to take all reasonable steps to acknowledge, understand and mitigate impacts on protected wildlife encountered.

Purpose

The purpose of these North Island Coastal Trawl OPs is to ensure:

- risks of protected species mortalities are mitigated by reducing the risk of capture
- that by implementing this OP and associated vessel PSRMP the vessel crew is actively involved in protected species mitigation measures and undertakes improvements through ongoing on board observation, review and improvement processes, i.e. **Look – Think – Act**
- that all vessels in the fleet have the same information as well as robust and documented systems to manage protected species risk and therefore are working together as a fleet to manage the risks
- vessels report as required and as accurately as possible all capture events (MPI reporting) as well as any event triggers required by the OP systems are able to stand up to audit or review by vessel owners, skippers, or Government.

Seabirds National Plan of Action (NPOA) and Risk Assessment	The National Plan of Action (NPOA) for Seabirds is part of an internationally visible management framework for seabirds. The NPOA sets out objectives for the next five years to guide management of risk to seabirds in New Zealand fisheries, led by Fisheries New Zealand (FNZ) with support from Department of Conservation (DOC) and industry bodies such as Fisheries Inshore NZ (FINZ) and Southern Inshore Fisheries Management Co. The Risk Assessment referred to in the NPOA is a useful guide to assess the impact of potential fisheries mortalities on 93 of the seabird species that breed in the New Zealand region. A risk 'factor' for each seabird species is estimated as the ratio between the estimated annual potential fatalities due to fisheries and the number that the population can withstand and stay healthy or grow. The risk ratios are assessed on a fishery-by-fishery basis where data is sufficient to allow this. A key part of the NPOA is the objective to move seabird species to a lower risk category within the five-year period. The NPOA process also developed the **Mitigation Standards to Reduce the Incidental Captures of Seabirds in New Zealand Commercial Fisheries (Toolbox of Measures)**. This document outlines statutory requirements for bycatch mitigation, and some that are above and beyond statutory requirements. The fishing industry focuses on ensuring our fleets are at a minimum, meeting statutory requirements but encourages all vessels to meet the mitigation standards as appropriate to their vessel operations.
Marine Mammals	The Government evaluates the risk that commercial fishing presents to marine mammals and has implemented national management regimes for Hector's and Maui dolphins through area-specific setnet and trawl controls. Maui and Hector's dolphins are also the focus of a DOC Threat Management Plan (TMP). Like seabirds, these mitigation measures will continue to be reviewed accordingly.
Marine Reptiles	Occasional interactions with marine turtles in trawl nets do occur. Turtle capture rates are increasing across other fleets, so could be expected to occur more.

Managing Risk Associated with the Coastal Trawl Fishery

Seabirds and marine mammals are attracted to offal and discards (fish waste) from the vessel or whole fish in the trawl net or fish disturbed by the passing of the net. Once attracted, they are at risk of injury from the gear or drowning in it.

Risk to seabirds and marine mammals in your region is driven by two main factors and how they interact:

Risk Item	Risk For	Ways to manage risk
Net captures	Seabirds (mostly petrels, shearwaters, shags and penguins), marine mammals and turtles	• Net captures occur during both shooting and hauling of the net. Therefore, it is important that the vessel prevents offal discharges both before and during hauling and shooting. • Minimising the amount of time the net is on the surface will also reduce this risk. So, getting the gear to fishing depth and later aboard quickly is important. Avoid trailing the gear in the water while mending. • Avoiding setting the net when large numbers of birds or mammals are present Ensuring that the net is clean of stickers and other food attractants when being set
Warp capture	Seabirds (mostly albatross)	• Stopping or controlling (batching) offal/waste discharge while warps are in the water will greatly reduce or even eliminate interactions - **this is the PRIMARY risk reducing measure** • Fit and proper mitigation devices (tori lines, bafflers, deflectors or scarers), well designed, and implemented will serve to keep seabirds away from the warp danger area (see recommended devices at the back of this OP) Ensuring warp splices are 'wrapped', and any sprags removed and 'whipped'

Regions and Periods of Risk for Seabird & Marine Mammal Species

Currently four seabird species that have been observed captured by the coastal trawl fleet are known to be high or very high-risk category and warrant immediate and ongoing reduction in captures or risk of capture. Captures occur in all areas frequently fished by the fleet.

Species at Risk	Species Code	Main Risk Area	Place, Time, Risk Profile
Black petrel	**XBP**	East Coast North Island and Kermadec	• Nests on Great and Little Barrier, active in BOP, HG, Northland in autumn, summer, spring. • Highest risk seabird in FNZ Risk Assessment • Nationally Critical • Aggressive feeders
Flesh-footed shearwater	**XFS**	East Coast North Island (particularly FMA1) and Kermadec	• Nests on many off lying islands around upper North Island, most common autumn, summer, spring. Third highest risk species in Fisheries NZ Risk Assessment • Aggressive feeders
Salvin's and White capped albatross	**XPB**	East and West coasts North Island	• Occasionally visitors to upper North Island coasts year-round but especially spring/summer • Aggressive feeders
Penguins and Shags	**XPG (penguin)** **XHG (shag)**	All coastal areas	• Can forage well out to sea but usually coastal near breeding colonies or roosts onshore • Birds that form rafts i.e. large flocks, on sea can pose a risk
Common Dolphins	**CDD**	All coastal areas	• Most common marine mammal caught in inshore trawl fishery • Around all of North Island though more prevalent in the northern regions
Maui & Hector's dolphins	**MDO (Maui)** **HDO (Hector's)**	West Coast NI	• West Coast, often shallow, dirty water off river mouths and harbours, infrequently seen on East Coast • Maui – nationally critical and Hector's – Nationally vulnerable
NZ Fur Seal	**FUR**	All coastal areas	• Can forage well out to sea but usually in coastal waters • Year round and increasing in northern regions

Risk Management Plan Responsibilities

Responsibilities of Operator and Skipper	• Ensure all crew are briefed on these OPs, the vessel's PS-RMP and fully understand all the actions required • Be aware of seabird/mammal activity around the vessel, assess risks and take those actions needed to minimise risk • Ensure shooting and hauling carried out as quickly as possible and with regard to protected species activity in immediate area • Batch discharge equipment is available and fish waste is not discharged when shooting and hauling • Monitor crew removal of stickers from net prior to shooting • Deploy mitigation measures (fish waste management and warp device) whenever seabirds are at risk from warps • Deploy and/or adjust mitigation measures to best suit weather, fishing and processing conditions to minimise risk of seabird interactions • Regularly inspect warps and ensure they are spliced using methods that do not leave sprags (i.e. splices should be wrapped and sprags whipped) • Display a copy of "The 10 Golden Rules for NI Coastal Trawl Vessels" on the bridge • Ensure correct reporting (MPI) and that trigger reports are sent promptly to the Liaison Officer identified on your PS-RMP. • Ensure crew are meeting their responsibilities listed below. • Address any deficiencies in implementation of the PSRMP as noted by any observer, and address the effectiveness and content of the PSRMP if any triggers are exceeded.

Responsibilities of Crew	• Do not discharge offal and fish waste prior to or during hauling and shooting periods to reduce bird numbers in the net danger zone
	• Shoot and haul the net as quickly as practicable and always minimise the time the net remains on or near the surface
	• Remove stickers and food attractant from net before shooting
	• Maintain a watch of seabird and mammal activity around the vessel and advise the skipper as appropriate when it is clear there is risk that requires action including:
	  ○ Not shooting in presence of significant feeding activity
	  ○ Altering hauling speed and operation to reduce risk
	  ○ Advising if any animal seen caught and ensuring its immediate release if alive
	  ○ Carry and deploy a fit and proper bird scaring device as described in the vessel's PS-RMP and spare parts to rebuild/replace if damaged or lost

Reporting Protected Species Captures

Trigger Limits & Vessel Action	Trigger Limits are the FINZ real time reporting 'threshold' system. Once a 'trigger' is reached, the Liaison Officer, FINZ, and the operator/owner and skipper (noting these might be the same person at times) will review the situation. Whenever appropriate, the vessel crew may need to take additional steps to mitigate risk of further capture events.
Real Time Reporting Triggers	Triggers include: Any 24 hr period • (Alive or Dead) Any great albatross, penguin, dolphin, sea lion or basking shark • (Alive or Dead) First turtle capture of fishing year (Oct-Sep) • (Alive or Dead) 3 large (e.g. albatross/mollymawk, giant petrel, gannet), or 5 small (e.g. petrel/shearwater) seabirds, or 2 fur seals • (Dead) Any black petrel or flesh-footed shearwater Any 7-day period • (Alive or Dead) 10 protected seabirds of any type, or 3 turtles, or 5 fur seals
Trigger breach Reporting Contact - 24/7	The vessel (directly) or the onshore Vessel Manager must notify the Liaison Officer **within 24 hours** of any trigger breach so that any follow-up deemed necessary can be discussed and carried out. Emails from Sat-C or texts are OK. Your Liaison Officer's contact details are shown on your Protected Species Risk Management Plan.

Fisheries NZ Reporting Requirements

Fisheries NZ Reporting Requirements – All protected species captures	**It is not illegal to accidentally capture protected species while commercial fishing, but it is illegal to fail to report the capture**. • It is important that all captures and mortalities are reported accurately. All protected species landed dead or alive (then returned to the sea) must be recorded in the **Non-Fish Protected Species Catch Return form** (NFPSCR) or the Electronic reporting system equivalent. • Fisheries NZ observers may decide to keep some protected species caught for formal identification autopsy. They are permitted to do so. The vessel may only do so if it holds a current DOC permit. **Always meet your legal requirements**.
Definitions	***Capture:*** *An animal (dead or alive) which is brought onboard on/by the fishing gear and requires assistance/help off the vessel.* ***Deck-Strikes:*** *Birds that 'collide' with the vessel/deck/superstructure and are dead or injured, unable to leave vessel of its own accord; report as 'deck-strikes' (not reported if alive and leaves the vessel unassisted, i.e. landed on vessel)*
Seabirds	Use the XAL (unidentified Albatross/mollymawk) and XXP (unidentified Petrels & Shearwaters) species codes if you are not 100% sure of the species identification. If you are 100% sure, use the species individual codes supplied by MPI
Marine Mammals	If possible, report captures at species level. If unsure, use generic codes. You may take photos of the head, whole body and any distinguishing marks on a marine mammal to share with your Liaison Officer who may identify the marine mammal for you. Do this without any crew or vessel features in the picture
Leg bands	Record any leg band numbers on the form, these are really important and FINZ urges skippers to record any leg bands. Take a photo if possible and send to your Liaison Officer

Animal Handling/Release and Crew Safety

Release Alive	Every care should be taken to release animals alive, reduce stress and handle with care to minimise any further harm or injury to the animal, and to increase survivability when it is being returned to the sea alive. **Deliberately harassing or harming these animals after an incidental capture is an offence.**
Birds	• Keep the bird calm by covering the head with a cloth. Use two crew; one to support the bird, while the other frees the gear from the bird. Use gloves and eye protection (beware large birds can inflict a nasty bite). • Carefully isolate the tangled meshes. Peel the netting back over the tail, feet, and then the wings, while holding the bird firmly. Remove the head from meshes last. • When freed, place the bird gently back into the water. If the bird is waterlogged keep it in a safe place, such as an empty fish case, until it has recovered.
Marine Mammals	• If possible, give animals time and space to leave the vessel. Do not take actions that will antagonise the animal. Watch carefully for signs of aggression in the animal. • Do not allow crew to be in its path or escape route, use netting as a moving barrier or a deck hose to persuade/guide the animal back to the sea.
Turtles	• Release the turtle in the water
Returning Dead Seabirds and Marine Mammals to the Sea	The entire body of any dead protected species must be returned to the sea, unless a FNZ observer onboard the vessel directs the skipper to, or they themselves keep it or the skipper has been advised otherwise by DOC or Fisheries NZ. Usually they only keep seabirds and Maui dolphins. **Taking any part and keeping it or cutting or mutilating the body of a protected species is an offence.**
Seal Handling and Crew Safety Issues	Seals can carry a number of infectious diseases which can infect humans. Live marine mammals can also be potentially dangerous to humans particularly when they are in stressful situations. Handling marine mammals should always be kept to a minimum and should only occur if and when needed. **When attending to animals landed on deck the following steps should be followed to ensure crew safety:** • Whenever handling bodies of drowned fur seals, or any other marine mammals, wear waterproof gloves and waterproof protective clothing • Where possible, avoid direct contact with blood, urine, faeces and other body fluids. It is also important to avoid the mouth of the marine mammal as this is a major source of disease. • If bitten or grazed by a marine mammal, as a first measure wash and disinfect the wound immediately, apply betadine/antiseptic ointment and cover the wound. This minimises the risk of 'seal finger', a chronic and very painful infection caused by bacteria carried by some marine mammals. Visit a doctor once ashore as infection is very common with seal and sea lion bites. • After handling any marine mammal, crew should wash their hands and forearms with antibacterial soap and their protective clothing by hose down.

Audit & Review

Audit & Review	Government fisheries observers on your vessel will audit the implementation of your PSRMP. Information they collect will be provided to DOC, Fisheries NZ and the Liaison Officer. If your PSRMP is not being implemented effectively, it means that either the Plan needs updating or practices onboard need to be improved. Your Liaison Officer can work this through with you and update your Plan if necessary. Your PSRMP may also need updating at other times. For example, if you change gear or target species, or there are changes in any element of your fishing operations that relate to the risk of protected species captures. At these times, please contact your Liaison Officer.

Department of Conservation
Te Papa Atawhai

Fisheries New Zealand
Tini a Tangaroa

June 2019

Mitigation Standards to Reduce the Incidental Captures of Seabirds in New Zealand Commercial Fisheries

<28 metre trawl

1. Introduction

To effectively reduce the risk of seabird captures, trawl vessels less than 28 metres in overall length (<28 metre) need to use a combination of mitigation practices that best address the risks of their individual operations. As the <28 metre trawl fleet is highly diverse with respect to vessel size, gear set-up and on-board equipment, the particulars of the mitigation practices employed may differ between vessels.

To ensure consistency in the mitigation practices employed by the <28 m trawl fleet, these mitigation standards document what is expected of effective mitigation practices. Mitigation standards are grouped by what the mitigation practices aim to achieve (desired outcomes).

This document also details how the mitigation standards will be implemented and how adherence to the mitigation standards will be monitored and reported.

2. Scope

These mitigation standards are applicable to all <28 metre trawl vessels (excluding those used to target scampi). See Appendix 1 for a characterisation of the <28 metre trawl fleet.

3. Desired outcomes

1. The discharge of fish waste[1] from the vessel is managed so as not to attract seabirds to risk areas.
2. The risk to seabirds from trawl warps is minimised.
3. Seabird attraction towards, and access to, trawl nets is minimised. If seabirds do access nets, the risk of harmful interactions is minimised.
4. The risk of deck landings or impacts against the vessel is minimised.[2]

[1] Fish waste is defined as all processing offal and all dead or damaged fish that are returned to the sea (or parts thereof).

[2] A deck landing (also known as a deck strike) is a situation when a seabird lands on a vessel and is assisted from the vessel by the crew or an observer. An impact with a vessel is a situation when a seabird collides with the superstructure of the vessel.

4. Mitigation standards

This section details the mitigation standards necessary to achieve each desired outcome and the equipment and/or operational practices currently needed to meet each mitigation standard.

Each mitigation standard will be updated as alternate technologies or operational practices are demonstrated to be effective in achieving the desired outcomes.

These mitigation standards do not replace or override any fisheries regulations, or legislation on workplace health and safety, maritime safety or other relevant subject.

Desired outcome 1: The discharge of fish waste from the vessel is managed so as not to attract seabirds to risk areas

Mitigation standards 1.1 and 1.2 are necessary to achieve desired outcome 1.

Mitigation standard 1.1:	Fish waste is not discharged from the vessel immediately before or during shooting or hauling.[3]
Mitigation standard 1.2:	Fish waste discharged whilst the net is being towed must be batch discharged.[4]

To meet mitigation standards 1.1 and 1.2, vessel operators should:

- Develop and document a fish waste management system that describes how standards 1.1 and 1.2 will be met. A copy of this document must be carried on board the vessel at all times and be accessible to, and understood by, all crew members.[5]
- Ensure their vessels have the equipment needed to implement their fish waste management system (such as holding/batching tanks or bins). All such equipment should be well maintained with sufficient spare parts kept on board to effect regular maintenance/repairs.
- Develop and document a fish waste contingency plan that describes what actions will be taken to meet mitigation standards 1.1 and 1.2 in the event of an equipment failure. The contingency plan should ensure that any fish waste discharge from the vessel continues to achieve desired outcome 1. Sufficient, well maintained equipment must be kept on board to allow the vessel to enact the fish waste contingency plan at short notice.
- Maintain a secondary system that prevents fish waste lost to the deck or factory floor from being lost overboard. Examples of such secondary systems include equipment to minimise the volume of fish waste lost to the factory floor/deck and the use of gratings or trap systems to reduce the volume of fish waste discharged through scuppers/sump pumps (whilst still allowing the free movement and egress of water).

[3] 'Shooting' is defined as the time between the codend leaving the deck and the time when the doors are below the surface. 'Hauling' is defined as the time between the doors reaching the surface and the codend being on deck.

[4] Batch discharging is defined as holding all fish waste for at least 30 minutes and then discharging it in periods that last no more than five minutes each.

[5] See Appendix 2 for the template of the protected species risk management plan.

Desired outcome 2: The risk to seabirds from trawl warps is minimised

Mitigation standards 2.1 and 2.2 are necessary to achieve desired outcome 2.

Mitigation standard 2.1:	The trawl warp located closest to the side of the vessel from which fish waste is discharged is protected by a visible and physical barrier which deters birds from approaching the warp (unless the vessel is operating at a time and place where there is no risk to seabirds).
Mitigation standard 2.2:	The condition of the trawl warps does not increase the risk of seabirds captures.

To meet mitigation standards 2.1 and 2.2, vessel operators should:

- Deploy a seabird scaring device on the appropriate warp(s), unless the vessel is operating at a time and place that the operator or skipper and liaison officer agree poses no risk to seabirds. The chosen device must be well maintained and deployed in such a way that does not increase the risk to seabirds.[6] Sufficient spares must be carried on board to effect repairs when necessary.
- Ensure the warps are not overly greased; all warp splices are 'wrapped'; any sprags are removed or 'whipped'; and warp splices are not near the water's surface

Desired Outcome 3: Seabird attraction towards, and access to, trawl nets is minimised. If seabirds do access nets, the risk of harmful interactions is minimised

Mitigation standards 3.1, 3.2, 3.3 and 3.4 are necessary to achieve desired outcome 3.

Mitigation standard 3.1	All practicable stickers (fish caught in mesh) are removed from the net before each shot.
Mitigation standard 3.2	The amount of time fishing gear remains at, or near, the surface is minimised.
Mitigation standard 3.3	All gear maintenance/repairs (planned or otherwise) are conducted in a way which minimises the risk to seabirds.
Mitigation standard 3.4	Any seabirds caught in the net and released alive are handled in ways that maximise their chance of survival (whilst managing the risk to the crew)

To meet mitigation standards 3.1, 3.2, 3.3 and 3.4, vessel operators should:

- Ensure the crew clear the net of all practicable stickers prior to shooting.
- Shoot and haul the trawl net as quickly as practicable.

[6] The risk of seabirds becoming entangled in the mitigation device is increased if droppers or streamers trail excessively in the water.

- Inspect and maintain all fishing gear and equipment (such as winches) to reduce the risk of gear or equipment failure.
- Conduct planned gear maintenance whilst the trawl net is on board. If the trawl net must be in the water during repairs, the repairs must happen when there's a low risk of seabirds getting caught (such as at night or during periods of low seabird abundance).
- Conduct all unplanned/emergency maintenance whilst the trawl net is on board. If the trawl net is required to be in the water to effect repairs, all such maintenance should be conducted with as much of the trawl net on board as possible given the circumstances (with particular consideration given to the net mouth).
- Instruct the deck crew in safe seabird-handling procedures and protocols and ensure these procedures and protocols are adhered to.

Desired Outcome 4: The risk of deck landings or impacts against the vessel is minimised

Mitigation standards 4.1, 4.2 and 4.3 are necessary to achieve desired outcome 4.

Mitigation standard 4.1	Deck lighting does not unnecessarily attract or disorientate seabirds.
Mitigation standard 4.2	Seabirds are not induced to land on the deck due to the presence of fish waste.
Mitigation standard 4.3	Any seabirds that land on deck or impact with the vessel and are released alive, are handled in ways that maximise their chance of survival (whilst managing the risk to the crew).

To meet mitigation standards 4.1, 4.2 and 4.3, vessel operators should:

- Minimise all deck lighting (including outward facing lights) that is not necessary for ship or crew safety, especially when the vessel is sheltering or anchored near seabird breeding colonies.
- Clean the deck and fish waste-handling equipment (such as fish bins) regularly, so that excess fish waste is removed.
- Instruct the deck crew in safe seabird-handling procedures and protocols and ensure these procedures and protocols are adhered to.

5. Implementation

The mitigation standards outlined above are implemented through non-regulatory management measures as set out in the Coastal Trawl Operational Procedures and Protected Species Risk Management Plans (PSRMPs). Coastal trawl operational procedures set out the fleet wide management measures to reduce interactions between seabirds and set net vessels whereas PSRMPs set out the vessel specific measures each vessel will follow to reduce the risk to protected species.

Coastal trawl operational procedures are agreed between quota holders, vessel operators and Fisheries New Zealand and are implemented and administered by Fisheries Inshore New Zealand, an organisation which represents quota holders and vessel operators.

Associated with coastal trawl operational procedures, each vessel is required to have, and follow, a PSRMP which sets out the mitigation measures agreed by the vessel owner/operator that will be used on that vessel. See Appendix 2 for an example PSRMP.

Fishers are assisted with the development of PSRMPs through the Department of Conservation's (DOC) Protected Species Liaison Project. As part of the Liaison Project, liaison officers contact fishers to support them in the development and implementation of PSRMPs. Liaison officers regularly visit fishers to audit and review plans and assist operators with changes as necessary.

The progress of liaison officers is reported back to DOC monthly by the liaison officer project coordinator. The number of PSRMPs in place, and the number of vessels visited is reported annually by DOC[7] and will be included in the seabird annual review report.

6. Verification

Vessel adherence to the mitigation standards is verified through Fisheries New Zealand observer coverage. After each trip, the observer completes a Protected Species Risk Management Plan Observer Review Form (Appendix 3). Fisheries New Zealand discuss the review form with the observer and then sends it to the liaison officer coordinator to follow up on any issues with the vessel operator. The outcome of the any follow-up actions are reported to DOC and Fisheries New Zealand quarterly and will be reported annually in the seabird annual review report.

During their trips, Fisheries New Zealand observers also inspect and measure each seabird scaring device. Observers record their findings on either the bird baffler, tori line or warp scarer details form (Appendices 4, 5 and 6).

The level of observer coverage on board the <28 metre trawl fleet is relatively low with approximately 5% of tows observed between the 2013/14 and 2017/18 fishing years. The level of observer coverage has increased in recent years although coverage is highly skewed towards northern waters and seasonal hoki fisheries.

[7] https://www.doc.govt.nz/our-work/conservation-services-programme/csp-reports/2017-18/protected-species-liaison-project/

Appendix 1: Characteristics of the <28 metre trawl fleet (February 2019)

The < 28 metre trawl fleet is active around the entire coast of New Zealand. Areas of particularly fishing activity include:

- Northland;
- Bay of Plenty;
- Hawkes Bay;
- Cook Strait;
- Golden Bay;
- Hokitika Canyon; and
- East and south coasts of the South Island.

The <28 metre trawl fleet targets a variety of species including flatfish, snapper, ling, hoki, stargazer, tarakihi, gurnard, john dory and red cod.

The <28 metre trawl fleet consists of approximately 140 vessels. Around 46 vessels are less than 14 metres in length; 68 vessels are between 14 and 20 metres in length and 26 vessels are greater than 20 metres in length. The smallest vessel is 10 metres long, while the largest is 27 metres long.

Many of the species caught by the <28 metre trawl fleet are retained whole (green), although some target and key bycatch species (such as ling, school shark and stargazer) are processed at sea. All fish caught are stored on ice. No <28 metre trawl vessels operate meal plants and any fish waste is discharged at sea.

< 28 m Trawl Protected Species Risk Management Plan: Observer audit form

Fisheries New Zealand
Tini a Tangaroa

Trip Number	Vessel Name	Observer code	Trip start date	Trip end date
		.	/ /	/ /

Target species		FMAs fished		Number of tows	

Record Yes (Y), No (N), Unknown (U) or Not Applicable (N/A) in the box provided, if you answer N or U to any questions, or Y to questions 4, 6, 8 & 12 then please make detailed comments on the reverse.

Item 1. Did the vessel carry a copy of the South Island/North Island Coast Trawl Operational Procedures (as relevant) document on board that was made available on request?

Item 2. Were copies of the 10 Golden Rules and Protected Species Risk Management Plan Readily available in a place accessible to all crew?

Item 3. Were the skipper and crew familiar with the contents of the above documents?

Item 4 Were any protected species capture '*trigger-points'* reached during the trip?
(if Y please describe in comments)

Item 5. After a trigger point was reached, did the crew: *(if Y describe in comments)*

a) Change their behaviour?

b) Make changes to fishing operations?

c) Change the mitigation measures they implemented?

Item 6. Did a gear or equipment failure event occur that increased the risk of seabird or marine mammal captures? (*if Y detail the event and the action taken by the vessel)*

Fish waste management

Item 7. Was the discharge of fish waste from the vessel managed as per the Protected Species Risk Management Plan?

Item 8. Were there any periods of continuous fish waste discharge during the tow?
(if Y please describe in comments)

Item 9. Was all fish waste held on board during shooting and hauling?

Item 10. Was the net cleared, as practicable, of all stickers prior to shooting?

Warp strike mitigation

Item 11. Was the primary warp strike mitigation device used in accordance with the Protected Species Risk Management Plan?

Item 12. Were any other mitigation devices used either instead of, or in conjunction with, the primary mitigation device? *(if Y please describe in comments)*

General procedures

Item 13. Was the amount on time the net spent at the surface minimised as much as practicable?

Item 14. Was deck lighting at night reduced to minimum safe operational levels?

Item 15. Were all protected species captures reported on the Non-Fish protected Species Catch Return, or electronically, as required?

Item 16. Were a protected species caught and released alive handled with due care?

Item 17. Were spot lights shining directly astern controlled/dimmed during night setting?

International and National Seabird Risk Frameworks

1. United Nations (UN) Law of the Sea, Fish Stocks Agreement & Responsible Fishing Agreement
   - Nations must catch their fish but not harm environment
2. UN -FAO delivers required base standards through IPOA for seabird risk management globally and each nation must have its own plan
3. Seabirds especially albatross are recognised as the world's most threatened bird group
4. Association for Conservation of Albatrosses and Petrels is a global treaty on reducing threats to seabirds and in New Zealand is the responsibility of the Department of Conservation (DOC) with Fisheries NZ involvement.
5. NZ has National Plan of Action (NPOA)-seabirds with 2 goals
   - No risk to populations (they can grow, not decline due to fishing)
   - As few deaths as practical (further affordable and sensible mitigation)
6. Fisheries Act allows for utilisation (catch your fish) while avoiding, remedying or mitigating adverse impacts on environment
7. Under the NPOA, NZ has a Seabird Risk assessment with each species given a '*risk-rating by fishery'* where there is a risk of unsustainable mortality levels
8. Crown/MPI (FNZ) obligated to meet the Act, therefore they have introduced mandatory measures in many fisheries, with more to come and undertake risk assessments
9. Crown (FNZ and DOC) being held to account by eNGOs and others
10. Most NZ trawl, line and net fisheries have issues with certain bird species
11. Anywhere bird captures are high and monitoring (observer coverage) is low will drive FNZ to meet its obligations with further interventions
12. FNZ has ability, and does, set limits on mortalities if seen necessary (e.g. NZ sea lions)
13. Industry associations have worked with and demonstrated to Government that a joint approach with risk plans, liaison and support is the best approach rather than more laws
14. Liaison/support programmes are in place for many sectors now (approximately 200 vessels inshore and deepwater) and more will be in as time goes on
15. These programmes are paid for by quota owners directly or through Govt. levies
16. Industry works hard to ensure the programmes are practical, sensible and that all vessels in a sector are dealt with the same way
17. Vessel owners as well as skippers need to understand these programmes and be engaged in them

FISHERIES INSHORE NEW ZEALAND

deepwater group

Hector's and Māui dolphins Threat Management Plan

North Island fisheries measures

Below is a summary of the new fisheries measures to support the Threat Management Plan for Hector's and Māui dolphins, which come into effect on **1 October 2020**.

Hector's and Māui dolphins are only found in New Zealand waters and together are one of the world's rarest dolphin species.

Extensive measures are already in place to reduce fishing-related threats to Hector's and Māui dolphins and more is needed to be done to protect them.

The Government is extending and creating new areas that will prohibit the use of commercial and recreational set-nets in both the North Island and South Island.

While trawl fishing poses a lower risk of fishing-related mortality, given the critically endangered status of the Māui dolphin, the Government is also extending the trawl prohibition within the central Māui dolphin habitat zone.

What does this mean for the North Island?

The west coast North Island, from Cape Reinga down to Wellington, will see new measures introduced.

- New commercial and recreational set-net closures out to 4 nautical miles offshore will be created between Cape Reinga and Maunganui Bluff, and between Hawera and Wellington.
- Set-net closures will be extended between Maunganui Bluff and the Waiwhakaiho River (New Plymouth) from 7 nautical miles to 12 nautical miles offshore, as well as between the Waiwhakaiho River and Hawera from 2 nautical miles to 7 nautical miles offshore.
- Set-net closures within the Manukau Harbour will be extended to Taumatarea Point in the north and Matakawau Point in the south within the harbour.
- An extension to commercial trawl closures between Maunganui Bluff and Pariokariwa Point will be put in place, extending south to the Waiwhakaiho River (New Plymouth) and to 4 nautical miles offshore. This falls within the central Māui dolphin habitat zone.
- Commercial and recreational drift netting will be banned in its entirety in all New Zealand waters.
- A change to the regulations allows the Minister to act immediately to impose further restrictions if a single dolphin is caught in the Māui dolphin habitat within the west coast of the North Island.

How do the measures affect commercial fishers?

The measures will prevent commercial set-net fishing in the areas outlined above, extend closures to trawl fishing in the central Māui dolphin habitat zone, and prohibit drift netting in all New Zealand waters. These changes are significant to fishers who operate between Maunganui Bluff and Hawera, given the scale of the offshore extensions. However, the measures will also be notable in the Northland, Manawatu-Whanganui, and Wellington (Kapiti) regions where there are currently few or no commercial restrictions on the use of set-net.

An additional new measure will enable the use of commercial ring nets in set-net prohibition areas within west coast North Island harbours; this fishing method poses a low risk to Māui dolphins.

Other commercial fishing methods including drag netting and beach seining may continue to be used unless otherwise prohibited.

Fisheries New Zealand
Tini a Tangaroa

Will the new measures impact customary fishing?

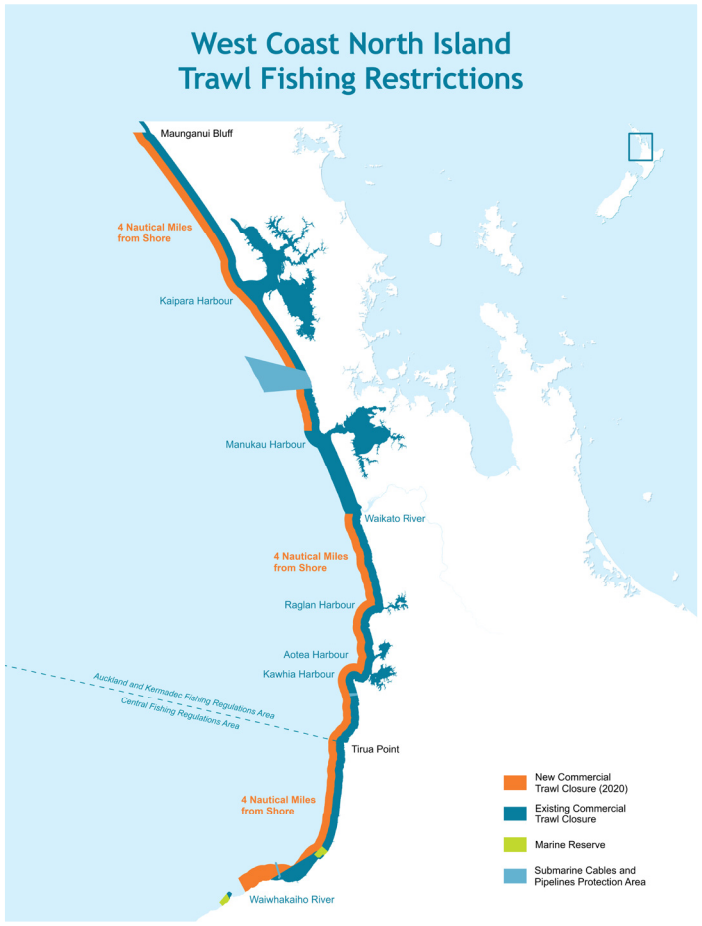
Tangata whenua may still authorise customary fishing to be carried out by non-commercial or commercial fishers, with or without a fishing vessel, using any type of gear or method.

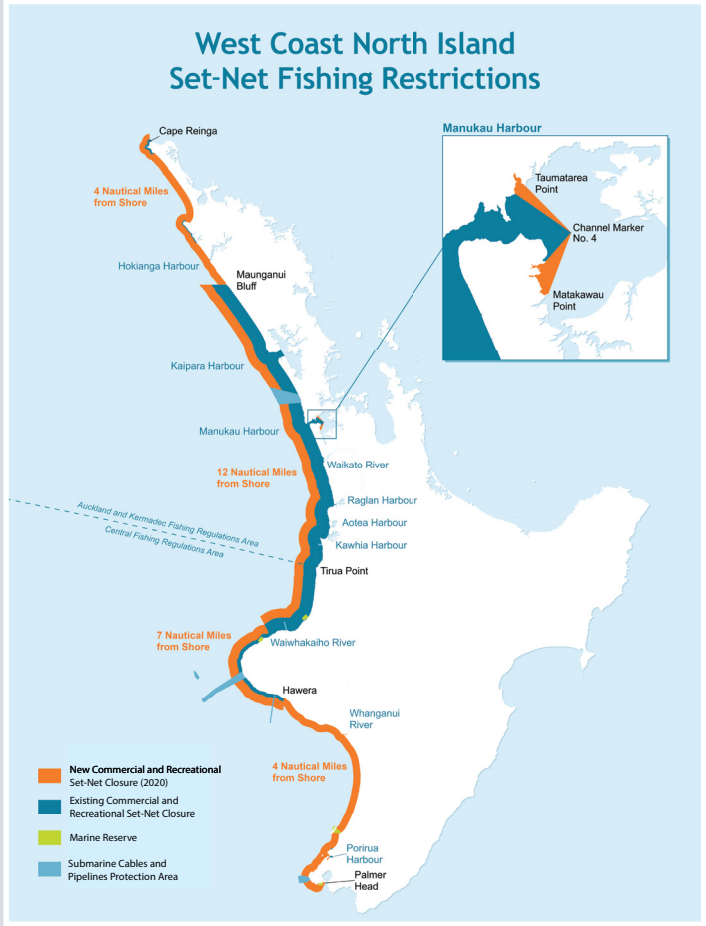
What do the measures mean for recreational fishers?

Recreational fishers will no longer be able to fish using set-nets in the areas outlined above, or drift net in any New Zealand waters. The set-net changes will be notable in the Northland, Manawatu-Whanganui, and Wellington (Kapiti) regions where there are currently few or no restrictions on the use of set-net.

Other recreational fishing methods including drag netting and beach seining may continue to be used unless otherwise prohibited.

What does this look like in your area?





For more information, please visit www.fisheries.govt.nz/dolphintmp or contact dolphintmp@mpi.govt.nz